XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-fx-4-8.xsd ○ fpml-ird-4-8.xsd ○ fpml-eqd-4-8.xsd ○ fpml-return-swaps-4-8.xsd ○ fpml-cd-4-8.xsd ○ fpml-bond-option-4-8.xsd ○ fpml-correlation-swaps-4-8.xsd ○ fpml-dividend-swaps-4-8.xsd ○ fpml-variance-swaps-4-8.xsd ○ fpml-loan-4-8.xsd ○ fpml-com-4-8.xsd ○ fpml-pretrade-4-8.xsd ○ fpml-tradeexec-4-8.xsd ○ fpml-posttrade-negotiation-4-8.xsd ○ fpml-posttrade-execution-4-8.xsd ○ fpml-allocation-4-8.xsd ○ fpml-trade-notification-4-8.xsd ○ fpml-contract-notification-4-8.xsd ○ fpml-confirmation-4-8.xsd ○ fpml-posttrade-confirmation-4-8.xsd ○ fpml-credit-event-notification-4-8.xsd

	❍ [fpml-reporting-4-8.xsd] ❍ [fpml-reconciliation-4-8.xsd] ❍ [fpml-matching-status-4-8.xsd]
Documentation	products business process messaging pre-trade negotiation and execution notification confirmation reporting and settlement miscellaneous

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-fx-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-ird-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-eqd-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-return-swaps-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-cd-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-bond-option-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-correlation-swaps-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-dividend-swaps-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-variance-swaps-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-loan-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-com-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-pretrade-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-tradeexec-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-posttrade-negotiation-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-posttrade-execution-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-allocation-4-8.xsd"/>
```

```
    <xsd:include schemaLocation="fpml-trade-notification-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-contract-notification-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-confirmation-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-posttrade-confirmation-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-credit-event-notification-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-reporting-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-reconciliation-4-8.xsd"/>
    <xsd:include schemaLocation="fpml-matching-status-4-8.xsd"/>
    ...
</xsd:schema>
```

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Global Declarations

Element: FpML

Name	FpML
Type	Document
Nillable	no
Abstract	no
Documentation	The FpML element forms the root for any conforming FpML instance document. The actual structure of the document is determined by setting the 'type' attribute to an appropriate derived subtype of the complex type Document.

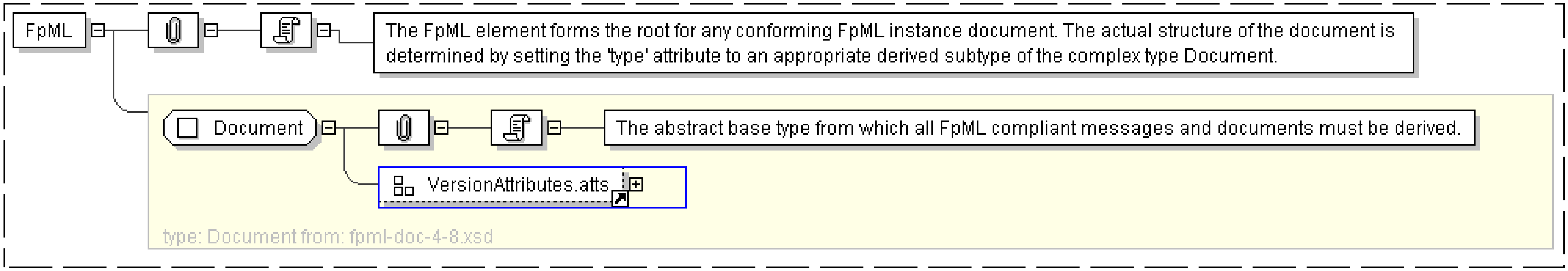
Logical Diagram

XML Instance Representation

```
<FpML
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
```

```
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

"/>
```

Diagram



Schema Component Representation

```
<xsd:element name="FpML" type=" Document "/>
```

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Global Definitions

Complex Type: ValuationDocument

Super-types:	DataDocument < **ValuationDocument** (by extension)
Sub-types:	None

Name	ValuationDocument
Abstract	no
Documentation	A type defining a content model that includes valuation (pricing and risk) data without expressing any processing intention.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
```

specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<validation> Validation </validation> [0..*]
Start Choice [1]
<trade> Trade </trade> [0..*]

'The root element in an FpML trade document.'

<portfolio> Portfolio </portfolio> [0..*]

'An arbitary grouping of trade references (and possibly other portfolios).'

<event> ... </event> [1..*]

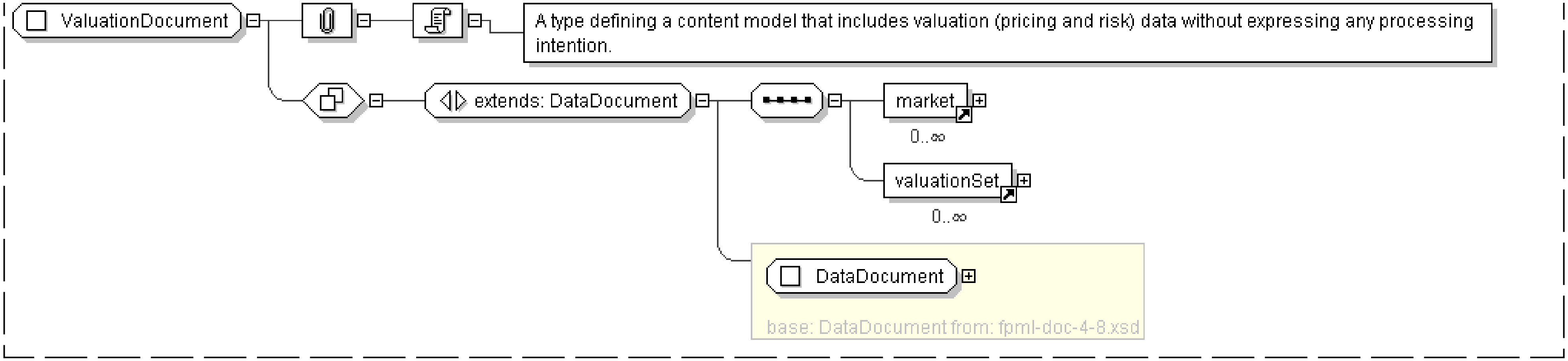
'A business event.'

End Choice
<party> Party </party> [0..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

<market> ... </market> [0..*]
<valuationSet> ... </valuationSet> [0..*]
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationDocument">
   <xsd:complexContent>
      <xsd:extension base=" DataDocument ">
         <xsd:sequence>
            <xsd:element ref=" market " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element ref=" valuationSet " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

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Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-posttrade-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-posttrade-4-8.xsd"/>
   ...
</xsd:schema>
```

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Global Definitions

Complex Type: AllocationAmended

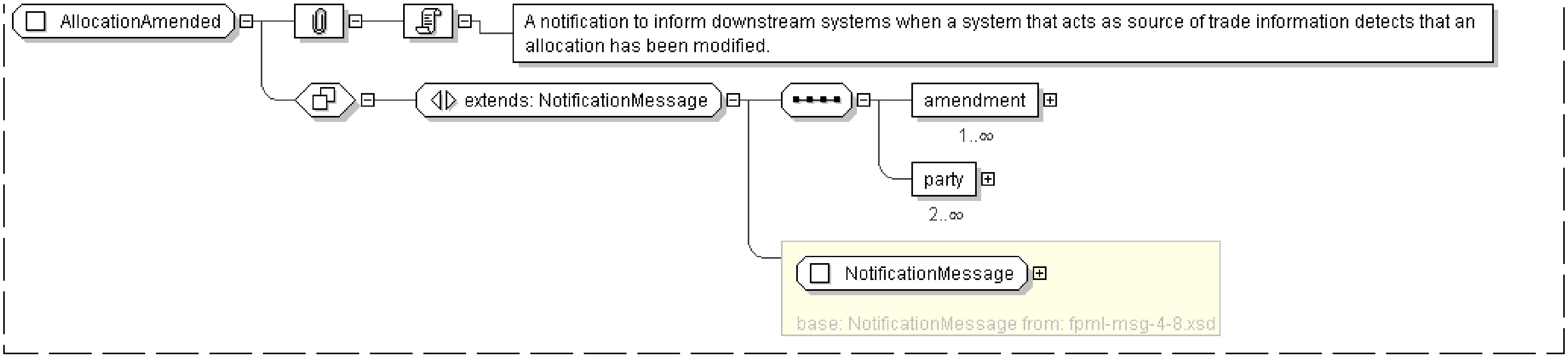
Super-types:	NotificationMessage < **AllocationAmended** (by extension)
Sub-types:	None

Name	AllocationAmended
Abstract	no
Documentation	A notification to inform downstream systems when a system that acts as source of trade information detects that an allocation has been modified.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <amendment> TradeAmendment </amendment> [1..*]
   <party> Party </party> [2..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AllocationAmended">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="amendment" type=" TradeAmendment " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: AllocationCancelled

Super-types:	NotificationMessage < **AllocationCancelled** (by extension)
Sub-types:	None

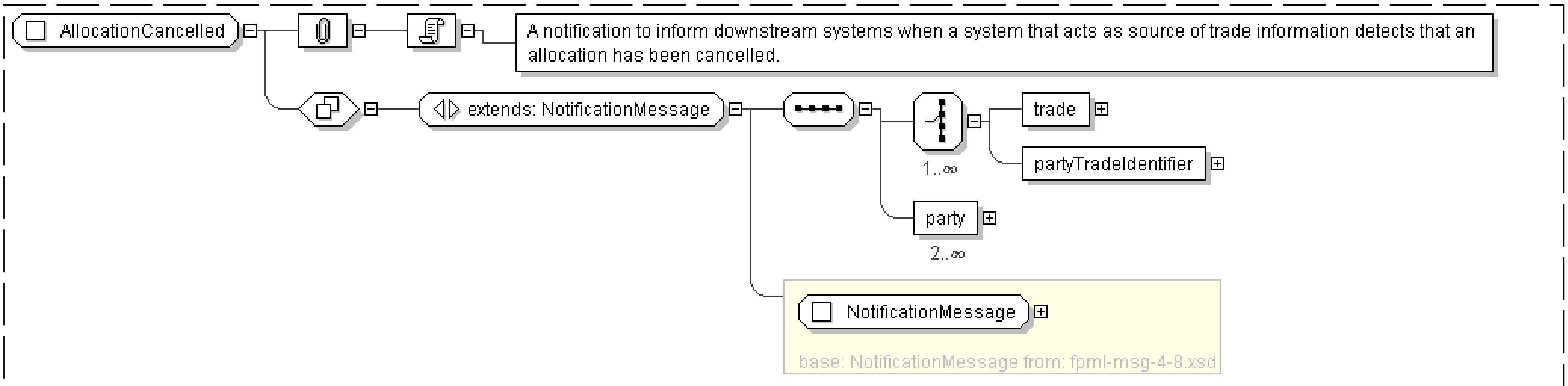
Name	AllocationCancelled
Abstract	no
Documentation	A notification to inform downstream systems when a system that acts as source of trade information detects that an allocation has been cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
```

```
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Choice [1..*]
      <trade> Trade </trade> [1]
      <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1]
End Choice
   <party> Party </party> [2..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AllocationCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:choice maxOccurs="unbounded">
               <xsd:element name="trade" type=" Trade "/>
```

```
                <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier "/>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
        </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

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Complex Type: AllocationCreated

Super-types:	NotificationMessage < **AllocationCreated** (by extension)
Sub-types:	None

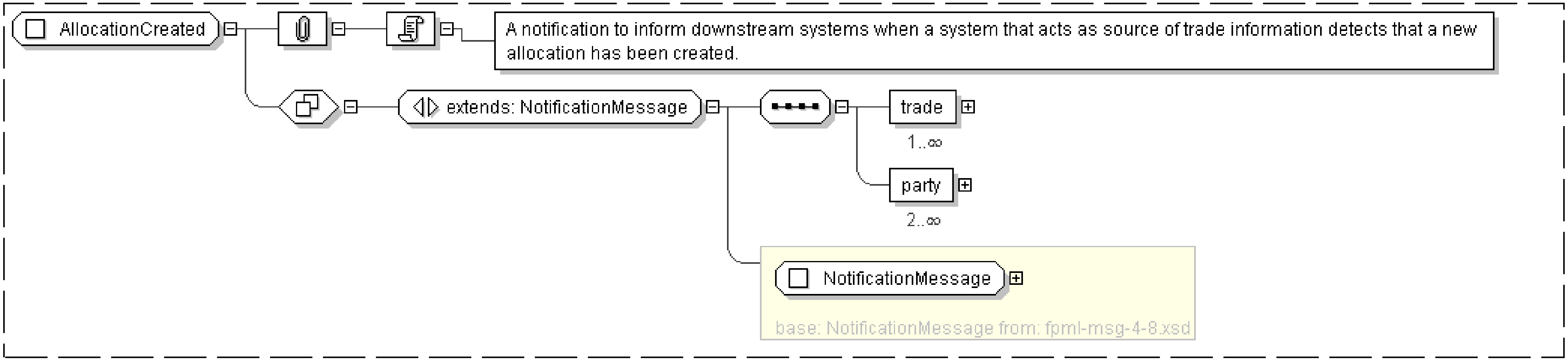
Name	AllocationCreated
Abstract	no
Documentation	A notification to inform downstream systems when a system that acts as source of trade information detects that a new allocation has been created.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <trade> Trade </trade> [1..*]
   <party> Party </party> [2..*]
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AllocationCreated">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestAllocation

Super-types:	RequestMessage < **RequestAllocation** (by extension)
Sub-types:	None

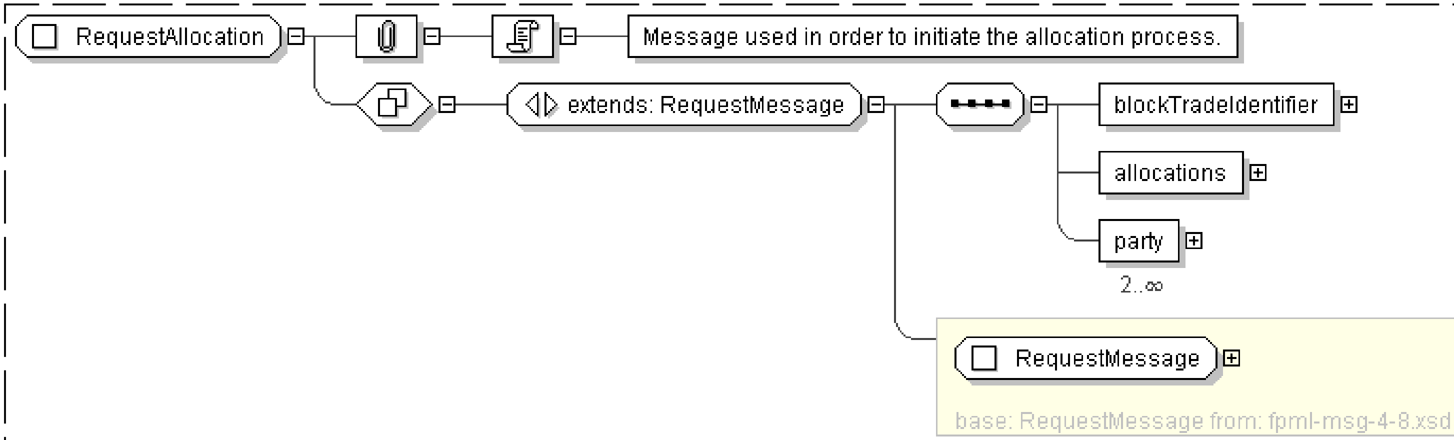
Name	RequestAllocation
Abstract	no
Documentation	Message used in order to initiate the allocation process.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
```

```
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <blockTradeIdentifier> BlockTradeIdentifier </blockTradeIdentifier> [1]
   <allocations> Allocations </allocations> [1]
   <party> Party </party> [2..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestAllocation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="blockTradeIdentifier" type=" BlockTradeIdentifier "/>
            <xsd:element name="allocations" type=" Allocations "/>
```

```
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: Schema Component Type

AusAddress Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ◦ fpml-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

top

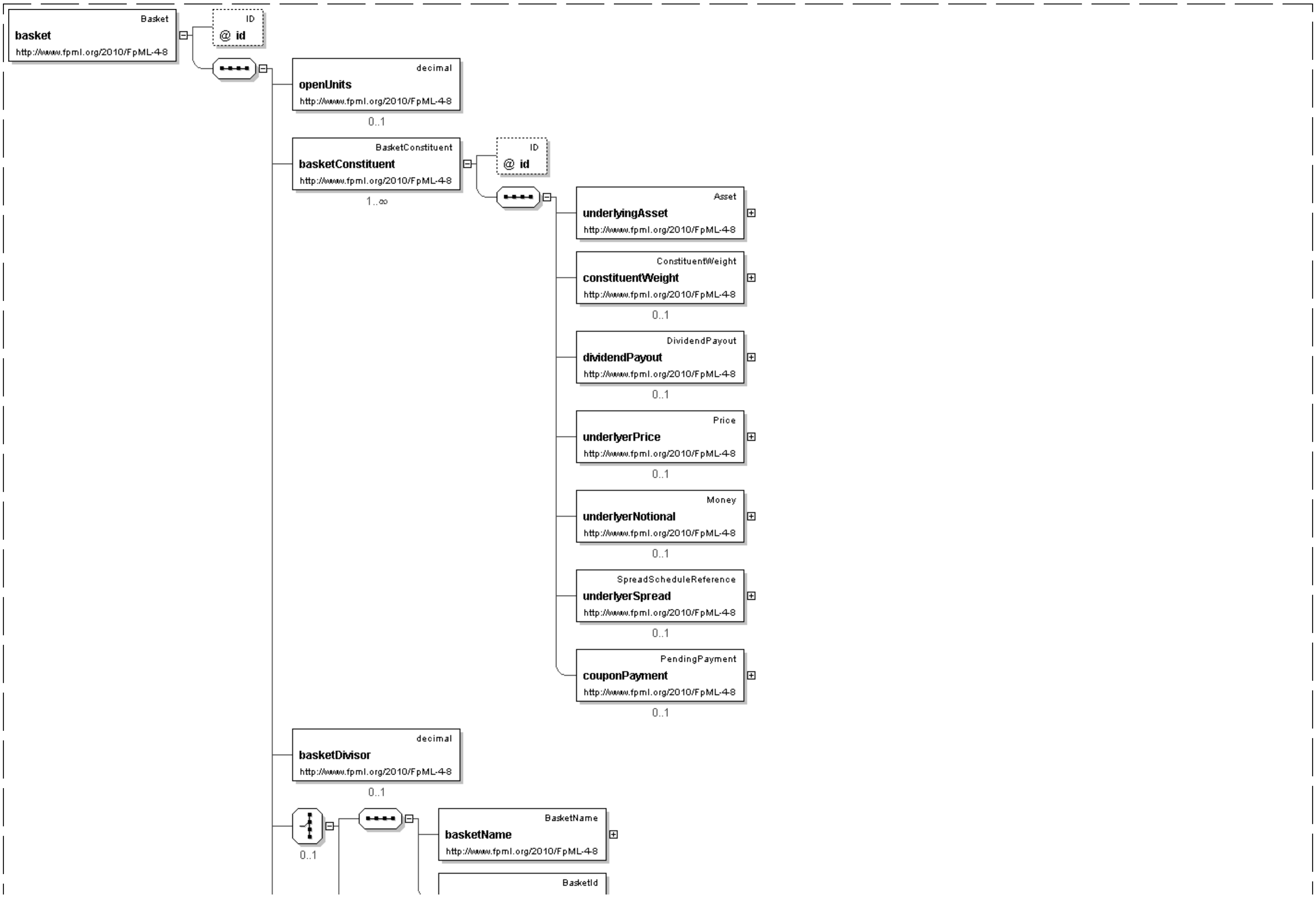
Global Declarations

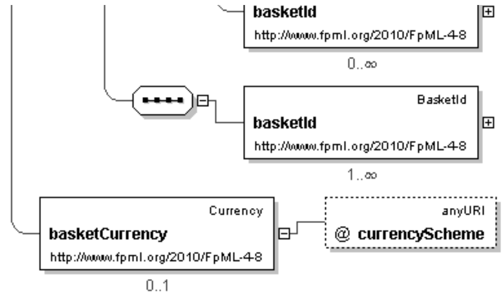
Element: basket

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	basket
Type	Basket
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a basket.

Logical Diagram

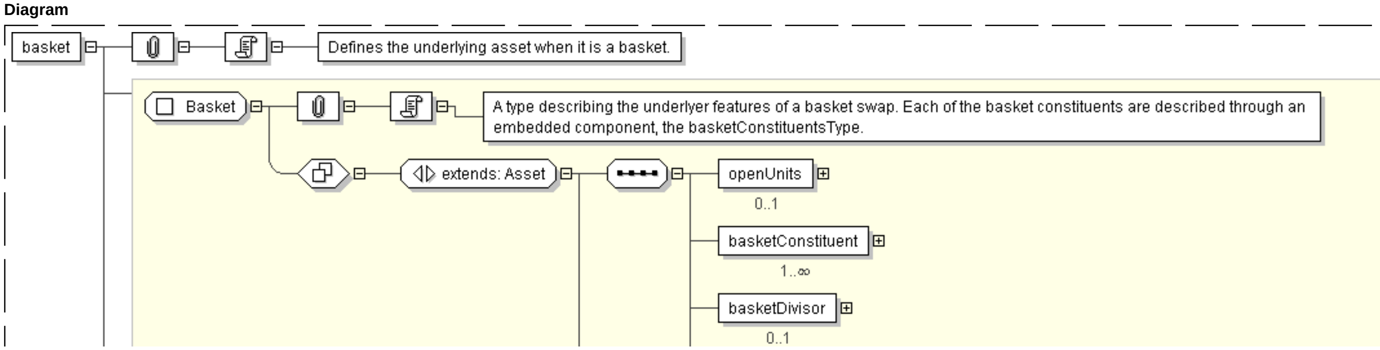


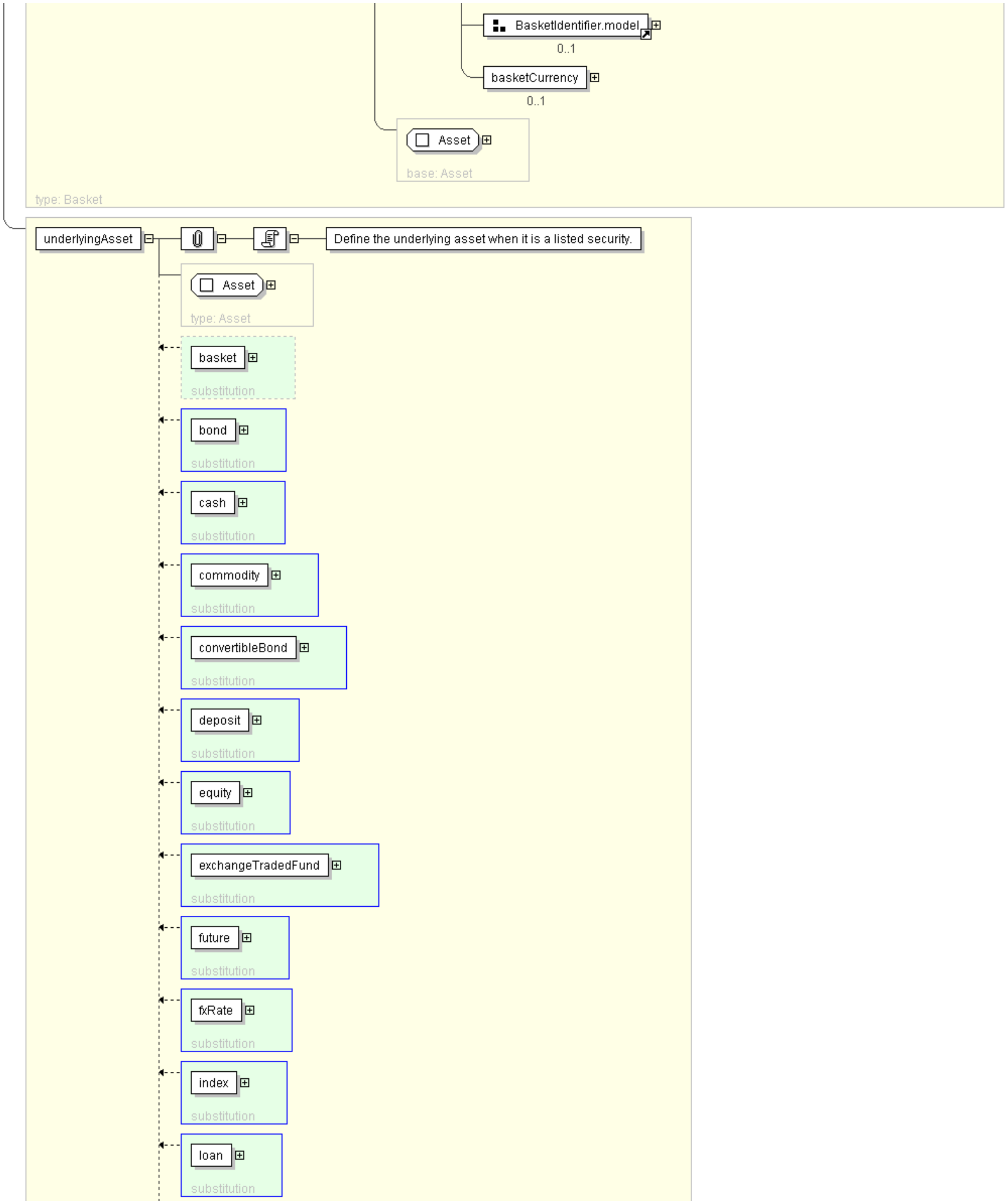


XML Instance Representation

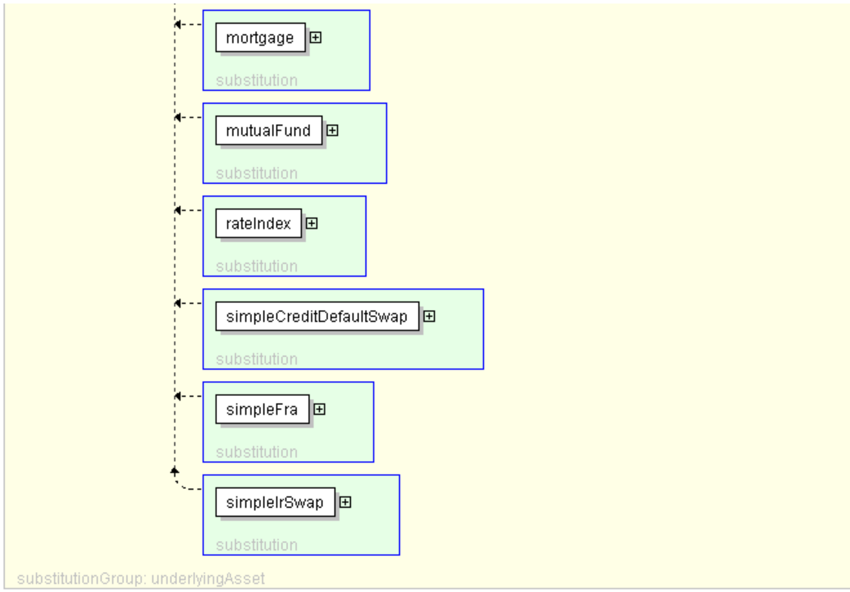
```
<basket
id=" xsd:ID [0..1]">
   <openUnits> xsd:decimal </openUnits> [0..1]
   'The number of units (index or securities) that constitute the underlyer of the swap. In
   the case of a basket swap, this element is used to reference both the number of basket
   units, and the number of each asset components of the basket when these are expressed
   in absolute terms.'

   <basketConstituent> BasketConstituent </basketConstituent> [1..*]
   'Describes each of the components of the basket.'

   <basketDivisor> xsd:decimal </basketDivisor> [0..1]
   'Specifies the basket divisor amount. This value is normally used to adjust the
   constituent weight for pricing or to adjust for dividends, or other corporate actions.'

Start Group: BasketIdentifier.model [0..1]
'Reuses the group that specifies a name and an identifier for a given basket.'

Start Choice [1]
      <basketName> BasketName </basketName> [1]
      'The name of the basket expressed as a free format string. FpML does not define usage rules
      for this element.'

      <basketId> BasketId </basketId> [0..*]
      'A CDS basket identifier'

      <basketId> BasketId </basketId> [1..*]
      'A CDS basket identifier'

End Choice
End Group: BasketIdentifier.model
   <basketCurrency> Currency </basketCurrency> [0..1]
   'Specifies the currency for this basket.'

</basket>
```

Diagram





BasketIdentifier.model
0..1
basketCurrency
0..1
Asset
base: Asset
type: Basket
underlyingAsset
Define the underlying asset when it is a listed security.
Asset
type: Asset
basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution



Schema Component Representation

```
<xsd:element name="basket" type=" Basket " substitutionGroup="underlyingAsset"/>
```

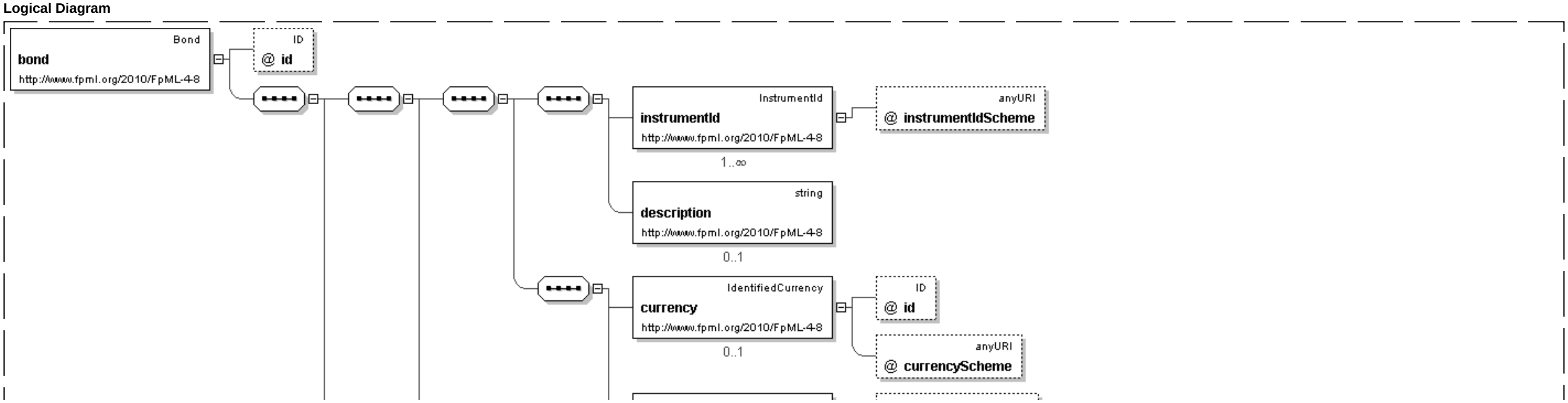
top

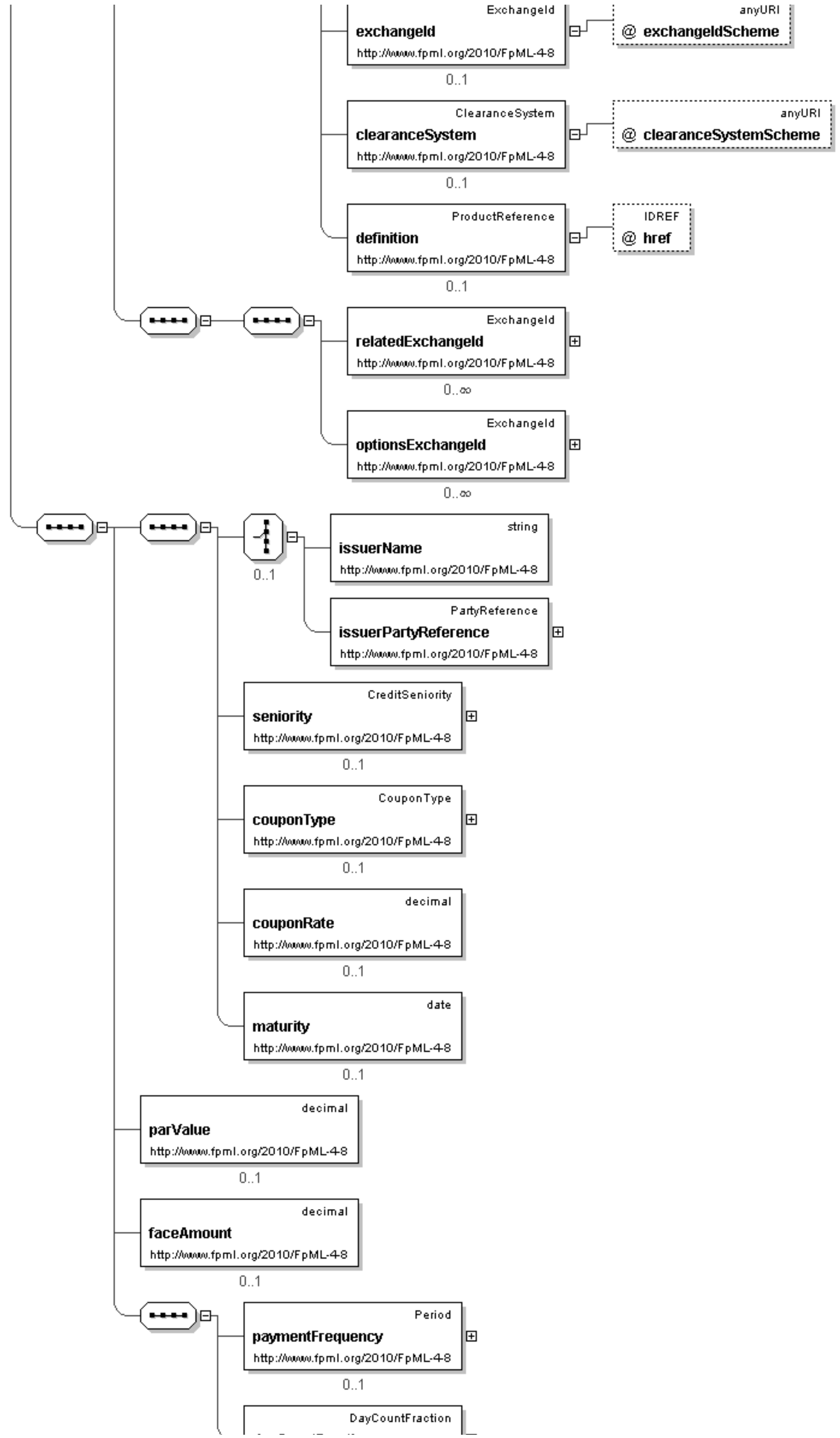
Element: bond

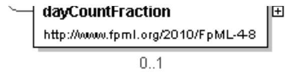
- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	bond
Used by (from the same schema document)	Model Group **BondChoice.model**
Type	Bond
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a bond.

Logical Diagram




ExchangeId
exchangeId
http://www.fpml.org/2010/FpML-4-8
0..1
anyURI
@ exchangeIdScheme
ClearanceSystem
clearanceSystem
http://www.fpml.org/2010/FpML-4-8
0..1
anyURI
@ clearanceSystemScheme
ProductReference
definition
http://www.fpml.org/2010/FpML-4-8
0..1
IDREF
@ href
ExchangeId
relatedExchangeId
http://www.fpml.org/2010/FpML-4-8
0..∞
ExchangeId
optionsExchangeId
http://www.fpml.org/2010/FpML-4-8
0..∞
0..1
string
issuerName
http://www.fpml.org/2010/FpML-4-8
PartyReference
issuerPartyReference
http://www.fpml.org/2010/FpML-4-8
CreditSeniority
seniority
http://www.fpml.org/2010/FpML-4-8
0..1
CouponType
couponType
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
couponRate
http://www.fpml.org/2010/FpML-4-8
0..1
date
maturity
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
parValue
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
faceAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Period
paymentFrequency
http://www.fpml.org/2010/FpML-4-8
0..1
DayCountFraction



XML Instance Representation

```
<bond
id=" xsd:ID [0..1]">
    <instrumentId> InstrumentId </instrumentId> [1..*]
    'Identification of the underlying asset, using public and/or private identifiers.'

    <description> xsd:string </description> [0..1]
    'Long name of the underlying asset.'

    <currency> IdentifiedCurrency </currency> [0..1]
    'Trading currency of the underlyer when transacted as a cash instrument.'

    <exchangeId> ExchangeId </exchangeId> [0..1]
    'Identification of the exchange on which this asset is transacted for the purposes
    of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
    as defined in the ISDA 2002 Equity Derivatives Definitions.'

    <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
    'Identification of the clearance system associated with the transaction exchange.'

    <definition> ProductReference </definition> [0..1]
    'An optional reference to a full FpML product that defines the simple product in
    greater detail. In case of inconsistency between the terms of the simple product and those
    of the detailed definition, the values in the simple product override those in the
    detailed definition.'

    <relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
    'A short form unique identifier for a related exchange. If the element is not present then
    the exchange shall be the primary exchange on which listed futures and options on
    the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
    in the ISDA 2002 Equity Derivatives Definitions.'

    <optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
    'A short form unique identifier for an exchange on which the reference option contract
    is listed. This is to address the case where the reference exchange for the future is
    different than the one for the option. The options Exchange is referenced on share options
    when Merger Elections are selected as Options Exchange Adjustment.'

Start Choice [0..1]
'Specifies the issuer name of a fixed income security or convertible bond. This name can
either be explicitly stated, or specified as an href into another element of the document,
such as the obligor'


        <issuerName> xsd:string </issuerName> [1]
        <issuerPartyReference> PartyReference </issuerPartyReference> [1]
End Choice
    <seniority> CreditSeniority </seniority> [0..1]
    'The repayment precedence of a debt instrument.'

    <couponType> CouponType </couponType> [0..1]
    'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

    <couponRate> xsd:decimal </couponRate> [0..1]
    'Specifies the coupon rate (expressed in percentage) of a fixed income security or
    convertible bond.'

    <maturity> xsd:date </maturity> [0..1]
    'The date when the principal amount of a security becomes due and payable.'

    <parValue> xsd:decimal </parValue> [0..1]
    'Specifies the nominal amount of a fixed income security or convertible bond.'
```

<faceAmount> xsd:decimal </faceAmount> [0..1]

'Specifies the total amount of the issue. Corresponds to the par value multiplied by the number of issued security.'

<paymentFrequency> Period </paymentFrequency> [0..1]

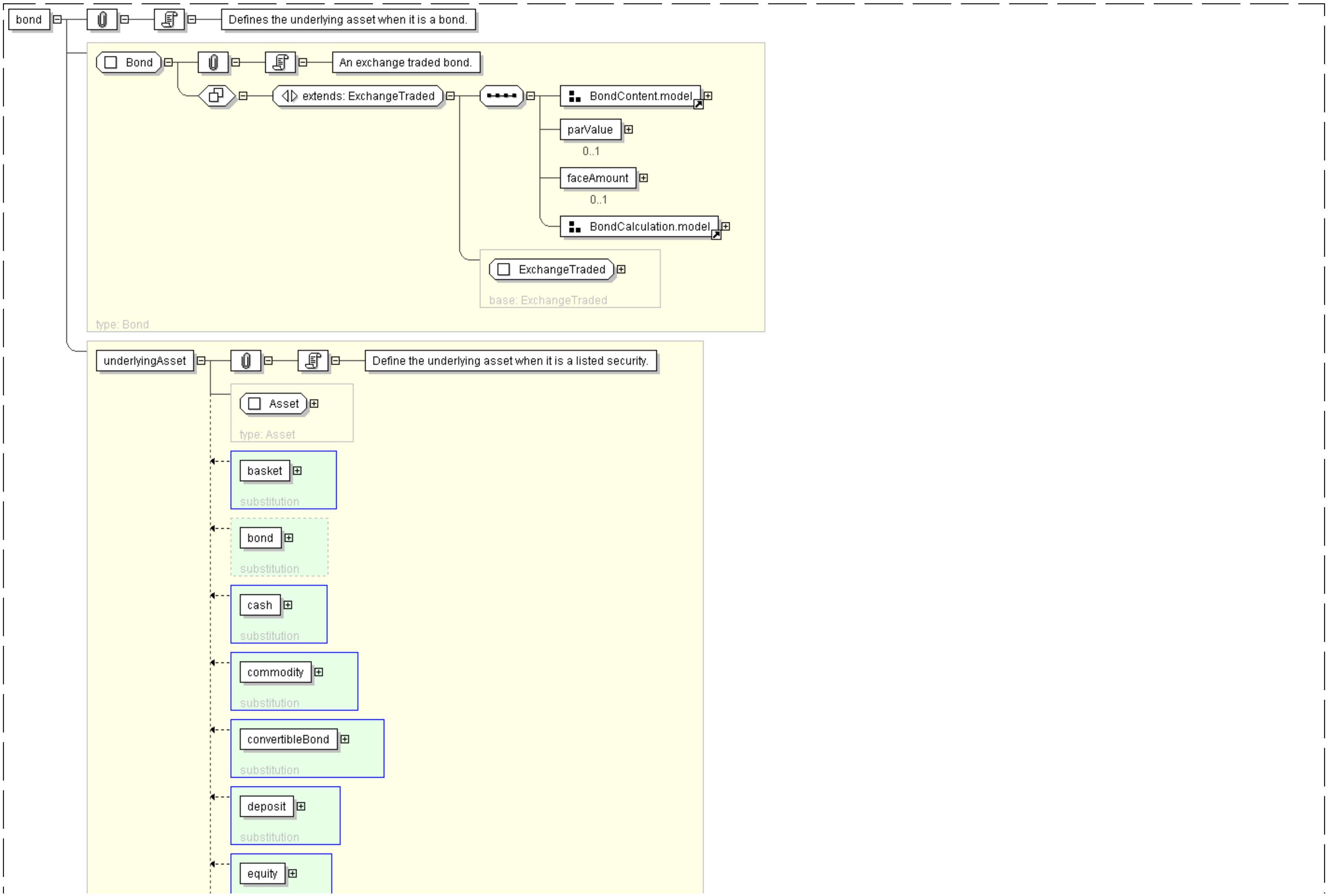
'Specifies the frequency at which the bond pays, e.g. 6M.'

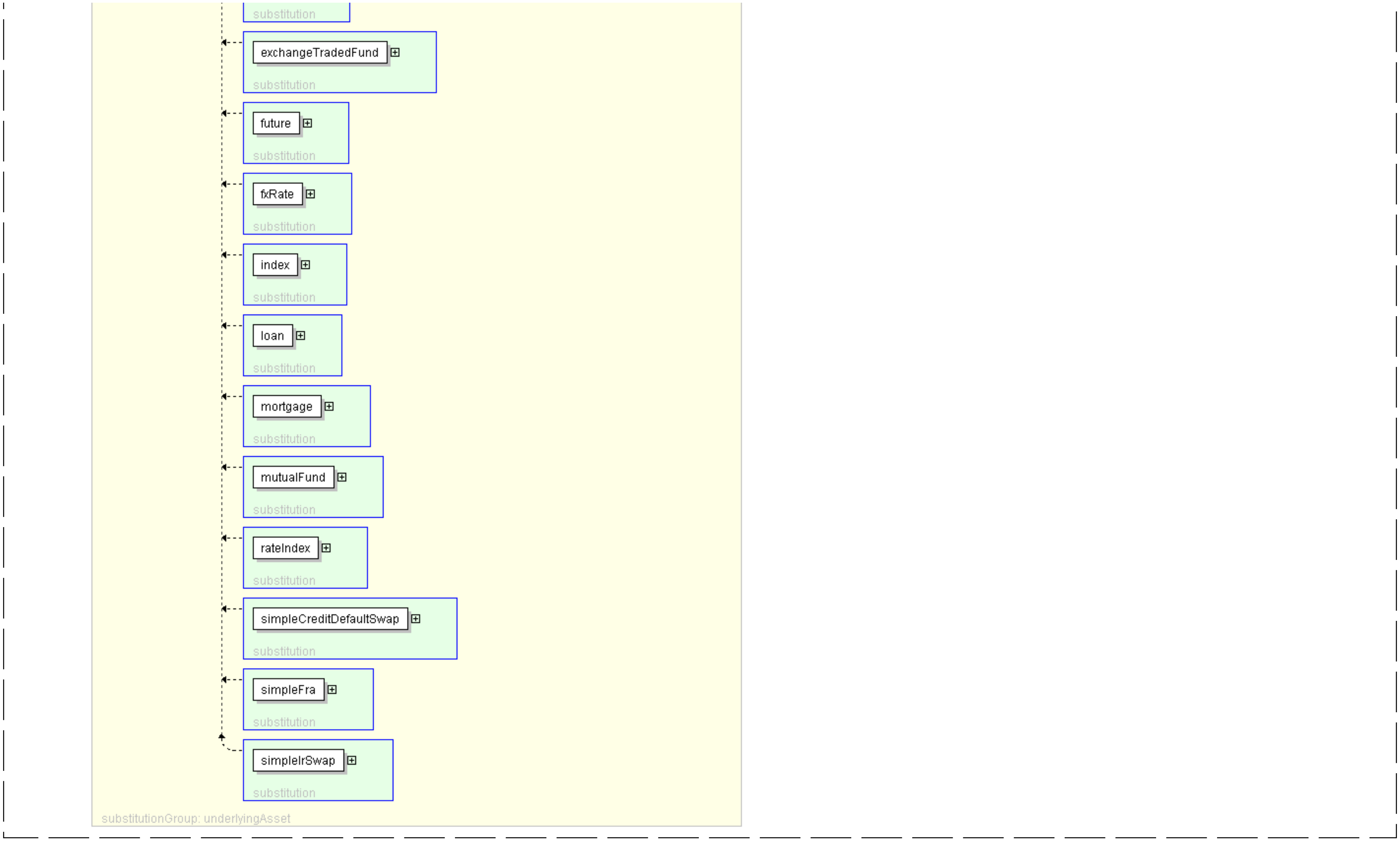
<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]

'The day count basis for the bond.'

</bond>

Diagram





Schema Component Representation

```
<xsd:element name="bond" type=" Bond " substitutionGroup="underlyingAsset"/>
```

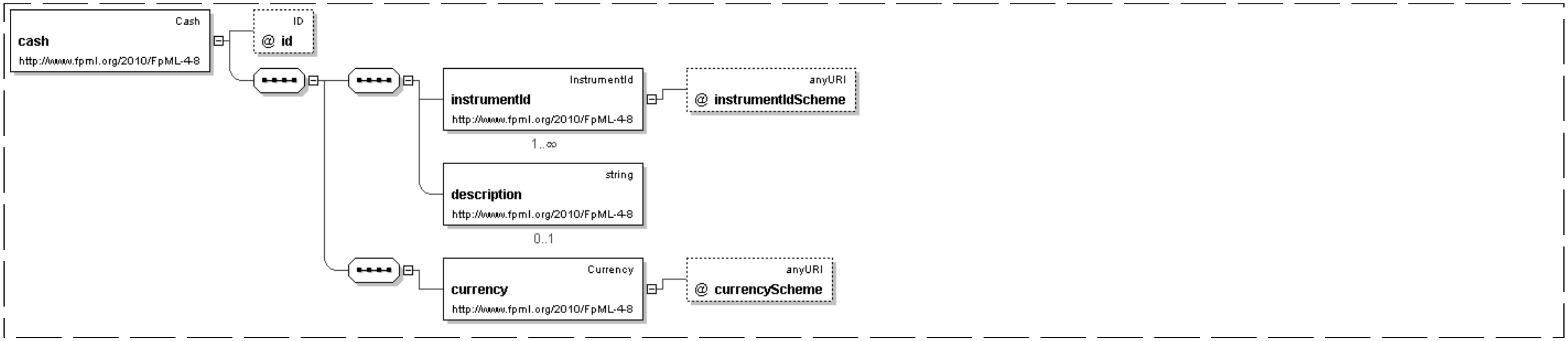
top

Element: cash

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	cash
Type	Cash
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset type that is a cash payment. Used for specifying discounting factors for future cash flows in the pricing and risk model.

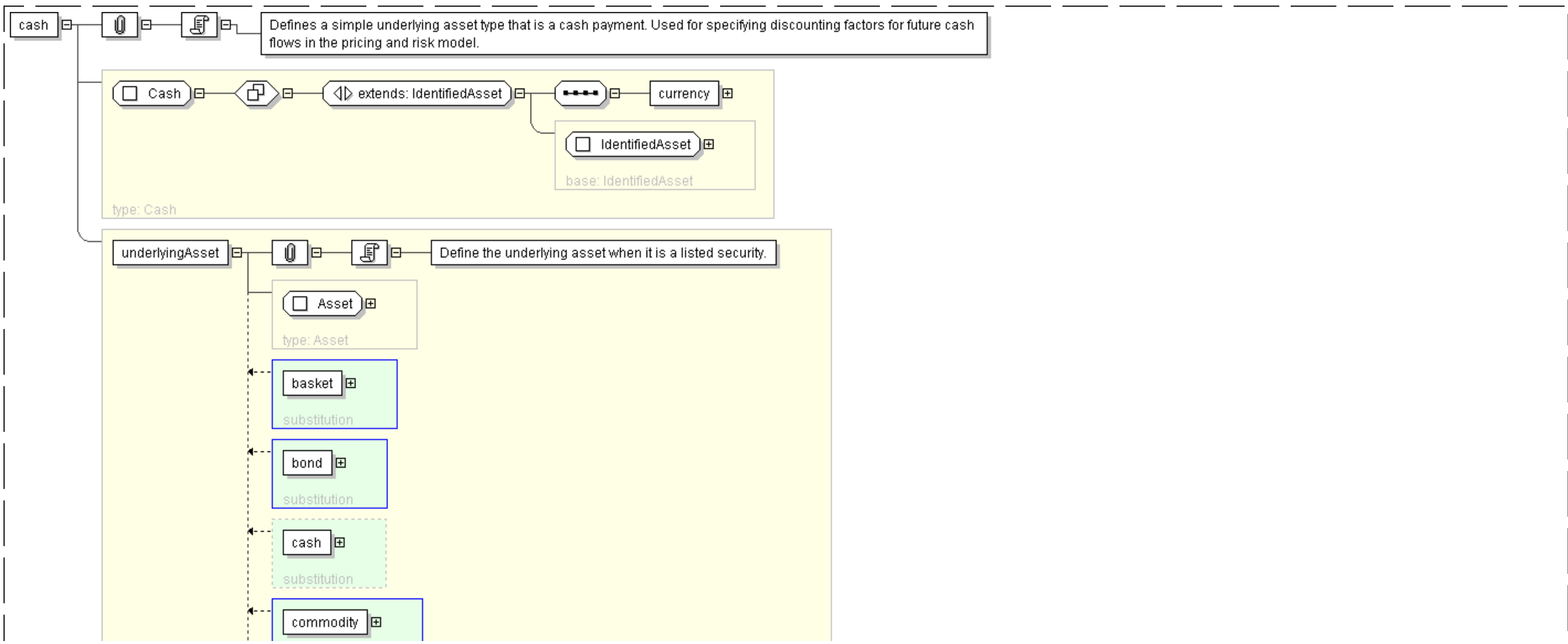
Logical Diagram

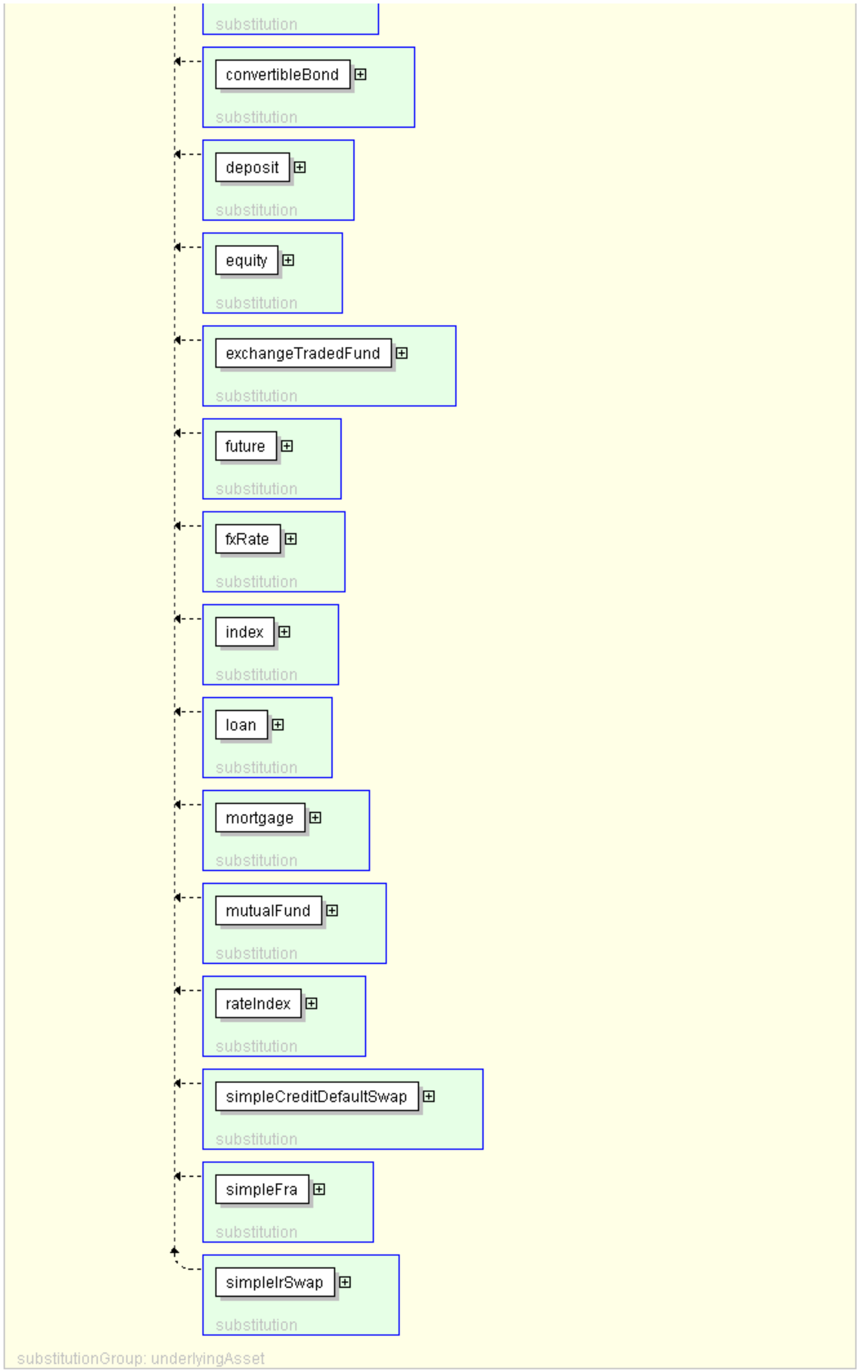


XML Instance Representation

```
<cash
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> Currency </currency> [1]
   'The currency in which an amount is denominated.'

</cash>
```

Diagram





Schema Component Representation

```
<xsd:element name="cash" type=" Cash " substitutionGroup="underlyingAsset"/>
```

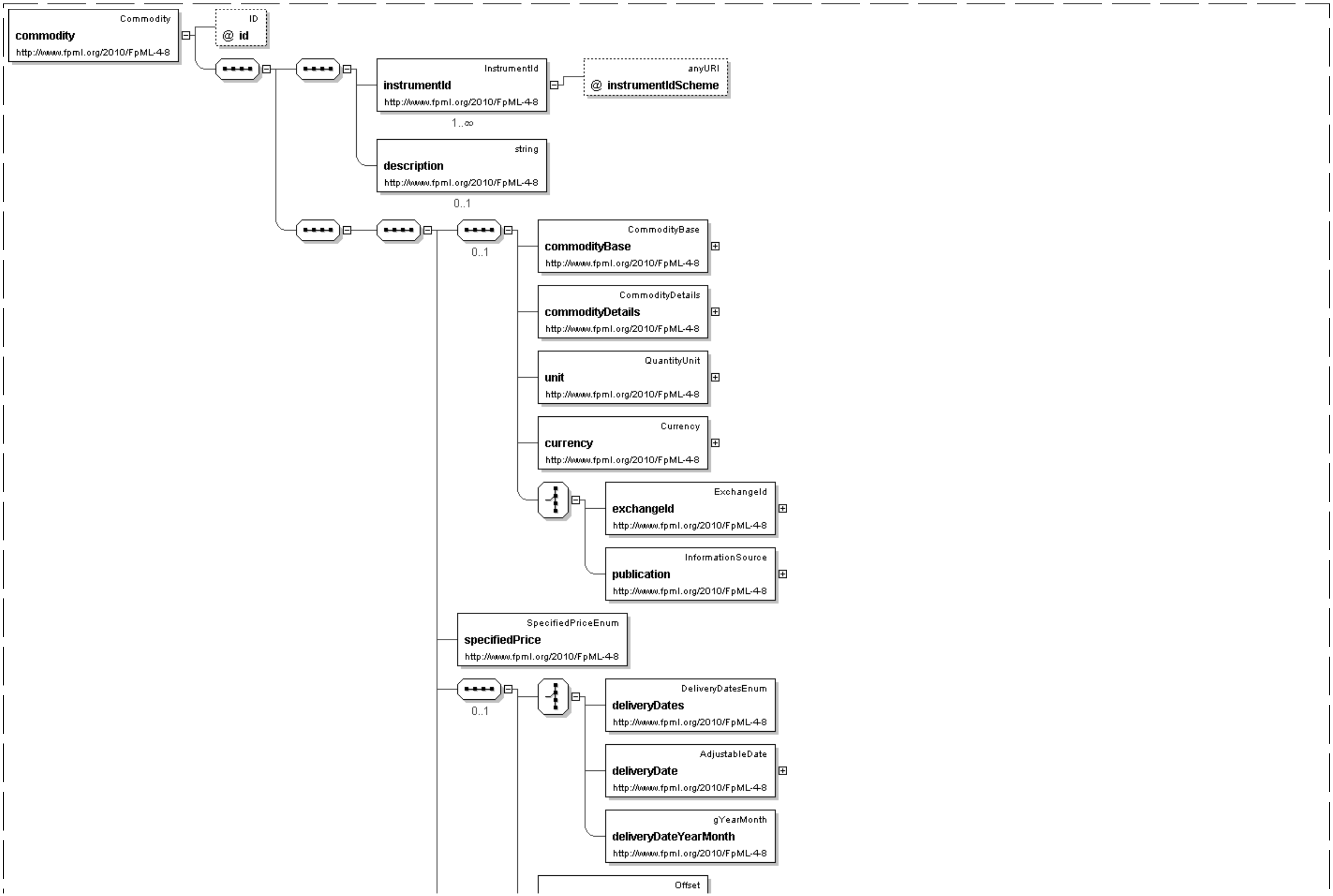
top

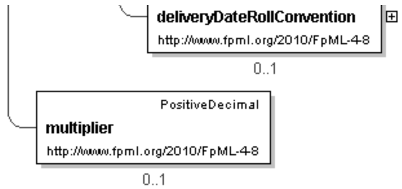
Element: commodity

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	commodity
Type	Commodity
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a commodity.

Logical Diagram





XML Instance Representation

```
<commodity
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

Start Group: CommodityReferencePriceFramework.model [0..1]
      <commodityBase> CommodityBase </commodityBase> [1]
      'A coding scheme value to identify the base type of the commodity being traded. Where
      possible, this should follow the naming convention used in the 2005 ISDA Commodity
      Definitions. For example, \'Oil\'.'

      <commodityDetails> CommodityDetails </commodityDetails> [1]
      'A coding scheme value to identify the commodity being traded more specifically.
      Where possible, this should follow the naming convention used in the 2005 ISDA
      Commodity Definitions. For example, \'Brent\'.'

      <unit> QuantityUnit </unit> [1]
      'A coding scheme value to identify the unit in which the undelryer is denominated.
      Where possible, this should follow the naming convention used in the 2005 ISDA
      Commodity Definitions.'

      <currency> Currency </currency> [1]
      'The currency in which the Commodity Reference Price is published.'

Start Choice [1]
         <exchangeId> ExchangeId </exchangeId> [1]
         'For those commodities being traded with reference to the price of a listed future,
         the exchange where that future is listed should be specified here.'

         <publication> InformationSource </publication> [1]
         'For those commodities being traded with reference to a price distributed by a
         publication, that publication should be specified here.'

End Choice
End Group: CommodityReferencePriceFramework.model
   <specifiedPrice> SpecifiedPriceEnum </specifiedPrice> [1]
   'The Specified Price is not defined in the Commodity Reference Price and so needs to be
   stated in the Underlyer definition as it will impact the calculation of the Floating Price.'

Start Sequence [0..1]
Start Choice [1]
         <deliveryDates> DeliveryDatesEnum </deliveryDates> [1]
         'The Delivery Date is a NearbyMonth, for use when the Commodity Transaction references
         Futures Contract.'

         <deliveryDate> AdjustableDate </deliveryDate> [1]
         'The Delivery Date is a fixed, single day.'

         <deliveryDateYearMonth> xsd:gYearMonth </deliveryDateYearMonth> [1]
         'The Delivery Date is a fixed, single month.'

End Choice
      <deliveryDateRollConvention> Offset </deliveryDateRollConvention> [0..1]
      'Specifies, for a Commodity Transaction that references a listed future via the
```

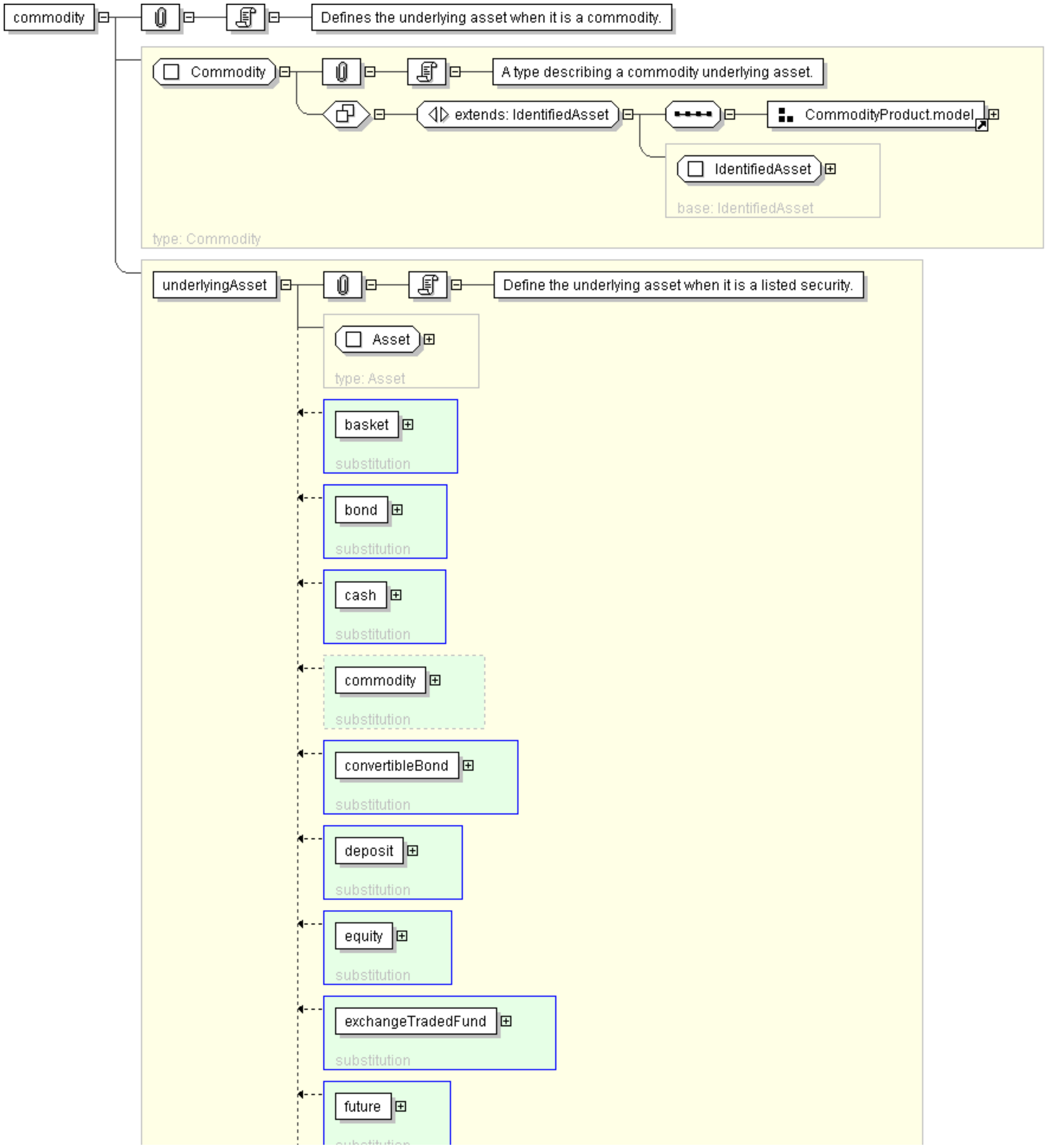
deliveryDates element, the day on which the specified future will roll to the next nearby month when the referenced future expires. If the future will not roll at all - i.e. the price will be taken from the expiring contract, 0 should be specified here. If the future will roll to the next nearby on the last trading day - i.e. the price will be taken from the next nearby on the last trading day, then 1 should be specified and so on.'

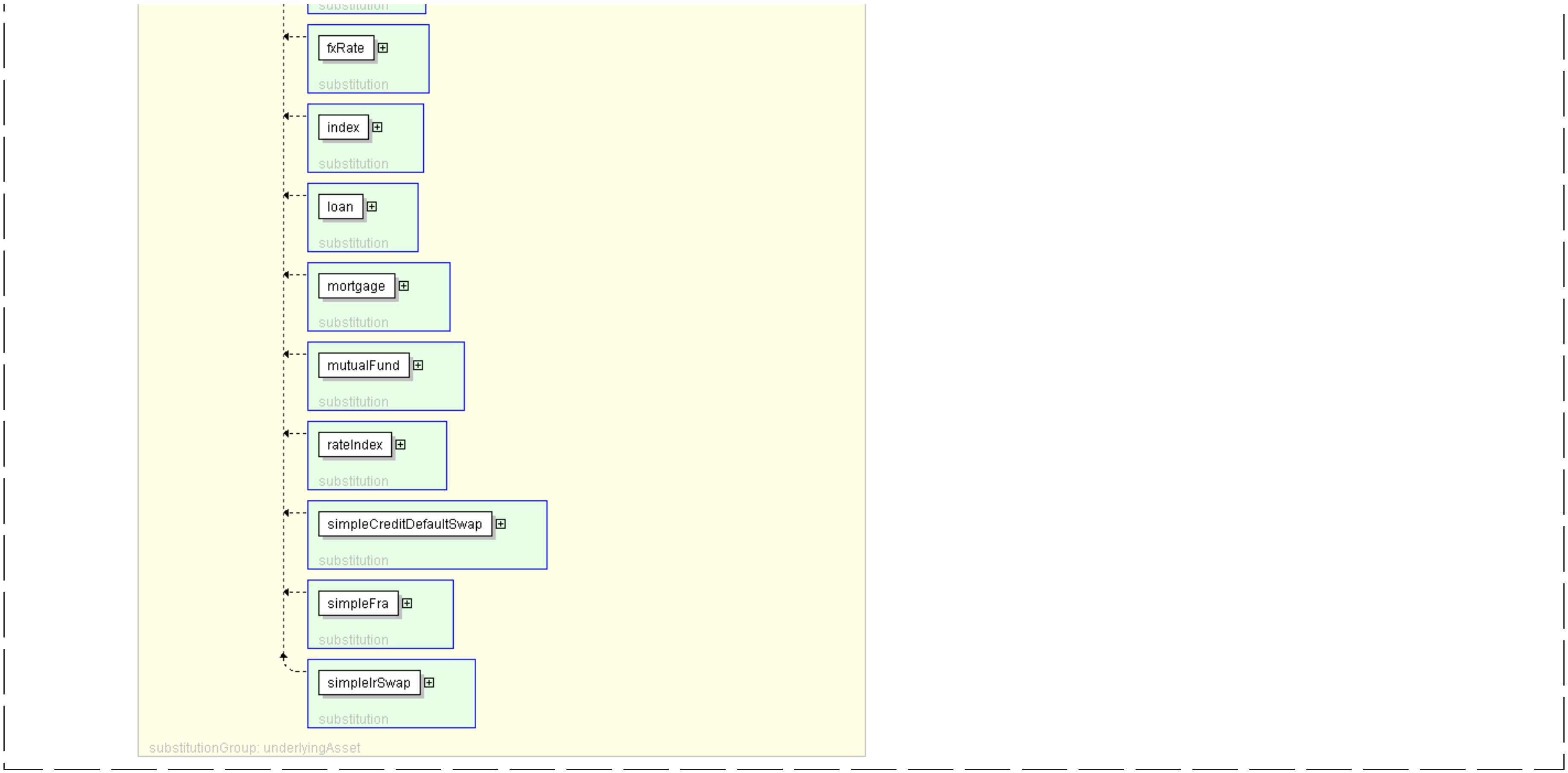
End Sequence
<multiplier> PositiveDecimal </multiplier> [0..1]

'Specifies the multiplier associated with a Transaction.'

</commodity>

Diagram





Schema Component Representation

```
<xsd:element name="commodity" type=" Commodity " substitutionGroup="underlyingAsset"/>
```

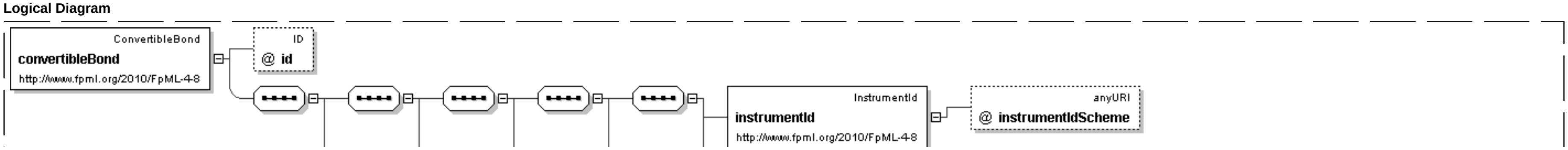
top

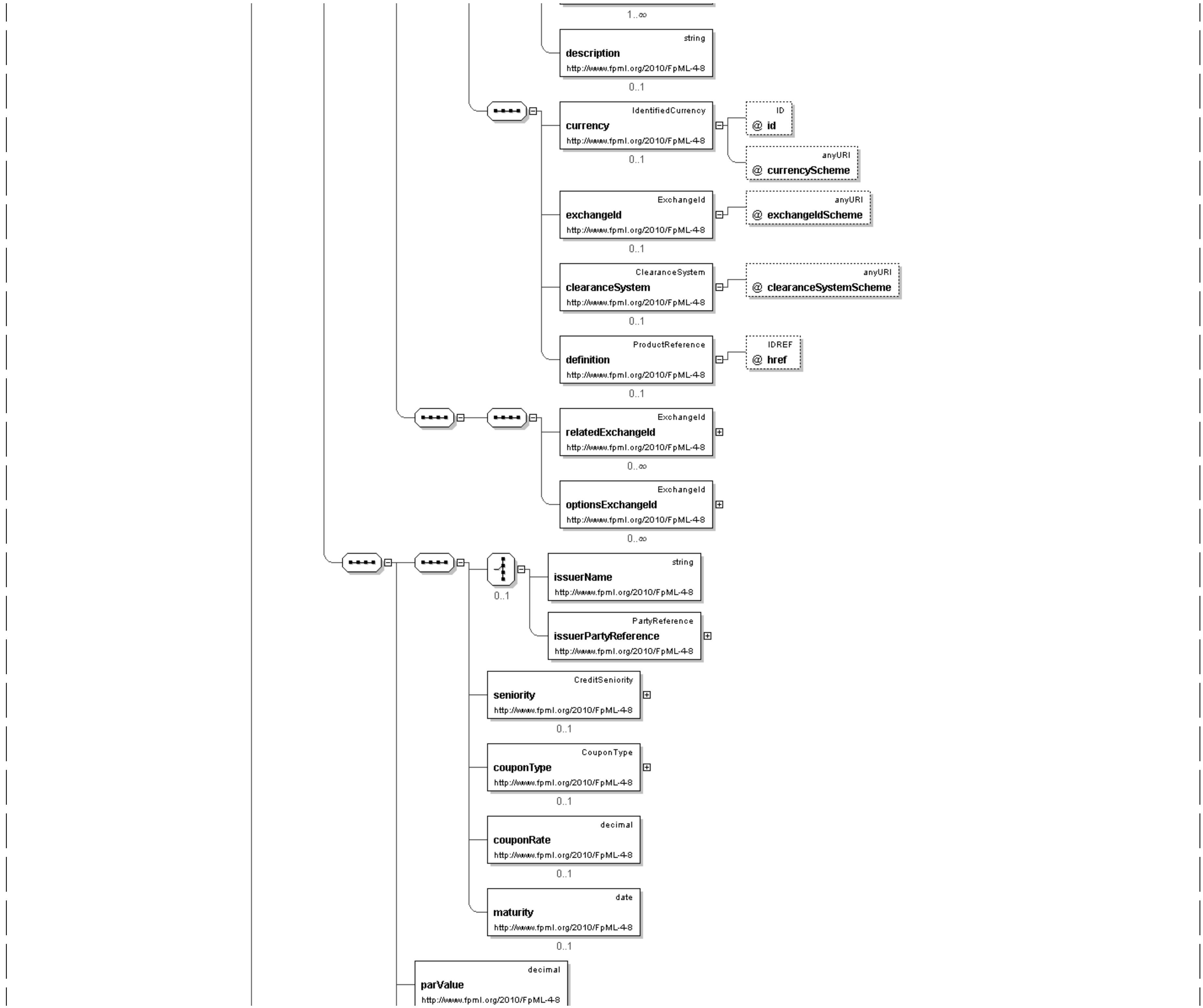
Element: convertibleBond

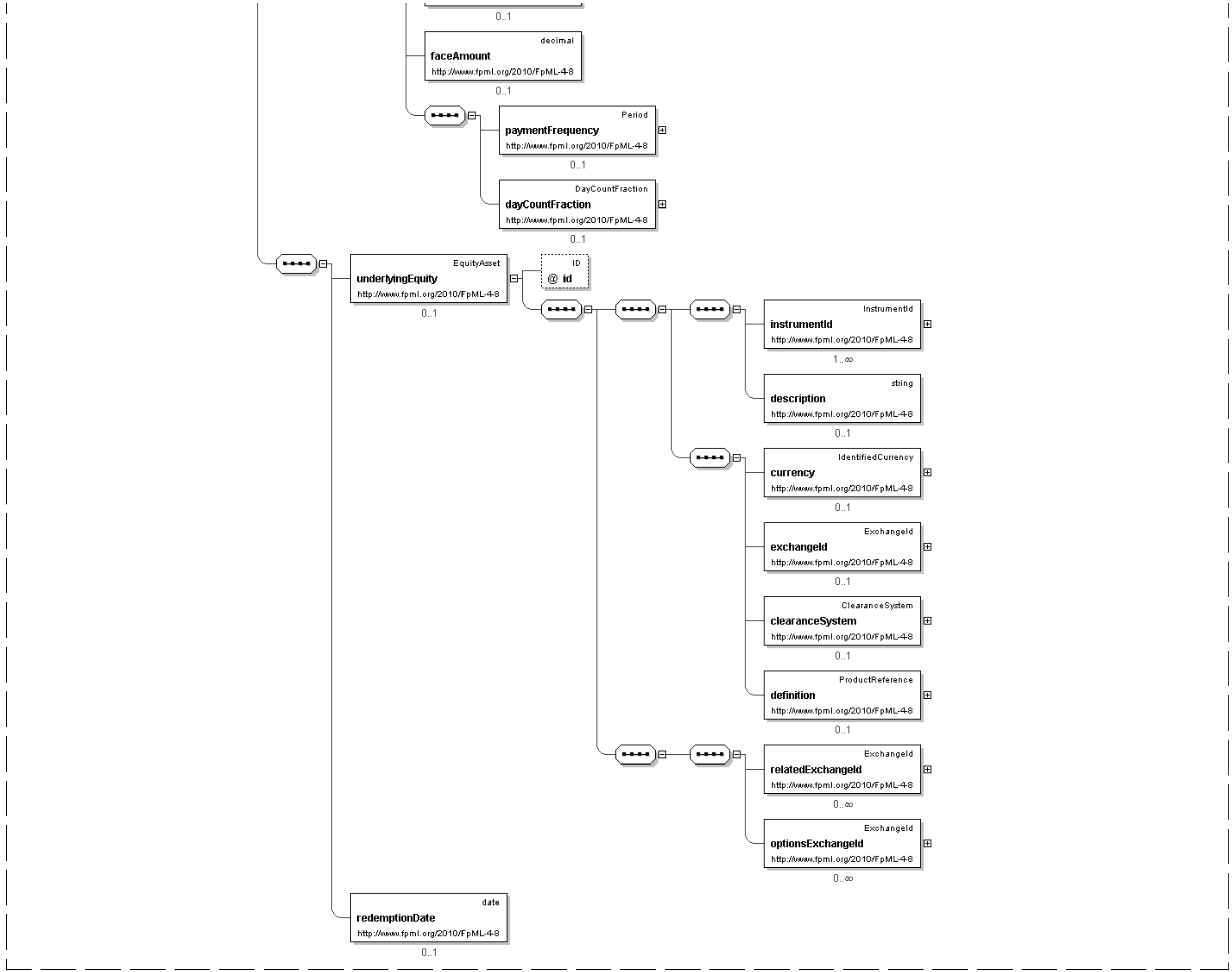
- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	convertibleBond
Used by (from the same schema document)	Model Group **BondChoice.model**
Type	ConvertibleBond
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a convertible bond.

Logical Diagram




1..∞
string
description
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedCurrency
currency
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
anyURI
@ currencyScheme
ExchangeId
exchangeId
http://www.fpml.org/2010/FpML-4-8
0..1
anyURI
@ exchangeIdScheme
ClearanceSystem
clearanceSystem
http://www.fpml.org/2010/FpML-4-8
0..1
anyURI
@ clearanceSystemScheme
ProductReference
definition
http://www.fpml.org/2010/FpML-4-8
0..1
IDREF
@ href
ExchangeId
relatedExchangeId
http://www.fpml.org/2010/FpML-4-8
0..∞
ExchangeId
optionsExchangeId
http://www.fpml.org/2010/FpML-4-8
0..∞
0..1
string
issuerName
http://www.fpml.org/2010/FpML-4-8
PartyReference
issuerPartyReference
http://www.fpml.org/2010/FpML-4-8
CreditSeniority
seniority
http://www.fpml.org/2010/FpML-4-8
0..1
CouponType
couponType
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
couponRate
http://www.fpml.org/2010/FpML-4-8
0..1
date
maturity
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
parValue
http://www.fpml.org/2010/FpML-4-8



XML Instance Representation

```
<convertibleBond
```

id=" xsd:ID [0..1]">
<instrumentId> InstrumentId </instrumentId> [1..*]

'Identification of the underlying asset, using public and/or private identifiers.'

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

Start Choice [0..1]

'Specifies the issuer name of a fixed income security or convertible bond. This name can either be explicitly stated, or specified as an href into another element of the document, such as the obligor'

<issuerName> xsd:string </issuerName> [1]
<issuerPartyReference> PartyReference </issuerPartyReference> [1]
End Choice
<seniority> CreditSeniority </seniority> [0..1]

'The repayment precedence of a debt instrument.'

<couponType> CouponType </couponType> [0..1]

'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

<couponRate> xsd:decimal </couponRate> [0..1]

'Specifies the coupon rate (expressed in percentage) of a fixed income security or convertible bond.'

<maturity> xsd:date </maturity> [0..1]

'The date when the principal amount of a security becomes due and payable.'

<parValue> xsd:decimal </parValue> [0..1]

'Specifies the nominal amount of a fixed income security or convertible bond.'

<faceAmount> xsd:decimal </faceAmount> [0..1]

'Specifies the total amount of the issue. Corresponds to the par value multiplied by the number of issued security.'

<paymentFrequency> Period </paymentFrequency> [0..1]

'Specifies the frequency at which the bond pays, e.g. 6M.'

<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]

'The day count basis for the bond.'

<underlyingEquity> EquityAsset </underlyingEquity> [0..1]

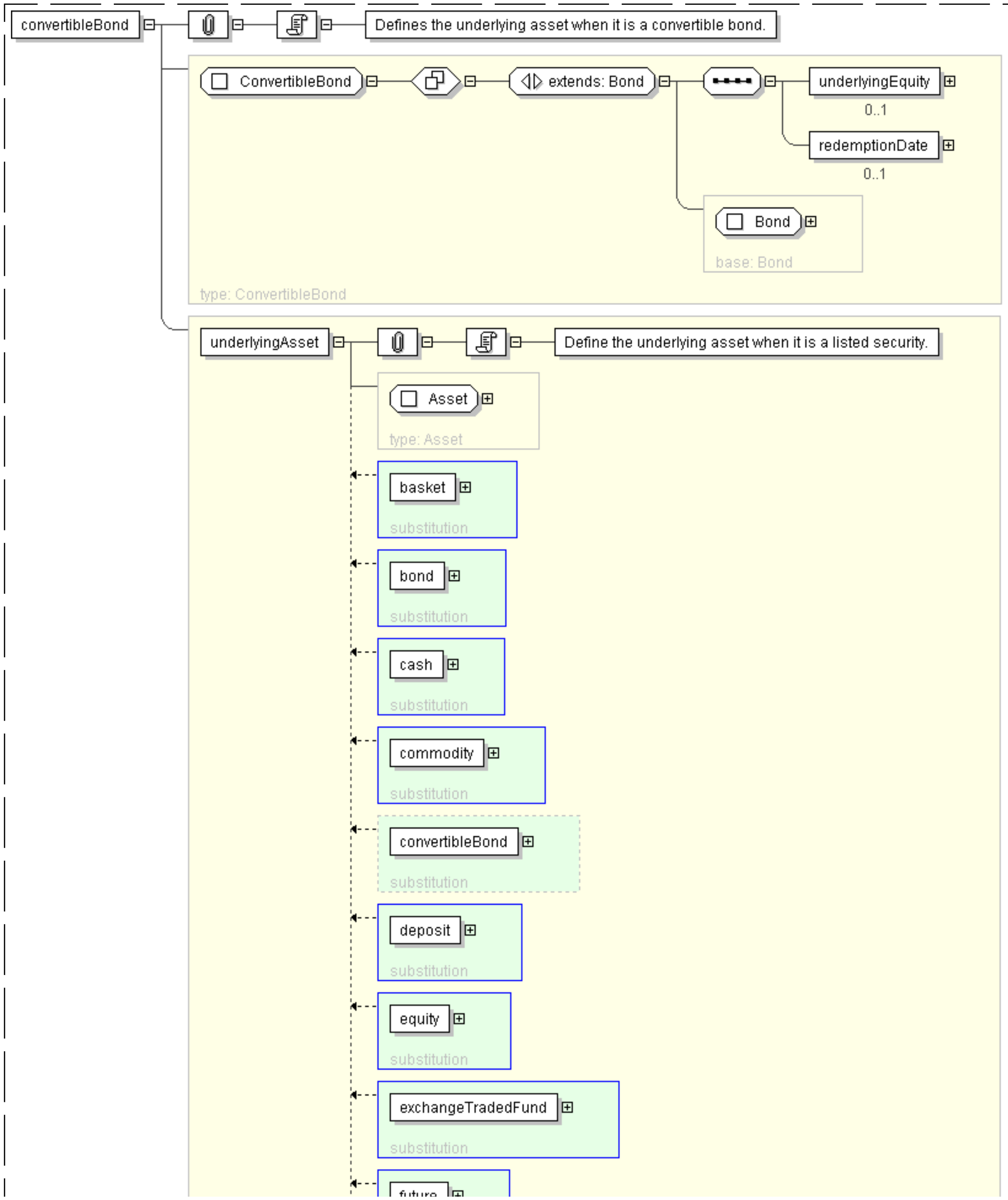
'Specifies the equity in which the convertible bond can be converted.'

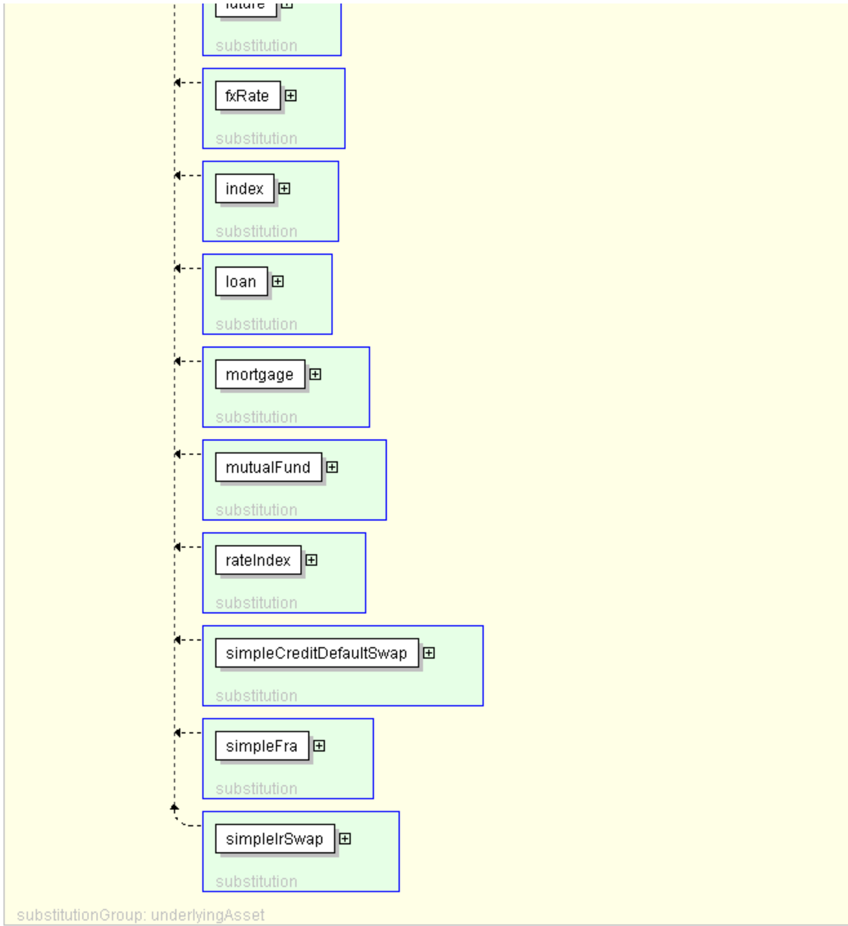
<redemptionDate> xsd:date </redemptionDate> [0..1]

'Earlier date between the convertible bond put dates and its maturity date.'

</convertibleBond>

Diagram





Schema Component Representation

```
<xsd:element name="convertibleBond" type=" ConvertibleBond
" substitutionGroup="underlyingAsset"/>
```

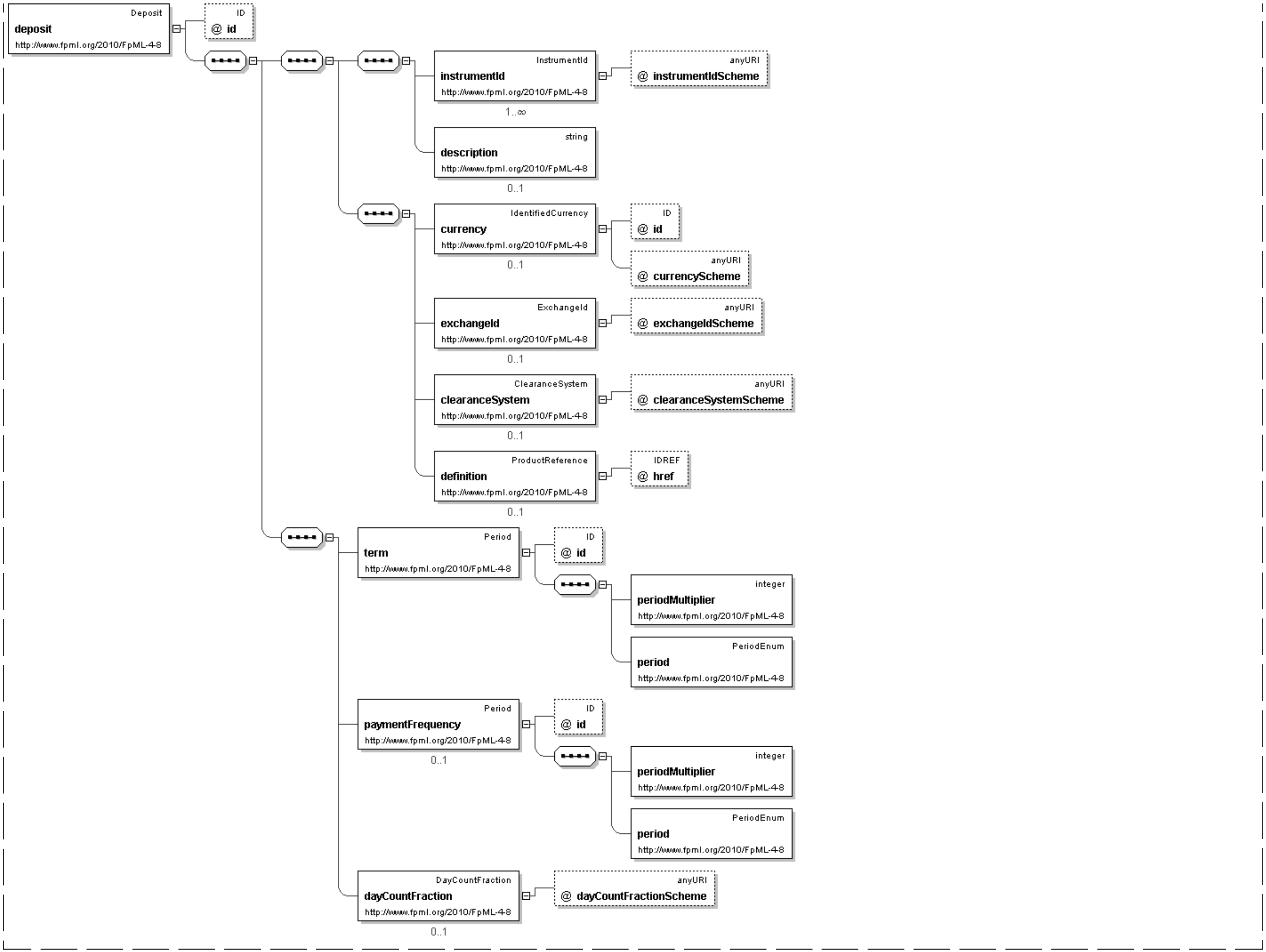
top

Element: deposit

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	deposit
Type	Deposit
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset that is a term deposit.

Logical Diagram



XML Instance Representation

```
<deposit
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'
```

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<term> Period </term> [1]

'Specifies the term of the deposit, e.g. 5Y.'

<paymentFrequency> Period </paymentFrequency> [0..1]

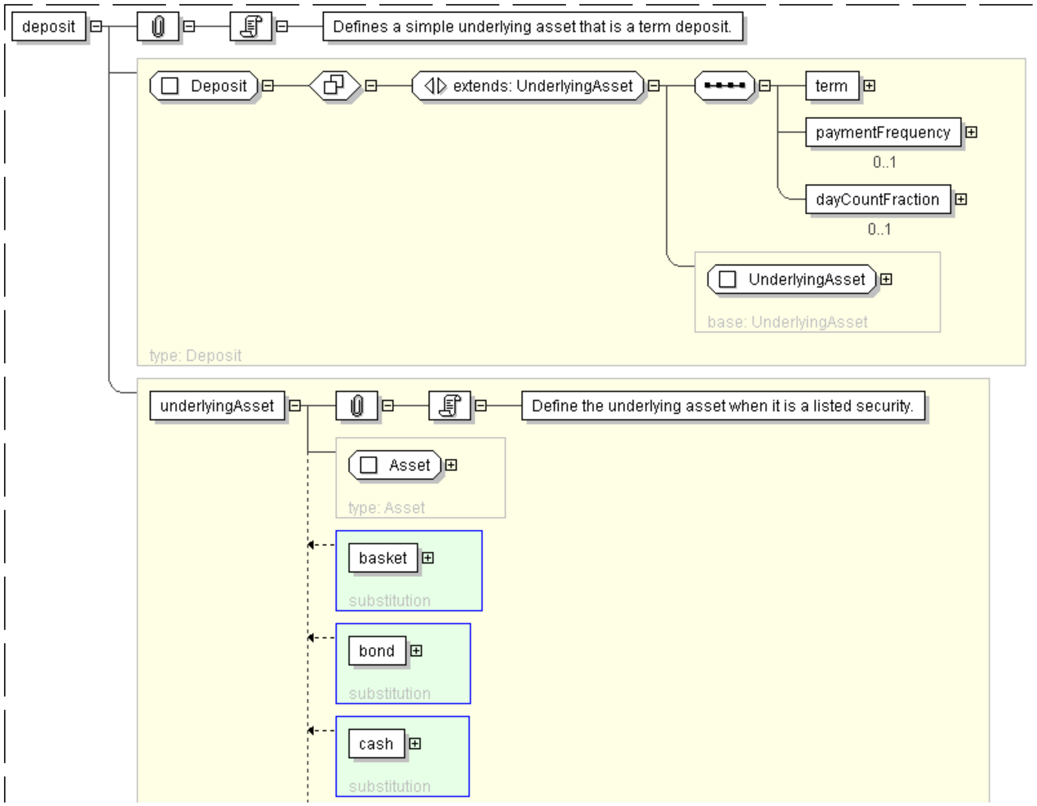
'Specifies the frequency at which the deposit pays, e.g. 6M.'

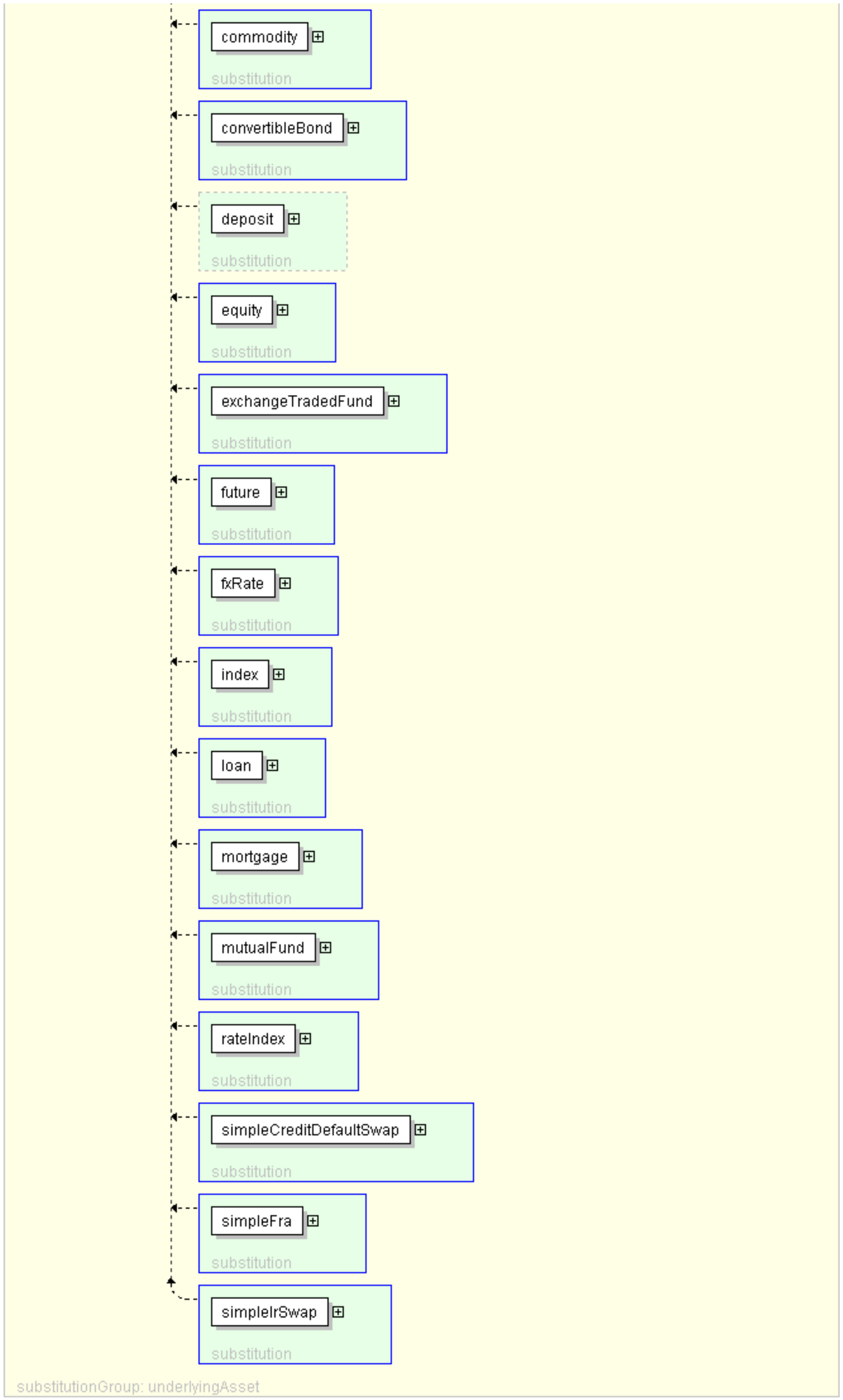
<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]

'The day count basis for the deposit.'

</deposit>

Diagram





Schema Component Representation

```
<xsd:element name="deposit" type=" Deposit " substitutionGroup="underlyingAsset"/>
```

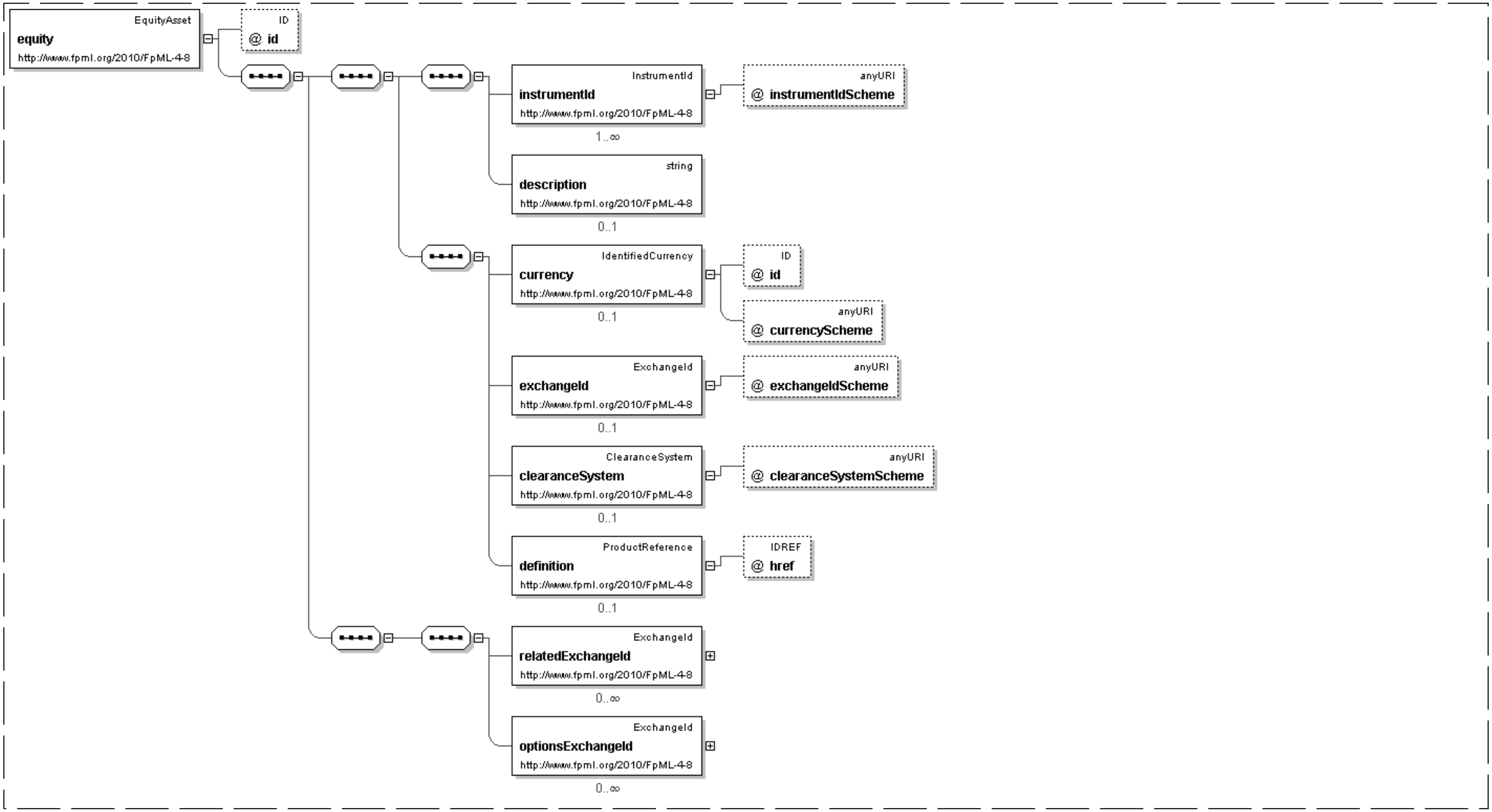
top

Element: equity

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	equity
Type	EquityAsset
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a listed equity.

Logical Diagram



XML Instance Representation

```
<equity
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'
```

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

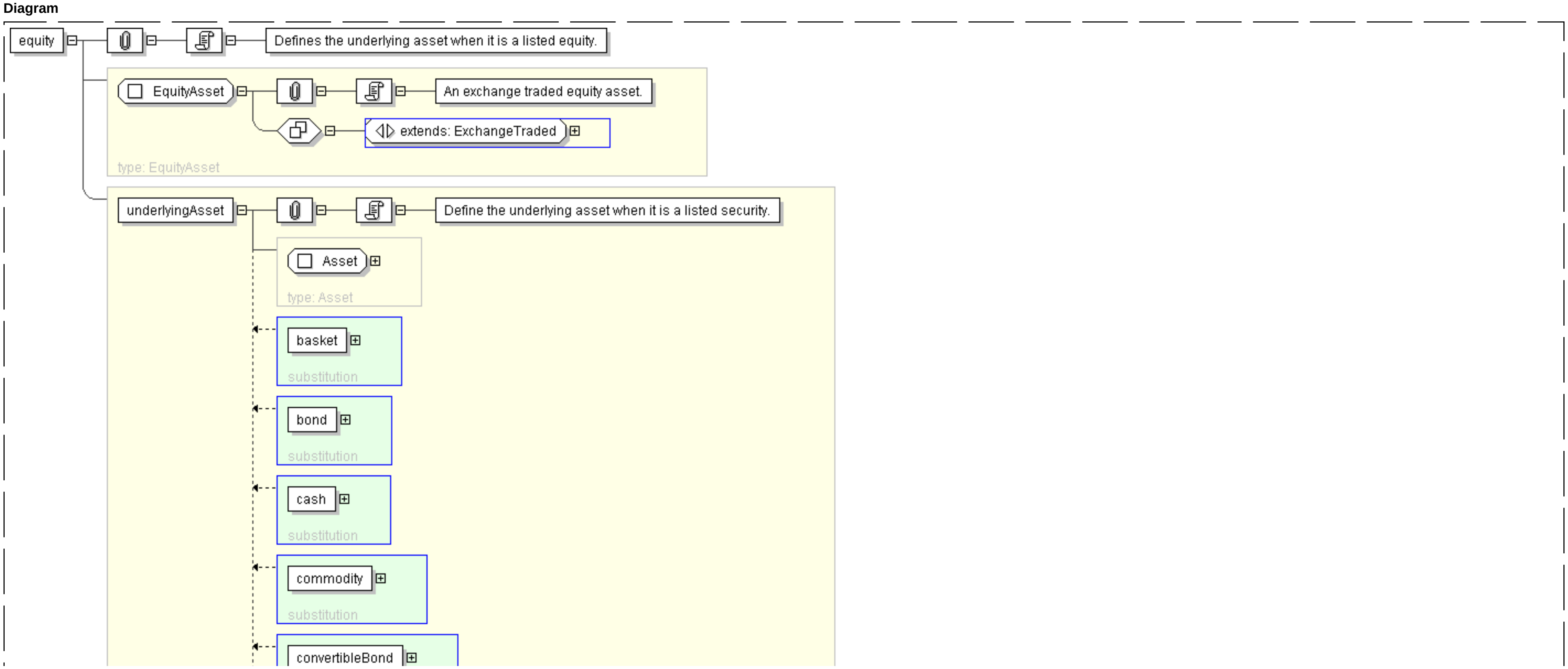
'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

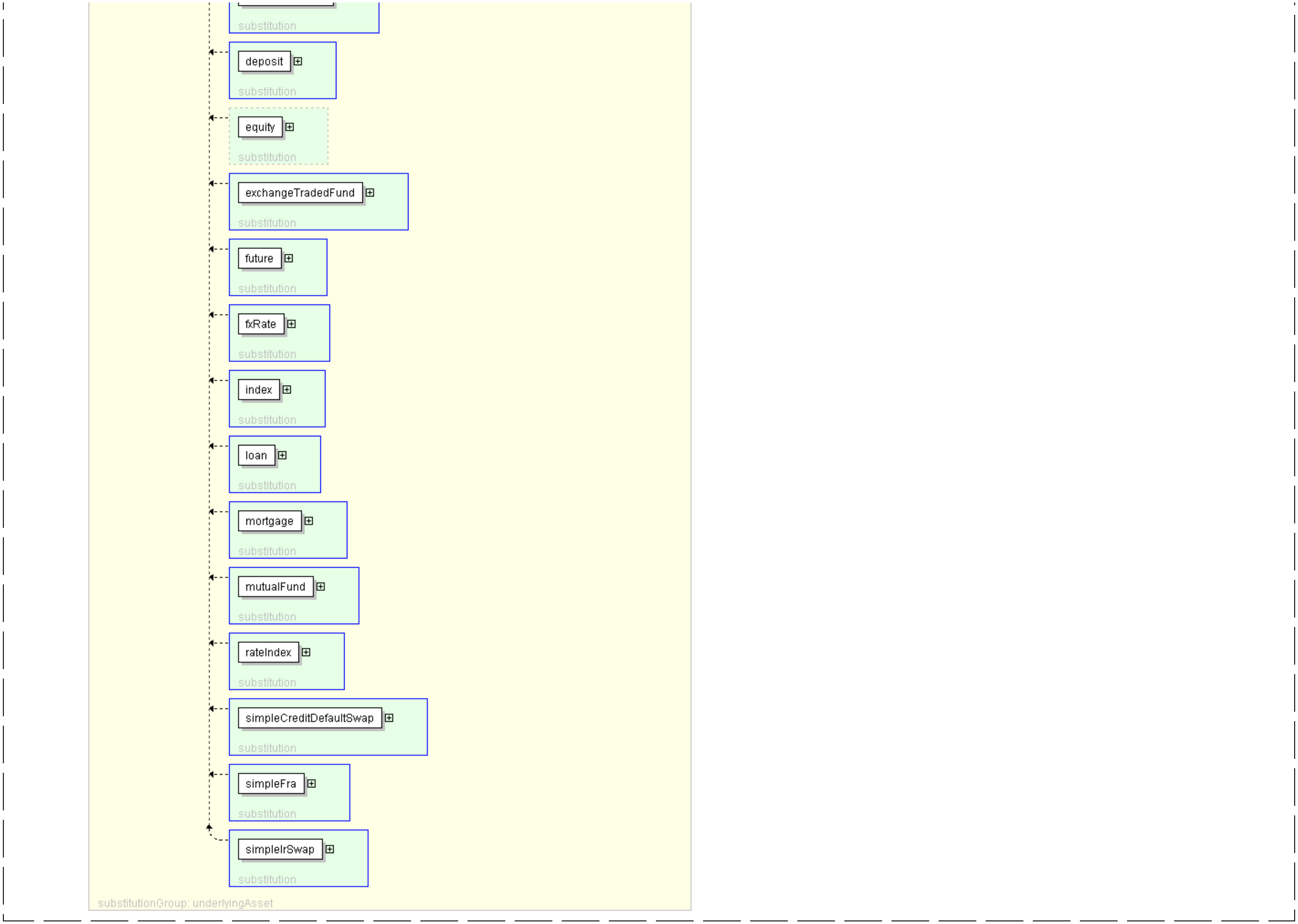
<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

</equity>

Diagram





Schema Component Representation

```
<xsd:element name="equity" type=" EquityAsset " substitutionGroup="underlyingAsset"/>
```

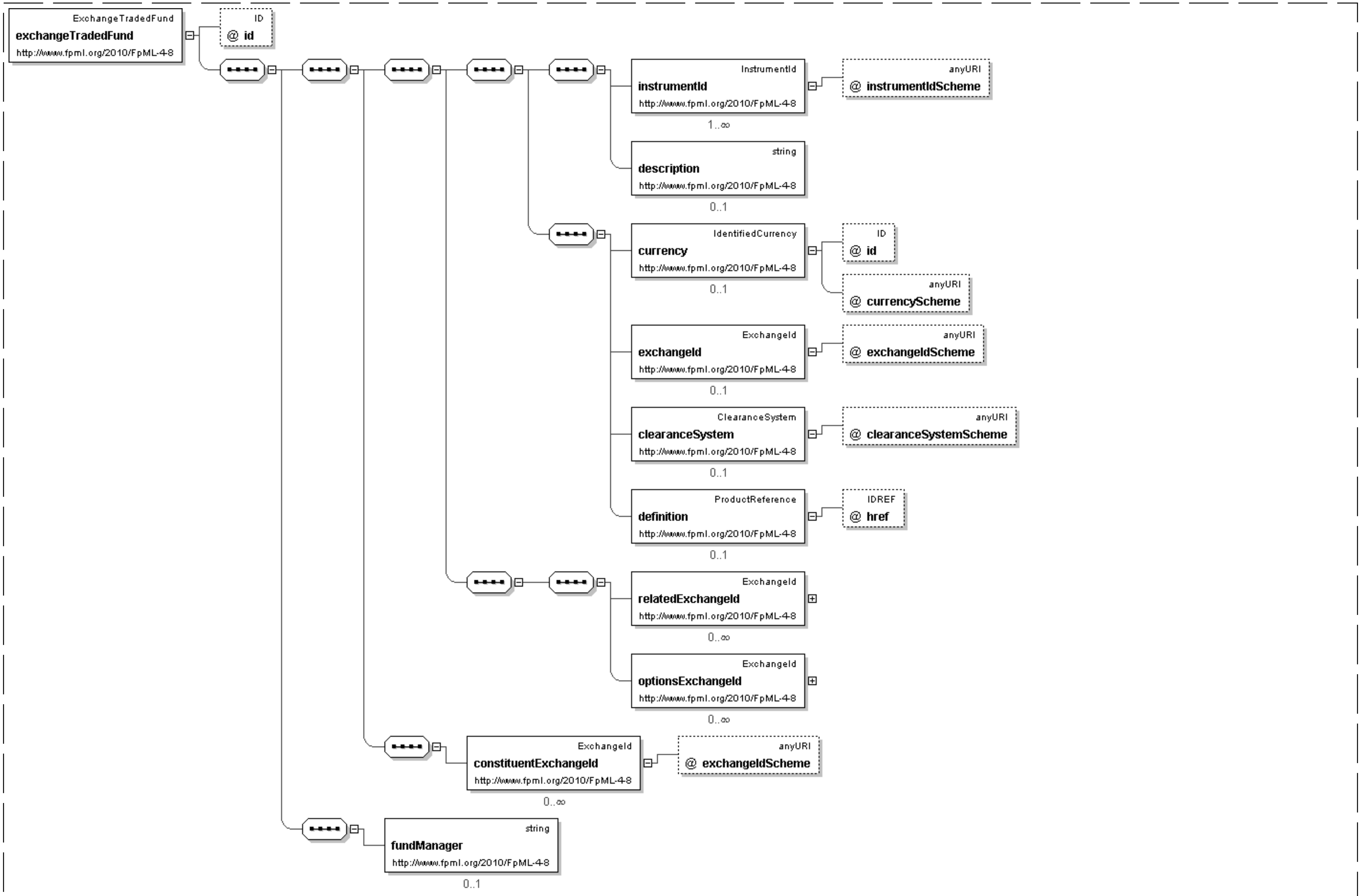
top

Element: exchangeTradedFund

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	exchangeTradedFund
Type	ExchangeTradedFund
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is an exchange-traded fund.

Logical Diagram



XML Instance Representation

```
<exchangeTradedFund
```

id=" xsd:ID [0..1]">
<instrumentId> InstrumentId </instrumentId> [1..*]

'Identification of the underlying asset, using public and/or private identifiers.'

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

<constituentExchangeId> ExchangeId </constituentExchangeId> [0..*]

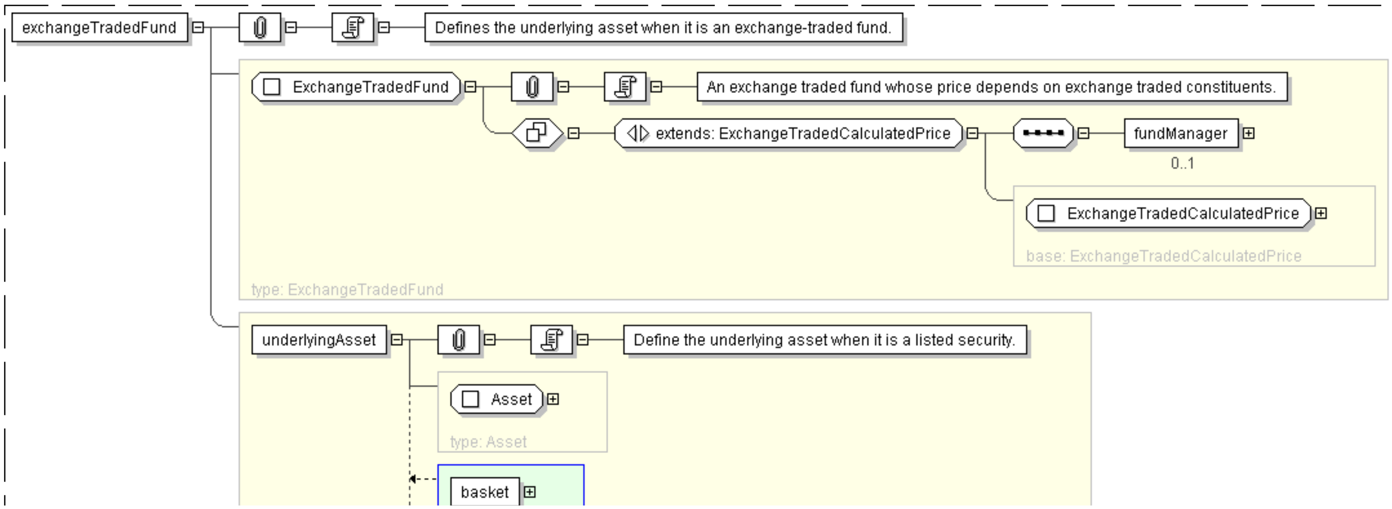
'Identification of all the exchanges where constituents are traded. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

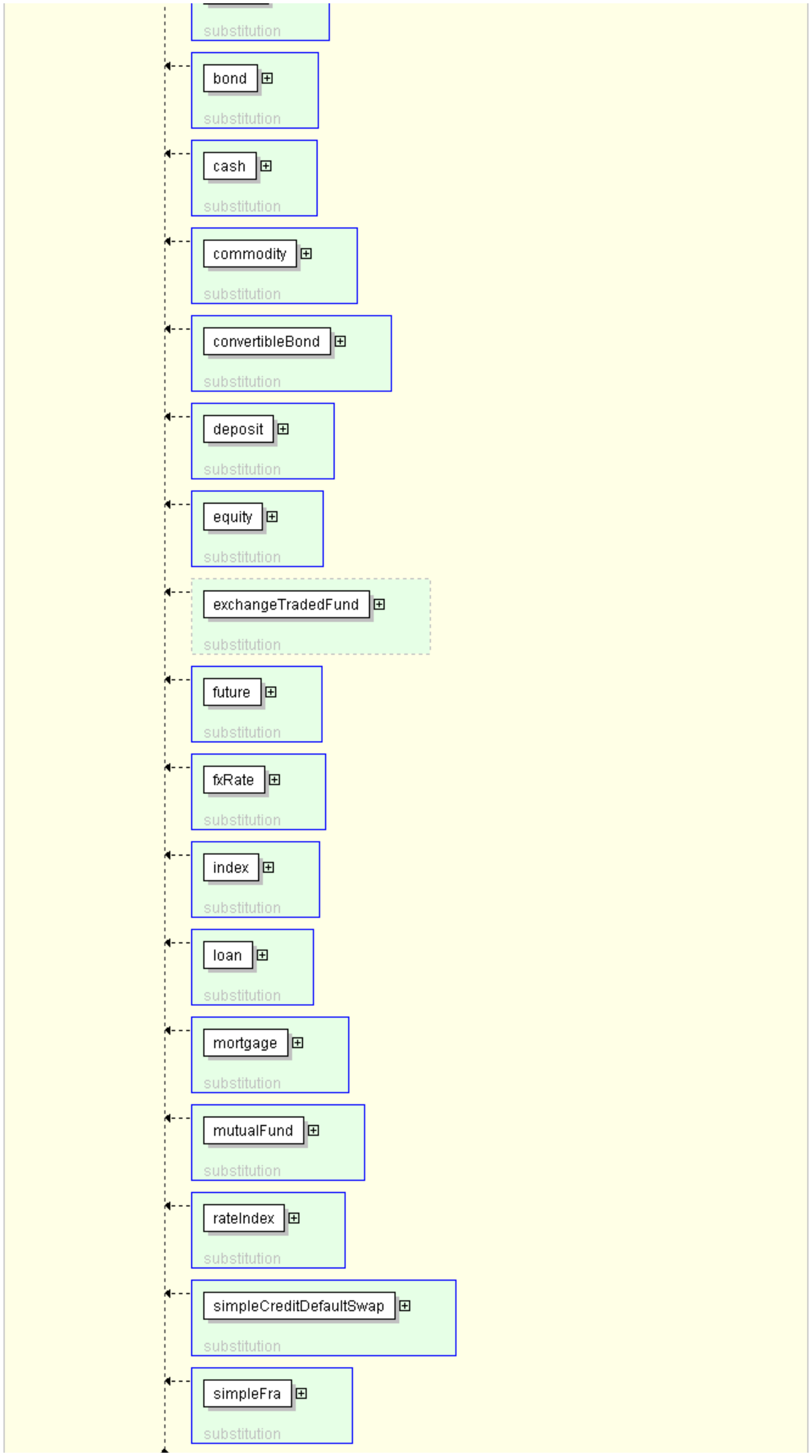
<fundManager> xsd:string </fundManager> [0..1]

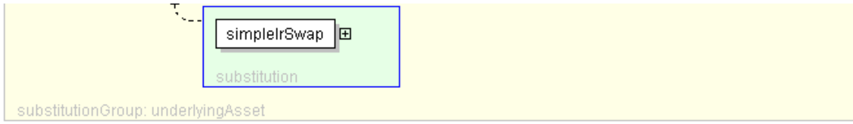
'Specifies the fund manager that is in charge of the fund.'

</exchangeTradedFund>

Diagram




substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund
substitution
rateIndex
substitution
simpleCreditDefaultSwap
substitution
simpleFra
substitution



Schema Component Representation

```
<xsd:element name="exchangeTradedFund" type=" ExchangeTradedFund
" substitutionGroup="underlyingAsset"/>
```

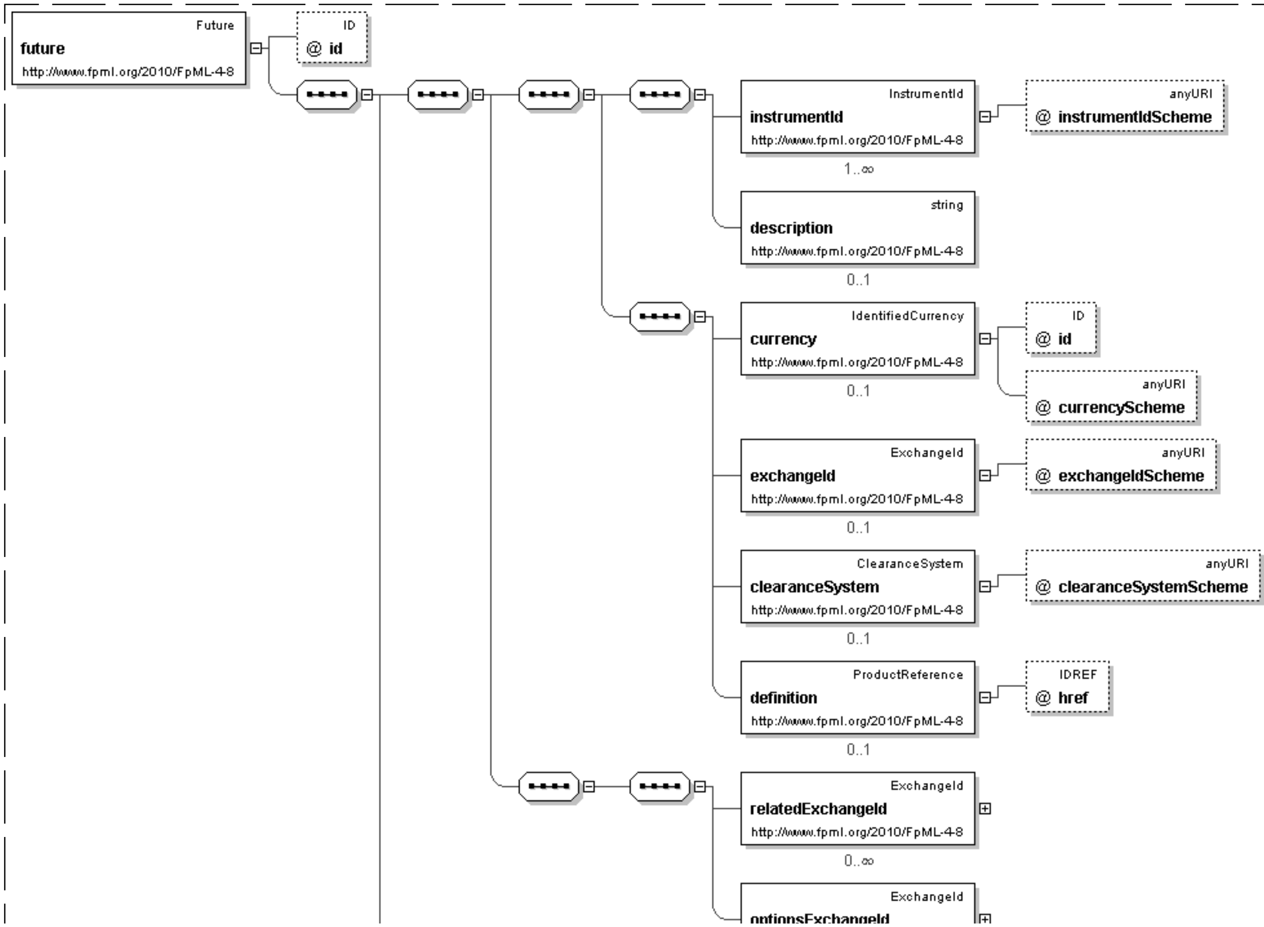
top

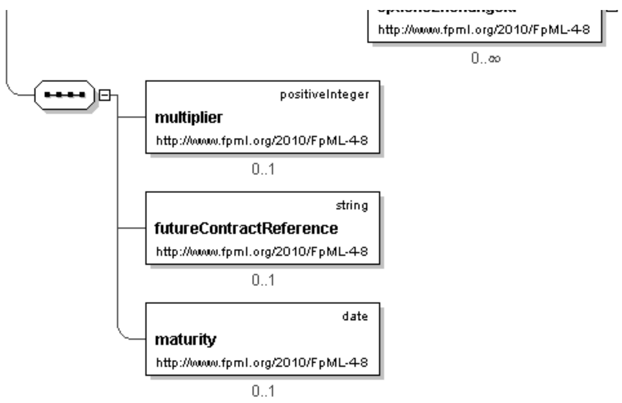
Element: future

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	future
Type	Future
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a listed future contract.

Logical Diagram

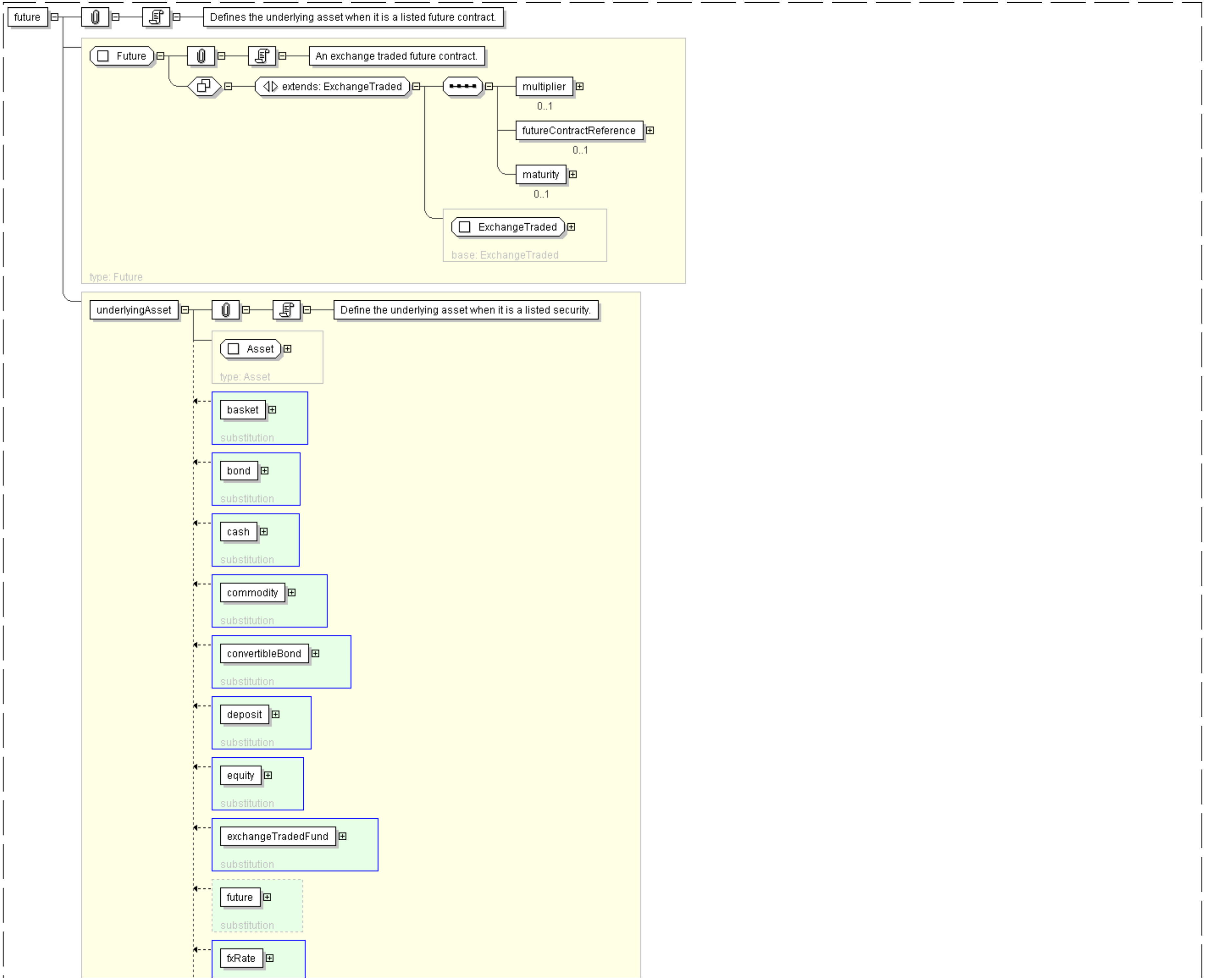


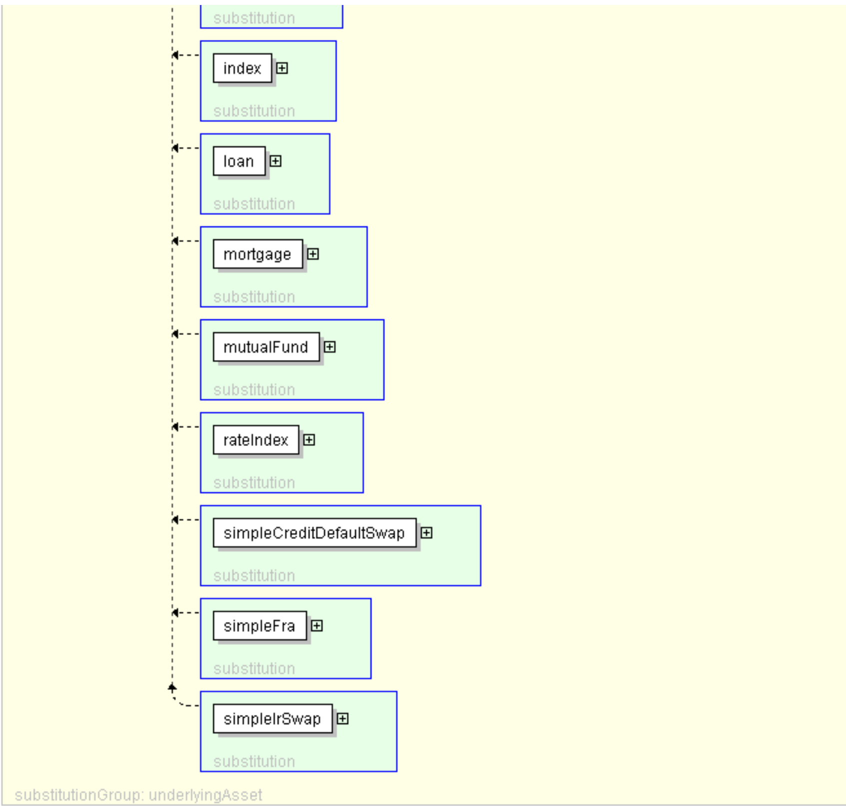


XML Instance Representation

```
<future
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
   'A short form unique identifier for a related exchange. If the element is not present then
   the exchange shall be the primary exchange on which listed futures and options on
   the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
   in the ISDA 2002 Equity Derivatives Definitions.'

   <optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
   'A short form unique identifier for an exchange on which the reference option contract
   is listed. This is to address the case where the reference exchange for the future is
   different than the one for the option. The options Exchange is referenced on share options
   when Merger Elections are selected as Options Exchange Adjustment.'

   <multiplier> xsd:positiveInteger </multiplier> [0..1]
   'Specifies the contract multiplier that can be associated with the number of units.'

   <futureContractReference> xsd:string </futureContractReference> [0..1]
   'Specifies the future contract that can be referenced, besides the equity or index
   reference defined as part of the UnderlyerAsset type.'

   <maturity> xsd:date </maturity> [0..1]
   'The date when the future contract expires.'

</future>
```

Diagram


future
Defines the underlying asset when it is a listed future contract.
Future
An exchange traded future contract.
extends: ExchangeTraded
multiplier
0..1
futureContractReference
0..1
maturity
0..1
ExchangeTraded
base: ExchangeTraded
type: Future
underlyingAsset
Define the underlying asset when it is a listed security.
Asset
type: Asset
basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate



Schema Component Representation

```
<xsd:element name="future" type=" Future " substitutionGroup="underlyingAsset"/>
```

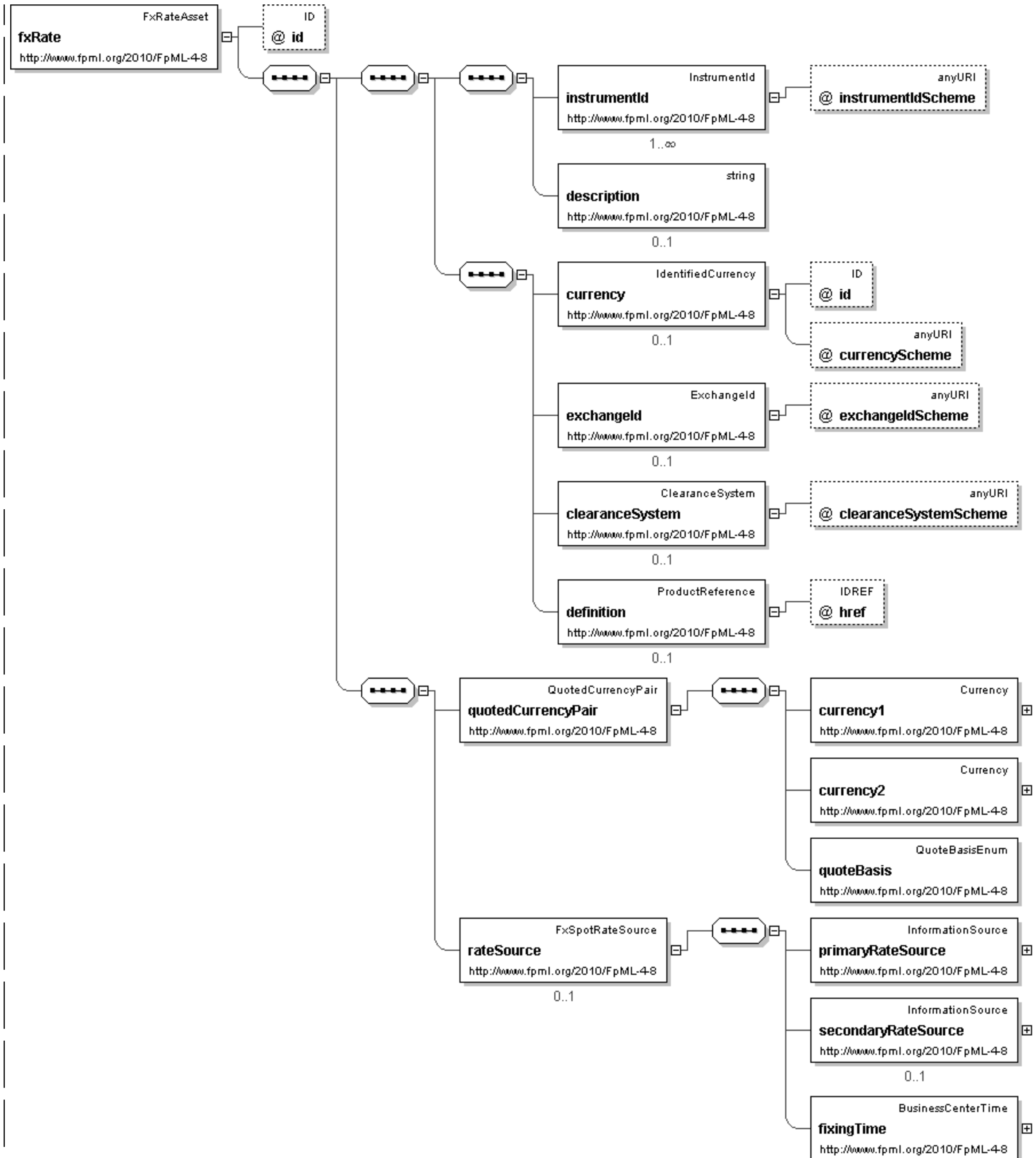
top

Element: fxRate

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	fxRate
Type	FxRateAsset
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset type that is an FX rate. Used for specifying FX rates in the pricing and risk model.

Logical Diagram



XML Instance Representation

```
<fxRate
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'
```

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]

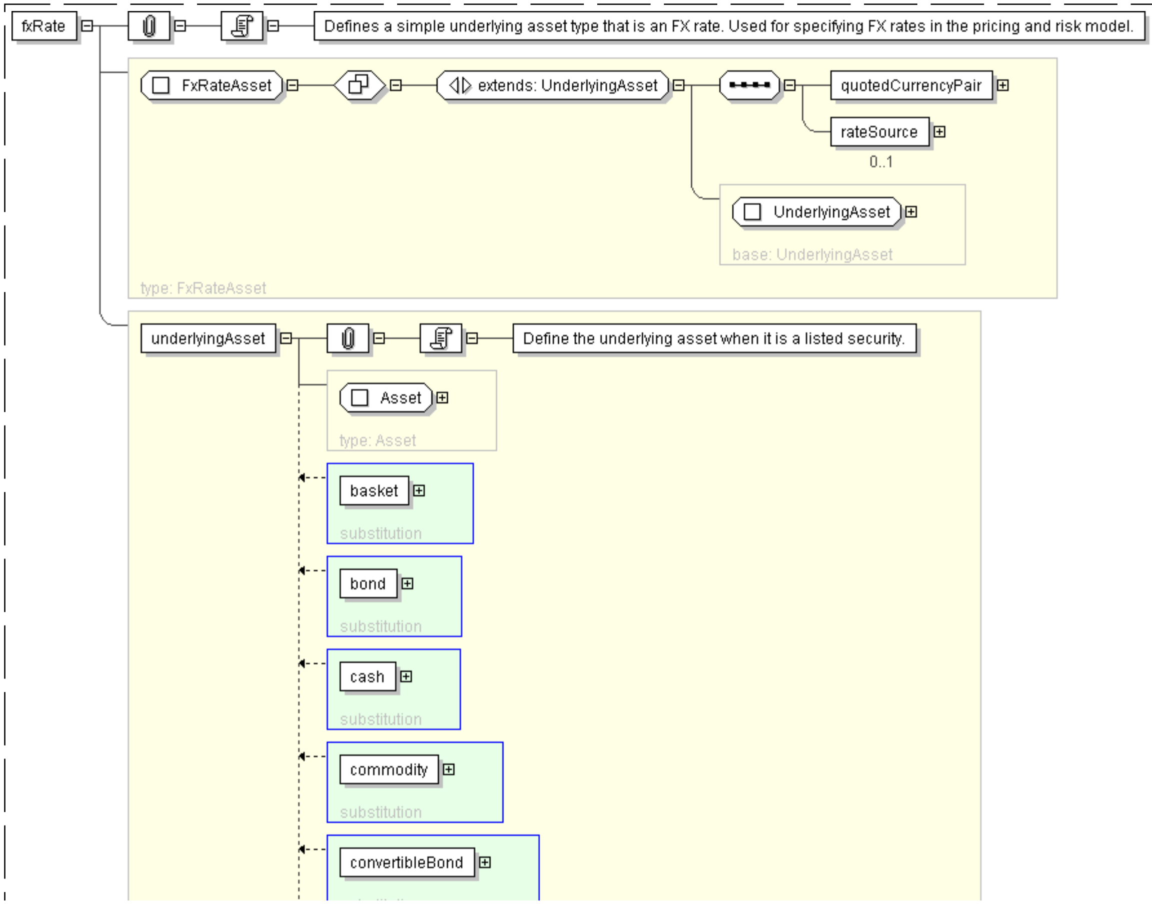
'Defines the two currencies for an FX trade and the quotation relationship between the two currencies.'

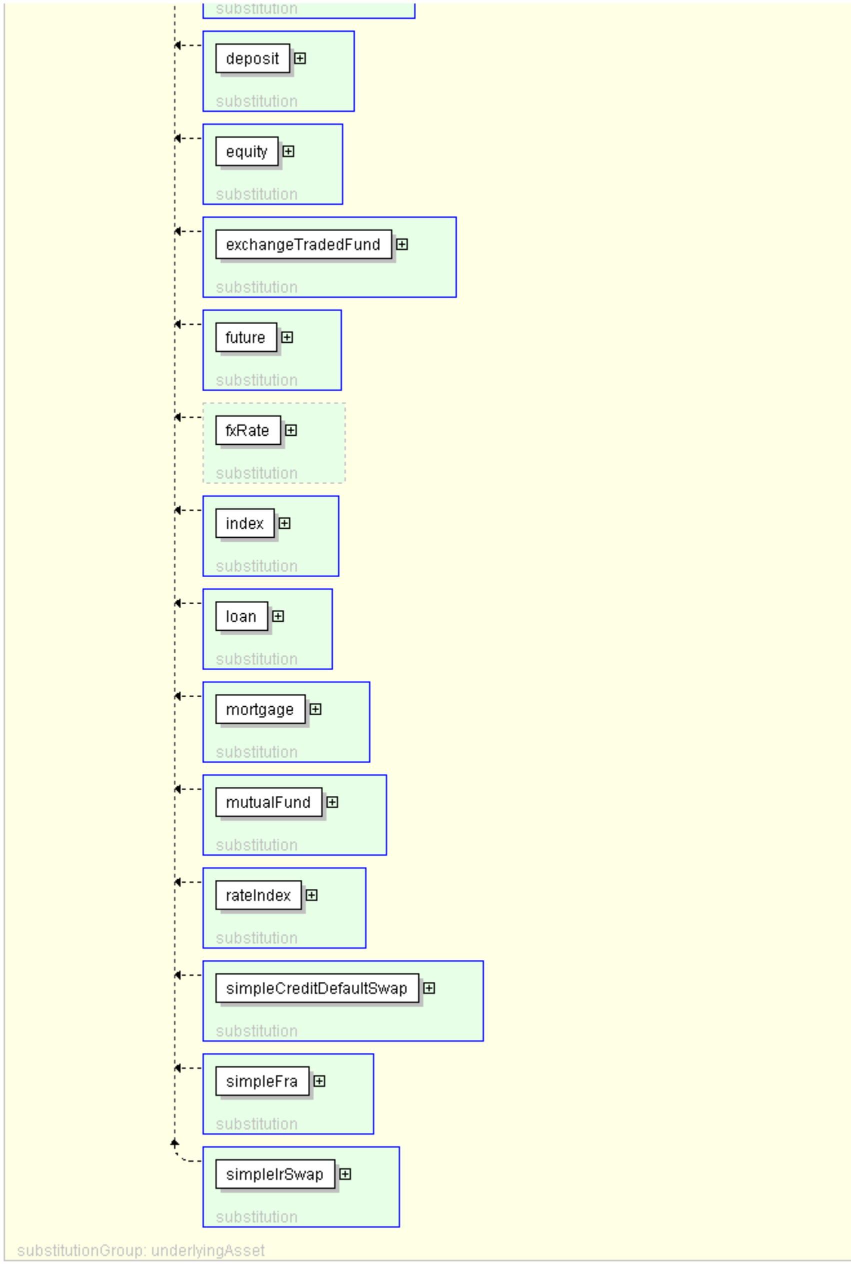
<rateSource> FxSpotRateSource </rateSource> [0..1]

'Defines the source of the FX rate.'

</fxRate>

Diagram





Schema Component Representation

```
<xsd:element name="fxRate" type=" FxRateAsset " substitutionGroup="underlyingAsset"/>
```

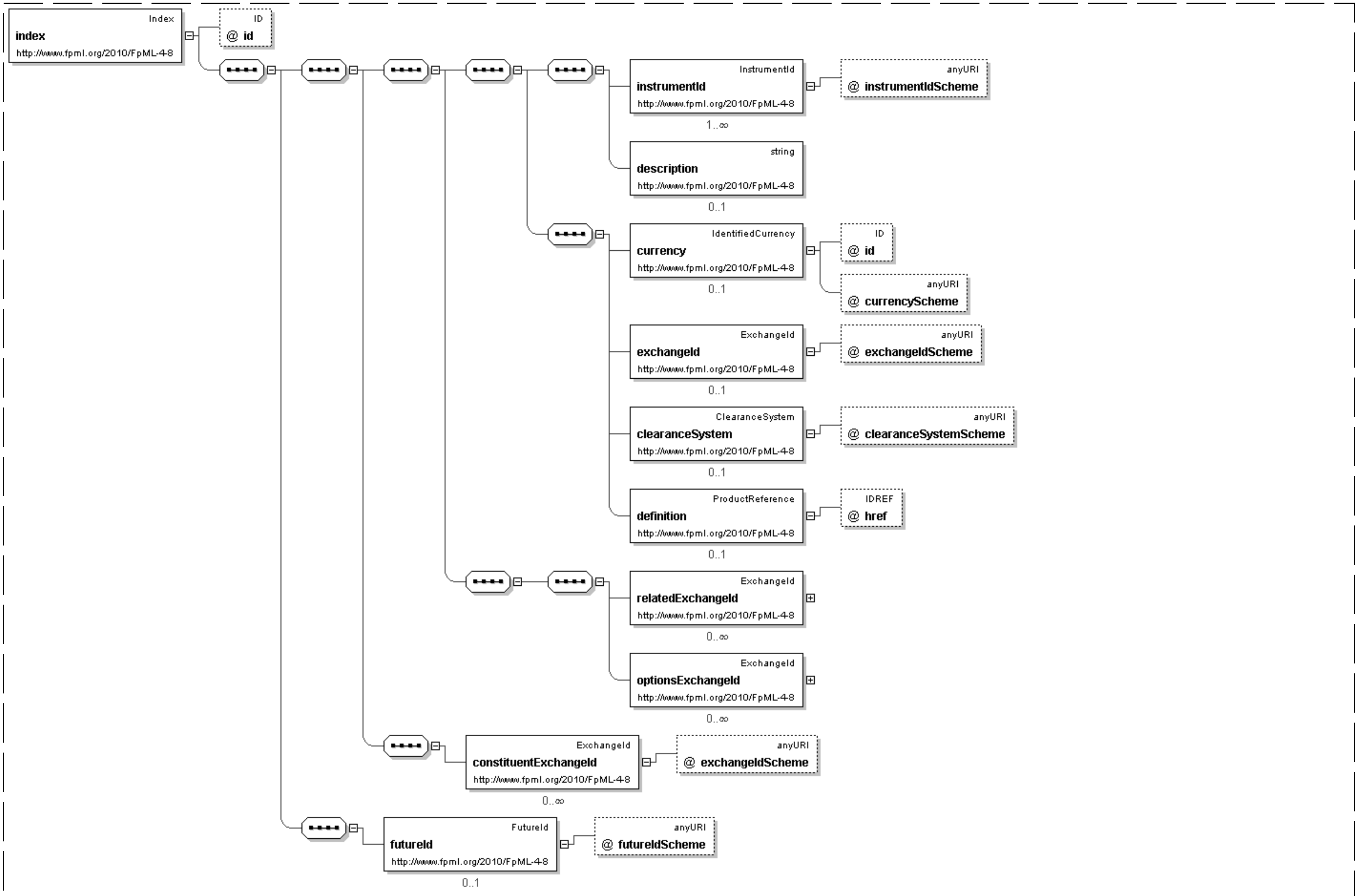
top

Element: index

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	index
Type	Index
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a financial index.

Logical Diagram



XML Instance Representation

```
<index
```

id=" xsd:ID [0..1]">
<instrumentId> InstrumentId </instrumentId> [1..*]

'Identification of the underlying asset, using public and/or private identifiers.'

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

<constituentExchangeId> ExchangeId </constituentExchangeId> [0..*]

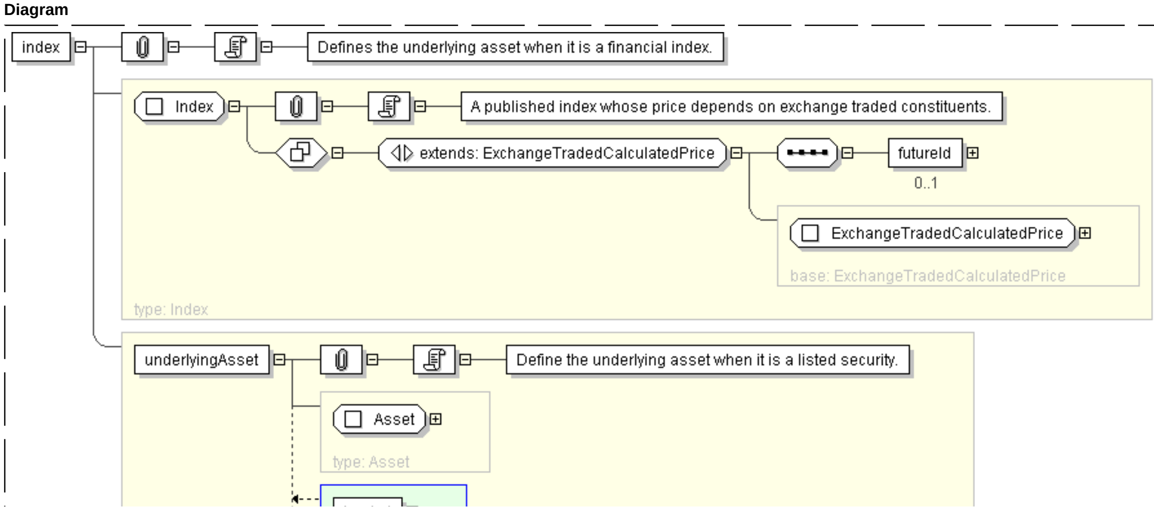
'Identification of all the exchanges where constituents are traded. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

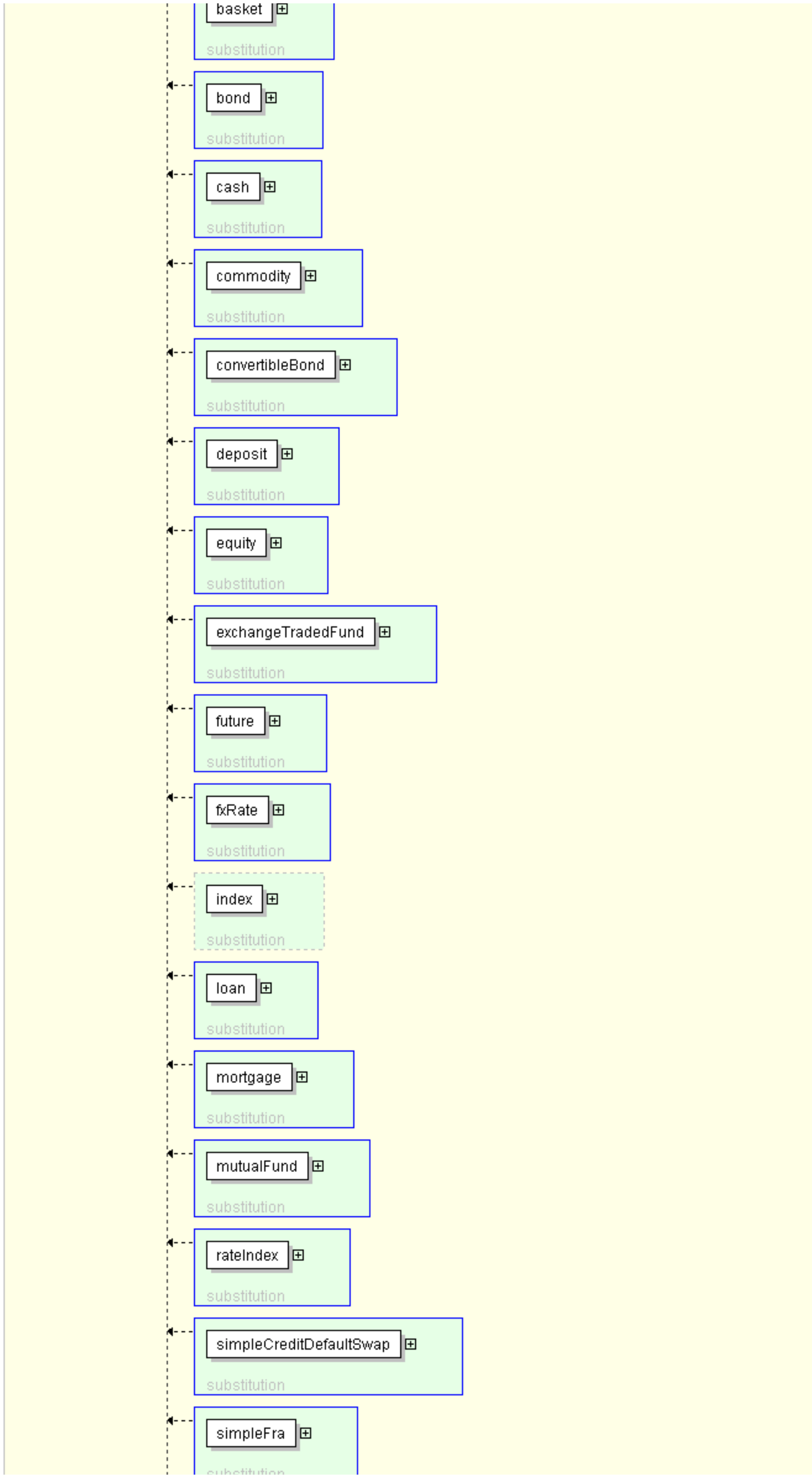
<futureId> FutureId </futureId> [0..1]

'A short form unique identifier for the reference future contract in the case of an index underlyer.'

</index>

Diagram




basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund
substitution
rateIndex
substitution
simpleCreditDefaultSwap
substitution
simpleFra

Schema Component Representation

```
<xsd:element name="index" type=" Index " substitutionGroup="underlyingAsset"/>
```

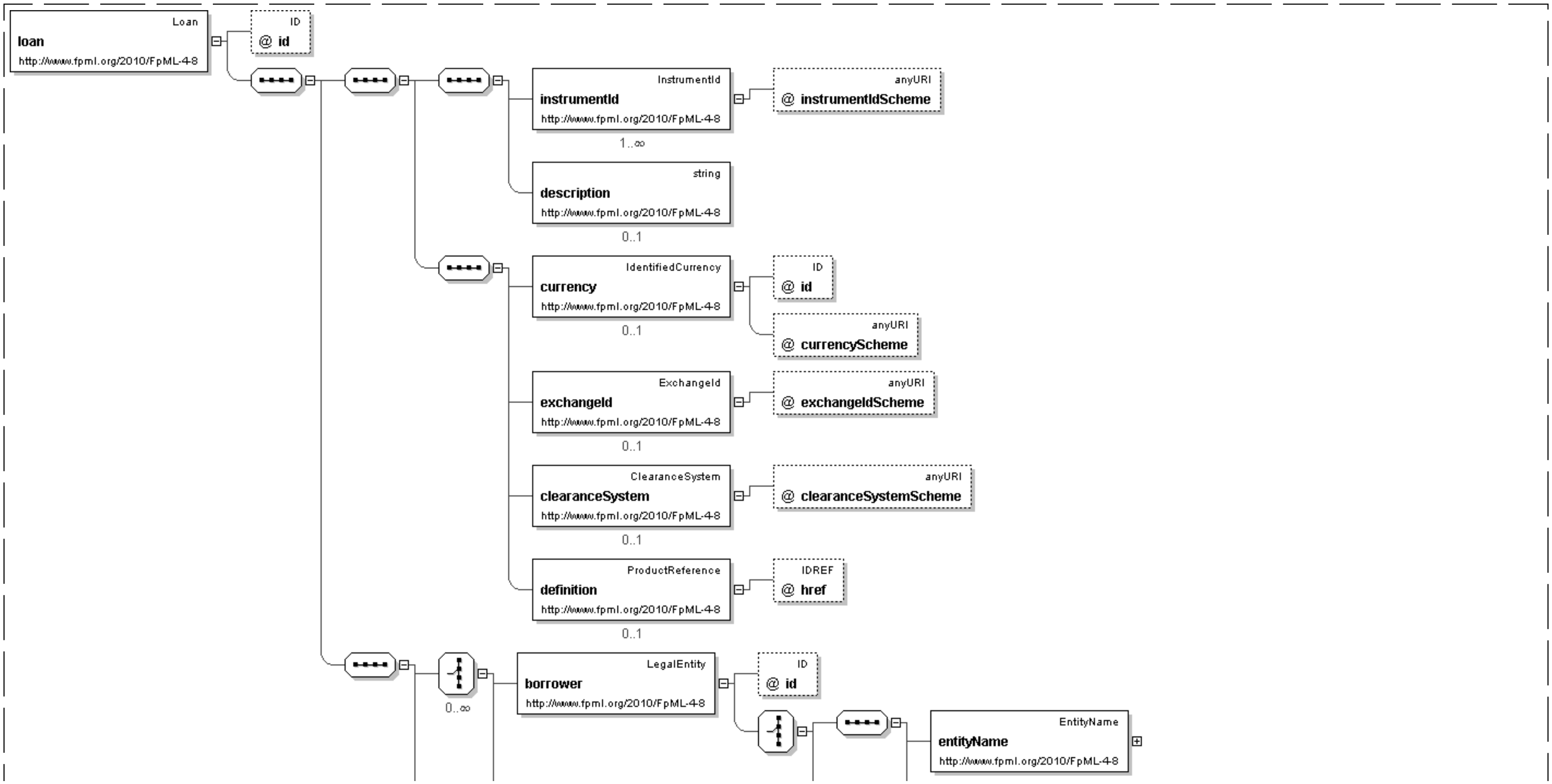
top

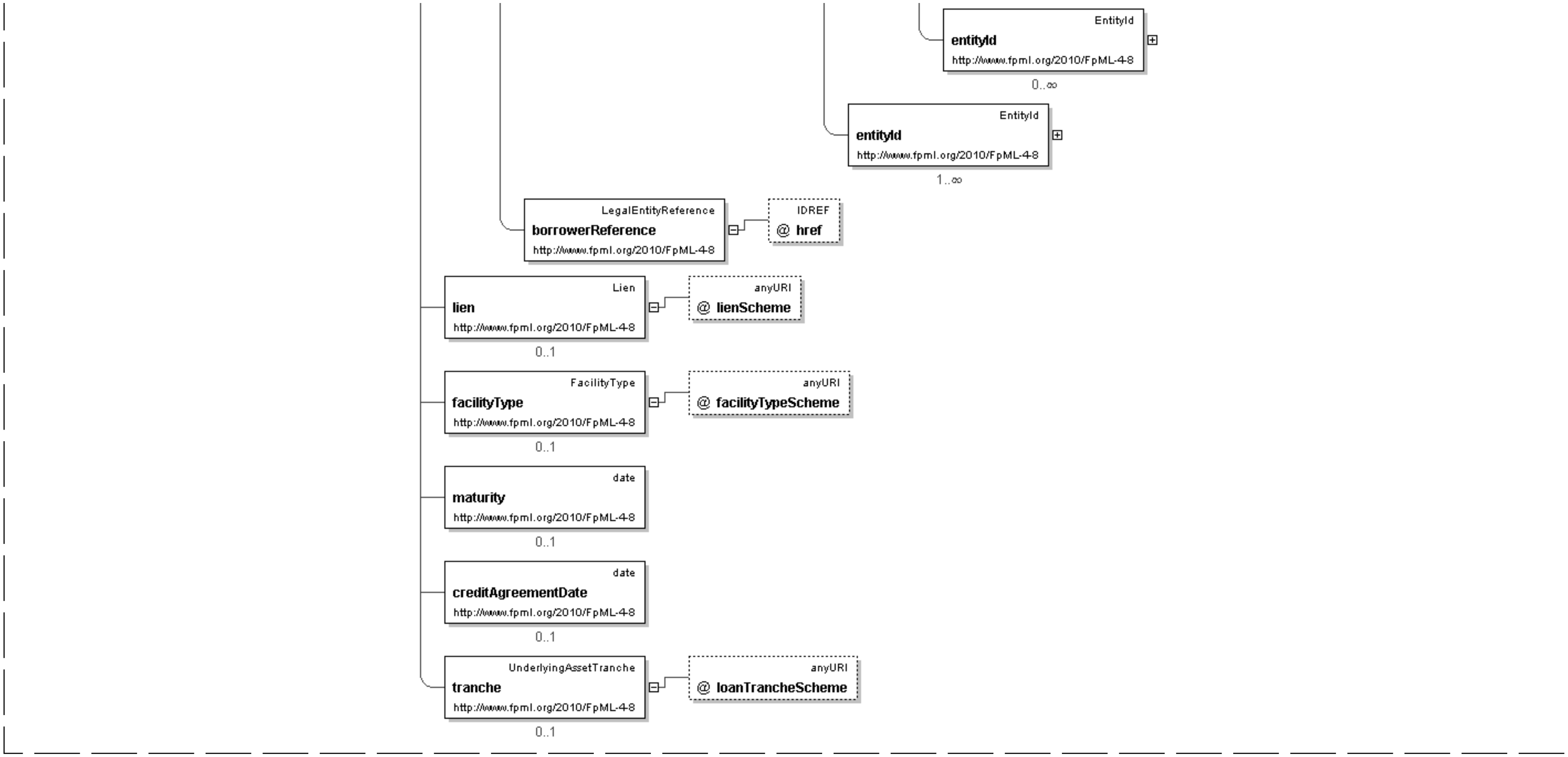
Element: loan

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	loan
Type	Loan
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset that is a loan.

Logical Diagram



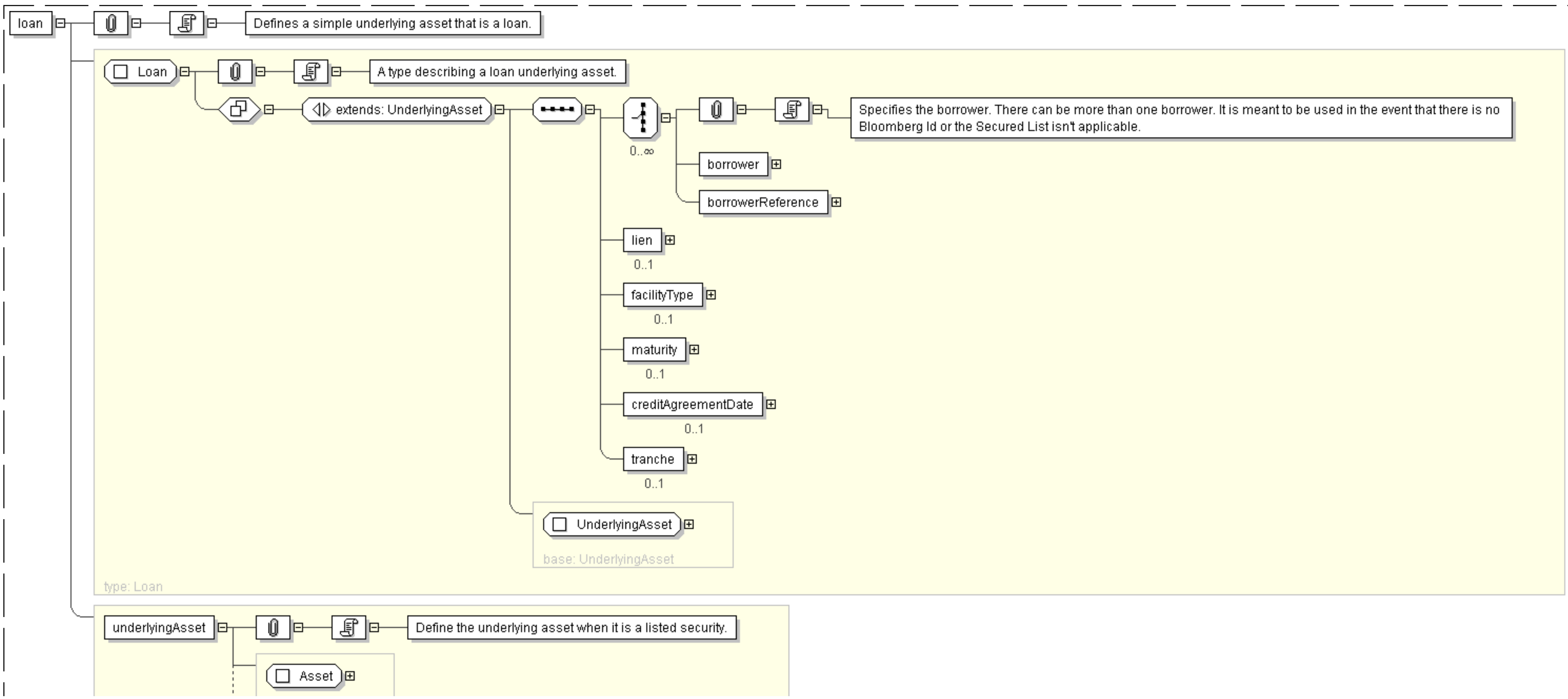


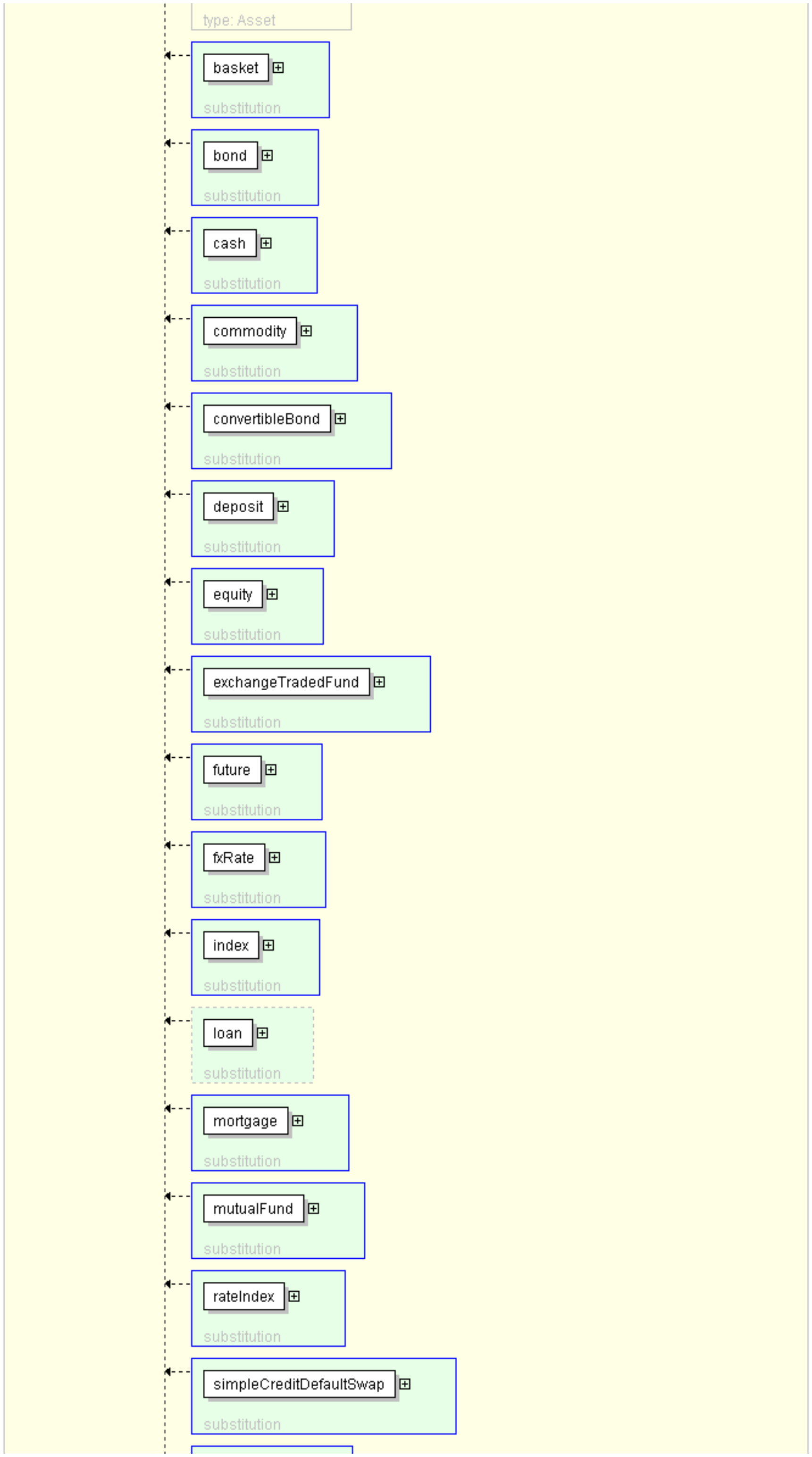
XML Instance Representation

```
<loan
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

Start Choice [0..*]
'Specifies the borrower. There can be more than one borrower. It is meant to be used in
```

```
the event that there is no Bloomberg Id or the Secured List isn\'t applicable.'

      <borrower> LegalEntity </borrower> [1]
      <borrowerReference> LegalEntityReference </borrowerReference> [1]
End Choice
   <lien> Lien </lien> [0..1]
   'Specifies the seniority level of the lien.'

   <facilityType> FacilityType </facilityType> [0..1]
   'The type of loan facility (letter of credit, revolving, ...).'

   <maturity> xsd:date </maturity> [0..1]
   'The date when the principal amount of the loan becomes due and payable.'

   <creditAgreementDate> xsd:date </creditAgreementDate> [0..1]
   'The credit agreement date is the closing date (the date where the agreement has been
   signed) for the loans in the credit agreement. Funding of the facilities occurs on
   (or sometimes a little after) the Credit Agreement date. This underlyer attribute is used
   to help identify which of the company\'s outstanding loans are being referenced by knowing
   to which credit agreement it belongs. ISDA Standards Terms Supplement term: Date of
   Original Credit Agreement.'

   <tranche> UnderlyingAssetTranche </tranche> [0..1]
   'The loan tranche that is subject to the derivative transaction. It will typically
   be referenced as the Bloomberg tranche number. ISDA Standards Terms Supplement term:
   Bloomberg Tranche Number.'

</loan>
```

Diagram




type: Asset
basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund
substitution
rateIndex
substitution
simpleCreditDefaultSwap
substitution

Schema Component Representation

```
<xsd:element name="loan" type=" Loan " substitutionGroup="underlyingAsset"/>
```

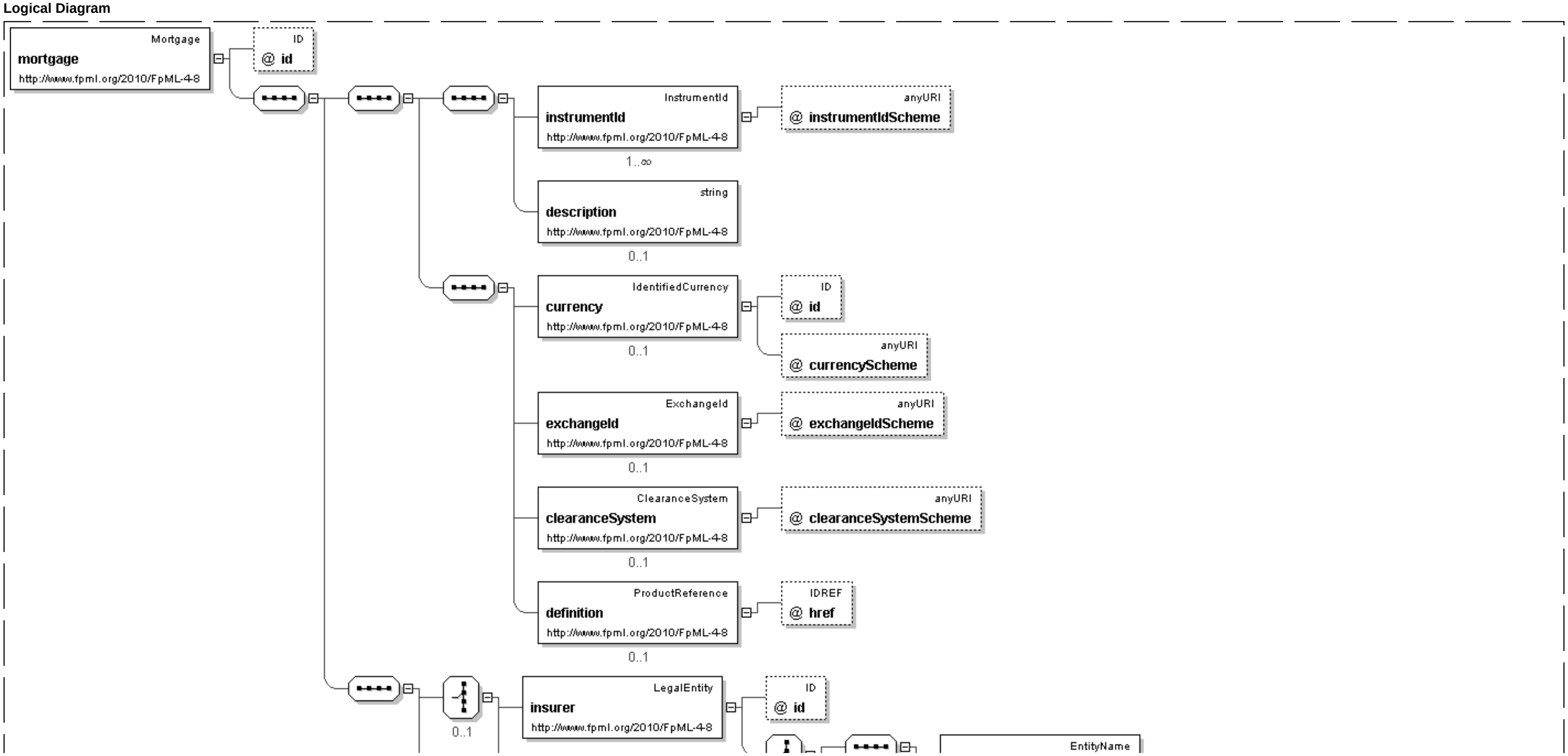
top

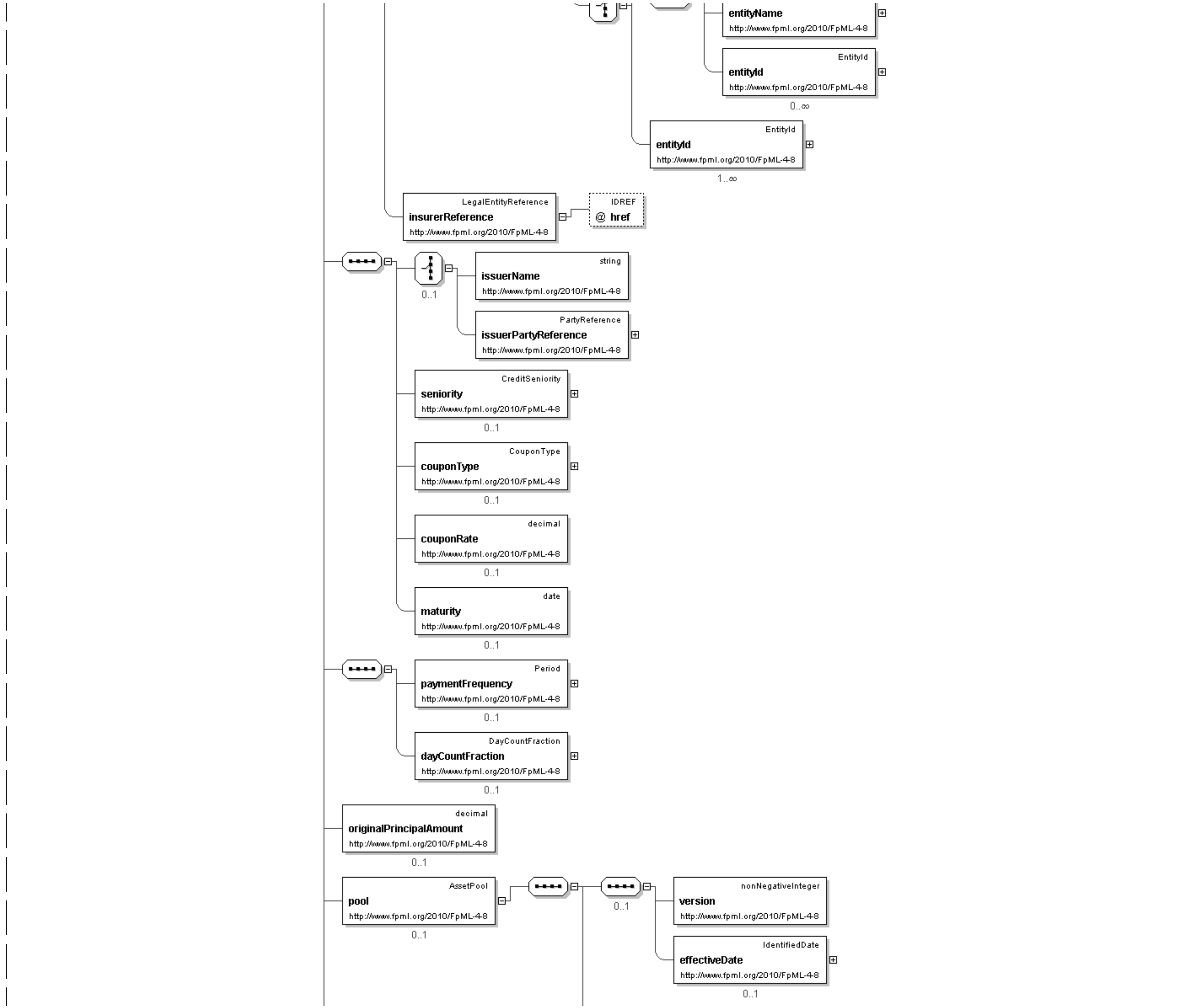
Element: mortgage

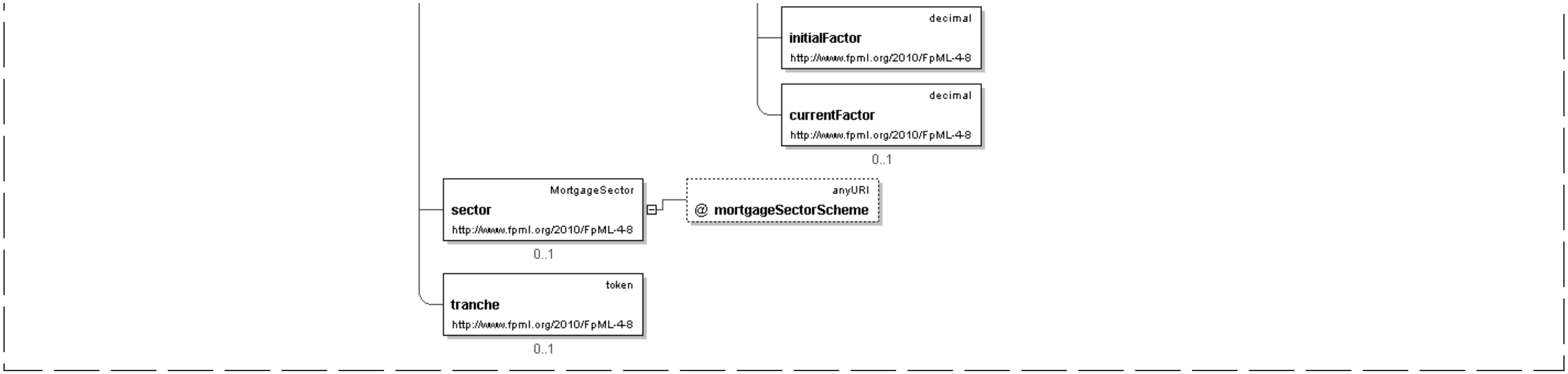
- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	mortgage
Type	Mortgage
Nillable	no
Abstract	no
Documentation	Defines an underlying asset that is a mortgage.

Logical Diagram




entityName
http://www.fpml.org/2010/FpML-4-8
EntityId
entityId
http://www.fpml.org/2010/FpML-4-8
0..∞
EntityId
entityId
http://www.fpml.org/2010/FpML-4-8
1..∞
LegalEntityReference
insurerReference
http://www.fpml.org/2010/FpML-4-8
IDREF
@ href
0..1
string
issuerName
http://www.fpml.org/2010/FpML-4-8
PartyReference
issuerPartyReference
http://www.fpml.org/2010/FpML-4-8
CreditSeniority
seniority
http://www.fpml.org/2010/FpML-4-8
0..1
CouponType
couponType
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
couponRate
http://www.fpml.org/2010/FpML-4-8
0..1
date
maturity
http://www.fpml.org/2010/FpML-4-8
0..1
Period
paymentFrequency
http://www.fpml.org/2010/FpML-4-8
0..1
DayCountFraction
dayCountFraction
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
originalPrincipalAmount
http://www.fpml.org/2010/FpML-4-8
0..1
AssetPool
pool
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
nonNegativeInteger
version
http://www.fpml.org/2010/FpML-4-8
IdentifiedDate
effectiveDate
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<mortgage
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'
Start Choice [0..1]
'Applicable to the case of default swaps on MBS terms. For specifying the insurer name,
when applicable (when the element is not present, it signifies that the insurer is
Not Applicable)'

      <insurer> LegalEntity </insurer> [1]
      <insurerReference> LegalEntityReference </insurerReference> [1]
End Choice
Start Choice [0..1]
'Specifies the issuer name of a fixed income security or convertible bond. This name can
either be explicitly stated, or specified as an href into another element of the document,
such as the obligor'

      <issuerName> xsd:string </issuerName> [1]
      <issuerPartyReference> PartyReference </issuerPartyReference> [1]
End Choice
   <seniority> CreditSeniority </seniority> [0..1]
   'The repayment precedence of a debt instrument.'

   <couponType> CouponType </couponType> [0..1]
```

'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

<couponRate> xsd:decimal </couponRate> [0..1]

'Specifies the coupon rate (expressed in percentage) of a fixed income security or convertible bond.'

<maturity> xsd:date </maturity> [0..1]

'The date when the principal amount of a security becomes due and payable.'

<paymentFrequency> Period </paymentFrequency> [0..1]

'Specifies the frequency at which the bond pays, e.g. 6M.'

<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]

'The day count basis for the bond.'

<originalPrincipalAmount> xsd:decimal </originalPrincipalAmount> [0..1]

'The initial issued amount of the mortgage obligation.'

<pool> AssetPool </pool> [0..1]

'The morgage pool that is underneath the mortgage obligation.'

<sector> MortgageSector </sector> [0..1]

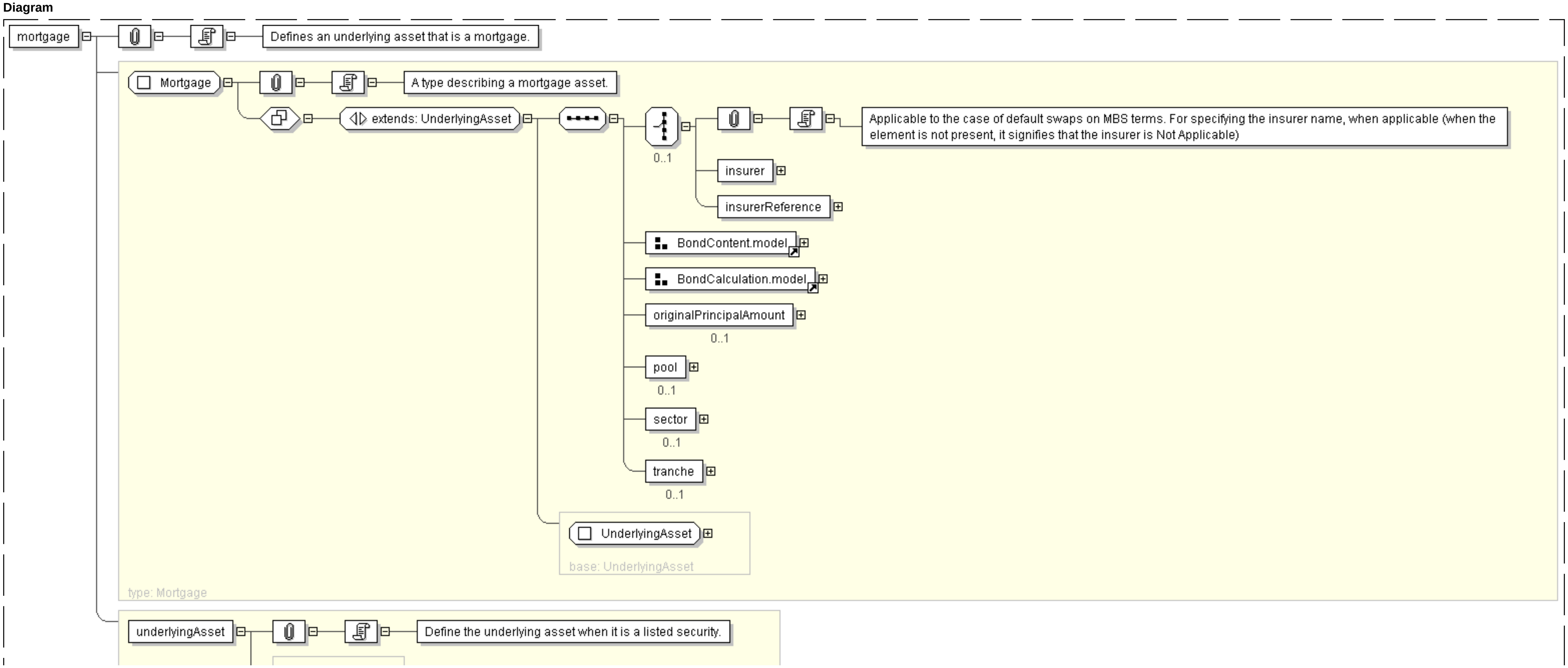
'The sector classification of the mortgage obligation.'

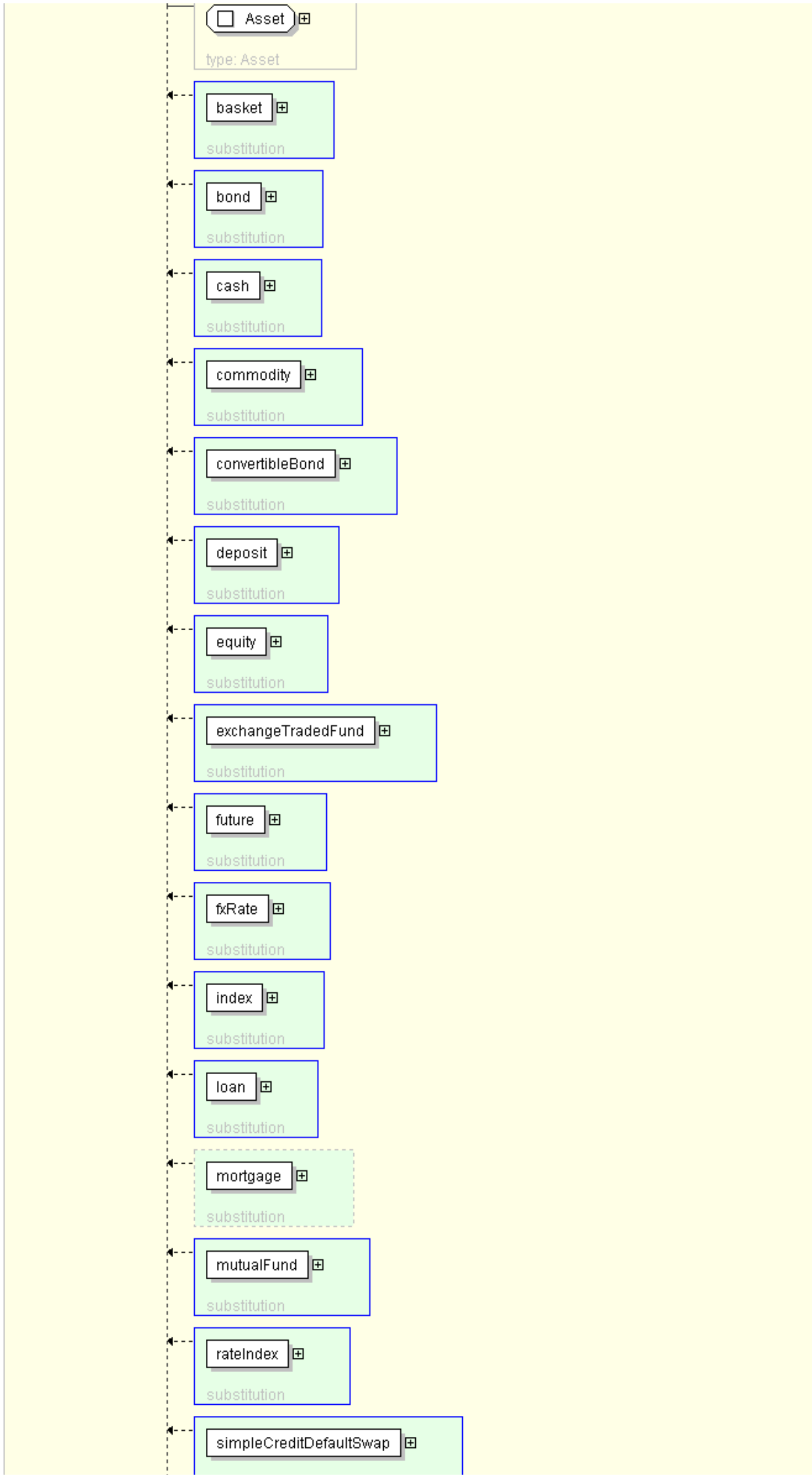
<tranche> xsd:token </tranche> [0..1]

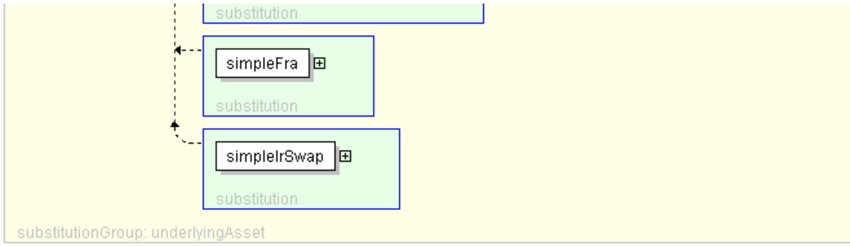
'The mortgage obligation tranche that is subject to the derivative transaction.'

</mortgage>

Diagram




Asset
type: Asset
basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund
substitution
rateIndex
substitution
simpleCreditDefaultSwap



Schema Component Representation

```
<xsd:element name="mortgage" type=" Mortgage " substitutionGroup="underlyingAsset"/>
```

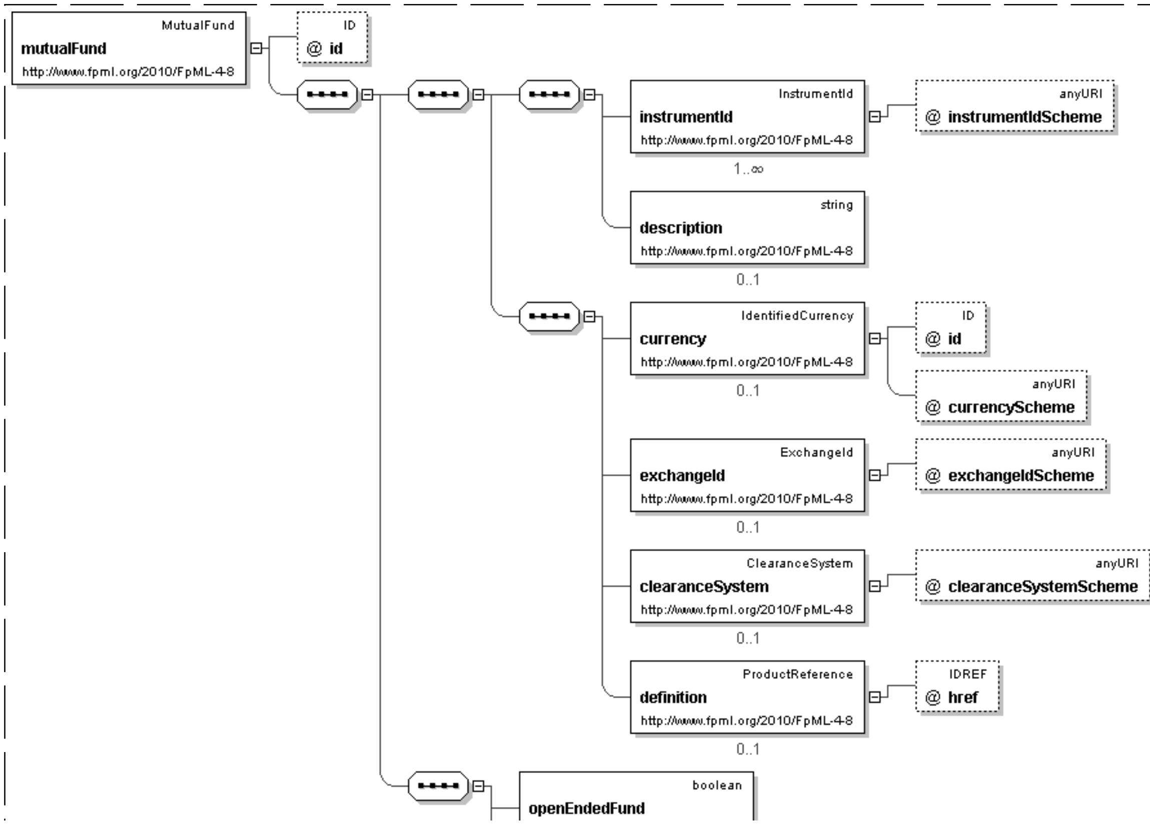
top

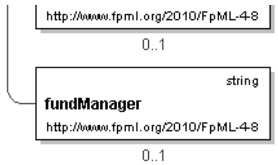
Element: mutualFund

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	mutualFund
Type	MutualFund
Nillable	no
Abstract	no
Documentation	Defines the underlying asset when it is a mutual fund.

Logical Diagram

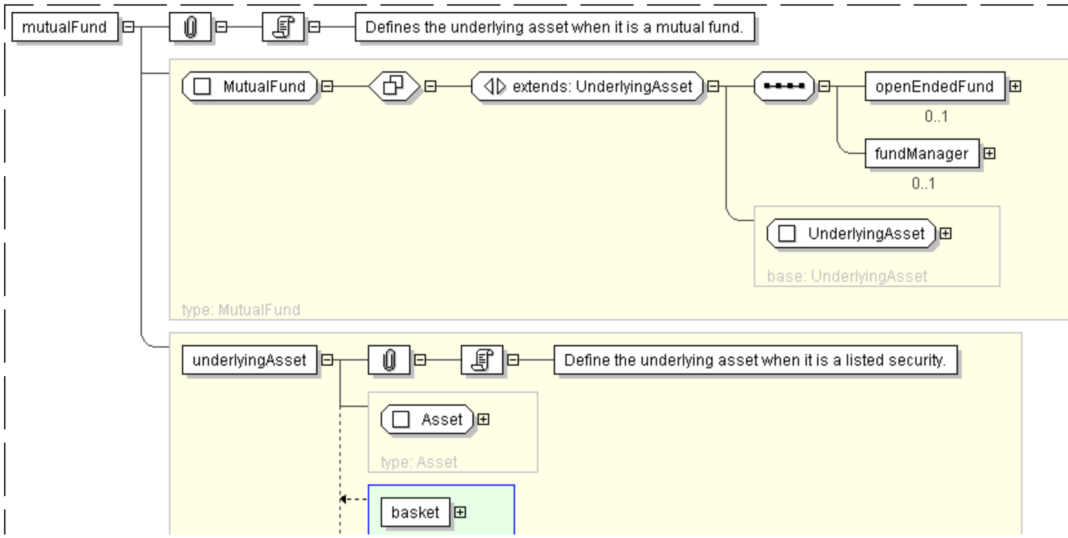


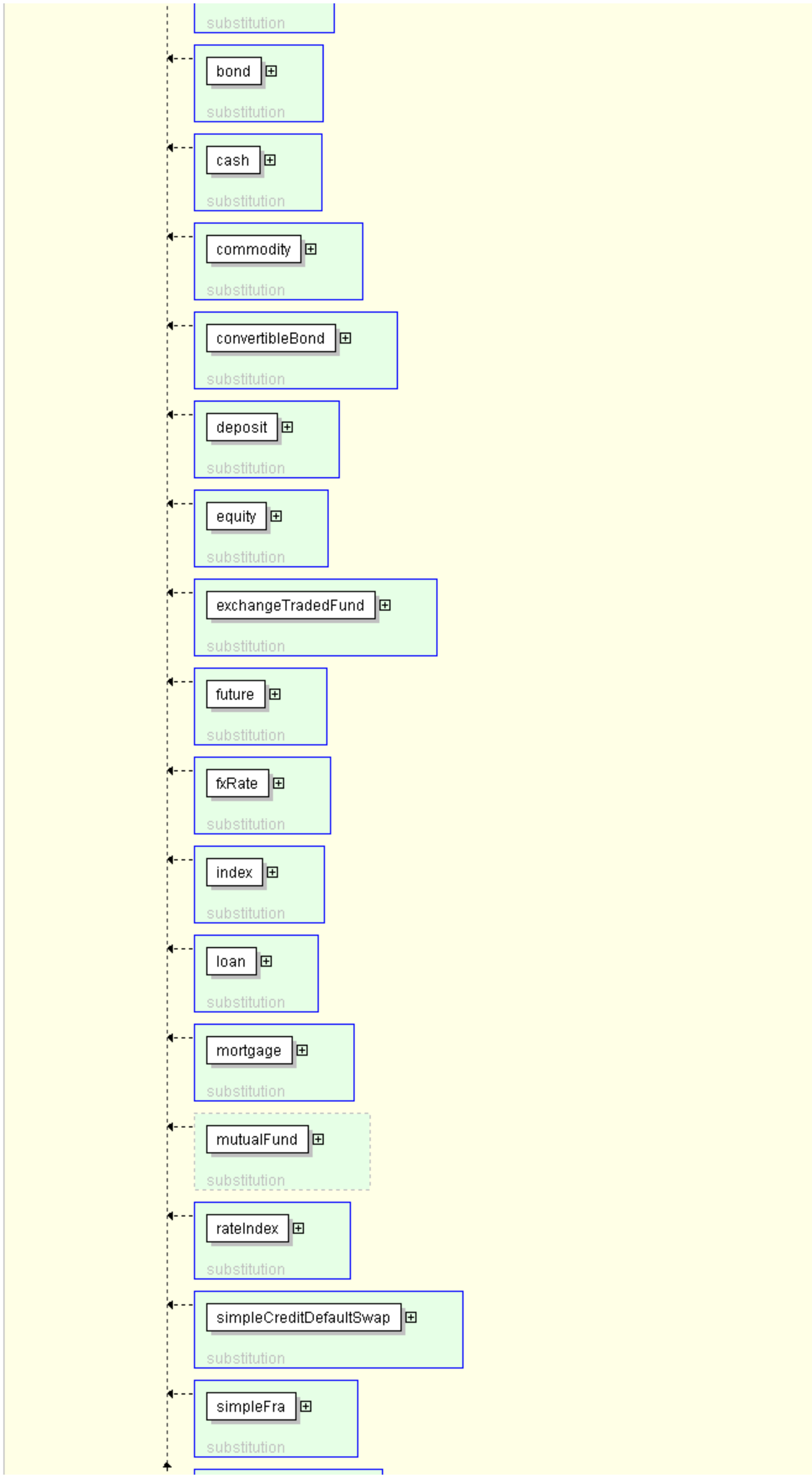


XML Instance Representation

```
<mutualFund
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <openEndedFund> xsd:boolean </openEndedFund> [0..1]
   'Boolean indicator to specify whether the mutual fund is an open-ended mutual fund.'

   <fundManager> xsd:string </fundManager> [0..1]
   'Specifies the fund manager that is in charge of the fund.'

</mutualFund>
```

Diagram




substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund
substitution
rateIndex
substitution
simpleCreditDefaultSwap
substitution
simpleFra
substitution

Schema Component Representation

```
<xsd:element name="mutualFund" type=" MutualFund " substitutionGroup="underlyingAsset"/>
```

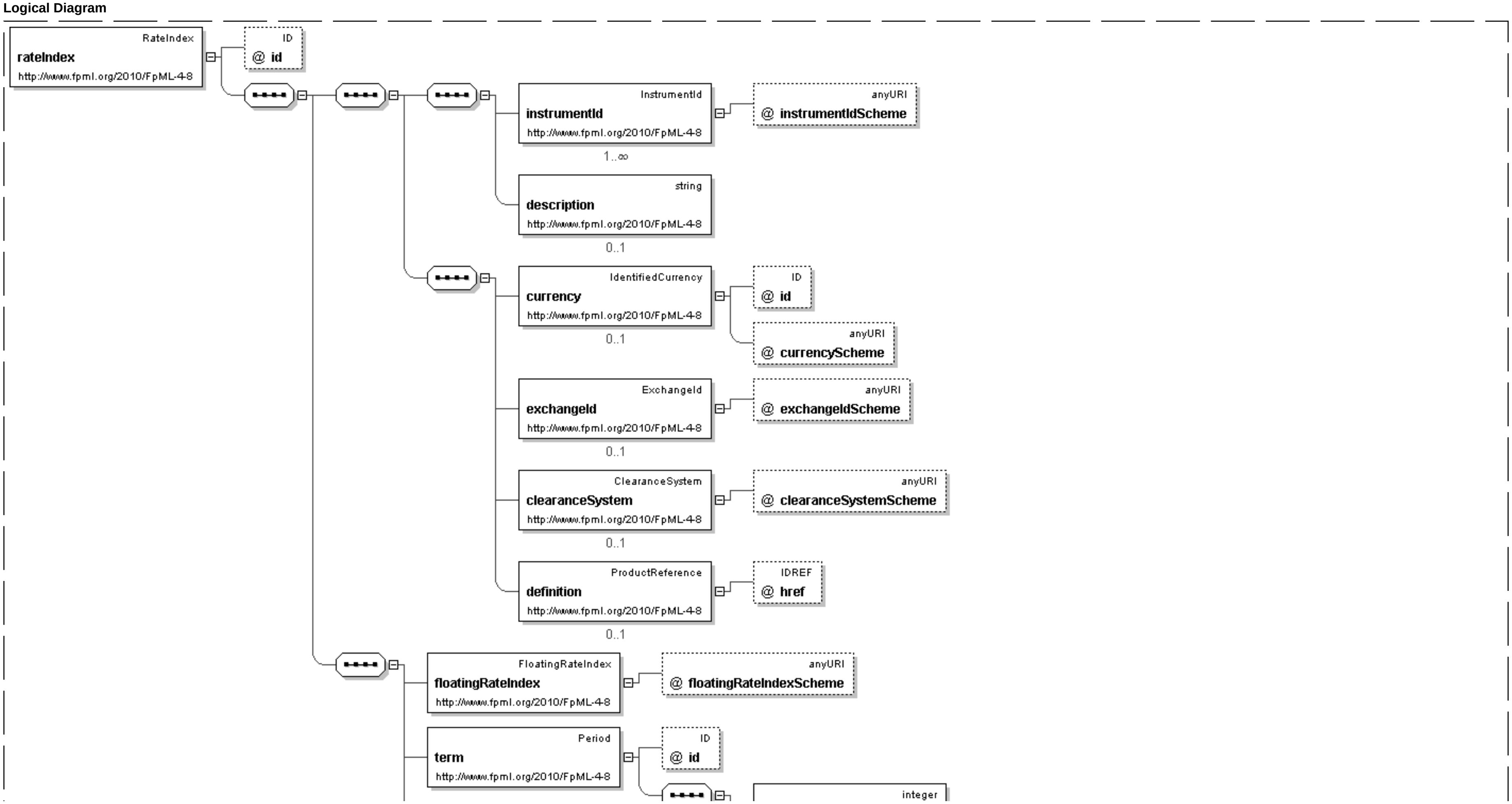
top

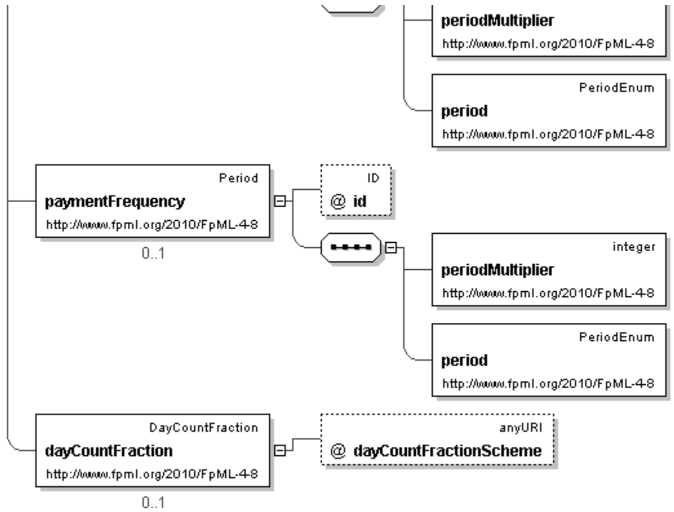
Element: rateIndex

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	rateIndex
Type	RateIndex
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset that is an interest rate index. Used for specifying benchmark assets in the market environment in the pricing and risk model.

Logical Diagram

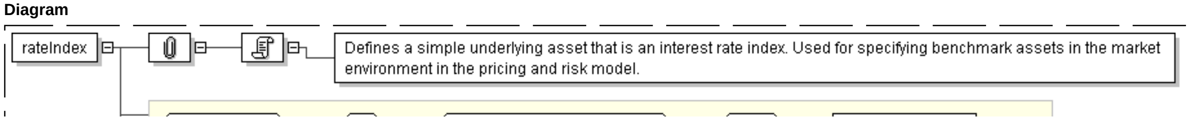


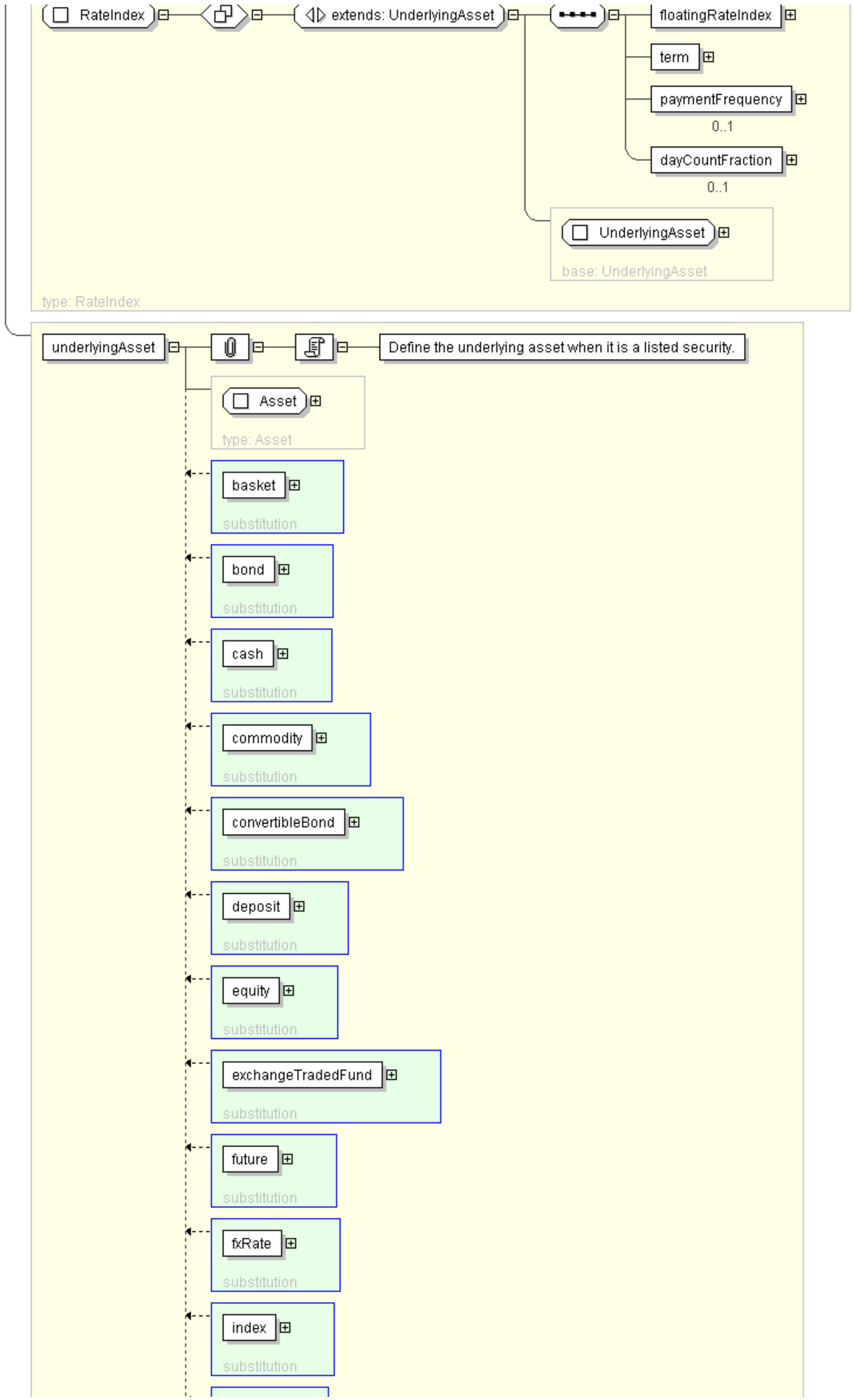


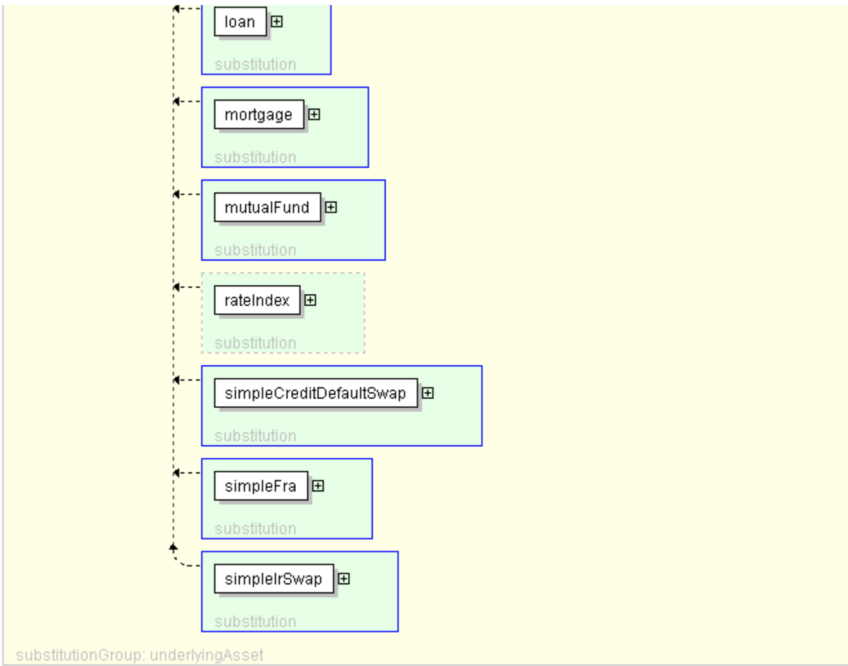
XML Instance Representation

```
<rateIndex
id=" xsd:ID [0..1]">
    <instrumentId> InstrumentId </instrumentId> [1..*]
    'Identification of the underlying asset, using public and/or private identifiers.'

    <description> xsd:string </description> [0..1]
    'Long name of the underlying asset.'

    <currency> IdentifiedCurrency </currency> [0..1]
    'Trading currency of the underlyer when transacted as a cash instrument.'

    <exchangeId> ExchangeId </exchangeId> [0..1]
    'Identification of the exchange on which this asset is transacted for the purposes
    of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
    as defined in the ISDA 2002 Equity Derivatives Definitions.'

    <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
    'Identification of the clearance system associated with the transaction exchange.'

    <definition> ProductReference </definition> [0..1]
    'An optional reference to a full FpML product that defines the simple product in
    greater detail. In case of inconsistency between the terms of the simple product and those
    of the detailed definition, the values in the simple product override those in the
    detailed definition.'

    <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
    <term> Period </term> [1]
    'Specifies the term of the simple swap, e.g. 5Y.'

    <paymentFrequency> Period </paymentFrequency> [0..1]
    'Specifies the frequency at which the index pays, e.g. 6M.'

    <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
    'The day count basis for the index.'

</rateIndex>
```

Diagram




RateIndex
extends: UnderlyingAsset
floatingRateIndex
term
paymentFrequency
0..1
dayCountFraction
0..1
UnderlyingAsset
base: UnderlyingAsset
type: RateIndex
underlyingAsset
Define the underlying asset when it is a listed security.
Asset
type: Asset
basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution



Schema Component Representation

```
<xsd:element name="rateIndex" type=" RateIndex " substitutionGroup="underlyingAsset"/>
```

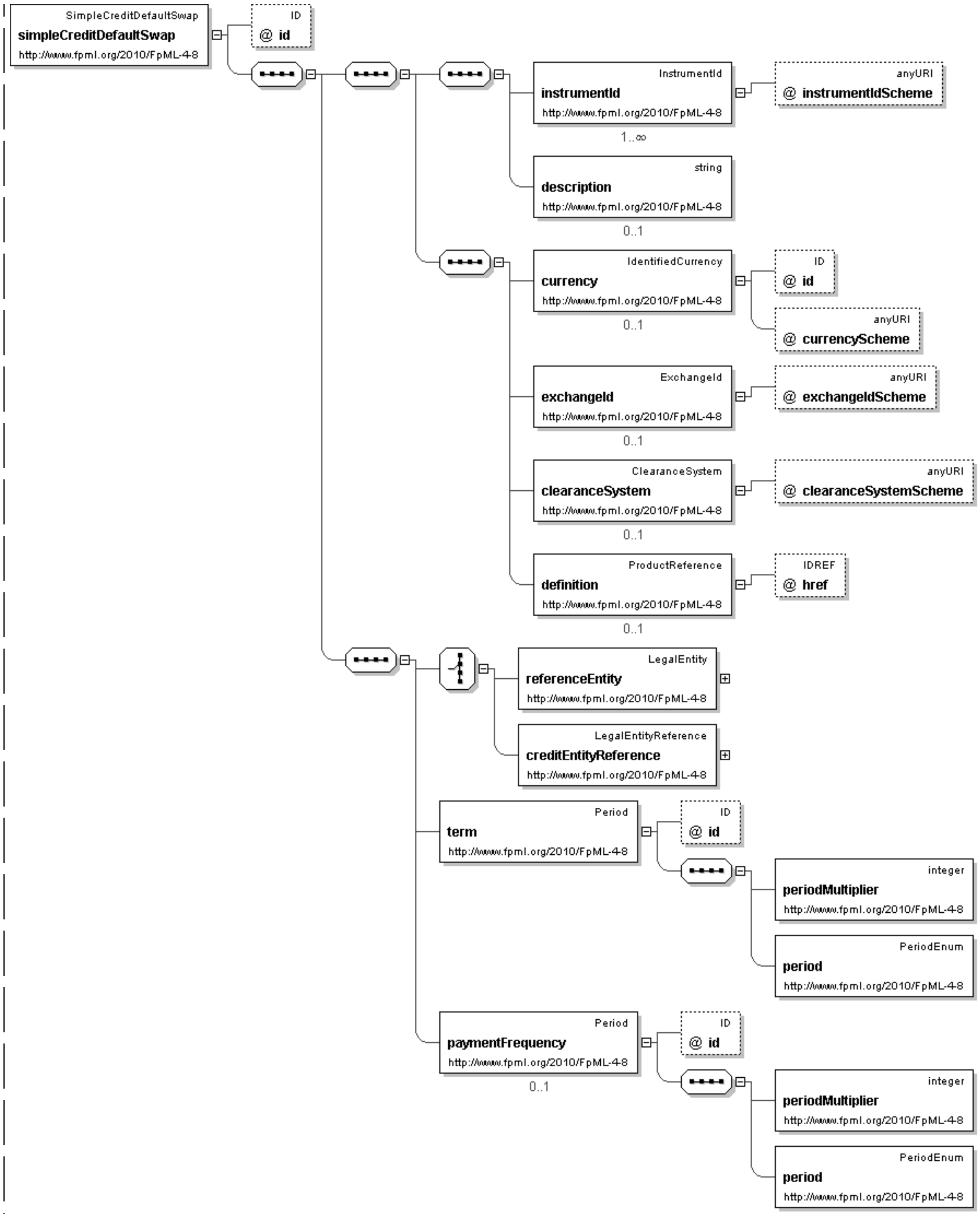
top

Element: simpleCreditDefaultSwap

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	simpleCreditDefaultSwap
Type	SimpleCreditDefaultSwap
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset that is a credit default swap.

Logical Diagram



XML Instance Representation

```
<simpleCreditDefaultSwap
id=" xsd:ID [0..1]">
```

<instrumentId> InstrumentId </instrumentId> [1..*]

'Identification of the underlying asset, using public and/or private identifiers.'

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

Start Choice [1]

<referenceEntity> LegalEntity </referenceEntity> [1]

'The entity for which this is defined.'

<creditEntityReference> LegalEntityReference </creditEntityReference> [1]

'An XML reference a credit entity defined elsewhere in the document.'

End Choice

<term> Period </term> [1]

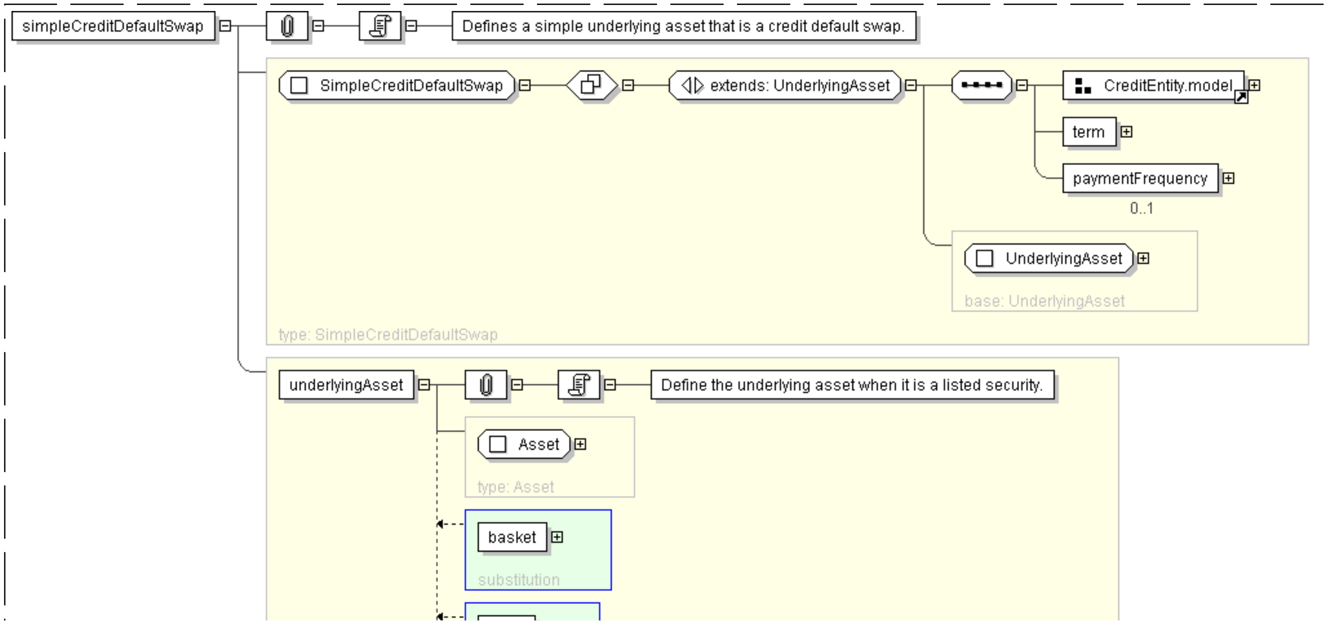
'Specifies the term of the simple CD swap, e.g. 5Y.'

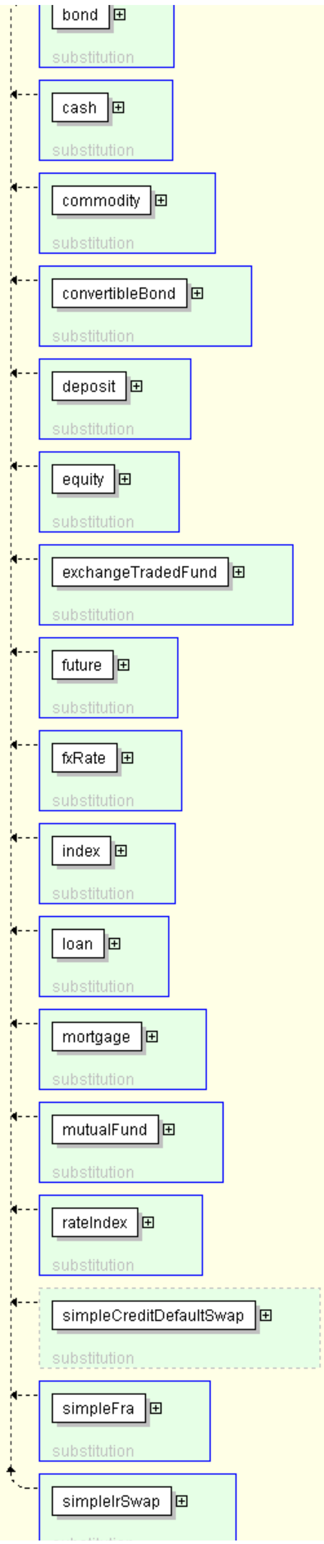
<paymentFrequency> Period </paymentFrequency> [0..1]

'Specifies the frequency at which the swap pays, e.g. 6M.'

</simpleCreditDefaultSwap>

Diagram




bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund
substitution
rateIndex
substitution
simpleCreditDefaultSwap
substitution
simpleFra
substitution
simpleIrSwap

Schema Component Representation

```
<xsd:element name="simpleCreditDefaultSwap" type=" SimpleCreditDefaultSwap
" substitutionGroup="underlyingAsset"/>
```

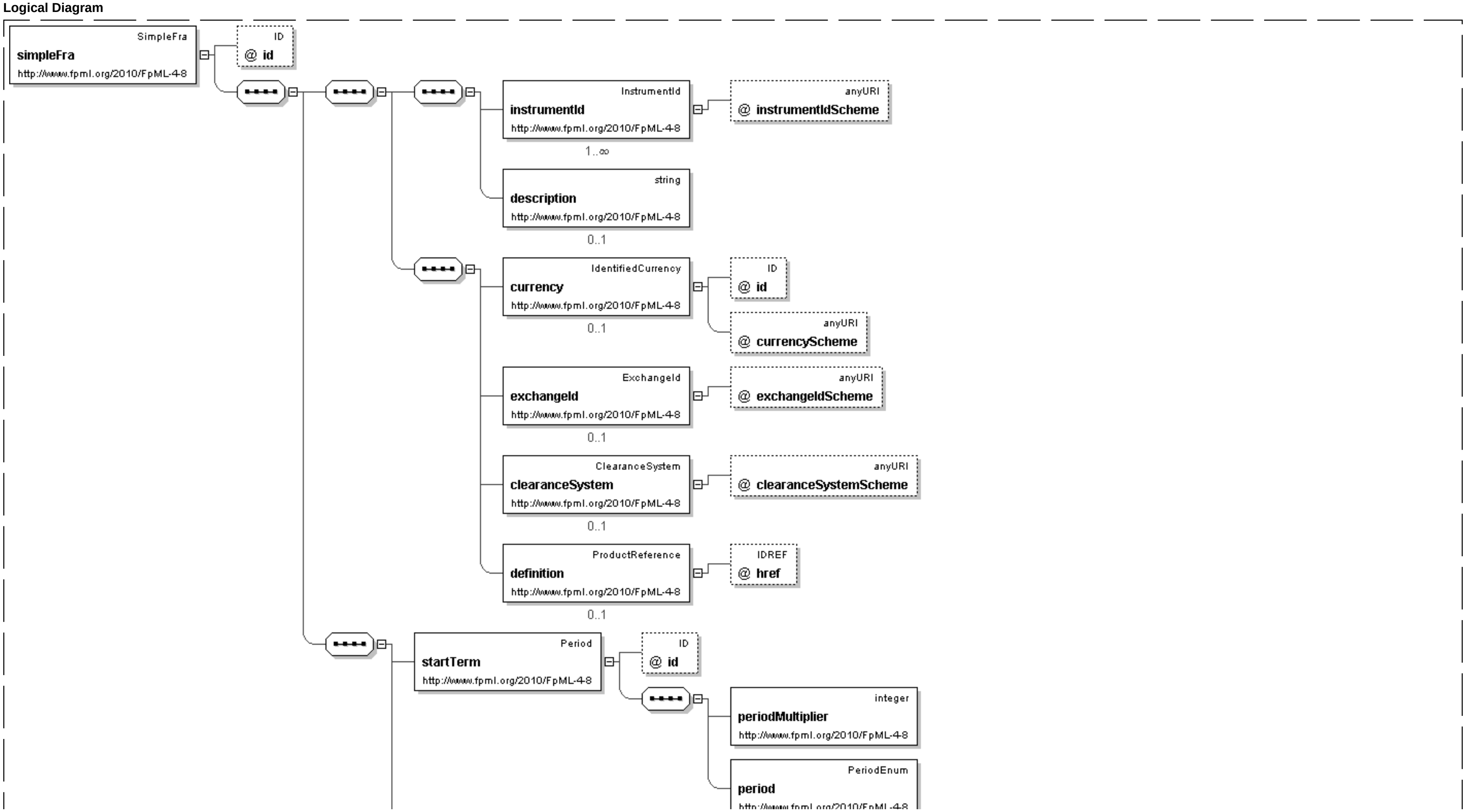
top

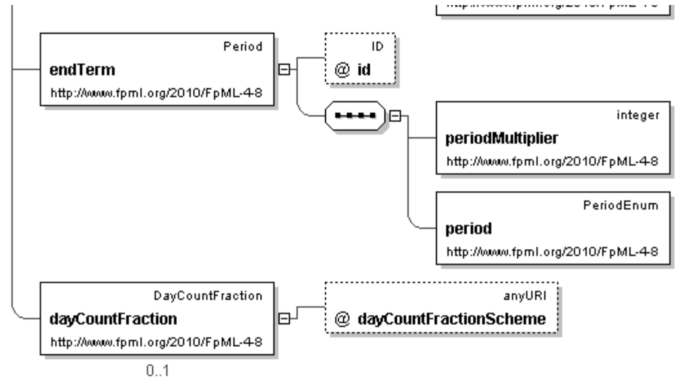
Element: simpleFra

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	simpleFra
Type	SimpleFra
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset that is a forward rate agreement.

Logical Diagram

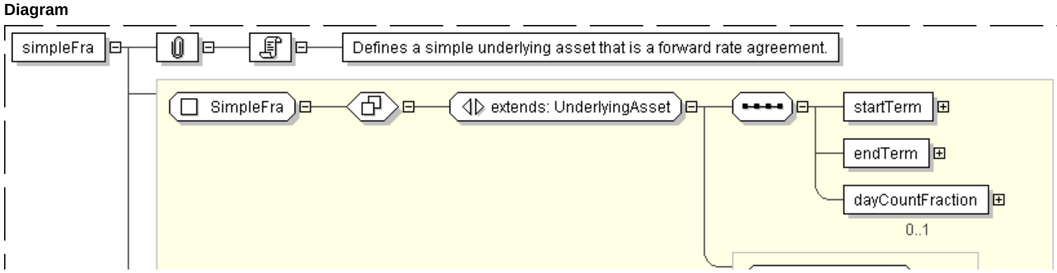


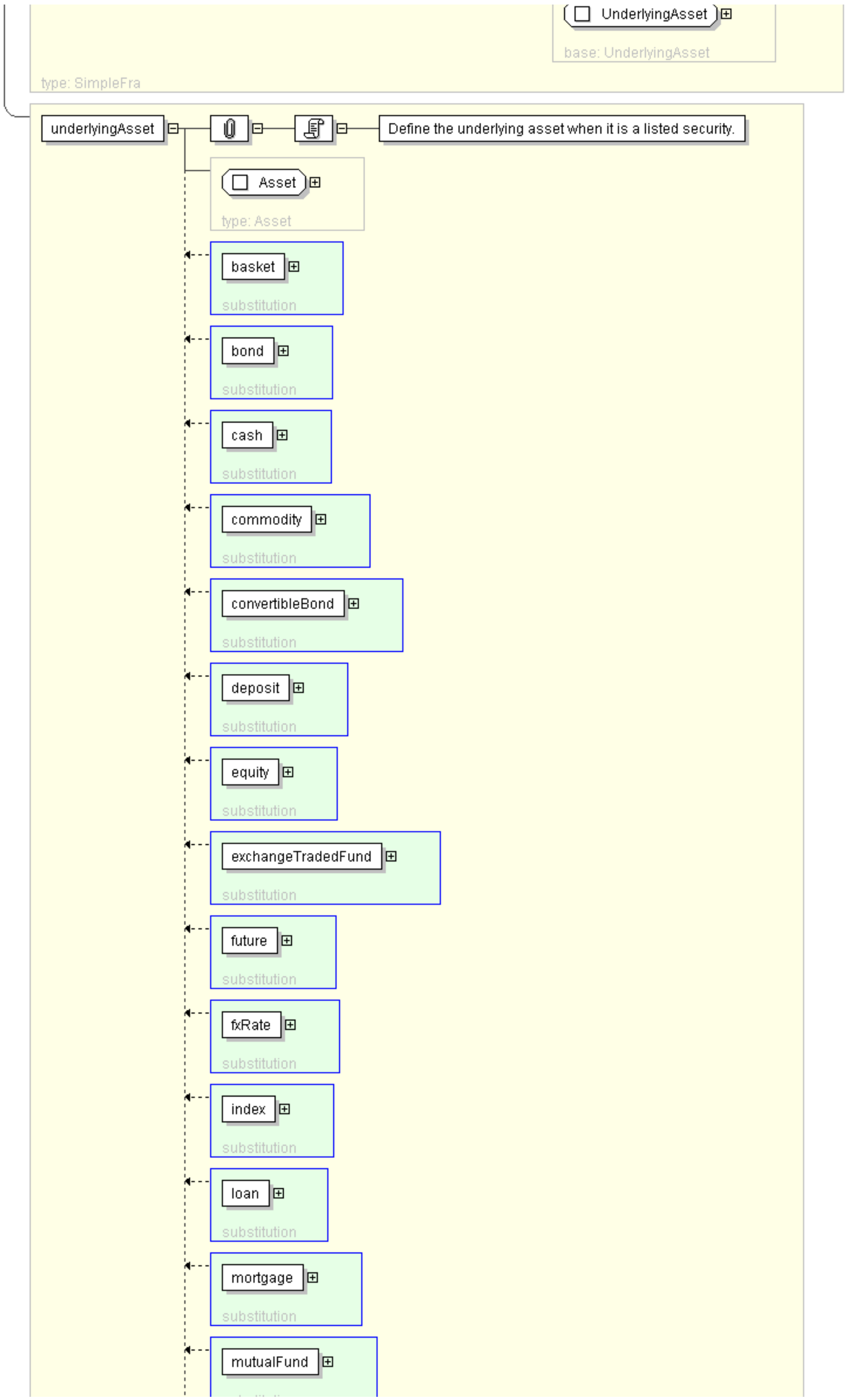


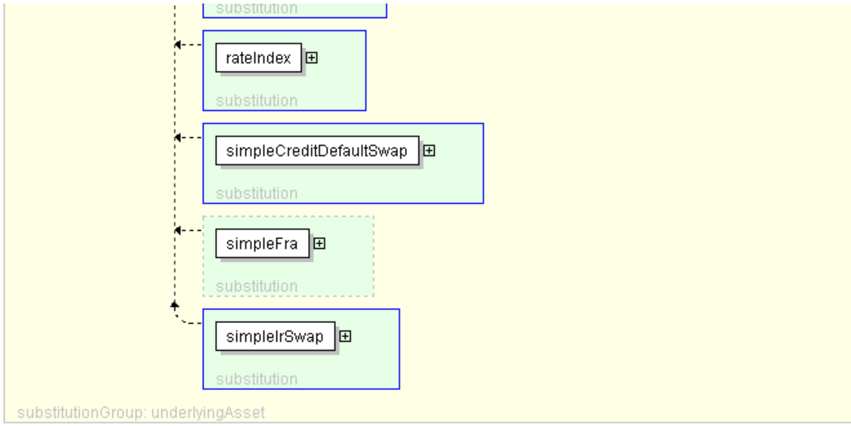
XML Instance Representation

```
<simpleFra
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <startTerm> Period </startTerm> [1]
   'Specifies the start term of the simple fra, e.g. 3M.'

   <endTerm> Period </endTerm> [1]
   'Specifies the end term of the simple fra, e.g. 9M.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
   'The day count basis for the FRA.'

</simpleFra>
```

Diagram




UnderlyingAsset
base: UnderlyingAsset
type: SimpleFra
underlyingAsset
Define the underlying asset when it is a listed security.
Asset
type: Asset
basket
substitution
bond
substitution
cash
substitution
commodity
substitution
convertibleBond
substitution
deposit
substitution
equity
substitution
exchangeTradedFund
substitution
future
substitution
fxRate
substitution
index
substitution
loan
substitution
mortgage
substitution
mutualFund



Schema Component Representation

```
<xsd:element name="simpleFra" type=" SimpleFra " substitutionGroup="underlyingAsset"/>
```

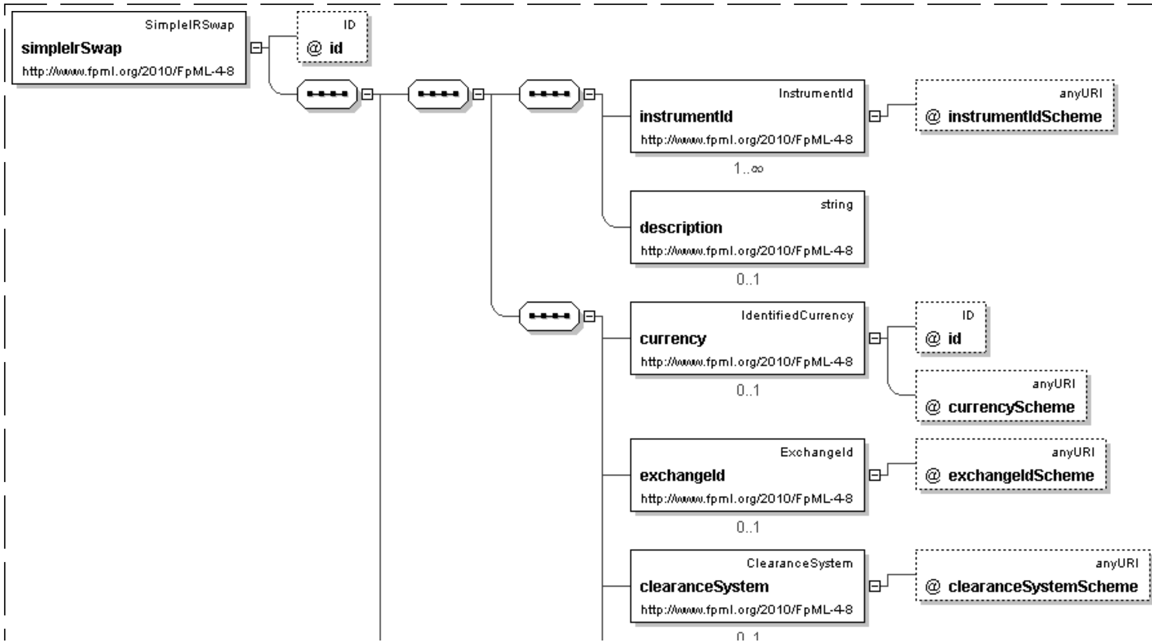
top

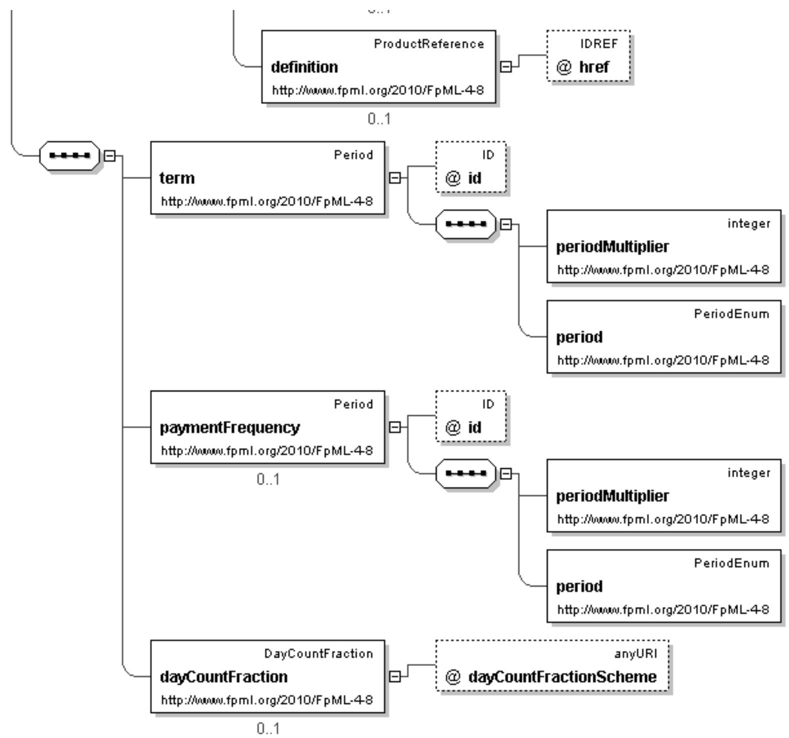
Element: simpleIrSwap

- *This element can be used wherever the following element is referenced:*
  - underlyingAsset

Name	simpleIrSwap
Type	SimpleIRSwap
Nillable	no
Abstract	no
Documentation	Defines a simple underlying asset that is a swap.

Logical Diagram



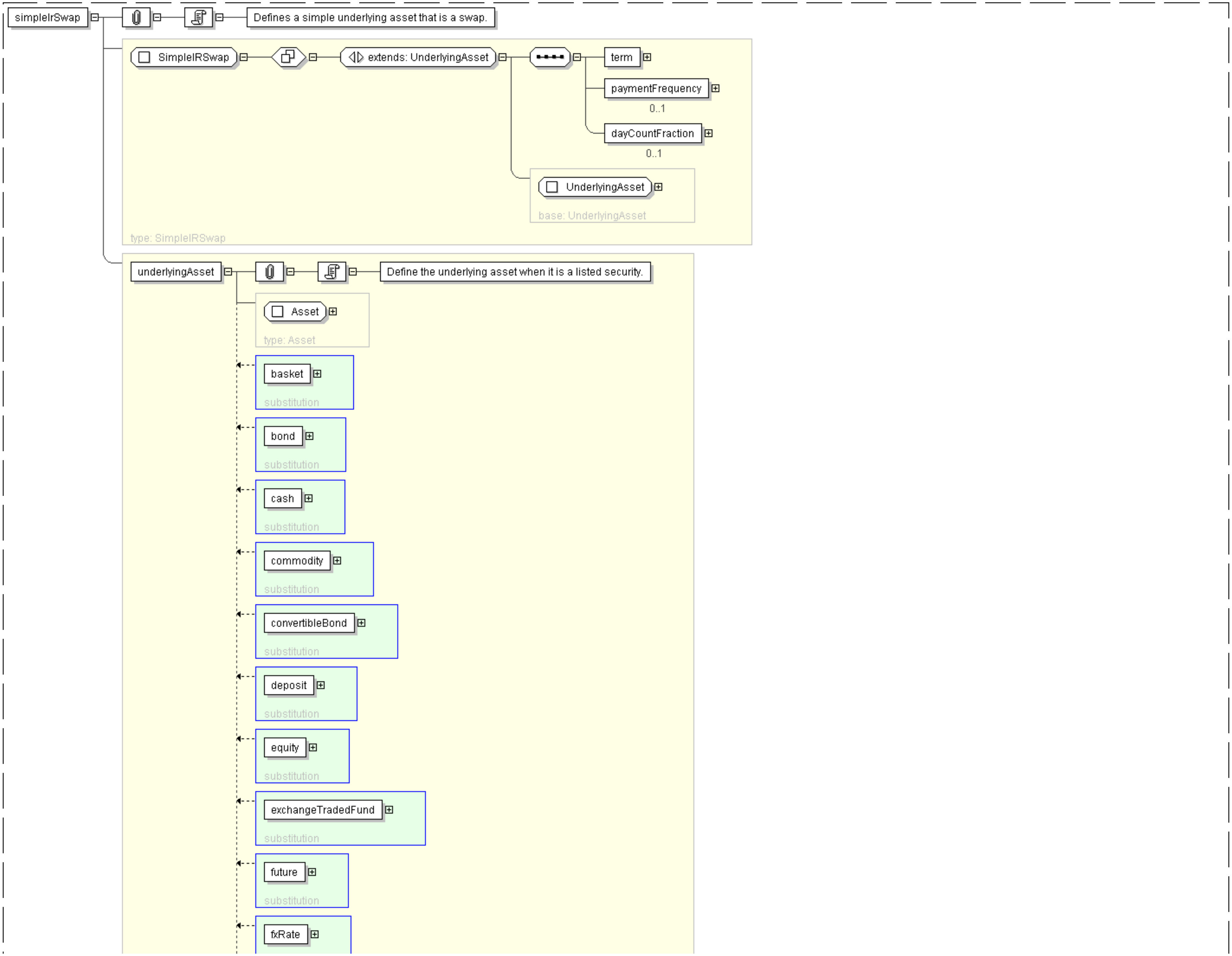


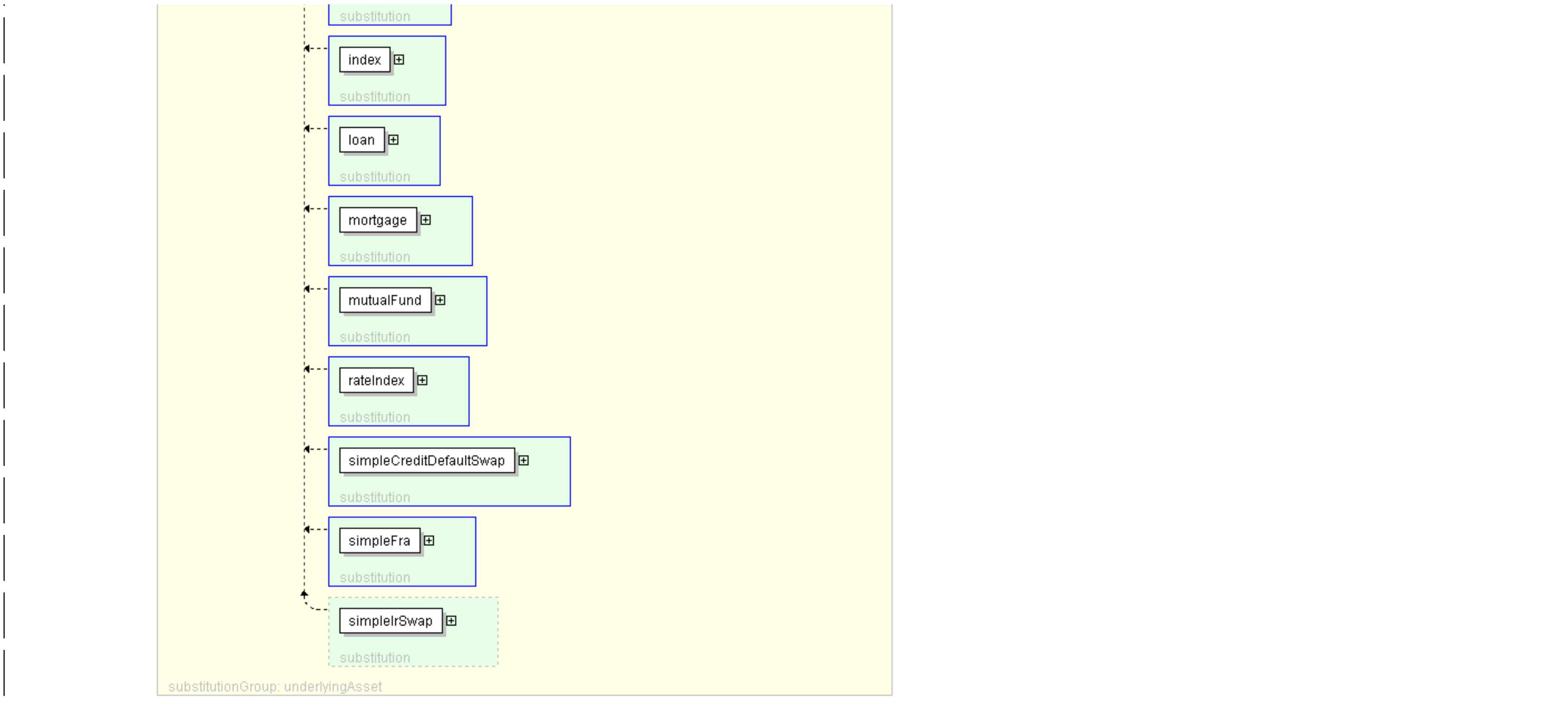
XML Instance Representation

```
<simpleIrSwap
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <term> Period </term> [1]
   'Specifies the term of the simple swap, e.g. 5Y.'

   <paymentFrequency> Period </paymentFrequency> [0..1]
   'Specifies the frequency at which the swap pays, e.g. 6M.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
```

```
'The day count basis for the swap.'
</simpleIrSwap>
```

Diagram





Schema Component Representation

```
<xsd:element name="simpleIrSwap" type=" SimpleIRSwap " substitutionGroup="underlyingAsset"/>
```

top

Element: underlyingAsset

- *The following elements can be used wherever this element is referenced:*
  - basket
  - bond
  - cash
  - commodity
  - convertibleBond
  - deposit
  - equity
  - exchangeTradedFund
  - future
  - fxRate
  - index
  - loan
  - mortgage
  - mutualFund
  - rateIndex
  - simpleCreditDefaultSwap
  - simpleFra
  - simpleIrSwap

Name	underlyingAsset
Used by (from the same schema document)	Complex Type **BasketConstituent** , Complex Type **SingleUnderlyer**

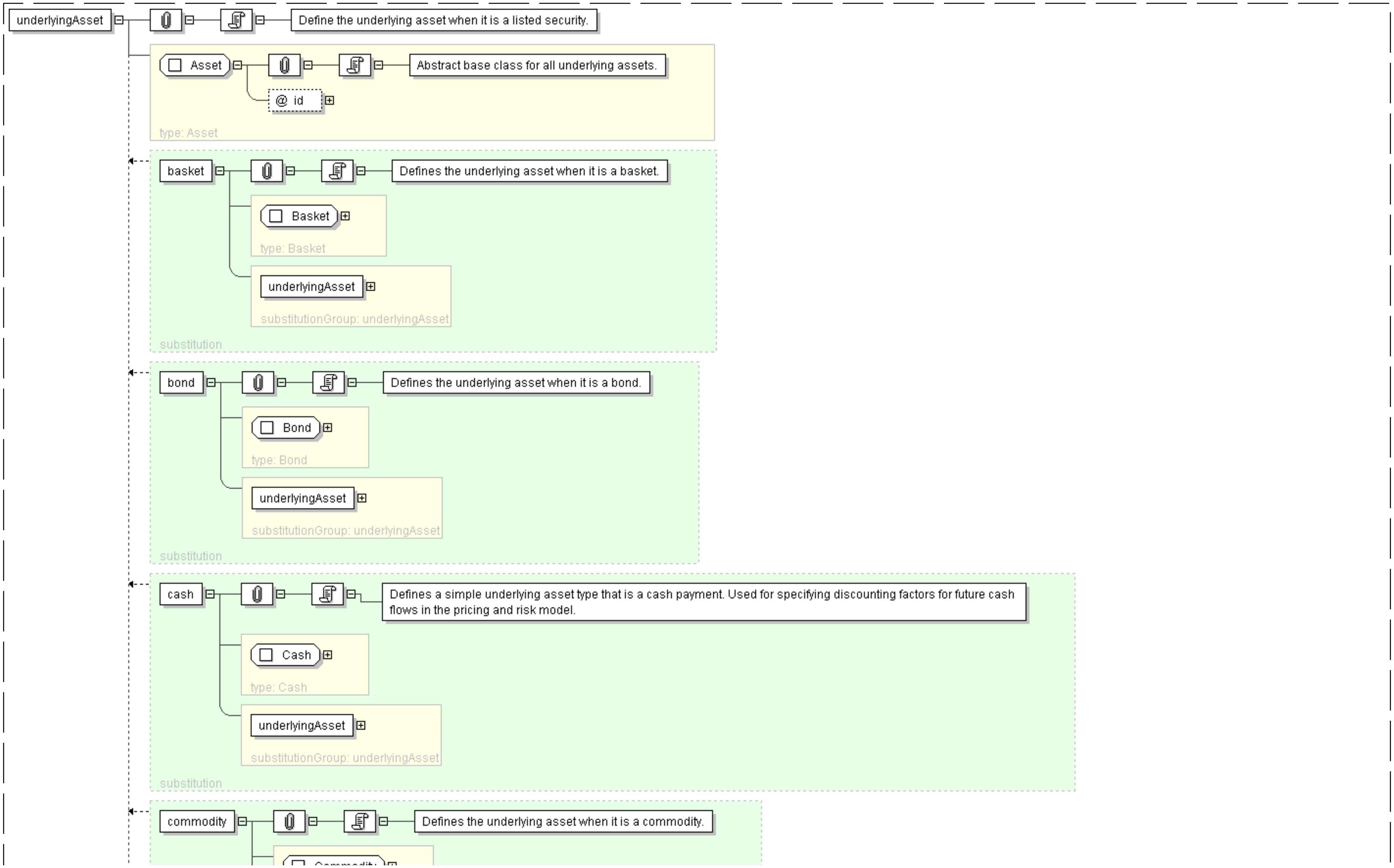
Type	Asset
Nillable	no
Abstract	yes
Documentation	Define the underlying asset when it is a listed security.

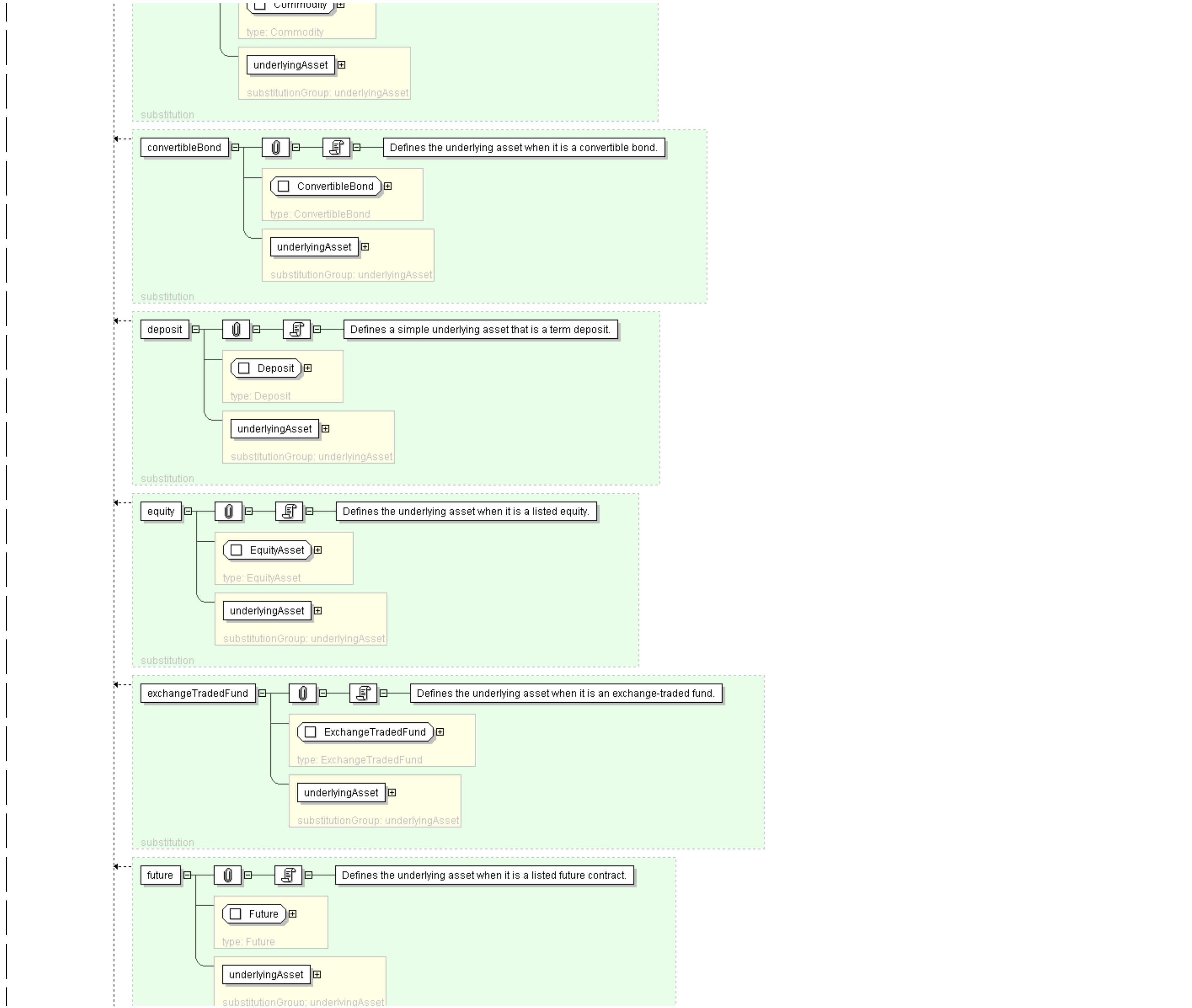
Logical Diagram

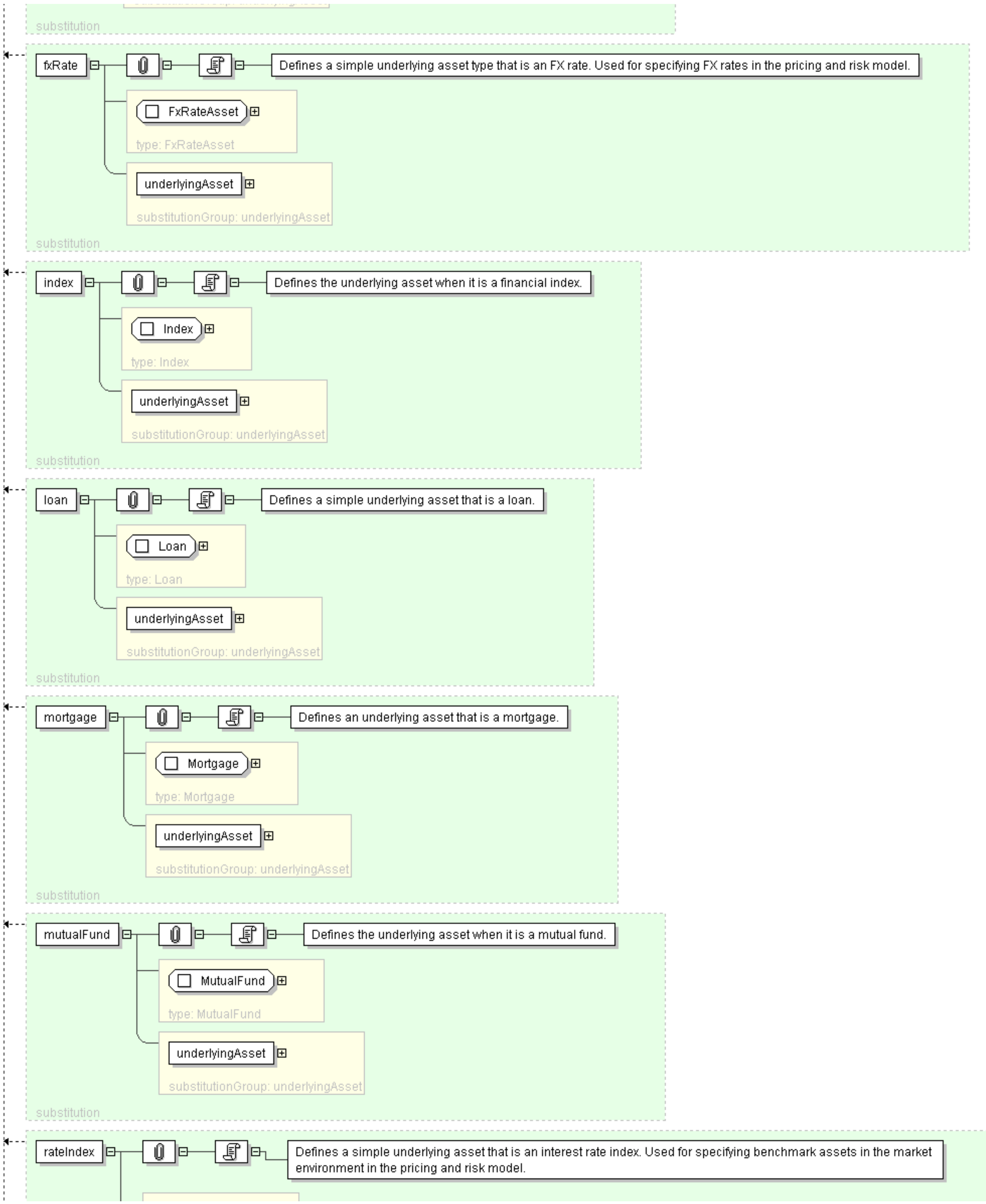
XML Instance Representation

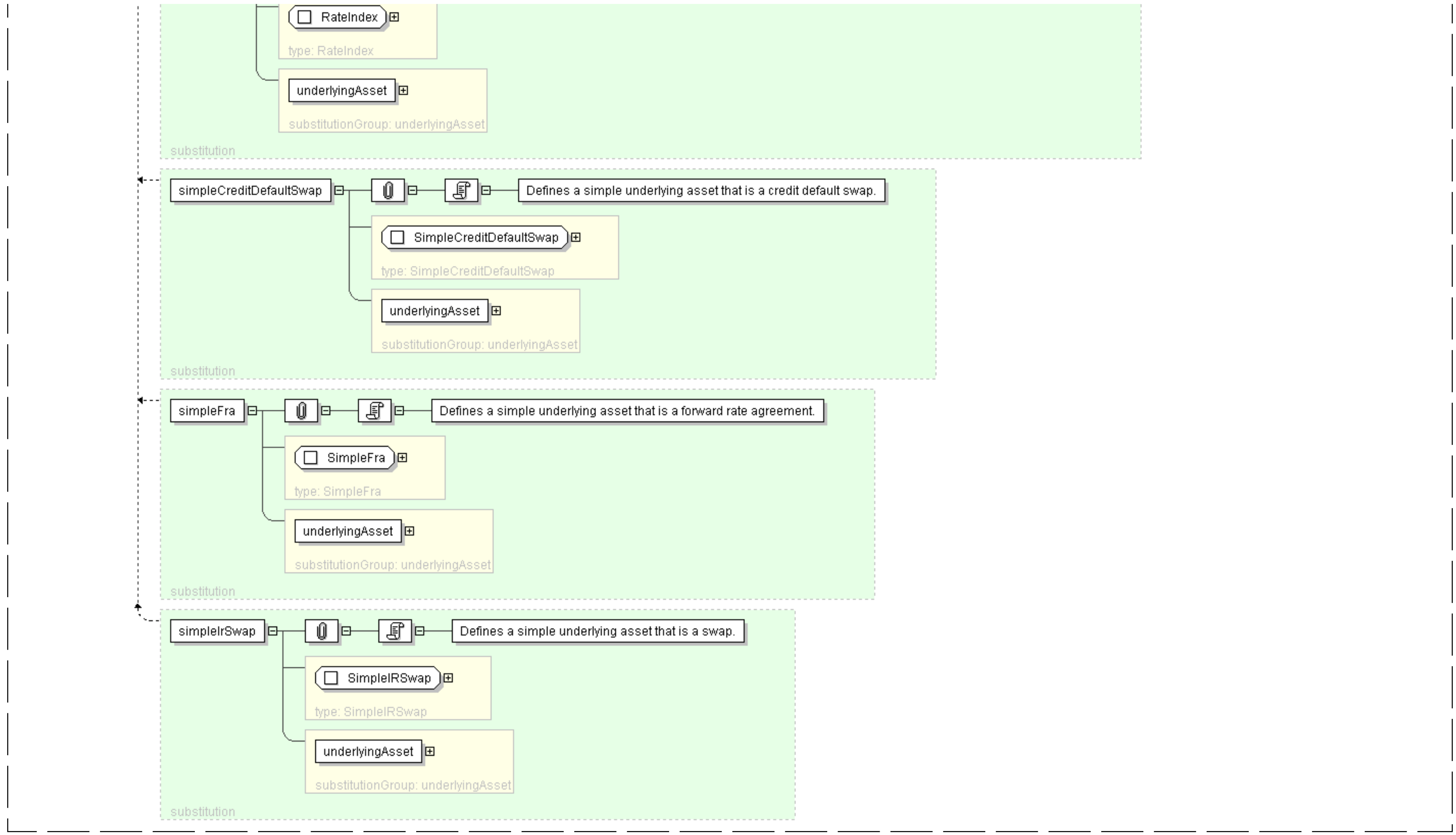
```
<underlyingAsset
id=" xsd:ID [0..1]"/>
```

Diagram




Commodity
type: Commodity
underlyingAsset
substitutionGroup: underlyingAsset
substitution
convertibleBond
Defines the underlying asset when it is a convertible bond.
ConvertibleBond
type: ConvertibleBond
underlyingAsset
substitutionGroup: underlyingAsset
substitution
deposit
Defines a simple underlying asset that is a term deposit.
Deposit
type: Deposit
underlyingAsset
substitutionGroup: underlyingAsset
substitution
equity
Defines the underlying asset when it is a listed equity.
EquityAsset
type: EquityAsset
underlyingAsset
substitutionGroup: underlyingAsset
substitution
exchangeTradedFund
Defines the underlying asset when it is an exchange-traded fund.
ExchangeTradedFund
type: ExchangeTradedFund
underlyingAsset
substitutionGroup: underlyingAsset
substitution
future
Defines the underlying asset when it is a listed future contract.
Future
type: Future
underlyingAsset
substitutionGroup: underlyingAsset


substitution
fxRate
Defines a simple underlying asset type that is an FX rate. Used for specifying FX rates in the pricing and risk model.
FxRateAsset
type: FxRateAsset
underlyingAsset
substitutionGroup: underlyingAsset
substitution
index
Defines the underlying asset when it is a financial index.
Index
type: Index
underlyingAsset
substitutionGroup: underlyingAsset
substitution
loan
Defines a simple underlying asset that is a loan.
Loan
type: Loan
underlyingAsset
substitutionGroup: underlyingAsset
substitution
mortgage
Defines an underlying asset that is a mortgage.
Mortgage
type: Mortgage
underlyingAsset
substitutionGroup: underlyingAsset
substitution
mutualFund
Defines the underlying asset when it is a mutual fund.
MutualFund
type: MutualFund
underlyingAsset
substitutionGroup: underlyingAsset
substitution
rateIndex
Defines a simple underlying asset that is an interest rate index. Used for specifying benchmark assets in the market environment in the pricing and risk model.



Schema Component Representation

```
<xsd:element name="underlyingAsset" type=" Asset " abstract="true"/>
```

top

Global Definitions

Complex Type: ActualPrice

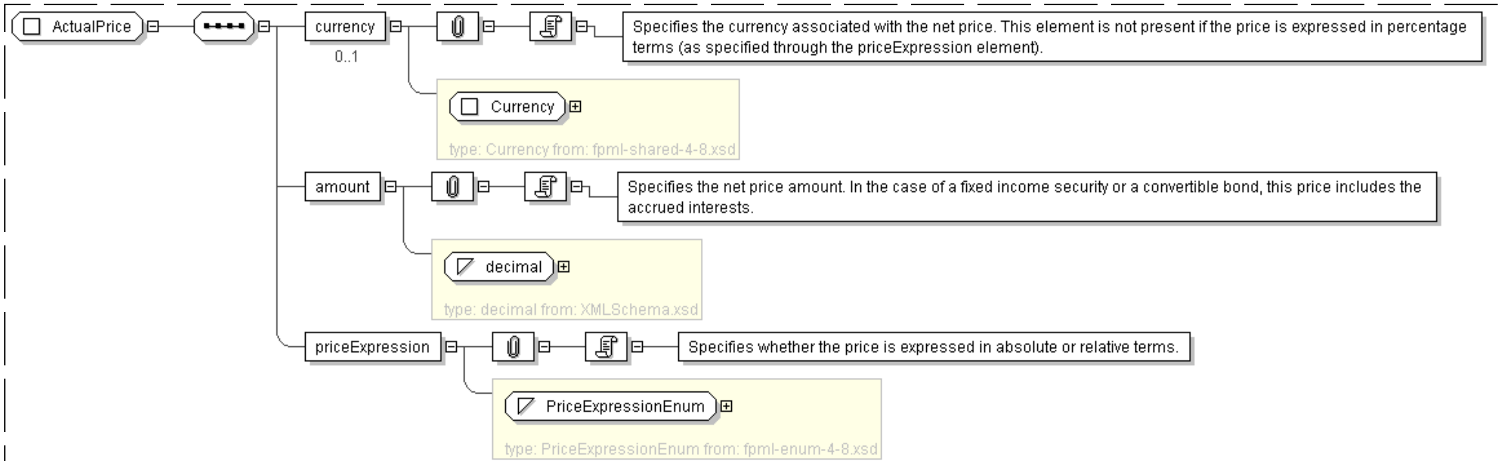
Super-types:	None
Sub-types:	None

Name	ActualPrice
Used by (from the same schema document)	Model Group **EquityPrice.model** , Model Group **EquityPrice.model**
Abstract	no

XML Instance Representation

```
<...>
   <currency> Currency </currency> [0..1]
   'Specifies the currency associated with the net price. This element is not present if the
   price is expressed in percentage terms (as specified through the priceExpression element).'

   <amount> xsd:decimal </amount> [1]
   'Specifies the net price amount. In the case of a fixed income security or a convertible
   bond, this price includes the accrued interests.'

   <priceExpression> PriceExpressionEnum </priceExpression> [1]
   'Specifies whether the price is expressed in absolute or relative terms.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ActualPrice">
   <xsd:sequence>
      <xsd:element name="currency" type=" Currency " minOccurs="0"/>
      <xsd:element name="amount" type=" xsd:decimal "/>
      <xsd:element name="priceExpression" type=" PriceExpressionEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AnyAssetReference

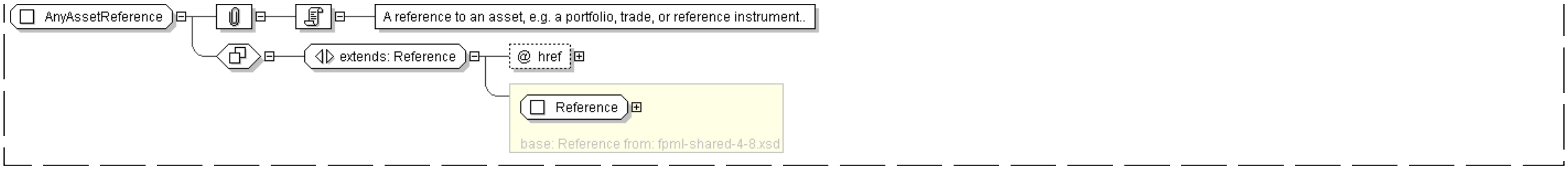
Super-types:	Reference < **AnyAssetReference** (by extension)
Sub-types:	None

Name	AnyAssetReference
Abstract	no
Documentation	A reference to an asset, e.g. a portfolio, trade, or reference instrument..

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AnyAssetReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Asset

Super-types: None

Sub-types:

- Basket (by extension)
- IdentifiedAsset (by extension)
  - Cash (by extension)
  - Commodity (by extension)
  - UnderlyingAsset (by extension)
    - Deposit (by extension)
    - ExchangeTraded (by extension)
      - Bond (by extension)
        - ConvertibleBond (by extension)
      - EquityAsset (by extension)
      - ExchangeTradedCalculatedPrice (by extension)
        - ExchangeTradedFund (by extension)
        - Index (by extension)
      - ExchangeTradedContract (by extension)
      - Future (by extension)
    - FxRateAsset (by extension)
    - Loan (by extension)
    - Mortgage (by extension)
    - MutualFund (by extension)
    - RateIndex (by extension)
    - SimpleCreditDefaultSwap (by extension)
    - SimpleFra (by extension)
    - SimpleIRSwap (by extension)

Name	Asset
Used by (from the same schema document)	Element **underlyingAsset**
Abstract	yes
Documentation	Abstract base class for all underlying assets.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"/>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="Asset" abstract="true">
   <xsd:attribute name="id" type=" xsd:ID "/>
```

```
</xsd:complexType>
```

top

Complex Type: AssetMeasureType

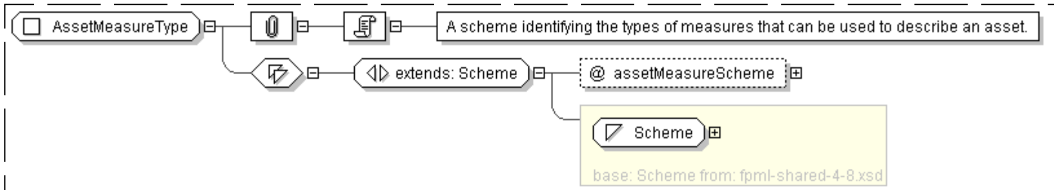
Super-types:	Scheme < **AssetMeasureType** (by extension)
Sub-types:	None

Name	AssetMeasureType
Used by (from the same schema document)	Model Group **QuotationCharacteristics.model**
Abstract	no
Documentation	A scheme identifying the types of measures that can be used to describe an asset.

XML Instance Representation

```
<...
assetMeasureScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AssetMeasureType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="assetMeasureScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/asset-measure"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: AssetPool

Super-types:	None
Sub-types:	None

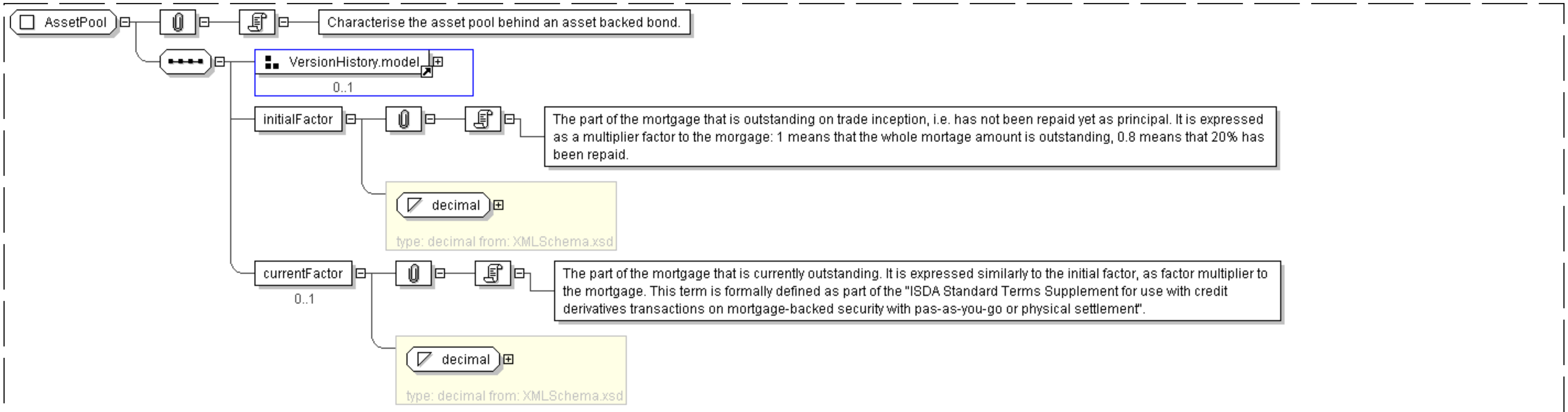
Name	AssetPool
Used by (from the same schema document)	Complex Type **Mortgage**
Abstract	no
Documentation	Characterise the asset pool behind an asset backed bond.

XML Instance Representation

```
<...>
Start Group: VersionHistory.model [0..1]
      <version> xsd:nonNegativeInteger </version> [1]
      'The version number'

      <effectiveDate> IdentifiedDate </effectiveDate> [0..1]
      'Optionally it is possible to specify a version effective date when a versionId is supplied.'

End Group: VersionHistory.model
```

```
<initialFactor> xsd:decimal </initialFactor> [1]
'The part of the mortgage that is outstanding on trade inception, i.e. has not been repaid
yet as principal. It is expressed as a multiplier factor to the morgage: 1 means that the
whole mortage amount is outstanding, 0.8 means that 20% has been repaid.'

<currentFactor> xsd:decimal </currentFactor> [0..1]
'The part of the mortgage that is currently outstanding. It is expressed similarly to
the initial factor, as factor multiplier to the mortgage. This term is formally defined as
part of the \"ISDA Standard Terms Supplement for use with credit derivatives transactions
on mortgage-backed security with pas-as-you-go or physical settlement\".'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AssetPool">
   <xsd:sequence>
      <xsd:group ref=" VersionHistory.model " minOccurs="0"/>
      <xsd:element name="initialFactor" type=" xsd:decimal "/>
      <xsd:element name="currentFactor" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AssetReference

Super-types:	Reference < **AssetReference** (by extension)
Sub-types:	None

Name	AssetReference
Abstract	no
Documentation	Reference to an underlying asset.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="AssetReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="Asset"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: BasicQuotation

Super-types:	None
Sub-types:	None

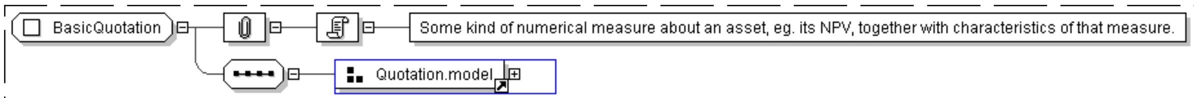
Name	BasicQuotation
Abstract	no
Documentation	Some kind of numerical measure about an asset, eg. its NPV, together with characteristics of that measure.

XML Instance Representation

```
<...>
   <value> xsd:decimal </value> [0..1]
   'The value of the the quotation.'

   <measureType> AssetMeasureType </measureType> [0..1]
   'The type of the value that is measured. This could be an NPV, a cash flow, a clean price, etc.'

   <quoteUnits> PriceQuoteUnits </quoteUnits> [0..1]
   'The optional units that the measure is expressed in. If not supplied, this is assumed to be
   a price/value in currency units.'

   <side> QuotationSideEnum </side> [0..1]
   'The side (bid/mid/ask) of the measure.'

   <currency> Currency </currency> [0..1]
   'The optional currency that the measure is expressed in. If not supplied, this is
   defaulted from the reportingCurrency in the valuationScenarioDefinition.'

   <timing> QuoteTiming </timing> [0..1]
   'When during a day the quote is for. Typically, if this element is supplied, the
   QuoteLocation needs also to be supplied.'
Start Group: QuoteLocation.model [0..1]
'Where the quote is from.'

Start Choice [1]
      <businessCenter> BusinessCenter </businessCenter> [1]
      'A city or other business center.'

      <exchangeId> ExchangeId </exchangeId> [1]
      'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
End Group: QuoteLocation.model
```

```
<informationSource> InformationSource </informationSource> [0..*]
'The information source where a published or displayed market rate will be obtained, e.
g. Telerate Page 3750.'

<time> xsd:dateTime </time> [0..1]
'When the quote was observed or derived.'

<valuationDate> xsd:date </valuationDate> [0..1]
'When the quote was computed.'

<expiryTime> xsd:dateTime </expiryTime> [0..1]
'When does the quote cease to be valid.'

<cashFlowType> CashflowType </cashFlowType> [0..1]
'For cash flows, the type of the cash flows. Examples include: Coupon payment, Premium
Fee, Settlement Fee, Brokerage Fee, etc.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BasicQuotation">
   <xsd:sequence>
      <xsd:group ref=" Quotation.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Basket

Super-types:	Asset < **Basket** (by extension)
Sub-types:	None

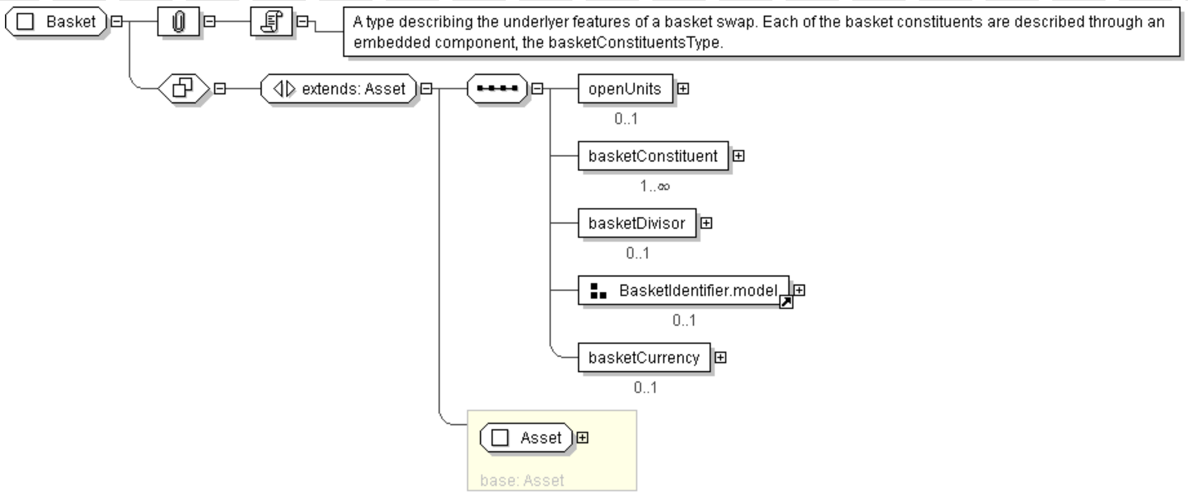
Name	Basket
Used by (from the same schema document)	Complex Type **Underlyer** , Element **basket**
Abstract	no
Documentation	A type describing the underlyer features of a basket swap. Each of the basket constituents are described through an embedded component, the basketConstituentsType.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <openUnits> xsd:decimal </openUnits> [0..1]
   'The number of units (index or securities) that constitute the underlyer of the swap. In
   the case of a basket swap, this element is used to reference both the number of basket
   units, and the number of each asset components of the basket when these are expressed
   in absolute terms.'

   <basketConstituent> BasketConstituent </basketConstituent> [1..*]
   'Describes each of the components of the basket.'

   <basketDivisor> xsd:decimal </basketDivisor> [0..1]
   'Specifies the basket divisor amount. This value is normally used to adjust the
   constituent weight for pricing or to adjust for dividends, or other corporate actions.'

Start Group: BasketIdentifier.model [0..1]
'Reuses the group that specifies a name and an identifier for a given basket.'
```

```
Start Choice [1]
        <basketName> BasketName </basketName> [1]
        'The name of the basket expressed as a free format string. FpML does not define usage rules
        for this element.'

        <basketId> BasketId </basketId> [0..*]
        'A CDS basket identifier'

        <basketId> BasketId </basketId> [1..*]
        'A CDS basket identifier'

End Choice
End Group: BasketIdentifier.model
    <basketCurrency> Currency </basketCurrency> [0..1]
    'Specifies the currency for this basket.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Basket">
   <xsd:complexContent>
      <xsd:extension base=" Asset ">
         <xsd:sequence>
            <xsd:element name="openUnits" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="basketConstituent" type=" BasketConstituent " maxOccurs="unbounded"/>
            <xsd:element name="basketDivisor" type=" xsd:decimal " minOccurs="0"/>
            <xsd:group ref=" BasketIdentifier.model " minOccurs="0"/>
            <xsd:element name="basketCurrency" type=" Currency " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: BasketConstituent

Super-types:	None
Sub-types:	None

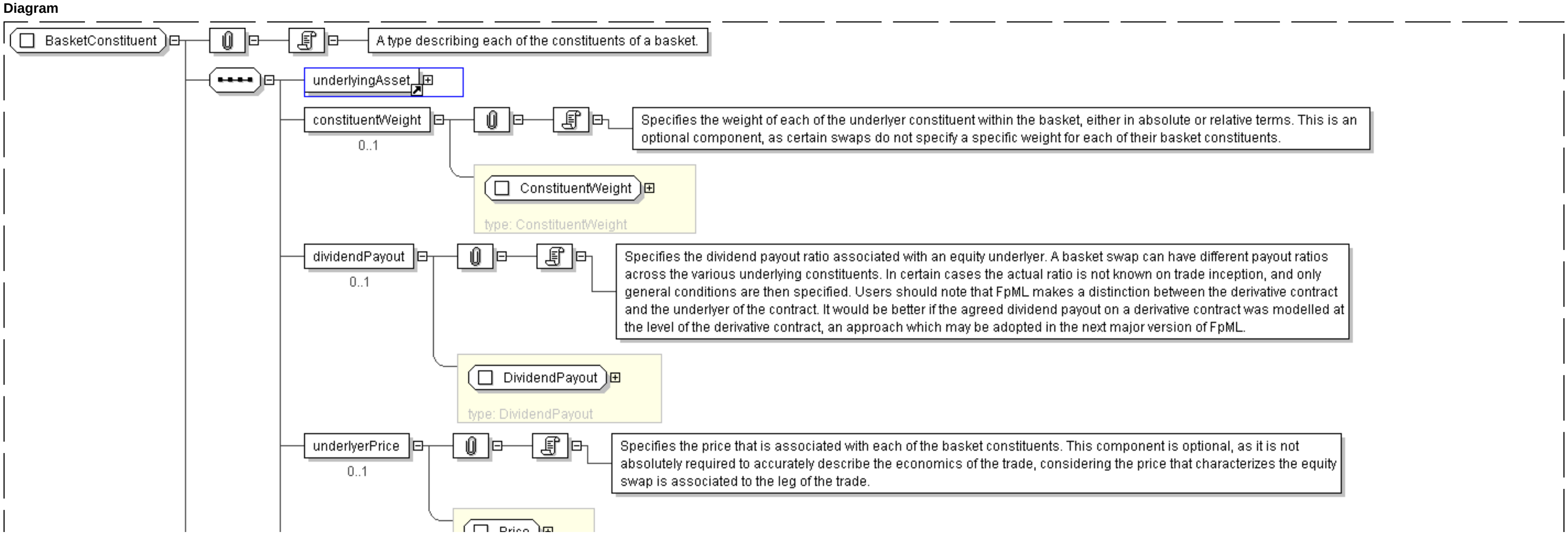
Name	BasketConstituent
Used by (from the same schema document)	Complex Type **Basket**

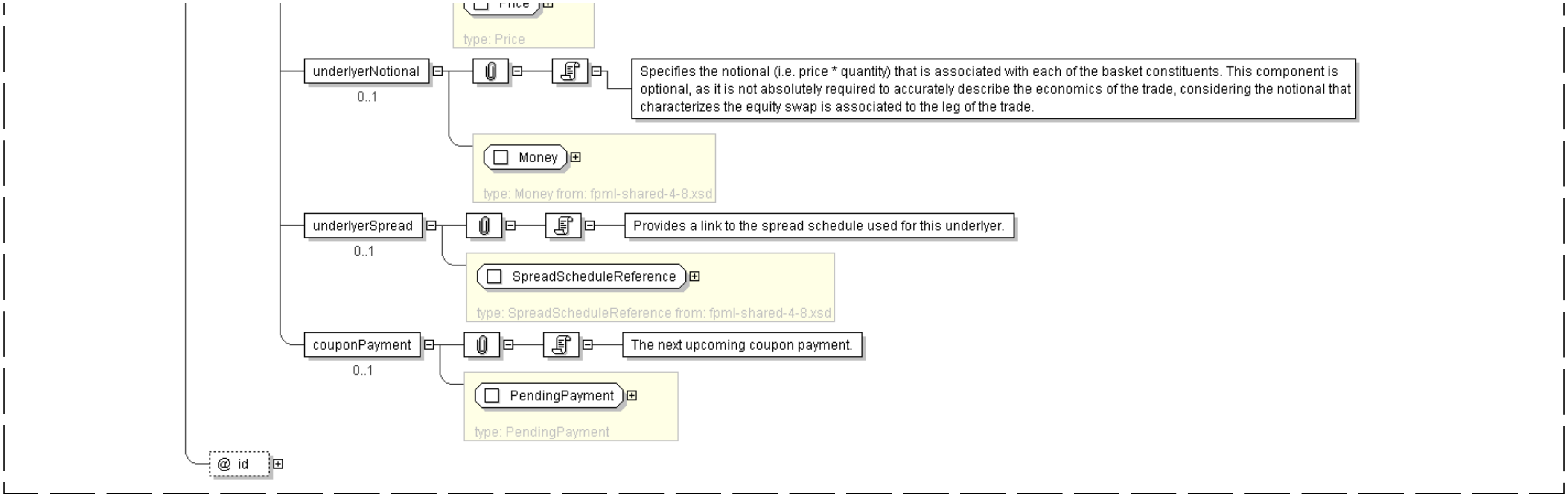
Abstract	no
Documentation	A type describing each of the constituents of a basket.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <underlyingAsset> ... </underlyingAsset> [1]
   <constituentWeight> ConstituentWeight </constituentWeight> [0..1]
   'Specifies the weight of each of the underlyer constituent within the basket, either
   in absolute or relative terms. This is an optional component, as certain swaps do not specify
   a specific weight for each of their basket constituents.'

   <dividendPayout> DividendPayout </dividendPayout> [0..1]
   'Specifies the dividend payout ratio associated with an equity underlyer. A basket swap
   can have different payout ratios across the various underlying constituents. In certain
   cases the actual ratio is not known on trade inception, and only general conditions are
   then specified. Users should note that FpML makes a distinction between the derivative
   contract and the underlyer of the contract. It would be better if the agreed dividend payout
   on a derivative contract was modelled at the level of the derivative contract, an
   approach which may be adopted in the next major version of FpML.'

   <underlyerPrice> Price </underlyerPrice> [0..1]
   'Specifies the price that is associated with each of the basket constituents. This component
   is optional, as it is not absolutely required to accurately describe the economics of
   the trade, considering the price that characterizes the equity swap is associated to the leg
   of the trade.'

   <underlyerNotional> Money </underlyerNotional> [0..1]
   'Specifies the notional (i.e. price * quantity) that is associated with each of the
   basket constituents. This component is optional, as it is not absolutely required to
   accurately describe the economics of the trade, considering the notional that characterizes
   the equity swap is associated to the leg of the trade.'

   <underlyerSpread> SpreadScheduleReference </underlyerSpread> [0..1]
   'Provides a link to the spread schedule used for this underlyer.'

   <couponPayment> PendingPayment </couponPayment> [0..1]
   'The next upcoming coupon payment.'

</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="BasketConstituent">
   <xsd:sequence>
      <xsd:element ref=" underlyingAsset "/>
      <xsd:element name="constituentWeight" type=" ConstituentWeight " minOccurs="0"/>
      <xsd:element name="dividendPayout" type=" DividendPayout " minOccurs="0"/>
      <xsd:element name="underlyerPrice" type=" Price " minOccurs="0"/>
      <xsd:element name="underlyerNotional" type=" Money " minOccurs="0"/>
      <xsd:element name="underlyerSpread" type=" SpreadScheduleReference " minOccurs="0"/>
      <xsd:element name="couponPayment" type=" PendingPayment " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
</xsd:complexType>
```

top

Complex Type: BasketId

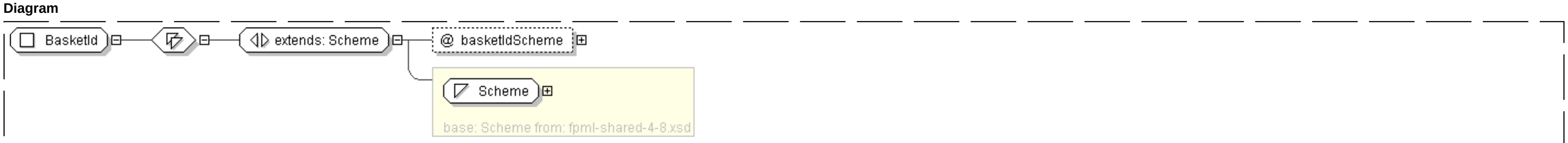
Super-types:	Scheme < **BasketId** (by extension)
Sub-types:	None

Name	BasketId
Used by (from the same schema document)	Model Group **BasketIdentifier.model** , Model Group **BasketIdentifier.model**
Abstract	no

XML Instance Representation

```
<...
basketIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BasketId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="basketIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: BasketName

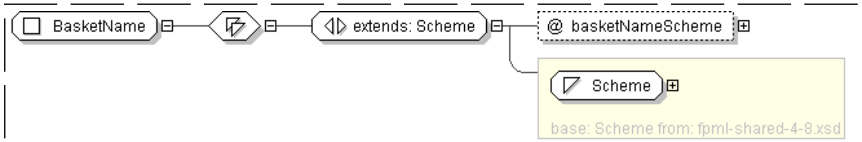
Super-types:	Scheme < **BasketName** (by extension)
Sub-types:	None

Name	BasketName
Used by (from the same schema document)	Model Group **BasketIdentifier.model**
Abstract	no

XML Instance Representation

```
<...
basketNameScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BasketName">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="basketNameScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Bond

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < **Bond** (by extension)
Sub-types:	• ConvertibleBond (by extension)

Name	Bond
Used by (from the same schema document)	Element **bond**
Abstract	no
Documentation	An exchange traded bond.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'
   <description> xsd:string </description> [0..1]
```

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

Start Choice [0..1]

'Specifies the issuer name of a fixed income security or convertible bond. This name can either be explicitly stated, or specified as an href into another element of the document, such as the obligor'

<issuerName> xsd:string **</issuerName>** [1]
<issuerPartyReference> PartyReference **</issuerPartyReference>** [1]

End Choice

<seniority> CreditSeniority **</seniority>** [0..1]

'The repayment precedence of a debt instrument.'

<couponType> CouponType **</couponType>** [0..1]

'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

<couponRate> xsd:decimal **</couponRate>** [0..1]

'Specifies the coupon rate (expressed in percentage) of a fixed income security or convertible bond.'

<maturity> xsd:date **</maturity>** [0..1]

'The date when the principal amount of a security becomes due and payable.'

<parValue> xsd:decimal **</parValue>** [0..1]

'Specifies the nominal amount of a fixed income security or convertible bond.'

<faceAmount> xsd:decimal **</faceAmount>** [0..1]

'Specifies the total amount of the issue. Corresponds to the par value multiplied by the number of issued security.'

<paymentFrequency> Period **</paymentFrequency>** [0..1]

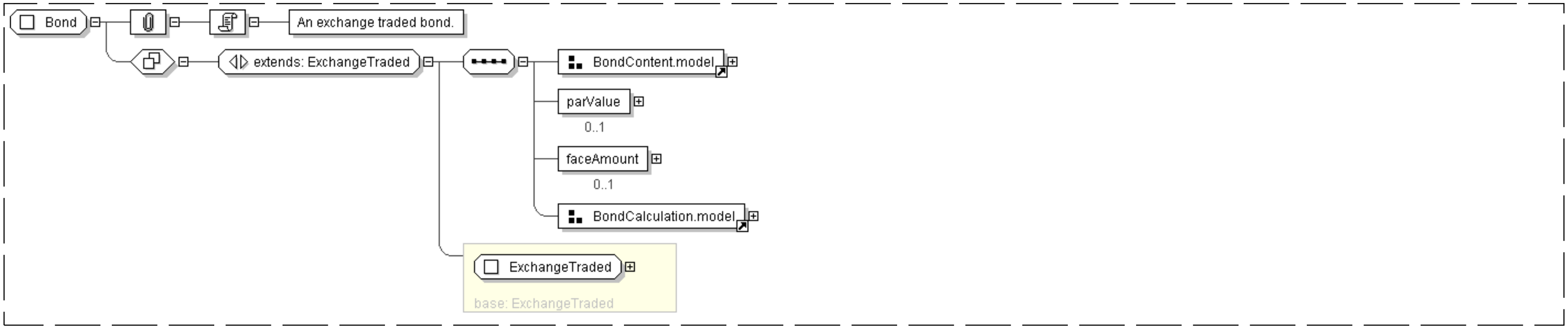
'Specifies the frequency at which the bond pays, e.g. 6M.'

<dayCountFraction> DayCountFraction **</dayCountFraction>** [0..1]

'The day count basis for the bond.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Bond">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTraded ">
         <xsd:sequence>
            <xsd:group ref=" BondContent.model "/>
            <xsd:element name="parValue" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="faceAmount" type=" xsd:decimal " minOccurs="0"/>
            <xsd:group ref=" BondCalculation.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Cash

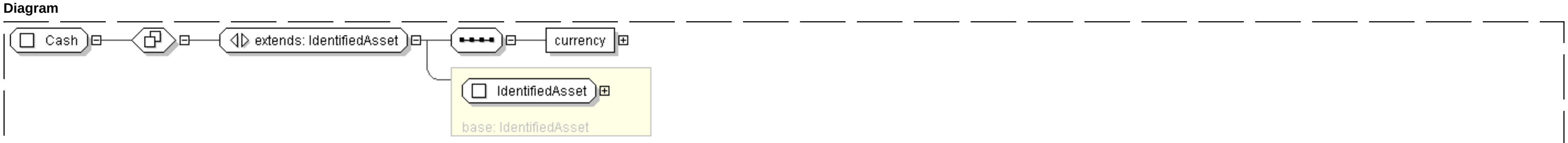
Super-types:	Asset < IdentifiedAsset (by extension) < **Cash** (by extension)
Sub-types:	None

Name	Cash
Used by (from the same schema document)	Element **cash**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> Currency </currency> [1]
   'The currency in which an amount is denominated.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Cash">
   <xsd:complexContent>
      <xsd:extension base=" IdentifiedAsset ">
         <xsd:sequence>
            <xsd:element name="currency" type=" Currency "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Commission

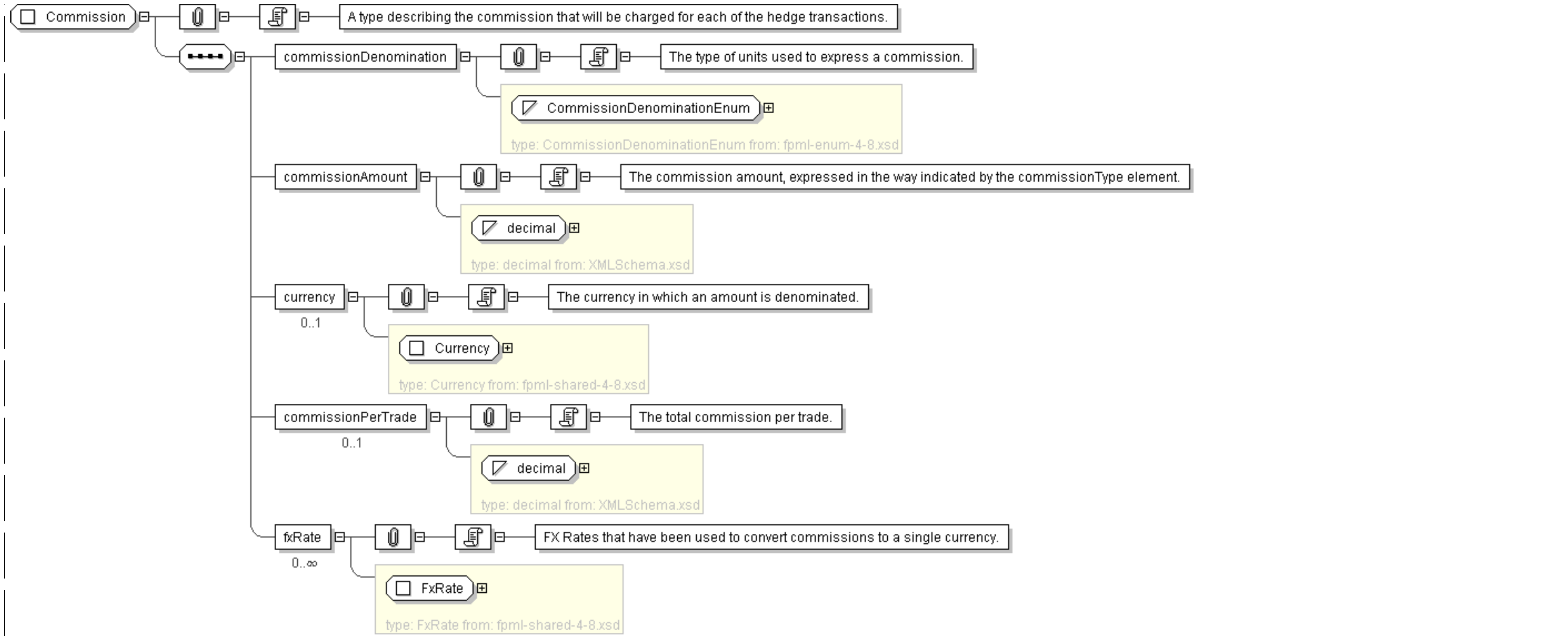
Super-types:	None
Sub-types:	None

Name	Commission
Used by (from the same schema document)	Complex Type **Price**
Abstract	no
Documentation	A type describing the commission that will be charged for each of the hedge transactions.

XML Instance Representation

```
<...>
   <commissionDenomination> CommissionDenominationEnum </commissionDenomination> [1]
   'The type of units used to express a commission.'

   <commissionAmount> xsd:decimal </commissionAmount> [1]
   'The commission amount, expressed in the way indicated by the commissionType element.'

   <currency> Currency </currency> [0..1]
   'The currency in which an amount is denominated.'

   <commissionPerTrade> xsd:decimal </commissionPerTrade> [0..1]
   'The total commission per trade.'

   <fxRate> FxRate </fxRate> [0..*]
   'FX Rates that have been used to convert commissions to a single currency.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Commission">
   <xsd:sequence>
      <xsd:element name="commissionDenomination" type=" CommissionDenominationEnum "/>
      <xsd:element name="commissionAmount" type=" xsd:decimal "/>
      <xsd:element name="currency" type=" Currency " minOccurs="0"/>
      <xsd:element name="commissionPerTrade" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="fxRate" type=" FxRate " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Commodity

Super-types:	Asset < IdentifiedAsset (by extension) < **Commodity** (by extension)
Sub-types:	None

Name	Commodity
Used by (from the same schema document)	Element **commodity**
Abstract	no
Documentation	A type describing a commodity underlying asset.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'
```

Start Group: CommodityReferencePriceFramework.model [0..1]

<commodityBase> CommodityBase **</commodityBase>** [1]

'A coding scheme value to identify the base type of the commodity being traded. Where possible, this should follow the naming convention used in the 2005 ISDA Commodity Definitions. For example, \'Oil\'.'

<commodityDetails> CommodityDetails **</commodityDetails>** [1]

'A coding scheme value to identify the commodity being traded more specifically. Where possible, this should follow the naming convention used in the 2005 ISDA Commodity Definitions. For example, \'Brent\'.'

<unit> QuantityUnit **</unit>** [1]

'A coding scheme value to identify the unit in which the undelryer is denominated. Where possible, this should follow the naming convention used in the 2005 ISDA Commodity Definitions.'

<currency> Currency **</currency>** [1]

'The currency in which the Commodity Reference Price is published.'

Start Choice [1]

<exchangeId> ExchangeId **</exchangeId>** [1]

'For those commodities being traded with reference to the price of a listed future, the exchange where that future is listed should be specified here.'

<publication> InformationSource **</publication>** [1]

'For those commodities being traded with reference to a price distributed by a publication, that publication should be specified here.'

End Choice

End Group: CommodityReferencePriceFramework.model

<specifiedPrice> SpecifiedPriceEnum **</specifiedPrice>** [1]

'The Specified Price is not defined in the Commodity Reference Price and so needs to be stated in the Underlyer definition as it will impact the calculation of the Floating Price.'

Start Sequence [0..1]

Start Choice [1]

<deliveryDates> DeliveryDatesEnum **</deliveryDates>** [1]

'The Delivery Date is a NearbyMonth, for use when the Commodity Transaction references Futures Contract.'

<deliveryDate> AdjustableDate **</deliveryDate>** [1]

'The Delivery Date is a fixed, single day.'

<deliveryDateYearMonth> xsd:gYearMonth **</deliveryDateYearMonth>** [1]

'The Delivery Date is a fixed, single month.'

End Choice

<deliveryDateRollConvention> Offset **</deliveryDateRollConvention>** [0..1]

'Specifies, for a Commodity Transaction that references a listed future via the deliveryDates element, the day on which the specified future will roll to the next nearby month when the referenced future expires. If the future will not roll at all - i.e. the price will be taken from the expiring contract, 0 should be specified here. If the future will roll to the next nearby on the last trading day - i.e. the price will be taken from the next nearby on the last trading day, then 1 should be specified and so on.'

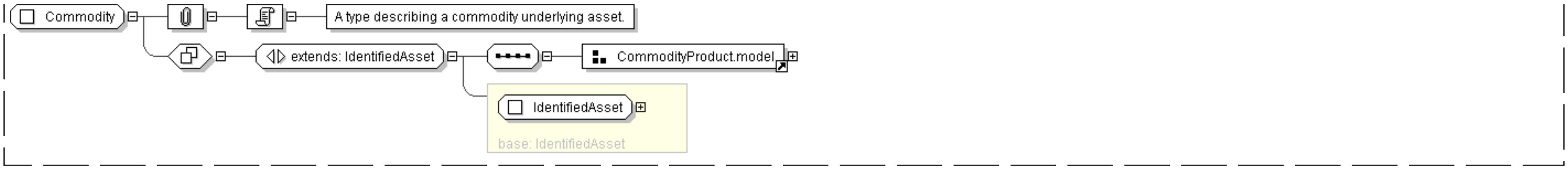
End Sequence

<multiplier> PositiveDecimal **</multiplier>** [0..1]

'Specifies the multiplier associated with a Transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Commodity">
   <xsd:complexContent>
      <xsd:extension base=" IdentifiedAsset ">
         <xsd:sequence>
            <xsd:group ref=" CommodityProduct.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityBase

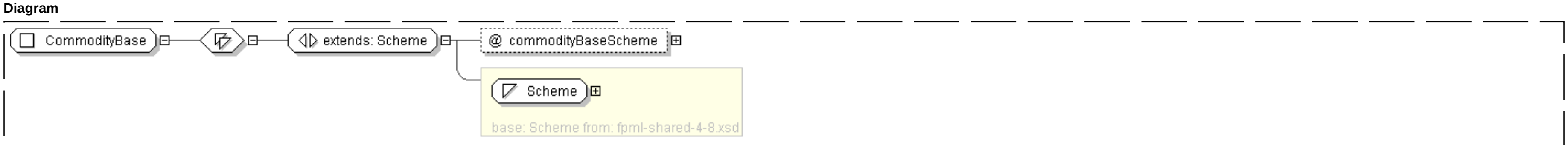
Super-types:	Scheme < **CommodityBase** (by extension)
Sub-types:	None

Name	CommodityBase
Used by (from the same schema document)	Model Group **CommodityReferencePriceFramework.model**
Abstract	no

XML Instance Representation

```
<...
commodityBaseScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityBase">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityBaseScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityBusinessCalendar

Super-types:	Scheme < **CommodityBusinessCalendar** (by extension)
Sub-types:	None

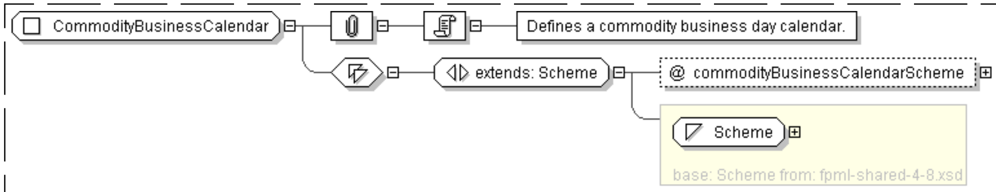
Name	CommodityBusinessCalendar
Used by (from the same schema document)	Complex Type **CommodityBusinessCalendarTime**

Abstract	no
Documentation	Defines a commodity business day calendar.

XML Instance Representation

```
<...
commodityBusinessCalendarScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityBusinessCalendar">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityBusinessCalendarScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/commodity-business-calendar"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityBusinessCalendarTime

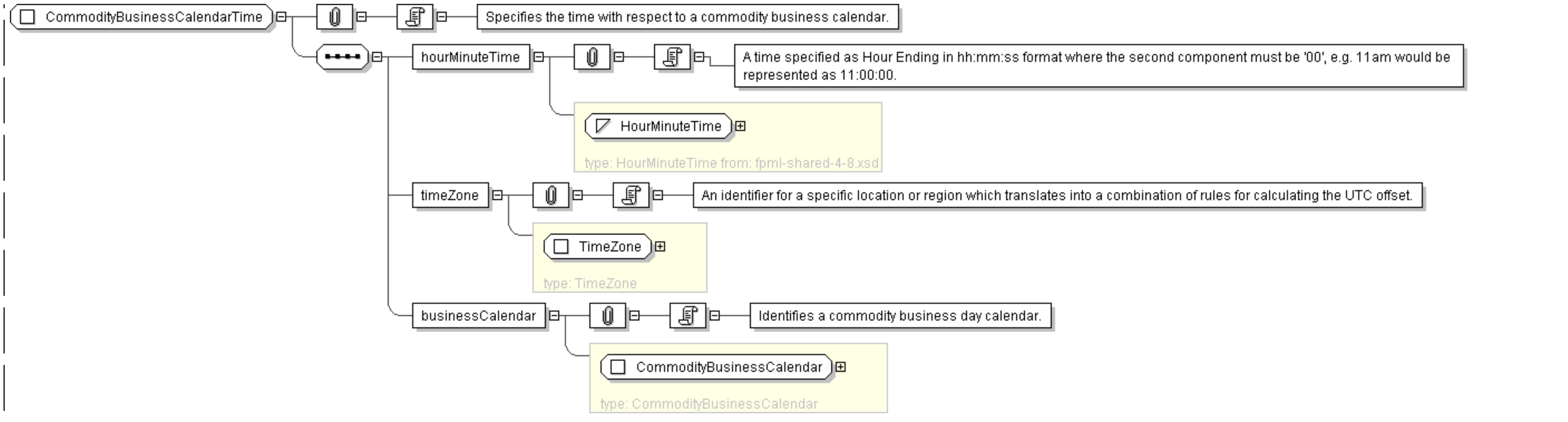
Super-types:	None
Sub-types:	None

Name	CommodityBusinessCalendarTime
Abstract	no
Documentation	Specifies the time with respect to a commodity business calendar.

XML Instance Representation

```
<...>
   <hourMinuteTime> HourMinuteTime </hourMinuteTime> [1]
   'A time specified as Hour Ending in hh:mm:ss format where the second component must be \'00
   \', e.g. 11am would be represented as 11:00:00.'

   <timeZone> TimeZone </timeZone> [1]
   'An identifier for a specific location or region which translates into a combination of
   rules for calculating the UTC offset.'

   <businessCalendar> CommodityBusinessCalendar </businessCalendar> [1]
   'Identifies a commodity business day calendar.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityBusinessCalendarTime">
   <xsd:sequence>
      <xsd:element name="hourMinuteTime" type=" HourMinuteTime "/>
      <xsd:element name="timeZone" type=" TimeZone "/>
      <xsd:element name="businessCalendar" type=" CommodityBusinessCalendar "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityDetails

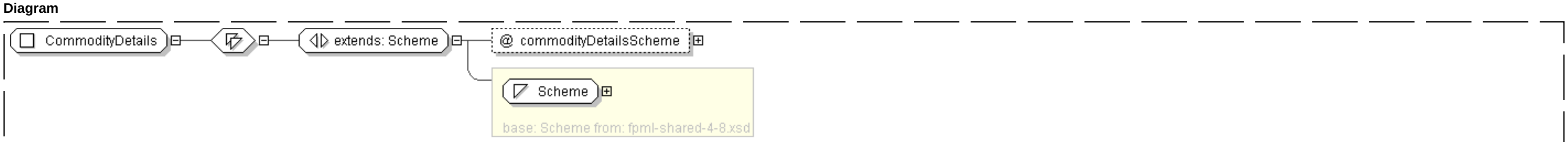
Super-types:	Scheme < **CommodityDetails** (by extension)
Sub-types:	None

Name	CommodityDetails
Used by (from the same schema document)	Model Group **CommodityReferencePriceFramework.model**
Abstract	no

XML Instance Representation

```
<...
commodityDetailsScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityDetails">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityDetailsScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ConstituentWeight

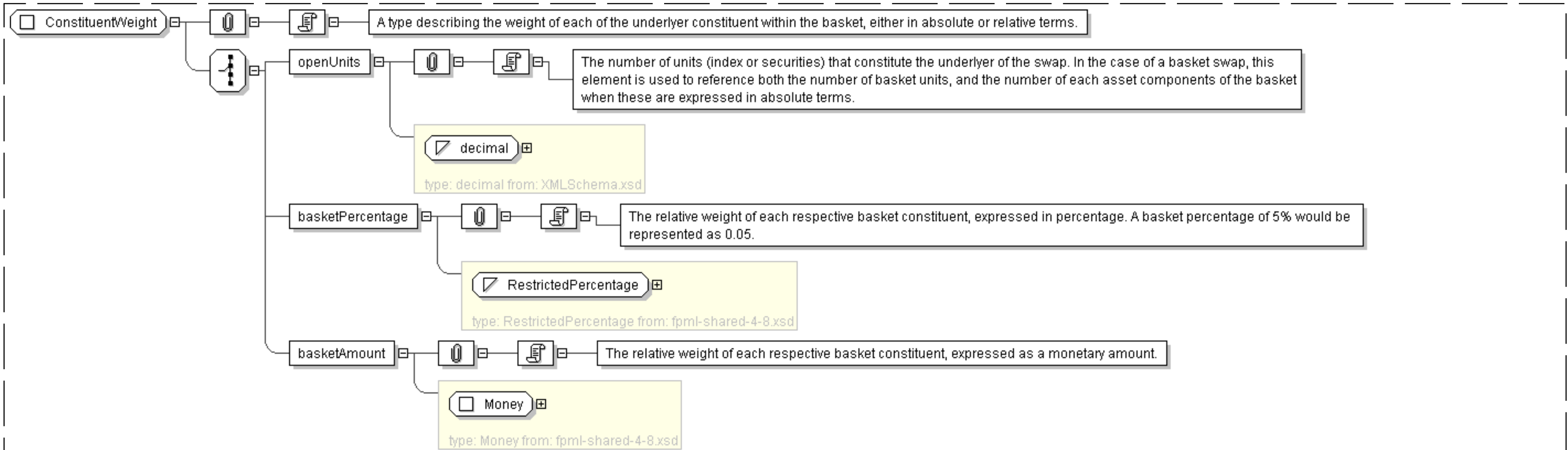
Super-types:	None
Sub-types:	None

Name	ConstituentWeight
Used by (from the same schema document)	Complex Type **BasketConstituent**
Abstract	no
Documentation	A type describing the weight of each of the underlyer constituent within the basket, either in absolute or relative terms.

XML Instance Representation

```
<...>
Start Choice [1]
      <openUnits> xsd:decimal </openUnits> [1]
      'The number of units (index or securities) that constitute the underlyer of the swap. In
      the case of a basket swap, this element is used to reference both the number of basket
      units, and the number of each asset components of the basket when these are expressed
      in absolute terms.'

      <basketPercentage> RestrictedPercentage </basketPercentage> [1]
      'The relative weight of each respective basket constituent, expressed in percentage. A
      basket percentage of 5% would be represented as 0.05.'

      <basketAmount> Money </basketAmount> [1]
      'The relative weight of each respective basket constituent, expressed as a monetary amount.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ConstituentWeight">
   <xsd:choice>
      <xsd:element name="openUnits" type=" xsd:decimal "/>
      <xsd:element name="basketPercentage" type=" RestrictedPercentage "/>
      <xsd:element name="basketAmount" type=" Money "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: ConvertibleBond

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < Bond (by extension) < **ConvertibleBond** (by extension)
Sub-types:	None

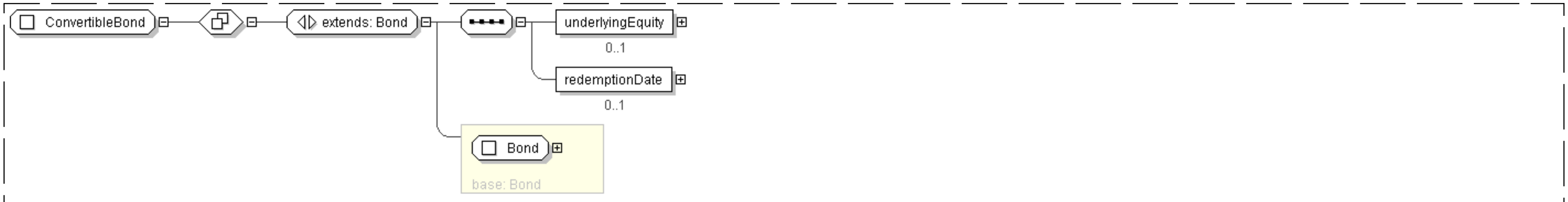
Name	ConvertibleBond
Used by (from the same schema document)	Element **convertibleBond**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <instrumentId> InstrumentId </instrumentId> [1..*]
    'Identification of the underlying asset, using public and/or private identifiers.'

    <description> xsd:string </description> [0..1]
    'Long name of the underlying asset.'

    <currency> IdentifiedCurrency </currency> [0..1]
    'Trading currency of the underlyer when transacted as a cash instrument.'

    <exchangeId> ExchangeId </exchangeId> [0..1]
    'Identification of the exchange on which this asset is transacted for the purposes
    of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
    as defined in the ISDA 2002 Equity Derivatives Definitions.'

    <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
    'Identification of the clearance system associated with the transaction exchange.'

    <definition> ProductReference </definition> [0..1]
    'An optional reference to a full FpML product that defines the simple product in
    greater detail. In case of inconsistency between the terms of the simple product and those
    of the detailed definition, the values in the simple product override those in the
    detailed definition.'

    <relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
    'A short form unique identifier for a related exchange. If the element is not present then
    the exchange shall be the primary exchange on which listed futures and options on
    the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
    in the ISDA 2002 Equity Derivatives Definitions.'

    <optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
    'A short form unique identifier for an exchange on which the reference option contract
    is listed. This is to address the case where the reference exchange for the future is
    different than the one for the option. The options Exchange is referenced on share options
    when Merger Elections are selected as Options Exchange Adjustment.'

Start Choice [0..1]
'Specifies the issuer name of a fixed income security or convertible bond. This name can
either be explicitly stated, or specified as an href into another element of the document,
such as the obligor'


        <issuerName> xsd:string </issuerName> [1]
        <issuerPartyReference> PartyReference </issuerPartyReference> [1]
End Choice
    <seniority> CreditSeniority </seniority> [0..1]
    'The repayment precedence of a debt instrument.'

    <couponType> CouponType </couponType> [0..1]
    'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

    <couponRate> xsd:decimal </couponRate> [0..1]
```

```
'Specifies the coupon rate (expressed in percentage) of a fixed income security or
convertible bond.'

<maturity> xsd:date </maturity> [0..1]
'The date when the principal amount of a security becomes due and payable.'

<parValue> xsd:decimal </parValue> [0..1]
'Specifies the nominal amount of a fixed income security or convertible bond.'

<faceAmount> xsd:decimal </faceAmount> [0..1]
'Specifies the total amount of the issue. Corresponds to the par value multiplied by the
number of issued security.'

<paymentFrequency> Period </paymentFrequency> [0..1]
'Specifies the frequency at which the bond pays, e.g. 6M.'

<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
'The day count basis for the bond.'

<underlyingEquity> EquityAsset </underlyingEquity> [0..1]
'Specifies the equity in which the convertible bond can be converted.'

<redemptionDate> xsd:date </redemptionDate> [0..1]
'Earlier date between the convertible bond put dates and its maturity date.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ConvertibleBond">
   <xsd:complexContent>
      <xsd:extension base=" Bond ">
         <xsd:sequence>
            <xsd:element name="underlyingEquity" type=" EquityAsset " minOccurs="0"/>
            <xsd:element name="redemptionDate" type=" xsd:date " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CouponType

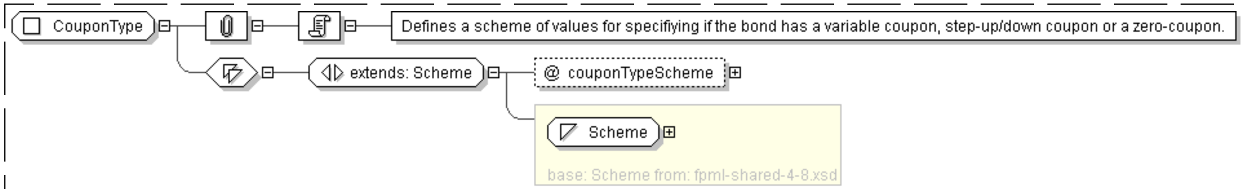
Super-types:	Scheme < **CouponType** (by extension)
Sub-types:	None

Name	CouponType
Used by (from the same schema document)	Model Group **BondContent.model**
Abstract	no
Documentation	Defines a scheme of values for specifiying if the bond has a variable coupon, step-up/down coupon or a zero-coupon.

XML Instance Representation

```
<...
couponTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CouponType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="couponTypeScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/coupon-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Deposit

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **Deposit** (by extension)
Sub-types:	None

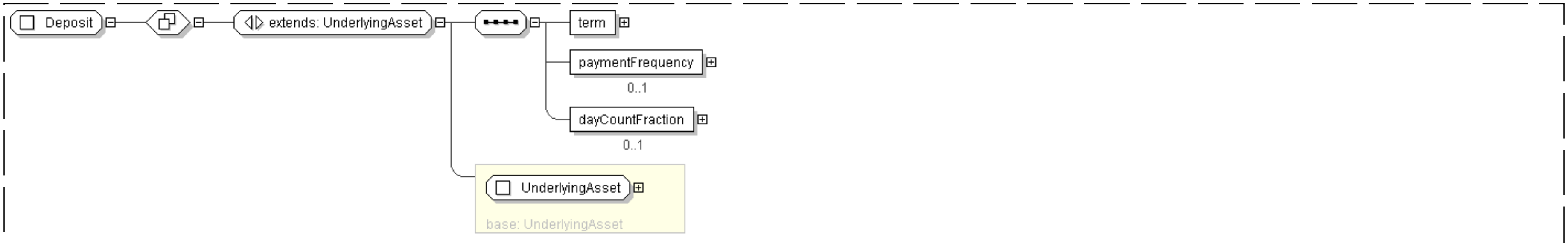
Name	Deposit
Used by (from the same schema document)	Element **deposit**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <term> Period </term> [1]
   'Specifies the term of the deposit, e.g. 5Y.'
```

```
<paymentFrequency> Period </paymentFrequency> [0..1]
'Specifies the frequency at which the deposit pays, e.g. 6M.'

<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
'The day count basis for the deposit.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Deposit">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:element name="term" type=" Period "/>
            <xsd:element name="paymentFrequency" type=" Period " minOccurs="0"/>
            <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DividendPayout

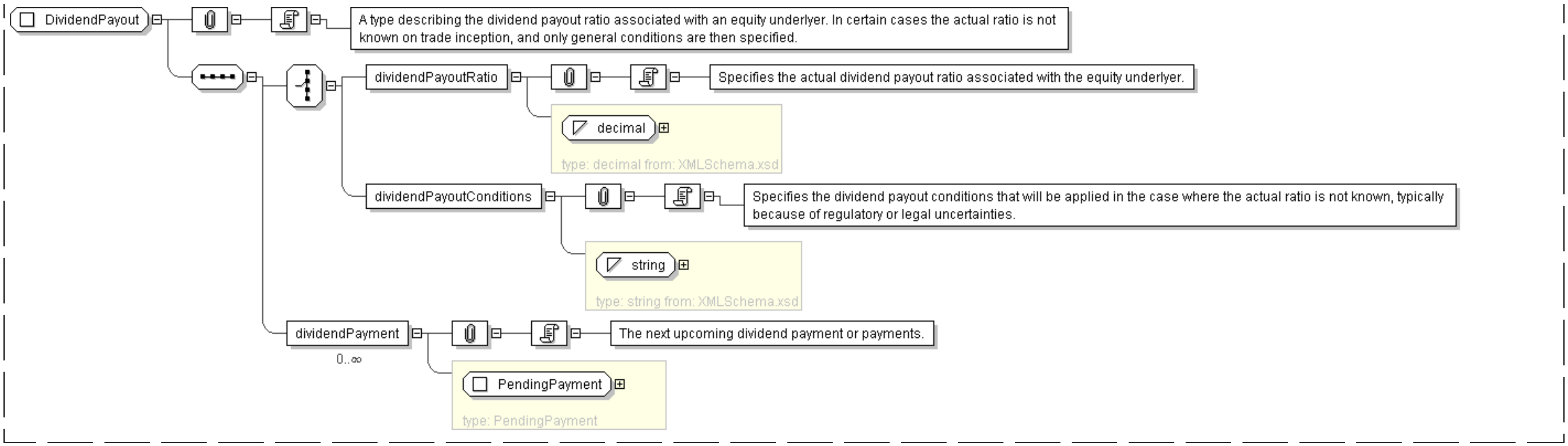
Super-types:	None
Sub-types:	None

Name	DividendPayout
Used by (from the same schema document)	Complex Type **BasketConstituent** , Complex Type **SingleUnderlyer**
Abstract	no
Documentation	A type describing the dividend payout ratio associated with an equity underlyer. In certain cases the actual ratio is not known on trade inception, and only general conditions are then specified.

XML Instance Representation

```
<...>
Start Choice [1]
      <dividendPayoutRatio> xsd:decimal </dividendPayoutRatio> [1]
      'Specifies the actual dividend payout ratio associated with the equity underlyer.'

      <dividendPayoutConditions> xsd:string </dividendPayoutConditions> [1]
      'Specifies the dividend payout conditions that will be applied in the case where the
      actual ratio is not known, typically because of regulatory or legal uncertainties.'

End Choice
   <dividendPayment> PendingPayment </dividendPayment> [0..*]
   'The next upcoming dividend payment or payments.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendPayout">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="dividendPayoutRatio" type=" xsd:decimal "/>
         <xsd:element name="dividendPayoutConditions" type=" xsd:string "/>
      </xsd:choice>
      <xsd:element name="dividendPayment" type=" PendingPayment " minOccurs="0"
      maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EquityAsset

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < **EquityAsset** (by extension)
Sub-types:	None

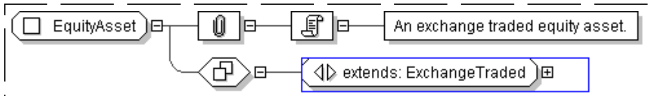
Name	EquityAsset
Used by (from the same schema document)	Complex Type **ConvertibleBond** , Element **equity**
Abstract	no
Documentation	An exchange traded equity asset.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
```

```
'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]
'An optional reference to a full FpML product that defines the simple product in
greater detail. In case of inconsistency between the terms of the simple product and those
of the detailed definition, the values in the simple product override those in the
detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
'A short form unique identifier for a related exchange. If the element is not present then
the exchange shall be the primary exchange on which listed futures and options on
the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
'A short form unique identifier for an exchange on which the reference option contract
is listed. This is to address the case where the reference exchange for the future is
different than the one for the option. The options Exchange is referenced on share options
when Merger Elections are selected as Options Exchange Adjustment.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityAsset">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTraded "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ExchangeTraded

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **ExchangeTraded** (by extension)

Sub-types:	• Bond (by extension)
	  ◦ ConvertibleBond (by extension)
	• EquityAsset (by extension)
	• ExchangeTradedCalculatedPrice (by extension)
	  ◦ ExchangeTradedFund (by extension)
	  ◦ Index (by extension)
	• ExchangeTradedContract (by extension)
	• Future (by extension)

Name	ExchangeTraded
Abstract	yes
Documentation	An abstract base class for all exchange traded financial products.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'
```

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId **</relatedExchangeId>** [0..*]

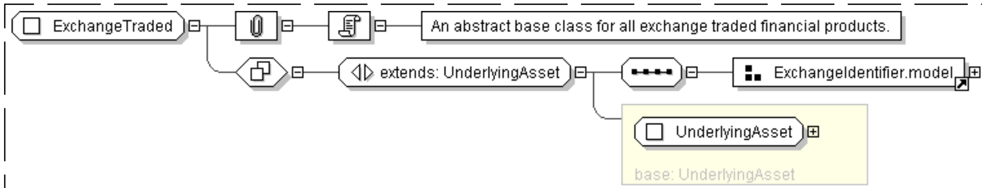
'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId **</optionsExchangeId>** [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ExchangeTraded" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:group ref=" ExchangeIdentifier.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ExchangeTradedCalculatedPrice

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < **ExchangeTradedCalculatedPrice** (by extension)
Sub-types:	• ExchangeTradedFund (by extension) • Index (by extension)

Name	ExchangeTradedCalculatedPrice
Abstract	yes
Documentation	Abstract base class for all exchange traded financial products with a price which is calculated from exchange traded constituents.

XML Instance Representation

<...
id=" xsd:ID [0..1]">

<instrumentId> InstrumentId </instrumentId> [1..*]

'Identification of the underlying asset, using public and/or private identifiers.'

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

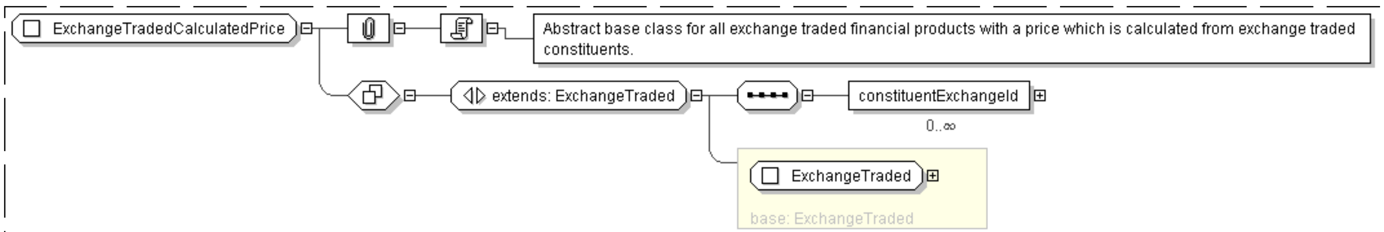
'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

<constituentExchangeId> ExchangeId </constituentExchangeId> [0..*]

'Identification of all the exchanges where constituents are traded. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ExchangeTradedCalculatedPrice" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTraded ">
         <xsd:sequence>
            <xsd:element name="constituentExchangeId" type=" ExchangeId "
            minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ExchangeTradedContract

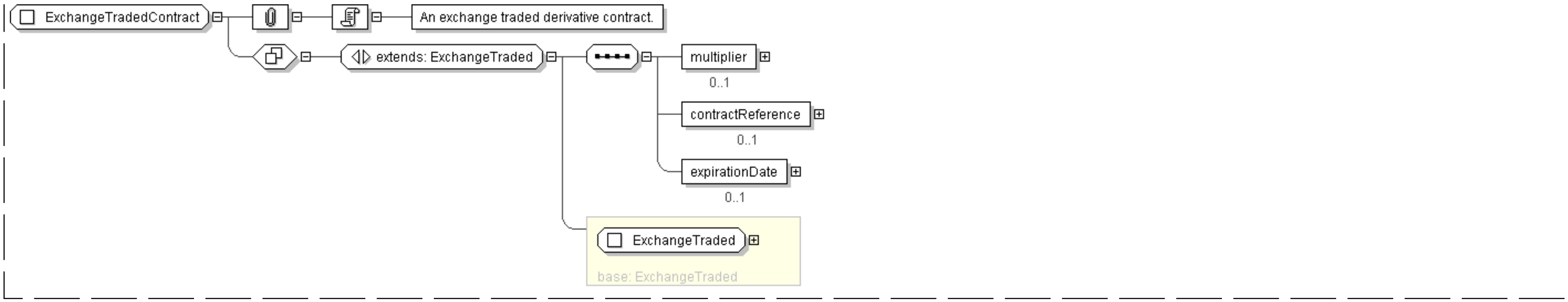
Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < **ExchangeTradedContract** (by extension)
Sub-types:	None

Name	ExchangeTradedContract
Abstract	no
Documentation	An exchange traded derivative contract.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <instrumentId> InstrumentId </instrumentId> [1..*]
    'Identification of the underlying asset, using public and/or private identifiers.'

    <description> xsd:string </description> [0..1]
    'Long name of the underlying asset.'

    <currency> IdentifiedCurrency </currency> [0..1]
    'Trading currency of the underlyer when transacted as a cash instrument.'

    <exchangeId> ExchangeId </exchangeId> [0..1]
    'Identification of the exchange on which this asset is transacted for the purposes
    of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
    as defined in the ISDA 2002 Equity Derivatives Definitions.'

    <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
    'Identification of the clearance system associated with the transaction exchange.'

    <definition> ProductReference </definition> [0..1]
    'An optional reference to a full FpML product that defines the simple product in
    greater detail. In case of inconsistency between the terms of the simple product and those
    of the detailed definition, the values in the simple product override those in the
    detailed definition.'

    <relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
    'A short form unique identifier for a related exchange. If the element is not present then
    the exchange shall be the primary exchange on which listed futures and options on
    the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
    in the ISDA 2002 Equity Derivatives Definitions.'

    <optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
    'A short form unique identifier for an exchange on which the reference option contract
    is listed. This is to address the case where the reference exchange for the future is
    different than the one for the option. The options Exchange is referenced on share options
    when Merger Elections are selected as Options Exchange Adjustment.'

    <multiplier> xsd:positiveInteger </multiplier> [0..1]
    'Specifies the contract multiplier that can be associated with the number of units.'

    <contractReference> xsd:string </contractReference> [0..1]
    'Specifies the contract that can be referenced, besides the undelyer type.'

    <expirationDate> AdjustableOrRelativeDate </expirationDate> [0..1]
    'The date when the contract expires.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExchangeTradedContract">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTraded ">
         <xsd:sequence>
            <xsd:element name="multiplier" type=" xsd:positiveInteger " minOccurs="0"/>
            <xsd:element name="contractReference" type=" xsd:string " minOccurs="0"/>
            <xsd:element name="expirationDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ExchangeTradedFund

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < ExchangeTradedCalculatedPrice (by extension) < **ExchangeTradedFund** (by extension)
Sub-types:	None

Name	ExchangeTradedFund
Used by (from the same schema document)	Element **exchangeTradedFund**
Abstract	no
Documentation	An exchange traded fund whose price depends on exchange traded constituents.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
```

detailed definition.'

<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]

'A short form unique identifier for a related exchange. If the element is not present then the exchange shall be the primary exchange on which listed futures and options on the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]

'A short form unique identifier for an exchange on which the reference option contract is listed. This is to address the case where the reference exchange for the future is different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

<constituentExchangeId> ExchangeId </constituentExchangeId> [0..*]

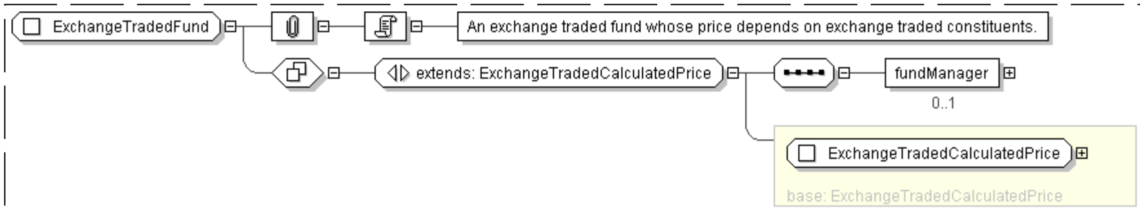
'Identification of all the exchanges where constituents are traded. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<fundManager> xsd:string **</fundManager>** [0..1]

'Specifies the fund manager that is in charge of the fund.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ExchangeTradedFund">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTradedCalculatedPrice ">
         <xsd:sequence>
            <xsd:element name="fundManager" type=" xsd:string " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FacilityType

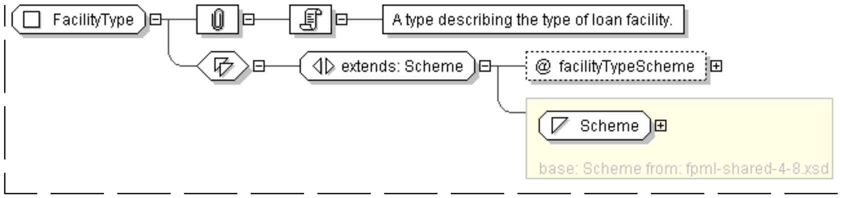
Super-types:	Scheme < **FacilityType** (by extension)
Sub-types:	None

Name	FacilityType
Used by (from the same schema document)	Complex Type **Loan**
Abstract	no
Documentation	A type describing the type of loan facility.

XML Instance Representation

<...
facilityTypeScheme=" xsd:anyURI [0..1]**">**
Scheme
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FacilityType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="facilityTypeScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/facility-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Future

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < **Future** (by extension)
Sub-types:	None

Name	Future
Used by (from the same schema document)	Element **future**
Abstract	no
Documentation	An exchange traded future contract.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
   'A short form unique identifier for a related exchange. If the element is not present then
   the exchange shall be the primary exchange on which listed futures and options on
   the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
   in the ISDA 2002 Equity Derivatives Definitions.'

   <optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
   'A short form unique identifier for an exchange on which the reference option contract
   is listed. This is to address the case where the reference exchange for the future is
```

different than the one for the option. The options Exchange is referenced on share options when Merger Elections are selected as Options Exchange Adjustment.'

<multiplier> xsd:positiveInteger **</multiplier>** [0..1]

'Specifies the contract multiplier that can be associated with the number of units.'

<futureContractReference> xsd:string **</futureContractReference>** [0..1]

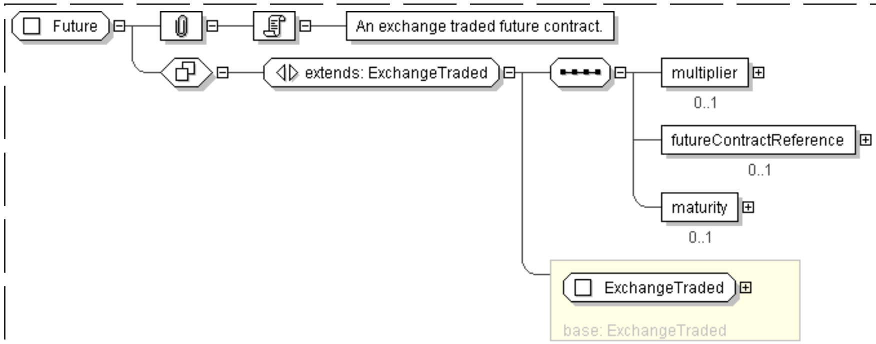
'Specifies the future contract that can be referenced, besides the equity or index reference defined as part of the UnderlyerAsset type.'

<maturity> xsd:date **</maturity>** [0..1]

'The date when the future contract expires.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Future">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTraded ">
         <xsd:sequence>
            <xsd:element name="multiplier" type=" xsd:positiveInteger " minOccurs="0"/>
            <xsd:element name="futureContractReference" type=" xsd:string " minOccurs="0"/>
            <xsd:element name="maturity" type=" xsd:date " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FutureId

Super-types:	Scheme < **FutureId** (by extension)
Sub-types:	None

Name	FutureId
Used by (from the same schema document)	Complex Type **Index**
Abstract	no
Documentation	A type defining a short form unique identifier for a future contract.

XML Instance Representation

<...
futureIdScheme=" xsd:anyURI [0..1]**">**
Scheme
</...>

Diagram

Schema Component Representation

```
<xsd:complexType name="FutureId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="futureIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: FxConversion

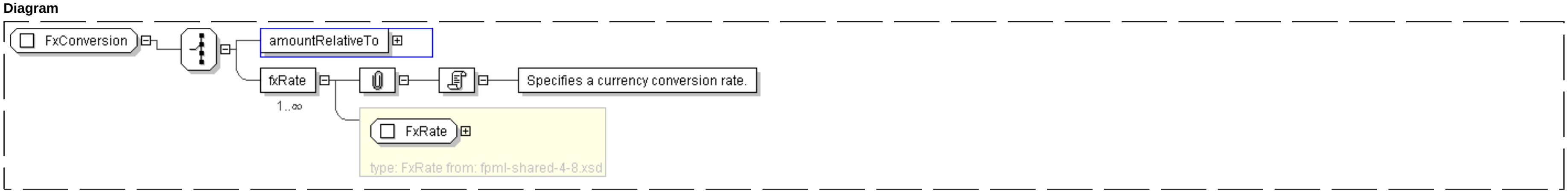
Super-types:	None
Sub-types:	None

Name	FxConversion
Used by (from the same schema document)	Model Group **EquityPrice.model**
Abstract	no

XML Instance Representation

```
<...>
Start Choice [1]
      <amountRelativeTo> AmountReference </amountRelativeTo> [1]
      <fxRate> FxRate </fxRate> [1..*]
      'Specifies a currency conversion rate.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxConversion">
   <xsd:choice>
      <xsd:element name="amountRelativeTo" type=" AmountReference "/>
      <xsd:element name="fxRate" type=" FxRate " maxOccurs="unbounded"/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: FxRateAsset

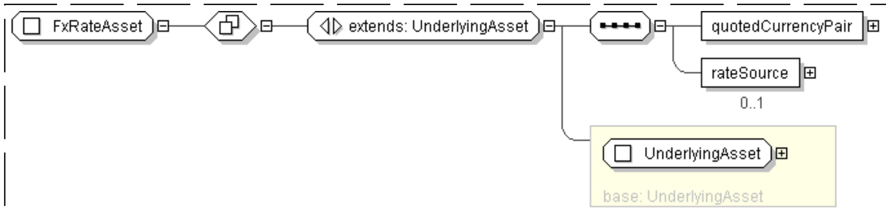
Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **FxRateAsset** (by extension)
Sub-types:	None

Name	FxRateAsset
Used by (from the same schema document)	Element **fxRate**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
   'Defines the two currencies for an FX trade and the quotation relationship between the
   two currencies.'

   <rateSource> FxSpotRateSource </rateSource> [0..1]
   'Defines the source of the FX rate.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxRateAsset">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
            <xsd:element name="rateSource" type=" FxSpotRateSource " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: IdentifiedAsset

Super-types:	Asset < **IdentifiedAsset** (by extension)

Sub-types:

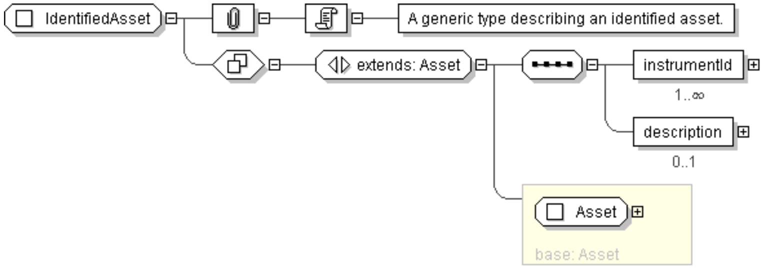
- Cash (by extension)
- Commodity (by extension)
- UnderlyingAsset (by extension)
  - Deposit (by extension)
  - ExchangeTraded (by extension)
    - Bond (by extension)
      - ConvertibleBond (by extension)
    - EquityAsset (by extension)
    - ExchangeTradedCalculatedPrice (by extension)
      - ExchangeTradedFund (by extension)
      - Index (by extension)
    - ExchangeTradedContract (by extension)
    - Future (by extension)
  - FxRateAsset (by extension)
  - Loan (by extension)
  - Mortgage (by extension)
  - MutualFund (by extension)
  - RateIndex (by extension)
  - SimpleCreditDefaultSwap (by extension)
  - SimpleFra (by extension)
  - SimpleIRSwap (by extension)

Name	IdentifiedAsset
Abstract	yes
Documentation	A generic type describing an identified asset.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="IdentifiedAsset" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Asset ">
         <xsd:sequence>
            <xsd:element name="instrumentId" type=" InstrumentId " maxOccurs="unbounded"/>
            <xsd:element name="description" type=" xsd:string " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Index

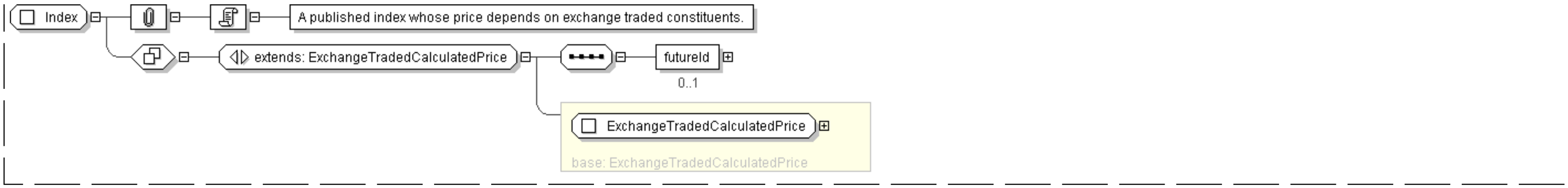
Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < ExchangeTraded (by extension) < ExchangeTradedCalculatedPrice (by extension) < **Index** (by extension)
Sub-types:	None

Name	Index
Used by (from the same schema document)	Element **index**
Abstract	no
Documentation	A published index whose price depends on exchange traded constituents.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
   'A short form unique identifier for a related exchange. If the element is not present then
   the exchange shall be the primary exchange on which listed futures and options on
   the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
   in the ISDA 2002 Equity Derivatives Definitions.'

   <optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
   'A short form unique identifier for an exchange on which the reference option contract
   is listed. This is to address the case where the reference exchange for the future is
   different than the one for the option. The options Exchange is referenced on share options
   when Merger Elections are selected as Options Exchange Adjustment.'

   <constituentExchangeId> ExchangeId </constituentExchangeId> [0..*]
   'Identification of all the exchanges where constituents are traded. The term \"Exchange\"
   is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <futureId> FutureId </futureId> [0..1]
   'A short form unique identifier for the reference future contract in the case of an
   index underlyer.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Index">
   <xsd:complexContent>
      <xsd:extension base=" ExchangeTradedCalculatedPrice ">
         <xsd:sequence>
            <xsd:element name="futureId" type=" FutureId " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Lien

Super-types:	Scheme < **Lien** (by extension)
Sub-types:	None

Name	Lien
Used by (from the same schema document)	Complex Type **Loan**
Abstract	no
Documentation	A type describing the liens associated with a loan facility.

XML Instance Representation

```
<...
lienScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="Lien">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="lienScheme" type=" xsd:anyURI " default="http://www.fpml.org/coding-
         scheme/designated-priority"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Loan

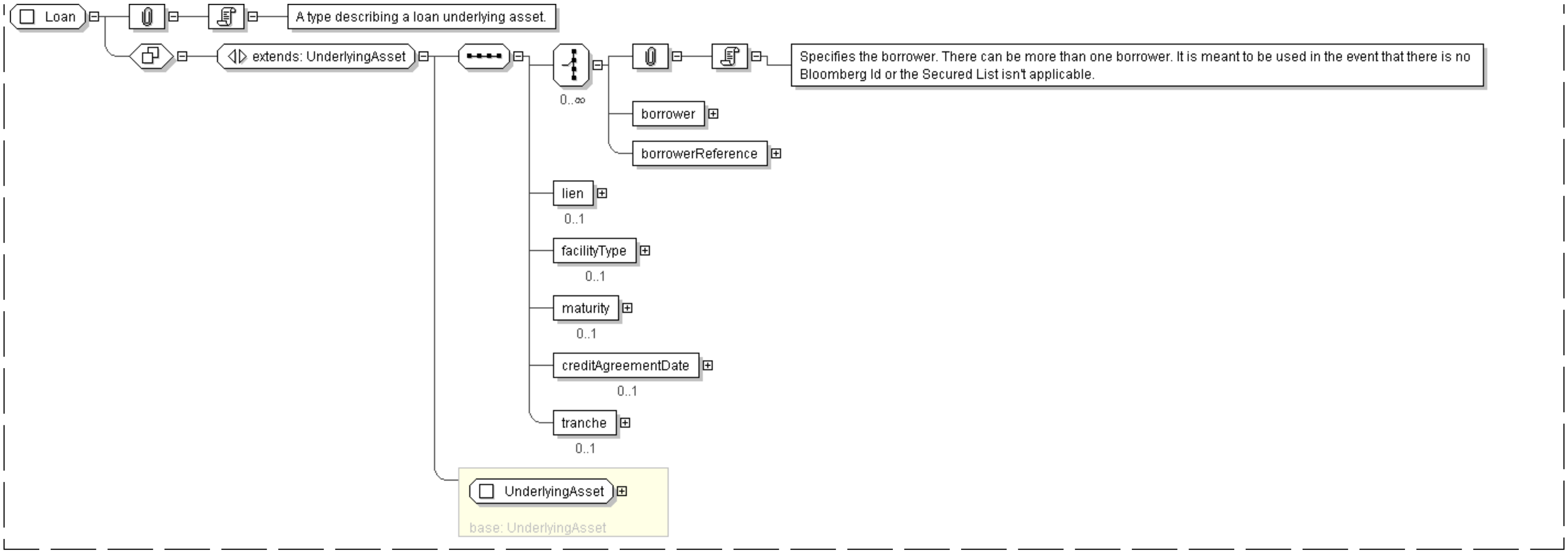
Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **Loan** (by extension)
Sub-types:	None

Name	Loan
Used by (from the same schema document)	Element **loan**
Abstract	no
Documentation	A type describing a loan underlying asset.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

Start Choice [0..*]
'Specifies the borrower. There can be more than one borrower. It is meant to be used in
the event that there is no Bloomberg Id or the Secured List isn\'t applicable.'


      <borrower> LegalEntity </borrower> [1]
      <borrowerReference> LegalEntityReference </borrowerReference> [1]
End Choice
   <lien> Lien </lien> [0..1]
   'Specifies the seniority level of the lien.'

   <facilityType> FacilityType </facilityType> [0..1]
   'The type of loan facility (letter of credit, revolving, ...).'

   <maturity> xsd:date </maturity> [0..1]
   'The date when the principal amount of the loan becomes due and payable.'

   <creditAgreementDate> xsd:date </creditAgreementDate> [0..1]
   'The credit agreement date is the closing date (the date where the agreement has been
   signed) for the loans in the credit agreement. Funding of the facilities occurs on
   (or sometimes a little after) the Credit Agreement date. This underlyer attribute is used
   to help identify which of the company\'s outstanding loans are being referenced by knowing
   to which credit agreement it belongs. ISDA Standards Terms Supplement term: Date of
   Original Credit Agreement.'

   <tranche> UnderlyingAssetTranche </tranche> [0..1]
   'The loan tranche that is subject to the derivative transaction. It will typically
   be referenced as the Bloomberg tranche number. ISDA Standards Terms Supplement term:
   Bloomberg Tranche Number.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Loan">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:choice minOccurs="0" maxOccurs="unbounded">
               <xsd:element name="borrower" type=" LegalEntity "/>
               <xsd:element name="borrowerReference" type=" LegalEntityReference "/>
            </xsd:choice>
            <xsd:element name="lien" type=" Lien " minOccurs="0"/>
            <xsd:element name="facilityType" type=" FacilityType " minOccurs="0"/>
            <xsd:element name="maturity" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="creditAgreementDate" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="tranche" type=" UnderlyingAssetTranche " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Mortgage

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **Mortgage** (by extension)
Sub-types:	None

Name	Mortgage
Used by (from the same schema document)	Element **mortgage**
Abstract	no
Documentation	A type describing a mortgage asset.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'
```

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

Start Choice [0..1]

'Applicable to the case of default swaps on MBS terms. For specifying the insurer name, when applicable (when the element is not present, it signifies that the insurer is Not Applicable)'

<insurer> LegalEntity **</insurer>** [1]
<insurerReference> LegalEntityReference **</insurerReference>** [1]
End Choice
Start Choice [0..1]

'Specifies the issuer name of a fixed income security or convertible bond. This name can either be explicitly stated, or specified as an href into another element of the document, such as the obligor'

<issuerName> xsd:string **</issuerName>** [1]
<issuerPartyReference> PartyReference **</issuerPartyReference>** [1]
End Choice
<seniority> CreditSeniority **</seniority>** [0..1]

'The repayment precedence of a debt instrument.'

<couponType> CouponType **</couponType>** [0..1]

'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

<couponRate> xsd:decimal **</couponRate>** [0..1]

'Specifies the coupon rate (expressed in percentage) of a fixed income security or convertible bond.'

<maturity> xsd:date **</maturity>** [0..1]

'The date when the principal amount of a security becomes due and payable.'

<paymentFrequency> Period **</paymentFrequency>** [0..1]

'Specifies the frequency at which the bond pays, e.g. 6M.'

<dayCountFraction> DayCountFraction **</dayCountFraction>** [0..1]

'The day count basis for the bond.'

<originalPrincipalAmount> xsd:decimal **</originalPrincipalAmount>** [0..1]

'The initial issued amount of the mortgage obligation.'

<pool> AssetPool **</pool>** [0..1]

'The morgage pool that is underneath the mortgage obligation.'

<sector> MortgageSector **</sector>** [0..1]

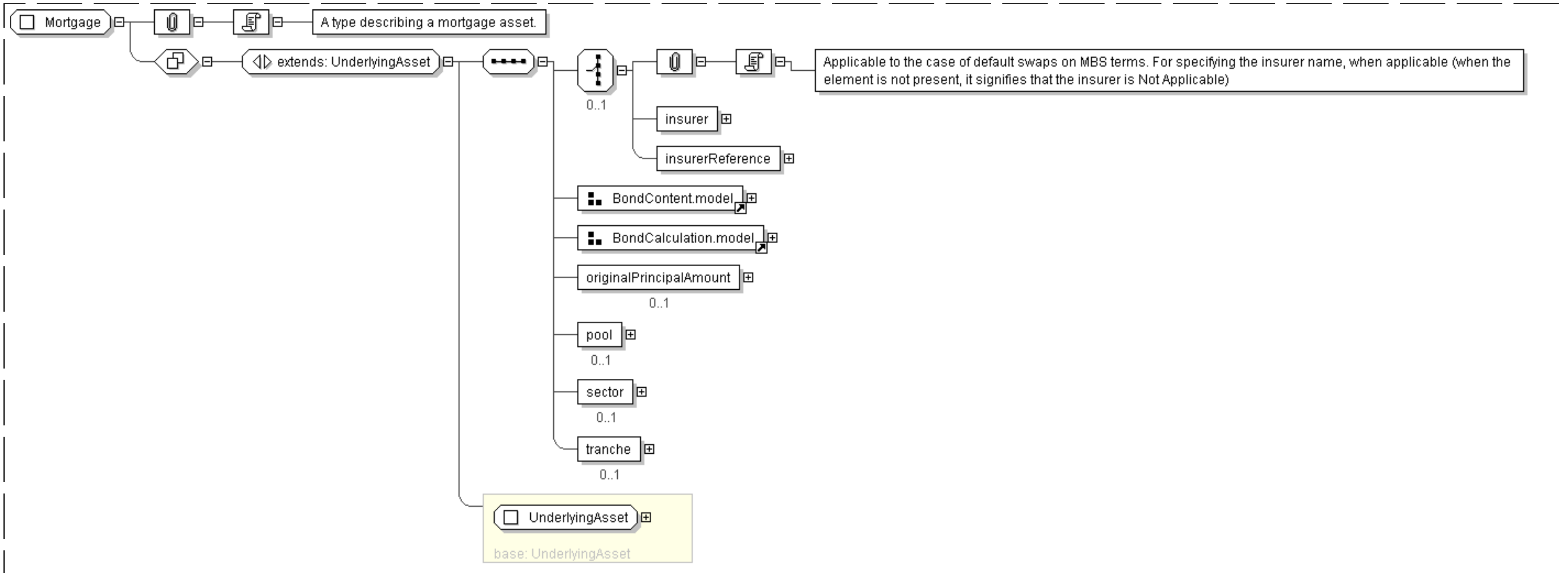
'The sector classification of the mortgage obligation.'

<tranche> xsd:token **</tranche>** [0..1]

'The mortgage obligation tranche that is subject to the derivative transaction.'

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Mortgage">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:choice minOccurs="0">
               <xsd:element name="insurer" type=" LegalEntity "/>
               <xsd:element name="insurerReference" type=" LegalEntityReference "/>
            </xsd:choice>
            <xsd:group ref=" BondContent.model "/>
            <xsd:group ref=" BondCalculation.model "/>
            <xsd:element name="originalPrincipalAmount" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="pool" type=" AssetPool " minOccurs="0"/>
            <xsd:element name="sector" type=" MortgageSector " minOccurs="0"/>
            <xsd:element name="tranche" type=" xsd:token " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MortgageSector

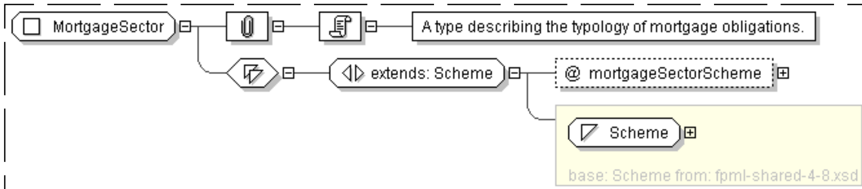
Super-types:	Scheme < **MortgageSector** (by extension)
Sub-types:	None

Name	MortgageSector
Used by (from the same schema document)	Complex Type **Mortgage**
Abstract	no
Documentation	A type describing the typology of mortgage obligations.

XML Instance Representation

```
<...
mortgageSectorScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MortgageSector">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="mortgageSectorScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/mortgage-sector"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: MutualFund

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **MutualFund** (by extension)
Sub-types:	None

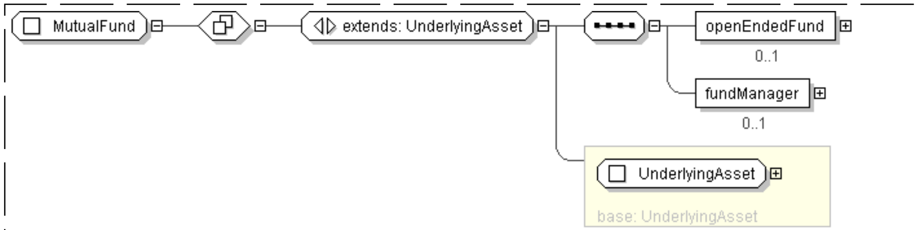
Name	MutualFund
Used by (from the same schema document)	Element **mutualFund**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <openEndedFund> xsd:boolean </openEndedFund> [0..1]
   'Boolean indicator to specify whether the mutual fund is an open-ended mutual fund.'
```

```
    <fundManager> xsd:string </fundManager> [0..1]
    'Specifies the fund manager that is in charge of the fund.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MutualFund">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:element name="openEndedFund" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="fundManager" type=" xsd:string " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PendingPayment

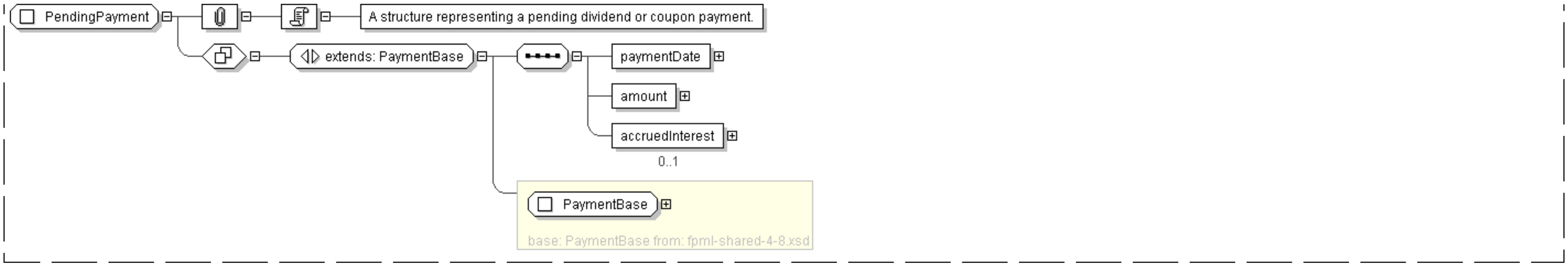
Super-types:	PaymentBase < **PendingPayment** (by extension)
Sub-types:	None

Name	PendingPayment
Used by (from the same schema document)	Complex Type **BasketConstituent** , Complex Type **DividendPayout** , Complex Type **SingleUnderlyer**
Abstract	no
Documentation	A structure representing a pending dividend or coupon payment.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <paymentDate> xsd:date </paymentDate> [1]
   'The date that the dividend or coupon is due.'

   <amount> Money </amount> [1]
   'The amount of the dividend or coupon payment. Value of dividends or coupon between ex and
   pay date. Stock: if we are between ex-date and pay-date and the dividend is payable under
   the swap, then this should be the ex-div amount * # of securities. Bond: regardless of where
   we are vis-a-vis resets: (coupon % * face of bonds on swap * (bond day count fraction
   using days last coupon pay date of the bond through today).'

   <accruedInterest> Money </accruedInterest> [0..1]
   'Accrued interest on the dividend or coupon payment. When the TRS is structured to pay
   a dividend or coupon on reset after payable date, you may earn interest on these amounts.
   This field indicates the interest accrued on dividend/coupon from pay date to statement
   date. This will only apply to a handful of agreements where dividendss are held to the
   next reset AND you receive/pay interest on unpaid amounts.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PendingPayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="paymentDate" type=" xsd:date "/>
            <xsd:element name="amount" type=" Money "/>
            <xsd:element name="accruedInterest" type=" Money " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Price

Super-types:	None
Sub-types:	None

Name	Price
Used by (from the same schema document)	Complex Type **BasketConstituent**
Abstract	no
Documentation	A type describing the strike price.

XML Instance Representation

```
<...>
   <commission> Commission </commission> [0..1]
   'This optional component specifies the commission to be charged for executing the
   hedge transactions.'
Start Choice [1]
      <determinationMethod> DeterminationMethod </determinationMethod> [1]
      'Specifies the method according to which an amount or a date is determined.'
Start Group: EquityPrice.model [0..1]
         <grossPrice> ActualPrice </grossPrice> [0..1]
         'Specifies the price of the underlyer, before commissions.'

         <netPrice> ActualPrice </netPrice> [1]
         'Specifies the price of the underlyer, net of commissions.'

         <accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]
         'Specifies the accrued interest that are part of the dirty price in the case of a fixed
         income security or a convertible bond. Expressed in percentage of the notional.'

         <fxConversion> FxConversion </fxConversion> [0..1]
         'Specifies the currency conversion rate that applies to an amount. This rate can either
         be defined elsewhere in the document (case of a quanto swap), or explicitly described
         through this component.'
```

End Group: EquityPrice.model
<amountRelativeTo> AmountReference </amountRelativeTo> [1]

'The href attribute value will be a pointer style reference to the element or component elsewhere in the document where the anchor amount is defined.'

<grossPrice> ActualPrice </grossPrice> [0..1]

'Specifies the price of the underlyer, before commissions.'

<netPrice> ActualPrice </netPrice> [1]

'Specifies the price of the underlyer, net of commissions.'

<accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]

'Specifies the accrued interest that are part of the dirty price in the case of a fixed income security or a convertible bond. Expressed in percentage of the notional.'

<fxConversion> FxConversion </fxConversion> [0..1]

'Specifies the currency conversion rate that applies to an amount. This rate can either be defined elsewhere in the document (case of a quanto swap), or explicitly described through this component.'

End Choice
<cleanNetPrice> xsd:decimal </cleanNetPrice> [0..1]

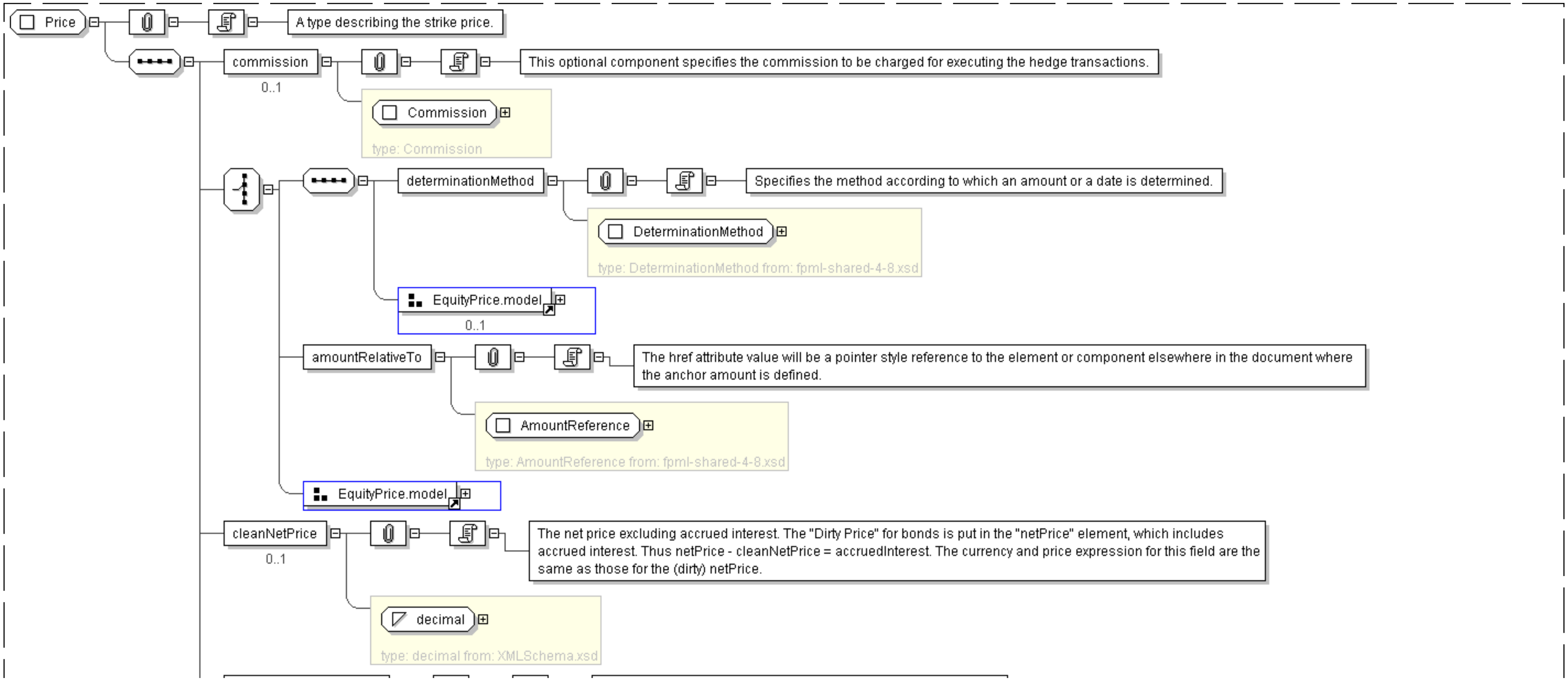
'The net price excluding accrued interest. The \"Dirty Price\" for bonds is put in the \"netPrice\" element, which includes accrued interest. Thus netPrice - cleanNetPrice = accruedInterest. The currency and price expression for this field are the same as those for the (dirty) netPrice.'

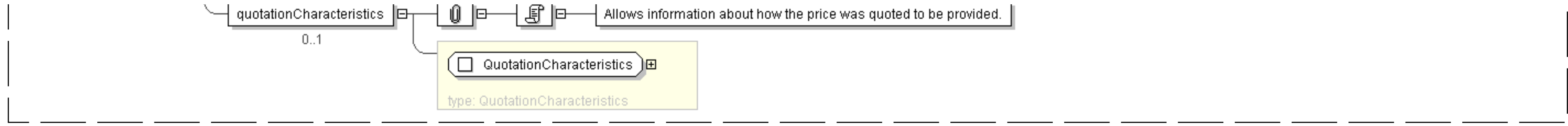
<quotationCharacteristics> QuotationCharacteristics </quotationCharacteristics> [0..1]

'Allows information about how the price was quoted to be provided.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="Price">
   <xsd:sequence>
      <xsd:element name="commission" type=" Commission " minOccurs="0"/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="determinationMethod" type=" DeterminationMethod "/>
            <xsd:group ref=" EquityPrice.model " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element name="amountRelativeTo" type=" AmountReference "/>
         <xsd:group ref=" EquityPrice.model "/>
      </xsd:choice>
      <xsd:element name="cleanNetPrice" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="quotationCharacteristics" type=" QuotationCharacteristics " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PriceQuoteUnits

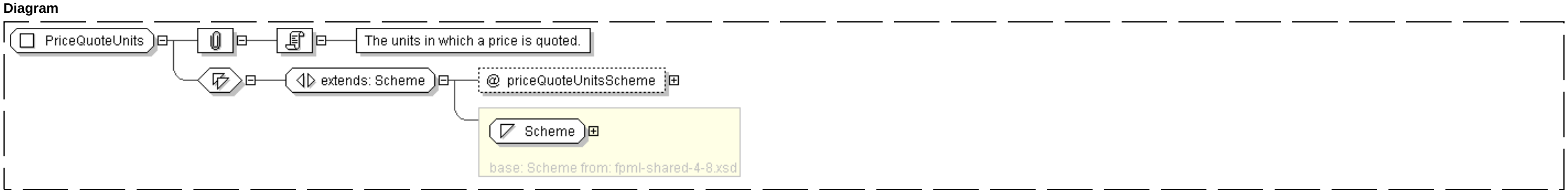
Super-types:	Scheme < **PriceQuoteUnits** (by extension)
Sub-types:	None

Name	PriceQuoteUnits
Used by (from the same schema document)	Model Group **QuotationCharacteristics.model**
Abstract	no
Documentation	The units in which a price is quoted.

XML Instance Representation

```
<...
priceQuoteUnitsScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PriceQuoteUnits">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="priceQuoteUnitsScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/price-quote-units"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: QuantityUnit

Super-types:	Scheme < **QuantityUnit** (by extension)
Sub-types:	None

Name	QuantityUnit
Used by (from the same schema document)	Model Group **CommodityReferencePriceFramework.model**
Abstract	no

XML Instance Representation

```
<...
quantityUnitScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="QuantityUnit">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="quantityUnitScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/price-quote-units"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: QuotationCharacteristics

Super-types:	None
Sub-types:	None

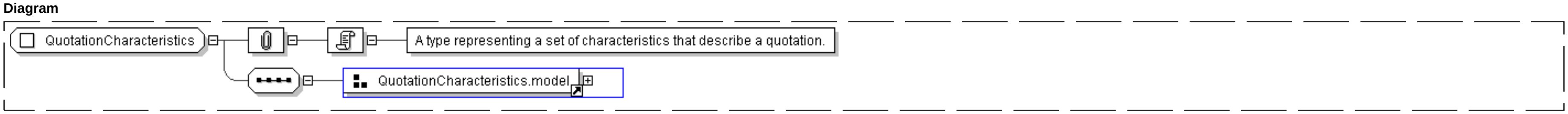
Name	QuotationCharacteristics
Used by (from the same schema document)	Complex Type **Price**
Abstract	no
Documentation	A type representing a set of characteristics that describe a quotation.

XML Instance Representation

```
<...>
   <measureType> AssetMeasureType </measureType> [0..1]
   'The type of the value that is measured. This could be an NPV, a cash flow, a clean price, etc.'

   <quoteUnits> PriceQuoteUnits </quoteUnits> [0..1]
   'The optional units that the measure is expressed in. If not supplied, this is assumed to be
   a price/value in currency units.'

   <side> QuotationSideEnum </side> [0..1]
   'The side (bid/mid/ask) of the measure.'

   <currency> Currency </currency> [0..1]
   'The optional currency that the measure is expressed in. If not supplied, this is
   defaulted from the reportingCurrency in the valuationScenarioDefinition.'

   <timing> QuoteTiming </timing> [0..1]
   'When during a day the quote is for. Typically, if this element is supplied, the
   QuoteLocation needs also to be supplied.'
```

```
Start Group: QuoteLocation.model [0..1]
'Where the quote is from.'

Start Choice [1]
        <businessCenter> BusinessCenter </businessCenter> [1]
        'A city or other business center.'

        <exchangeId> ExchangeId </exchangeId> [1]
        'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
End Group: QuoteLocation.model
   <informationSource> InformationSource </informationSource> [0..*]
   'The information source where a published or displayed market rate will be obtained, e.
   g. Telerate Page 3750.'

   <time> xsd:dateTime </time> [0..1]
   'When the quote was observed or derived.'

   <valuationDate> xsd:date </valuationDate> [0..1]
   'When the quote was computed.'

   <expiryTime> xsd:dateTime </expiryTime> [0..1]
   'When does the quote cease to be valid.'

   <cashFlowType> CashflowType </cashFlowType> [0..1]
   'For cash flows, the type of the cash flows. Examples include: Coupon payment, Premium
   Fee, Settlement Fee, Brokerage Fee, etc.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotationCharacteristics">
   <xsd:sequence>
      <xsd:group ref=" QuotationCharacteristics.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: QuoteTiming

Super-types:	Scheme < **QuoteTiming** (by extension)
Sub-types:	None

Name	QuoteTiming
Used by (from the same schema document)	Model Group **QuotationCharacteristics.model**
Abstract	no
Documentation	The type of the time of the quote.

XML Instance Representation

```
<...
quoteTimingScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="QuoteTiming">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="quoteTimingScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/quote-timing"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: RateIndex

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **RateIndex** (by extension)
Sub-types:	None

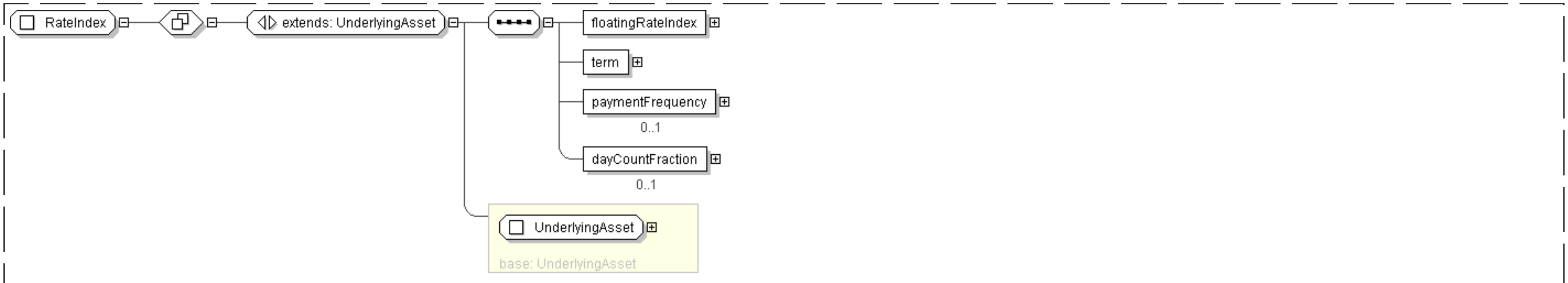
Name	RateIndex
Used by (from the same schema document)	Element **rateIndex**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
   <term> Period </term> [1]
   'Specifies the term of the simple swap, e.g. 5Y.'

   <paymentFrequency> Period </paymentFrequency> [0..1]
   'Specifies the frequency at which the index pays, e.g. 6M.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
```

```
'The day count basis for the index.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RateIndex">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:element name="floatingRateIndex" type=" FloatingRateIndex "/>
            <xsd:element name="term" type=" Period "/>
            <xsd:element name="paymentFrequency" type=" Period " minOccurs="0"/>
            <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SimpleCreditDefaultSwap

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **SimpleCreditDefaultSwap** (by extension)
Sub-types:	None

Name	SimpleCreditDefaultSwap
Used by (from the same schema document)	Element **simpleCreditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'
```

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

Start Choice [1]

<referenceEntity> LegalEntity **</referenceEntity>** [1]

'The entity for which this is defined.'

<creditEntityReference> LegalEntityReference **</creditEntityReference>** [1]

'An XML reference a credit entity defined elsewhere in the document.'

End Choice

<term> Period **</term>** [1]

'Specifies the term of the simple CD swap, e.g. 5Y.'

<paymentFrequency> Period **</paymentFrequency>** [0..1]

'Specifies the frequency at which the swap pays, e.g. 6M.'

</...>

Diagram

Schema Component Representation

```
<xsd:complexType name="SimpleCreditDefaultSwap">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:group ref=" CreditEntity.model "/>
            <xsd:element name="term" type=" Period "/>
            <xsd:element name="paymentFrequency" type=" Period " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SimpleFra

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **SimpleFra** (by extension)
Sub-types:	None

Name	SimpleFra
Used by (from the same schema document)	Element **simpleFra**
Abstract	no

XML Instance Representation

<...
id=" xsd:ID [0..1]">

<instrumentId> InstrumentId </instrumentId> [1..*]

'Identification of the underlying asset, using public and/or private identifiers.'

<description> xsd:string </description> [0..1]

'Long name of the underlying asset.'

<currency> IdentifiedCurrency </currency> [0..1]

'Trading currency of the underlyer when transacted as a cash instrument.'

<exchangeId> ExchangeId </exchangeId> [0..1]

'Identification of the exchange on which this asset is transacted for the purposes of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]

'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]

'An optional reference to a full FpML product that defines the simple product in greater detail. In case of inconsistency between the terms of the simple product and those of the detailed definition, the values in the simple product override those in the detailed definition.'

<startTerm> Period **</startTerm>** [1]

'Specifies the start term of the simple fra, e.g. 3M.'

<endTerm> Period **</endTerm>** [1]

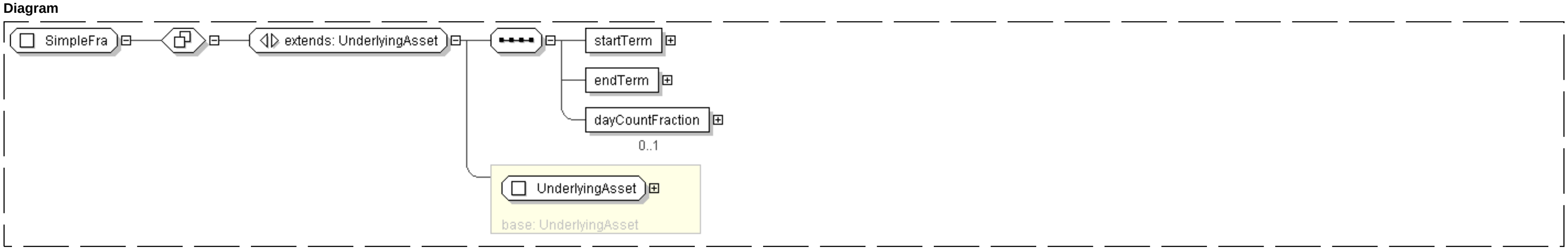
'Specifies the end term of the simple fra, e.g. 9M.'

<dayCountFraction> DayCountFraction **</dayCountFraction>** [0..1]

'The day count basis for the FRA.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="SimpleFra">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:element name="startTerm" type=" Period "/>
            <xsd:element name="endTerm" type=" Period "/>
            <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SimpleIRSwap

Super-types:	Asset < IdentifiedAsset (by extension) < UnderlyingAsset (by extension) < **SimpleIRSwap** (by extension)
Sub-types:	None

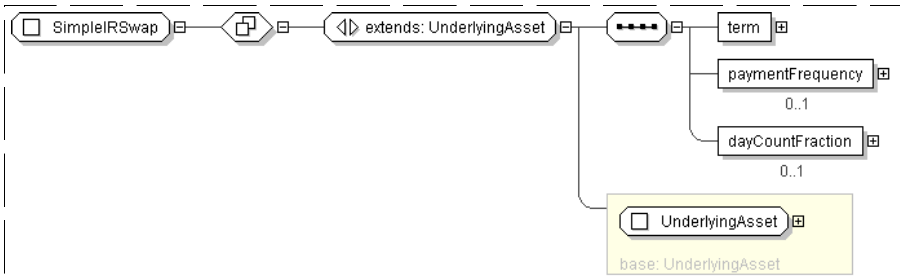
Name	SimpleIRSwap

Used by (from the same schema document)	Element **simpleIrSwap**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
   'Identification of the exchange on which this asset is transacted for the purposes
   of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
   as defined in the ISDA 2002 Equity Derivatives Definitions.'

   <clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
   'Identification of the clearance system associated with the transaction exchange.'

   <definition> ProductReference </definition> [0..1]
   'An optional reference to a full FpML product that defines the simple product in
   greater detail. In case of inconsistency between the terms of the simple product and those
   of the detailed definition, the values in the simple product override those in the
   detailed definition.'

   <term> Period </term> [1]
   'Specifies the term of the simple swap, e.g. 5Y.'

   <paymentFrequency> Period </paymentFrequency> [0..1]
   'Specifies the frequency at which the swap pays, e.g. 6M.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
   'The day count basis for the swap.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SimpleIRSwap">
   <xsd:complexContent>
      <xsd:extension base=" UnderlyingAsset ">
         <xsd:sequence>
            <xsd:element name="term" type=" Period "/>
            <xsd:element name="paymentFrequency" type=" Period " minOccurs="0"/>
            <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SingleUnderlyer

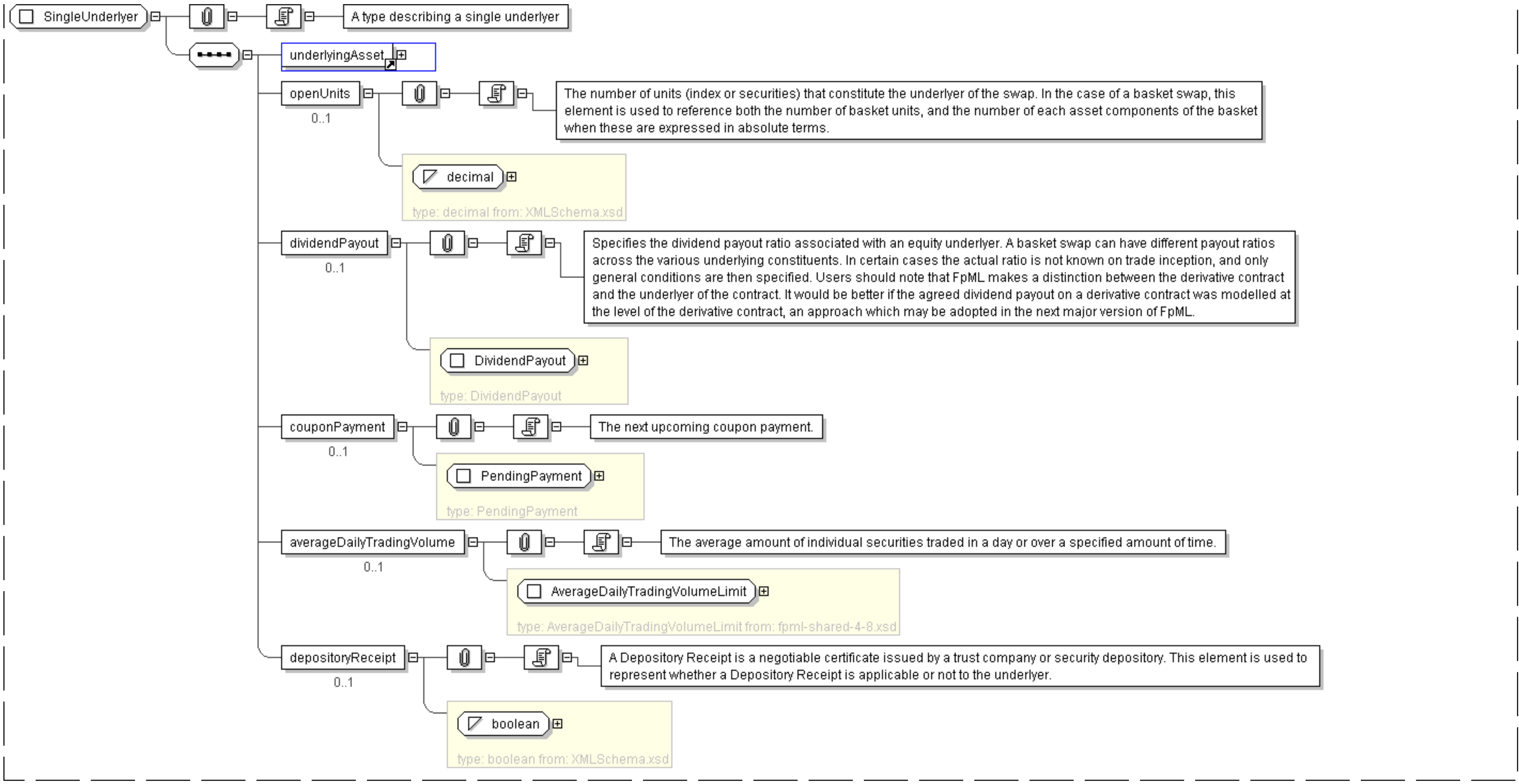
Super-types:	None
Sub-types:	None

Name	SingleUnderlyer
Used by (from the same schema document)	Complex Type **Underlyer**
Abstract	no
Documentation	A type describing a single underlyer

XML Instance Representation

```
<...>
   <underlyingAsset> ... </underlyingAsset> [1]
   <openUnits> xsd:decimal </openUnits> [0..1]
   'The number of units (index or securities) that constitute the underlyer of the swap. In
   the case of a basket swap, this element is used to reference both the number of basket
   units, and the number of each asset components of the basket when these are expressed
   in absolute terms.'

   <dividendPayout> DividendPayout </dividendPayout> [0..1]
   'Specifies the dividend payout ratio associated with an equity underlyer. A basket swap
   can have different payout ratios across the various underlying constituents. In certain
   cases the actual ratio is not known on trade inception, and only general conditions are
   then specified. Users should note that FpML makes a distinction between the derivative
   contract and the underlyer of the contract. It would be better if the agreed dividend payout
   on a derivative contract was modelled at the level of the derivative contract, an
   approach which may be adopted in the next major version of FpML.'

   <couponPayment> PendingPayment </couponPayment> [0..1]
   'The next upcoming coupon payment.'

   <averageDailyTradingVolume> AverageDailyTradingVolumeLimit </averageDailyTradingVolume> [0..1]
   'The average amount of individual securities traded in a day or over a specified amount
   of time.'

   <depositoryReceipt> xsd:boolean </depositoryReceipt> [0..1]
   'A Depository Receipt is a negotiable certificate issued by a trust company or
   security depository. This element is used to represent whether a Depository Receipt
   is applicable or not to the underlyer.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SingleUnderlyer">
   <xsd:sequence>
      <xsd:element ref=" underlyingAsset "/>
      <xsd:element name="openUnits" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="dividendPayout" type=" DividendPayout " minOccurs="0"/>
      <xsd:element name="couponPayment" type=" PendingPayment " minOccurs="0"/>
      <xsd:element name="averageDailyTradingVolume" type=" AverageDailyTradingVolumeLimit
      " minOccurs="0"/>
      <xsd:element name="depositoryReceipt" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TimeZone

Super-types:	Scheme < **TimeZone** (by extension)
Sub-types:	None

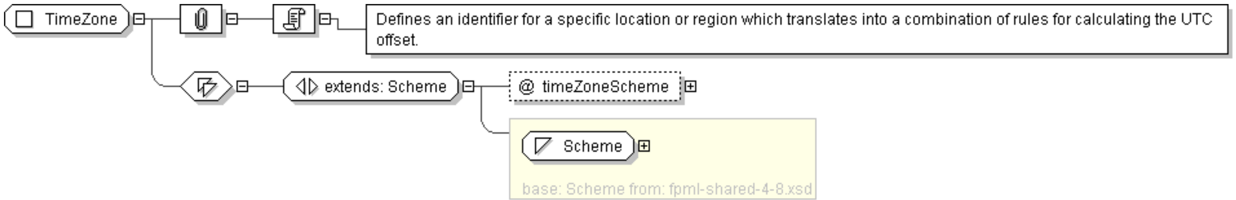
Name	TimeZone
Used by (from the same schema document)	Complex Type **CommodityBusinessCalendarTime**
Abstract	no

Documentation	Defines an identifier for a specific location or region which translates into a combination of rules for calculating the UTC offset.

XML Instance Representation

```
<...
timeZoneScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TimeZone">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="timeZoneScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Underlyer

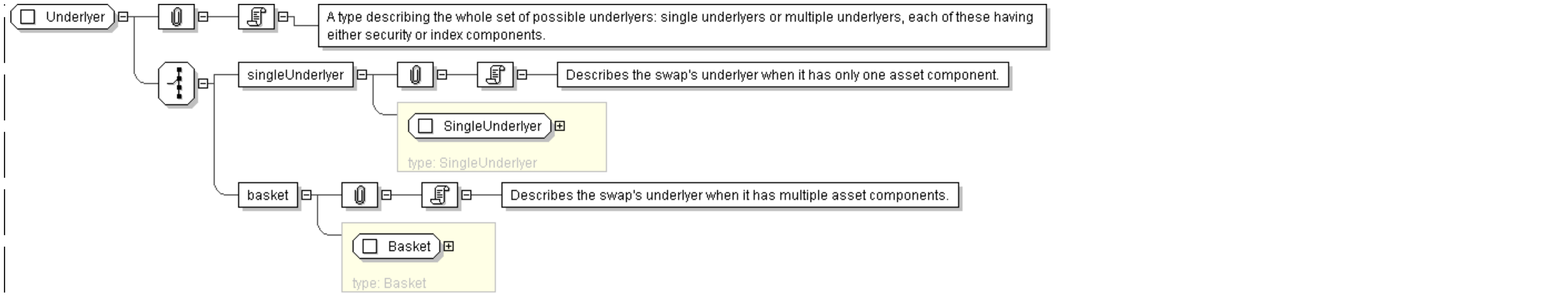
Super-types:	None
Sub-types:	None

Name	Underlyer
Abstract	no
Documentation	A type describing the whole set of possible underlyers: single underlyers or multiple underlyers, each of these having either security or index components.

XML Instance Representation

```
<...>
Start Choice [1]
      <singleUnderlyer> SingleUnderlyer </singleUnderlyer> [1]
      'Describes the swap\'s underlyer when it has only one asset component.'

      <basket> Basket </basket> [1]
      'Describes the swap\'s underlyer when it has multiple asset components.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Underlyer">
   <xsd:choice>
      <xsd:element name="singleUnderlyer" type=" SingleUnderlyer "/>
      <xsd:element name="basket" type=" Basket "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: UnderlyingAsset

Super-types:	Asset < IdentifiedAsset (by extension) < **UnderlyingAsset** (by extension)

Sub-types:	• Deposit (by extension)
	• ExchangeTraded (by extension)
	  ○ Bond (by extension)
	    ▪ ConvertibleBond (by extension)
	  ○ EquityAsset (by extension)
	  ○ ExchangeTradedCalculatedPrice (by extension)
	    ▪ ExchangeTradedFund (by extension)
	    ▪ Index (by extension)
	  ○ ExchangeTradedContract (by extension)
	  ○ Future (by extension)
	• FxRateAsset (by extension)
	• Loan (by extension)
	• Mortgage (by extension)
	• MutualFund (by extension)
	• RateIndex (by extension)
	• SimpleCreditDefaultSwap (by extension)
	• SimpleFra (by extension)
	• SimpleIRSwap (by extension)

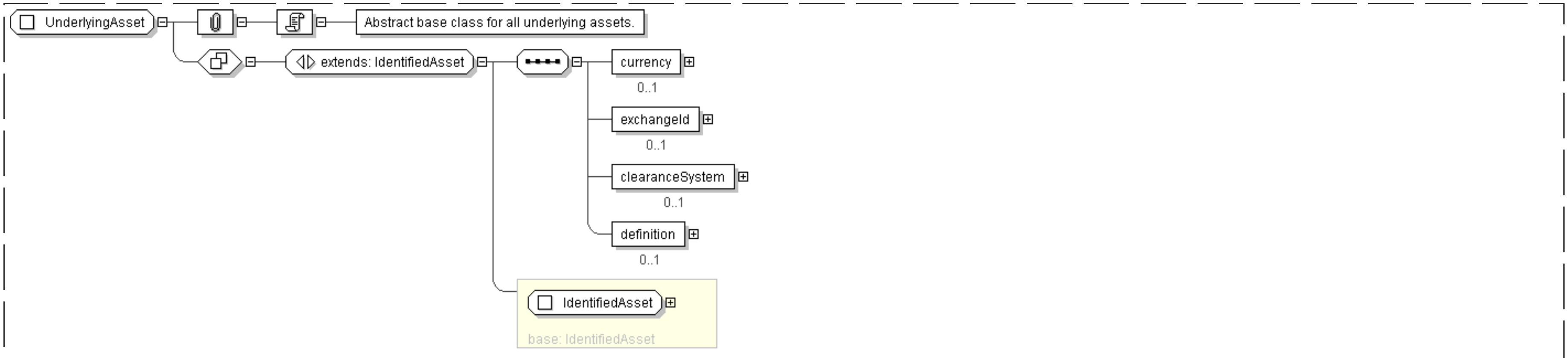
Name	UnderlyingAsset
Abstract	yes
Documentation	Abstract base class for all underlying assets.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <currency> IdentifiedCurrency </currency> [0..1]
   'Trading currency of the underlyer when transacted as a cash instrument.'

   <exchangeId> ExchangeId </exchangeId> [0..1]
```

```
'Identification of the exchange on which this asset is transacted for the purposes
of calculating a contractural payoff. The term \"Exchange\" is assumed to have the meaning
as defined in the ISDA 2002 Equity Derivatives Definitions.'

<clearanceSystem> ClearanceSystem </clearanceSystem> [0..1]
'Identification of the clearance system associated with the transaction exchange.'

<definition> ProductReference </definition> [0..1]
'An optional reference to a full FpML product that defines the simple product in
greater detail. In case of inconsistency between the terms of the simple product and those
of the detailed definition, the values in the simple product override those in the
detailed definition.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="UnderlyingAsset" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" IdentifiedAsset ">
         <xsd:sequence>
            <xsd:element name="currency" type=" IdentifiedCurrency " minOccurs="0"/>
            <xsd:element name="exchangeId" type=" ExchangeId " minOccurs="0"/>
            <xsd:element name="clearanceSystem" type=" ClearanceSystem " minOccurs="0"/>
            <xsd:element name="definition" type=" ProductReference " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: UnderlyingAssetTranche

Super-types:	Scheme < **UnderlyingAssetTranche** (by extension)
Sub-types:	None

Name	UnderlyingAssetTranche
Used by (from the same schema document)	Complex Type **Loan**
Abstract	no

XML Instance Representation

```
<...
loanTrancheScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="UnderlyingAssetTranche">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="loanTrancheScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/underlying-asset-tranche"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

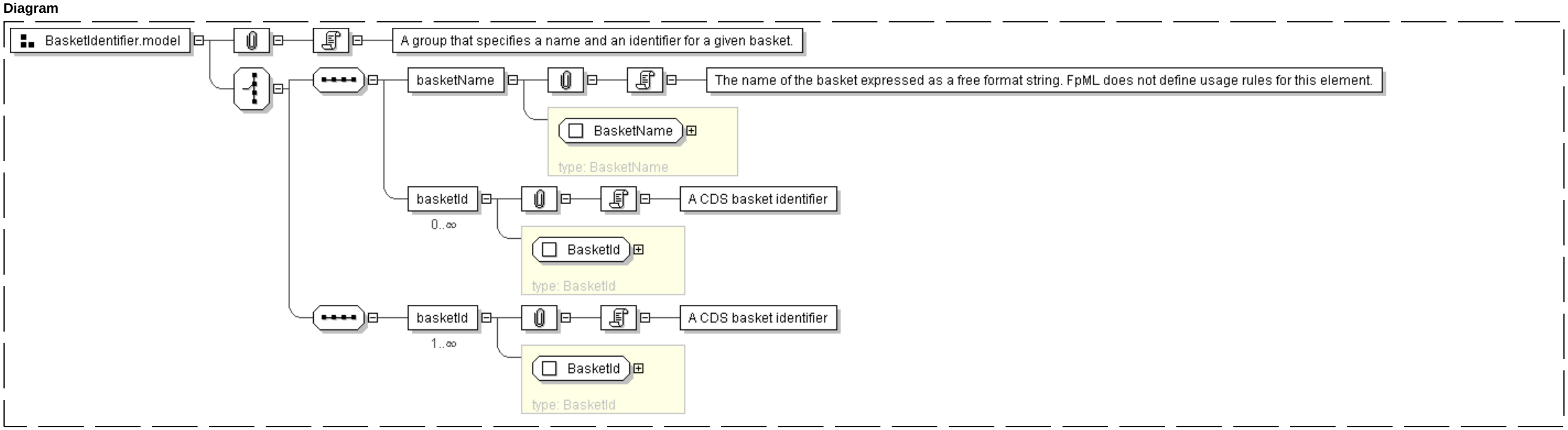
Model Group: BasketIdentifier.model

Name	BasketIdentifier.model
Used by (from the same schema document)	Complex Type **Basket**
Documentation	A group that specifies a name and an identifier for a given basket.

XML Instance Representation

```
Start Choice [1]
   <basketName> BasketName </basketName> [1]
   'The name of the basket expressed as a free format string. FpML does not define usage rules
   for this element.'

   <basketId> BasketId </basketId> [0..*]
   'A CDS basket identifier'

   <basketId> BasketId </basketId> [1..*]
   'A CDS basket identifier'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="BasketIdentifier.model">
   <xsd:choice>
      <xsd:sequence>
         <xsd:element name="basketName" type=" BasketName "/>
         <xsd:element name="basketId" type=" BasketId " minOccurs="0" maxOccurs="unbounded"/>
      </xsd:sequence>
      <xsd:sequence>
         <xsd:element name="basketId" type=" BasketId " maxOccurs="unbounded"/>
      </xsd:sequence>
   </xsd:choice>
</xsd:group>
```

top

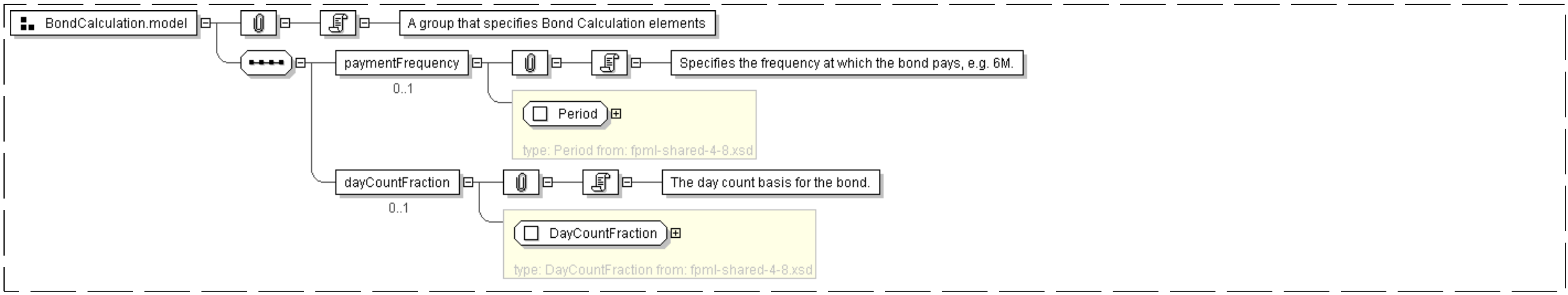
Model Group: BondCalculation.model

Name	BondCalculation.model
Used by (from the same schema document)	Complex Type **Bond** , Complex Type **Mortgage**
Documentation	A group that specifies Bond Calculation elements

XML Instance Representation

```
<paymentFrequency> Period </paymentFrequency> [0..1]
'Specifies the frequency at which the bond pays, e.g. 6M.'

<dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
'The day count basis for the bond.'
```

Diagram



Schema Component Representation

```
<xsd:group name="BondCalculation.model">
   <xsd:sequence>
      <xsd:element name="paymentFrequency" type=" Period " minOccurs="0"/>
      <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: BondChoice.model

Name	BondChoice.model
Documentation	A model group which provides choices between all bond underlyers.

XML Instance Representation

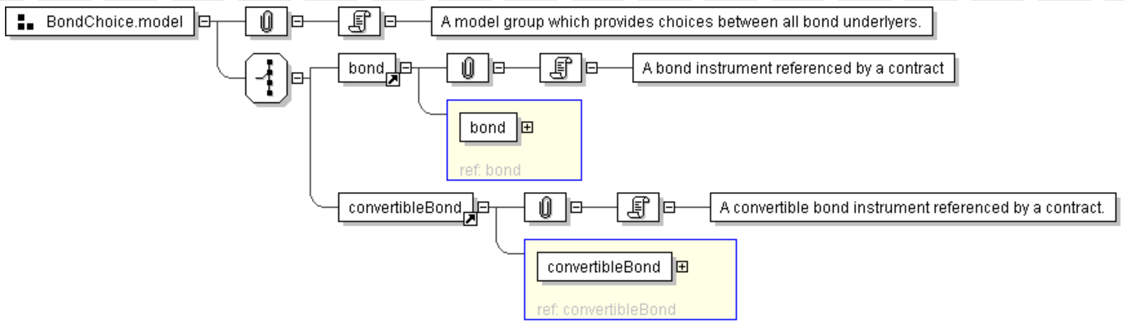
```
Start Choice [1]
   <bond> ... </bond> [1]
   'A bond instrument referenced by a contract'
```

<convertibleBond> ... </convertibleBond> [1]

'A convertible bond instrument referenced by a contract.'

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="BondChoice.model">
   <xsd:choice>
      <xsd:element ref=" bond "/>
      <xsd:element ref=" convertibleBond "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: BondContent.model

Name	BondContent.model
Used by (from the same schema document)	Complex Type **Bond** , Complex Type **Mortgage**
Documentation	A group that specifies Bond Content elements

XML Instance Representation

Start Choice [0..1]

'Specifies the issuer name of a fixed income security or convertible bond. This name can either be explicitly stated, or specified as an href into another element of the document, such as the obligor'

<issuerName> xsd:string </issuerName> [1]
<issuerPartyReference> PartyReference </issuerPartyReference> [1]
End Choice
<seniority> CreditSeniority </seniority> [0..1]

'The repayment precedence of a debt instrument.'

<couponType> CouponType </couponType> [0..1]

'Specifies if the bond has a variable coupon, step-up/down coupon or a zero-coupon.'

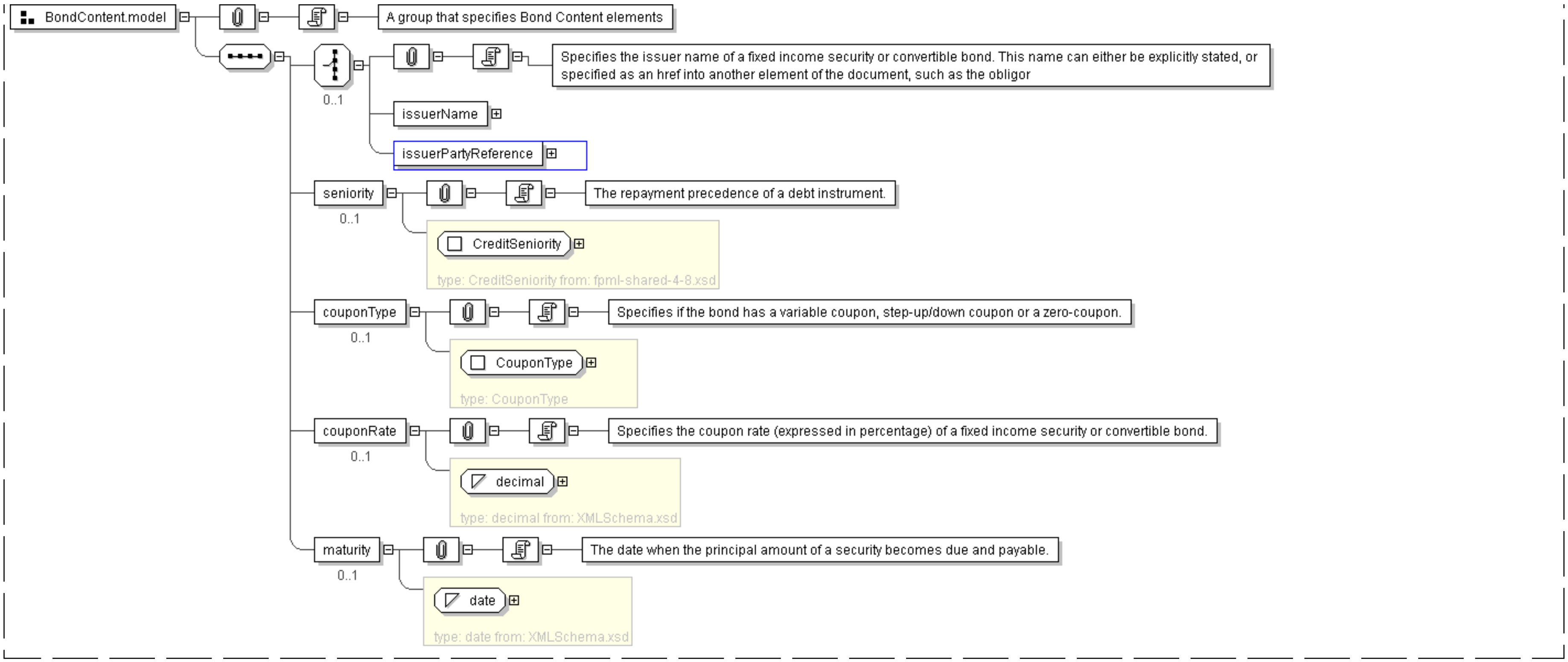
<couponRate> xsd:decimal </couponRate> [0..1]

'Specifies the coupon rate (expressed in percentage) of a fixed income security or convertible bond.'

<maturity> xsd:date </maturity> [0..1]

'The date when the principal amount of a security becomes due and payable.'

Diagram



Schema Component Representation

```
<xsd:group name="BondContent.model">
   <xsd:sequence>
      <xsd:choice minOccurs="0">
         <xsd:element name="issuerName" type=" xsd:string "/>
         <xsd:element name="issuerPartyReference" type=" PartyReference "/>
      </xsd:choice>
      <xsd:element name="seniority" type=" CreditSeniority " minOccurs="0"/>
      <xsd:element name="couponType" type=" CouponType " minOccurs="0"/>
      <xsd:element name="couponRate" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="maturity" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CommodityProduct.model

Name	CommodityProduct.model
Used by (from the same schema document)	Complex Type **Commodity**
Documentation	A group used to specify details of a commodity underlyer.

XML Instance Representation

```
Start Group: CommodityReferencePriceFramework.model [0..1]
   <commodityBase> CommodityBase </commodityBase> [1]
   'A coding scheme value to identify the base type of the commodity being traded. Where
   possible, this should follow the naming convention used in the 2005 ISDA Commodity
   Definitions. For example, \'Oil\'.'

   <commodityDetails> CommodityDetails </commodityDetails> [1]
   'A coding scheme value to identify the commodity being traded more specifically.
```

Where possible, this should follow the naming convention used in the 2005 ISDA Commodity Definitions. For example, \'Brent\'.'

<unit> QuantityUnit </unit> [1]

'A coding scheme value to identify the unit in which the undelryer is denominated. Where possible, this should follow the naming convention used in the 2005 ISDA Commodity Definitions.'

<currency> Currency </currency> [1]

'The currency in which the Commodity Reference Price is published.'

Start Choice [1]

<exchangeId> ExchangeId </exchangeId> [1]

'For those commodities being traded with reference to the price of a listed future, the exchange where that future is listed should be specified here.'

<publication> InformationSource </publication> [1]

'For those commodities being traded with reference to a price distributed by a publication, that publication should be specified here.'

End Choice
End Group: CommodityReferencePriceFramework.model
<specifiedPrice> SpecifiedPriceEnum </specifiedPrice> [1]

'The Specified Price is not defined in the Commodity Reference Price and so needs to be stated in the Underlyer definition as it will impact the calculation of the Floating Price.'

Start Sequence [0..1]
Start Choice [1]

<deliveryDates> DeliveryDatesEnum </deliveryDates> [1]

'The Delivery Date is a NearbyMonth, for use when the Commodity Transaction references Futures Contract.'

<deliveryDate> AdjustableDate </deliveryDate> [1]

'The Delivery Date is a fixed, single day.'

<deliveryDateYearMonth> xsd:gYearMonth </deliveryDateYearMonth> [1]

'The Delivery Date is a fixed, single month.'

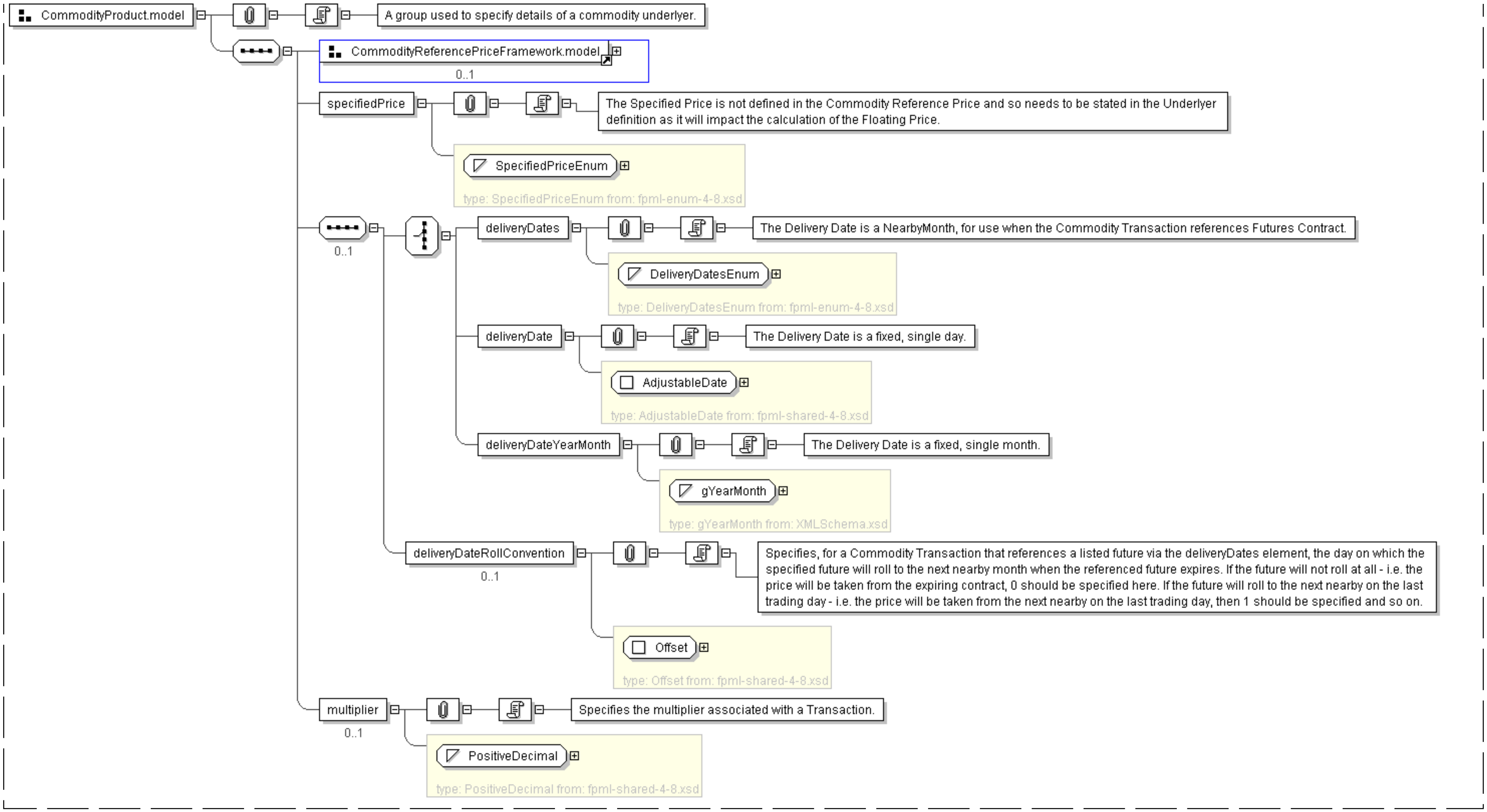
End Choice
<deliveryDateRollConvention> Offset </deliveryDateRollConvention> [0..1]

'Specifies, for a Commodity Transaction that references a listed future via the deliveryDates element, the day on which the specified future will roll to the next nearby month when the referenced future expires. If the future will not roll at all - i.e. the price will be taken from the expiring contract, 0 should be specified here. If the future will roll to the next nearby on the last trading day - i.e. the price will be taken from the next nearby on the last trading day, then 1 should be specified and so on.'

End Sequence
<multiplier> PositiveDecimal </multiplier> [0..1]

'Specifies the multiplier associated with a Transaction.'

Diagram



Schema Component Representation

```
<xsd:group name="CommodityProduct.model">
   <xsd:sequence>
      <xsd:group ref=" CommodityReferencePriceFramework.model " minOccurs="0"/>
      <xsd:element name="specifiedPrice" type=" SpecifiedPriceEnum "/>
      <xsd:sequence minOccurs="0">
         <xsd:choice>
            <xsd:element name="deliveryDates" type=" DeliveryDatesEnum "/>
            <xsd:element name="deliveryDate" type=" AdjustableDate "/>
            <xsd:element name="deliveryDateYearMonth" type=" xsd:gYearMonth "/>
         </xsd:choice>
         <xsd:element name="deliveryDateRollConvention" type=" Offset " minOccurs="0"/>
      </xsd:sequence>
      <xsd:element name="multiplier" type=" PositiveDecimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

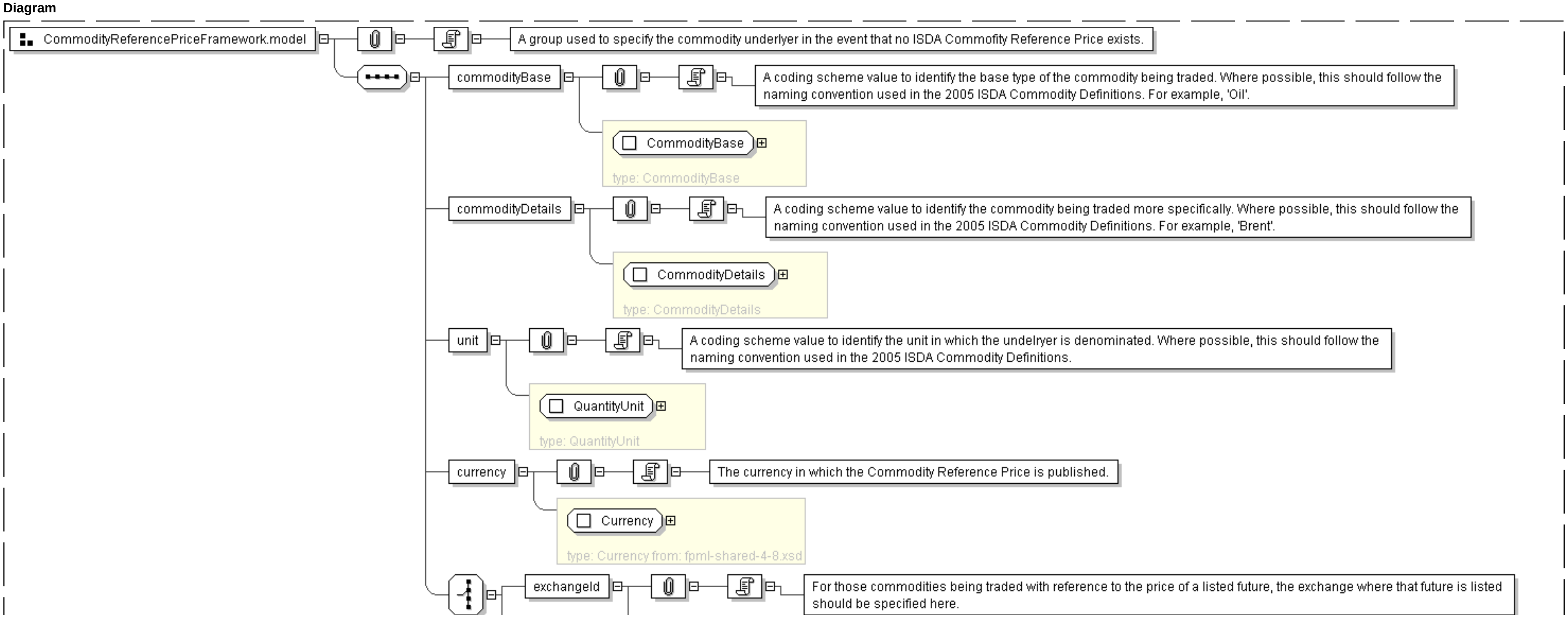
Model Group: CommodityReferencePriceFramework.model

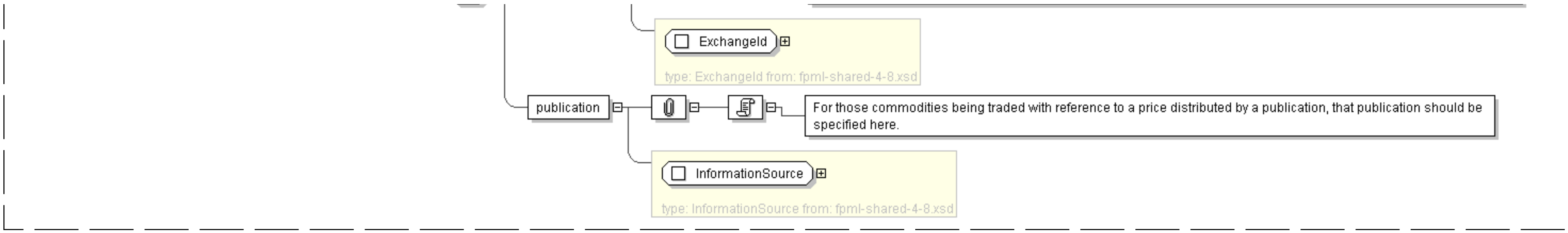
Name	CommodityReferencePriceFramework.model
Used by (from the same schema document)	Model Group **CommodityProduct.model**
Documentation	A group used to specify the commodity underlyer in the event that no ISDA Commofity Reference Price exists.

XML Instance Representation

```
<commodityBase> CommodityBase </commodityBase> [1]
'A coding scheme value to identify the base type of the commodity being traded. Where
possible, this should follow the naming convention used in the 2005 ISDA Commodity
Definitions. For example, \'Oil\'.'

<commodityDetails> CommodityDetails </commodityDetails> [1]
'A coding scheme value to identify the commodity being traded more specifically.
Where possible, this should follow the naming convention used in the 2005 ISDA
Commodity Definitions. For example, \'Brent\'.'

<unit> QuantityUnit </unit> [1]
'A coding scheme value to identify the unit in which the undelryer is denominated.
Where possible, this should follow the naming convention used in the 2005 ISDA
Commodity Definitions.'

<currency> Currency </currency> [1]
'The currency in which the Commodity Reference Price is published.'

Start Choice [1]
   <exchangeId> ExchangeId </exchangeId> [1]
   'For those commodities being traded with reference to the price of a listed future,
   the exchange where that future is listed should be specified here.'

   <publication> InformationSource </publication> [1]
   'For those commodities being traded with reference to a price distributed by a
   publication, that publication should be specified here.'

End Choice
```

Diagram





Schema Component Representation

```
<xsd:group name="CommodityReferencePriceFramework.model">
   <xsd:sequence>
      <xsd:element name="commodityBase" type=" CommodityBase "/>
      <xsd:element name="commodityDetails" type=" CommodityDetails "/>
      <xsd:element name="unit" type=" QuantityUnit "/>
      <xsd:element name="currency" type=" Currency "/>
      <xsd:choice>
         <xsd:element name="exchangeId" type=" ExchangeId "/>
         <xsd:element name="publication" type=" InformationSource "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:group>
```

top

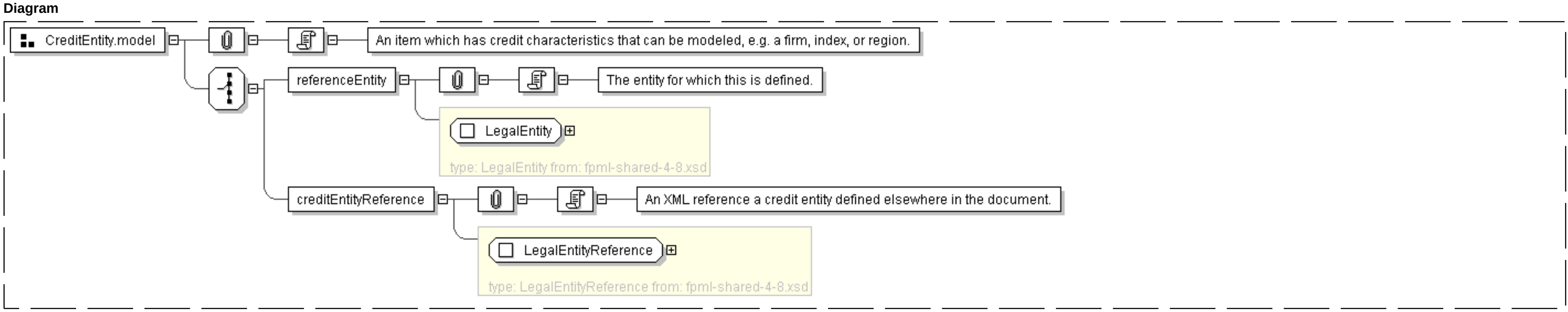
Model Group: CreditEntity.model

Name	CreditEntity.model
Used by (from the same schema document)	Complex Type **SimpleCreditDefaultSwap**
Documentation	An item which has credit characteristics that can be modeled, e.g. a firm, index, or region.

XML Instance Representation

```
Start Choice [1]
   <referenceEntity> LegalEntity </referenceEntity> [1]
   'The entity for which this is defined.'

   <creditEntityReference> LegalEntityReference </creditEntityReference> [1]
   'An XML reference a credit entity defined elsewhere in the document.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="CreditEntity.model">
   <xsd:choice>
      <xsd:element name="referenceEntity" type=" LegalEntity "/>
```

```
    <xsd:element name="creditEntityReference" type=" LegalEntityReference "/>
  </xsd:choice>
</xsd:group>
```

top

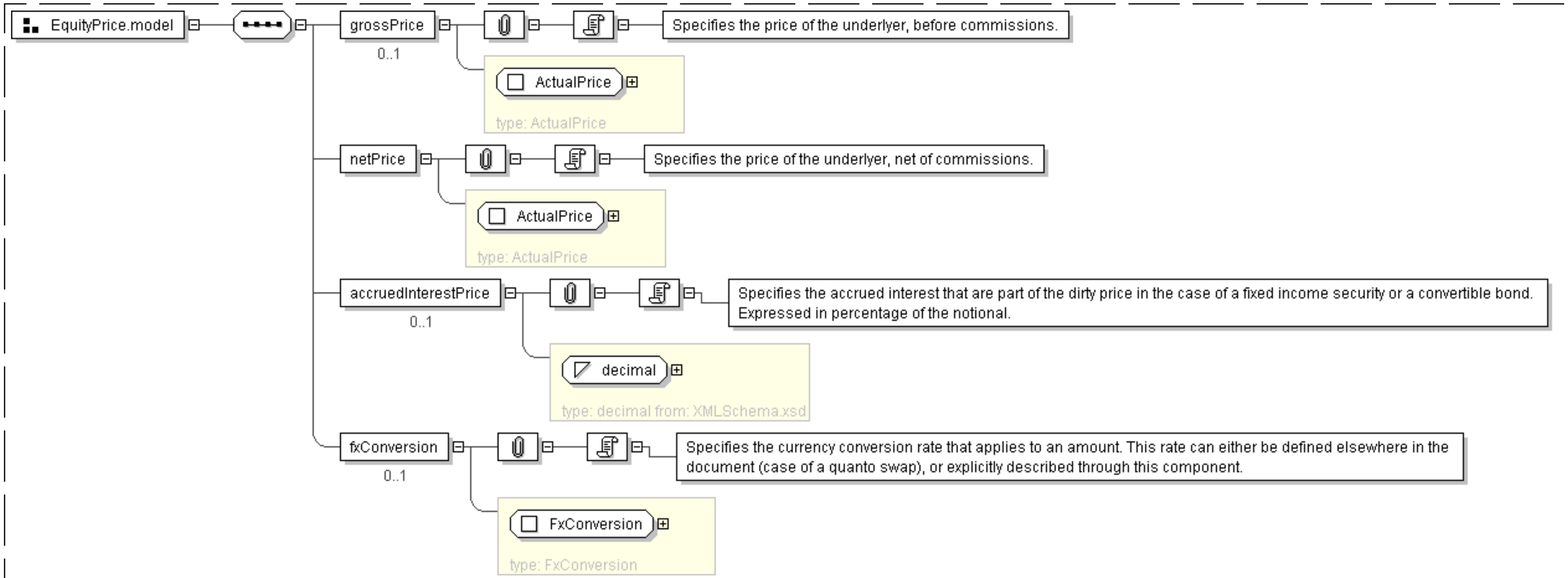
Model Group: EquityPrice.model

Name	EquityPrice.model
Used by (from the same schema document)	Complex Type **Price** , Complex Type **Price**

XML Instance Representation

```
<grossPrice> ActualPrice </grossPrice> [0..1]
'Specifies the price of the underlyer, before commissions.'

<netPrice> ActualPrice </netPrice> [1]
'Specifies the price of the underlyer, net of commissions.'

<accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]
'Specifies the accrued interest that are part of the dirty price in the case of a fixed
income security or a convertible bond. Expressed in percentage of the notional.'

<fxConversion> FxConversion </fxConversion> [0..1]
'Specifies the currency conversion rate that applies to an amount. This rate can either
be defined elsewhere in the document (case of a quanto swap), or explicitly described
through this component.'
```

Diagram



Schema Component Representation

```
<xsd:group name="EquityPrice.model">
  <xsd:sequence>
    <xsd:element name="grossPrice" type=" ActualPrice " minOccurs="0"/>
    <xsd:element name="netPrice" type=" ActualPrice "/>
    <xsd:element name="accruedInterestPrice" type=" xsd:decimal " minOccurs="0"/>
    <xsd:element name="fxConversion" type=" FxConversion " minOccurs="0"/>
  </xsd:sequence>
</xsd:group>
```

top

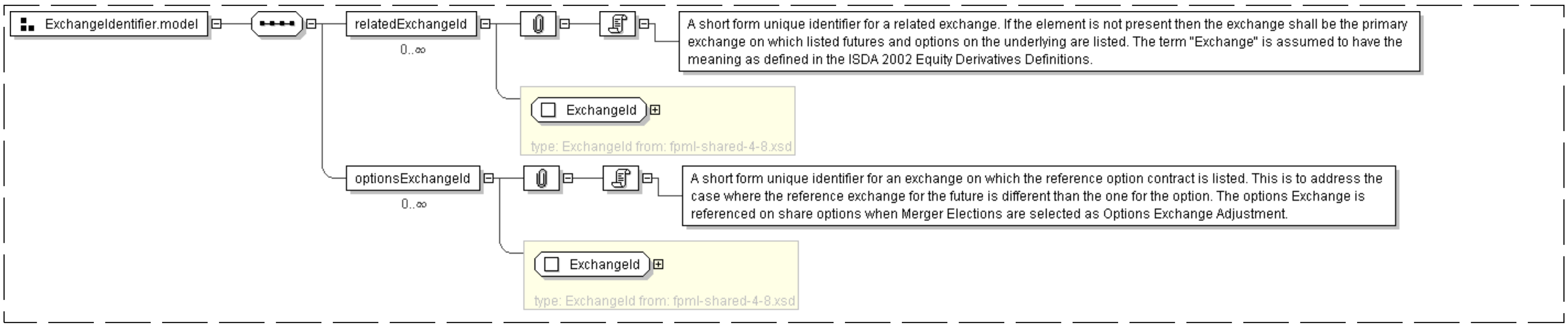
Model Group: ExchangeIdentifier.model

Name	ExchangeIdentifier.model
Used by (from the same schema document)	Complex Type **ExchangeTraded**

XML Instance Representation

```
<relatedExchangeId> ExchangeId </relatedExchangeId> [0..*]
'A short form unique identifier for a related exchange. If the element is not present then
the exchange shall be the primary exchange on which listed futures and options on
the underlying are listed. The term \"Exchange\" is assumed to have the meaning as defined
in the ISDA 2002 Equity Derivatives Definitions.'

<optionsExchangeId> ExchangeId </optionsExchangeId> [0..*]
'A short form unique identifier for an exchange on which the reference option contract
is listed. This is to address the case where the reference exchange for the future is
different than the one for the option. The options Exchange is referenced on share options
when Merger Elections are selected as Options Exchange Adjustment.'
```

Diagram



Schema Component Representation

```
<xsd:group name="ExchangeIdentifier.model">
   <xsd:sequence>
      <xsd:element name="relatedExchangeId" type=" ExchangeId " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="optionsExchangeId" type=" ExchangeId " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: Quotation.model

Name	Quotation.model
Used by (from the same schema document)	Complex Type **BasicQuotation**
Documentation	Some kind of numerical measure about an asset, eg. its price or NPV, together with characteristics of that measure.

XML Instance Representation

```
<value> xsd:decimal </value> [0..1]
'The value of the the quotation.'

<measureType> AssetMeasureType </measureType> [0..1]
'The type of the value that is measured. This could be an NPV, a cash flow, a clean price, etc.'

<quoteUnits> PriceQuoteUnits </quoteUnits> [0..1]
'The optional units that the measure is expressed in. If not supplied, this is assumed to be
```

a price/value in currency units.'

<side> QuotationSideEnum </side> [0..1]

'The side (bid/mid/ask) of the measure.'

<currency> Currency </currency> [0..1]

'The optional currency that the measure is expressed in. If not supplied, this is defaulted from the reportingCurrency in the valuationScenarioDefinition.'

<timing> QuoteTiming </timing> [0..1]

'When during a day the quote is for. Typically, if this element is supplied, the QuoteLocation needs also to be supplied.'

Start Group: QuoteLocation.model [0..1]

'Where the quote is from.'

Start Choice [1]

<businessCenter> BusinessCenter </businessCenter> [1]

'A city or other business center.'

<exchangeId> ExchangeId </exchangeId> [1]

'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
End Group: QuoteLocation.model
<informationSource> InformationSource </informationSource> [0..*]

'The information source where a published or displayed market rate will be obtained, e.g. Telerate Page 3750.'

<time> xsd:dateTime </time> [0..1]

'When the quote was observed or derived.'

<valuationDate> xsd:date </valuationDate> [0..1]

'When the quote was computed.'

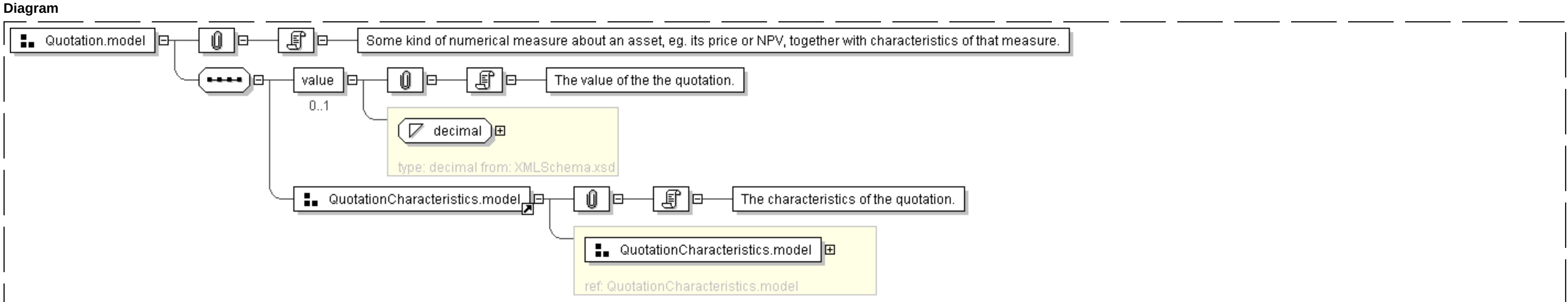
<expiryTime> xsd:dateTime </expiryTime> [0..1]

'When does the quote cease to be valid.'

<cashFlowType> CashflowType </cashFlowType> [0..1]

'For cash flows, the type of the cash flows. Examples include: Coupon payment, Premium Fee, Settlement Fee, Brokerage Fee, etc.'

Diagram



Schema Component Representation

```
<xsd:group name="Quotation.model">
   <xsd:sequence>
      <xsd:element name="value" type=" xsd:decimal " minOccurs="0"/>
      <xsd:group ref=" QuotationCharacteristics.model "/>
   </xsd:sequence>
</xsd:group>
```

top

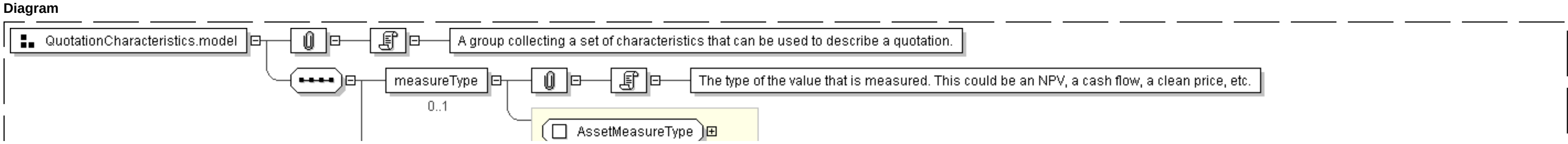
Model Group: QuotationCharacteristics.model

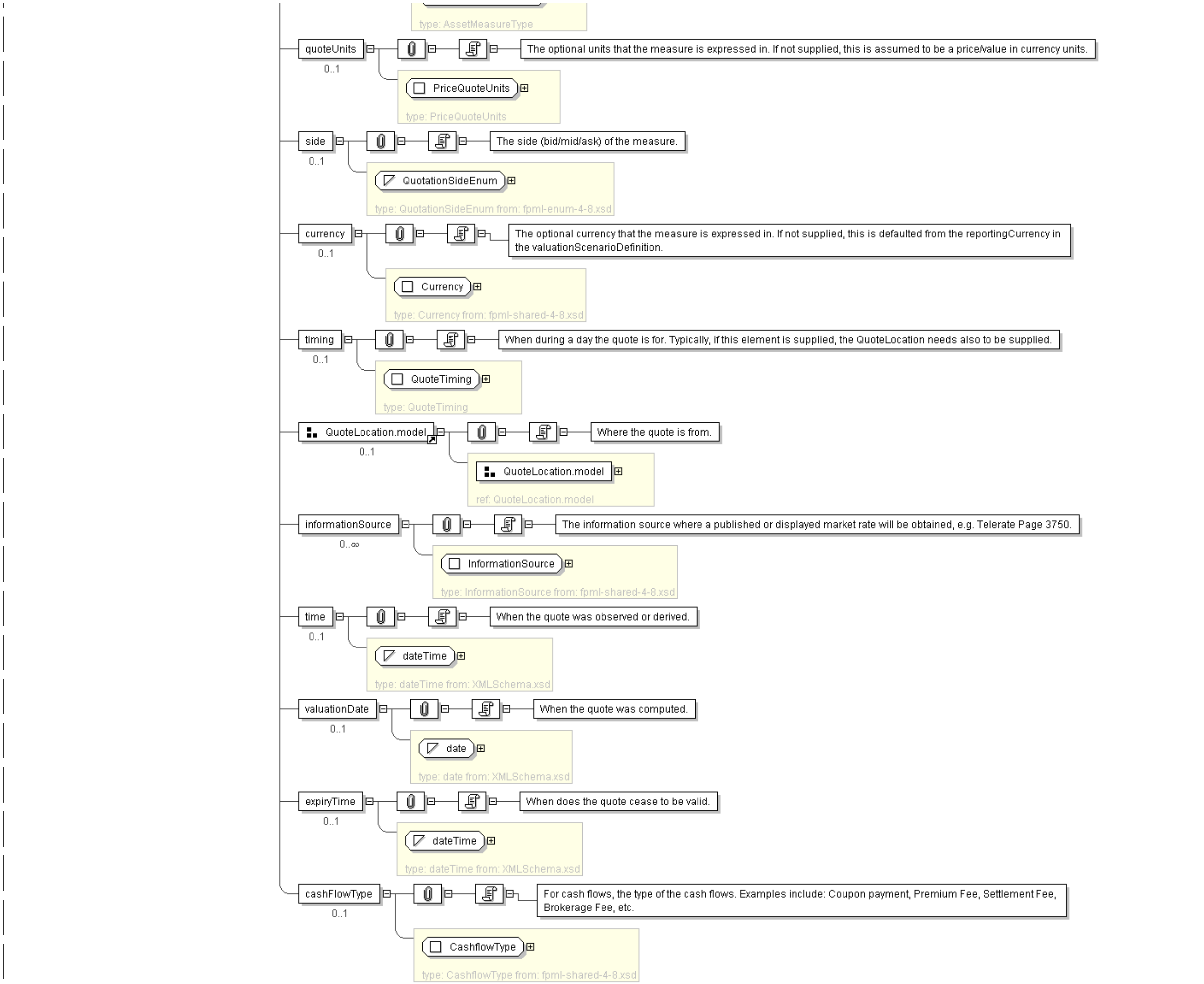
Name	QuotationCharacteristics.model
Used by (from the same schema document)	Complex Type **QuotationCharacteristics** , Model Group **Quotation.model**
Documentation	A group collecting a set of characteristics that can be used to describe a quotation.

XML Instance Representation

```
<measureType> AssetMeasureType </measureType> [0..1]
'The type of the value that is measured. This could be an NPV, a cash flow, a clean price, etc.'

<quoteUnits> PriceQuoteUnits </quoteUnits> [0..1]
'The optional units that the measure is expressed in. If not supplied, this is assumed to be
a price/value in currency units.'

<side> QuotationSideEnum </side> [0..1]
'The side (bid/mid/ask) of the measure.'

<currency> Currency </currency> [0..1]
'The optional currency that the measure is expressed in. If not supplied, this is
defaulted from the reportingCurrency in the valuationScenarioDefinition.'

<timing> QuoteTiming </timing> [0..1]
'When during a day the quote is for. Typically, if this element is supplied, the
QuoteLocation needs also to be supplied.'

Start Group: QuoteLocation.model [0..1]
'Where the quote is from.'

Start Choice [1]
      <businessCenter> BusinessCenter </businessCenter> [1]
      'A city or other business center.'

      <exchangeId> ExchangeId </exchangeId> [1]
      'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
End Group: QuoteLocation.model
<informationSource> InformationSource </informationSource> [0..*]
'The information source where a published or displayed market rate will be obtained, e.
g. Telerate Page 3750.'

<time> xsd:dateTime </time> [0..1]
'When the quote was observed or derived.'

<valuationDate> xsd:date </valuationDate> [0..1]
'When the quote was computed.'

<expiryTime> xsd:dateTime </expiryTime> [0..1]
'When does the quote cease to be valid.'

<cashFlowType> CashflowType </cashFlowType> [0..1]
'For cash flows, the type of the cash flows. Examples include: Coupon payment, Premium
Fee, Settlement Fee, Brokerage Fee, etc.'
```

Diagram





Schema Component Representation

```
<xsd:group name="QuotationCharacteristics.model">
   <xsd:sequence>
      <xsd:element name="measureType" type=" AssetMeasureType " minOccurs="0"/>
      <xsd:element name="quoteUnits" type=" PriceQuoteUnits " minOccurs="0"/>
      <xsd:element name="side" type=" QuotationSideEnum " minOccurs="0"/>
      <xsd:element name="currency" type=" Currency " minOccurs="0"/>
      <xsd:element name="timing" type=" QuoteTiming " minOccurs="0"/>
      <xsd:group ref=" QuoteLocation.model " minOccurs="0"/>
      <xsd:element name="informationSource" type=" InformationSource "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="time" type=" xsd:dateTime " minOccurs="0"/>
      <xsd:element name="valuationDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="expiryTime" type=" xsd:dateTime " minOccurs="0"/>
      <xsd:element name="cashFlowType" type=" CashflowType " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

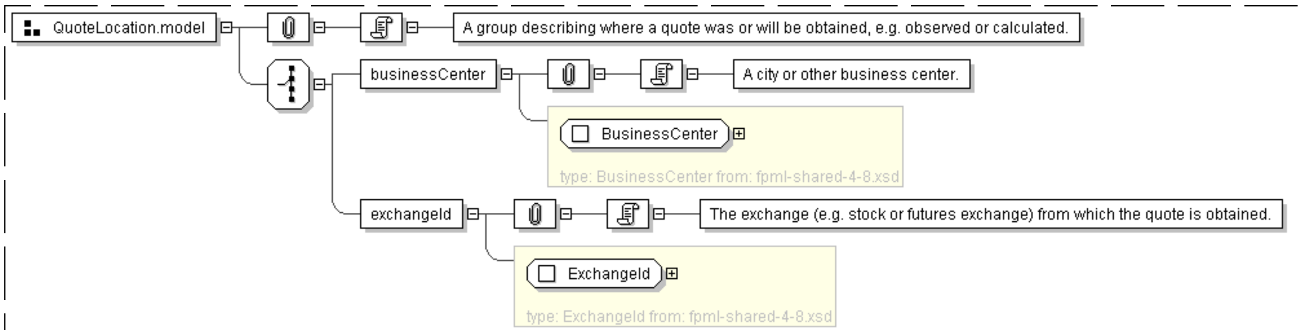
Model Group: QuoteLocation.model

Name	QuoteLocation.model
Used by (from the same schema document)	Model Group **QuotationCharacteristics.model**
Documentation	A group describing where a quote was or will be obtained, e.g. observed or calculated.

XML Instance Representation

```
Start Choice [1]
   <businessCenter> BusinessCenter </businessCenter> [1]
   'A city or other business center.'

   <exchangeId> ExchangeId </exchangeId> [1]
   'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="QuoteLocation.model">
   <xsd:choice>
      <xsd:element name="businessCenter" type=" BusinessCenter "/>
      <xsd:element name="exchangeId" type=" ExchangeId "/>
   </xsd:choice>
</xsd:group>
```

top

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-option-shared-4-8.xsd ○ fpml-mktenv-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-option-shared-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-mktenv-4-8.xsd"/>
   ...
</xsd:schema>
```

top

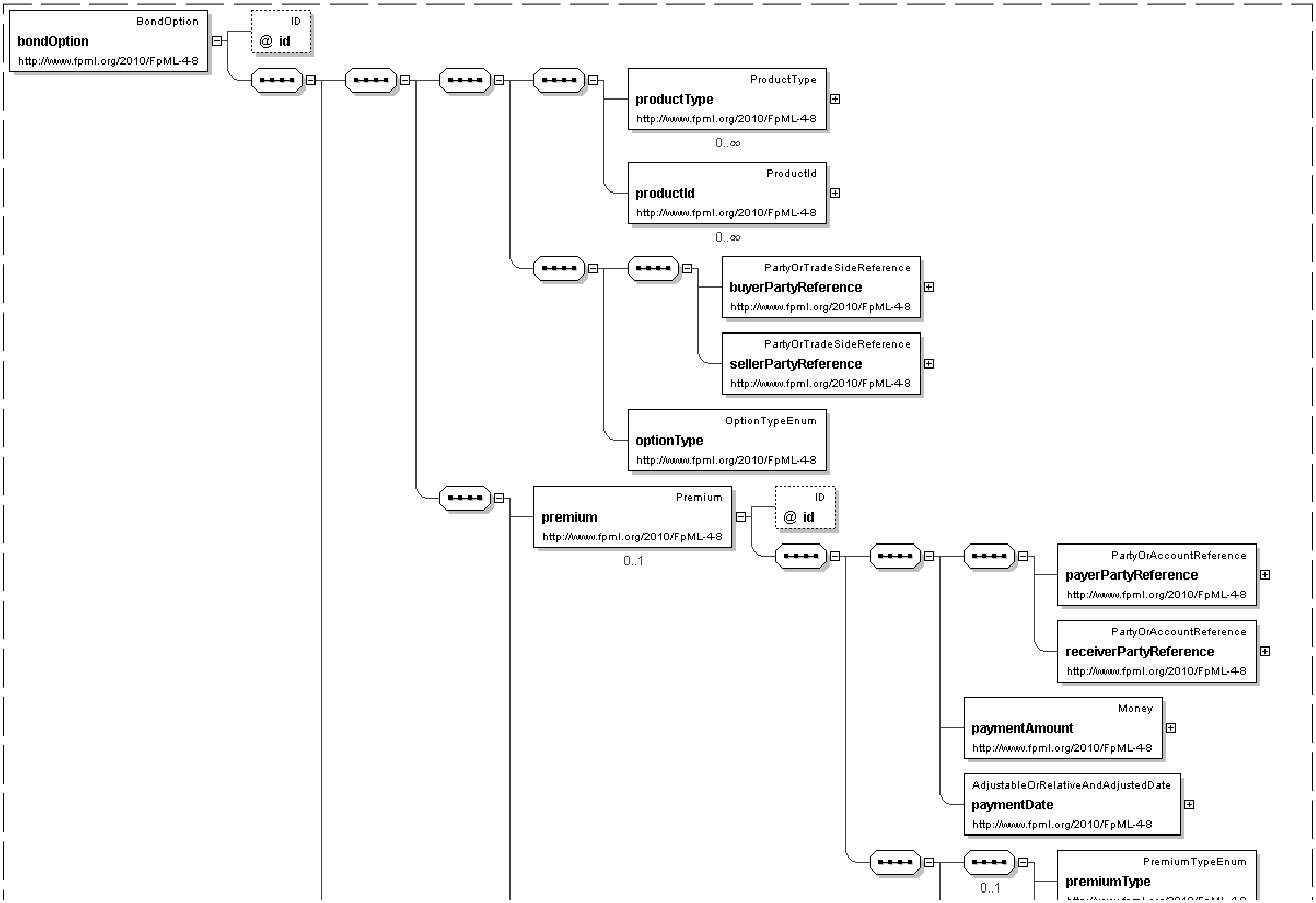
Global Declarations

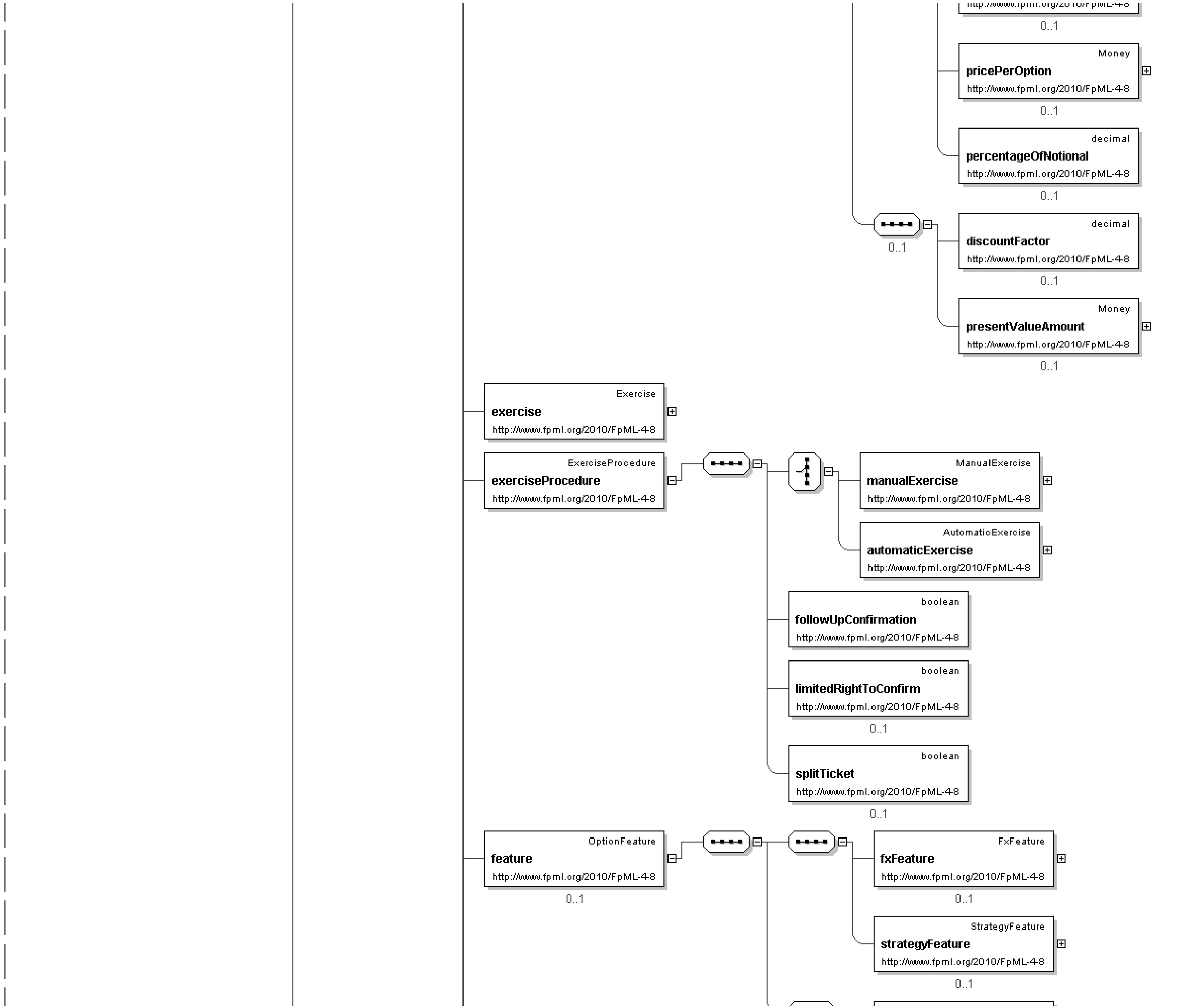
Element: bondOption

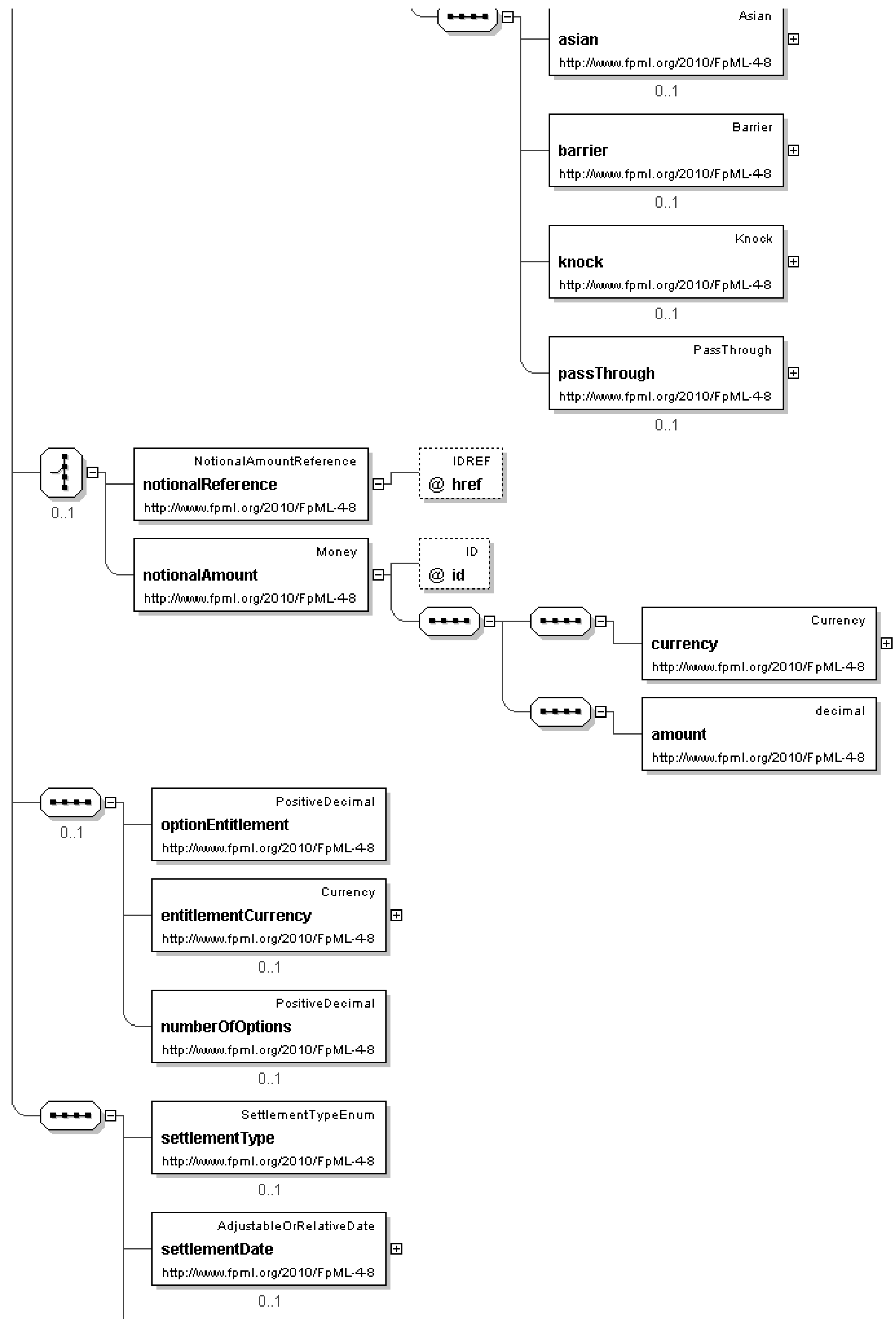
- *This element can be used wherever the following element is referenced:*
  - product

Name	bondOption
Type	BondOption
Nillable	no
Abstract	no
Documentation	A component describing a Bond Option product.

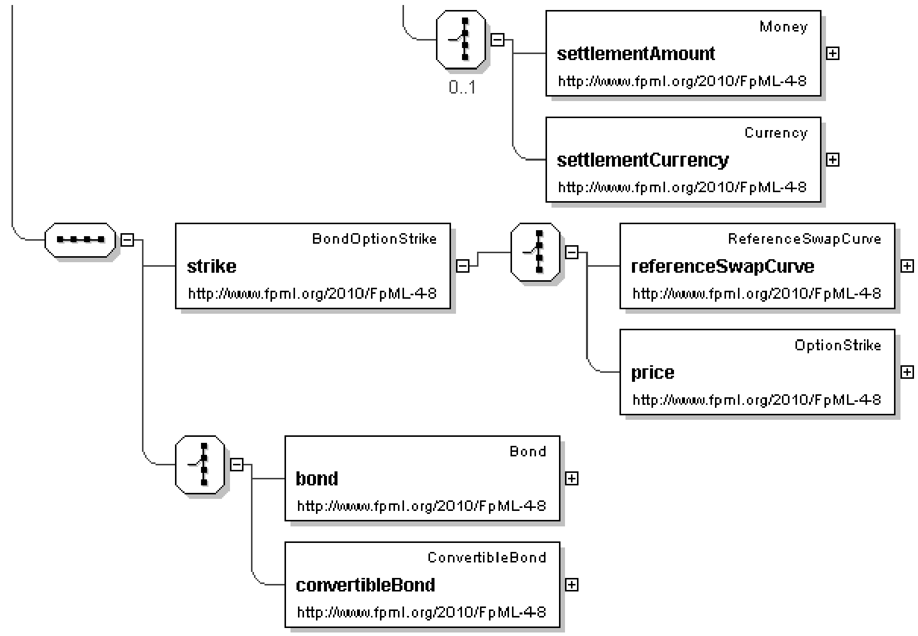
Logical Diagram




0..1
Money
pricePerOption
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
percentageOfNotional
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1
Money
presentValueAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Exercise
exercise
http://www.fpml.org/2010/FpML-4-8
ExerciseProcedure
exerciseProcedure
http://www.fpml.org/2010/FpML-4-8
ManualExercise
manualExercise
http://www.fpml.org/2010/FpML-4-8
AutomaticExercise
automaticExercise
http://www.fpml.org/2010/FpML-4-8
boolean
followUpConfirmation
http://www.fpml.org/2010/FpML-4-8
boolean
limitedRightToConfirm
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
splitTicket
http://www.fpml.org/2010/FpML-4-8
0..1
OptionFeature
feature
http://www.fpml.org/2010/FpML-4-8
0..1
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
StrategyFeature
strategyFeature
http://www.fpml.org/2010/FpML-4-8
0..1



Asian
asian
http://www.fpml.org/2010/FpML-4-8
0..1
Barrier
barrier
http://www.fpml.org/2010/FpML-4-8
0..1
Knock
knock
http://www.fpml.org/2010/FpML-4-8
0..1
PassThrough
passThrough
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
NotionalAmountReference
notionalReference
http://www.fpml.org/2010/FpML-4-8
IDREF
@ href
Money
notionalAmount
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
0..1
PositiveDecimal
optionEntitlement
http://www.fpml.org/2010/FpML-4-8
Currency
entitlementCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
PositiveDecimal
numberOfOptions
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementTypeEnum
settlementType
http://www.fpml.org/2010/FpML-4-8
0..1
AdjustableOrRelativeDate
settlementDate
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

<bondOption
id=" xsd:ID [0..1]">

<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction. From a usage standpoint, put/call is the default option type, while payer/receiver indicator is used for options index credit default swaps, consistently with the industry practice. Straddle is used for the case of straddle strategy, that combine a call and a put with the same strike.'

<premium> Premium </premium> [0..1]

'The option premium payable by the buyer to the seller.'

<exercise> ... </exercise> [1]
<exerciseProcedure> ExerciseProcedure </exerciseProcedure> [1]

'A set of parameters defining procedures associated with the exercise.'

<feature> OptionFeature </feature> [0..1]

'An Option feature such as quanto, asian, barrier, knock.'

Start Choice [0..1]

'A choice between an explicit representation of the notional amount, or a reference to a notional amount defined elsewhere in this document.'

<notionalReference> NotionalAmountReference </notionalReference> [1]
<notionalAmount> Money </notionalAmount> [1]
End Choice
Start Group: OptionDenomination.model [0..1]
<optionEntitlement> PositiveDecimal </optionEntitlement> [1]

'The number of units of underlyer per option comprised in the option transaction.'

<entitlementCurrency> Currency </entitlementCurrency> [0..1]

'TODO'

<numberOfOptions> PositiveDecimal </numberOfOptions> [0..1]

'The number of options comprised in the option transaction.'

End Group: OptionDenomination.model
<settlementType> SettlementTypeEnum </settlementType> [0..1]
<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
<settlementAmount> Money </settlementAmount> [1]

'Settlement Amount'

<settlementCurrency> Currency </settlementCurrency> [1]

'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
<strike> BondOptionStrike </strike> [1]

'Strike of the the Bond Option.'

Start Choice [1]
<bond> ... </bond> [1]

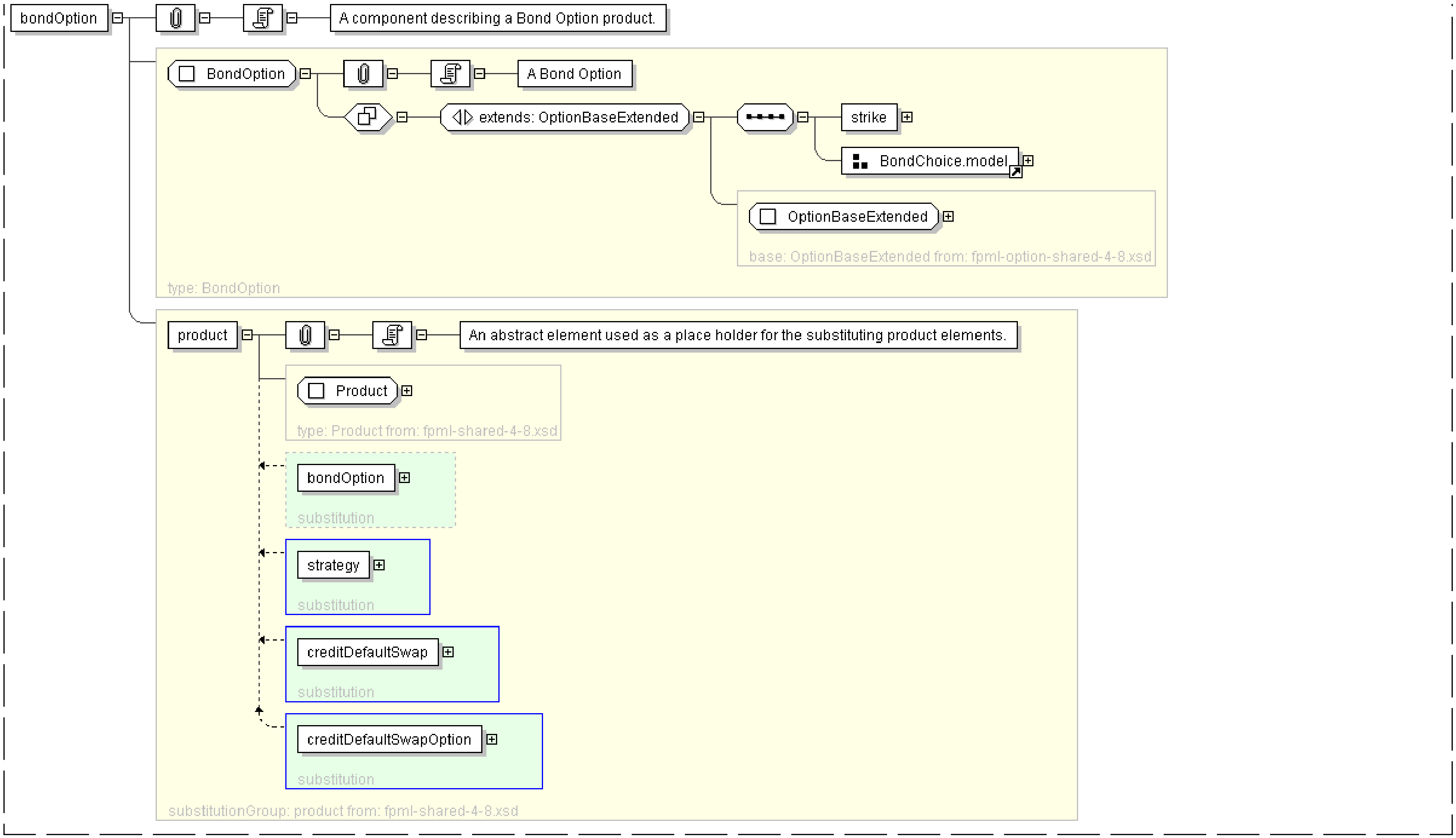
'A bond instrument referenced by a contract'

<convertibleBond> ... </convertibleBond> [1]

'A convertible bond instrument referenced by a contract.'

End Choice
</bondOption>

Diagram



Schema Component Representation

```
<xsd:element name="bondOption" type=" BondOption " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: BondOption

Super-types:	OptionBaseExtended < **BondOption** (by extension)
Sub-types:	None

Name	BondOption
Used by (from the same schema document)	Element **bondOption**

Abstract	no
Documentation	A Bond Option

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <optionType> OptionTypeEnum </optionType> [1]
   'The type of option transaction. From a usage standpoint, put/call is the default option
   type, while payer/receiver indicator is used for options index credit default
   swaps, consistently with the industry practice. Straddle is used for the case of
   straddle strategy, that combine a call and a put with the same strike.'

   <premium> Premium </premium> [0..1]
   'The option premium payable by the buyer to the seller.'

   <exercise> ... </exercise> [1]
   <exerciseProcedure> ExerciseProcedure </exerciseProcedure> [1]
   'A set of parameters defining procedures associated with the exercise.'

   <feature> OptionFeature </feature> [0..1]
   'An Option feature such as quanto, asian, barrier, knock.'

Start Choice [0..1]
'A choice between an explicit representation of the notional amount, or a reference to
a notional amount defined elsewhere in this document.'

      <notionalReference> NotionalAmountReference </notionalReference> [1]
      <notionalAmount> Money </notionalAmount> [1]
End Choice
Start Group: OptionDenomination.model [0..1]
      <optionEntitlement> PositiveDecimal </optionEntitlement> [1]
      'The number of units of underlyer per option comprised in the option transaction.'

      <entitlementCurrency> Currency </entitlementCurrency> [0..1]
      'TODO'

      <numberOfOptions> PositiveDecimal </numberOfOptions> [0..1]
      'The number of options comprised in the option transaction.'
```

End Group: OptionDenomination.model
<settlementType> SettlementTypeEnum </settlementType> [0..1]
<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
<settlementAmount> Money </settlementAmount> [1]

'Settlement Amount'

<settlementCurrency> Currency </settlementCurrency> [1]

'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
<strike> BondOptionStrike </strike> [1]

'Strike of the the Bond Option.'

Start Choice [1]
<bond> ... </bond> [1]

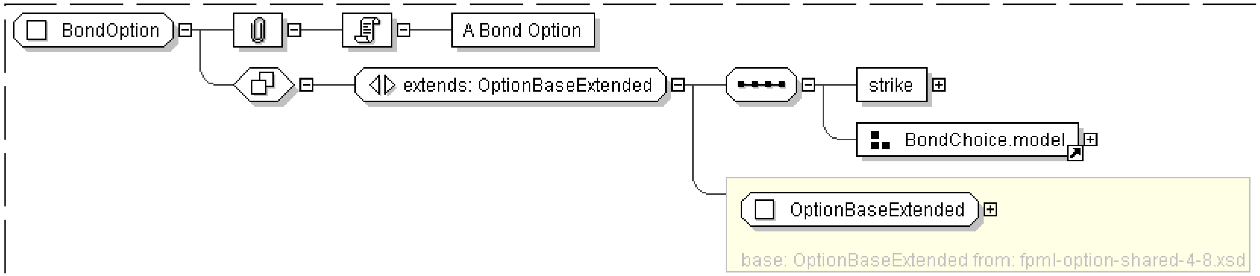
'A bond instrument referenced by a contract'

<convertibleBond> ... </convertibleBond> [1]

'A convertible bond instrument referenced by a contract.'

End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="BondOption">
   <xsd:complexContent>
      <xsd:extension base=" OptionBaseExtended ">
         <xsd:sequence>
            <xsd:element name="strike" type=" BondOptionStrike "/>
            <xsd:group ref=" BondChoice.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: BondOptionStrike

Super-types:	None
Sub-types:	None

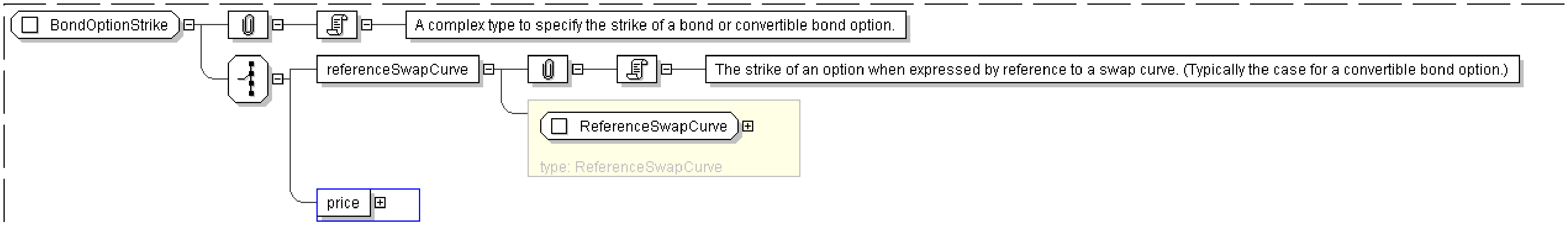
Name	BondOptionStrike
Used by (from the same schema document)	Complex Type **BondOption**
Abstract	no
Documentation	A complex type to specify the strike of a bond or convertible bond option.

XML Instance Representation

```
<...>
Start Choice [1]
      <referenceSwapCurve> ReferenceSwapCurve </referenceSwapCurve> [1]
      'The strike of an option when expressed by reference to a swap curve. (Typically the case for
      a convertible bond option.)'

      <price> OptionStrike </price> [1]
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BondOptionStrike">
   <xsd:choice>
      <xsd:element name="referenceSwapCurve" type=" ReferenceSwapCurve "/>
      <xsd:element name="price" type=" OptionStrike "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: MakeWholeAmount

Super-types:	SwapCurveValuation < **MakeWholeAmount** (by extension)
Sub-types:	None

Name	MakeWholeAmount
Used by (from the same schema document)	Complex Type **ReferenceSwapCurve**
Abstract	no
Documentation	A complex type to specify the amount to be paid by the buyer of the option if the option is exercised prior to the Early Call Date (Typically applicable to the convertible bond options).

XML Instance Representation

```
<...>
```

<floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
<indexTenor> Period </indexTenor> [0..1]

'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'

<spread> xsd:decimal </spread> [1]

'Spread in basis points over the floating rate index.'

<side> QuotationSideEnum </side> [0..1]

'The side (bid/mid/ask) of the measure.'

<interpolationMethod> InterpolationMethod **</interpolationMethod>** [0..1]

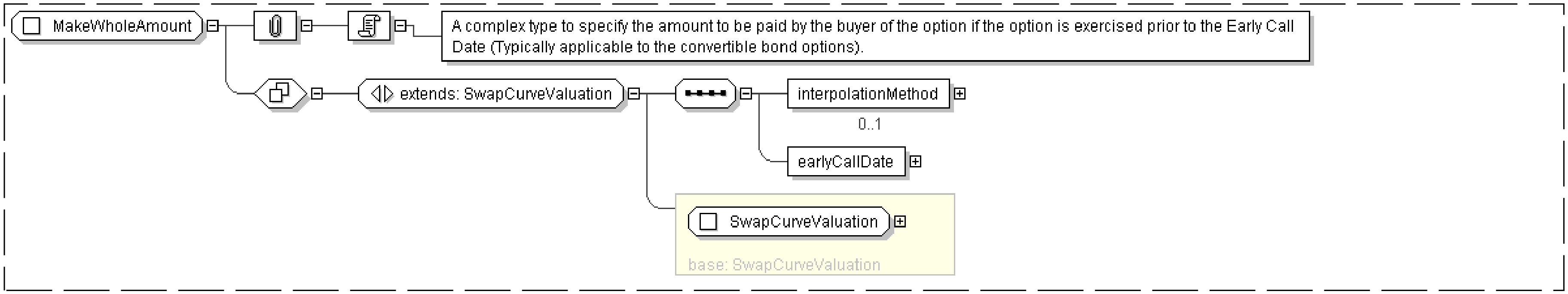
'The type of interpolation method that the calculation agent reserves the right to use.'

<earlyCallDate> IdentifiedDate **</earlyCallDate>** [1]

'Date prior to which the option buyer will have to pay a Make Whole Amount to the option seller if he/she exercises the option.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="MakeWholeAmount">
   <xsd:complexContent>
      <xsd:extension base=" SwapCurveValuation ">
         <xsd:sequence>
            <xsd:element name="interpolationMethod" type=" InterpolationMethod " minOccurs="0"/>
            <xsd:element name="earlyCallDate" type=" IdentifiedDate "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReferenceSwapCurve

Super-types:	None
Sub-types:	None

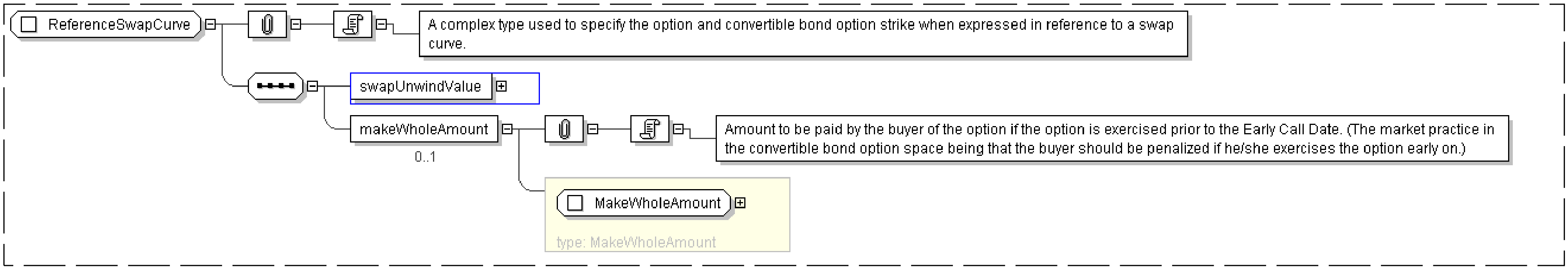
Name	ReferenceSwapCurve
Used by (from the same schema document)	Complex Type **BondOptionStrike**
Abstract	no

Documentation	A complex type used to specify the option and convertible bond option strike when expressed in reference to a swap curve.

XML Instance Representation

```
<...>
   <swapUnwindValue> SwapCurveValuation </swapUnwindValue> [1]
   <makeWholeAmount> MakeWholeAmount </makeWholeAmount> [0..1]
   'Amount to be paid by the buyer of the option if the option is exercised prior to the
   Early Call Date. (The market practice in the convertible bond option space being that the
   buyer should be penalized if he/she exercises the option early on.)'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReferenceSwapCurve">
   <xsd:sequence>
      <xsd:element name="swapUnwindValue" type=" SwapCurveValuation "/>
      <xsd:element name="makeWholeAmount" type=" MakeWholeAmount " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SwapCurveValuation

Super-types:	None
Sub-types:	• MakeWholeAmount (by extension)

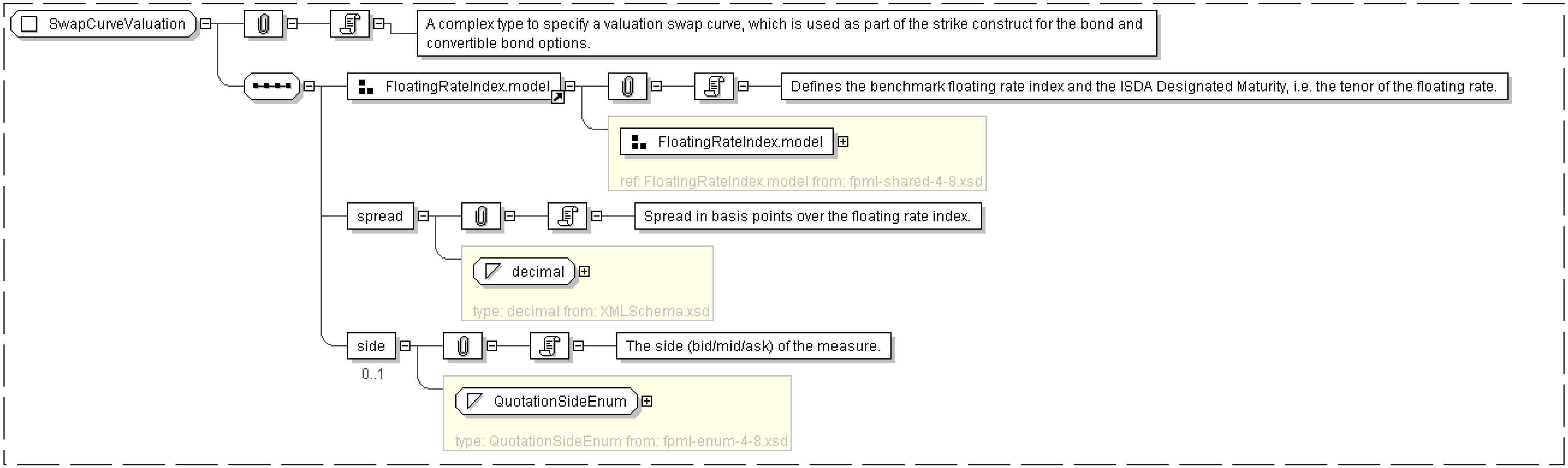
Name	SwapCurveValuation
Used by (from the same schema document)	Complex Type **ReferenceSwapCurve**
Abstract	no
Documentation	A complex type to specify a valuation swap curve, which is used as part of the strike construct for the bond and convertible bond options.

XML Instance Representation

```
<...>
   <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
   <indexTenor> Period </indexTenor> [0..1]
   'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'
   <spread> xsd:decimal </spread> [1]
   'Spread in basis points over the floating rate index.'
```

```
<side> QuotationSideEnum </side> [0..1]
'The side (bid/mid/ask) of the measure.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SwapCurveValuation">
   <xsd:sequence>
      <xsd:group ref=" FloatingRateIndex.model "/>
      <xsd:element name="spread" type=" xsd:decimal "/>
      <xsd:element name="side" type=" QuotationSideEnum " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type   Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-option-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-option-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

top

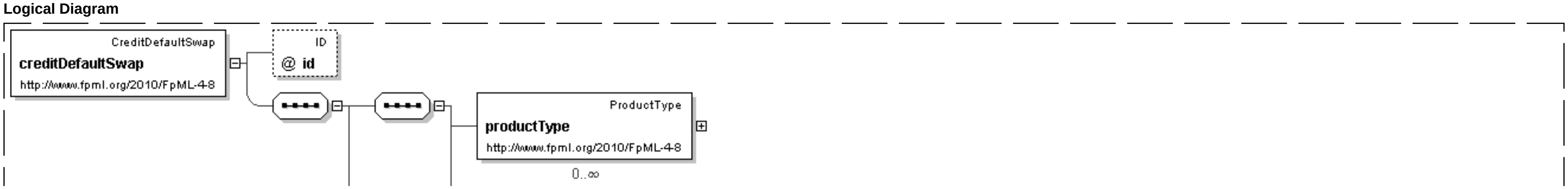
Global Declarations

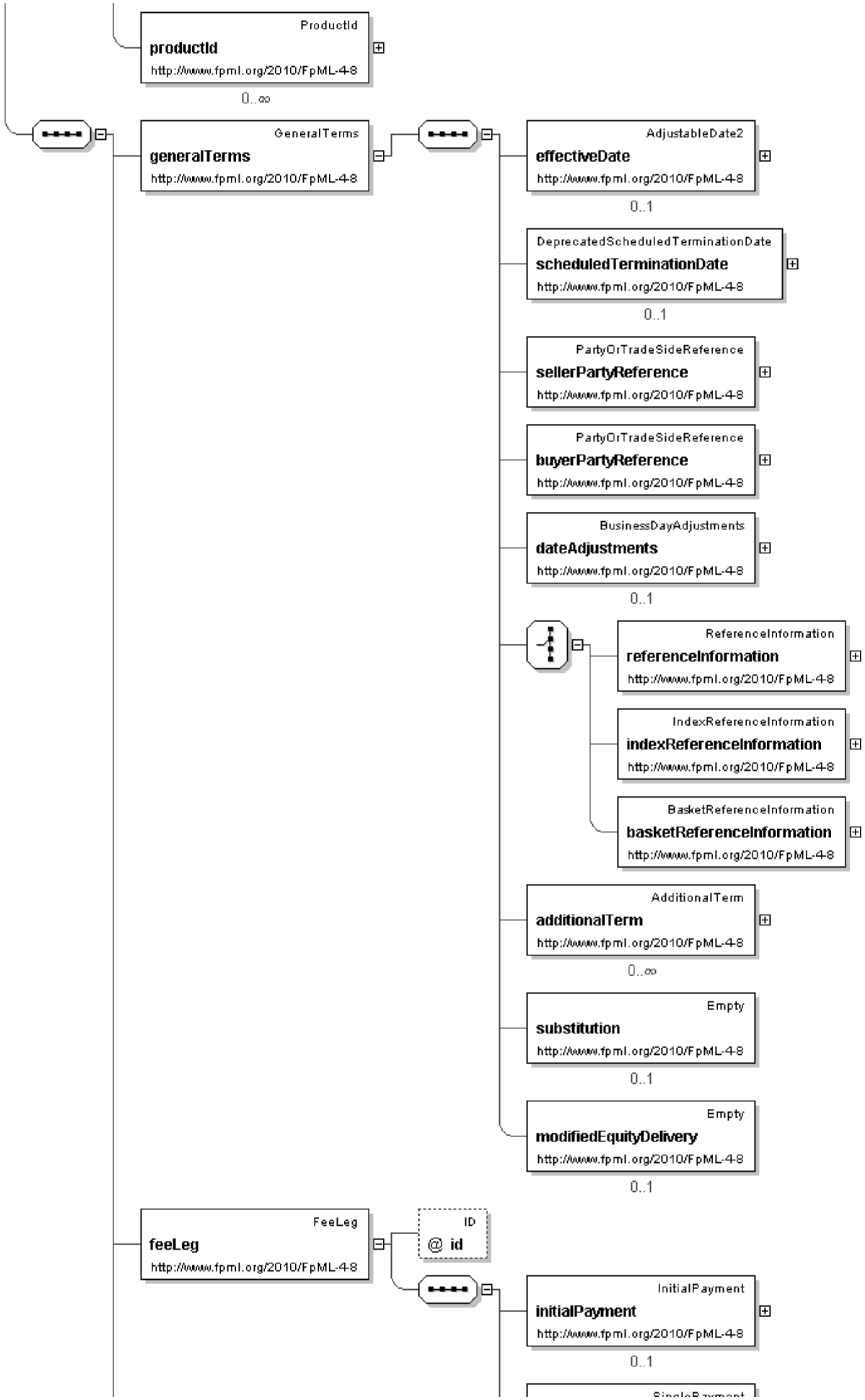
Element: creditDefaultSwap

- *This element can be used wherever the following element is referenced:*
  - product

Name	creditDefaultSwap
Used by (from the same schema document)	Complex Type **CreditDefaultSwapOption**
Type	CreditDefaultSwap
Nillable	no
Abstract	no
Documentation	In a credit default swap one party (the protection seller) agrees to compensate another party (the protection buyer) if a specified company or Sovereign (the reference entity) experiences a credit event, indicating it is or may be unable to service its debts. The protection seller is typically paid a fee and/ or premium, expressed as an annualized percent of the notional in basis points, regularly over the life of the transaction or otherwise as agreed by the parties.

Logical Diagram




ProductId
productId
http://www.fpml.org/2010/FpML-4-8
0..∞
GeneralTerms
generalTerms
http://www.fpml.org/2010/FpML-4-8
AdjustableDate2
effectiveDate
http://www.fpml.org/2010/FpML-4-8
0..1
DeprecatedScheduledTerminationDate
scheduledTerminationDate
http://www.fpml.org/2010/FpML-4-8
0..1
PartyOrTradeSideReference
sellerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrTradeSideReference
buyerPartyReference
http://www.fpml.org/2010/FpML-4-8
BusinessDayAdjustments
dateAdjustments
http://www.fpml.org/2010/FpML-4-8
0..1
ReferenceInformation
referenceInformation
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IndexReferenceInformation
indexReferenceInformation
http://www.fpml.org/2010/FpML-4-8
BasketReferenceInformation
basketReferenceInformation
http://www.fpml.org/2010/FpML-4-8
AdditionalTerm
additionalTerm
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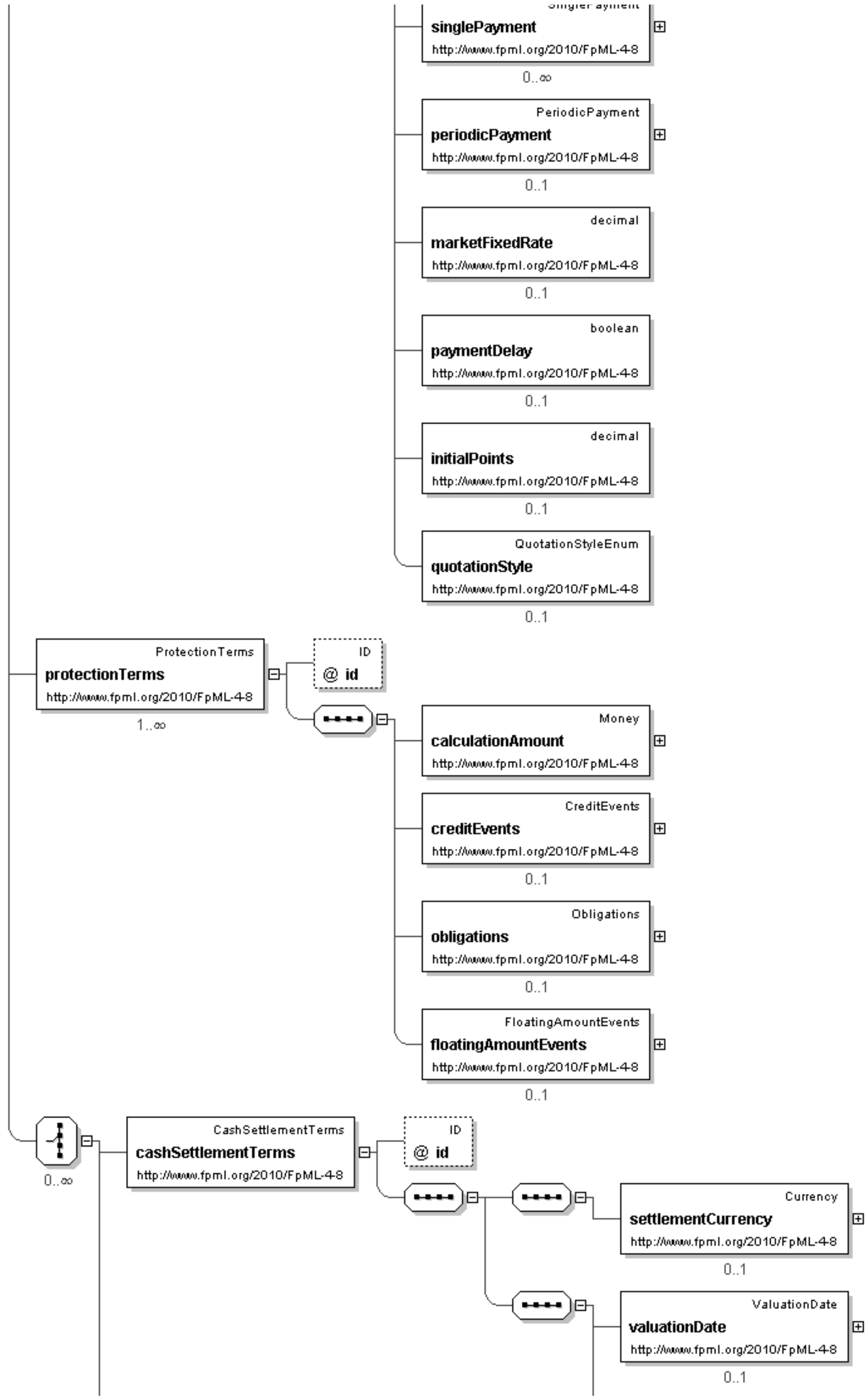
0..∞
Empty
substitution
http://www.fpml.org/2010/FpML-4-8
0..1
Empty
modifiedEquityDelivery
http://www.fpml.org/2010/FpML-4-8
0..1
FeeLeg
feeLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
InitialPayment
initialPayment
http://www.fpml.org/2010/FpML-4-8
0..1


SinglePayment
singlePayment
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0..∞
PeriodicPayment
periodicPayment
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
marketFixedRate
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
paymentDelay
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
initialPoints
http://www.fpml.org/2010/FpML-4-8
0..1
QuotationStyleEnum
quotationStyle
http://www.fpml.org/2010/FpML-4-8
0..1
ProtectionTerms
protectionTerms
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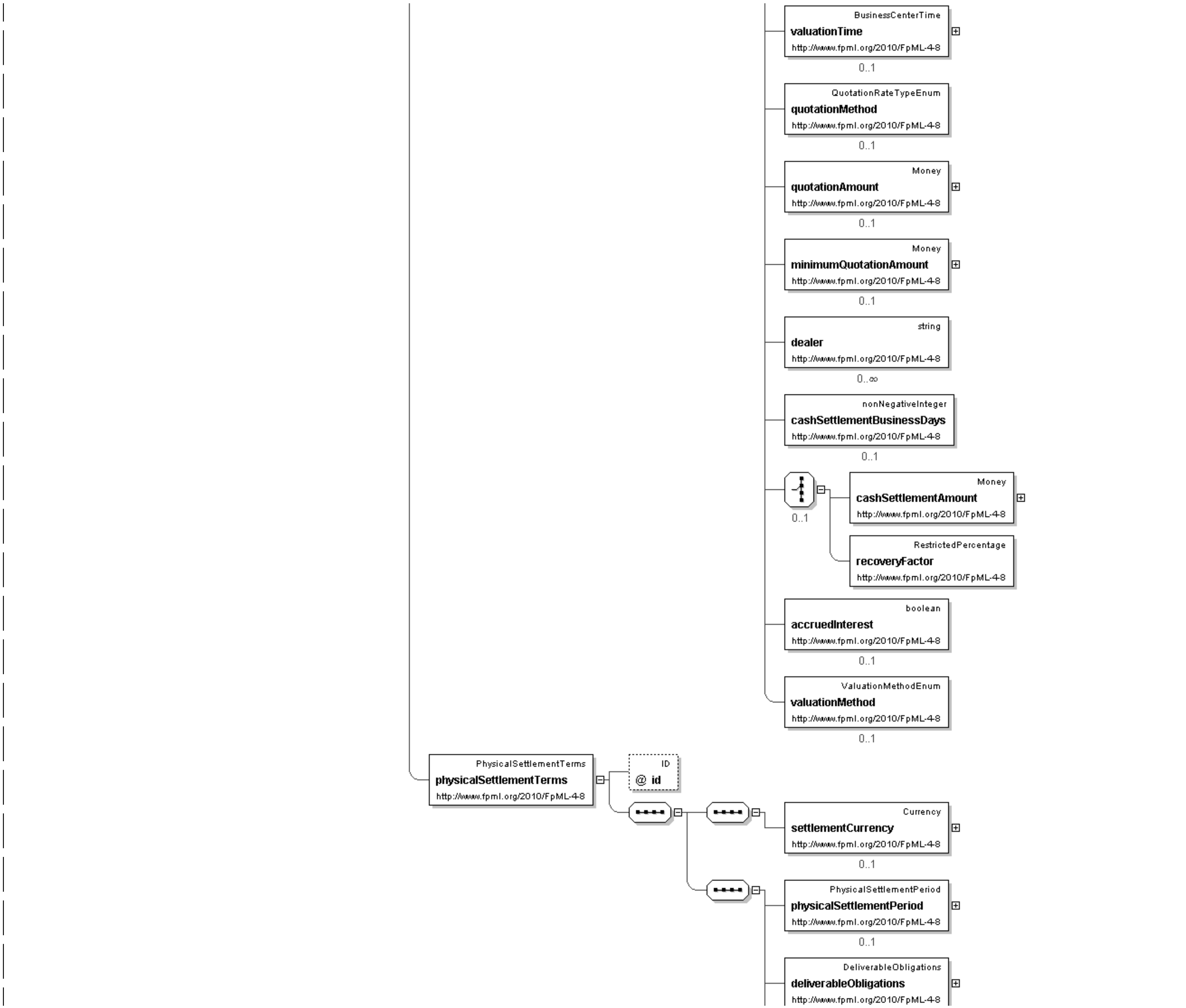
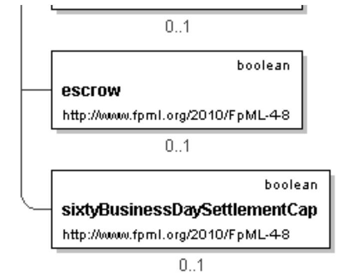
1..∞
ID
@ id
Money
calculationAmount
http://www.fpml.org/2010/FpML-4-8
CreditEvents
creditEvents
http://www.fpml.org/2010/FpML-4-8
0..1
Obligations
obligations
http://www.fpml.org/2010/FpML-4-8
0..1
FloatingAmountEvents
floatingAmountEvents
http://www.fpml.org/2010/FpML-4-8
0..1
0..∞
CashSettlementTerms
cashSettlementTerms
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
ValuationDate
valuationDate
http://www.fpml.org/2010/FpML-4-8
0..1



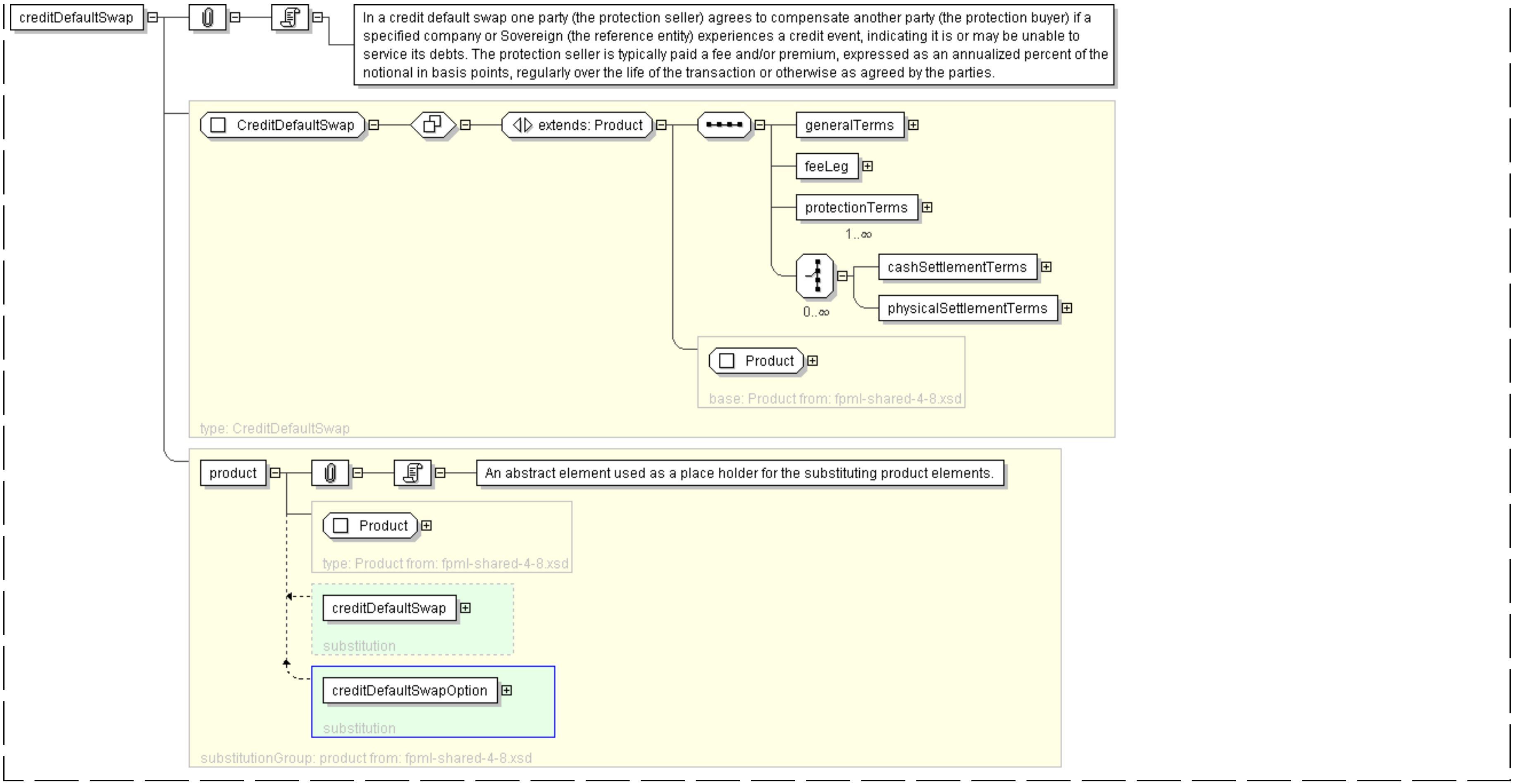
BusinessCenterTime
valuationTime
http://www.fpml.org/2010/FpML-4-8
0..1
QuotationRateTypeEnum
quotationMethod
http://www.fpml.org/2010/FpML-4-8
0..1
Money
quotationAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Money
minimumQuotationAmount
http://www.fpml.org/2010/FpML-4-8
0..1
string
dealer
http://www.fpml.org/2010/FpML-4-8
0..∞
nonNegativeInteger
cashSettlementBusinessDays
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
Money
cashSettlementAmount
http://www.fpml.org/2010/FpML-4-8
RestrictedPercentage
recoveryFactor
http://www.fpml.org/2010/FpML-4-8
boolean
accruedInterest
http://www.fpml.org/2010/FpML-4-8
0..1
ValuationMethodEnum
valuationMethod
http://www.fpml.org/2010/FpML-4-8
0..1
PhysicalSettlementTerms
physicalSettlementTerms
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
PhysicalSettlementPeriod
physicalSettlementPeriod
http://www.fpml.org/2010/FpML-4-8
0..1
DeliverableObligations
deliverableObligations
http://www.fpml.org/2010/FpML-4-8



XML Instance Representation

```
<creditDefaultSwap
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <generalTerms> GeneralTerms </generalTerms> [1]
   'This element contains all the data that appears in the section entitled \"1. General Terms
   \" in the 2003 ISDA Credit Derivatives Confirmation.'

   <feeLeg> FeeLeg </feeLeg> [1]
   'This element contains all the terms relevant to defining the fixed amounts/payments per
   the applicable ISDA definitions.'

   <protectionTerms> ProtectionTerms </protectionTerms> [1..*]
   'This element contains all the terms relevant to defining the applicable floating rate
   payer calculation amount, credit events and associated conditions to settlement, and
   reference obligations.'

Start Choice [0..*]
      <cashSettlementTerms> CashSettlementTerms </cashSettlementTerms> [1]
      'This element contains all the ISDA terms relevant to cash settlement for when cash
      settlement is applicable. ISDA 2003 Term: Cash Settlement'

      <physicalSettlementTerms> PhysicalSettlementTerms </physicalSettlementTerms> [1]
      'This element contains all the ISDA terms relevant to physical settlement for when
      physical settlement is applicable. ISDA 2003 Term: Physical Settlement'

End Choice
</creditDefaultSwap>
```

Diagram



Schema Component Representation

```
<xsd:element name="creditDefaultSwap" type=" CreditDefaultSwap " substitutionGroup="product"/>
```

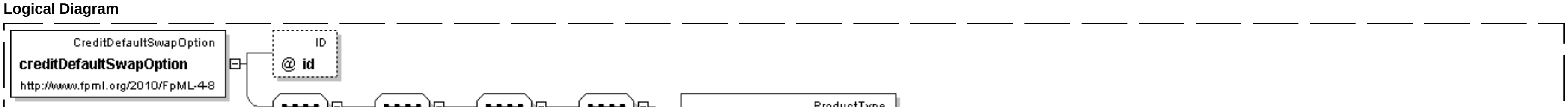
top

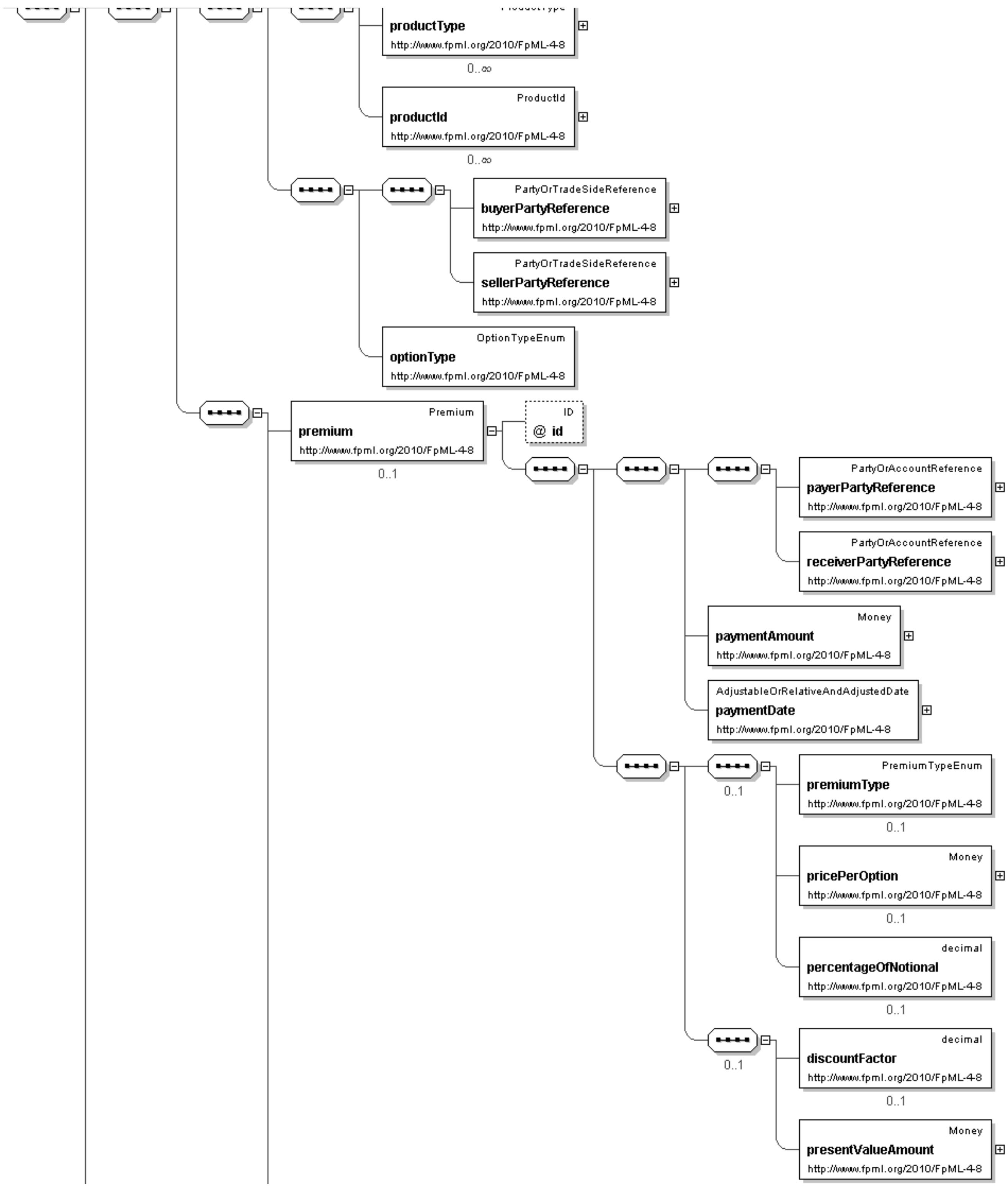
Element: creditDefaultSwapOption

- *This element can be used wherever the following element is referenced:*
  - product

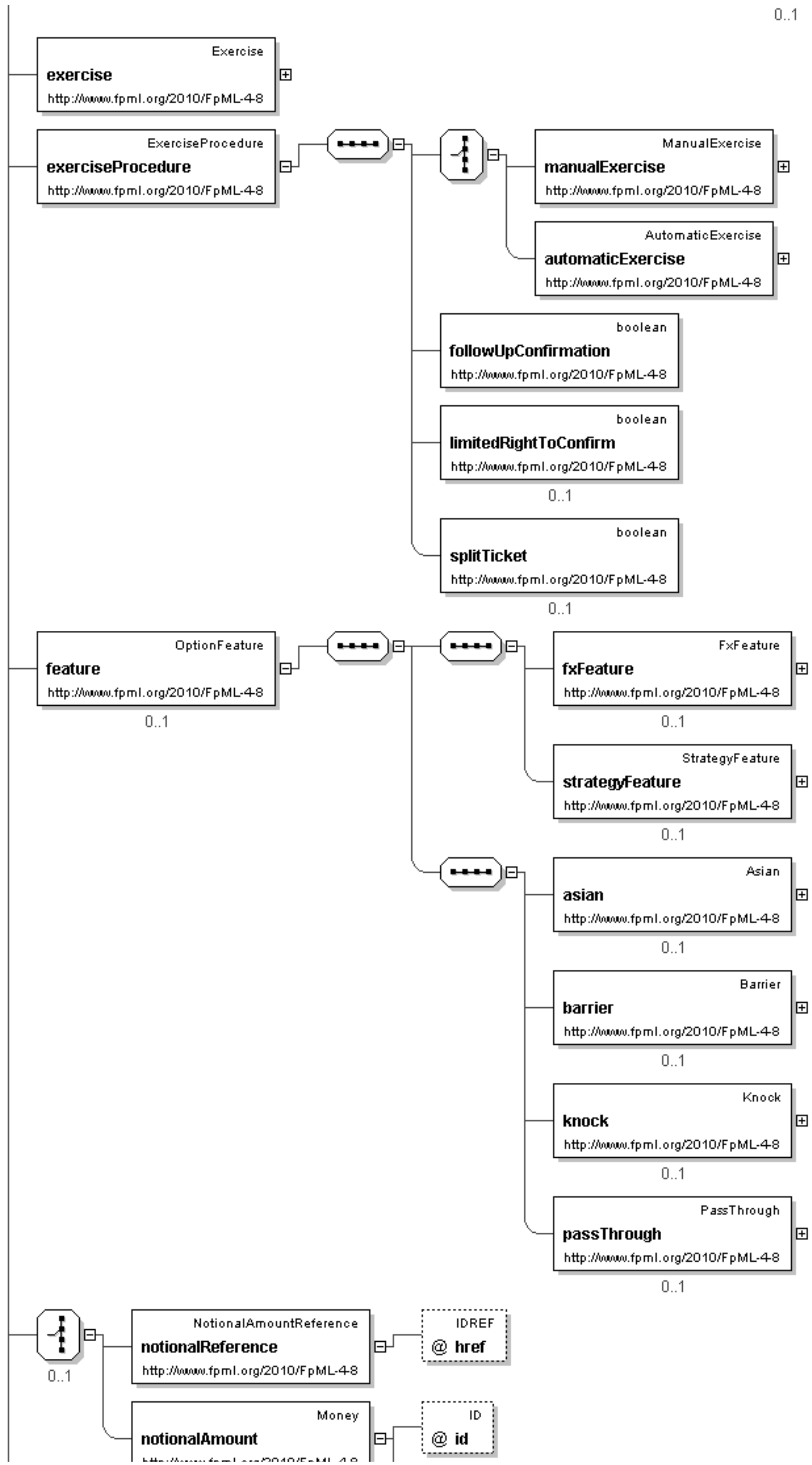
Name	creditDefaultSwapOption
Type	CreditDefaultSwapOption
Nillable	no
Abstract	no
Documentation	An option on a credit default swap.

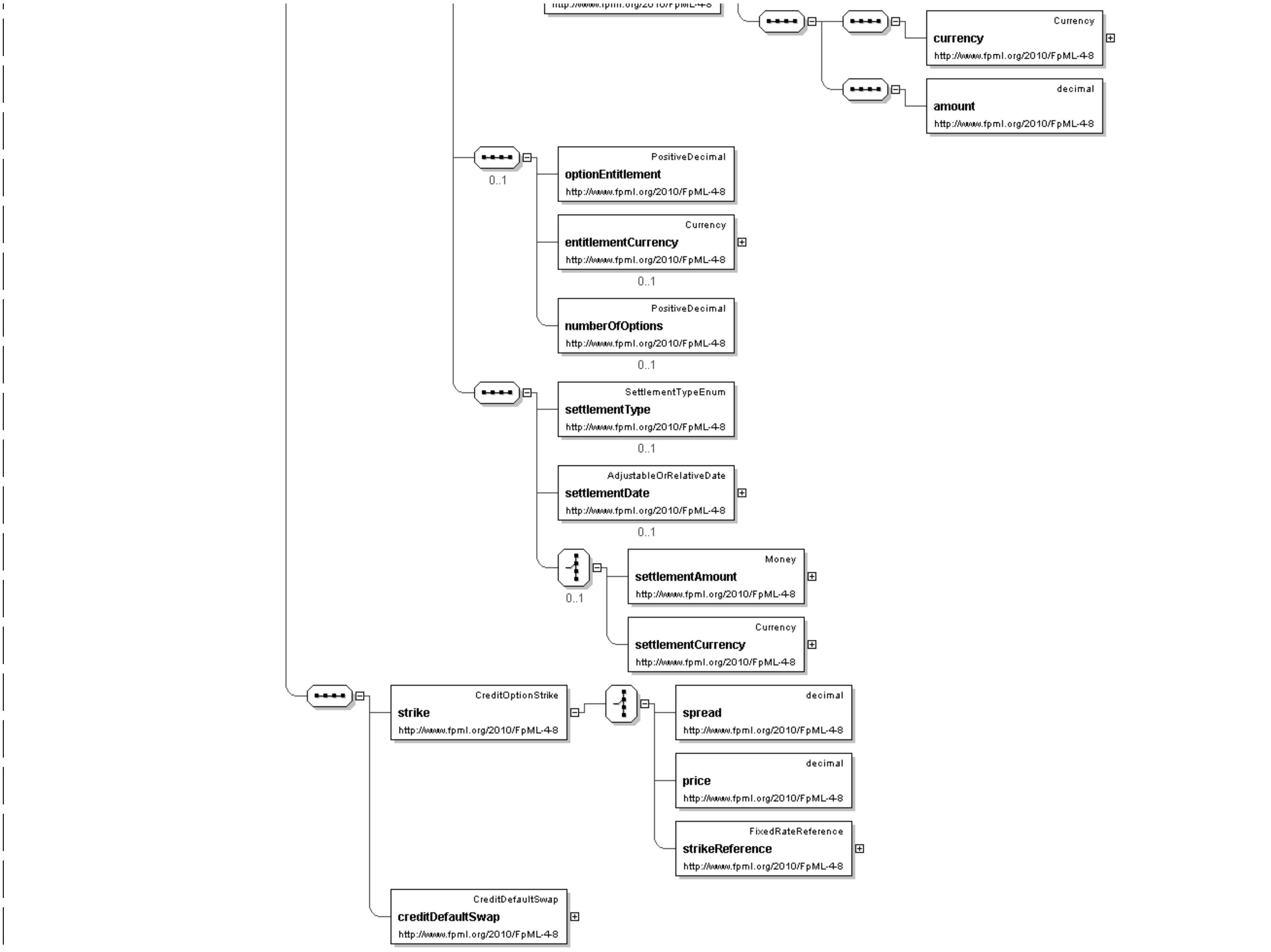
Logical Diagram





productType
http://www.fpml.org/2010/FpML-4-8
0..∞
ProductId
productId
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrTradeSideReference
buyerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrTradeSideReference
sellerPartyReference
http://www.fpml.org/2010/FpML-4-8
OptionTypeEnum
optionType
http://www.fpml.org/2010/FpML-4-8
Premium
premium
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
paymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeAndAdjustedDate
paymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
PremiumTypeEnum
premiumType
http://www.fpml.org/2010/FpML-4-8
0..1
Money
pricePerOption
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
percentageOfNotional
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1
Money
presentValueAmount
http://www.fpml.org/2010/FpML-4-8


0..1
Exercise
exercise
http://www.fpml.org/2010/FpML-4-8
ExerciseProcedure
exerciseProcedure
http://www.fpml.org/2010/FpML-4-8
ManualExercise
manualExercise
http://www.fpml.org/2010/FpML-4-8
AutomaticExercise
automaticExercise
http://www.fpml.org/2010/FpML-4-8
boolean
followUpConfirmation
http://www.fpml.org/2010/FpML-4-8
boolean
limitedRightToConfirm
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
splitTicket
http://www.fpml.org/2010/FpML-4-8
0..1
OptionFeature
feature
http://www.fpml.org/2010/FpML-4-8
0..1
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
StrategyFeature
strategyFeature
http://www.fpml.org/2010/FpML-4-8
0..1
Asian
asian
http://www.fpml.org/2010/FpML-4-8
0..1
Barrier
barrier
http://www.fpml.org/2010/FpML-4-8
0..1
Knock
knock
http://www.fpml.org/2010/FpML-4-8
0..1
PassThrough
passThrough
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
NotionalAmountReference
notionalReference
http://www.fpml.org/2010/FpML-4-8
IDREF
@ href
Money
notionalAmount
ID
@ id



XML Instance Representation

```
<creditDefaultSwapOption
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'
```

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction. From a usage standpoint, put/call is the default option type, while payer/receiver indicator is used for options index credit default swaps, consistently with the industry practice. Straddle is used for the case of straddle strategy, that combine a call and a put with the same strike.'

<premium> Premium </premium> [0..1]

'The option premium payable by the buyer to the seller.'

<exercise> ... </exercise> [1]
<exerciseProcedure> ExerciseProcedure </exerciseProcedure> [1]

'A set of parameters defining procedures associated with the exercise.'

<feature> OptionFeature </feature> [0..1]

'An Option feature such as quanto, asian, barrier, knock.'

Start Choice [0..1]

'A choice between an explicit representation of the notional amount, or a reference to a notional amount defined elsewhere in this document.'

<notionalReference> NotionalAmountReference </notionalReference> [1]
<notionalAmount> Money </notionalAmount> [1]
End Choice
Start Group: OptionDenomination.model [0..1]
<optionEntitlement> PositiveDecimal </optionEntitlement> [1]

'The number of units of underlyer per option comprised in the option transaction.'

<entitlementCurrency> Currency </entitlementCurrency> [0..1]

'TODO'

<numberOfOptions> PositiveDecimal </numberOfOptions> [0..1]

'The number of options comprised in the option transaction.'

End Group: OptionDenomination.model
<settlementType> SettlementTypeEnum </settlementType> [0..1]
<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
<settlementAmount> Money </settlementAmount> [1]

'Settlement Amount'

<settlementCurrency> Currency </settlementCurrency> [1]

'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model

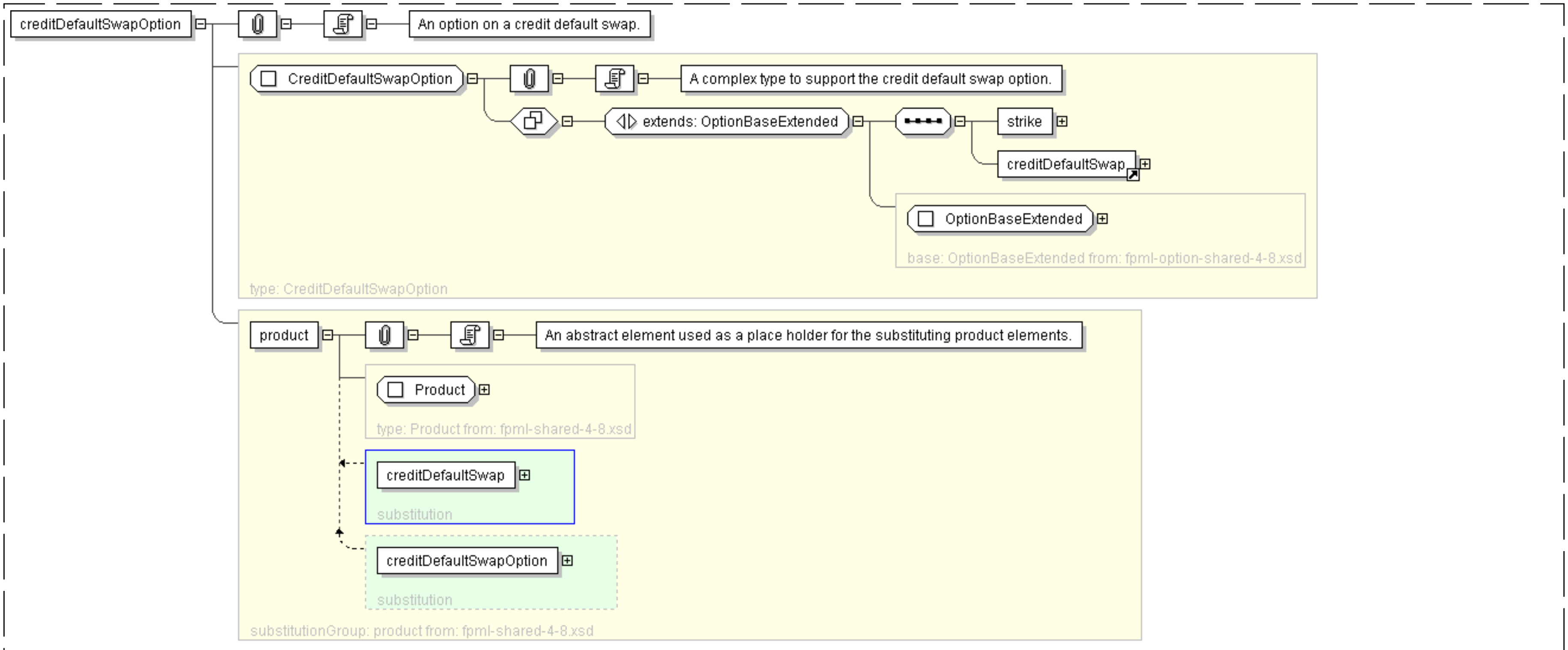
<strike> CreditOptionStrike </strike> [1]

'Specifies the strike of the option on credit default swap.'

<creditDefaultSwap> ... </creditDefaultSwap> [1]

</creditDefaultSwapOption>

Diagram



Schema Component Representation

```
<xsd:element name="creditDefaultSwapOption" type=" CreditDefaultSwapOption
" substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: AdditionalFixedPayments

Super-types:	None
Sub-types:	None

Name	AdditionalFixedPayments
Used by (from the same schema document)	Complex Type **FloatingAmountEvents**
Abstract	no

XML Instance Representation

<...>

<interestShortfallReimbursement> Empty </interestShortfallReimbursement> [0..1]

'An additional Fixed Payment Event. Corresponds to the payment by or on behalf of the Issuer

of an actual interest amount in respect to the reference obligation that is greater than the expected interest amount. ISDA 2003 Term: Interest Shortfall Reimbursement.'

<principalShortfallReimbursement> Empty </principalShortfallReimbursement> [0..1]

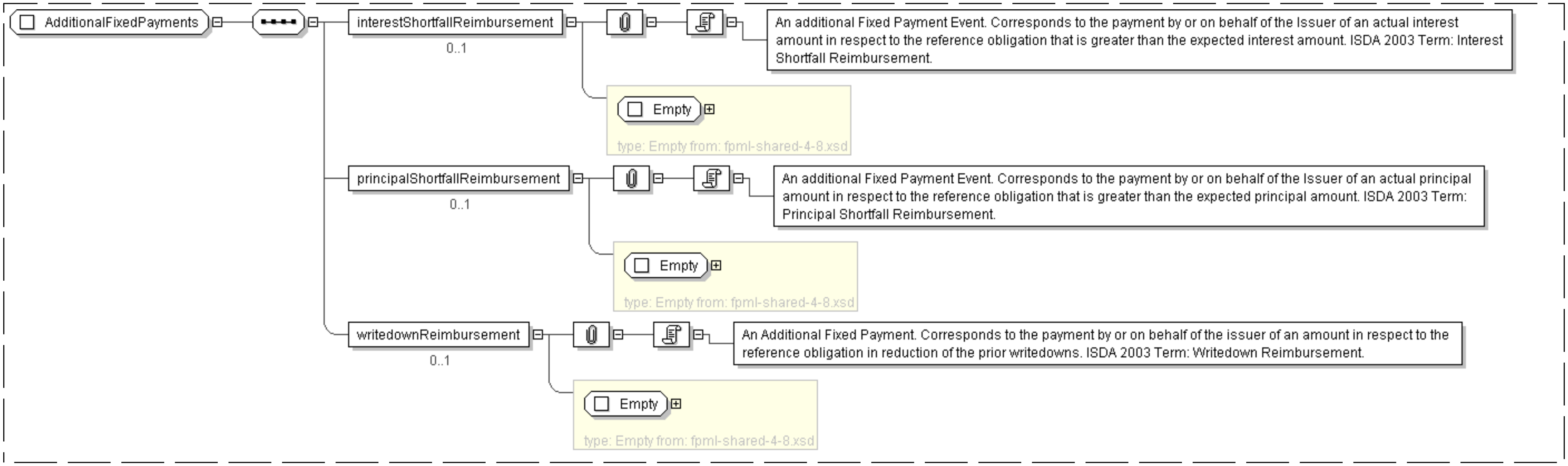
'An additional Fixed Payment Event. Corresponds to the payment by or on behalf of the Issuer of an actual principal amount in respect to the reference obligation that is greater than the expected principal amount. ISDA 2003 Term: Principal Shortfall Reimbursement.'

<writedownReimbursement> Empty </writedownReimbursement> [0..1]

'An Additional Fixed Payment. Corresponds to the payment by or on behalf of the issuer of an amount in respect to the reference obligation in reduction of the prior writedowns. ISDA 2003 Term: Writedown Reimbursement.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="AdditionalFixedPayments">
   <xsd:sequence>
      <xsd:element name="interestShortfallReimbursement" type=" Empty " minOccurs="0"/>
      <xsd:element name="principalShortfallReimbursement" type=" Empty " minOccurs="0"/>
      <xsd:element name="writedownReimbursement" type=" Empty " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AdditionalTerm

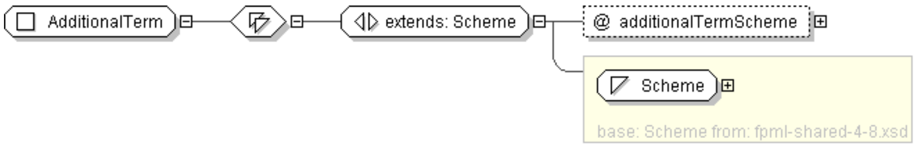
Super-types:	Scheme < **AdditionalTerm** (by extension)
Sub-types:	None

Name	AdditionalTerm
Used by (from the same schema document)	Complex Type **GeneralTerms**
Abstract	no

XML Instance Representation

```
<...
additionalTermScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AdditionalTerm">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="additionalTermScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: AdjustedPaymentDates

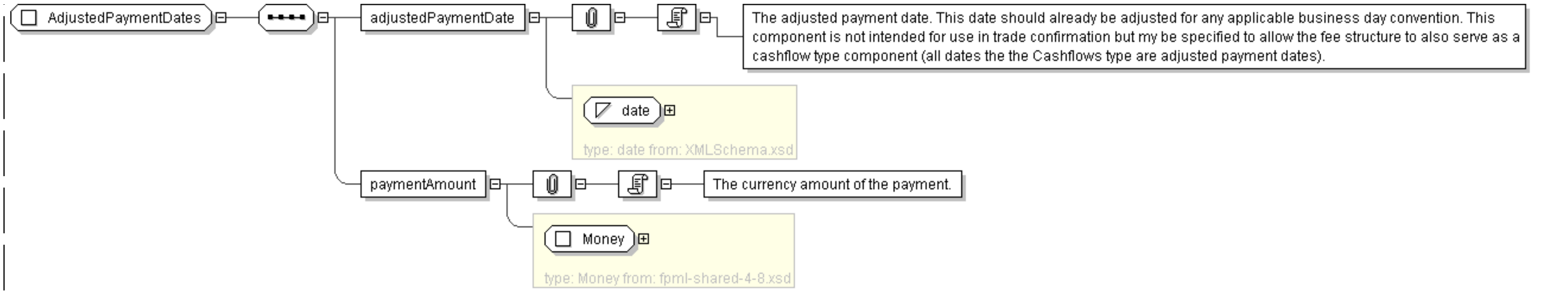
Super-types:	None
Sub-types:	None

Name	AdjustedPaymentDates
Used by (from the same schema document)	Complex Type **PeriodicPayment**
Abstract	no

XML Instance Representation

```
<...>
   <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
   'The adjusted payment date. This date should already be adjusted for any applicable
   business day convention. This component is not intended for use in trade confirmation but my
   be specified to allow the fee structure to also serve as a cashflow type component (all
   dates the the Cashflows type are adjusted payment dates).'

   <paymentAmount> Money </paymentAmount> [1]
   'The currency amount of the payment.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AdjustedPaymentDates">
   <xsd:sequence>
      <xsd:element name="adjustedPaymentDate" type=" xsd:date "/>
      <xsd:element name="paymentAmount" type=" Money "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: BasketReferenceInformation

Super-types:	None
Sub-types:	None

Name	BasketReferenceInformation
Used by (from the same schema document)	Complex Type **GeneralTerms**
Abstract	no
Documentation	CDS Basket Reference Information

XML Instance Representation

```
<...>
Start Group: BasketIdentifier.model [0..1]
'Reuses the group that specifies a name and an identifier for a given basket.'

Start Choice [1]
         <basketName> BasketName </basketName> [1]
         'The name of the basket expressed as a free format string. FpML does not define usage rules
         for this element.'

         <basketId> BasketId </basketId> [0..*]
         'A CDS basket identifier'

         <basketId> BasketId </basketId> [1..*]
         'A CDS basket identifier'

End Choice
End Group: BasketIdentifier.model
   <referencePool> ReferencePool </referencePool> [1]
   'This element contains all the reference pool items to define the reference entity
   and reference obligation(s) in the basket'

Start Choice [0..1]
      <nthToDefault> xsd:positiveInteger </nthToDefault> [1]
      'N th reference obligation to default triggers payout.'
```

<mthToDefault> xsd:positiveInteger </mthToDefault> [0..1]

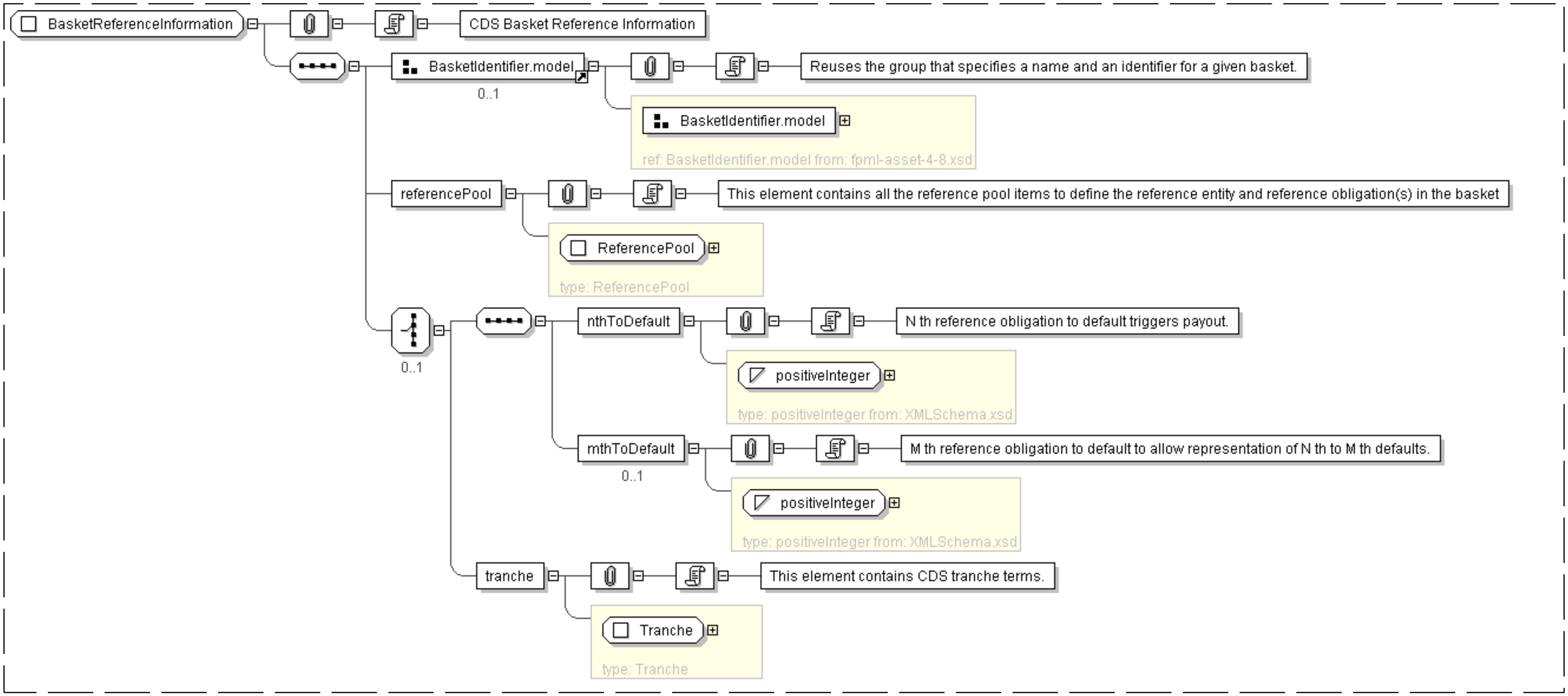
'M th reference obligation to default to allow representation of N th to M th defaults.'

<tranche> Tranche </tranche> [1]

'This element contains CDS tranche terms.'

End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="BasketReferenceInformation">
   <xsd:sequence>
      <xsd:group ref=" BasketIdentifier.model " minOccurs="0"/>
      <xsd:element name="referencePool" type=" ReferencePool "/>
      <xsd:choice minOccurs="0">
         <xsd:sequence>
            <xsd:element name="nthToDefault" type=" xsd:positiveInteger "/>
            <xsd:element name="mthToDefault" type=" xsd:positiveInteger " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element name="tranche" type=" Tranche "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CalculationAmount

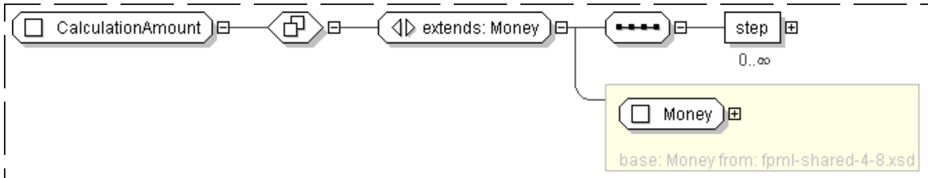
Super-types:	Money < **CalculationAmount** (by extension)
Sub-types:	None

Name	CalculationAmount
Used by (from the same schema document)	Complex Type **FixedAmountCalculation**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <currency> Currency </currency> [1]
   'The currency in which an amount is denominated.'

   <amount> xsd:decimal </amount> [1]
   'The monetary quantity in currency units.'

   <step> Step </step> [0..*]
   'A schedule of step date and value pairs. On each step date the associated step value
   becomes effective. A list of steps may be ordered in the document by ascending step date.
   An FpML document containing an unordered list of steps is still regarded as a
   conformant document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationAmount">
   <xsd:complexContent>
      <xsd:extension base=" Money ">
         <xsd:sequence>
            <xsd:element name="step" type=" Step " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CashSettlementTerms

Super-types:	SettlementTerms < **CashSettlementTerms** (by extension)
Sub-types:	None

Name	CashSettlementTerms
Used by (from the same schema document)	Complex Type **CreditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...
```

id=" xsd:ID [0..1]">
<settlementCurrency> Currency </settlementCurrency> [0..1]

'ISDA 2003 Term: Settlement Currency'

<valuationDate> ValuationDate **</valuationDate>** [0..1]

'The number of business days after conditions to settlement have been satisfied when the calculation agent obtains a price quotation on the Reference Obligation for purposes of cash settlement. There may be one or more valuation dates. This is typically specified if the cash settlement amount is not a fixed amount. ISDA 2003 Term: Valuation Date'

<valuationTime> BusinessCenterTime **</valuationTime>** [0..1]

'The time of day in the specified business center when the calculation agent seeks quotations for an amount of the reference obligation for purposes of cash settlement. ISDA 2003 Term: Valuation Time'

<quotationMethod> QuotationRateTypeEnum **</quotationMethod>** [0..1]

'The type of price quotations to be requested from dealers when determining the market value of the reference obligation for purposes of cash settlement. For example, Bid, Offer or Mid-market. ISDA 2003 Term: Quotation Method'

<quotationAmount> Money **</quotationAmount>** [0..1]

'In the determination of a cash settlement amount, if weighted average quotations are to be obtained, the quotation amount specifies an upper limit to the outstanding principal balance of the reference obligation for which the quote should be obtained. If not specified, the ISDA definitions provide for a fallback amount equal to the floating rate payer calculation amount. ISDA 2003 Term: Quotation Amount'

<minimumQuotationAmount> Money **</minimumQuotationAmount>** [0..1]

'In the determination of a cash settlement amount, if weighted average quotations are to be obtained, the minimum quotation amount specifies a minimum intended threshold amount of outstanding principal balance of the reference obligation for which the quote should be obtained. If not specified, the ISDA definitions provide for a fallback amount of the lower of either USD 1,000,000 (or its equivalent in the relevant obligation currency) or the quotation amount. ISDA 2003 Term: Minimum Quotation Amount'

<dealer> xsd:string **</dealer>** [0..*]

'A dealer from whom quotations are obtained by the calculation agent on the reference obligation for purposes of cash settlement. ISDA 2003 Term: Dealer'

<cashSettlementBusinessDays> xsd:nonNegativeInteger **</cashSettlementBusinessDays>** [0..1]

'The number of business days used in the determination of the cash settlement payment date. If a cash settlement amount is specified, the cash settlement payment date will be this number of business days following the calculation of the final price. If a cash settlement amount is not specified, the cash settlement payment date will be this number of business days after all conditions to settlement are satisfied. ISDA 2003 Term: Cash Settlement Date'

Start Group: FixedRecovery.model [0..1]
Start Choice [1]

<cashSettlementAmount> Money **</cashSettlementAmount>** [1]

'The amount paid by the seller to the buyer for cash settlement on the cash settlement date. If not otherwise specified, would typically be calculated as 100 (or the Reference Price) minus the price of the Reference Obligation (all expressed as a percentage) times Floating Rate Payer Calculation Amount. ISDA 2003 Term: Cash Settlement Amount.'

<recoveryFactor> RestrictedPercentage **</recoveryFactor>** [1]

'Used for fixed recovery, specifies the recovery level, determined at contract inception, to be applied on a default. Used to calculate the amount paid by the seller to the buyer for cash settlement on the cash settlement date. Amount calculation is (1 minus the Recovery Factor) multiplied by the Floating Rate Payer Calculation Amount. The currency will be derived from the Floating Rate Payer Calculation Amount.'

End Choice
End Group: FixedRecovery.model

<accruedInterest> xsd:boolean **</accruedInterest>** [0..1]

'Indicates whether accrued interest is included (true) or not (false). For cash settlement

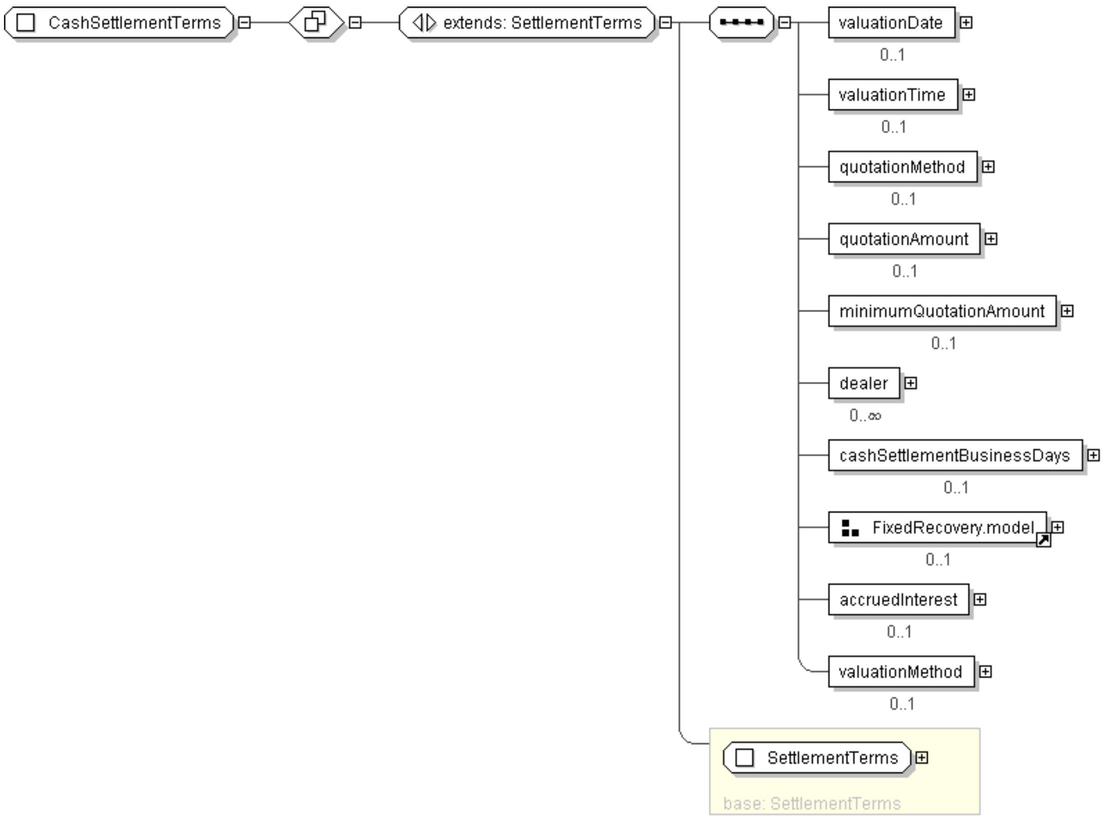
this specifies whether quotations should be obtained inclusive or not of accrued interest. For physical settlement this specifies whether the buyer should deliver the obligation with an outstanding principal balance that includes or excludes accrued interest. ISDA 2003 Term: Include/Exclude Accrued Interest'

<valuationMethod> ValuationMethodEnum **</valuationMethod>** [0..1]

'The ISDA defined methodology for determining the final price of the reference obligation for purposes of cash settlement. (ISDA 2003 Term: Valuation Method). For example, Market, Highest etc.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CashSettlementTerms">
   <xsd:complexContent>
      <xsd:extension base=" SettlementTerms ">
         <xsd:sequence>
            <xsd:element name="valuationDate" type=" ValuationDate " minOccurs="0"/>
            <xsd:element name="valuationTime" type=" BusinessCenterTime " minOccurs="0"/>
            <xsd:element name="quotationMethod" type=" QuotationRateTypeEnum " minOccurs="0"/>
            <xsd:element name="quotationAmount" type=" Money " minOccurs="0"/>
            <xsd:element name="minimumQuotationAmount" type=" Money " minOccurs="0"/>
            <xsd:element name="dealer" type=" xsd:string " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="cashSettlementBusinessDays" type=" xsd:nonNegativeInteger " minOccurs="0"/>
            <xsd:group ref=" FixedRecovery.model " minOccurs="0"/>
            <xsd:element name="accruedInterest" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="valuationMethod" type=" ValuationMethodEnum " minOccurs="0"/>
         </xsd:sequence>
```

```
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditDefaultSwap

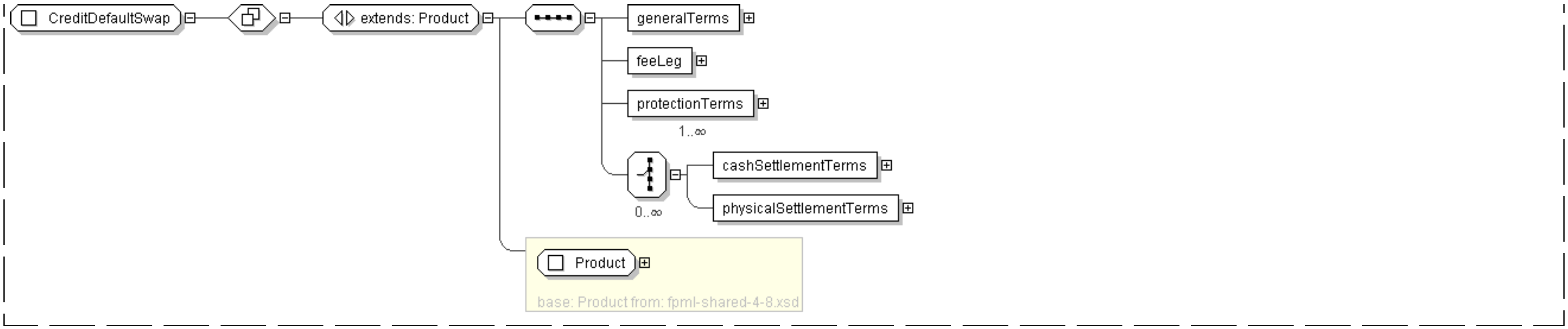
Super-types:	Product < **CreditDefaultSwap** (by extension)
Sub-types:	None

Name	CreditDefaultSwap
Used by (from the same schema document)	Element **creditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <generalTerms> GeneralTerms </generalTerms> [1]
   'This element contains all the data that appears in the section entitled \"1. General Terms
   \" in the 2003 ISDA Credit Derivatives Confirmation.'

   <feeLeg> FeeLeg </feeLeg> [1]
   'This element contains all the terms relevant to defining the fixed amounts/payments per
   the applicable ISDA definitions.'

   <protectionTerms> ProtectionTerms </protectionTerms> [1..*]
   'This element contains all the terms relevant to defining the applicable floating rate
   payer calculation amount, credit events and associated conditions to settlement, and
   reference obligations.'

Start Choice [0..*]
      <cashSettlementTerms> CashSettlementTerms </cashSettlementTerms> [1]
      'This element contains all the ISDA terms relevant to cash settlement for when cash
      settlement is applicable. ISDA 2003 Term: Cash Settlement'

      <physicalSettlementTerms> PhysicalSettlementTerms </physicalSettlementTerms> [1]
      'This element contains all the ISDA terms relevant to physical settlement for when
      physical settlement is applicable. ISDA 2003 Term: Physical Settlement'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditDefaultSwap">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="generalTerms" type=" GeneralTerms "/>
            <xsd:element name="feeLeg" type=" FeeLeg "/>
            <xsd:element name="protectionTerms" type=" ProtectionTerms " maxOccurs="unbounded"/>
            <xsd:choice minOccurs="0" maxOccurs="unbounded">
               <xsd:element name="cashSettlementTerms" type=" CashSettlementTerms "/>
               <xsd:element name="physicalSettlementTerms" type=" PhysicalSettlementTerms "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditDefaultSwapOption

Super-types:	OptionBaseExtended < **CreditDefaultSwapOption** (by extension)
Sub-types:	None

Name	CreditDefaultSwapOption
Used by (from the same schema document)	Element **creditDefaultSwapOption**
Abstract	no
Documentation	A complex type to support the credit default swap option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'
```

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction. From a usage standpoint, put/call is the default option type, while payer/receiver indicator is used for options index credit default swaps, consistently with the industry practice. Straddle is used for the case of straddle strategy, that combine a call and a put with the same strike.'

<premium> Premium </premium> [0..1]

'The option premium payable by the buyer to the seller.'

<exercise> ... </exercise> [1]
<exerciseProcedure> ExerciseProcedure </exerciseProcedure> [1]

'A set of parameters defining procedures associated with the exercise.'

<feature> OptionFeature </feature> [0..1]

'An Option feature such as quanto, asian, barrier, knock.'

Start Choice [0..1]

'A choice between an explicit representation of the notional amount, or a reference to a notional amount defined elsewhere in this document.'

<notionalReference> NotionalAmountReference </notionalReference> [1]
<notionalAmount> Money </notionalAmount> [1]
End Choice
Start Group: OptionDenomination.model [0..1]
<optionEntitlement> PositiveDecimal </optionEntitlement> [1]

'The number of units of underlyer per option comprised in the option transaction.'

<entitlementCurrency> Currency </entitlementCurrency> [0..1]

'TODO'

<numberOfOptions> PositiveDecimal </numberOfOptions> [0..1]

'The number of options comprised in the option transaction.'

End Group: OptionDenomination.model
<settlementType> SettlementTypeEnum </settlementType> [0..1]
<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
<settlementAmount> Money </settlementAmount> [1]

'Settlement Amount'

<settlementCurrency> Currency </settlementCurrency> [1]

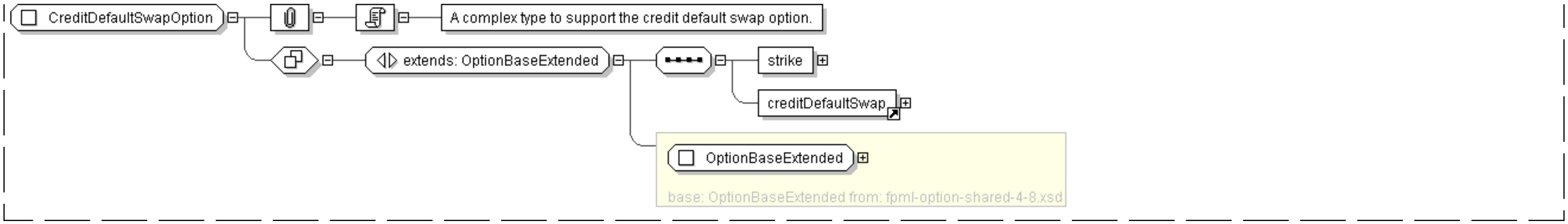
'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
<strike> CreditOptionStrike </strike> [1]

'Specifies the strike of the option on credit default swap.'

<creditDefaultSwap> ... </creditDefaultSwap> [1]
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditDefaultSwapOption">
   <xsd:complexContent>
      <xsd:extension base=" OptionBaseExtended ">
         <xsd:sequence>
            <xsd:element name="strike" type=" CreditOptionStrike "/>
            <xsd:element ref=" creditDefaultSwap "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditOptionStrike

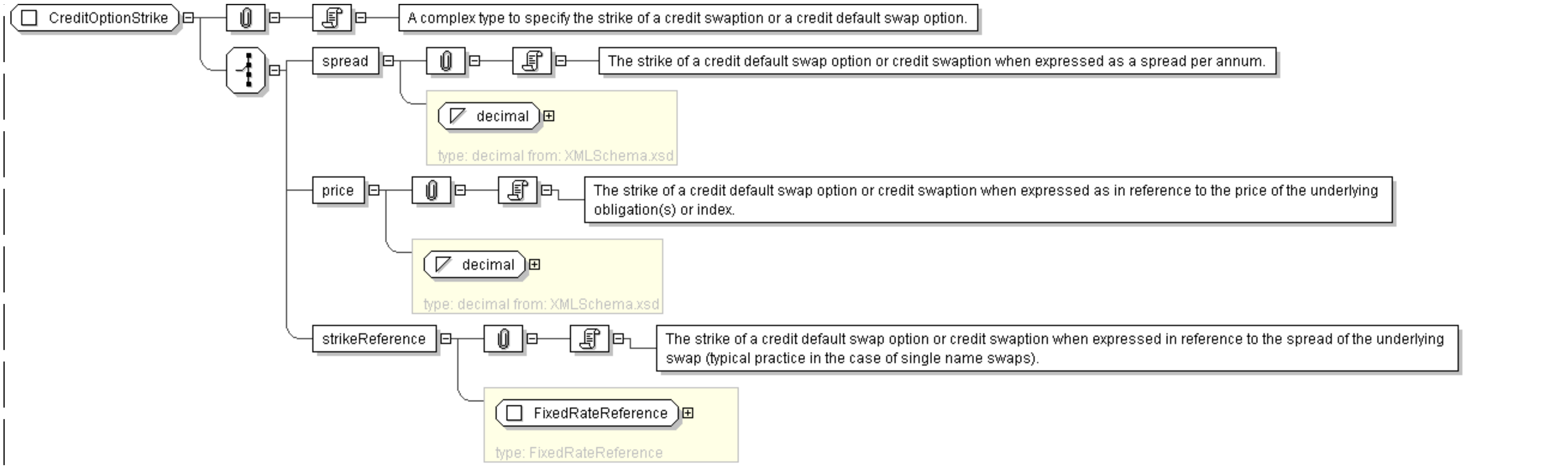
Super-types:	None
Sub-types:	None

Name	CreditOptionStrike
Used by (from the same schema document)	Complex Type **CreditDefaultSwapOption**
Abstract	no
Documentation	A complex type to specify the strike of a credit swaption or a credit default swap option.

XML Instance Representation

```
<...>
Start Choice [1]
      <spread> xsd:decimal </spread> [1]
      'The strike of a credit default swap option or credit swaption when expressed as a spread
      per annum.'

      <price> xsd:decimal </price> [1]
      'The strike of a credit default swap option or credit swaption when expressed as in
      reference to the price of the underlying obligation(s) or index.'

      <strikeReference> FixedRateReference </strikeReference> [1]
      'The strike of a credit default swap option or credit swaption when expressed in reference
      to the spread of the underlying swap (typical practice in the case of single name swaps).'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditOptionStrike">
   <xsd:choice>
      <xsd:element name="spread" type=" xsd:decimal "/>
      <xsd:element name="price" type=" xsd:decimal "/>
      <xsd:element name="strikeReference" type=" FixedRateReference "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: DeliverableObligations

Super-types:	None
Sub-types:	None

Name	DeliverableObligations
Used by (from the same schema document)	Complex Type **PhysicalSettlementTerms**
Abstract	no

XML Instance Representation

```
<...>
   <accruedInterest> xsd:boolean </accruedInterest> [0..1]
   'Indicates whether accrued interest is included (true) or not (false). For cash settlement
   this specifies whether quotations should be obtained inclusive or not of accrued interest.
   For physical settlement this specifies whether the buyer should deliver the obligation with
   an outstanding principal balance that includes or excludes accrued interest. ISDA 2003
   Term: Include/Exclude Accrued Interest'

   <category> ObligationCategoryEnum </category> [0..1]
   'Used in both obligations and deliverable obligations to represent a class or type
   of securities which apply. ISDA 2003 Term: Obligation Category/Deliverable Obligation Category'

   <notSubordinated> Empty </notSubordinated> [0..1]
   'An obligation and deliverable obligation characteristic. An obligation that ranks at
   least equal with the most senior Reference Obligation in priority of payment or, if
   no Reference Obligation is specified in the related Confirmation, the obligations of
   the Reference Entity that are senior. ISDA 2003 Term: Not Subordinated'
```

<specifiedCurrency> SpecifiedCurrency </specifiedCurrency> [0..1]

'An obligation and deliverable obligation characteristic. The currency or currencies in which an obligation or deliverable obligation must be payable. ISDA 2003 Term: Specified Currency'

<notSovereignLender> Empty </notSovereignLender> [0..1]

'An obligation and deliverable obligation characteristic. Any obligation that is not primarily (majority) owed to a Sovereign or Supranational Organization. ISDA 2003 Term: Not Sovereign Lender'

<notDomesticCurrency> NotDomesticCurrency </notDomesticCurrency> [0..1]

'An obligation and deliverable obligation characteristic. Any obligation that is payable in any currency other than the domestic currency. Domestic currency is either the currency so specified or, if no currency is specified, the currency of (a) the reference entity, if the reference entity is a sovereign, or (b) the jurisdiction in which the relevant reference entity is organised, if the reference entity is not a sovereign. ISDA 2003 Term: Not Domestic Currency'

<notDomesticLaw> Empty </notDomesticLaw> [0..1]

'An obligation and deliverable obligation characteristic. If the reference entity is a Sovereign, this means any obligation that is not subject to the laws of the reference entity. If the reference entity is not a sovereign, this means any obligation that is not subject to the laws of the jurisdiction of the reference entity. ISDA 2003 Term: Not Domestic Law'

<listed> Empty </listed> [0..1]

'An obligation and deliverable obligation characteristic. Indicates whether or not the obligation is quoted, listed or ordinarily purchased and sold on an exchange. ISDA 2003 Term: Listed'

<notContingent> Empty </notContingent> [0..1]

'A deliverable obligation characteristic. In essence Not Contingent means the repayment of principal cannot be dependant on a formula/index, i.e. to prevent the risk of being delivered an instrument that may never pay any element of principal, and to ensure that the obligation is interest bearing (on a regular schedule). ISDA 2003 Term: Not Contingent'

<notDomesticIssuance> Empty </notDomesticIssuance> [0..1]

'An obligation and deliverable obligation characteristic. Any obligation other than an obligation that was intended to be offered for sale primarily in the domestic market of the relevant Reference Entity. This specifies that the obligation must be an internationally recognized bond. ISDA 2003 Term: Not Domestic Issuance'

<assignableLoan> PCDeliverableObligationCharac </assignableLoan> [0..1]

'A deliverable obligation characteristic. A loan that is freely assignable to a bank or financial institution without the consent of the Reference Entity or the guarantor, if any, of the loan (or the consent of the applicable borrower if a Reference Entity is guaranteeing the loan) or any agent. ISDA 2003 Term: Assignable Loan'

<consentRequiredLoan> PCDeliverableObligationCharac </consentRequiredLoan> [0..1]

'A deliverable obligation characteristic. A loan that is capable of being assigned with the consent of the Reference Entity or the guarantor, if any, of the loan or any agent. ISDA 2003 Term: Consent Required Loan'

<directLoanParticipation> LoanParticipation </directLoanParticipation> [0..1]

'A deliverable obligation characteristic. A loan with a participation agreement whereby the buyer is capable of creating, or procuring the creation of, a contractual right in favour of the seller that provides the seller with recourse to the participation seller for a specified share in any payments due under the relevant loan which are received by the participation seller. ISDA 2003 Term: Direct Loan Participation'

<transferable> Empty </transferable> [0..1]

'A deliverable obligation characteristic. An obligation that is transferable to institutional investors without any contractual, statutory or regulatory restrictions. ISDA 2003 Term: Transferable'

<maximumMaturity> Period </maximumMaturity> [0..1]

'A deliverable obligation characteristic. An obligation that has a remaining maturity from the Physical Settlement Date of not greater than the period specified. ISDA 2003 Term: Maximum Maturity'

<acceleratedOrMatured> Empty </acceleratedOrMatured> [0..1]

'A deliverable obligation characteristic. An obligation at time of default is due to mature and due to be repaid, or as a result of downgrade/bankruptcy is due to be repaid as a result of an acceleration clause. ISDA 2003 Term: Accelerated or Matured'

<notBearer> Empty </notBearer> [0..1]

'A deliverable obligation characteristic. Any obligation that is not a bearer instrument. This applies to Bonds only and is meant to avoid tax, fraud and security/delivery provisions that can potentially be associated with Bearer Bonds. ISDA 2003 Term: Not Bearer'

Start Choice [0..1]

<fullFaithAndCreditObLiability> Empty </fullFaithAndCreditObLiability> [1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Full Faith and Credit Obligation Liability'

<generalFundObligationLiability> Empty </generalFundObligationLiability> [1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: General Fund Obligation Liability'

<revenueObligationLiability> Empty </revenueObligationLiability> [1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Revenue Obligation Liability'

End Choice

<indirectLoanParticipation> LoanParticipation </indirectLoanParticipation> [0..1]

'ISDA 1999 Term: Indirect Loan Participation. NOTE: Only applicable as a deliverable obligation under ISDA Credit 1999.'

<excluded> xsd:string </excluded> [0..1]

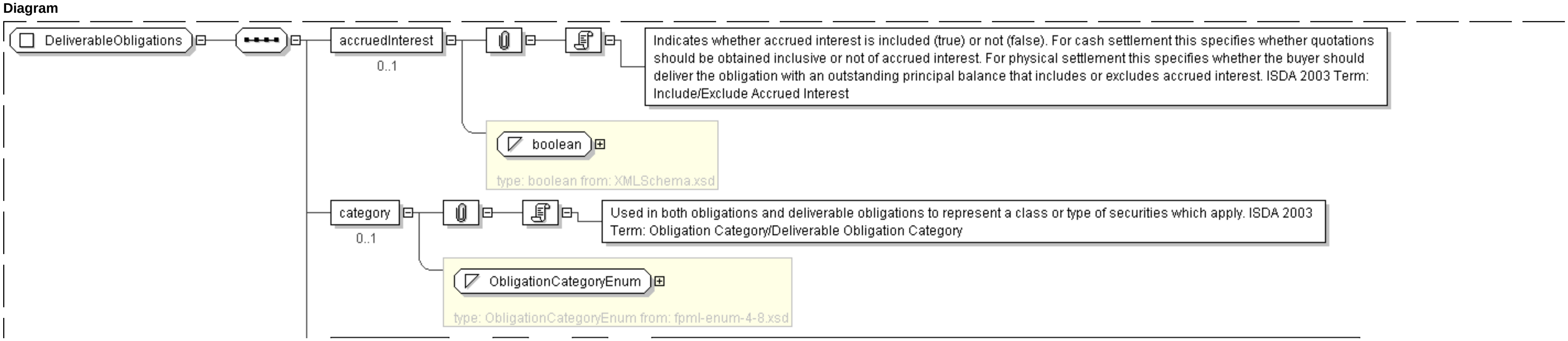
'A free format string to specify any excluded obligations or deliverable obligations, as the case may be, of the reference entity or excluded types of obligations or deliverable obligations. ISDA 2003 Term: Excluded Obligations/Excluded Deliverable Obligations'

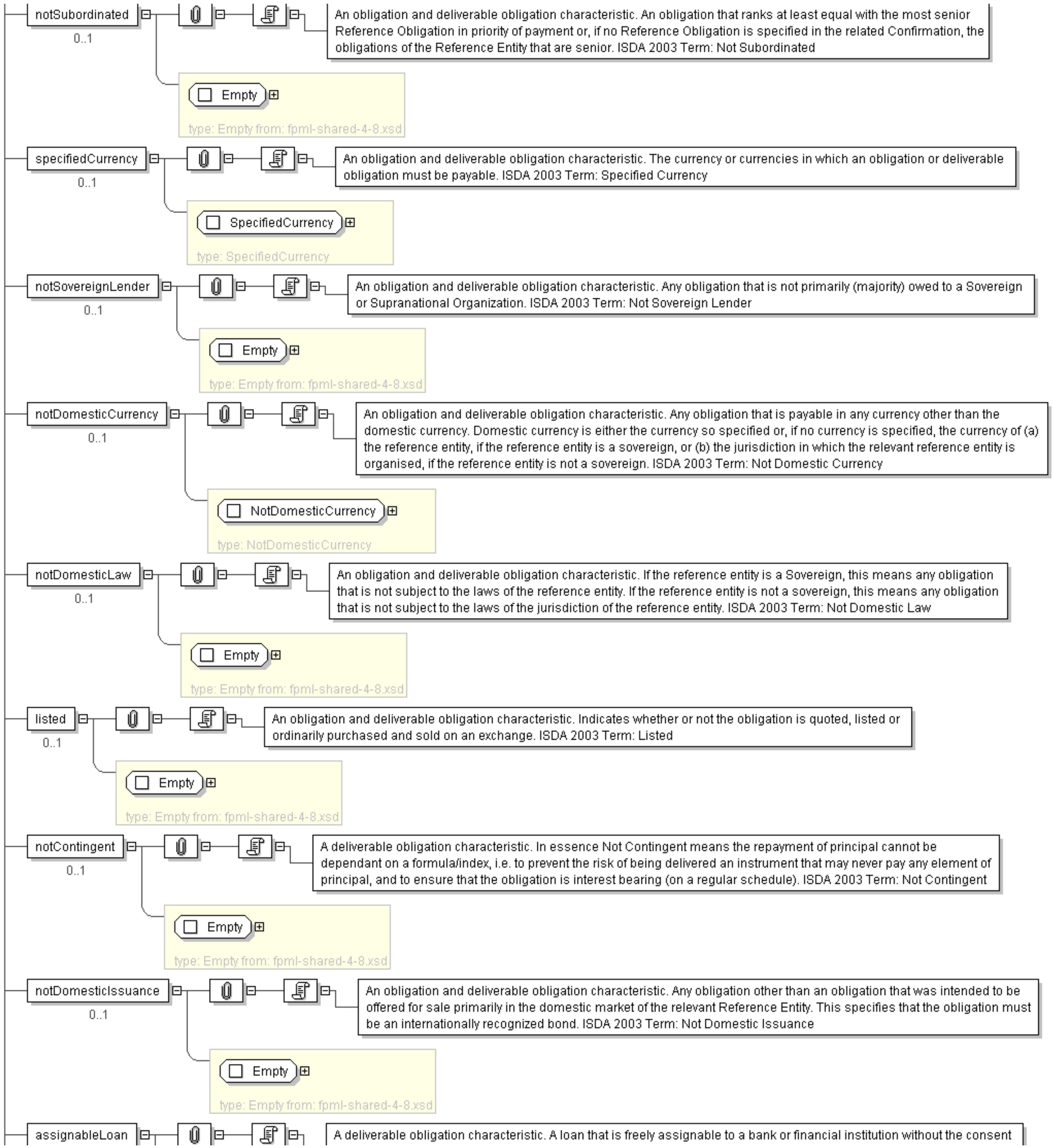
<othReferenceEntityObligations> xsd:string </othReferenceEntityObligations> [0..1]

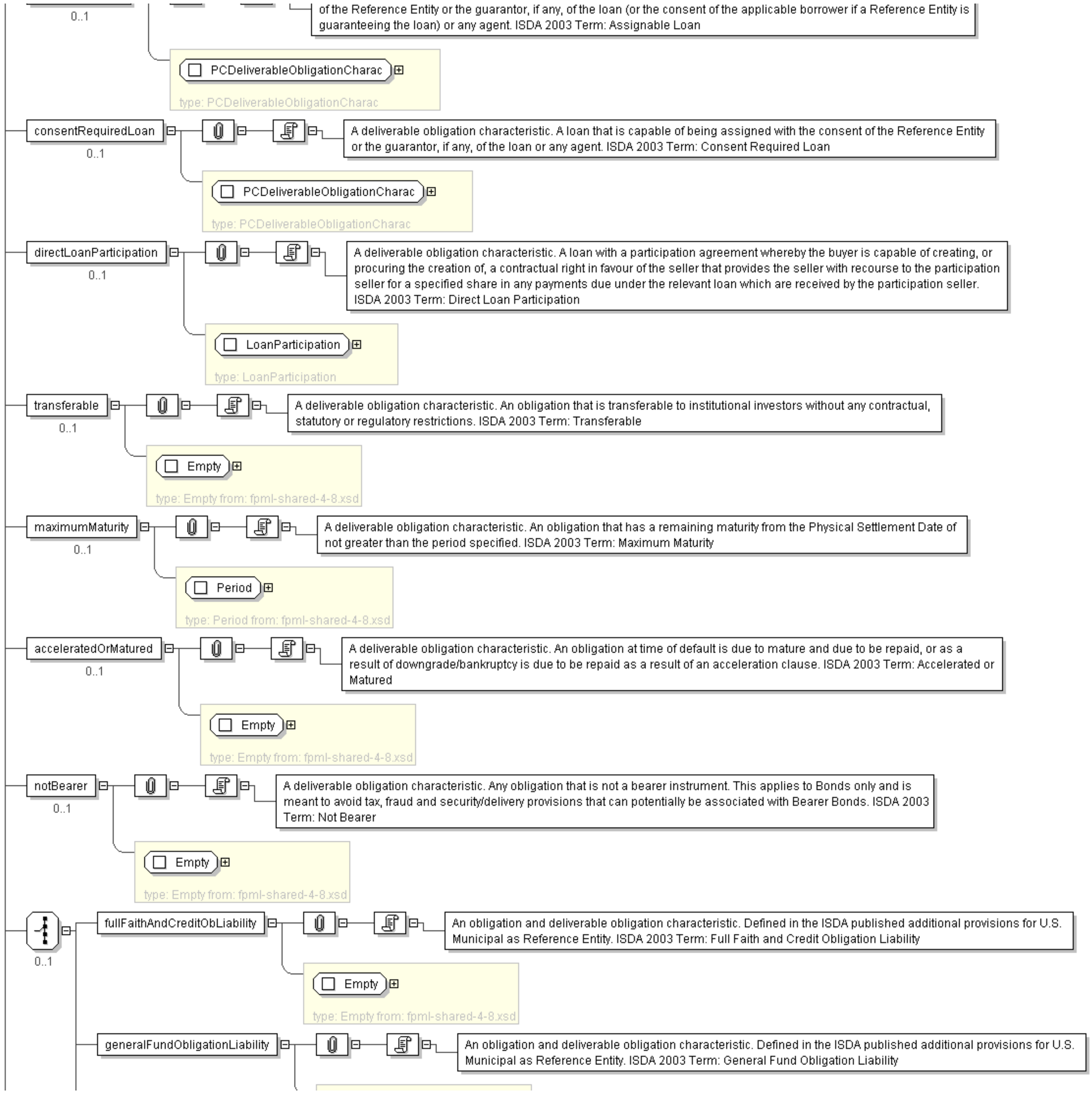
'This element is used to specify any other obligations of a reference entity in both obligations and deliverable obligations. The obligations can be specified free-form. ISDA 2003 Term: Other Obligations of a Reference Entity'

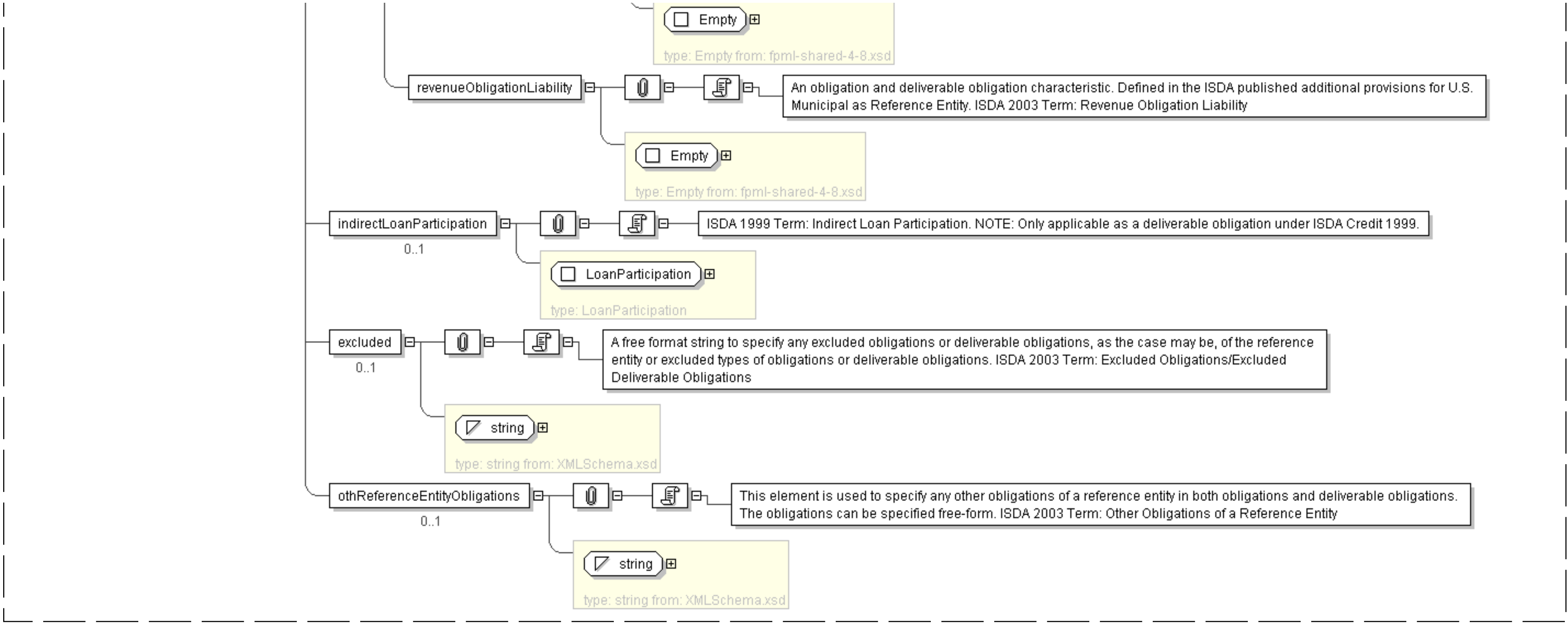
</...>

Diagram




notSubordinated
0..1
An obligation and deliverable obligation characteristic. An obligation that ranks at least equal with the most senior Reference Obligation in priority of payment or, if no Reference Obligation is specified in the related Confirmation, the obligations of the Reference Entity that are senior. ISDA 2003 Term: Not Subordinated
Empty
type: Empty from: fpml-shared-4-8.xsd
specifiedCurrency
0..1
An obligation and deliverable obligation characteristic. The currency or currencies in which an obligation or deliverable obligation must be payable. ISDA 2003 Term: Specified Currency
SpecifiedCurrency
type: SpecifiedCurrency
notSovereignLender
0..1
An obligation and deliverable obligation characteristic. Any obligation that is not primarily (majority) owed to a Sovereign or Supranational Organization. ISDA 2003 Term: Not Sovereign Lender
Empty
type: Empty from: fpml-shared-4-8.xsd
notDomesticCurrency
0..1
An obligation and deliverable obligation characteristic. Any obligation that is payable in any currency other than the domestic currency. Domestic currency is either the currency so specified or, if no currency is specified, the currency of (a) the reference entity, if the reference entity is a sovereign, or (b) the jurisdiction in which the relevant reference entity is organised, if the reference entity is not a sovereign. ISDA 2003 Term: Not Domestic Currency
NotDomesticCurrency
type: NotDomesticCurrency
notDomesticLaw
0..1
An obligation and deliverable obligation characteristic. If the reference entity is a Sovereign, this means any obligation that is not subject to the laws of the reference entity. If the reference entity is not a sovereign, this means any obligation that is not subject to the laws of the jurisdiction of the reference entity. ISDA 2003 Term: Not Domestic Law
Empty
type: Empty from: fpml-shared-4-8.xsd
listed
0..1
An obligation and deliverable obligation characteristic. Indicates whether or not the obligation is quoted, listed or ordinarily purchased and sold on an exchange. ISDA 2003 Term: Listed
Empty
type: Empty from: fpml-shared-4-8.xsd
notContingent
0..1
A deliverable obligation characteristic. In essence Not Contingent means the repayment of principal cannot be dependant on a formula/index, i.e. to prevent the risk of being delivered an instrument that may never pay any element of principal, and to ensure that the obligation is interest bearing (on a regular schedule). ISDA 2003 Term: Not Contingent
Empty
type: Empty from: fpml-shared-4-8.xsd
notDomesticIssuance
0..1
An obligation and deliverable obligation characteristic. Any obligation other than an obligation that was intended to be offered for sale primarily in the domestic market of the relevant Reference Entity. This specifies that the obligation must be an internationally recognized bond. ISDA 2003 Term: Not Domestic Issuance
Empty
type: Empty from: fpml-shared-4-8.xsd
assignableLoan
A deliverable obligation characteristic. A loan that is freely assignable to a bank or financial institution without the consent


0..1
of the Reference Entity or the guarantor, if any, of the loan (or the consent of the applicable borrower if a Reference Entity is guaranteeing the loan) or any agent. ISDA 2003 Term: Assignable Loan
PCDeliverableObligationCharac
type: PCDeliverableObligationCharac
consentRequiredLoan
0..1
A deliverable obligation characteristic. A loan that is capable of being assigned with the consent of the Reference Entity or the guarantor, if any, of the loan or any agent. ISDA 2003 Term: Consent Required Loan
PCDeliverableObligationCharac
type: PCDeliverableObligationCharac
directLoanParticipation
0..1
A deliverable obligation characteristic. A loan with a participation agreement whereby the buyer is capable of creating, or procuring the creation of, a contractual right in favour of the seller that provides the seller with recourse to the participation seller for a specified share in any payments due under the relevant loan which are received by the participation seller. ISDA 2003 Term: Direct Loan Participation
LoanParticipation
type: LoanParticipation
transferable
0..1
A deliverable obligation characteristic. An obligation that is transferable to institutional investors without any contractual, statutory or regulatory restrictions. ISDA 2003 Term: Transferable
Empty
type: Empty from: fpml-shared-4-8.xsd
maximumMaturity
0..1
A deliverable obligation characteristic. An obligation that has a remaining maturity from the Physical Settlement Date of not greater than the period specified. ISDA 2003 Term: Maximum Maturity
Period
type: Period from: fpml-shared-4-8.xsd
acceleratedOrMatured
0..1
A deliverable obligation characteristic. An obligation at time of default is due to mature and due to be repaid, or as a result of downgrade/bankruptcy is due to be repaid as a result of an acceleration clause. ISDA 2003 Term: Accelerated or Matured
Empty
type: Empty from: fpml-shared-4-8.xsd
notBearer
0..1
A deliverable obligation characteristic. Any obligation that is not a bearer instrument. This applies to Bonds only and is meant to avoid tax, fraud and security/delivery provisions that can potentially be associated with Bearer Bonds. ISDA 2003 Term: Not Bearer
Empty
type: Empty from: fpml-shared-4-8.xsd
0..1
fullFaithAndCreditObLiability
An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Full Faith and Credit Obligation Liability
Empty
type: Empty from: fpml-shared-4-8.xsd
generalFundObligationLiability
An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: General Fund Obligation Liability



Schema Component Representation

```
<xsd:complexType name="DeliverableObligations">
   <xsd:sequence>
      <xsd:element name="accruedInterest" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="category" type=" ObligationCategoryEnum " minOccurs="0"/>
      <xsd:element name="notSubordinated" type=" Empty " minOccurs="0"/>
      <xsd:element name="specifiedCurrency" type=" SpecifiedCurrency " minOccurs="0"/>
      <xsd:element name="notSovereignLender" type=" Empty " minOccurs="0"/>
      <xsd:element name="notDomesticCurrency" type=" NotDomesticCurrency " minOccurs="0"/>
      <xsd:element name="notDomesticLaw" type=" Empty " minOccurs="0"/>
      <xsd:element name="listed" type=" Empty " minOccurs="0"/>
      <xsd:element name="notContingent" type=" Empty " minOccurs="0"/>
      <xsd:element name="notDomesticIssuance" type=" Empty " minOccurs="0"/>
      <xsd:element name="assignableLoan" type=" PCDeliverableObligationCharac " minOccurs="0"/>
      <xsd:element name="consentRequiredLoan" type=" PCDeliverableObligationCharac " minOccurs="0"/>
      <xsd:element name="directLoanParticipation" type=" LoanParticipation " minOccurs="0"/>
      <xsd:element name="transferable" type=" Empty " minOccurs="0"/>
      <xsd:element name="maximumMaturity" type=" Period " minOccurs="0"/>
      <xsd:element name="acceleratedOrMatured" type=" Empty " minOccurs="0"/>
      <xsd:element name="notBearer" type=" Empty " minOccurs="0"/>
      <xsd:choice minOccurs="0">
         <xsd:element name="fullFaithAndCreditObLiability" type=" Empty "/>
         <xsd:element name="generalFundObligationLiability" type=" Empty "/>
         <xsd:element name="revenueObligationLiability" type=" Empty "/>
      </xsd:choice>
      <xsd:element name="indirectLoanParticipation" type=" LoanParticipation " minOccurs="0"/>
      <xsd:element name="excluded" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="othReferenceEntityObligations" type=" xsd:string " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DeprecatedScheduledTerminationDate

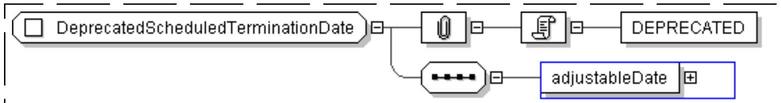
Super-types:	None
Sub-types:	None

Name	DeprecatedScheduledTerminationDate
Used by (from the same schema document)	Complex Type **GeneralTerms**
Abstract	no
Documentation	DEPRECATED

XML Instance Representation

```
<...>
   <adjustableDate> AdjustableDate2 </adjustableDate> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedScheduledTerminationDate"
deprecated="true" deprecatedReason="The intent is to make the scheduledTerminationDate of
type AdjustableDate2 and remove the adjustableDate node. The current container doesn't give
any value since the choice with relative date was removed.">
   <xsd:sequence>
      <xsd:element name="adjustableDate" type=" AdjustableDate2 "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EntityType

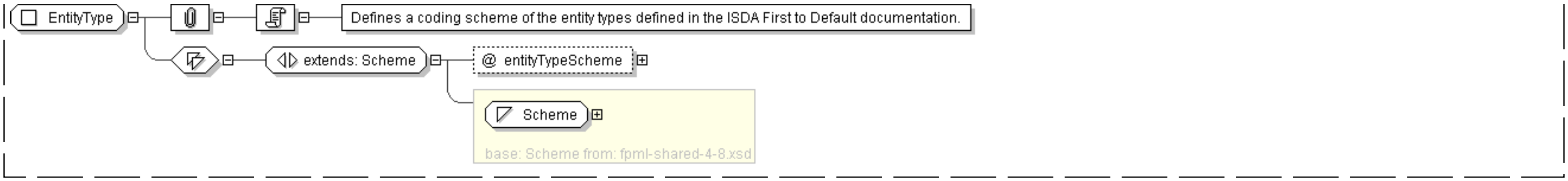
Super-types:	Scheme < **EntityType** (by extension)
Sub-types:	None

Name	EntityType
Used by (from the same schema document)	Complex Type **ReferencePair**
Abstract	no
Documentation	Defines a coding scheme of the entity types defined in the ISDA First to Default documentation.

XML Instance Representation

```
<...
entityTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EntityType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="entityTypeScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/entity-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: FeeLeg

Super-types:	Leg < **FeeLeg** (by extension)
Sub-types:	None

Name	FeeLeg
Used by (from the same schema document)	Complex Type **CreditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <initialPayment> InitialPayment </initialPayment> [0..1]
   'Specifies a single fixed payment that is payable by the payer to the receiver on the
   initial payment date. The fixed payment to be paid is specified in terms of a known
   currency amount. This element should be used for CDS Index trades and can be used for
   CDS trades where it is necessary to represent a payment from Seller to Buyer. For CDS
   trades where a payment is to be made from Buyer to Seller the feeLeg/singlePayment
   structure must be used.'

   <singlePayment> SinglePayment </singlePayment> [0..*]
   'Specifies a single fixed amount that is payable by the buyer to the seller on the fixed
   rate payer payment date. The fixed amount to be paid is specified in terms of a known
   currency amount.'

   <periodicPayment> PeriodicPayment </periodicPayment> [0..1]
   'Specifies a periodic schedule of fixed amounts that are payable by the buyer to the seller
   on the fixed rate payer payment dates. The fixed amount to be paid on each payment date can
   be specified in terms of a known currency amount or as an amount calculated on a formula
   basis by reference to a per annum fixed rate. The applicable business day convention
   and business day for adjusting any fixed rate payer payment date if it would otherwise fall
   on a day that is not a business day are those specified in the dateAdjustments element
   within the generalTerms component. ISDA 2003 Term:'

   <marketFixedRate> xsd:decimal </marketFixedRate> [0..1]
   'An optional element that only has meaning in a credit index trade. This element contains
   the credit spread (\"fair value\") at which the trade was executed. Unlike the fixedRate of
   an index, the marketFixedRate varies over the life of the index depending on market
   conditions. The marketFixedRate is the price of the index as quoted by trading desks.'

   <paymentDelay> xsd:boolean </paymentDelay> [0..1]
```

'Applicable to CDS on MBS to specify whether payment delays are applicable to the fixed Amount. RMBS typically have a payment delay of 5 days between the coupon date of the reference obligation and the payment date of the synthetic swap. CMBS do not, on the other hand, with both payment dates being on the 25th of each month.'

<initialPoints> xsd:decimal **</initialPoints>** [0..1]

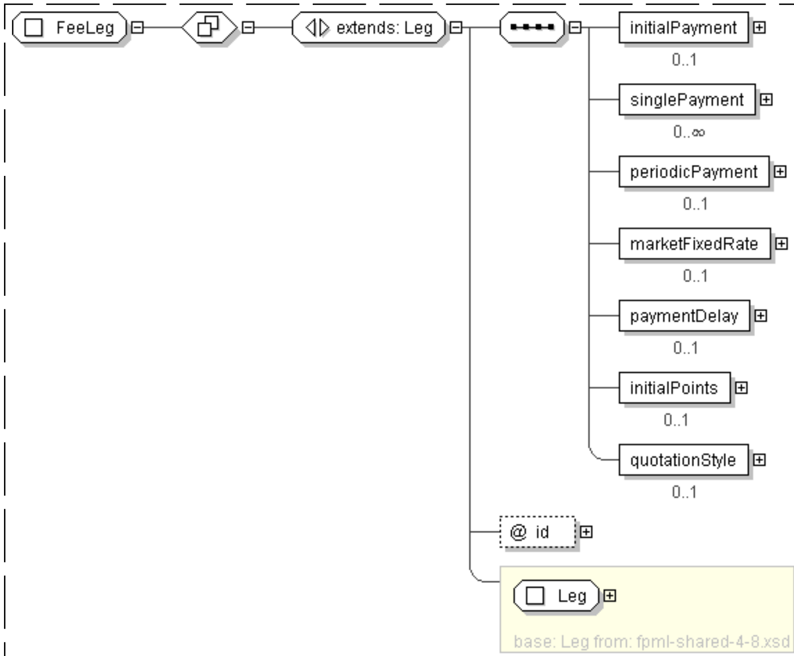
'An optional element that contains the up-front points expressed as a percentage of the notional. An initialPoints value of 5% would be represented as 0.05. The initialPoints element is an alternative to marketFixedRate in quoting the traded level of a trade. The initialPoints is one of the items that are factored into the initialPayment calculation and is payable by the Buyer to the Seller. Note that initialPoints and marketFixedRate may both be present in the same document when both implied values are desired.'

<quotationStyle> QuotationStyleEnum **</quotationStyle>** [0..1]

'The type of quotation that was used between the trading desks. The purpose of this element is to indicate the actual quotation style that was used to quote this trade which may not be apparent when both marketFixedRate and initialPoints are included in the document. When quotationStyle is 'PointsUpFront', the initialPoints element should be populated. When quotationStyle is 'TradedSpread', the marketFixedRate element should be populated.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FeeLeg">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:element name="initialPayment" type=" InitialPayment " minOccurs="0"/>
            <xsd:element name="singlePayment" type=" SinglePayment " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="periodicPayment" type=" PeriodicPayment " minOccurs="0"/>
            <xsd:element name="marketFixedRate" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="paymentDelay" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="initialPoints" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="quotationStyle" type=" QuotationStyleEnum " minOccurs="0"/>
```

```
        </xsd:sequence>
        <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FixedAmountCalculation

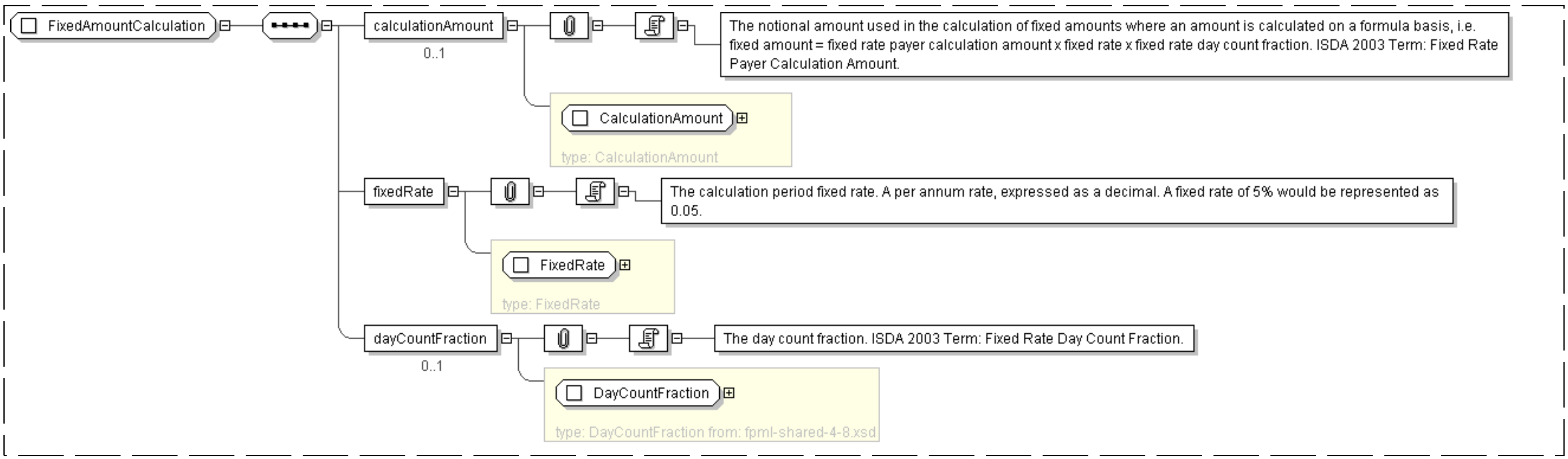
Super-types:	None
Sub-types:	None

Name	FixedAmountCalculation
Used by (from the same schema document)	Complex Type **PeriodicPayment**
Abstract	no

XML Instance Representation

```
<...>
   <calculationAmount> CalculationAmount </calculationAmount> [0..1]
   'The notional amount used in the calculation of fixed amounts where an amount is calculated
   on a formula basis, i.e. fixed amount = fixed rate payer calculation amount x fixed rate
   x fixed rate day count fraction. ISDA 2003 Term: Fixed Rate Payer Calculation Amount.'

   <fixedRate> FixedRate </fixedRate> [1]
   'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate
   of 5% would be represented as 0.05.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
   'The day count fraction. ISDA 2003 Term: Fixed Rate Day Count Fraction.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FixedAmountCalculation">
   <xsd:sequence>
      <xsd:element name="calculationAmount" type=" CalculationAmount " minOccurs="0"/>
```

```
      <xsd:element name="fixedRate" type=" FixedRate "/>
      <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FixedRate

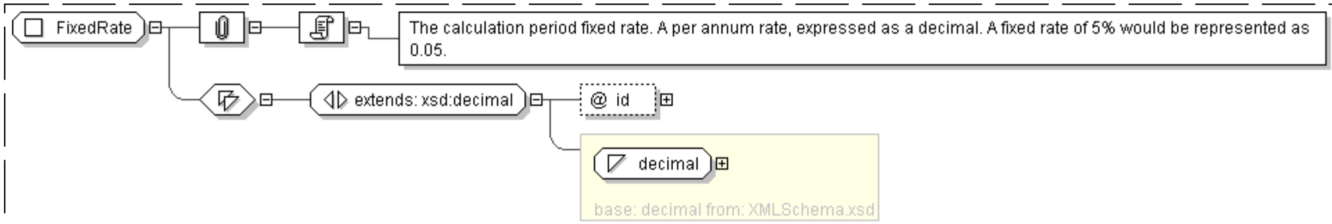
Super-types:	xsd:decimal < **FixedRate** (by extension)
Sub-types:	None

Name	FixedRate
Used by (from the same schema document)	Complex Type **FixedAmountCalculation**
Abstract	no
Documentation	The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate of 5% would be represented as 0.05.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
xsd:decimal
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FixedRate">
   <xsd:simpleContent>
      <xsd:extension base=" xsd:decimal ">
         <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: FixedRateReference

Super-types:	Reference < **FixedRateReference** (by extension)
Sub-types:	None

Name	FixedRateReference
Used by (from the same schema document)	Complex Type **CreditOptionStrike**
Abstract	no

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="FixedRateReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="FixedRate"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FloatingAmountEvents

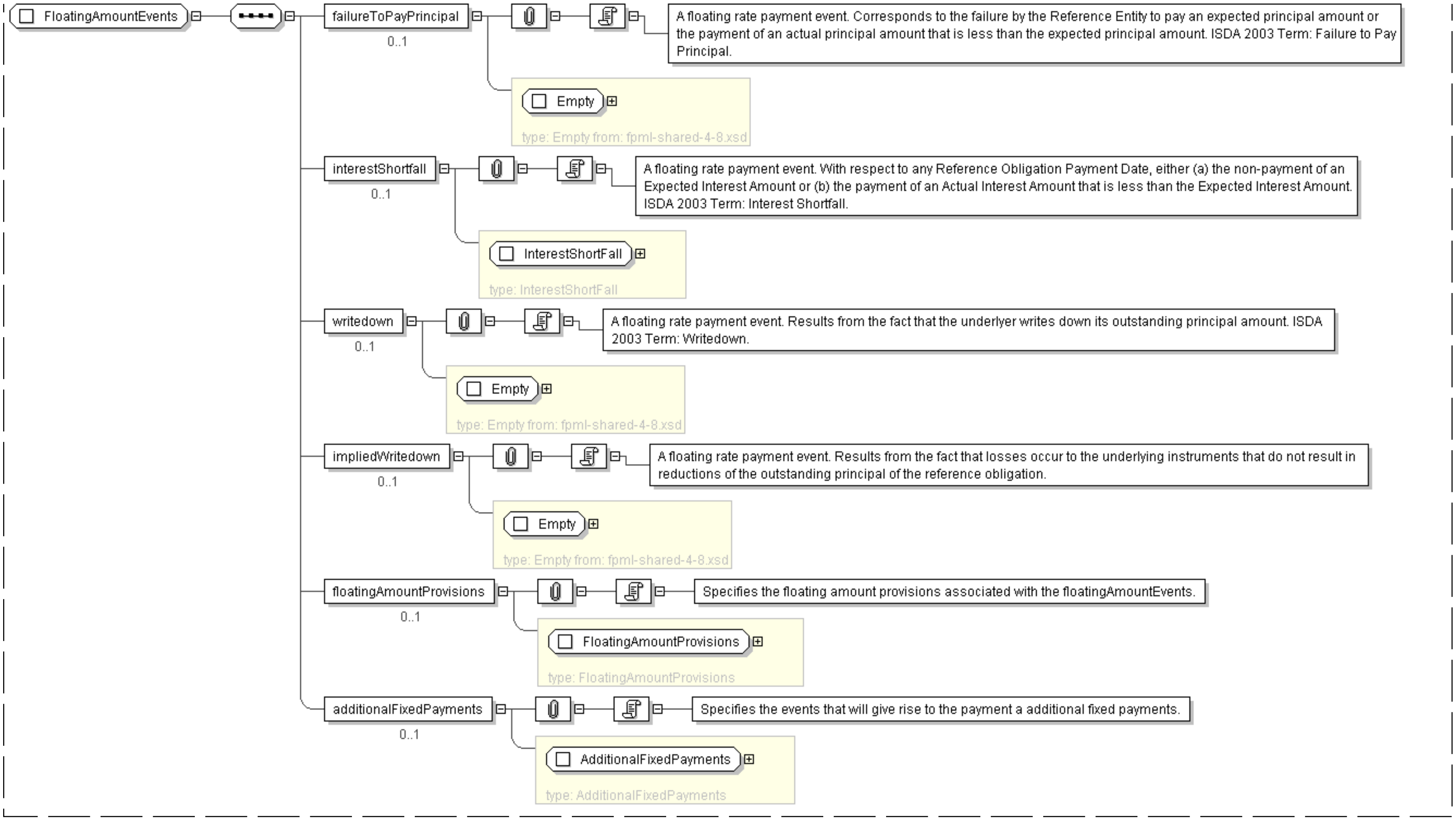
Super-types:	None
Sub-types:	None

Name	FloatingAmountEvents
Used by (from the same schema document)	Complex Type **ProtectionTerms**
Abstract	no

XML Instance Representation

```
<...>
   <failureToPayPrincipal> Empty </failureToPayPrincipal> [0..1]
   'A floating rate payment event. Corresponds to the failure by the Reference Entity to pay
   an expected principal amount or the payment of an actual principal amount that is less than
   the expected principal amount. ISDA 2003 Term: Failure to Pay Principal.'

   <interestShortfall> InterestShortFall </interestShortfall> [0..1]
   'A floating rate payment event. With respect to any Reference Obligation Payment Date,
   either (a) the non-payment of an Expected Interest Amount or (b) the payment of an
   Actual Interest Amount that is less than the Expected Interest Amount. ISDA 2003 Term:
   Interest Shortfall.'

   <writedown> Empty </writedown> [0..1]
   'A floating rate payment event. Results from the fact that the underlyer writes down
   its outstanding principal amount. ISDA 2003 Term: Writedown.'

   <impliedWritedown> Empty </impliedWritedown> [0..1]
   'A floating rate payment event. Results from the fact that losses occur to the
   underlying instruments that do not result in reductions of the outstanding principal of
   the reference obligation.'

   <floatingAmountProvisions> FloatingAmountProvisions </floatingAmountProvisions> [0..1]
   'Specifies the floating amount provisions associated with the floatingAmountEvents.'

   <additionalFixedPayments> AdditionalFixedPayments </additionalFixedPayments> [0..1]
   'Specifies the events that will give rise to the payment a additional fixed payments.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FloatingAmountEvents">
   <xsd:sequence>
      <xsd:element name="failureToPayPrincipal" type=" Empty " minOccurs="0"/>
      <xsd:element name="interestShortfall" type=" InterestShortFall " minOccurs="0"/>
      <xsd:element name="writedown" type=" Empty " minOccurs="0"/>
      <xsd:element name="impliedWritedown" type=" Empty " minOccurs="0"/>
      <xsd:element name="floatingAmountProvisions" type=" FloatingAmountProvisions " minOccurs="0"/>
      <xsd:element name="additionalFixedPayments" type=" AdditionalFixedPayments " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FloatingAmountProvisions

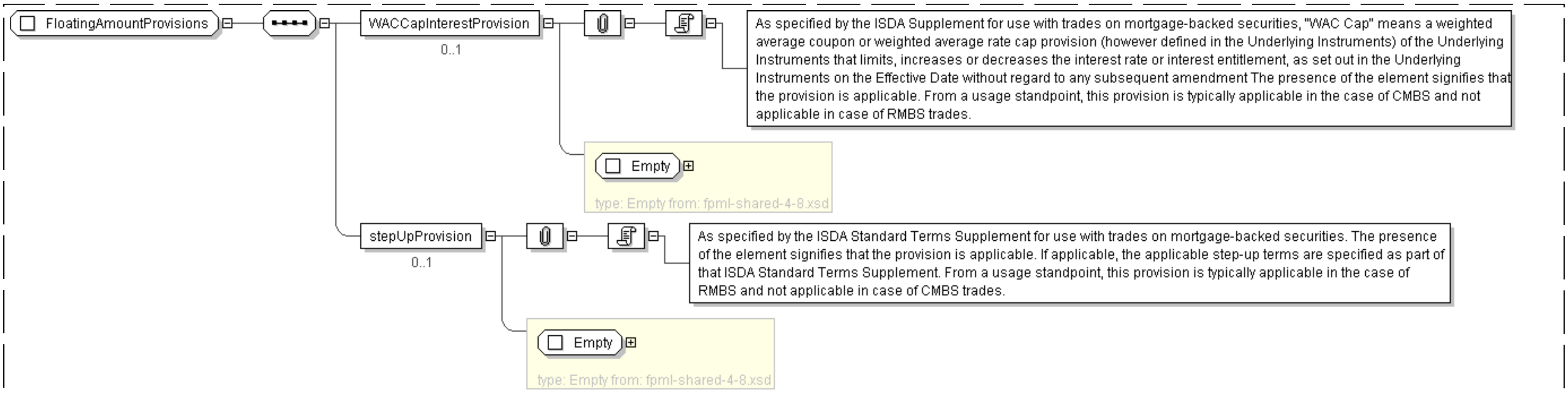
Super-types:	None
Sub-types:	None

Name	FloatingAmountProvisions
Used by (from the same schema document)	Complex Type **FloatingAmountEvents**
Abstract	no

XML Instance Representation

```
<...>
   <WACCapInterestProvision> Empty </WACCapInterestProvision> [0..1]
   'As specified by the ISDA Supplement for use with trades on mortgage-backed securities,
   \"WAC Cap\" means a weighted average coupon or weighted average rate cap provision
   (however defined in the Underlying Instruments) of the Underlying Instruments that
   limits, increases or decreases the interest rate or interest entitlement, as set out in
   the Underlying Instruments on the Effective Date without regard to any subsequent amendment
   The presence of the element signifies that the provision is applicable. From a
   usage standpoint, this provision is typically applicable in the case of CMBS and not
   applicable in case of RMBS trades.'

   <stepUpProvision> Empty </stepUpProvision> [0..1]
   'As specified by the ISDA Standard Terms Supplement for use with trades on mortgage-
   backed securities. The presence of the element signifies that the provision is applicable.
   If applicable, the applicable step-up terms are specified as part of that ISDA Standard
   Terms Supplement. From a usage standpoint, this provision is typically applicable in the
   case of RMBS and not applicable in case of CMBS trades.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FloatingAmountProvisions">
   <xsd:sequence>
      <xsd:element name="WACCapInterestProvision" type=" Empty " minOccurs="0"/>
      <xsd:element name="stepUpProvision" type=" Empty " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: GeneralTerms

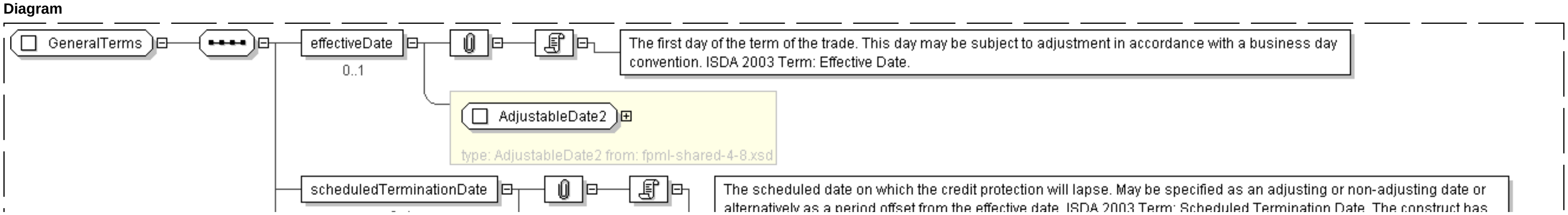
Super-types:	None
Sub-types:	None

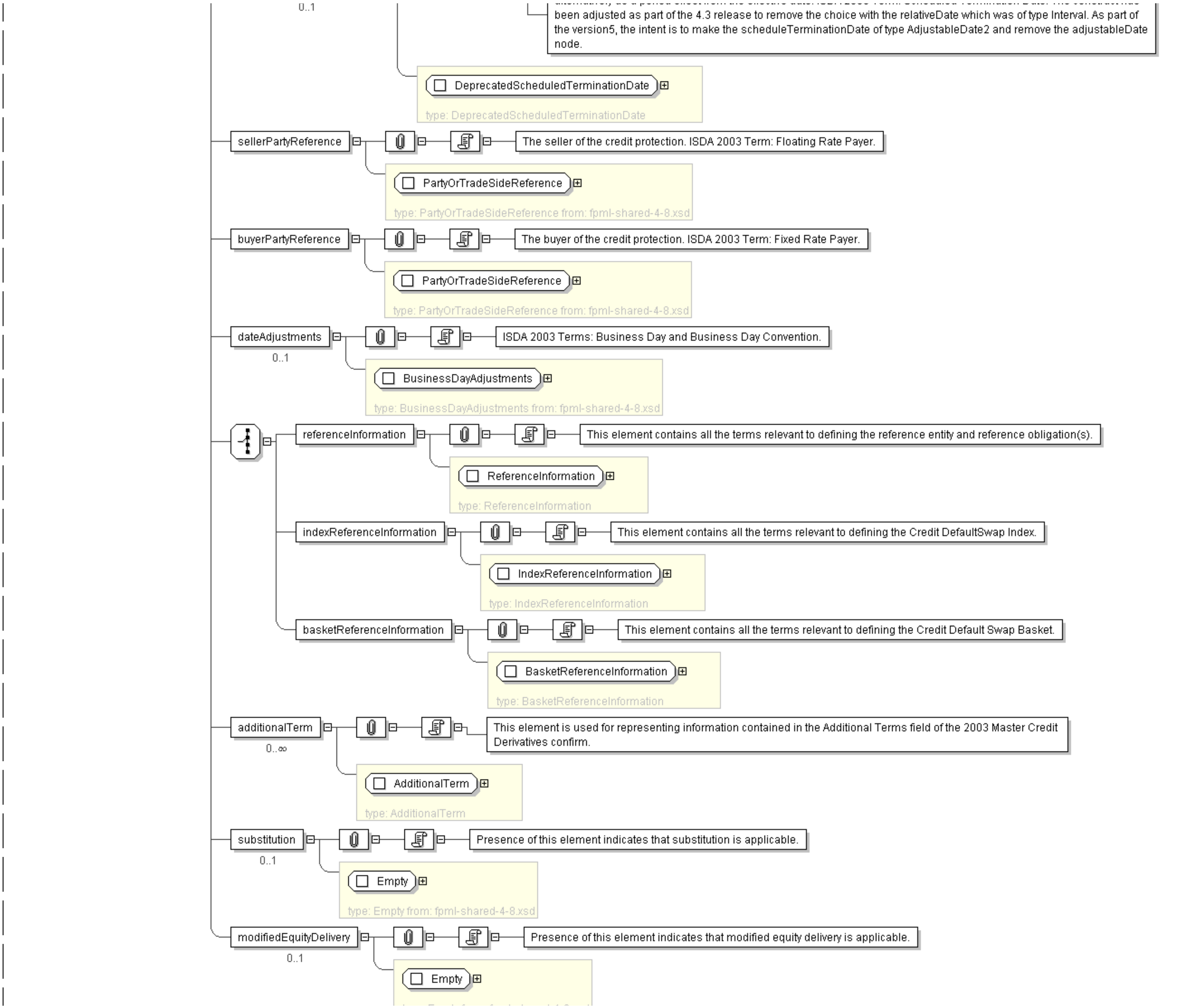
Name	GeneralTerms
Used by (from the same schema document)	Complex Type **CreditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...>
   <effectiveDate> AdjustableDate2 </effectiveDate> [0..1]
   'The first day of the term of the trade. This day may be subject to adjustment in
   accordance with a business day convention. ISDA 2003 Term: Effective Date.'

   <scheduledTerminationDate> DeprecatedScheduledTerminationDate </
   scheduledTerminationDate> [0..1]
   'The scheduled date on which the credit protection will lapse. May be specified as an
   adjusting or non-adjusting date or alternatively as a period offset from the effective
   date. ISDA 2003 Term: Scheduled Termination Date. The construct has been adjusted as part
   of the 4.3 release to remove the choice with the relativeDate which was of type Interval.
   As part of the version5, the intent is to make the scheduleTerminationDate of
   type AdjustableDate2 and remove the adjustableDate node.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'The seller of the credit protection. ISDA 2003 Term: Floating Rate Payer.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'The buyer of the credit protection. ISDA 2003 Term: Fixed Rate Payer.'

   <dateAdjustments> BusinessDayAdjustments </dateAdjustments> [0..1]
   'ISDA 2003 Terms: Business Day and Business Day Convention.'

Start Choice [1]
      <referenceInformation> ReferenceInformation </referenceInformation> [1]
      'This element contains all the terms relevant to defining the reference entity and
      reference obligation(s).'

      <indexReferenceInformation> IndexReferenceInformation </indexReferenceInformation> [1]
      'This element contains all the terms relevant to defining the Credit DefaultSwap Index.'

      <basketReferenceInformation> BasketReferenceInformation </basketReferenceInformation> [1]
      'This element contains all the terms relevant to defining the Credit Default Swap Basket.'

End Choice
   <additionalTerm> AdditionalTerm </additionalTerm> [0..*]
   'This element is used for representing information contained in the Additional Terms field
   of the 2003 Master Credit Derivatives confirm.'

   <substitution> Empty </substitution> [0..1]
   'Presence of this element indicates that substitution is applicable.'

   <modifiedEquityDelivery> Empty </modifiedEquityDelivery> [0..1]
   'Presence of this element indicates that modified equity delivery is applicable.'

</...>
```

Diagram




0..1
been adjusted as part of the 4.3 release to remove the choice with the relativeDate which was of type Interval. As part of the version5, the intent is to make the scheduleTerminationDate of type AdjustableDate2 and remove the adjustableDate node.
DeprecatedScheduledTerminationDate
type: DeprecatedScheduledTerminationDate
sellerPartyReference
The seller of the credit protection. ISDA 2003 Term: Floating Rate Payer.
PartyOrTradeSideReference
type: PartyOrTradeSideReference from: fpml-shared-4-8.xsd
buyerPartyReference
The buyer of the credit protection. ISDA 2003 Term: Fixed Rate Payer.
PartyOrTradeSideReference
type: PartyOrTradeSideReference from: fpml-shared-4-8.xsd
dateAdjustments
0..1
ISDA 2003 Terms: Business Day and Business Day Convention.
BusinessDayAdjustments
type: BusinessDayAdjustments from: fpml-shared-4-8.xsd
referenceInformation
This element contains all the terms relevant to defining the reference entity and reference obligation(s).
ReferenceInformation
type: ReferenceInformation
indexReferenceInformation
This element contains all the terms relevant to defining the Credit DefaultSwap Index.
IndexReferenceInformation
type: IndexReferenceInformation
basketReferenceInformation
This element contains all the terms relevant to defining the Credit Default Swap Basket.
BasketReferenceInformation
type: BasketReferenceInformation
additionalTerm
0..∞
This element is used for representing information contained in the Additional Terms field of the 2003 Master Credit Derivatives confirm.
AdditionalTerm
type: AdditionalTerm
substitution
0..1
Presence of this element indicates that substitution is applicable.
Empty
type: Empty from: fpml-shared-4-8.xsd
modifiedEquityDelivery
0..1
Presence of this element indicates that modified equity delivery is applicable.
Empty

Schema Component Representation

```
<xsd:complexType name="GeneralTerms">
   <xsd:sequence>
      <xsd:element name="effectiveDate" type=" AdjustableDate2 " minOccurs="0"/>
      <xsd:element name="scheduledTerminationDate" type=" DeprecatedScheduledTerminationDate
      " minOccurs="0"/>
      <xsd:element name="sellerPartyReference" type=" PartyOrTradeSideReference "/>
      <xsd:element name="buyerPartyReference" type=" PartyOrTradeSideReference "/>
      <xsd:element name="dateAdjustments" type=" BusinessDayAdjustments " minOccurs="0"/>
      <xsd:choice>
         <xsd:element name="referenceInformation" type=" ReferenceInformation "/>
         <xsd:element name="indexReferenceInformation" type=" IndexReferenceInformation "/>
         <xsd:element name="basketReferenceInformation" type=" BasketReferenceInformation "/>
      </xsd:choice>
      <xsd:element name="additionalTerm" type=" AdditionalTerm " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="substitution" type=" Empty " minOccurs="0"/>
      <xsd:element name="modifiedEquityDelivery" type=" Empty " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: IndexAnnexSource

Super-types:	Scheme < **IndexAnnexSource** (by extension)
Sub-types:	None

Name	IndexAnnexSource
Used by (from the same schema document)	Complex Type **IndexReferenceInformation**
Abstract	no

XML Instance Representation

```
<...
indexAnnexSourceScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="IndexAnnexSource">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="indexAnnexSourceScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/cdx-index-annex-source"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: IndexId

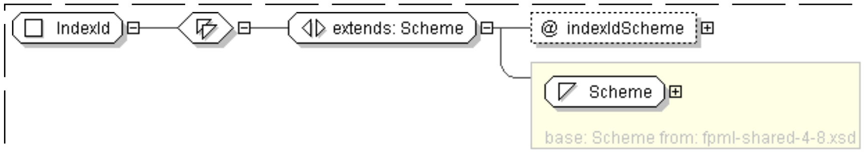
Super-types:	Scheme < **IndexId** (by extension)
Sub-types:	None

Name	IndexId
Used by (from the same schema document)	Complex Type **IndexReferenceInformation** , Complex Type **IndexReferenceInformation**
Abstract	no

XML Instance Representation

```
<...
indexIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="IndexId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="indexIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: IndexName

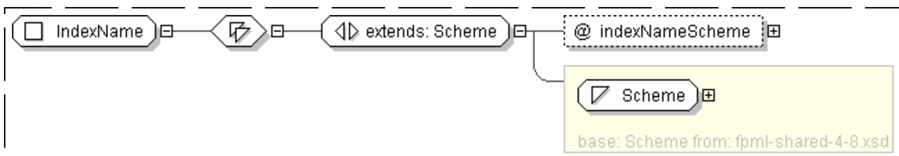
Super-types:	Scheme < **IndexName** (by extension)
Sub-types:	None

Name	IndexName
Used by (from the same schema document)	Complex Type **IndexReferenceInformation**
Abstract	no

XML Instance Representation

```
<...
indexNameScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="IndexName">
```

```
    <xsd:simpleContent>
       <xsd:extension base=" Scheme ">
          <xsd:attribute name="indexNameScheme" type=" xsd:anyURI "/>
       </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: IndexReferenceInformation

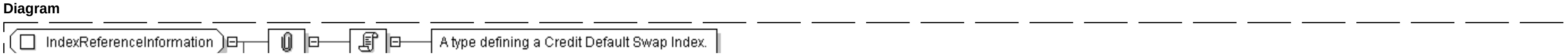
Super-types:	None
Sub-types:	None

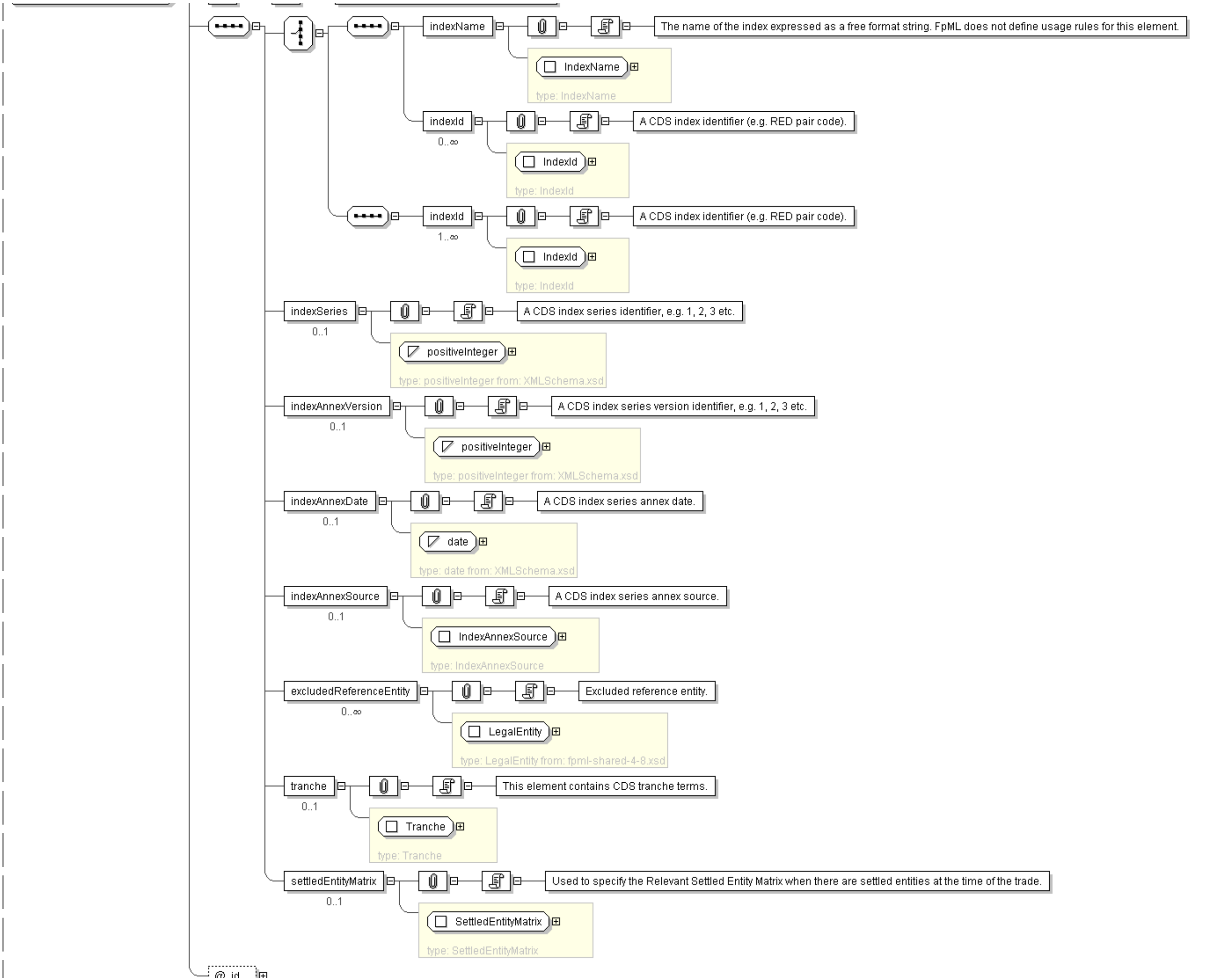
Name	IndexReferenceInformation
Used by (from the same schema document)	Complex Type **GeneralTerms**
Abstract	no
Documentation	A type defining a Credit Default Swap Index.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <indexName> IndexName </indexName> [1]
      'The name of the index expressed as a free format string. FpML does not define usage rules
      for this element.'

      <indexId> IndexId </indexId> [0..*]
      'A CDS index identifier (e.g. RED pair code).'

      <indexId> IndexId </indexId> [1..*]
      'A CDS index identifier (e.g. RED pair code).'

End Choice
   <indexSeries> xsd:positiveInteger </indexSeries> [0..1]
   'A CDS index series identifier, e.g. 1, 2, 3 etc.'

   <indexAnnexVersion> xsd:positiveInteger </indexAnnexVersion> [0..1]
   'A CDS index series version identifier, e.g. 1, 2, 3 etc.'

   <indexAnnexDate> xsd:date </indexAnnexDate> [0..1]
   'A CDS index series annex date.'

   <indexAnnexSource> IndexAnnexSource </indexAnnexSource> [0..1]
   'A CDS index series annex source.'

   <excludedReferenceEntity> LegalEntity </excludedReferenceEntity> [0..*]
   'Excluded reference entity.'

   <tranche> Tranche </tranche> [0..1]
   'This element contains CDS tranche terms.'

   <settledEntityMatrix> SettledEntityMatrix </settledEntityMatrix> [0..1]
   'Used to specify the Relevant Settled Entity Matrix when there are settled entities at the
   time of the trade.'

</...>
```

Diagram




indexName
The name of the index expressed as a free format string. FpML does not define usage rules for this element.
IndexName
type: IndexName
indexId
0..∞
A CDS index identifier (e.g. RED pair code).
IndexId
type: IndexId
indexId
1..∞
A CDS index identifier (e.g. RED pair code).
IndexId
type: IndexId
indexSeries
0..1
A CDS index series identifier, e.g. 1, 2, 3 etc.
positiveInteger
type: positiveInteger from: XMLSchema.xsd
indexAnnexVersion
0..1
A CDS index series version identifier, e.g. 1, 2, 3 etc.
positiveInteger
type: positiveInteger from: XMLSchema.xsd
indexAnnexDate
0..1
A CDS index series annex date.
date
type: date from: XMLSchema.xsd
indexAnnexSource
0..1
A CDS index series annex source.
IndexAnnexSource
type: IndexAnnexSource
excludedReferenceEntity
0..∞
Excluded reference entity.
LegalEntity
type: LegalEntity from: fpml-shared-4-8.xsd
tranche
0..1
This element contains CDS tranche terms.
Tranche
type: Tranche
settledEntityMatrix
0..1
Used to specify the Relevant Settled Entity Matrix when there are settled entities at the time of the trade.
SettledEntityMatrix
type: SettledEntityMatrix
@ id

Schema Component Representation

```
<xsd:complexType name="IndexReferenceInformation">
   <xsd:sequence>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="indexName" type=" IndexName "/>
            <xsd:element name="indexId" type=" IndexId " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
         <xsd:sequence>
            <xsd:element name="indexId" type=" IndexId " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:choice>
      <xsd:element name="indexSeries" type=" xsd:positiveInteger " minOccurs="0"/>
      <xsd:element name="indexAnnexVersion" type=" xsd:positiveInteger " minOccurs="0"/>
      <xsd:element name="indexAnnexDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="indexAnnexSource" type=" IndexAnnexSource " minOccurs="0"/>
      <xsd:element name="excludedReferenceEntity" type=" LegalEntity "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="tranche" type=" Tranche " minOccurs="0"/>
      <xsd:element name="settledEntityMatrix" type=" SettledEntityMatrix " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: InitialPayment

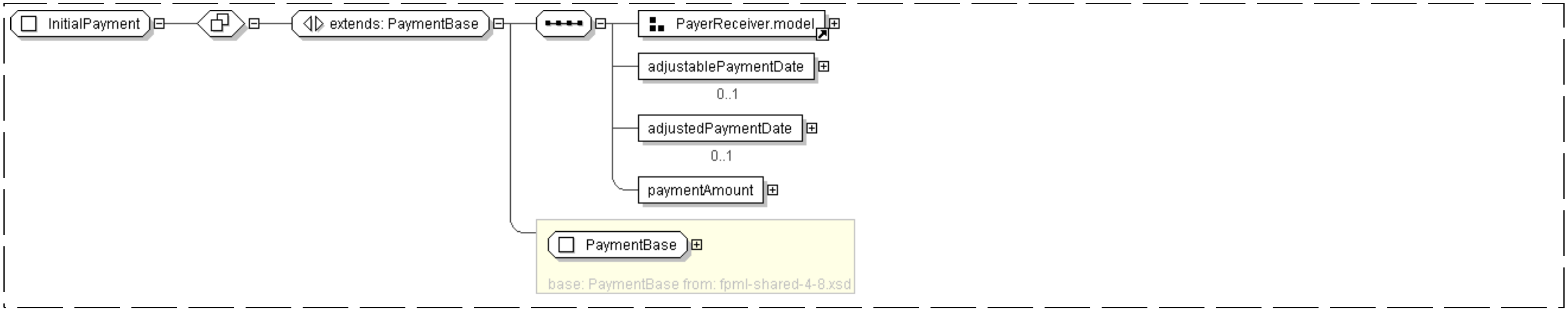
Super-types:	PaymentBase < **InitialPayment** (by extension)
Sub-types:	None

Name	InitialPayment
Used by (from the same schema document)	Complex Type **FeeLeg**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <adjustablePaymentDate> xsd:date </adjustablePaymentDate> [0..1]
   'A fixed payment date that shall be subject to adjustment in accordance with the
   applicable business day convention if it would otherwise fall on a day that is not a
   business day. The applicable business day convention and business day are those specified
   in the dateAdjustments element within the generalTerms component.'

   <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [0..1]
   'The adjusted payment date. This date should already be adjusted for any applicable
   business day convention. This component is not intended for use in trade confirmation but
   may be specified to allow the fee structure to also serve as a cashflow type component.'

   <paymentAmount> Money </paymentAmount> [1]
   'A fixed payment amount.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InitialPayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="adjustablePaymentDate" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="adjustedPaymentDate" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="paymentAmount" type=" Money "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestShortFall

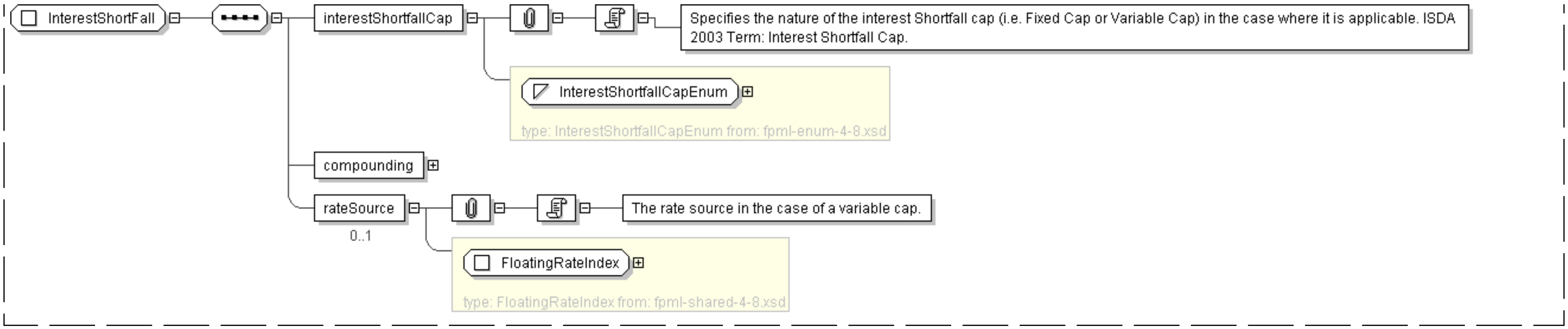
Super-types:	None
Sub-types:	None

Name	InterestShortFall
Used by (from the same schema document)	Complex Type **FloatingAmountEvents**
Abstract	no

XML Instance Representation

```
<...>
   <interestShortfallCap> InterestShortfallCapEnum </interestShortfallCap> [1]
   'Specifies the nature of the interest Shortfall cap (i.e. Fixed Cap or Variable Cap) in
   the case where it is applicable. ISDA 2003 Term: Interest Shortfall Cap.'

   <compounding> xsd:boolean </compounding> [1]
   <rateSource> FloatingRateIndex </rateSource> [0..1]
   'The rate source in the case of a variable cap.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestShortFall">
   <xsd:sequence>
      <xsd:element name="interestShortfallCap" type=" InterestShortfallCapEnum "/>
      <xsd:element name="compounding" type=" xsd:boolean "/>
      <xsd:element name="rateSource" type=" FloatingRateIndex " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LoanParticipation

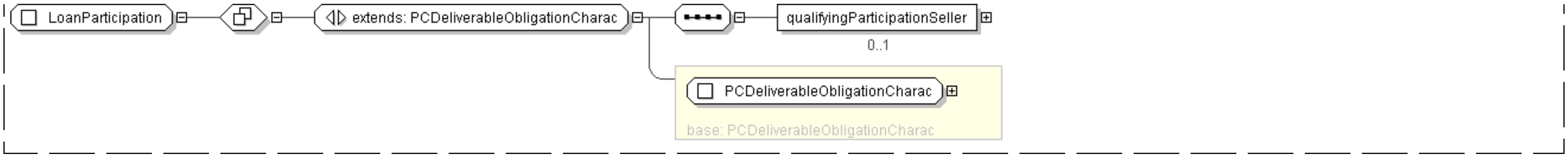
Super-types:	PCDeliverableObligationCharac < **LoanParticipation** (by extension)
Sub-types:	None

Name	LoanParticipation
Used by (from the same schema document)	Complex Type **DeliverableObligations** , Complex Type **DeliverableObligations**
Abstract	no

XML Instance Representation

```
<...>
   <partialCashSettlement> Empty </partialCashSettlement> [0..1]
   'Specifies whether either \'Partial Cash Settlement of Assignable Loans\', \'Partial
   Cash Settlement of Consent Required Loans\' or \'Partial Cash Settlement of Participations\'
   is applicable. If this element is specified and Assignable Loan is a Deliverable
   Obligation Chracteristic, any Assignable Loan that is deliverable, but where a non-receipt
   of Consent by the Physical Settlement Date has occurred, the Loan can be cash settled
   rather than physically delivered. If this element is specified and Consent Required Loan is
   a Deliverable Obligation Characterisitc, any Consent Required Loan that is deliverable,
   but where a non-receipt of Consent by the Physical Settlement Date has occurred, the Loan
   can be cash settled rather than physically delivered. If this element is specified and
   Direct Loan Participation is a Deliverable Obligation Characterisitic, any Participation
   that is deliverable, but where this participation has not been effected (has not come
   into effect) by the Physical Settlement Date, the participation can be cash settled rather
   than physically delivered.'

   <qualifyingParticipationSeller> xsd:string </qualifyingParticipationSeller> [0..1]
   'If Direct Loan Participation is specified as a deliverable obligation characteristic,
   this specifies any requirements for the Qualifying Participation Seller. The requirements
   may be listed free-form. ISDA 2003 Term: Qualifying Participation Seller'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LoanParticipation">
   <xsd:complexContent>
      <xsd:extension base=" PCDeliverableObligationCharac ">
         <xsd:sequence>
            <xsd:element name="qualifyingParticipationSeller" type=" xsd:string " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MatrixSource

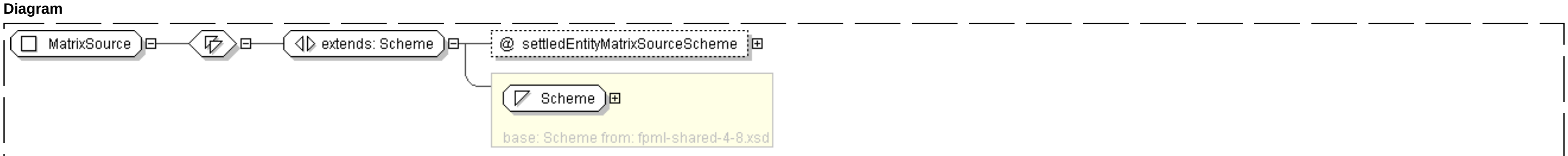
Super-types:	Scheme < **MatrixSource** (by extension)
Sub-types:	None

Name	MatrixSource
Used by (from the same schema document)	Complex Type **SettledEntityMatrix**
Abstract	no

XML Instance Representation

```
<...
settledEntityMatrixSourceScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MatrixSource">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="settledEntityMatrixSourceScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/settled-entity-matrix-source"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: MultipleValuationDates

Super-types:	SingleValuationDate < **MultipleValuationDates** (by extension)

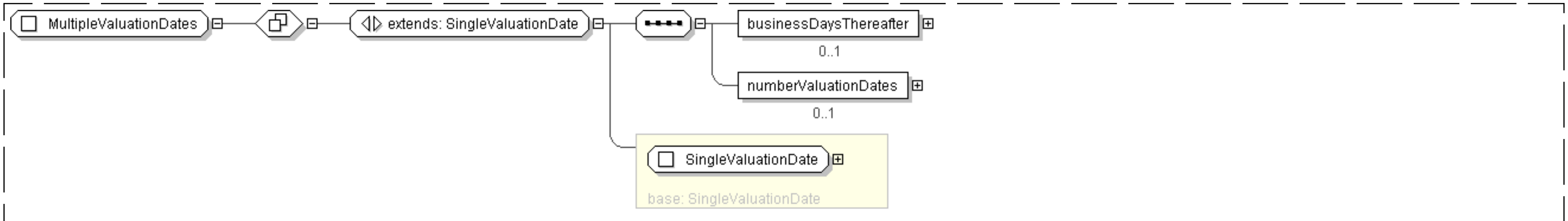
Sub-types:	None

Name	MultipleValuationDates
Used by (from the same schema document)	Complex Type **ValuationDate**
Abstract	no

XML Instance Representation

```
<...>
  <businessDays> xsd:nonNegativeInteger </businessDays> [0..1]
  'A number of business days. Its precise meaning is dependant on the context in which
  this element is used. ISDA 2003 Term: Business Day'

  <businessDaysThereafter> xsd:positiveInteger </businessDaysThereafter> [0..1]
  'The number of business days between successive valuation dates when multiple valuation
  dates are applicable for cash settlement. ISDA 2003 Term: Business Days thereafter'

  <numberValuationDates> xsd:positiveInteger </numberValuationDates> [0..1]
  'Where multiple valuation dates are specified as being applicable for cash settlement,
  this element specifies (a) the number of applicable valuation dates, and (b) the number
  of business days after satisfaction of all conditions to settlement when the first
  such valuation date occurs, and (c) the number of business days thereafter of each
  successive valuation date. ISDA 2003 Term: Multiple Valuation Dates'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MultipleValuationDates">
   <xsd:complexContent>
      <xsd:extension base=" SingleValuationDate ">
         <xsd:sequence>
            <xsd:element name="businessDaysThereafter" type=" xsd:positiveInteger " minOccurs="0"/>
            <xsd:element name="numberValuationDates" type=" xsd:positiveInteger " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NotDomesticCurrency

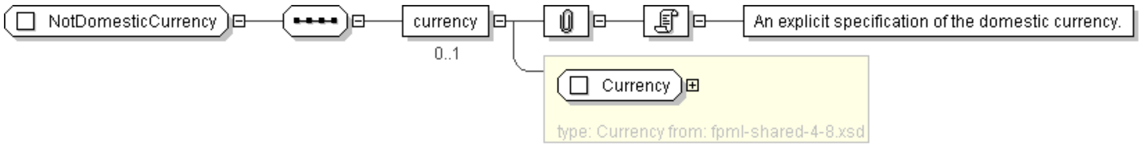
Super-types:	None
Sub-types:	None

Name	NotDomesticCurrency
Used by (from the same schema document)	Complex Type **DeliverableObligations** , Complex Type **Obligations**
Abstract	no

XML Instance Representation

```
<...>
   <currency> Currency </currency> [0..1]
   'An explicit specification of the domestic currency.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NotDomesticCurrency">
   <xsd:sequence>
      <xsd:element name="currency" type=" Currency " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Obligations

Super-types:	None
Sub-types:	None

Name	Obligations
Used by (from the same schema document)	Complex Type **ProtectionTerms**
Abstract	no

XML Instance Representation

```
<...>
   <category> ObligationCategoryEnum </category> [1]
   'Used in both obligations and deliverable obligations to represent a class or type
   of securities which apply. ISDA 2003 Term: Obligation Category/Deliverable Obligation Category'

   <notSubordinated> Empty </notSubordinated> [0..1]
   'An obligation and deliverable obligation characteristic. An obligation that ranks at
   least equal with the most senior Reference Obligation in priority of payment or, if
   no Reference Obligation is specified in the related Confirmation, the obligations of
   the Reference Entity that are senior. ISDA 2003 Term: Not Subordinated'

   <specifiedCurrency> SpecifiedCurrency </specifiedCurrency> [0..1]
   'An obligation and deliverable obligation characteristic. The currency or currencies in
   which an obligation or deliverable obligation must be payable. ISDA 2003 Term:
   Specified Currency'

   <notSovereignLender> Empty </notSovereignLender> [0..1]
   'An obligation and deliverable obligation characteristic. Any obligation that is not
   primarily (majority) owed to a Sovereign or Supranational Organization. ISDA 2003 Term:
   Not Sovereign Lender'

   <notDomesticCurrency> NotDomesticCurrency </notDomesticCurrency> [0..1]
   'An obligation and deliverable obligation characteristic. Any obligation that is payable in
   any currency other than the domestic currency. Domestic currency is either the currency
   so specified or, if no currency is specified, the currency of (a) the reference entity, if
   the reference entity is a sovereign, or (b) the jurisdiction in which the relevant
   reference entity is organised, if the reference entity is not a sovereign. ISDA 2003 Term:
   Not Domestic Currency'
```

<notDomesticLaw> Empty </notDomesticLaw> [0..1]

'An obligation and deliverable obligation characteristic. If the reference entity is a Sovereign, this means any obligation that is not subject to the laws of the reference entity. If the reference entity is not a sovereign, this means any obligation that is not subject to the laws of the jurisdiction of the reference entity. ISDA 2003 Term: Not Domestic Law'

<listed> Empty </listed> [0..1]

'An obligation and deliverable obligation characteristic. Indicates whether or not the obligation is quoted, listed or ordinarily purchased and sold on an exchange. ISDA 2003 Term: Listed'

<notDomesticIssuance> Empty </notDomesticIssuance> [0..1]

'An obligation and deliverable obligation characteristic. Any obligation other than an obligation that was intended to be offered for sale primarily in the domestic market of the relevant Reference Entity. This specifies that the obligation must be an internationally recognized bond. ISDA 2003 Term: Not Domestic Issuance'

Start Choice [0..1]

<fullFaithAndCreditObLiability> Empty </fullFaithAndCreditObLiability> [1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Full Faith and Credit Obligation Liability'

<generalFundObligationLiability> Empty </generalFundObligationLiability> [1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: General Fund Obligation Liability'

<revenueObligationLiability> Empty </revenueObligationLiability> [1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Revenue Obligation Liability'

End Choice

<notContingent> Empty </notContingent> [0..1]

'NOTE: Only allowed as an obligation charcteristic under ISDA Credit 1999. In essence Not Contingent means the repayment of principal cannot be dependant on a formula/index, i.e. to prevent the risk of being delivered an instrument that may never pay any element of principal, and to ensure that the obligation is interest bearing (on a regular schedule). ISDA 2003 Term: Not Contingent'

<excluded> xsd:string </excluded> [0..1]

'A free format string to specify any excluded obligations or deliverable obligations, as the case may be, of the reference entity or excluded types of obligations or deliverable obligations. ISDA 2003 Term: Excluded Obligations/Excluded Deliverable Obligations'

<othReferenceEntityObligations> xsd:string </othReferenceEntityObligations> [0..1]

'This element is used to specify any other obligations of a reference entity in both obligations and deliverable obligations. The obligations can be specified free-form. ISDA 2003 Term: Other Obligations of a Reference Entity'

<designatedPriority> Lien </designatedPriority> [0..1]

'Applies to Loan CDS, to indicate what lien level is appropriate for a deliverable obligation. Applies to European Loan CDS, to indicate the Ranking of the obligation. Example: a 2nd lien Loan CDS would imply that the deliverable obligations are 1st or 2nd lien loans.'

<cashSettlementOnly> Empty </cashSettlementOnly> [0..1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published Standard Terms Supplement for use with CDS Transactions on Leveraged Loans. ISDA 2003 Term: Cash Settlement Only.'

<deliveryOfCommitments> Empty </deliveryOfCommitments> [0..1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published Standard Terms Supplement for use with CDS Transactions on Leveraged Loans. ISDA

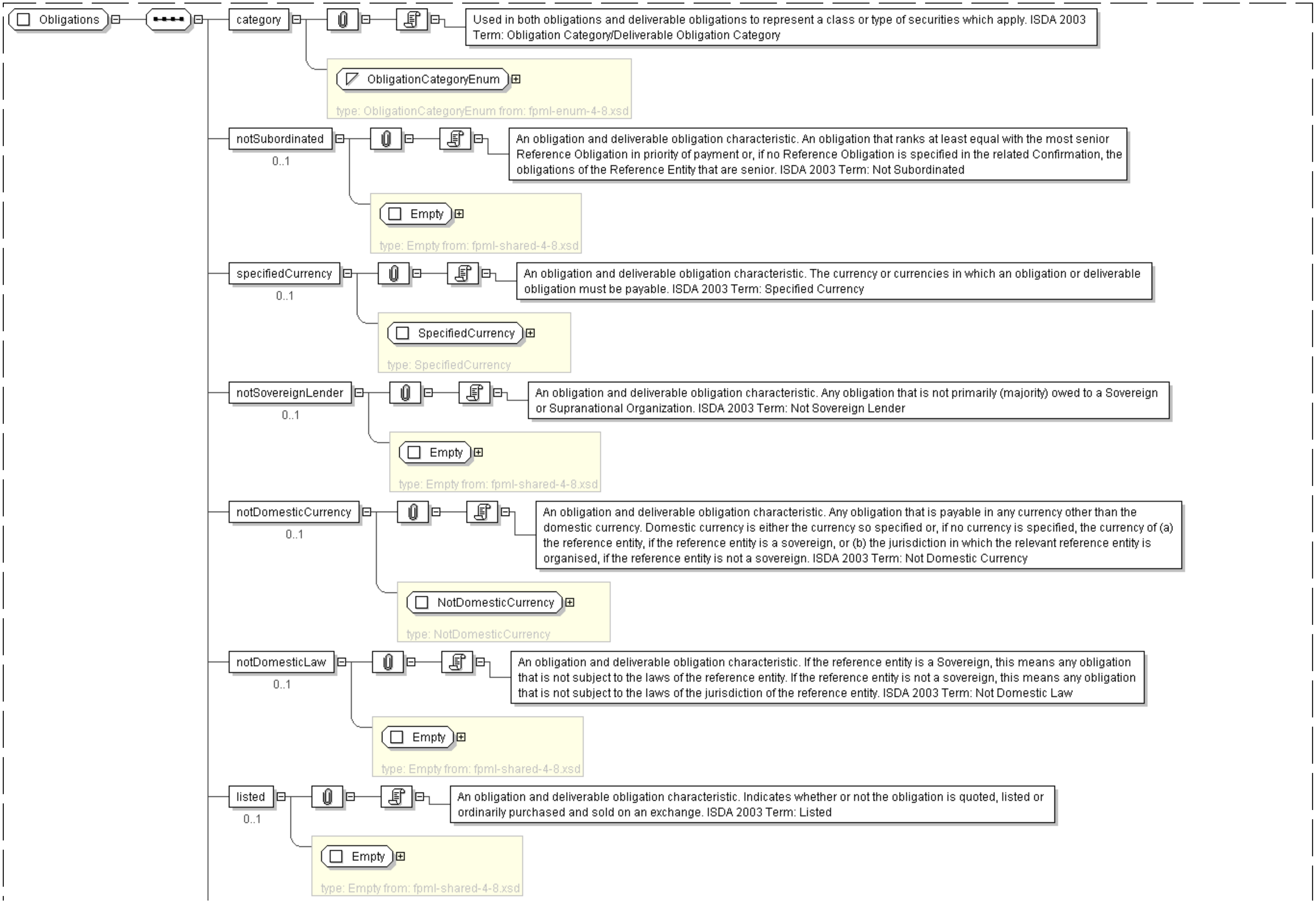
2003 Term: Delivery of Commitments.'

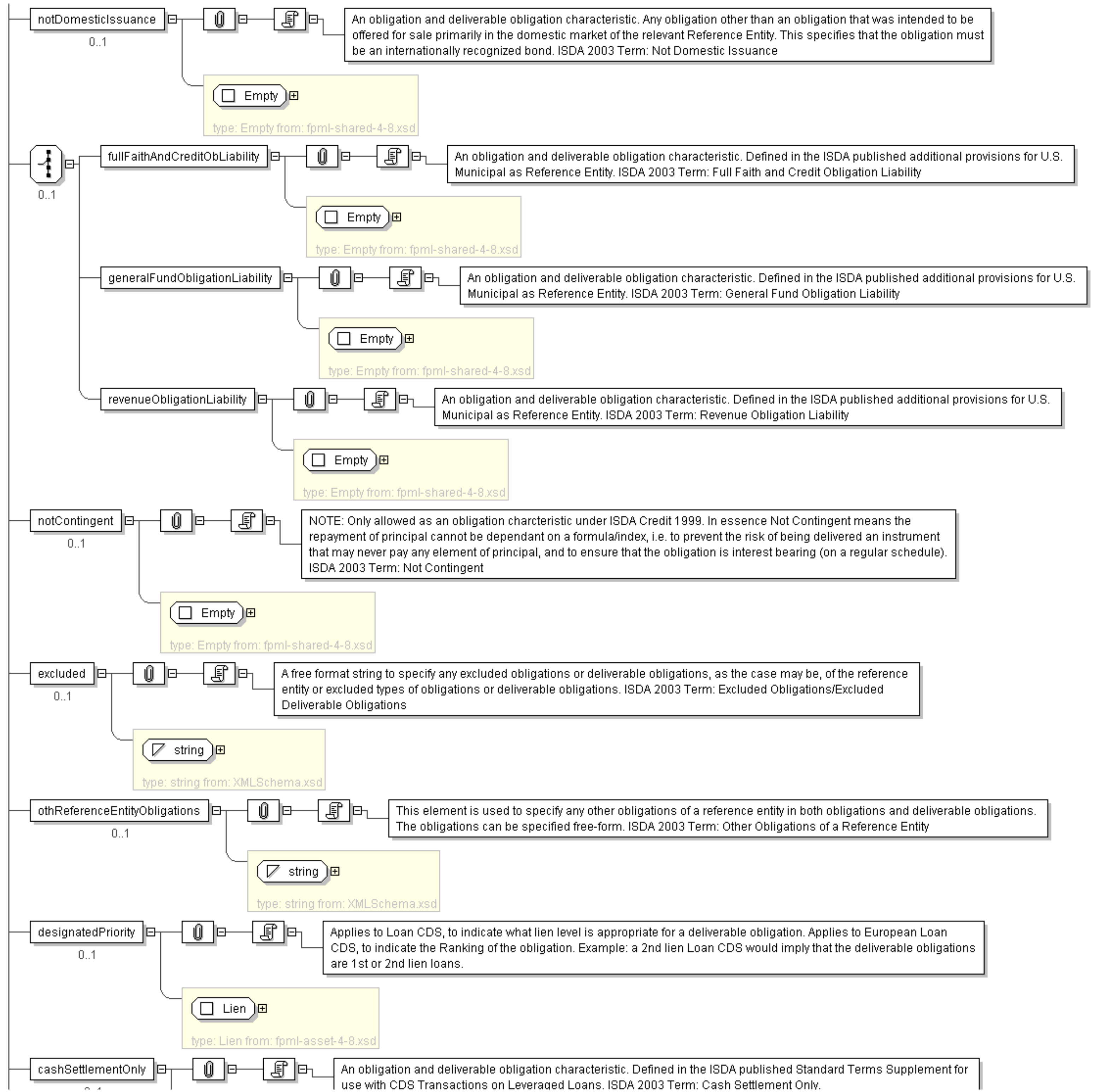
<continuity> Empty </continuity> [0..1]

'An obligation and deliverable obligation characteristic. Defined in the ISDA published Standard Terms Supplement for use with CDS Transactions on Leveraged Loans. ISDA 2003 Term: Continuity.'

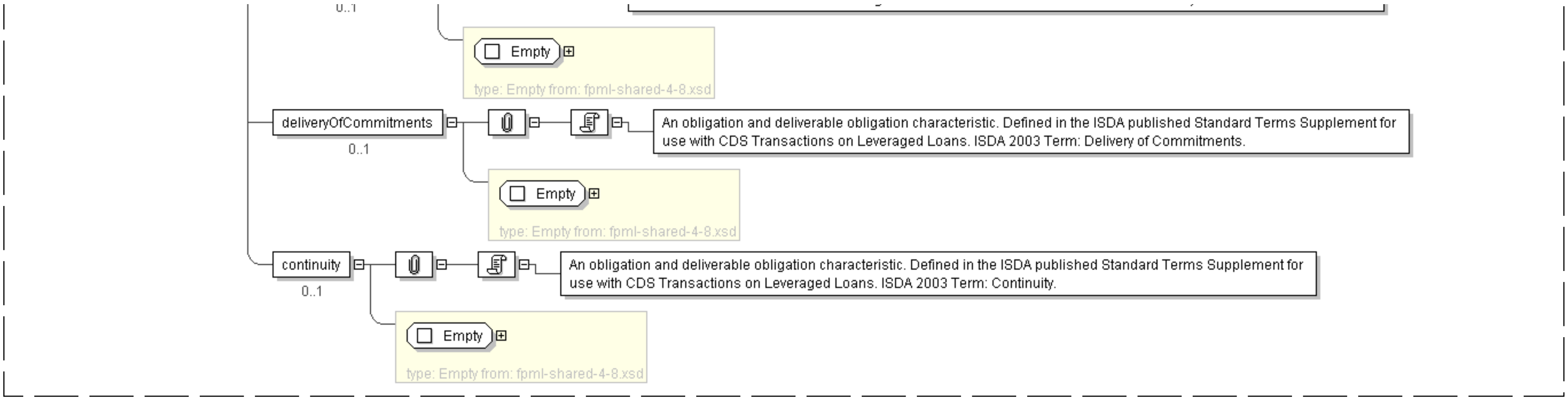
</...>

Diagram





notDomesticIssuance
0..1
An obligation and deliverable obligation characteristic. Any obligation other than an obligation that was intended to be offered for sale primarily in the domestic market of the relevant Reference Entity. This specifies that the obligation must be an internationally recognized bond. ISDA 2003 Term: Not Domestic Issuance
Empty
type: Empty from: fpml-shared-4-8.xsd
0..1
fullFaithAndCreditObLiability
An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Full Faith and Credit Obligation Liability
Empty
type: Empty from: fpml-shared-4-8.xsd
generalFundObligationLiability
An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: General Fund Obligation Liability
Empty
type: Empty from: fpml-shared-4-8.xsd
revenueObligationLiability
An obligation and deliverable obligation characteristic. Defined in the ISDA published additional provisions for U.S. Municipal as Reference Entity. ISDA 2003 Term: Revenue Obligation Liability
Empty
type: Empty from: fpml-shared-4-8.xsd
notContingent
0..1
NOTE: Only allowed as an obligation charcteristic under ISDA Credit 1999. In essence Not Contingent means the repayment of principal cannot be dependant on a formula/index, i.e. to prevent the risk of being delivered an instrument that may never pay any element of principal, and to ensure that the obligation is interest bearing (on a regular schedule). ISDA 2003 Term: Not Contingent
Empty
type: Empty from: fpml-shared-4-8.xsd
excluded
0..1
A free format string to specify any excluded obligations or deliverable obligations, as the case may be, of the reference entity or excluded types of obligations or deliverable obligations. ISDA 2003 Term: Excluded Obligations/Excluded Deliverable Obligations
string
type: string from: XMLSchema.xsd
othReferenceEntityObligations
0..1
This element is used to specify any other obligations of a reference entity in both obligations and deliverable obligations. The obligations can be specified free-form. ISDA 2003 Term: Other Obligations of a Reference Entity
string
type: string from: XMLSchema.xsd
designatedPriority
0..1
Applies to Loan CDS, to indicate what lien level is appropriate for a deliverable obligation. Applies to European Loan CDS, to indicate the Ranking of the obligation. Example: a 2nd lien Loan CDS would imply that the deliverable obligations are 1st or 2nd lien loans.
Lien
type: Lien from: fpml-asset-4-8.xsd
cashSettlementOnly
An obligation and deliverable obligation characteristic. Defined in the ISDA published Standard Terms Supplement for use with CDS Transactions on Leveraged Loans. ISDA 2003 Term: Cash Settlement Only.



Schema Component Representation

```
<xsd:complexType name="Obligations">
   <xsd:sequence>
      <xsd:element name="category" type=" ObligationCategoryEnum "/>
      <xsd:element name="notSubordinated" type=" Empty " minOccurs="0"/>
      <xsd:element name="specifiedCurrency" type=" SpecifiedCurrency " minOccurs="0"/>
      <xsd:element name="notSovereignLender" type=" Empty " minOccurs="0"/>
      <xsd:element name="notDomesticCurrency" type=" NotDomesticCurrency " minOccurs="0"/>
      <xsd:element name="notDomesticLaw" type=" Empty " minOccurs="0"/>
      <xsd:element name="listed" type=" Empty " minOccurs="0"/>
      <xsd:element name="notDomesticIssuance" type=" Empty " minOccurs="0"/>
      <xsd:choice minOccurs="0">
         <xsd:element name="fullFaithAndCreditObLiability" type=" Empty "/>
         <xsd:element name="generalFundObligationLiability" type=" Empty "/>
         <xsd:element name="revenueObligationLiability" type=" Empty "/>
      </xsd:choice>
      <xsd:element name="notContingent" type=" Empty " minOccurs="0"/>
      <xsd:element name="excluded" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="othReferenceEntityObligations" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="designatedPriority" type=" Lien " minOccurs="0"/>
      <xsd:element name="cashSettlementOnly" type=" Empty " minOccurs="0"/>
      <xsd:element name="deliveryOfCommitments" type=" Empty " minOccurs="0"/>
      <xsd:element name="continuity" type=" Empty " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PCDeliverableObligationCharac

Super-types:	None
Sub-types:	• LoanParticipation (by extension)

Name	PCDeliverableObligationCharac
Used by (from the same schema document)	Complex Type **DeliverableObligations** , Complex Type **DeliverableObligations**
Abstract	no

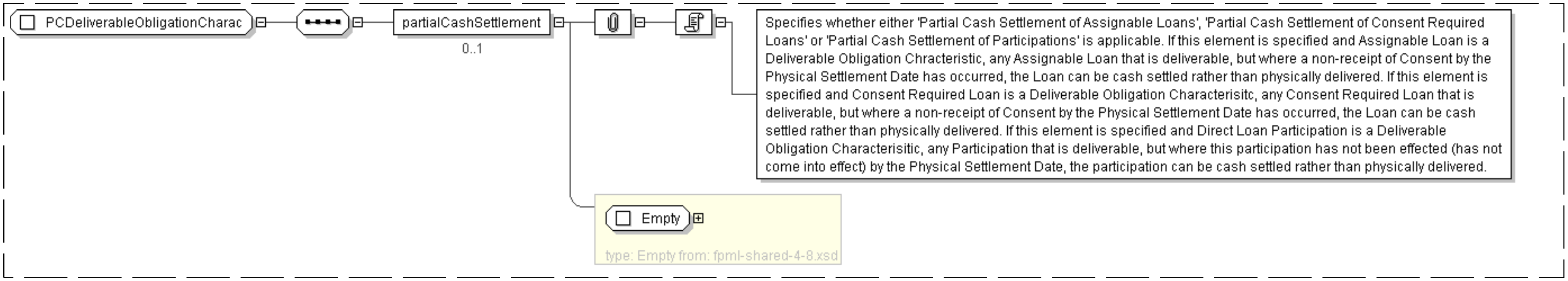
XML Instance Representation

```
<...>
   <partialCashSettlement> Empty </partialCashSettlement> [0..1]
   'Specifies whether either \'Partial Cash Settlement of Assignable Loans\', \'Partial
```

Cash Settlement of Consent Required Loans\' or \'Partial Cash Settlement of Participations\' is applicable. If this element is specified and Assignable Loan is a Deliverable Obligation Chracteristic, any Assignable Loan that is deliverable, but where a non-receipt of Consent by the Physical Settlement Date has occurred, the Loan can be cash settled rather than physically delivered. If this element is specified and Consent Required Loan is a Deliverable Obligation Characterisitc, any Consent Required Loan that is deliverable, but where a non-receipt of Consent by the Physical Settlement Date has occurred, the Loan can be cash settled rather than physically delivered. If this element is specified and Direct Loan Participation is a Deliverable Obligation Characterisitic, any Participation that is deliverable, but where this participation has not been effected (has not come into effect) by the Physical Settlement Date, the participation can be cash settled rather than physically delivered.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PCDeliverableObligationCharac">
   <xsd:sequence>
      <xsd:element name="partialCashSettlement" type=" Empty " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PeriodicPayment

Super-types:	PaymentBase < **PeriodicPayment** (by extension)
Sub-types:	None

Name	PeriodicPayment
Used by (from the same schema document)	Complex Type **FeeLeg**
Abstract	no

XML Instance Representation

<...
id=" xsd:ID [0..1]">

<paymentFrequency> Period **</paymentFrequency>** [0..1]

'The time interval between regular fixed rate payer payment dates.'

<firstPeriodStartDate> xsd:date **</firstPeriodStartDate>** [0..1]

'The start date of the initial calculation period if such date is not equal to the trade's effective date. It must only be specified if it is not equal to the effective date. The applicable business day convention and business day are those specified in the dateAdjustments element within the generalTerms component (or in a transaction supplement FpML representation defined within the referenced general terms confirmation agreement).'

<firstPaymentDate> xsd:date **</firstPaymentDate>** [0..1]

'The first unadjusted fixed rate payer payment date. The applicable business day convention and business day are those specified in the dateAdjustments element within the generalTerms component (or in a transaction supplement FpML representation defined within the referenced general terms confirmation agreement). ISDA 2003 Term: Fixed Rate Payer Payment Date'

<lastRegularPaymentDate> xsd:date **</lastRegularPaymentDate>** [0..1]

'The last regular unadjusted fixed rate payer payment date. The applicable business day convention and business day are those specified in the dateAdjustments element within the generalTerms component (or in a transaction supplement FpML representation defined within the referenced general terms confirmation agreement). This element should only be included if there is a final payment stub, i.e. where the last regular unadjusted fixed rate payer payment date is not equal to the scheduled termination date. ISDA 2003 Term: Fixed Rate Payer Payment Date'

<rollConvention> RollConventionEnum **</rollConvention>** [0..1]

'Used in conjunction with the effectiveDate, scheduledTerminationDate, firstPaymentDate, lastRegularPaymentDate and paymentFrequency to determine the regular fixed rate payer payment dates.'

Start Choice [1]

<fixedAmount> Money **</fixedAmount>** [1]

'A fixed payment amount. ISDA 2003 Term: Fixed Amount'

<fixedAmountCalculation> FixedAmountCalculation **</fixedAmountCalculation>** [1]

'This element contains all the terms relevant to calculating a fixed amount where the fixed amount is calculated by reference to a per annum fixed rate. There is no corresponding ISDA 2003 Term. The equivalent is Sec 5.1 \"Calculation of Fixed Amount\" but this in itself is not a defined Term.'

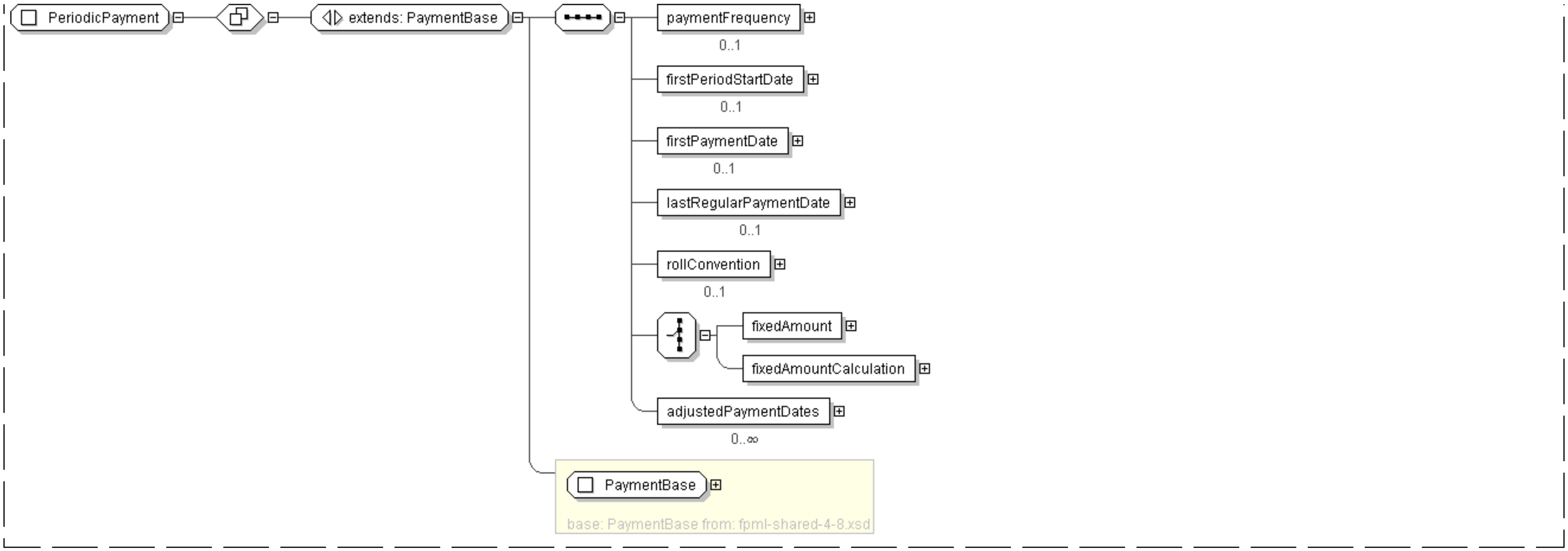
End Choice

<adjustedPaymentDates> AdjustedPaymentDates **</adjustedPaymentDates>** [0..*]

'An optional cashflow-like structure allowing the equivalent representation of the periodic fixed payments in terms of a series of adjusted payment dates and amounts. This is intended to support application integration within an organisation and is not intended for use in inter-firm communication or confirmations. ISDA 2003 Term: Fixed Rate Payer Payment Date'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PeriodicPayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="paymentFrequency" type=" Period " minOccurs="0"/>
            <xsd:element name="firstPeriodStartDate" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="firstPaymentDate" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="lastRegularPaymentDate" type=" xsd:date " minOccurs="0"/>
            <xsd:element name="rollConvention" type=" RollConventionEnum " minOccurs="0"/>
            <xsd:choice>
               <xsd:element name="fixedAmount" type=" Money "/>
               <xsd:element name="fixedAmountCalculation" type=" FixedAmountCalculation "/>
            </xsd:choice>
            <xsd:element name="adjustedPaymentDates" type=" AdjustedPaymentDates "
            minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PhysicalSettlementPeriod

Super-types:	None
Sub-types:	None

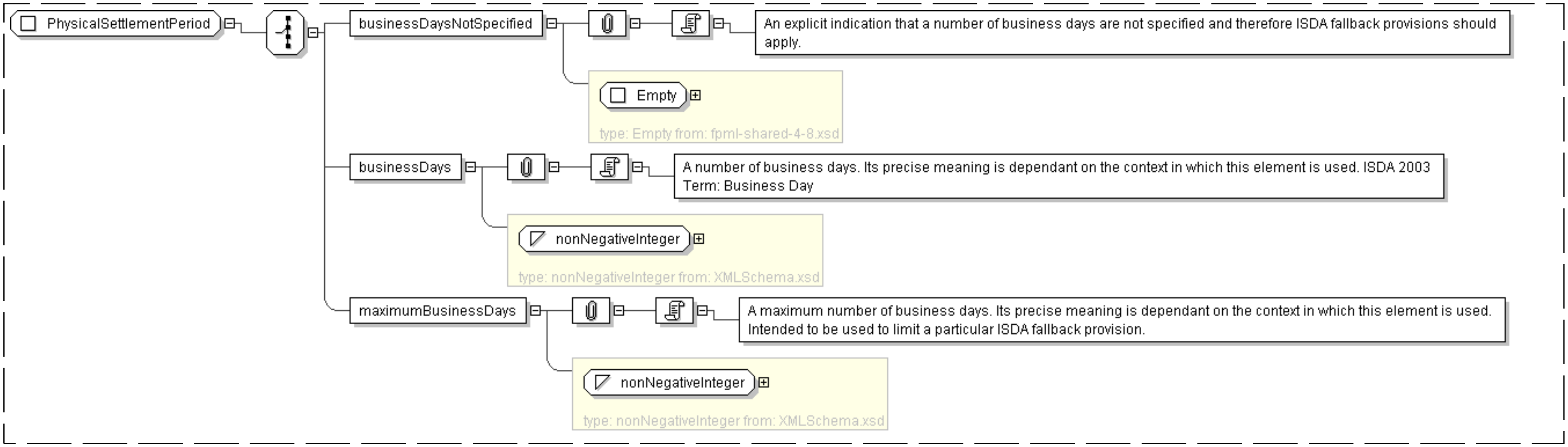
Name	PhysicalSettlementPeriod
Used by (from the same schema document)	Complex Type **PhysicalSettlementTerms**
Abstract	no

XML Instance Representation

```
<...>
Start Choice [1]
```

```
<businessDaysNotSpecified> Empty </businessDaysNotSpecified> [1]
'An explicit indication that a number of business days are not specified and therefore
ISDA fallback provisions should apply.'

<businessDays> xsd:nonNegativeInteger </businessDays> [1]
'A number of business days. Its precise meaning is dependant on the context in which
this element is used. ISDA 2003 Term: Business Day'

<maximumBusinessDays> xsd:nonNegativeInteger </maximumBusinessDays> [1]
'A maximum number of business days. Its precise meaning is dependant on the context in
which this element is used. Intended to be used to limit a particular ISDA fallback provision.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PhysicalSettlementPeriod">
   <xsd:choice>
      <xsd:element name="businessDaysNotSpecified" type=" Empty "/>
      <xsd:element name="businessDays" type=" xsd:nonNegativeInteger "/>
      <xsd:element name="maximumBusinessDays" type=" xsd:nonNegativeInteger "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: PhysicalSettlementTerms

Super-types:	SettlementTerms < **PhysicalSettlementTerms** (by extension)
Sub-types:	None

Name	PhysicalSettlementTerms
Used by (from the same schema document)	Complex Type **CreditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...
```

id=" xsd:ID [0..1]">
<settlementCurrency> Currency </settlementCurrency> [0..1]

'ISDA 2003 Term: Settlement Currency'

<physicalSettlementPeriod> PhysicalSettlementPeriod **</physicalSettlementPeriod>** [0..1]

'The number of business days used in the determination of the physical settlement date. The physical settlement date is this number of business days after all applicable conditions to settlement are satisfied. If a number of business days is not specified fallback provisions apply for determining the number of business days. If Section 8.5/8.6 of the 1999/2003 ISDA Definitions are to apply the businessDaysNotSpecified element should be included. If a specified number of business days are to apply these should be specified in the businessDays element. If Section 8.5/8.6 of the 1999/2003 ISDA Definitions are to apply but capped at a maximum number of business days then the maximum number should be specified in the maximumBusinessDays element. ISDA 2003 Term: Physical Settlement Period'

<deliverableObligations> DeliverableObligations **</deliverableObligations>** [0..1]

'This element contains all the ISDA terms relevant to defining the deliverable obligations.'

<escrow> xsd:boolean **</escrow>** [0..1]

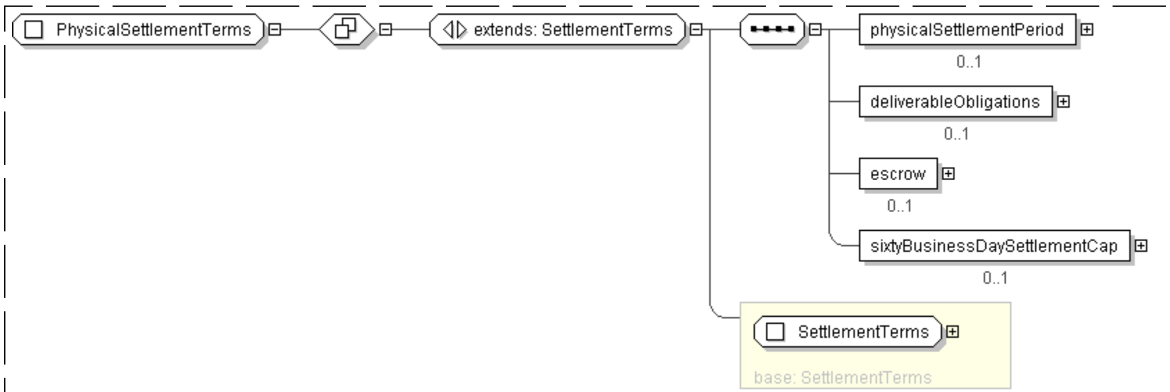
'If this element is specified, indicates that physical settlement must take place through the use of an escrow agent. (For Canadian counterparties this is always \"Not Applicable \". ISDA 2003 Term: Escrow'

<sixtyBusinessDaySettlementCap> xsd:boolean **</sixtyBusinessDaySettlementCap>** [0..1]

'If this element is specified, for a transaction documented under the 2003 ISDA Credit Derivatives Definitions, has the effect of incorporating the language set forth below into the confirmation. The section references are to the 2003 ISDA Credit Derivatives Definitions. Notwithstanding Section 1.7 or any provisions of Sections 9.9 or 9.10 to the contrary, but without prejudice to Section 9.3 and (where applicable) Sections 9.4, 9.5 and 9.6, if the Termination Date has not occurred on or prior to the date that is 60 Business Days following the Physical Settlement Date, such 60th Business Day shall be deemed to be the Termination Date with respect to this Transaction except in relation to any portion of the Transaction (an \"Affected Portion\") in respect of which: (1) a valid notice of Buy-in Price has been delivered that is effective fewer than three Business Days prior to such 60th Business Day, in which case the Termination Date for that Affected Portion shall be the third Business Day following the date on which such notice is effective; or (2) Buyer has purchased but not Delivered Deliverable Obligations validly specified by Seller pursuant to Section 9.10(b), in which case the Termination Date for that Affected Portion shall be the tenth Business Day following the date on which Seller validly specified such Deliverable Obligations to Buyer.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PhysicalSettlementTerms">
   <xsd:complexContent>
      <xsd:extension base=" SettlementTerms ">
```

```
        <xsd:sequence>
            <xsd:element name="physicalSettlementPeriod" type=" PhysicalSettlementPeriod " minOccurs="0"/>
            <xsd:element name="deliverableObligations" type=" DeliverableObligations " minOccurs="0"/>
            <xsd:element name="escrow" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="sixtyBusinessDaySettlementCap" type=" xsd:boolean " minOccurs="0"/>
        </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ProtectionTerms

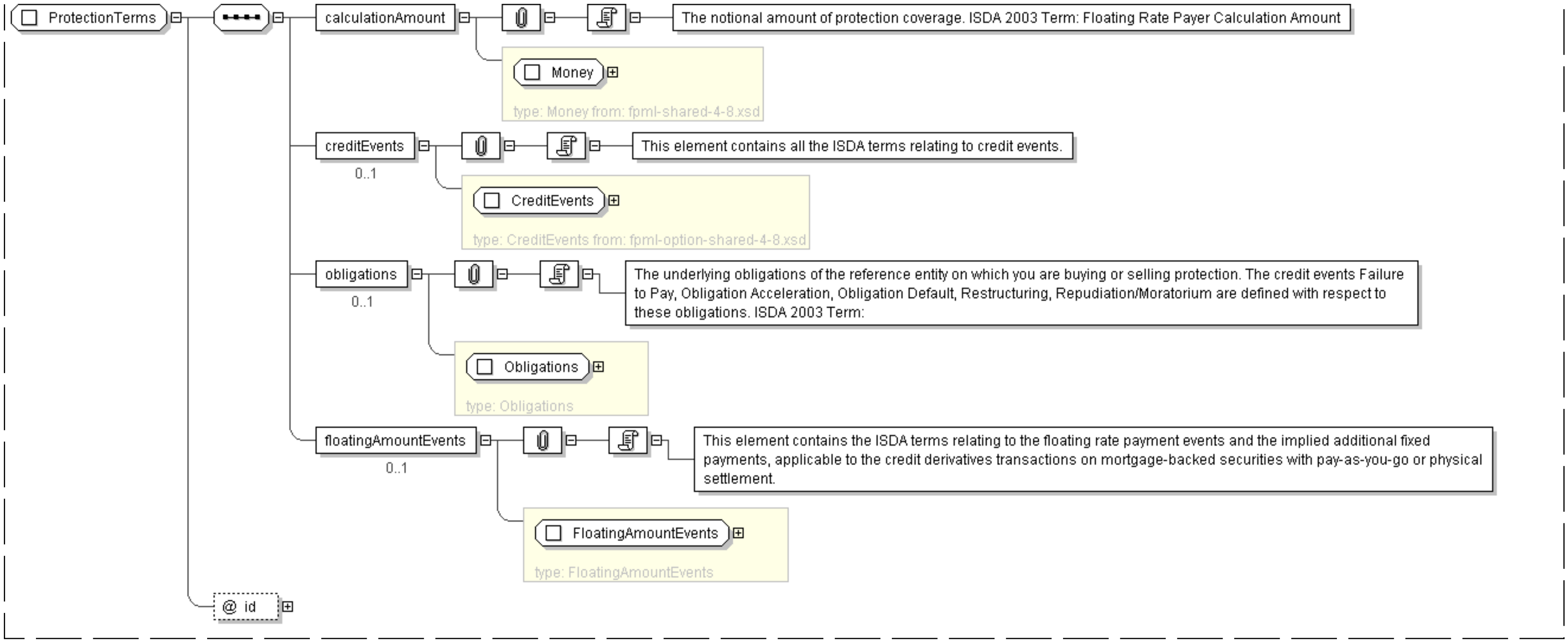
Super-types:	None
Sub-types:	None

Name	ProtectionTerms
Used by (from the same schema document)	Complex Type **CreditDefaultSwap**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <calculationAmount> Money </calculationAmount> [1]
   'The notional amount of protection coverage. ISDA 2003 Term: Floating Rate Payer
   Calculation Amount'

   <creditEvents> CreditEvents </creditEvents> [0..1]
   'This element contains all the ISDA terms relating to credit events.'

   <obligations> Obligations </obligations> [0..1]
   'The underlying obligations of the reference entity on which you are buying or
   selling protection. The credit events Failure to Pay, Obligation Acceleration,
   Obligation Default, Restructuring, Repudiation/Moratorium are defined with respect to
   these obligations. ISDA 2003 Term:'

   <floatingAmountEvents> FloatingAmountEvents </floatingAmountEvents> [0..1]
   'This element contains the ISDA terms relating to the floating rate payment events and
   the implied additional fixed payments, applicable to the credit derivatives transactions
   on mortgage-backed securities with pay-as-you-go or physical settlement.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ProtectionTerms">
   <xsd:sequence>
      <xsd:element name="calculationAmount" type=" Money "/>
      <xsd:element name="creditEvents" type=" CreditEvents " minOccurs="0"/>
      <xsd:element name="obligations" type=" Obligations " minOccurs="0"/>
      <xsd:element name="floatingAmountEvents" type=" FloatingAmountEvents " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
</xsd:complexType>
```

top

Complex Type: ProtectionTermsReference

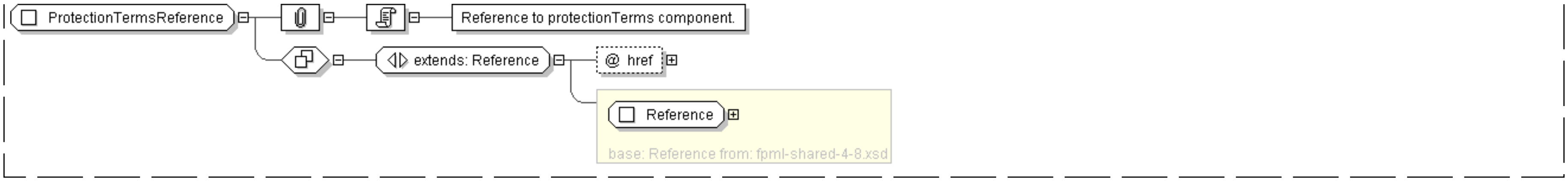
Super-types:	Reference < **ProtectionTermsReference** (by extension)
Sub-types:	None

Name	ProtectionTermsReference
Used by (from the same schema document)	Complex Type **ReferencePoolItem**
Abstract	no
Documentation	Reference to protectionTerms component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ProtectionTermsReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="ProtectionTerms"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReferenceInformation

Super-types:	None
Sub-types:	None

Name	ReferenceInformation
Used by (from the same schema document)	Complex Type **GeneralTerms**
Abstract	no

XML Instance Representation

```
<...>
   <referenceEntity> LegalEntity </referenceEntity> [1]
   'The corporate or sovereign entity on which you are buying or selling protection and
   any successor that assumes all or substantially all of its contractual and other
   obligations. It is vital to use the correct legal name of the entity and to be careful not
   to choose a subsidiary if you really want to trade protection on a parent company. Please
   note, Reference Entities cannot be senior or subordinated. It is the obligations of
   the Reference Entities that can be senior or subordinated. ISDA 2003 Term: Reference Entity'
Start Choice [1]
      <referenceObligation> ReferenceObligation </referenceObligation> [1..*]
      'The Reference Obligation is a financial instrument that is either issued or guaranteed by
      the reference entity. It serves to clarify the precise reference entity protection is
      being offered upon, and its legal position with regard to other related firms
      (parents/subsidiaries). Furthermore the Reference Obligation is ALWAYS deliverable
      and establishes the Pari Passu ranking (as the deliverable bonds must rank equal to
      the reference obligation). ISDA 2003 Term: Reference Obligation'

      <noReferenceObligation> Empty </noReferenceObligation> [1]
      'Used to indicate that there is no Reference Obligation associated with this Credit
      Default Swap and that there will never be one.'

      <unknownReferenceObligation> Empty </unknownReferenceObligation> [1]
      'Used to indicate that the Reference obligation associated with the Credit Default Swap
      is currently not known. This is not valid for Legal Confirmation purposes, but is valid
      for earlier stages in the trade life cycle (e.g. Broker Confirmation).'
End Choice
   <allGuarantees> xsd:boolean </allGuarantees> [0..1]
   'Indicates whether an obligation of the Reference Entity, guaranteed by the Reference Entity
   on behalf of a non-Affiliate, is to be considered an Obligation for the purpose of
   the transaction. It will be considered an obligation if allGuarantees is applicable (true)
   and not if allGuarantees is inapplicable (false). ISDA 2003 Term: All Guarantees'
```

<referencePrice> xsd:decimal </referencePrice> [0..1]

'Used to determine (a) for physically settled trades, the Physical Settlement Amount, which equals the Floating Rate Payer Calculation Amount times the Reference Price and (b) for cash settled trades, the Cash Settlement Amount, which equals the greater of (i) the difference between the Reference Price and the Final Price and (ii) zero. ISDA 2003 Term: Reference Price'

<referencePolicy> Empty </referencePolicy> [0..1]

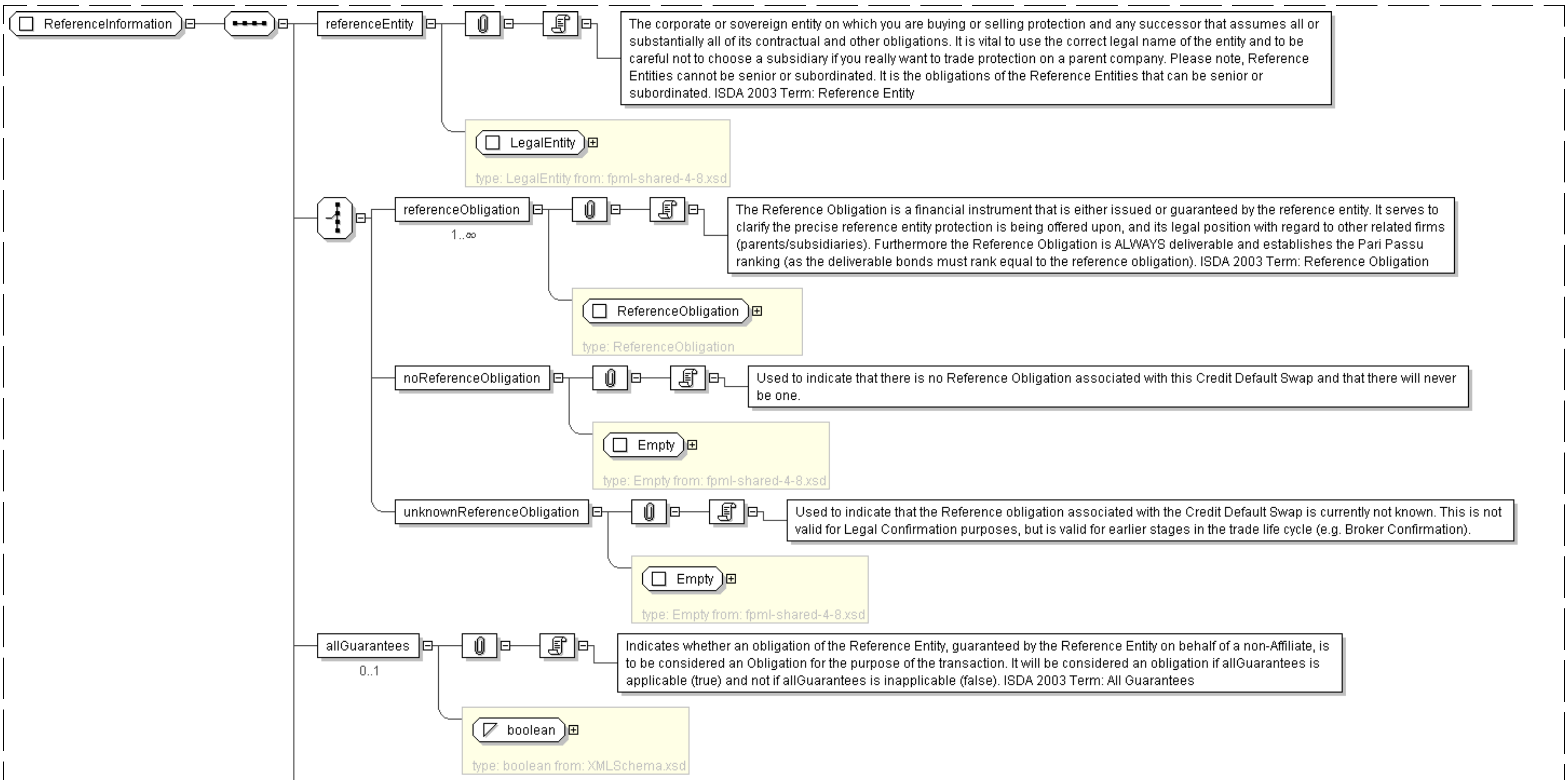
'Applicable to the transactions on mortgage-backed security, which can make use of a reference policy. Presence of the element indicates that the reference policy is applicable; absence implies that it is not.'

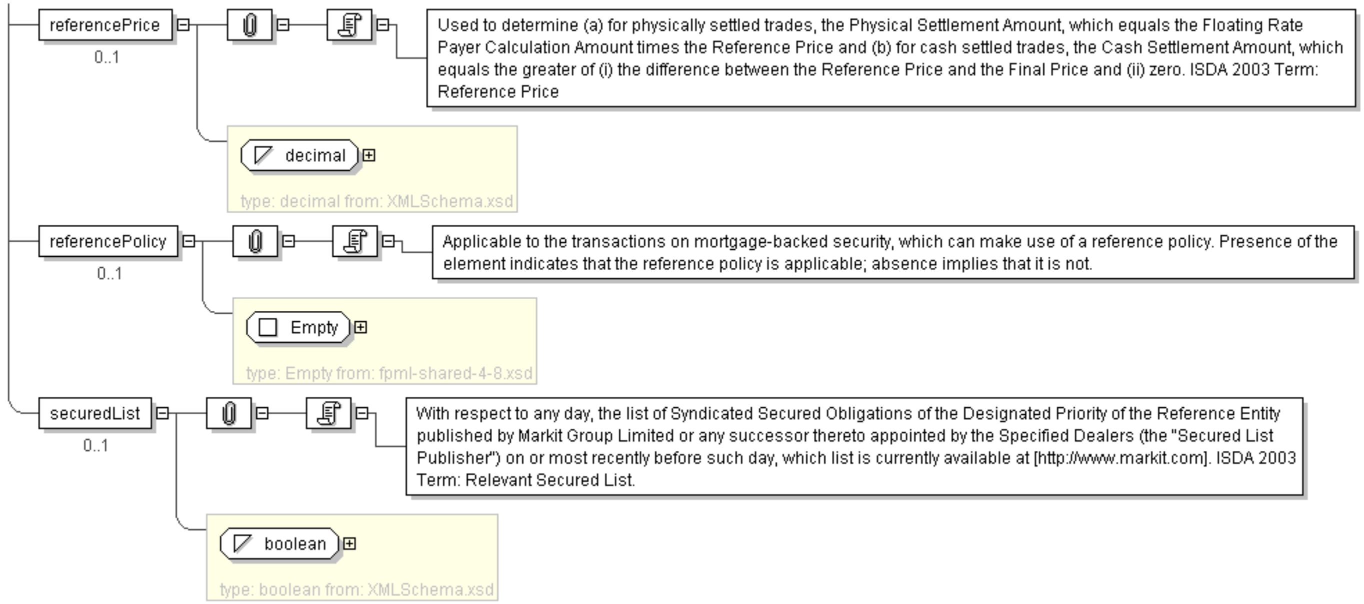
<securedList> xsd:boolean </securedList> [0..1]

'With respect to any day, the list of Syndicated Secured Obligations of the Designated Priority of the Reference Entity published by Markit Group Limited or any successor thereto appointed by the Specified Dealers (the \"Secured List Publisher\") on or most recently before such day, which list is currently available at [http://www.markit.com]. ISDA 2003 Term: Relevant Secured List.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="ReferenceInformation">
   <xsd:sequence>
      <xsd:element name="referenceEntity" type=" LegalEntity "/>
      <xsd:choice>
         <xsd:element name="referenceObligation" type=" ReferenceObligation " maxOccurs="unbounded"/>
         <xsd:element name="noReferenceObligation" type=" Empty "/>
         <xsd:element name="unknownReferenceObligation" type=" Empty "/>
      </xsd:choice>
      <xsd:element name="allGuarantees" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="referencePrice" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="referencePolicy" type=" Empty " minOccurs="0"/>
      <xsd:element name="securedList" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReferenceObligation

Super-types:	None
Sub-types:	None

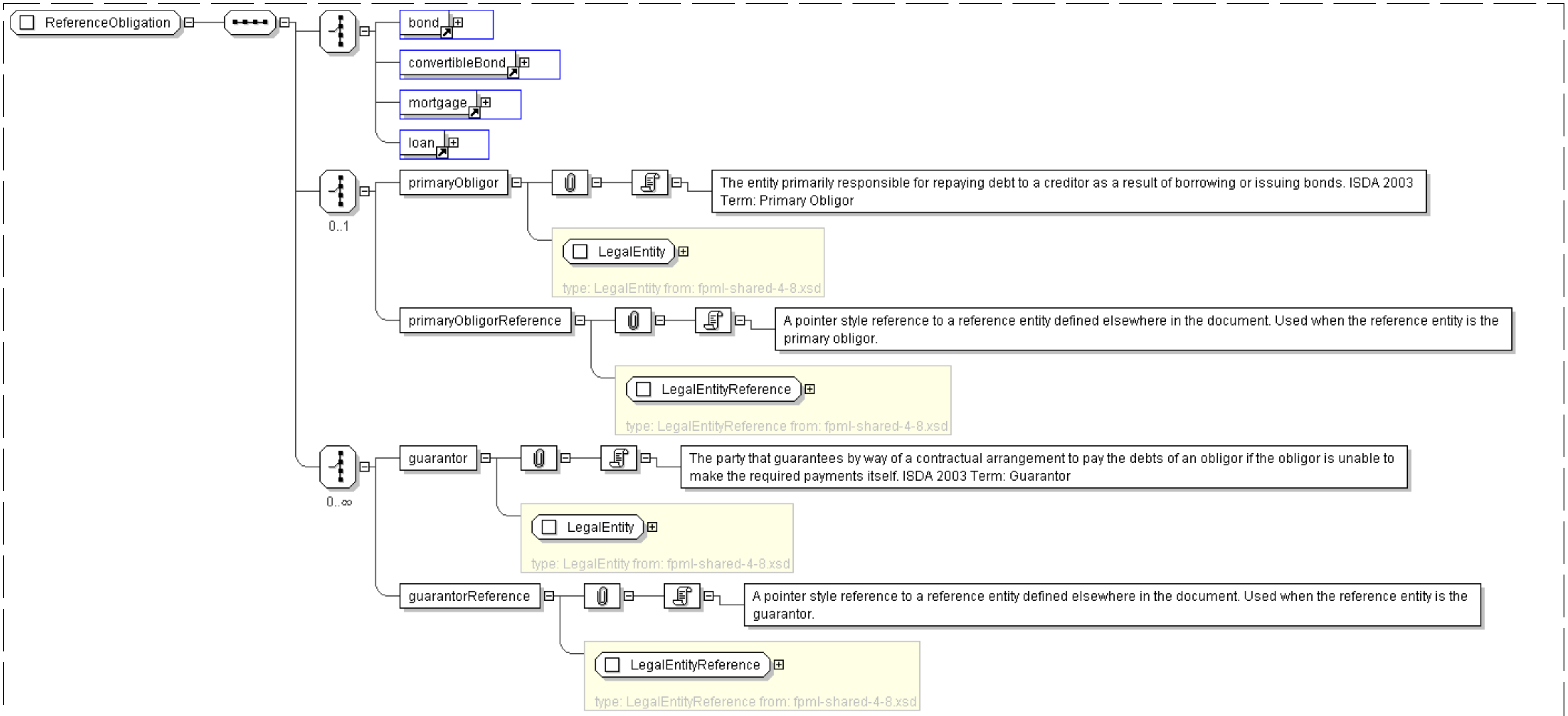
Name	ReferenceObligation
Used by (from the same schema document)	Complex Type **ReferenceInformation** , Complex Type **ReferencePair**
Abstract	no

XML Instance Representation

```
<...>
Start Choice [1]
      <bond> ... </bond> [1]
      <convertibleBond> ... </convertibleBond> [1]
      <mortgage> ... </mortgage> [1]
      <loan> ... </loan> [1]
End Choice
```

```
Start Choice [0..1]
      <primaryObligor> LegalEntity </primaryObligor> [1]
      'The entity primarily responsible for repaying debt to a creditor as a result of borrowing
      or issuing bonds. ISDA 2003 Term: Primary Obligor'

      <primaryObligorReference> LegalEntityReference </primaryObligorReference> [1]
      'A pointer style reference to a reference entity defined elsewhere in the document. Used
      when the reference entity is the primary obligor.'

End Choice
Start Choice [0..*]
      <guarantor> LegalEntity </guarantor> [1]
      'The party that guarantees by way of a contractual arrangement to pay the debts of an
      obligor if the obligor is unable to make the required payments itself. ISDA 2003
      Term: Guarantor'

      <guarantorReference> LegalEntityReference </guarantorReference> [1]
      'A pointer style reference to a reference entity defined elsewhere in the document. Used
      when the reference entity is the guarantor.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReferenceObligation">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element ref=" bond "/>
         <xsd:element ref=" convertibleBond "/>
         <xsd:element ref=" mortgage "/>
         <xsd:element ref=" loan "/>
      </xsd:choice>
      <xsd:choice minOccurs="0">
         <xsd:element name="primaryObligor" type=" LegalEntity "/>
         <xsd:element name="primaryObligorReference" type=" LegalEntityReference "/>
      </xsd:choice>
      <xsd:choice minOccurs="0" maxOccurs="unbounded">
         <xsd:element name="guarantor" type=" LegalEntity "/>
         <xsd:element name="guarantorReference" type=" LegalEntityReference "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReferencePair

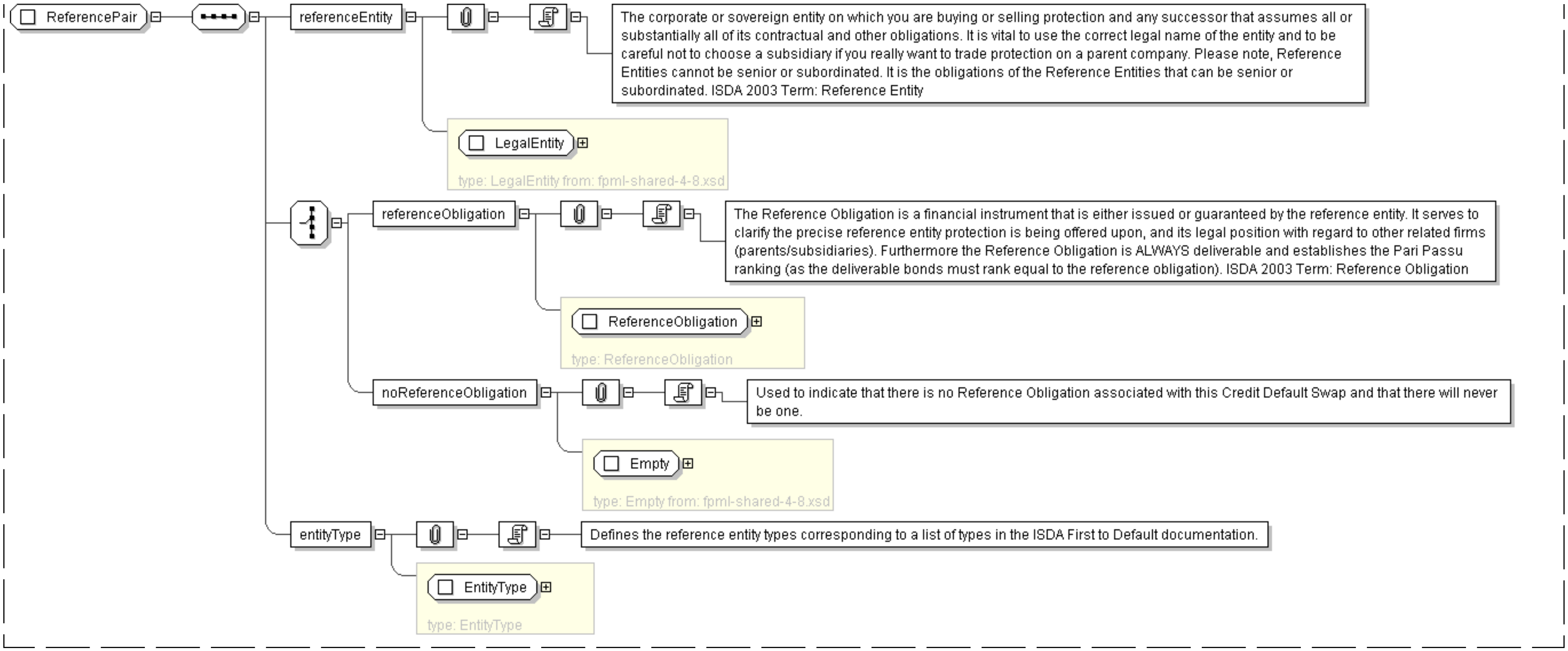
Super-types:	None
Sub-types:	None

Name	ReferencePair
Used by (from the same schema document)	Complex Type **ReferencePoolItem**
Abstract	no

XML Instance Representation

```
<...>
   <referenceEntity> LegalEntity </referenceEntity> [1]
   'The corporate or sovereign entity on which you are buying or selling protection and
   any successor that assumes all or substantially all of its contractual and other
   obligations. It is vital to use the correct legal name of the entity and to be careful not
   to choose a subsidiary if you really want to trade protection on a parent company. Please
   note, Reference Entities cannot be senior or subordinated. It is the obligations of
   the Reference Entities that can be senior or subordinated. ISDA 2003 Term: Reference Entity'
Start Choice [1]
      <referenceObligation> ReferenceObligation </referenceObligation> [1]
      'The Reference Obligation is a financial instrument that is either issued or guaranteed by
      the reference entity. It serves to clarify the precise reference entity protection is
      being offered upon, and its legal position with regard to other related firms
      (parents/subsidiaries). Furthermore the Reference Obligation is ALWAYS deliverable
      and establishes the Pari Passu ranking (as the deliverable bonds must rank equal to
      the reference obligation). ISDA 2003 Term: Reference Obligation'

      <noReferenceObligation> Empty </noReferenceObligation> [1]
      'Used to indicate that there is no Reference Obligation associated with this Credit
      Default Swap and that there will never be one.'
End Choice
   <entityType> EntityType </entityType> [1]
   'Defines the reference entity types corresponding to a list of types in the ISDA First
   to Default documentation.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReferencePair">
   <xsd:sequence>
      <xsd:element name="referenceEntity" type=" LegalEntity "/>
      <xsd:choice>
         <xsd:element name="referenceObligation" type=" ReferenceObligation "/>
         <xsd:element name="noReferenceObligation" type=" Empty "/>
      </xsd:choice>
      <xsd:element name="entityType" type=" EntityType "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReferencePool

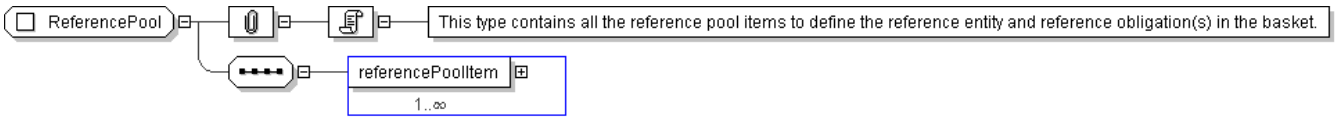
Super-types:	None
Sub-types:	None

Name	ReferencePool
Used by (from the same schema document)	Complex Type **BasketReferenceInformation**
Abstract	no
Documentation	This type contains all the reference pool items to define the reference entity and reference obligation(s) in the basket.

XML Instance Representation

```
<...>
   <referencePoolItem> ReferencePoolItem </referencePoolItem> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReferencePool">
   <xsd:sequence>
      <xsd:element name="referencePoolItem" type=" ReferencePoolItem " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReferencePoolItem

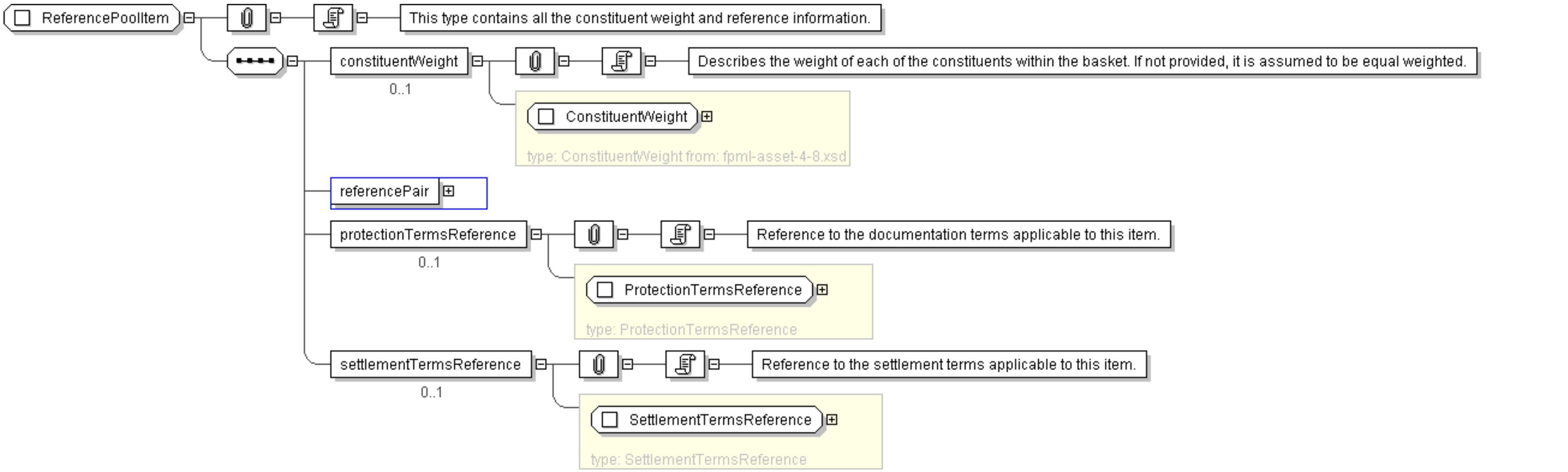
Super-types:	None
Sub-types:	None

Name	ReferencePoolItem
Used by (from the same schema document)	Complex Type **ReferencePool**
Abstract	no
Documentation	This type contains all the constituent weight and reference information.

XML Instance Representation

```
<...>
   <constituentWeight> ConstituentWeight </constituentWeight> [0..1]
   'Describes the weight of each of the constituents within the basket. If not provided, it
   is assumed to be equal weighted.'

   <referencePair> ReferencePair </referencePair> [1]
   <protectionTermsReference> ProtectionTermsReference </protectionTermsReference> [0..1]
   'Reference to the documentation terms applicable to this item.'

   <settlementTermsReference> SettlementTermsReference </settlementTermsReference> [0..1]
   'Reference to the settlement terms applicable to this item.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReferencePoolItem">
   <xsd:sequence>
      <xsd:element name="constituentWeight" type=" ConstituentWeight " minOccurs="0"/>
      <xsd:element name="referencePair" type=" ReferencePair "/>
      <xsd:element name="protectionTermsReference" type=" ProtectionTermsReference " minOccurs="0"/>
      <xsd:element name="settlementTermsReference" type=" SettlementTermsReference " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ScheduledTerminationDate

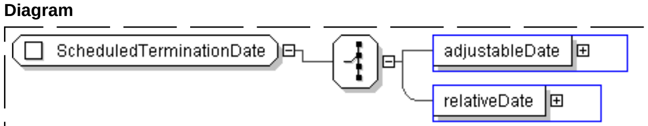
Super-types:	None
Sub-types:	None

Name	ScheduledTerminationDate
Abstract	no

XML Instance Representation

```
<...>
Start Choice [1]
      <adjustableDate> AdjustableDate2 </adjustableDate> [1]
      <relativeDate> Period </relativeDate> [1]
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ScheduledTerminationDate">
   <xsd:choice>
```

```
        <xsd:element name="adjustableDate" type=" AdjustableDate2 "/>
        <xsd:element name="relativeDate" type=" Period "/>
    </xsd:choice>
</xsd:complexType>
```

top

Complex Type: SettledEntityMatrix

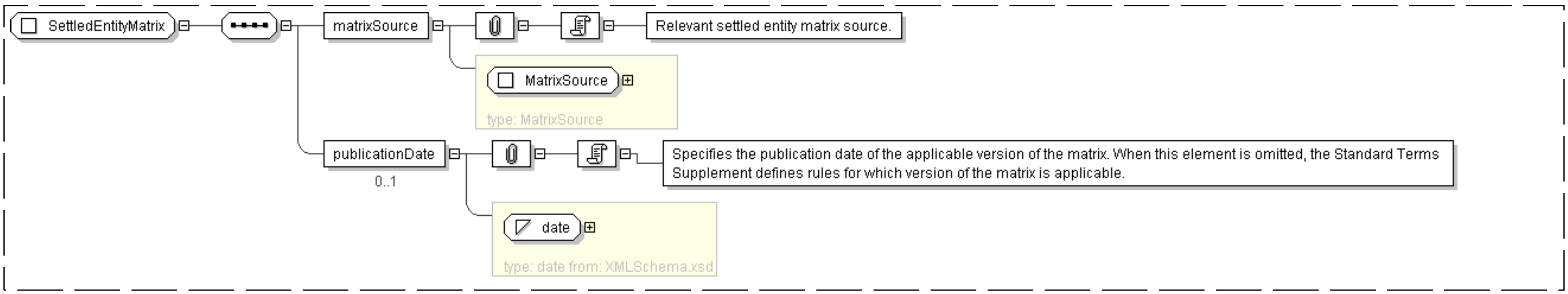
Super-types:	None
Sub-types:	None

Name	SettledEntityMatrix
Used by (from the same schema document)	Complex Type **IndexReferenceInformation**
Abstract	no

XML Instance Representation

```
<...>
    <matrixSource> MatrixSource </matrixSource> [1]
    'Relevant settled entity matrix source.'

    <publicationDate> xsd:date </publicationDate> [0..1]
    'Specifies the publication date of the applicable version of the matrix. When this element
    is omitted, the Standard Terms Supplement defines rules for which version of the matrix
    is applicable.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettledEntityMatrix">
    <xsd:sequence>
        <xsd:element name="matrixSource" type=" MatrixSource "/>
        <xsd:element name="publicationDate" type=" xsd:date " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SettlementTerms

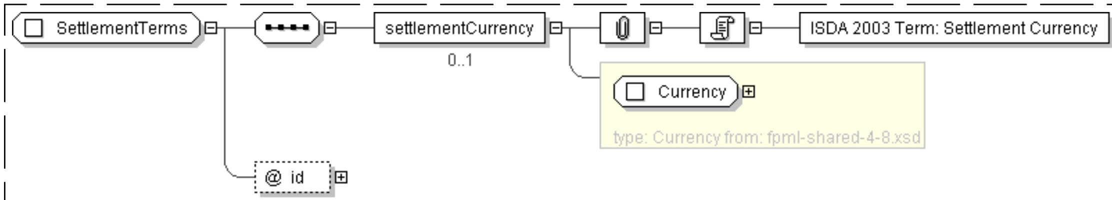
Super-types:	None
Sub-types:	• CashSettlementTerms (by extension) • PhysicalSettlementTerms (by extension)

Name	SettlementTerms
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <settlementCurrency> Currency </settlementCurrency> [0..1]
   'ISDA 2003 Term: Settlement Currency'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementTerms">
   <xsd:sequence>
      <xsd:element name="settlementCurrency" type=" Currency " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
</xsd:complexType>
```

top

Complex Type: SettlementTermsReference

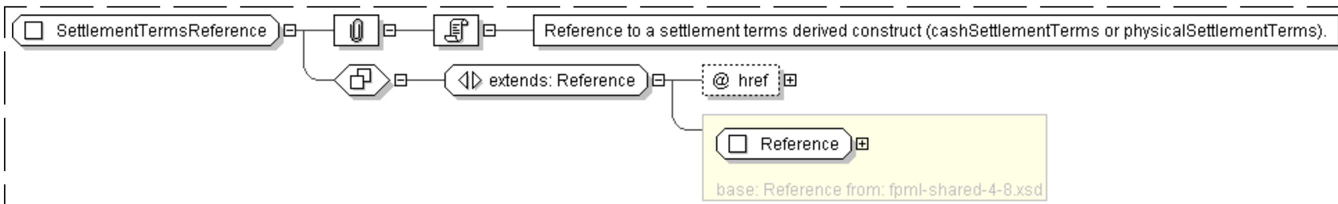
Super-types:	Reference < **SettlementTermsReference** (by extension)
Sub-types:	None

Name	SettlementTermsReference
Used by (from the same schema document)	Complex Type **ReferencePoolItem**
Abstract	no
Documentation	Reference to a settlement terms derived construct (cashSettlementTerms or physicalSettlementTerms).

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementTermsReference">
   <xsd:complexContent>
```

```
        <xsd:extension base=" Reference ">
            <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="SettlementTerms"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SinglePayment

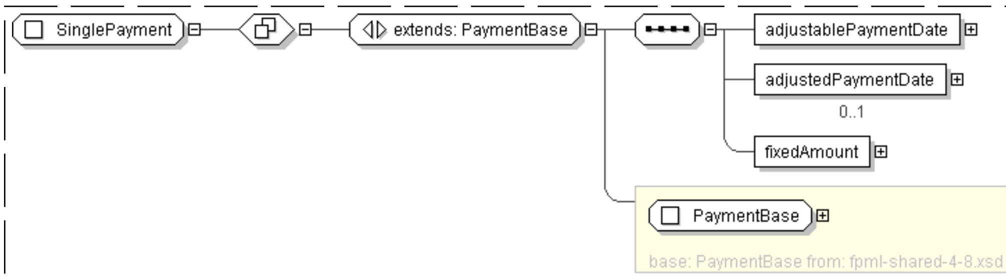
Super-types:	PaymentBase < **SinglePayment** (by extension)
Sub-types:	None

Name	SinglePayment
Used by (from the same schema document)	Complex Type **FeeLeg**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <adjustablePaymentDate> xsd:date </adjustablePaymentDate> [1]
    'A fixed amount payment date that shall be subject to adjustment in accordance with
    the applicable business day convention if it would otherwise fall on a day that is not
    a business day. The applicable business day convention and business day are those specified
    in the dateAdjustments element within the generalTerms component. ISDA 2003 Term: Fixed
    Rate Payer Payment Date'

    <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [0..1]
    'The adjusted payment date. This date should already be adjusted for any applicable
    business day convention. This component is not intended for use in trade confirmation but
    may be specified to allow the fee structure to also serve as a cashflow type component.'

    <fixedAmount> Money </fixedAmount> [1]
    'A fixed payment amount. ISDA 2003 Term: Fixed Amount'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SinglePayment">
    <xsd:complexContent>
        <xsd:extension base=" PaymentBase ">
            <xsd:sequence>
                <xsd:element name="adjustablePaymentDate" type=" xsd:date "/>
                <xsd:element name="adjustedPaymentDate" type=" xsd:date " minOccurs="0"/>
                <xsd:element name="fixedAmount" type=" Money "/>
            </xsd:sequence>
        </xsd:extension>
    </xsd:complexContent>
```

```
</xsd:complexType>
```

top

Complex Type: SingleValuationDate

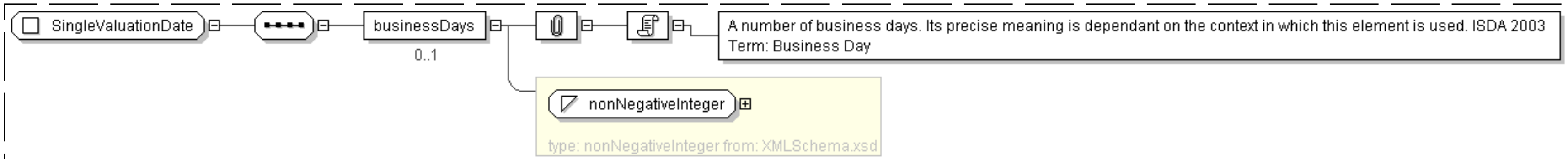
Super-types:	None
Sub-types:	• MultipleValuationDates (by extension)

Name	SingleValuationDate
Used by (from the same schema document)	Complex Type **ValuationDate**
Abstract	no

XML Instance Representation

```
<...>
   <businessDays> xsd:nonNegativeInteger </businessDays> [0..1]
   'A number of business days. Its precise meaning is dependant on the context in which
   this element is used. ISDA 2003 Term: Business Day'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SingleValuationDate">
   <xsd:sequence>
      <xsd:element name="businessDays" type=" xsd:nonNegativeInteger " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SpecifiedCurrency

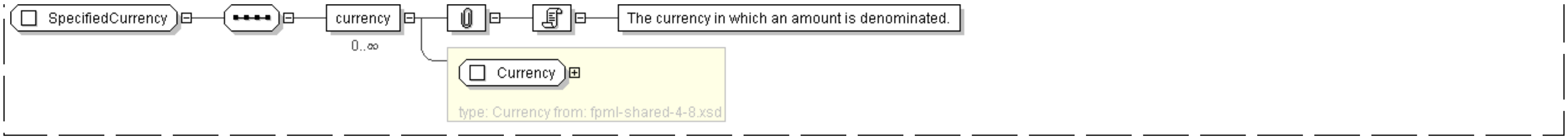
Super-types:	None
Sub-types:	None

Name	SpecifiedCurrency
Used by (from the same schema document)	Complex Type **DeliverableObligations** , Complex Type **Obligations**
Abstract	no

XML Instance Representation

```
<...>
   <currency> Currency </currency> [0..*]
   'The currency in which an amount is denominated.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SpecifiedCurrency">
   <xsd:sequence>
      <xsd:element name="currency" type=" Currency " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Tranche

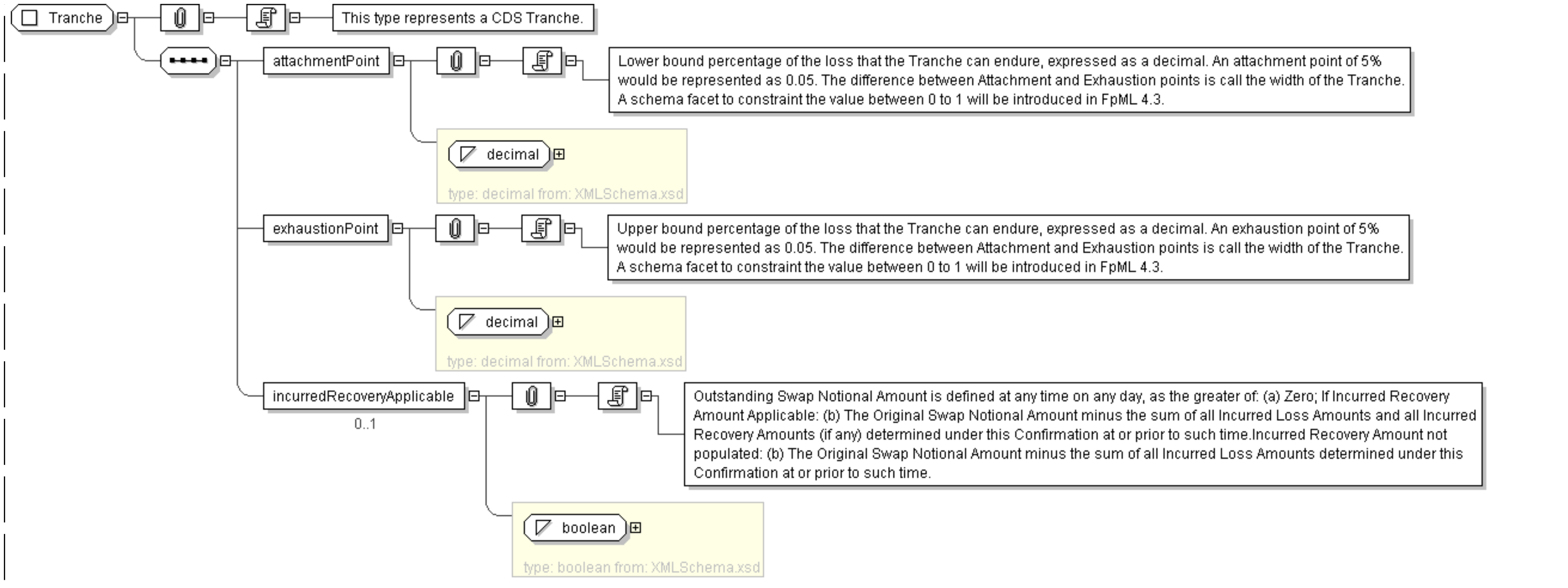
Super-types:	None
Sub-types:	None

Name	Tranche
Used by (from the same schema document)	Complex Type **BasketReferenceInformation** , Complex Type **IndexReferenceInformation**
Abstract	no
Documentation	This type represents a CDS Tranche.

XML Instance Representation

```
<...>
   <attachmentPoint> xsd:decimal </attachmentPoint> [1]
   'Lower bound percentage of the loss that the Tranche can endure, expressed as a decimal.
   An attachment point of 5% would be represented as 0.05. The difference between Attachment
   and Exhaustion points is call the width of the Tranche. A schema facet to constraint the
   value between 0 to 1 will be introduced in FpML 4.3.'

   <exhaustionPoint> xsd:decimal </exhaustionPoint> [1]
   'Upper bound percentage of the loss that the Tranche can endure, expressed as a decimal.
   An exhaustion point of 5% would be represented as 0.05. The difference between Attachment
   and Exhaustion points is call the width of the Tranche. A schema facet to constraint the
   value between 0 to 1 will be introduced in FpML 4.3.'

   <incurredRecoveryApplicable> xsd:boolean </incurredRecoveryApplicable> [0..1]
   'Outstanding Swap Notional Amount is defined at any time on any day, as the greater of:
   (a) Zero; If Incurred Recovery Amount Applicable: (b) The Original Swap Notional Amount
   minus the sum of all Incurred Loss Amounts and all Incurred Recovery Amounts (if
   any) determined under this Confirmation at or prior to such time.Incurred Recovery Amount
   not populated: (b) The Original Swap Notional Amount minus the sum of all Incurred Loss
   Amounts determined under this Confirmation at or prior to such time.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Tranche">
   <xsd:sequence>
      <xsd:element name="attachmentPoint" type=" xsd:decimal "/>
      <xsd:element name="exhaustionPoint" type=" xsd:decimal "/>
      <xsd:element name="incurredRecoveryApplicable" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ValuationDate

Super-types:	None
Sub-types:	None

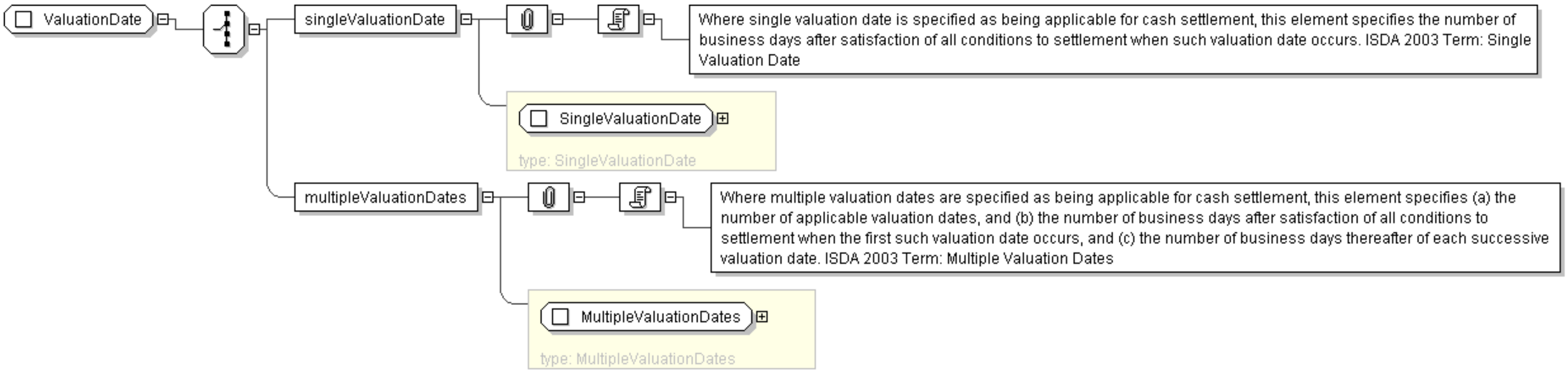
Name	ValuationDate
Used by (from the same schema document)	Complex Type **CashSettlementTerms**
Abstract	no

XML Instance Representation

```
<...>
Start Choice [1]
      <singleValuationDate> SingleValuationDate </singleValuationDate> [1]
      'Where single valuation date is specified as being applicable for cash settlement, this
      element specifies the number of business days after satisfaction of all conditions
      to settlement when such valuation date occurs. ISDA 2003 Term: Single Valuation Date'

      <multipleValuationDates> MultipleValuationDates </multipleValuationDates> [1]
      'Where multiple valuation dates are specified as being applicable for cash settlement,
      this element specifies (a) the number of applicable valuation dates, and (b) the number
      of business days after satisfaction of all conditions to settlement when the first
      such valuation date occurs, and (c) the number of business days thereafter of each
```

```
    'successive valuation date. ISDA 2003 Term: Multiple Valuation Dates'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationDate">
   <xsd:choice>
      <xsd:element name="singleValuationDate" type=" SingleValuationDate "/>
      <xsd:element name="multipleValuationDates" type=" MultipleValuationDates "/>
   </xsd:choice>
</xsd:complexType>
```

top

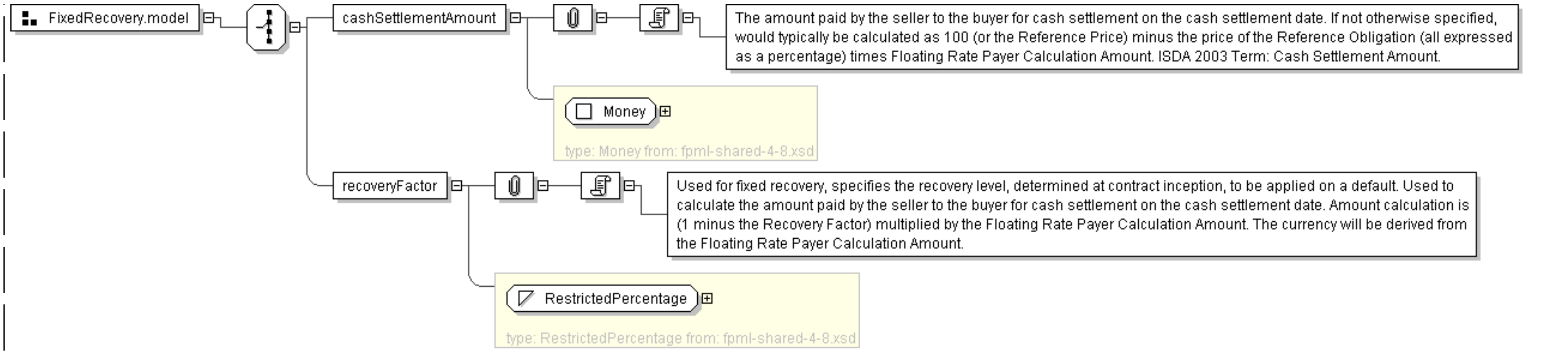
Model Group: FixedRecovery.model

Name	FixedRecovery.model
Used by (from the same schema document)	Complex Type **CashSettlementTerms**

XML Instance Representation

```
Start Choice [1]
   <cashSettlementAmount> Money </cashSettlementAmount> [1]
   'The amount paid by the seller to the buyer for cash settlement on the cash settlement date.
   If not otherwise specified, would typically be calculated as 100 (or the Reference Price)
   minus the price of the Reference Obligation (all expressed as a percentage) times Floating
   Rate Payer Calculation Amount. ISDA 2003 Term: Cash Settlement Amount.'

   <recoveryFactor> RestrictedPercentage </recoveryFactor> [1]
   'Used for fixed recovery, specifies the recovery level, determined at contract inception, to
   be applied on a default. Used to calculate the amount paid by the seller to the buyer for
   cash settlement on the cash settlement date. Amount calculation is (1 minus the
   Recovery Factor) multiplied by the Floating Rate Payer Calculation Amount. The currency will
   be derived from the Floating Rate Payer Calculation Amount.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="FixedRecovery.model">
   <xsd:choice>
      <xsd:element name="cashSettlementAmount" type=" Money "/>
      <xsd:element name="recoveryFactor" type=" RestrictedPercentage "/>
   </xsd:choice>
</xsd:group>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.

- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 2406 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ◦ fpml-option-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 2406 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-option-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

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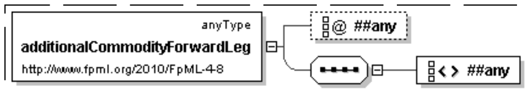
Global Declarations

Element: additionalCommodityForwardLeg

Name	additionalCommodityForwardLeg
Used by (from the same schema document)	Complex Type **CommodityForward**
Type	anyType
Nillable	no
Abstract	yes

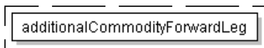
Logical Diagram



XML Instance Representation

```
<additionalCommodityForwardLeg> ... </additionalCommodityForwardLeg>
```

Diagram



Schema Component Representation

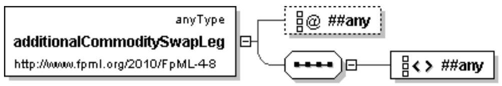
```
<xsd:element name="additionalCommodityForwardLeg" abstract="true"/>
```

top

Element: additionalCommoditySwapLeg

Name	additionalCommoditySwapLeg
Used by (from the same schema document)	Complex Type **CommoditySwap**
Type	anyType
Nillable	no
Abstract	yes

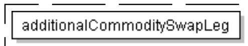
Logical Diagram



XML Instance Representation

```
<additionalCommoditySwapLeg> ... </additionalCommoditySwapLeg>
```

Diagram



Schema Component Representation

```
<xsd:element name="additionalCommoditySwapLeg" abstract="true"/>
```

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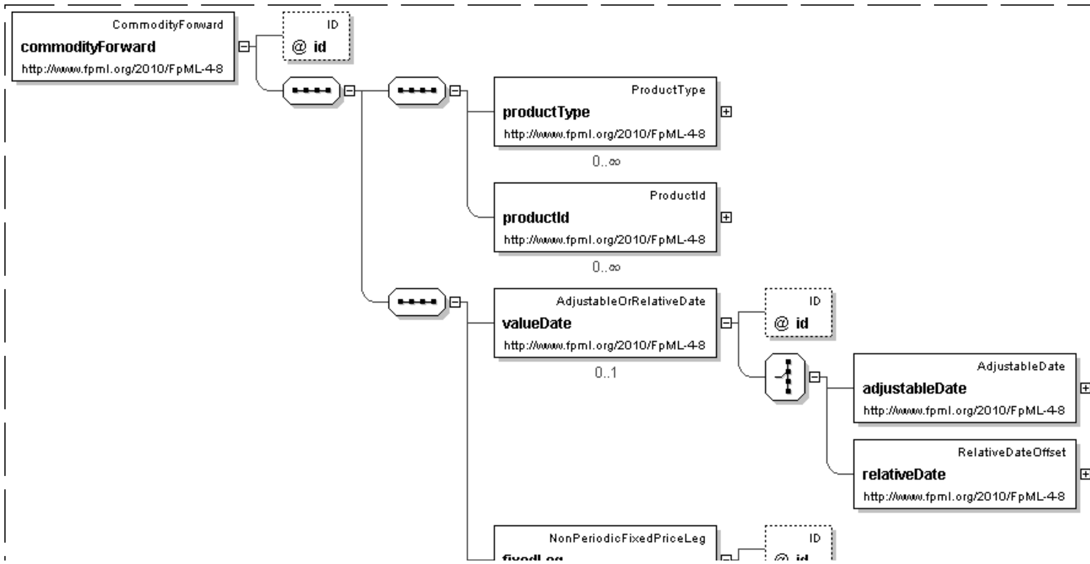
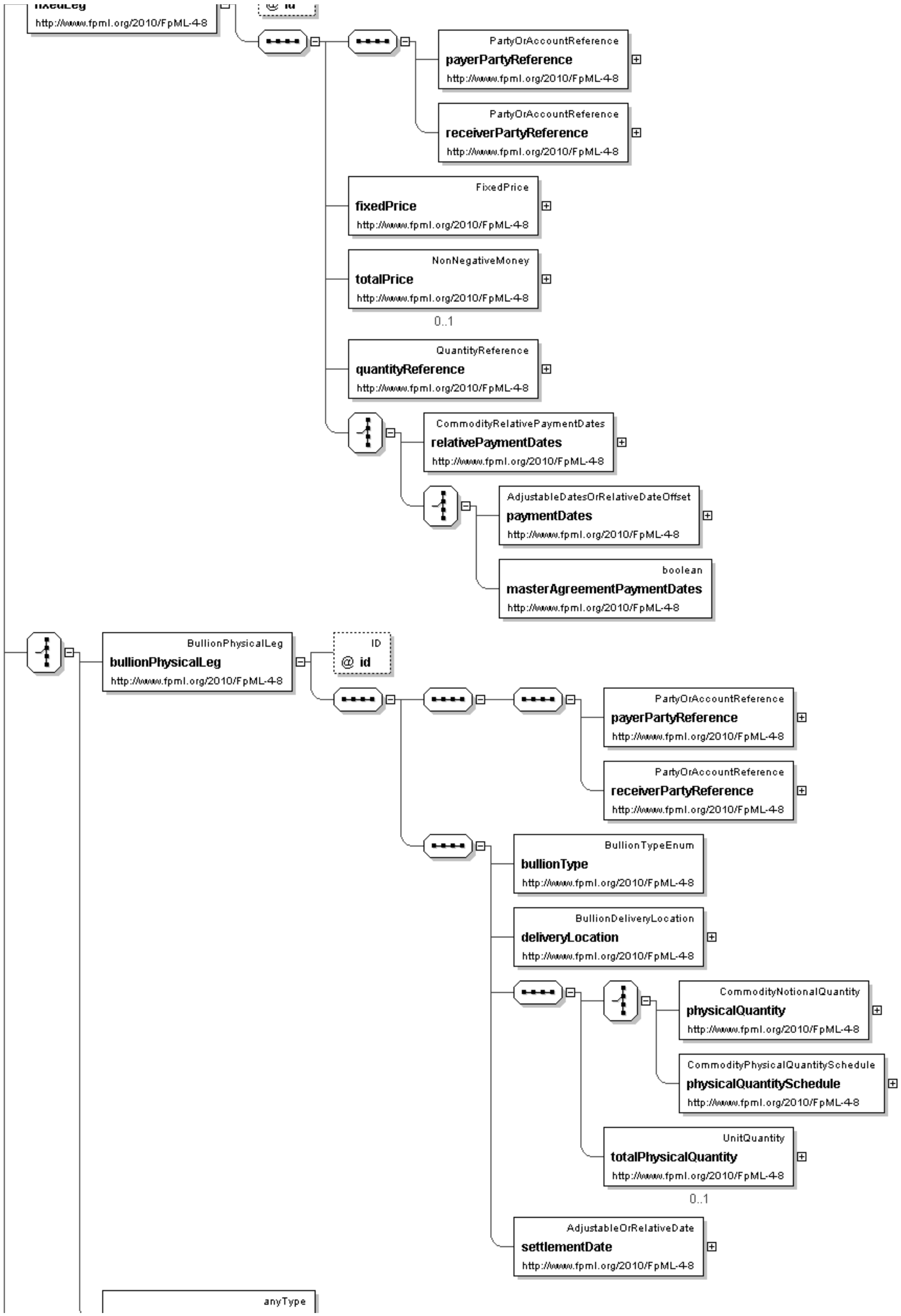
Element: commodityForward

- *This element can be used wherever the following element is referenced:*
  - product

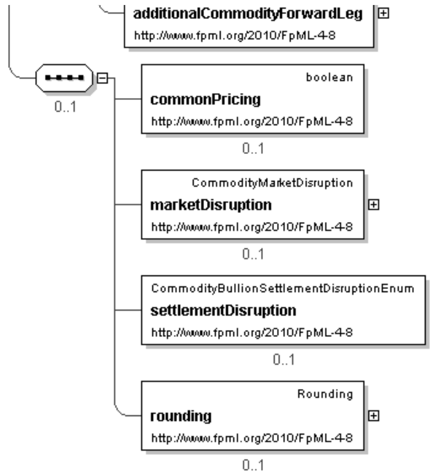
Name	commodityForward
Used by (from the same schema document)	Model Group **CommodityPhysicalOption.model**
Type	CommodityForward
Nillable	no
Abstract	no
Documentation	Defines a commodity forward product.

Logical Diagram





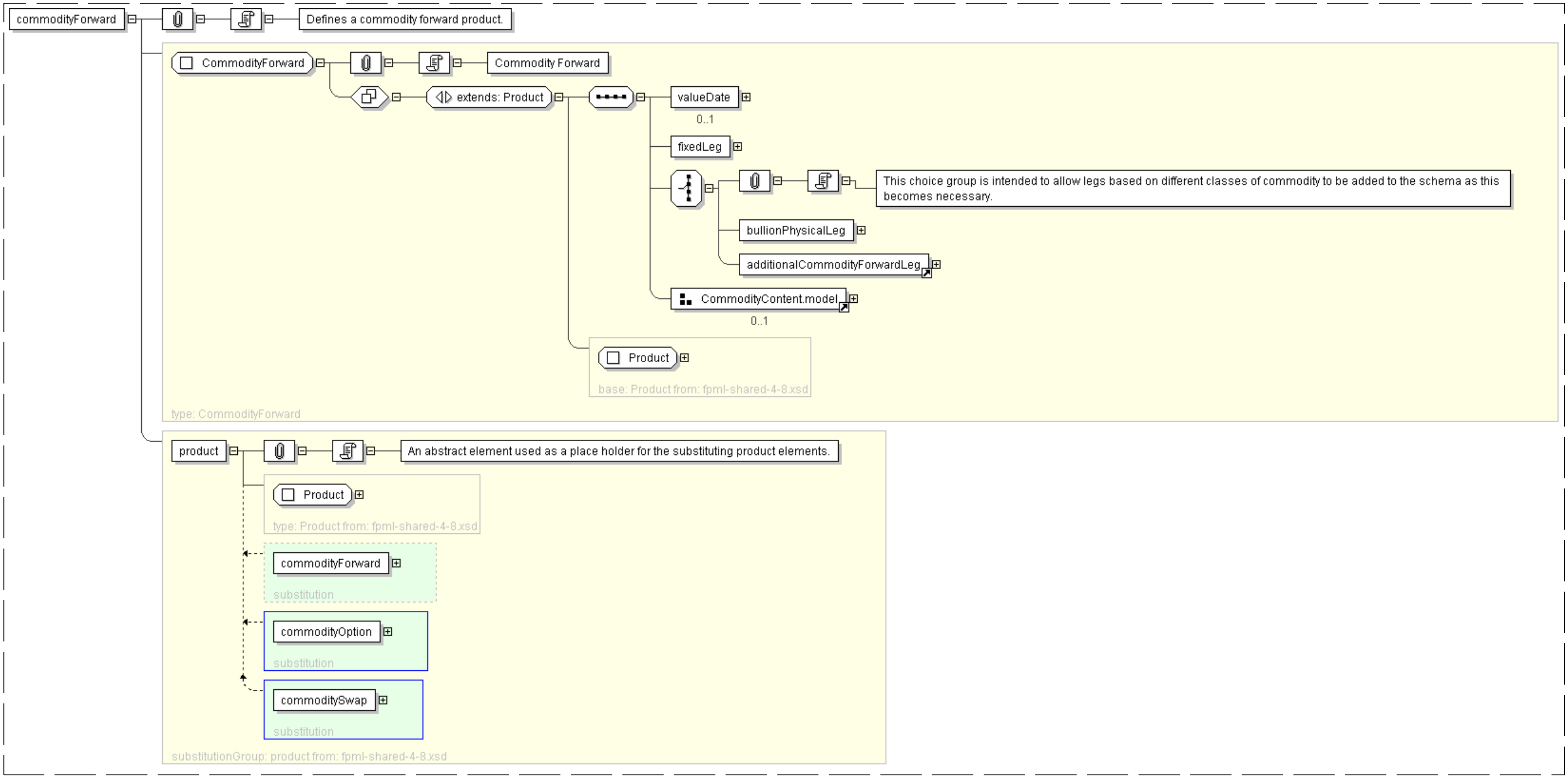
fixedLeg
http://www.fpml.org/2010/FpML-4-8
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
FixedPrice
fixedPrice
http://www.fpml.org/2010/FpML-4-8
NonNegativeMoney
totalPrice
http://www.fpml.org/2010/FpML-4-8
0..1
QuantityReference
quantityReference
http://www.fpml.org/2010/FpML-4-8
CommodityRelativePaymentDates
relativePaymentDates
http://www.fpml.org/2010/FpML-4-8
AdjustableDatesOrRelativeDateOffset
paymentDates
http://www.fpml.org/2010/FpML-4-8
boolean
masterAgreementPaymentDates
http://www.fpml.org/2010/FpML-4-8
BullionPhysicalLeg
bullionPhysicalLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
BullionTypeEnum
bullionType
http://www.fpml.org/2010/FpML-4-8
BullionDeliveryLocation
deliveryLocation
http://www.fpml.org/2010/FpML-4-8
CommodityNotionalQuantity
physicalQuantity
http://www.fpml.org/2010/FpML-4-8
CommodityPhysicalQuantitySchedule
physicalQuantitySchedule
http://www.fpml.org/2010/FpML-4-8
UnitQuantity
totalPhysicalQuantity
http://www.fpml.org/2010/FpML-4-8
0..1
AdjustableOrRelativeDate
settlementDate
http://www.fpml.org/2010/FpML-4-8
anyType



XML Instance Representation

```
<commodityForward
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <valueDate> AdjustableOrRelativeDate </valueDate> [0..1]
   'Specifies the value date of the Commodity Forward Transaction. This is the day on which
   both the cash and the physical commodity settle.'

   <fixedLeg> NonPeriodicFixedPriceLeg </fixedLeg> [1]
   'The fixed leg of a Commodity Forward Transaction'

Start Choice [1]
'This choice group is intended to allow legs based on different classes of commodity to
be added to the schema as this becomes necessary.'


      <bullionPhysicalLeg> BullionPhysicalLeg </bullionPhysicalLeg> [1]
      'The physical leg of a Commodity Forward Transaction for which the underlyer is Bullion.'

      <additionalCommodityForwardLeg> ... </additionalCommodityForwardLeg> [1]
End Choice
Start Group: CommodityContent.model [0..1]
      <commonPricing> xsd:boolean </commonPricing> [0..1]
      'Common pricing may be relevant for a Transaction that references more than one
      Commodity Reference Price. If Common Pricing is not specified as applicable, it will be
      deemed not to apply.'

      <marketDisruption> CommodityMarketDisruption </marketDisruption> [0..1]
      'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA
      2005 Commodity Definitions, as applicable.'

      <settlementDisruption> CommodityBullionSettlementDisruptionEnum </settlementDisruption> [0..1]
      'The consequences of Bullion Settlement Disruption Events.'

      <rounding> Rounding </rounding> [0..1]
      'Rounding direction and precision for amounts.'

End Group: CommodityContent.model
</commodityForward>
```

Diagram



Schema Component Representation

```
<xsd:element name="commodityForward" type=" CommodityForward " substitutionGroup="product"/>
```

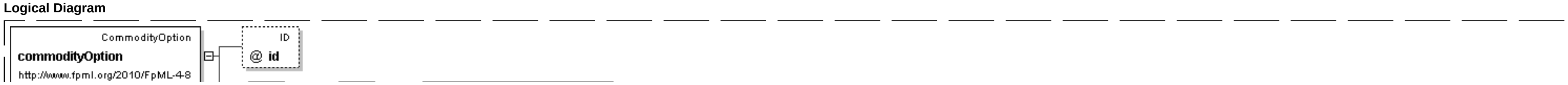
top

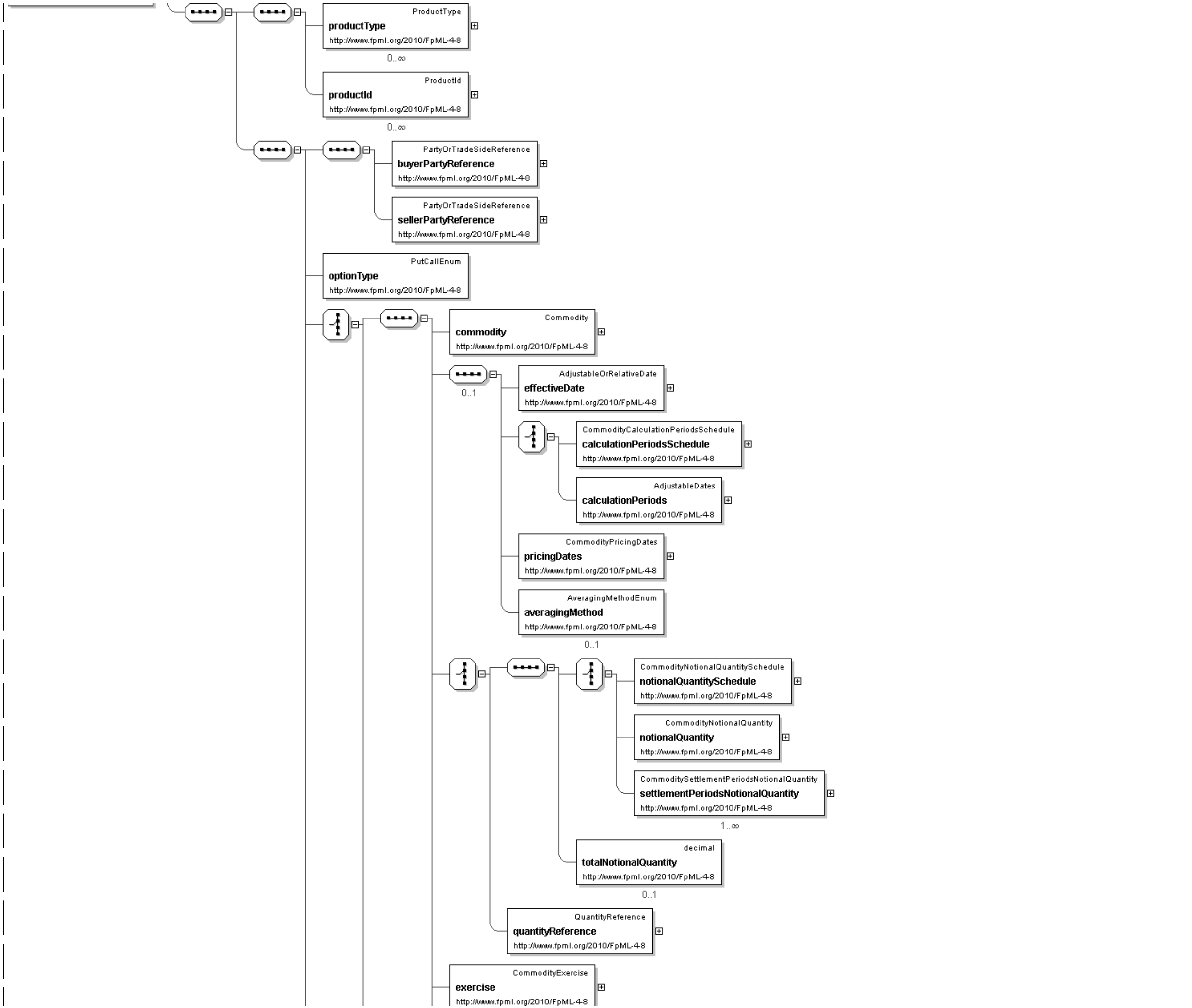
Element: commodityOption

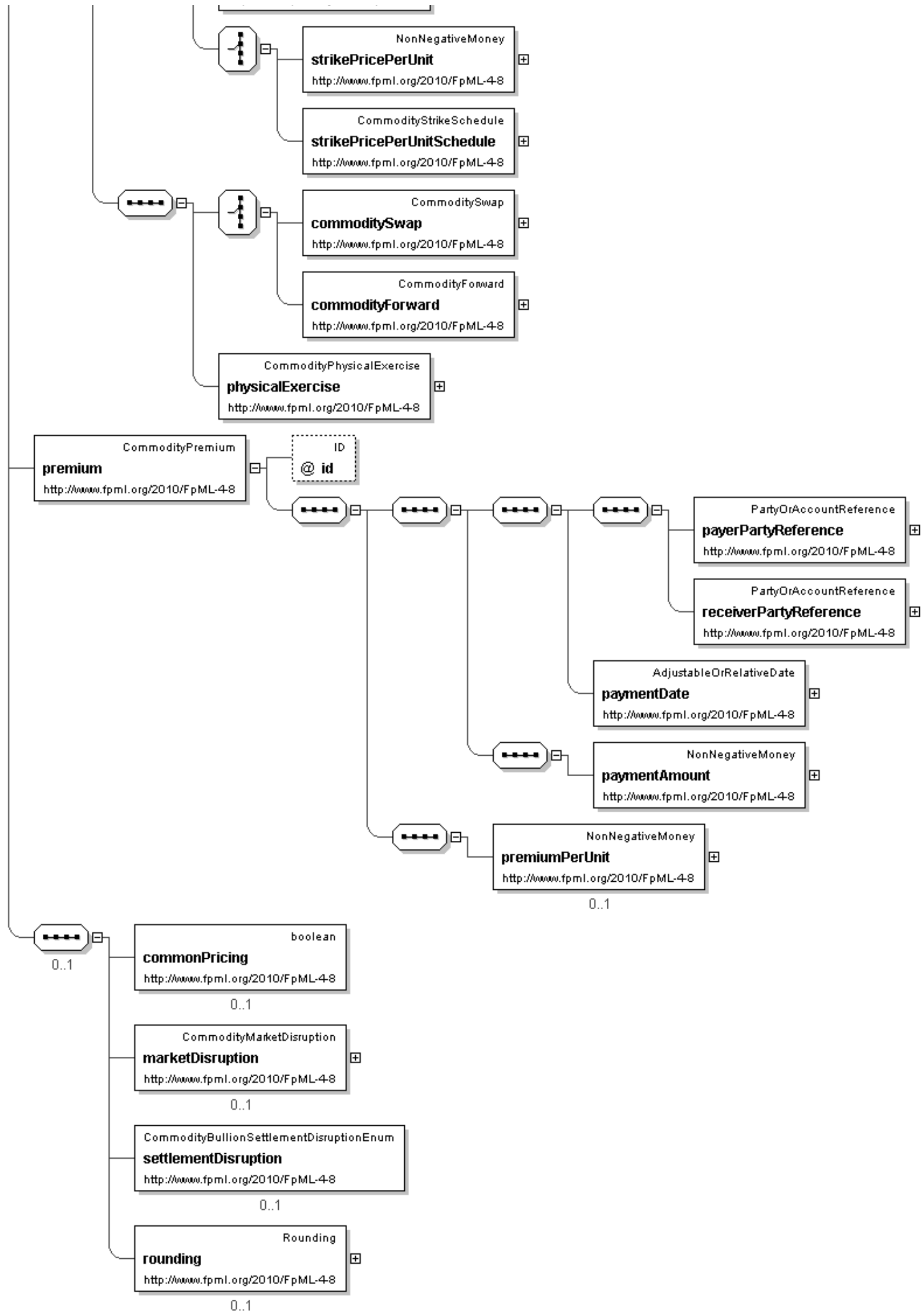
- *This element can be used wherever the following element is referenced:*
  - product

Name	commodityOption
Type	CommodityOption
Nillable	no
Abstract	no
Documentation	Defines a commodity option product.

Logical Diagram




ProductType
productType
http://www.fpml.org/2010/FpML-4-8
0..∞
ProductId
productId
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrTradeSideReference
buyerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrTradeSideReference
sellerPartyReference
http://www.fpml.org/2010/FpML-4-8
PutCallEnum
optionType
http://www.fpml.org/2010/FpML-4-8
Commodity
commodity
http://www.fpml.org/2010/FpML-4-8
0..1
AdjustableOrRelativeDate
effectiveDate
http://www.fpml.org/2010/FpML-4-8
CommodityCalculationPeriodsSchedule
calculationPeriodsSchedule
http://www.fpml.org/2010/FpML-4-8
AdjustableDates
calculationPeriods
http://www.fpml.org/2010/FpML-4-8
CommodityPricingDates
pricingDates
http://www.fpml.org/2010/FpML-4-8
AveragingMethodEnum
averagingMethod
http://www.fpml.org/2010/FpML-4-8
0..1
CommodityNotionalQuantitySchedule
notionalQuantitySchedule
http://www.fpml.org/2010/FpML-4-8
CommodityNotionalQuantity
notionalQuantity
http://www.fpml.org/2010/FpML-4-8
CommoditySettlementPeriodsNotionalQuantity
settlementPeriodsNotionalQuantity
http://www.fpml.org/2010/FpML-4-8
1..∞
decimal
totalNotionalQuantity
http://www.fpml.org/2010/FpML-4-8
0..1
QuantityReference
quantityReference
http://www.fpml.org/2010/FpML-4-8
CommodityExercise
exercise
http://www.fpml.org/2010/FpML-4-8



XML Instance Representation

```
<commodityOption
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
```

a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> PutCallEnum </optionType> [1]

'The type of option transaction.'

Start Choice [1]

<commodity> Commodity </commodity> [1]

'Specifies the underlying component. At the time of the initial schema design, only underlyers of type Commodity are supported; the choice group in the future could offer the possibility of adding other types later.'

Start Group: CommodityAsian.model [0..1]

'A group containing properties specific to Asian options.'

<effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]

'The effective date of the Commodity Option Transaction. Note that the Termination/ Expiration Date should be specified in expirationDate within the CommodityAmericanExercise type or the CommodityEuropeanExercise type, as applicable.'

Start Choice [1]

<calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </calculationPeriodsSchedule> [1]

'A parametric representation of the Calculation Periods of the Commodity Option Transaction.'

<calculationPeriods> AdjustableDates </calculationPeriods> [1]

'An absolute representation of the Calculation Period start dates of the Commodity Option Transaction.'

End Choice

<pricingDates> CommodityPricingDates </pricingDates> [1]

'The dates on which the option will price.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]

'The Method of Averaging if there is more than one Pricing Date.'

End Group: CommodityAsian.model

Start Choice [1]

Start Choice [1]

<notionalQuantitySchedule> CommodityNotionalQuantitySchedule </notionalQuantitySchedule> [1]

'Allows the documentation of a shaped notional trade where the notional changes over the life of the transaction.'

<notionalQuantity> CommodityNotionalQuantity </notionalQuantity> [1]

'The Notional Quantity.'

<settlementPeriodsNotionalQuantity> CommoditySettlementPeriodsNotionalQuantity </settlementPeriodsNotionalQuantity> [1..*]

'For an electricity transaction, the Notional Quantity for a one or more groups of Settlement Periods to which the Notional Quantity is based. If the schedule differs for different groups of Settlement Periods, this element should be repeated.'

End Choice

<totalNotionalQuantity> xsd:decimal </totalNotionalQuantity> [0..1]

'The Total Notional Quantity.'

<quantityReference> QuantityReference </quantityReference> [1]

'A pointer style reference to a quantity defined on another leg.'

End Choice
<exercise> CommodityExercise </exercise> [1]

'The parameters for defining how the commodity option can be exercised and how it is settled.'

Start Choice [1]
<strikePricePerUnit> NonNegativeMoney </strikePricePerUnit> [1]

'The currency amount of the strike price per unit.'

<strikePricePerUnitSchedule> CommodityStrikeSchedule </strikePricePerUnitSchedule> [1]
End Choice
Start Choice [1]
<commoditySwap> ... </commoditySwap> [1]
<commodityForward> ... </commodityForward> [1]
End Choice
<physicalExercise> CommodityPhysicalExercise </physicalExercise> [1]

'The parameters for defining how the commodity option can be exercised into a physical transaction.'

End Choice
<premium> CommodityPremium </premium> [1]

'The option premium payable by the buyer to the seller.'

Start Group: CommodityContent.model [0..1]
<commonPricing> xsd:boolean </commonPricing> [0..1]

'Common pricing may be relevant for a Transaction that references more than one Commodity Reference Price. If Common Pricing is not specified as applicable, it will be deemed not to apply.'

<marketDisruption> CommodityMarketDisruption </marketDisruption> [0..1]

'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA 2005 Commodity Definitions, as applicable.'

<settlementDisruption> CommodityBullionSettlementDisruptionEnum </settlementDisruption> [0..1]

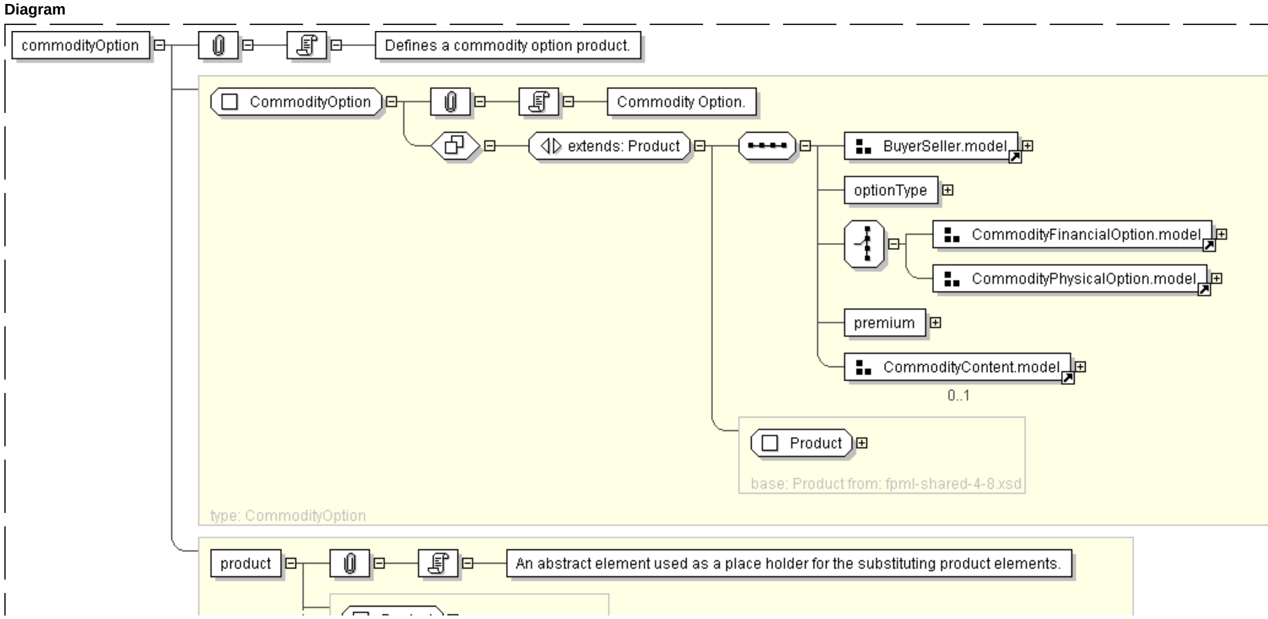
'The consequences of Bullion Settlement Disruption Events.'

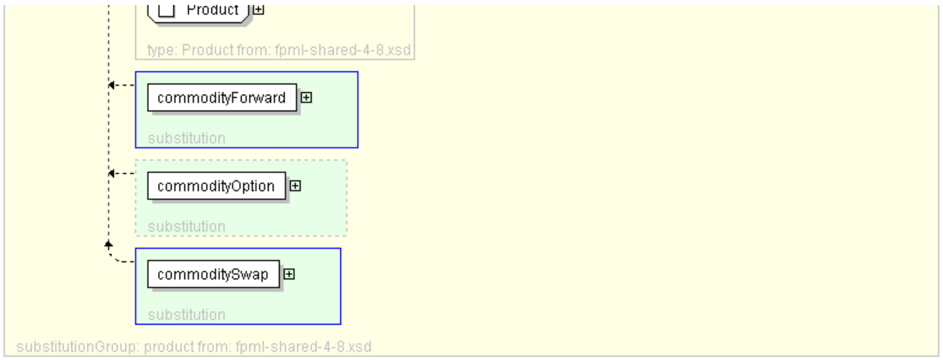
<rounding> Rounding </rounding> [0..1]

'Rounding direction and precision for amounts.'

End Group: CommodityContent.model
</commodityOption>

Diagram





Schema Component Representation

```
<xsd:element name="commodityOption" type=" CommodityOption " substitutionGroup="product"/>
```

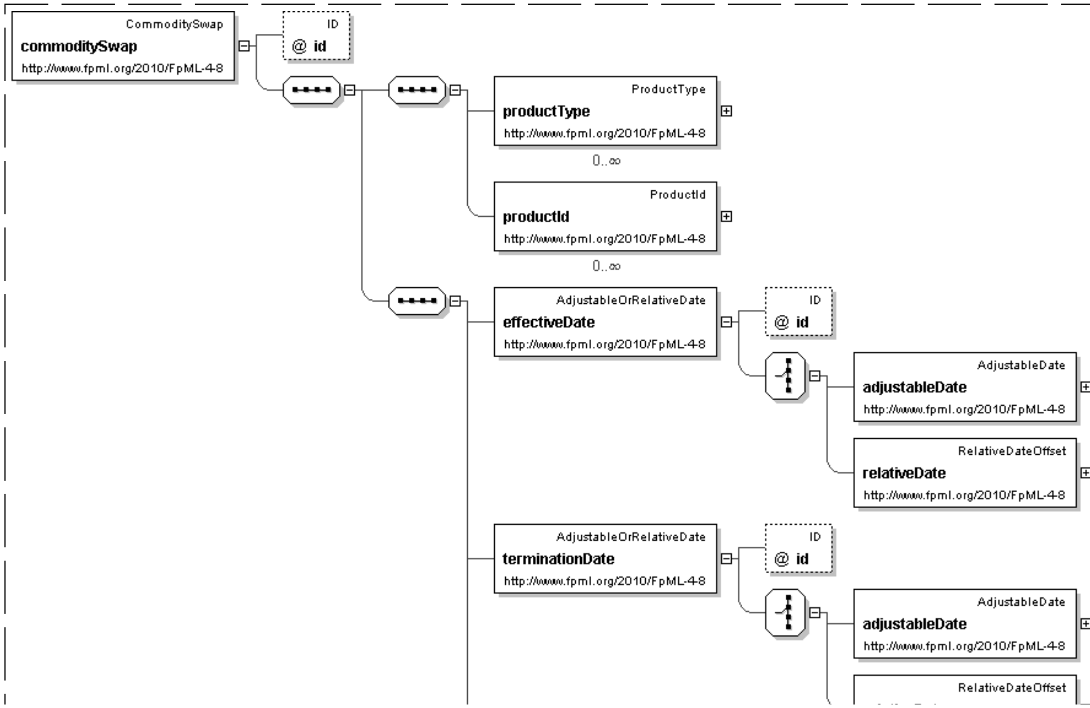
top

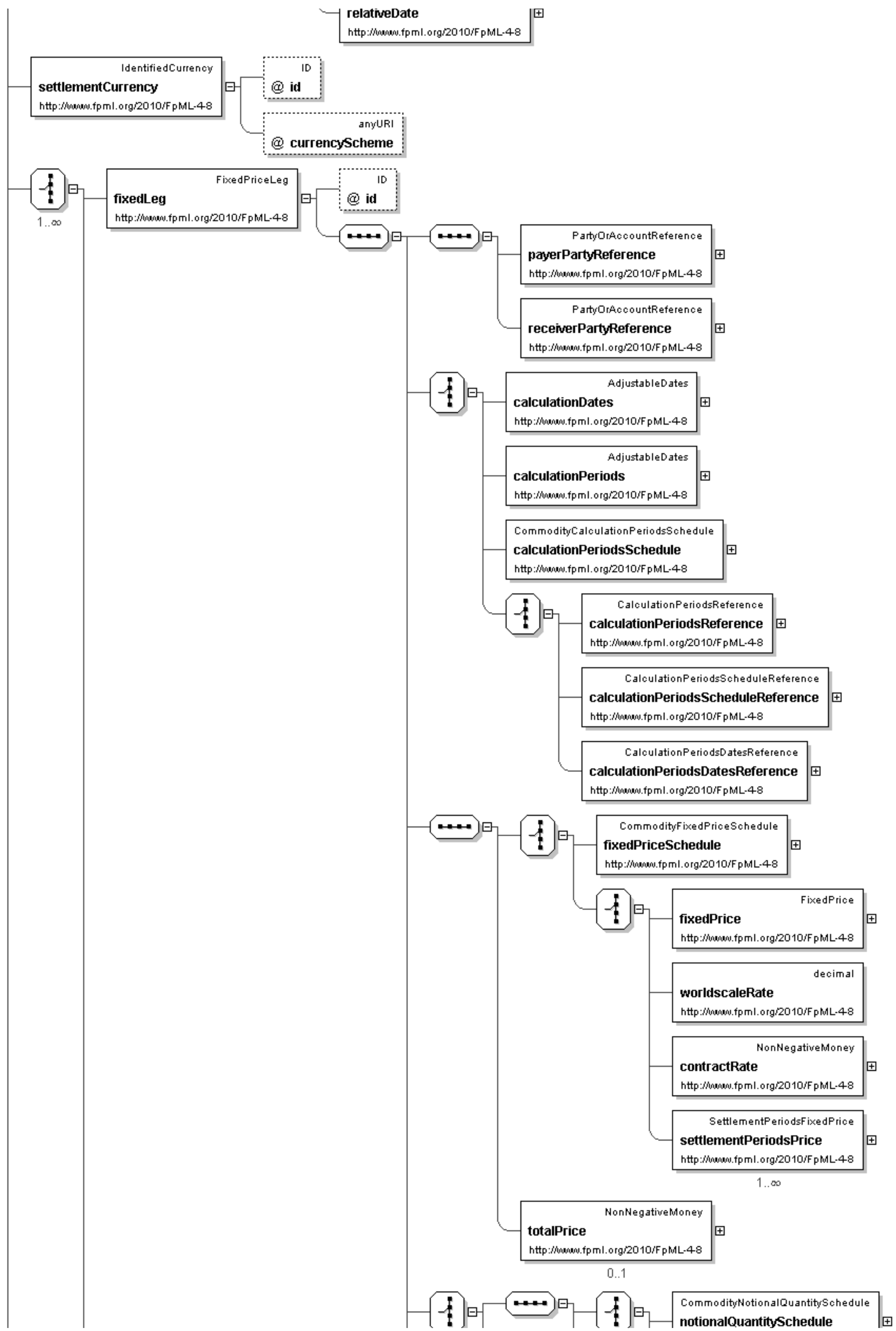
Element: commoditySwap

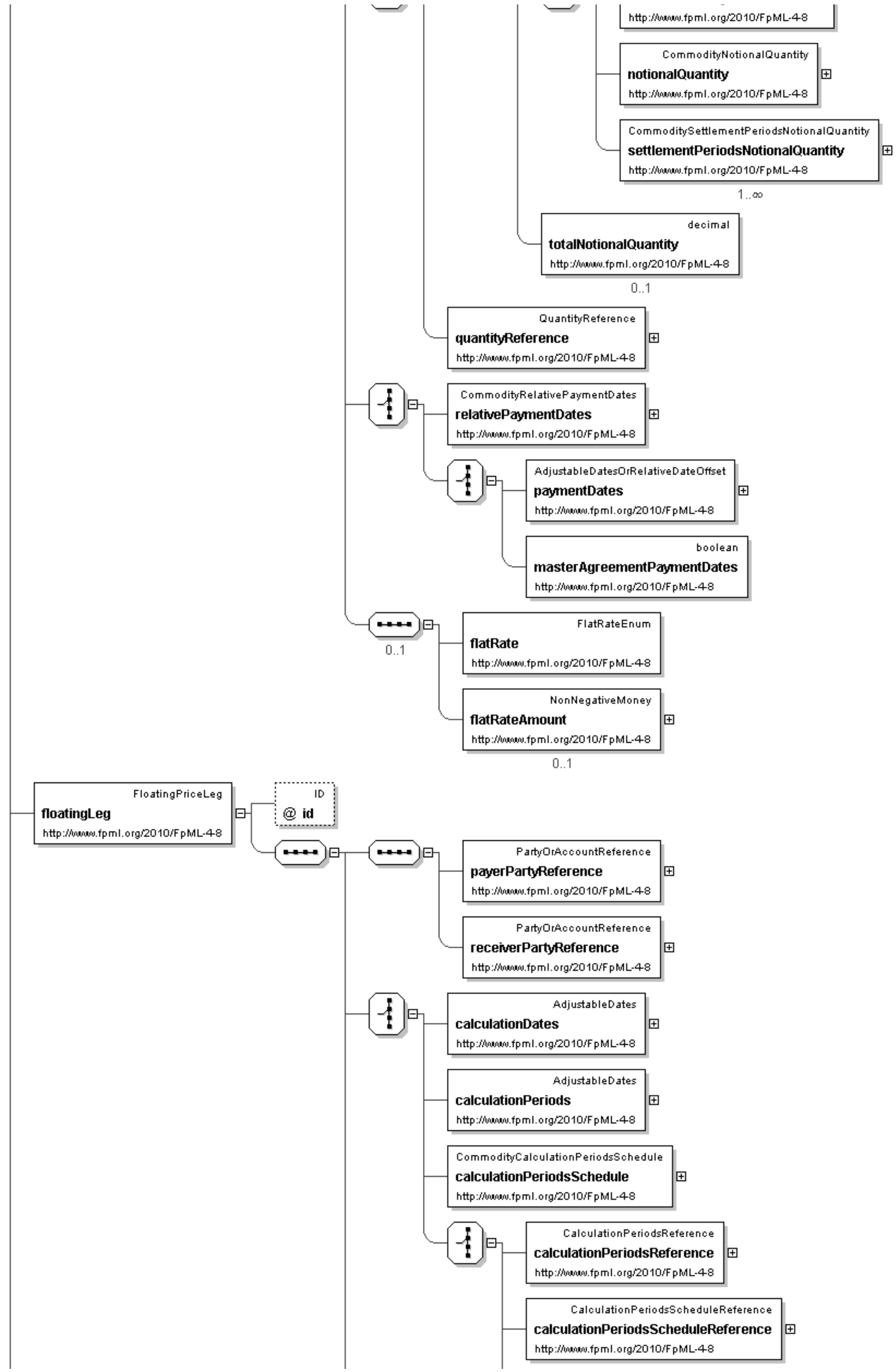
- *This element can be used wherever the following element is referenced:*
  - product

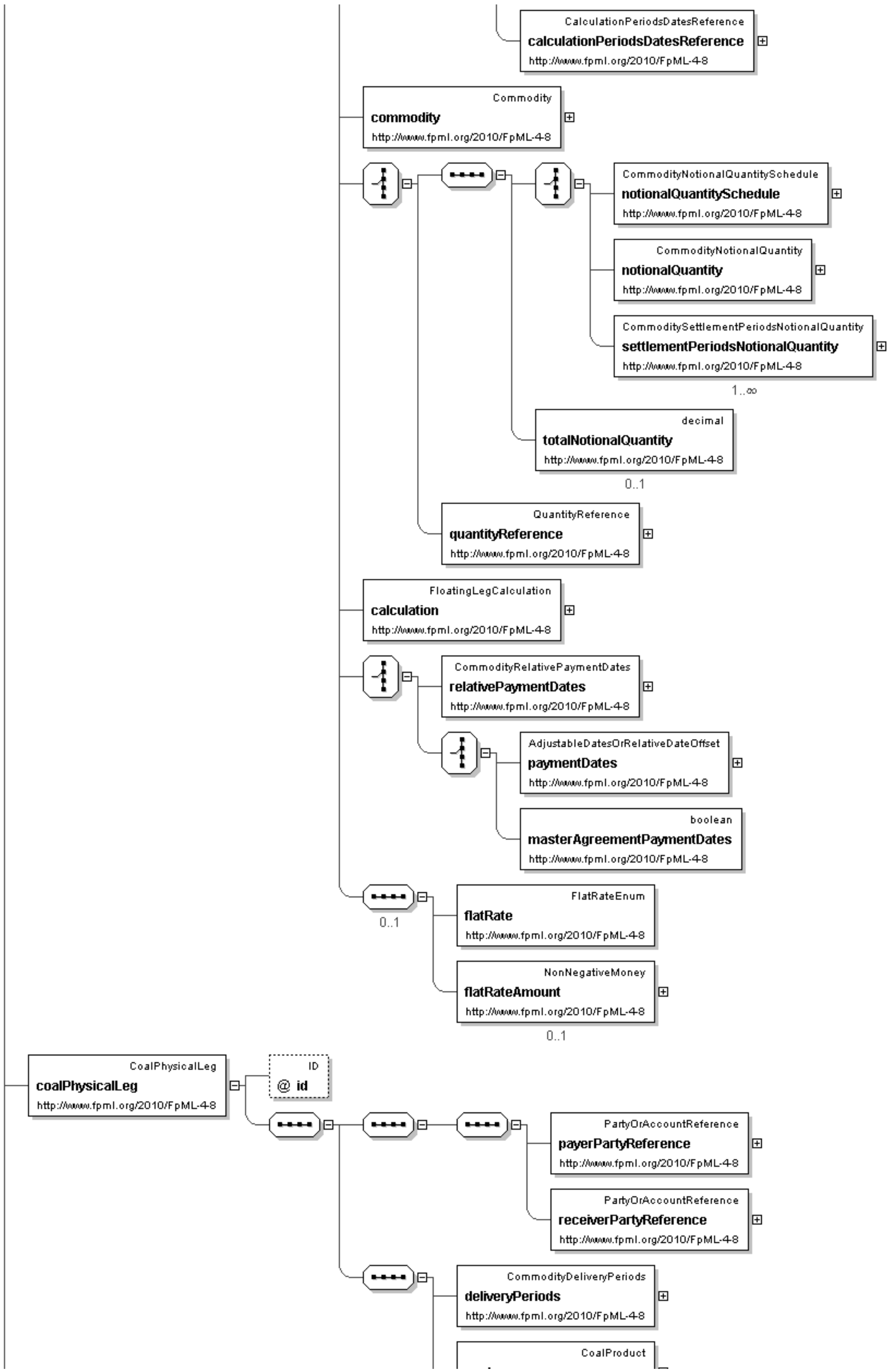
Name	commoditySwap
Used by (from the same schema document)	Model Group **CommodityPhysicalOption.model**
Type	CommoditySwap
Nillable	no
Abstract	no
Documentation	Defines a commodity swap product.

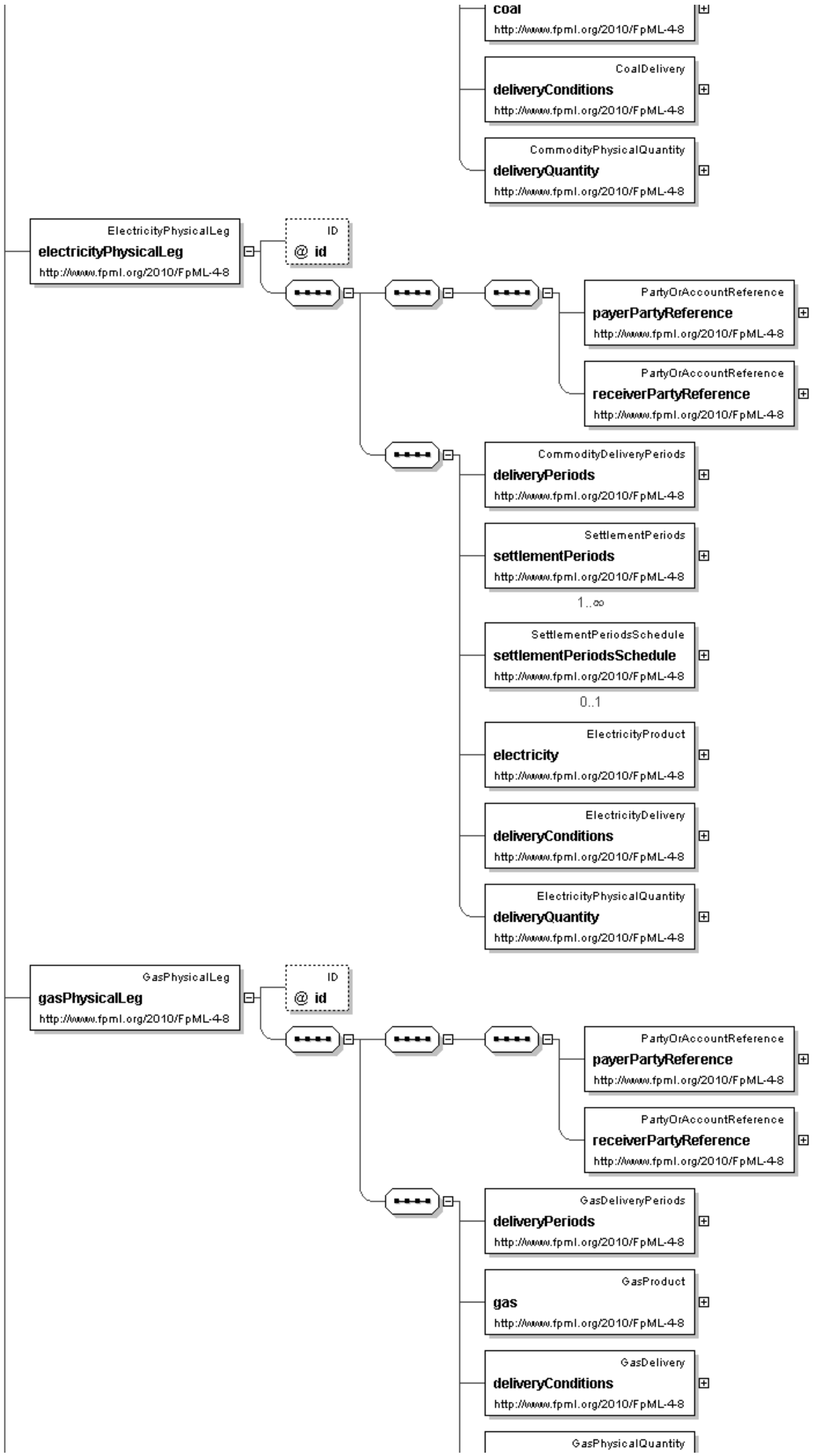
Logical Diagram

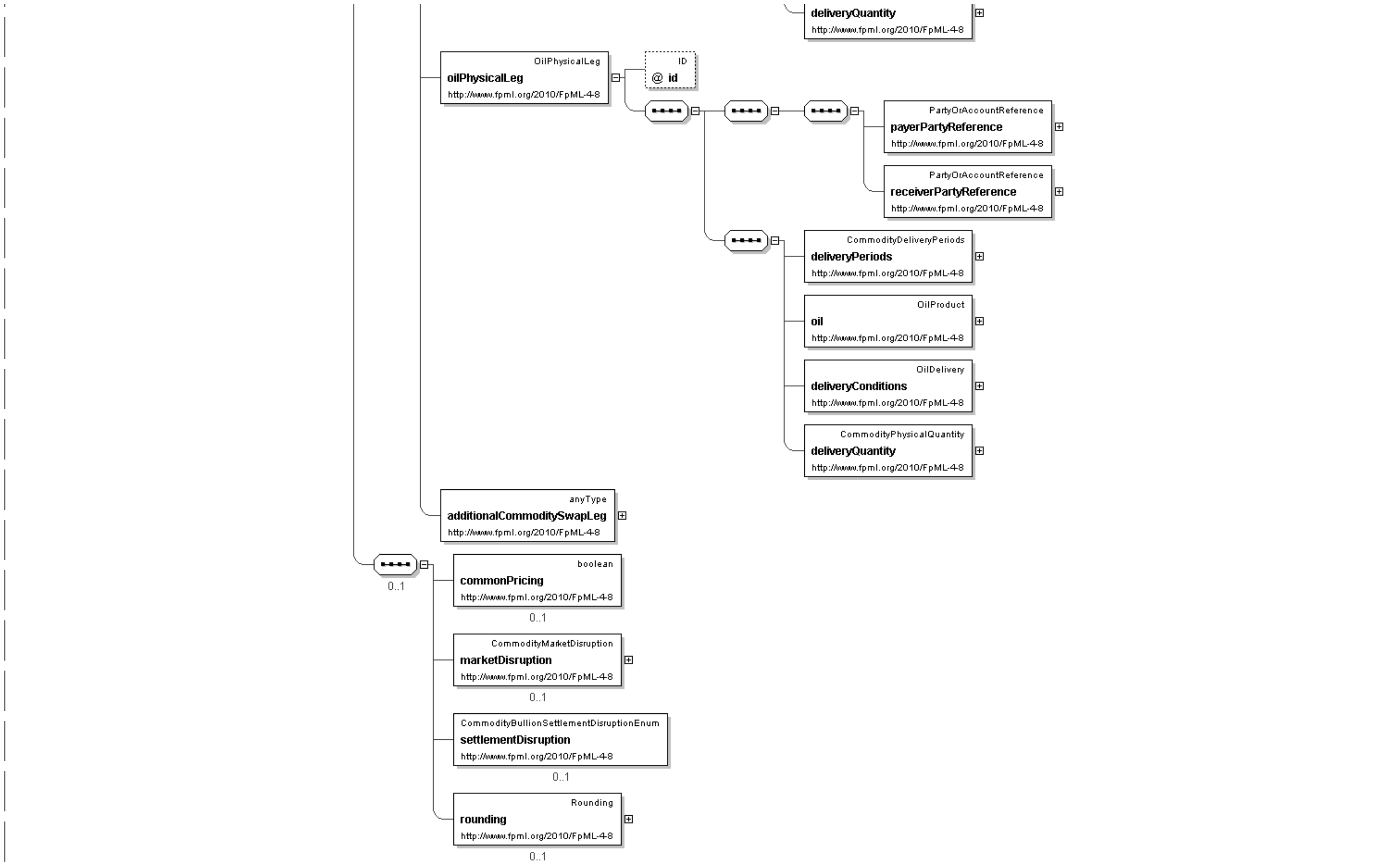



relativeDate
http://www.fpml.org/2010/FpML-4-8
IdentifiedCurrency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8
ID
@ id
anyURI
@ currencyScheme
1..∞
FixedPriceLeg
fixedLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
AdjustableDates
calculationDates
http://www.fpml.org/2010/FpML-4-8
AdjustableDates
calculationPeriods
http://www.fpml.org/2010/FpML-4-8
CommodityCalculationPeriodsSchedule
calculationPeriodsSchedule
http://www.fpml.org/2010/FpML-4-8
CalculationPeriodsReference
calculationPeriodsReference
http://www.fpml.org/2010/FpML-4-8
CalculationPeriodsScheduleReference
calculationPeriodsScheduleReference
http://www.fpml.org/2010/FpML-4-8
CalculationPeriodsDatesReference
calculationPeriodsDatesReference
http://www.fpml.org/2010/FpML-4-8
CommodityFixedPriceSchedule
fixedPriceSchedule
http://www.fpml.org/2010/FpML-4-8
FixedPrice
fixedPrice
http://www.fpml.org/2010/FpML-4-8
decimal
worldscaleRate
http://www.fpml.org/2010/FpML-4-8
NonNegativeMoney
contractRate
http://www.fpml.org/2010/FpML-4-8
SettlementPeriodsFixedPrice
settlementPeriodsPrice
http://www.fpml.org/2010/FpML-4-8
1..∞
NonNegativeMoney
totalPrice
http://www.fpml.org/2010/FpML-4-8
0..1
CommodityNotionalQuantitySchedule
notionalQuantitySchedule


http://www.fpml.org/2010/FpML-4-8
CommodityNotionalQuantity
notionalQuantity
http://www.fpml.org/2010/FpML-4-8
CommoditySettlementPeriodsNotionalQuantity
settlementPeriodsNotionalQuantity
http://www.fpml.org/2010/FpML-4-8
1..∞
decimal
totalNotionalQuantity
http://www.fpml.org/2010/FpML-4-8
0..1
QuantityReference
quantityReference
http://www.fpml.org/2010/FpML-4-8
CommodityRelativePaymentDates
relativePaymentDates
http://www.fpml.org/2010/FpML-4-8
AdjustableDatesOrRelativeDateOffset
paymentDates
http://www.fpml.org/2010/FpML-4-8
boolean
masterAgreementPaymentDates
http://www.fpml.org/2010/FpML-4-8
0..1
FlatRateEnum
flatRate
http://www.fpml.org/2010/FpML-4-8
NonNegativeMoney
flatRateAmount
http://www.fpml.org/2010/FpML-4-8
0..1
FloatingPriceLeg
floatingLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
AdjustableDates
calculationDates
http://www.fpml.org/2010/FpML-4-8
AdjustableDates
calculationPeriods
http://www.fpml.org/2010/FpML-4-8
CommodityCalculationPeriodsSchedule
calculationPeriodsSchedule
http://www.fpml.org/2010/FpML-4-8
CalculationPeriodsReference
calculationPeriodsReference
http://www.fpml.org/2010/FpML-4-8
CalculationPeriodsScheduleReference
calculationPeriodsScheduleReference
http://www.fpml.org/2010/FpML-4-8


CalculationPeriodsDatesReference
calculationPeriodsDatesReference
http://www.fpml.org/2010/FpML-4-8
Commodity
commodity
http://www.fpml.org/2010/FpML-4-8
CommodityNotionalQuantitySchedule
notionalQuantitySchedule
http://www.fpml.org/2010/FpML-4-8
CommodityNotionalQuantity
notionalQuantity
http://www.fpml.org/2010/FpML-4-8
CommoditySettlementPeriodsNotionalQuantity
settlementPeriodsNotionalQuantity
http://www.fpml.org/2010/FpML-4-8
1..∞
decimal
totalNotionalQuantity
http://www.fpml.org/2010/FpML-4-8
0..1
QuantityReference
quantityReference
http://www.fpml.org/2010/FpML-4-8
FloatingLegCalculation
calculation
http://www.fpml.org/2010/FpML-4-8
CommodityRelativePaymentDates
relativePaymentDates
http://www.fpml.org/2010/FpML-4-8
AdjustableDatesOrRelativeDateOffset
paymentDates
http://www.fpml.org/2010/FpML-4-8
boolean
masterAgreementPaymentDates
http://www.fpml.org/2010/FpML-4-8
0..1
FlatRateEnum
flatRate
http://www.fpml.org/2010/FpML-4-8
NonNegativeMoney
flatRateAmount
http://www.fpml.org/2010/FpML-4-8
0..1
CoalPhysicalLeg
coalPhysicalLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
CommodityDeliveryPeriods
deliveryPeriods
http://www.fpml.org/2010/FpML-4-8
CoalProduct


coal
http://www.fpml.org/2010/FpML-4-8
CoalDelivery
deliveryConditions
http://www.fpml.org/2010/FpML-4-8
CommodityPhysicalQuantity
deliveryQuantity
http://www.fpml.org/2010/FpML-4-8
ElectricityPhysicalLeg
electricityPhysicalLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
CommodityDeliveryPeriods
deliveryPeriods
http://www.fpml.org/2010/FpML-4-8
SettlementPeriods
settlementPeriods
http://www.fpml.org/2010/FpML-4-8
1..∞
SettlementPeriodsSchedule
settlementPeriodsSchedule
http://www.fpml.org/2010/FpML-4-8
0..1
ElectricityProduct
electricity
http://www.fpml.org/2010/FpML-4-8
ElectricityDelivery
deliveryConditions
http://www.fpml.org/2010/FpML-4-8
ElectricityPhysicalQuantity
deliveryQuantity
http://www.fpml.org/2010/FpML-4-8
GasPhysicalLeg
gasPhysicalLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
GasDeliveryPeriods
deliveryPeriods
http://www.fpml.org/2010/FpML-4-8
GasProduct
gas
http://www.fpml.org/2010/FpML-4-8
GasDelivery
deliveryConditions
http://www.fpml.org/2010/FpML-4-8
GasPhysicalQuantity



XML Instance Representation

<commoditySwap
id=" xsd:ID [0..1]">

<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]

'Specifies the effective date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the effective date of the other leg of the swap.'

<terminationDate> AdjustableOrRelativeDate </terminationDate> [1]

'Specifies the termination date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the termination date of the other leg of the swap.'

<settlementCurrency> IdentifiedCurrency </settlementCurrency> [1]

'The currency into which the Commodity Swap Transaction will settle. If this is not the same as the currency in which the Commodity Reference Price is quoted on a given floating leg of the Commodity Swap Transaction, then an FX rate should also be specified for that leg.'

Start Choice [1..*]

<fixedLeg> FixedPriceLeg </fixedLeg> [1]

'Fixed Price Leg.'

<floatingLeg> FloatingPriceLeg </floatingLeg> [1]

'Floating Price leg.'

<coalPhysicalLeg> CoalPhysicalLeg </coalPhysicalLeg> [1]

'Physically settled coal leg.'

<electricityPhysicalLeg> ElectricityPhysicalLeg </electricityPhysicalLeg> [1]

'Physically settled electricity leg.'

<gasPhysicalLeg> GasPhysicalLeg </gasPhysicalLeg> [1]

'Physically settled natural gas leg.'

<oilPhysicalLeg> OilPhysicalLeg </oilPhysicalLeg> [1]

'Physically settled oil or refined products leg.'

<additionalCommoditySwapLeg> ... </additionalCommoditySwapLeg> [1]

End Choice

Start Group: CommodityContent.model [0..1]

<commonPricing> xsd:boolean </commonPricing> [0..1]

'Common pricing may be relevant for a Transaction that references more than one Commodity Reference Price. If Common Pricing is not specified as applicable, it will be deemed not to apply.'

<marketDisruption> CommodityMarketDisruption </marketDisruption> [0..1]

'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA 2005 Commodity Definitions, as applicable.'

<settlementDisruption> CommodityBullionSettlementDisruptionEnum </settlementDisruption> [0..1]

'The consequences of Bullion Settlement Disruption Events.'

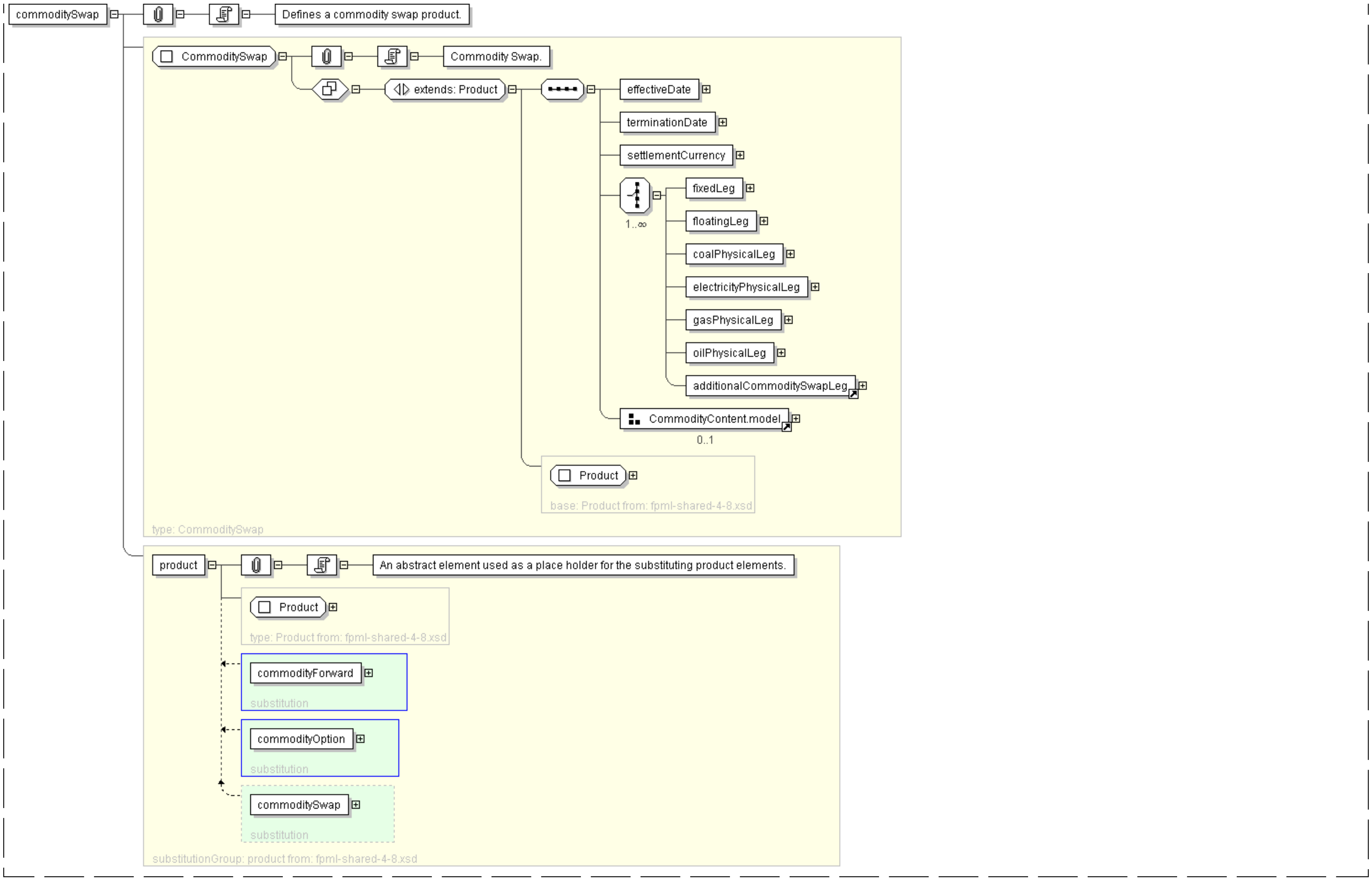
<rounding> Rounding </rounding> [0..1]

'Rounding direction and precision for amounts.'

End Group: CommodityContent.model

</commoditySwap>

Diagram



Schema Component Representation

```
<xsd:element name="commoditySwap" type=" CommoditySwap " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: AbsoluteTolerance

Super-types:	None
Sub-types:	None

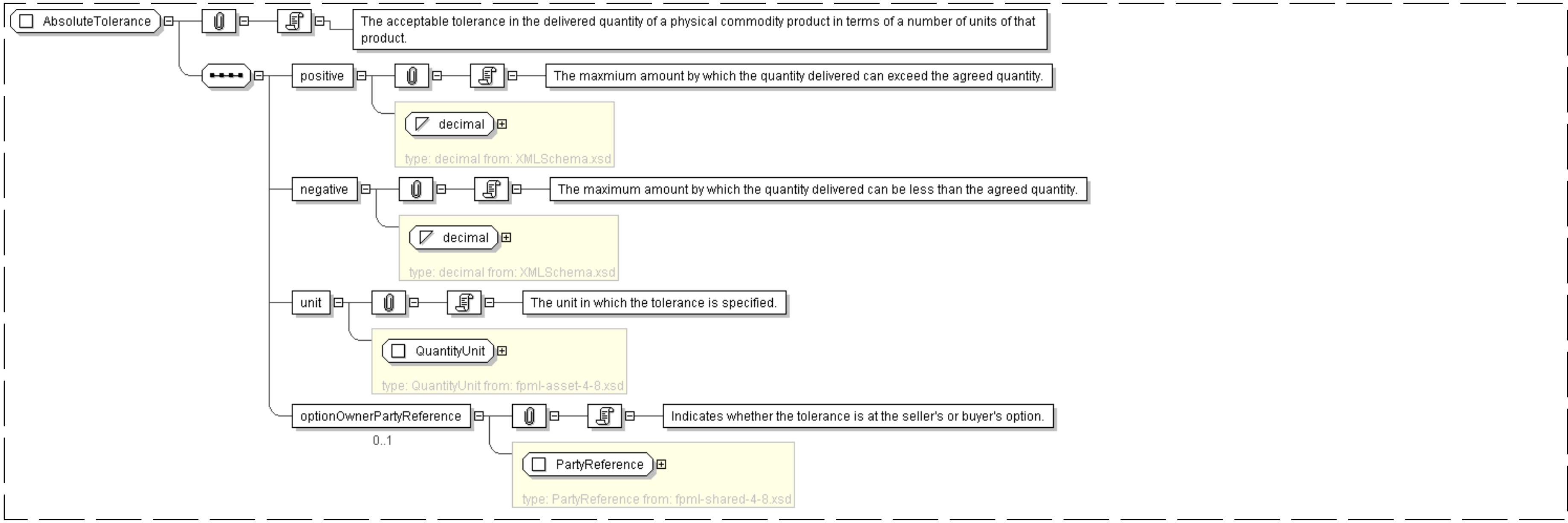
Name	AbsoluteTolerance

Used by (from the same schema document)	Complex Type **OilDelivery**
Abstract	no
Documentation	The acceptable tolerance in the delivered quantity of a physical commodity product in terms of a number of units of that product.

XML Instance Representation

```
<...>
  <positive> xsd:decimal </positive> [1]
  'The maxmium amount by which the quantity delivered can exceed the agreed quantity.'

  <negative> xsd:decimal </negative> [1]
  'The maximum amount by which the quantity delivered can be less than the agreed quantity.'

  <unit> QuantityUnit </unit> [1]
  'The unit in which the tolerance is specified.'

  <optionOwnerPartyReference> PartyReference </optionOwnerPartyReference> [0..1]
  'Indicates whether the tolerance is at the seller\'s or buyer\'s option.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AbsoluteTolerance">
   <xsd:sequence>
      <xsd:element name="positive" type=" xsd:decimal "/>
      <xsd:element name="negative" type=" xsd:decimal "/>
      <xsd:element name="unit" type=" QuantityUnit "/>
      <xsd:element name="optionOwnerPartyReference" type=" PartyReference " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: BullionDeliveryLocation

Super-types:	Scheme < **BullionDeliveryLocation** (by extension)
Sub-types:	None

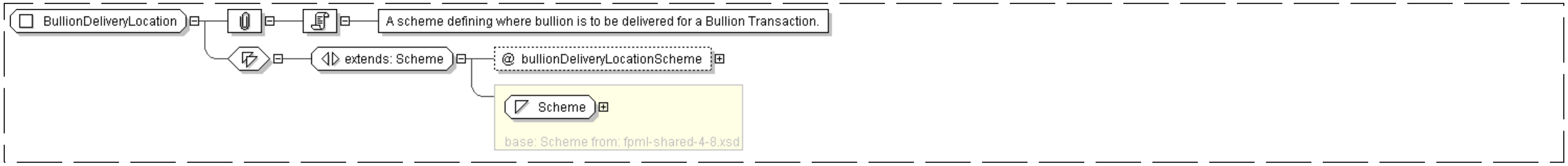
Name	BullionDeliveryLocation

Used by (from the same schema document)	Complex Type **BullionPhysicalLeg**
Abstract	no
Documentation	A scheme defining where bullion is to be delivered for a Bullion Transaction.

XML Instance Representation

```
<...
bullionDeliveryLocationScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BullionDeliveryLocation">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="bullionDeliveryLocationScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/bullion-delivery-location"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: BullionPhysicalLeg

Super-types:	Leg < PhysicalLeg (by extension) < **BullionPhysicalLeg** (by extension)
Sub-types:	None

Name	BullionPhysicalLeg
Used by (from the same schema document)	Complex Type **CommodityForward**
Abstract	no
Documentation	Physically settled leg of a physically settled Bullion Transaction.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <bullionType> BullionTypeEnum </bullionType> [1]
   'The type of Bullion underlying a Bullion Transaction.'

   <deliveryLocation> BullionDeliveryLocation </deliveryLocation> [1]
   'The physical delivery location for the transaction.'

Start Choice [1]
      <physicalQuantity> CommodityNotionalQuantity </physicalQuantity> [1]
      'The Quantity per Delivery Period.'

      <physicalQuantitySchedule> CommodityPhysicalQuantitySchedule </physicalQuantitySchedule> [1]
      'Allows the documentation of a shaped quantity trade where the quantity changes over the
      life of the transaction.'

End Choice
   <totalPhysicalQuantity> UnitQuantity </totalPhysicalQuantity> [0..1]
```

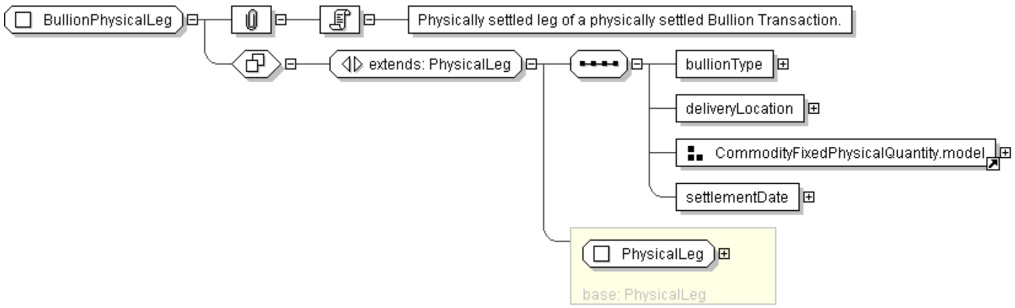
'The Total Quantity of the commodity to be delivered.'

<settlementDate> AdjustableOrRelativeDate **</settlementDate>** [1]

'Date on which the bullion will settle.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="BullionPhysicalLeg">
   <xsd:complexContent>
      <xsd:extension base=" PhysicalLeg ">
         <xsd:sequence>
            <xsd:element name="bullionType" type=" BullionTypeEnum "/>
            <xsd:element name="deliveryLocation" type=" BullionDeliveryLocation "/>
            <xsd:group ref=" CommodityFixedPhysicalQuantity.model "/>
            <xsd:element name="settlementDate" type=" AdjustableOrRelativeDate "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CalculationPeriodsDatesReference

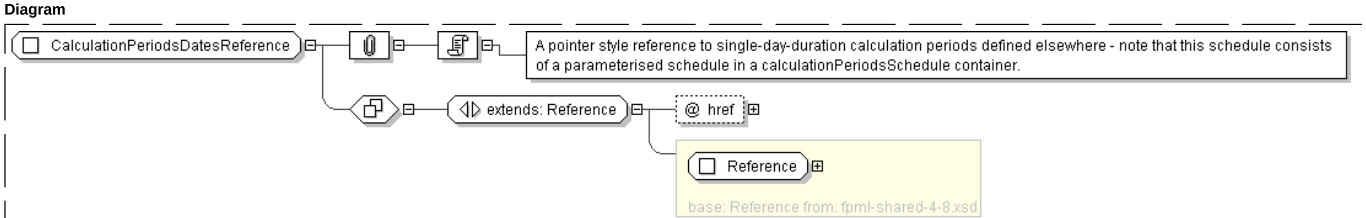
Super-types:	Reference < **CalculationPeriodsDatesReference** (by extension)
Sub-types:	None

Name	CalculationPeriodsDatesReference
Used by (from the same schema document)	Model Group **CommodityCalculationPeriodsPointer.model**
Abstract	no
Documentation	A pointer style reference to single-day-duration calculation periods defined elsewhere - note that this schedule consists of a parameterised schedule in a calculationPeriodsSchedule container.

XML Instance Representation

<...
href=" xsd:IDREF [1]**"/>**

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationPeriodsDatesReference">
```

```
    <xsd:complexContent>
        <xsd:extension base=" Reference ">
            <xsd:attribute name="href" type=" xsd:IDREF "
            use="required" reference="CommodityCalculationPeriodsSchedule"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CalculationPeriodsReference

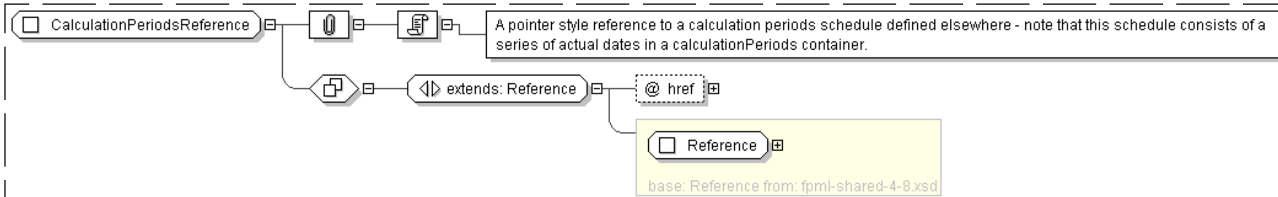
Super-types:	Reference < **CalculationPeriodsReference** (by extension)
Sub-types:	None

Name	CalculationPeriodsReference
Used by (from the same schema document)	Model Group **CommodityDeliveryPeriodsPointer.model** , Model Group **CommodityCalculationPeriodsPointer.model**
Abstract	no
Documentation	A pointer style reference to a calculation periods schedule defined elsewhere - note that this schedule consists of a series of actual dates in a calculationPeriods container.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationPeriodsReference">
    <xsd:complexContent>
        <xsd:extension base=" Reference ">
            <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="AdjustableDates"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CalculationPeriodsScheduleReference

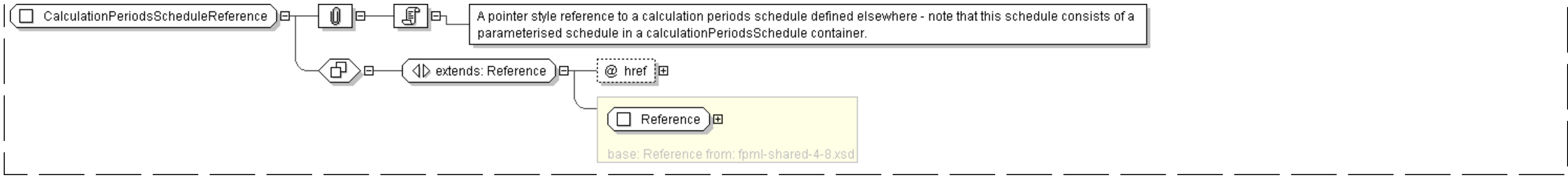
Super-types:	Reference < **CalculationPeriodsScheduleReference** (by extension)
Sub-types:	None

Name	CalculationPeriodsScheduleReference
Used by (from the same schema document)	Model Group **CommodityDeliveryPeriodsPointer.model** , Model Group **CommodityCalculationPeriodsPointer.model**
Abstract	no
Documentation	A pointer style reference to a calculation periods schedule defined elsewhere - note that this schedule consists of a parameterised schedule in a calculationPeriodsSchedule container.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationPeriodsScheduleReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="CommodityCalculationPeriodsSchedule"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CoalAttributeDecimal

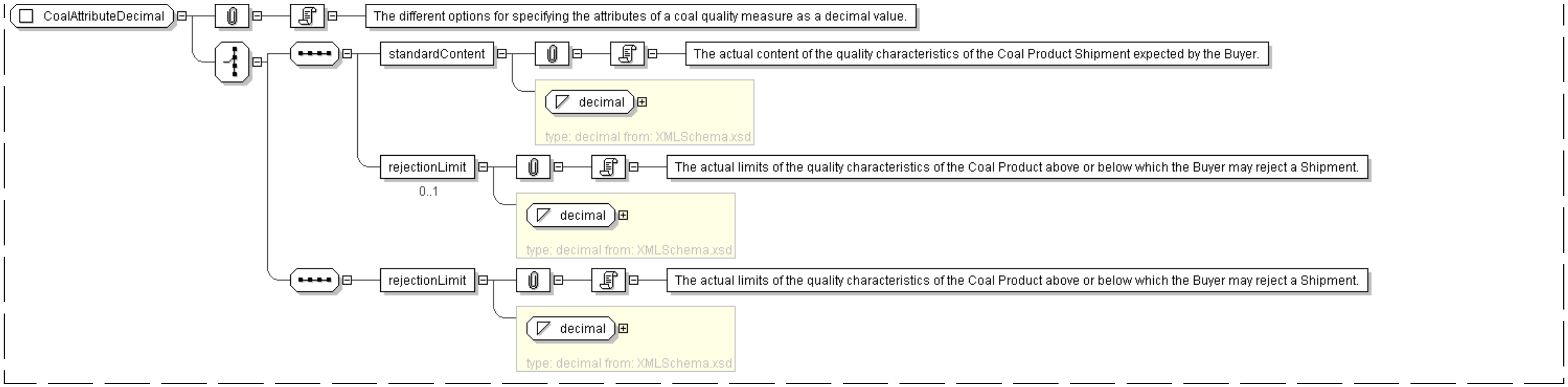
Super-types:	None
Sub-types:	None

Name	CoalAttributeDecimal
Used by (from the same schema document)	Model Group **CommodityCoalProperties.model** , Model Group **CommodityCoalProperties.model** , Model Group **CommodityCoalProperties.model** , Model Group **CommodityCoalProperties.model** , Model Group **CommodityCoalProperties.model** , Model Group **CommodityCoalReducingAtmosphere.model** , Model Group **CommodityCoalReducingAtmosphere.model** , Model Group **CommodityCoalReducingAtmosphere.model** , Model Group **CommodityCoalReducingAtmosphere.model**
Abstract	no
Documentation	The different options for specifying the attributes of a coal quality measure as a decimal value.

XML Instance Representation

```
<...>
Start Choice [1]
      <standardContent> xsd:decimal </standardContent> [1]
      'The actual content of the quality characteristics of the Coal Product Shipment expected by
      the Buyer.'

      <rejectionLimit> xsd:decimal </rejectionLimit> [0..1]
      'The actual limits of the quality characteristics of the Coal Product above or below which
      the Buyer may reject a Shipment.'

      <rejectionLimit> xsd:decimal </rejectionLimit> [1]
      'The actual limits of the quality characteristics of the Coal Product above or below which
      the Buyer may reject a Shipment.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalAttributeDecimal">
   <xsd:choice>
      <xsd:sequence>
         <xsd:element name="standardContent" type=" xsd:decimal "/>
         <xsd:element name="rejectionLimit" type=" xsd:decimal " minOccurs="0"/>
      </xsd:sequence>
      <xsd:sequence>
         <xsd:element name="rejectionLimit" type=" xsd:decimal "/>
      </xsd:sequence>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: CoalAttributePercentage

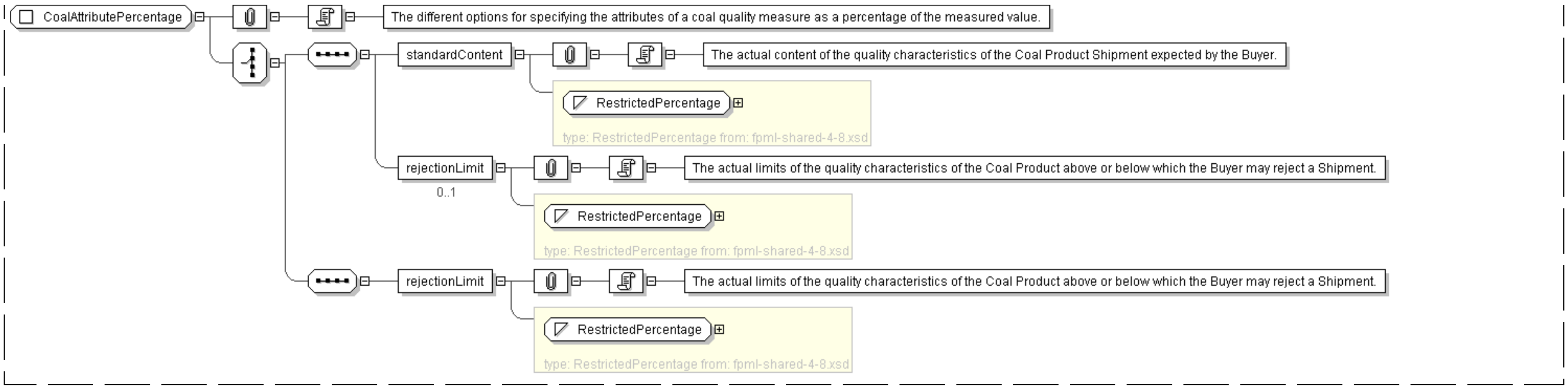
Super-types:	None
Sub-types:	None

Name	CoalAttributePercentage
Used by (from the same schema document)	Model Group **CommodityCoalComposition.model** , Model Group **CommodityCoalComposition.model** , Model Group **CommodityCoalComposition.model** , Model Group **CommodityCoalComposition.model** , Model Group **CommodityCoalComposition.model**
Abstract	no
Documentation	The different options for specifying the attributes of a coal quality measure as a percentage of the measured value.

XML Instance Representation

```
<...>
Start Choice [1]
      <standardContent> RestrictedPercentage </standardContent> [1]
      'The actual content of the quality characteristics of the Coal Product Shipment expected by
      the Buyer.'

      <rejectionLimit> RestrictedPercentage </rejectionLimit> [0..1]
      'The actual limits of the quality characteristics of the Coal Product above or below which
      the Buyer may reject a Shipment.'

      <rejectionLimit> RestrictedPercentage </rejectionLimit> [1]
      'The actual limits of the quality characteristics of the Coal Product above or below which
      the Buyer may reject a Shipment.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalAttributePercentage">
   <xsd:choice>
      <xsd:sequence>
         <xsd:element name="standardContent" type=" RestrictedPercentage "/>
         <xsd:element name="rejectionLimit" type=" RestrictedPercentage " minOccurs="0"/>
      </xsd:sequence>
      <xsd:sequence>
         <xsd:element name="rejectionLimit" type=" RestrictedPercentage "/>
      </xsd:sequence>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: CoalDelivery

Super-types:	None
Sub-types:	None

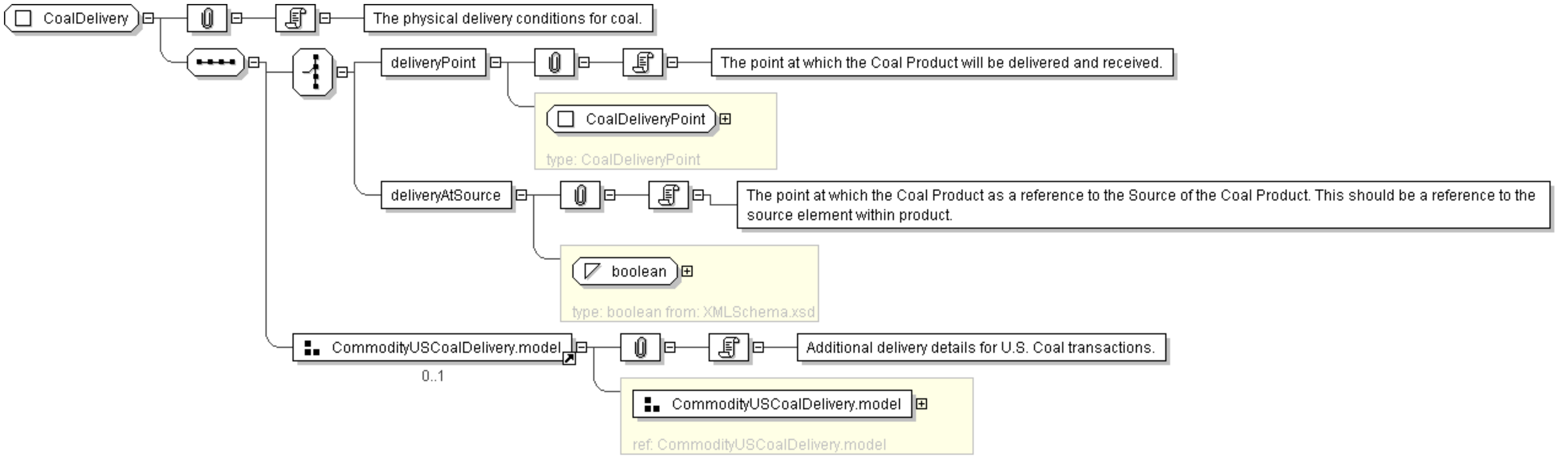
Name	CoalDelivery
Used by (from the same schema document)	Complex Type **CoalPhysicalLeg**
Abstract	no
Documentation	The physical delivery conditions for coal.

XML Instance Representation

```
<...>
Start Choice [1]
      <deliveryPoint> CoalDeliveryPoint </deliveryPoint> [1]
      'The point at which the Coal Product will be delivered and received.'

      <deliveryAtSource> xsd:boolean </deliveryAtSource> [1]
      'The point at which the Coal Product as a reference to the Source of the Coal Product.
      This should be a reference to the source element within product.'

End Choice
Start Group: CommodityUSCoalDelivery.model [0..1]
'Additional delivery details for U.S. Coal transactions.'

      <quantityVariationAdjustment> xsd:boolean </quantityVariationAdjustment> [1]
      'If true, indicates that QVA is applicable. If false, indicates that QVA is inapplicable.'

      <transportationEquipment> CoalTransportationEquipment </transportationEquipment> [0..1]
      'The transportation equipment with which the Coal Product will be delivered and received.'

      <risk> CommodityDeliveryRisk </risk> [0..1]
      'Specifies how the risk associated with the delivery is assigned.'
```

```
End Group: CommodityUSCoalDelivery.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalDelivery">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="deliveryPoint" type=" CoalDeliveryPoint "/>
         <xsd:element name="deliveryAtSource" type=" xsd:boolean "/>
      </xsd:choice>
      <xsd:group ref=" CommodityUSCoalDelivery.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CoalDeliveryPoint

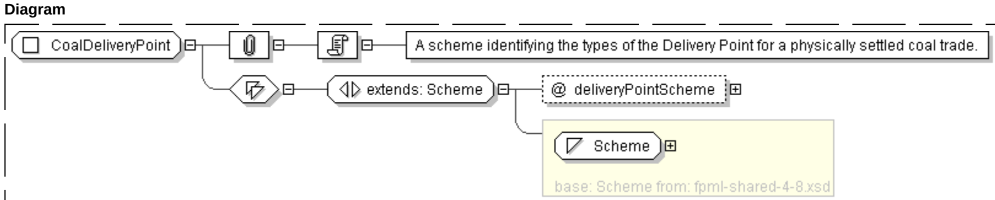
Super-types:	Scheme < **CoalDeliveryPoint** (by extension)
Sub-types:	None

Name	CoalDeliveryPoint
Used by (from the same schema document)	Complex Type **CoalDelivery**
Abstract	no
Documentation	A scheme identifying the types of the Delivery Point for a physically settled coal trade.

XML Instance Representation

```
<...
deliveryPointScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalDeliveryPoint">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="deliveryPointScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CoalPhysicalLeg

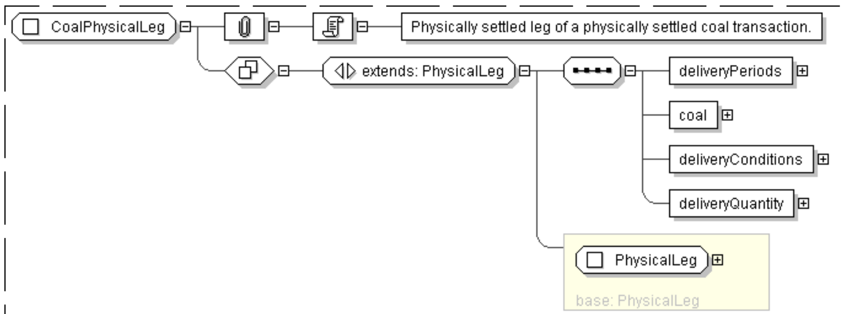
Super-types:	Leg < PhysicalLeg (by extension) < **CoalPhysicalLeg** (by extension)
Sub-types:	None

Name	CoalPhysicalLeg
Used by (from the same schema document)	Complex Type **CommoditySwap**
Abstract	no
Documentation	Physically settled leg of a physically settled coal transaction.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <deliveryPeriods> CommodityDeliveryPeriods </deliveryPeriods> [1]
   'The period during which delivery/deliveries of Coal Products may be scheduled. Equivalent
   to Nomination Period(s) for US Coal.'

   <coal> CoalProduct </coal> [1]
   'The specification of the Coal Product to be delivered.'

   <deliveryConditions> CoalDelivery </deliveryConditions> [1]
   'The physical delivery conditions for the transaction.'

   <deliveryQuantity> CommodityPhysicalQuantity </deliveryQuantity> [1]
   'The different options for specifying the quantity.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalPhysicalLeg">
   <xsd:complexContent>
      <xsd:extension base=" PhysicalLeg ">
         <xsd:sequence>
            <xsd:element name="deliveryPeriods" type=" CommodityDeliveryPeriods "/>
            <xsd:element name="coal" type=" CoalProduct "/>
            <xsd:element name="deliveryConditions" type=" CoalDelivery "/>
```

```
            <xsd:element name="deliveryQuantity" type=" CommodityPhysicalQuantity "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CoalProduct

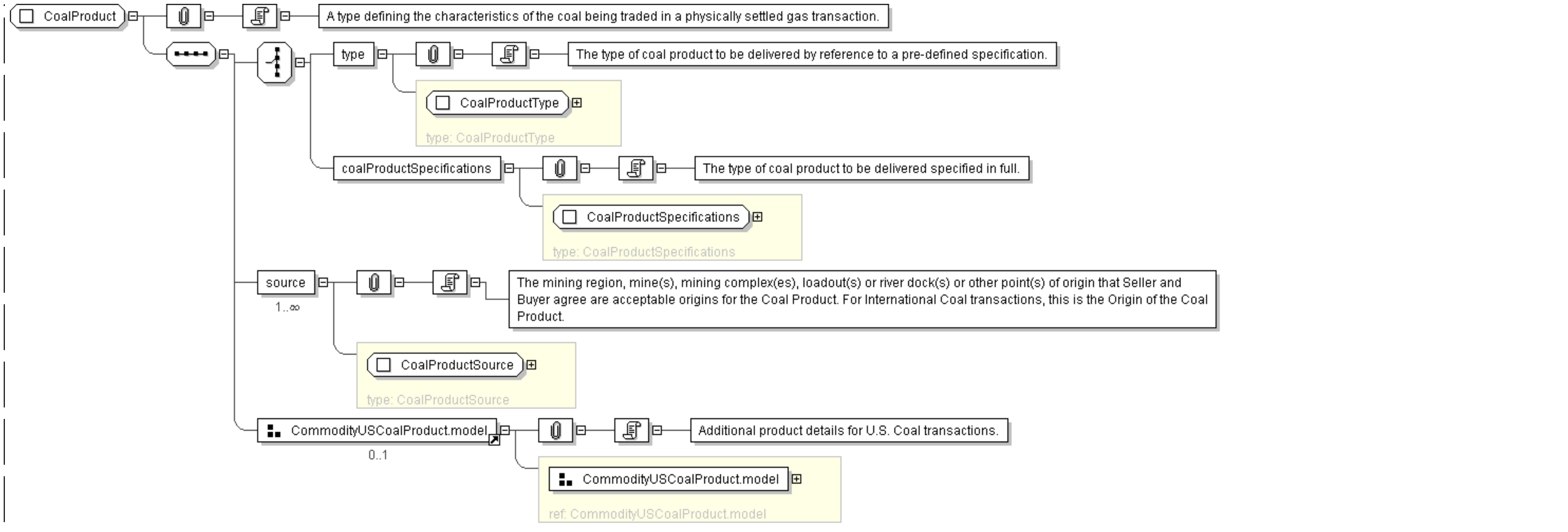
Super-types:	None
Sub-types:	None

Name	CoalProduct
Used by (from the same schema document)	Complex Type **CoalPhysicalLeg**
Abstract	no
Documentation	A type defining the characteristics of the coal being traded in a physically settled gas transaction.

XML Instance Representation

```
<...>
Start Choice [1]
      <type> CoalProductType </type> [1]
      'The type of coal product to be delivered by reference to a pre-defined specification.'

      <coalProductSpecifications> CoalProductSpecifications </coalProductSpecifications> [1]
      'The type of coal product to be delivered specified in full.'

End Choice
   <source> CoalProductSource </source> [1..*]
   'The mining region, mine(s), mining complex(es), loadout(s) or river dock(s) or other point
   (s) of origin that Seller and Buyer agree are acceptable origins for the Coal Product.
   For International Coal transactions, this is the Origin of the Coal Product.'

Start Group: CommodityUSCoalProduct.model [0..1]
'Additional product details for U.S. Coal transactions.'

      <btuQualityAdjustment> CoalQualityAdjustments </btuQualityAdjustment> [1]
      'The Quality Adjustment formula to be used where the Actual Shipment BTU/Lb value differs
      from the Standard BTU/Lb value.'

      <so2QualityAdjustment> CoalQualityAdjustments </so2QualityAdjustment> [0..1]
      'The Quality Adjustment formula to be used where the Actual Shipment SO2/MMBTU value
      differs from the Standard SO2/MMBTU value.'

End Group: CommodityUSCoalProduct.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalProduct">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="type" type=" CoalProductType "/>
         <xsd:element name="coalProductSpecifications" type=" CoalProductSpecifications "/>
      </xsd:choice>
      <xsd:element name="source" type=" CoalProductSource " maxOccurs="unbounded"/>
      <xsd:group ref=" CommodityUSCoalProduct.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CoalProductSource

Super-types:	Scheme < **CoalProductSource** (by extension)
Sub-types:	None

Name	CoalProductSource
Used by (from the same schema document)	Complex Type **CoalProduct**
Abstract	no
Documentation	A scheme identifying the sources of coal for a physically settled coal trade.

XML Instance Representation

```
<...
commodityCoalProductSourceScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="CoalProductSource">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityCoalProductSourceScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/commodity-coal-product-source"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CoalProductSpecifications

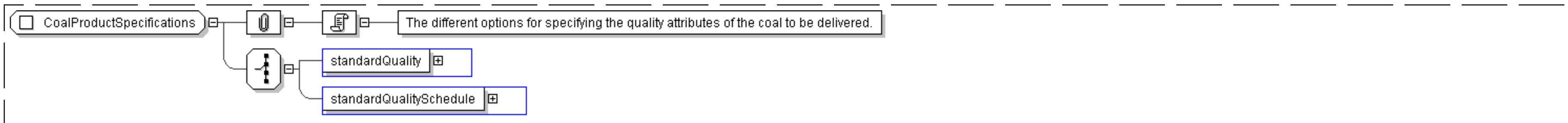
Super-types:	None
Sub-types:	None

Name	CoalProductSpecifications
Used by (from the same schema document)	Complex Type **CoalProduct**
Abstract	no
Documentation	The different options for specifying the quality attributes of the coal to be delivered.

XML Instance Representation

```
<...>
Start Choice [1]
      <standardQuality> CoalStandardQuality </standardQuality> [1]
      <standardQualitySchedule> CoalStandardQualitySchedule </standardQualitySchedule> [1]
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalProductSpecifications">
   <xsd:choice>
      <xsd:element name="standardQuality" type=" CoalStandardQuality "/>
      <xsd:element name="standardQualitySchedule" type=" CoalStandardQualitySchedule "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: CoalProductType

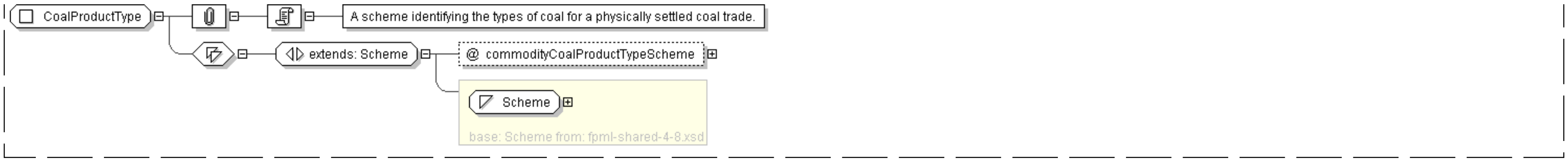
Super-types:	Scheme < **CoalProductType** (by extension)
Sub-types:	None

Name	CoalProductType
Used by (from the same schema document)	Complex Type **CoalProduct**
Abstract	no
Documentation	A scheme identifying the types of coal for a physically settled coal trade.

XML Instance Representation

```
<...
commodityCoalProductTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalProductType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityCoalProductTypeScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/commodity-coal-product-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CoalQualityAdjustments

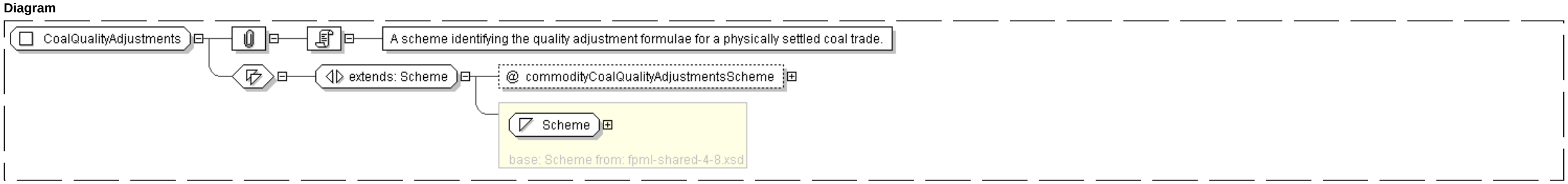
Super-types:	Scheme < **CoalQualityAdjustments** (by extension)
Sub-types:	None

Name	CoalQualityAdjustments
Used by (from the same schema document)	Model Group **CommodityUSCoalProduct.model** , Model Group **CommodityUSCoalProduct.model**
Abstract	no
Documentation	A scheme identifying the quality adjustment formulae for a physically settled coal trade.

XML Instance Representation

```
<...
commodityCoalQualityAdjustmentsScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalQualityAdjustments">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityCoalQualityAdjustmentsScheme" type=" xsd:anyURI "
         default="http://www.fpml.org/coding-scheme/commodity-coal-quality-adjustments"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CoalStandardQuality

Super-types:	None
Sub-types:	None

Name	CoalStandardQuality
Used by (from the same schema document)	Complex Type **CoalProductSpecifications** , Complex Type **CoalStandardQualitySchedule**

Abstract	no
Documentation	The quality attributes of the coal to be delivered.

XML Instance Representation

```
<...>
  <moisture> CoalAttributePercentage </moisture> [0..1]
  'The moisture content of the coal product.'

  <ash> CoalAttributePercentage </ash> [0..1]
  'The ash content of the coal product.'

  <sulfur> CoalAttributePercentage </sulfur> [0..1]
  'The sulfur/sulphur content of the coal product.'

  <SO2> CoalAttributePercentage </SO2> [0..1]
  'The sulfur/sulphur dioxide content of the coal product.'

  <volatile> CoalAttributePercentage </volatile> [0..1]
  'The volatile content of the coal product.'

  <BTUperLB> CoalAttributeDecimal </BTUperLB> [0..1]
  'The number of British Thermal Units per Pound of the coal product.'

  <topSize> CoalAttributeDecimal </topSize> [0..1]
  'The smallest sieve opening that will result in less than 5% of a sample of the coal
  product remaining.'

  <finesPassingScreen> CoalAttributeDecimal </finesPassingScreen> [0..1]
  <grindability> CoalAttributeDecimal </grindability> [0..1]
  'The Hardgrove Grindability Index value of the coal to be delivered.'

  <ashFusionTemperature> CoalAttributeDecimal </ashFusionTemperature> [0..1]
  'The temperature at which the ash form of the coal product fuses completely in accordance
  with the ASTM International D1857 Standard Test Methodology.'

  <initialDeformation> CoalAttributeDecimal </initialDeformation> [0..1]
  'The temperature at which an ash cone shows evidence of deformation.'

  <softeningHeightWidth> CoalAttributeDecimal </softeningHeightWidth> [0..1]
  'The temperature at which the height of an ash cone equals its width. (Softening temperature).'

  <softeningHeightHalfWidth> CoalAttributeDecimal </softeningHeightHalfWidth> [0..1]
  'The temperature at which the height of an ash cone equals half its width.
  (Hemisphere temperature).'

  <fluid> CoalAttributeDecimal </fluid> [0..1]
  'The temperature at which the ash cone flattens.'

</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="CoalStandardQuality">
   <xsd:sequence>
      <xsd:group ref=" CommodityCoalComposition.model "/>
      <xsd:group ref=" CommodityCoalProperties.model "/>
      <xsd:group ref=" CommodityCoalReducingAtmosphere.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CoalStandardQualitySchedule

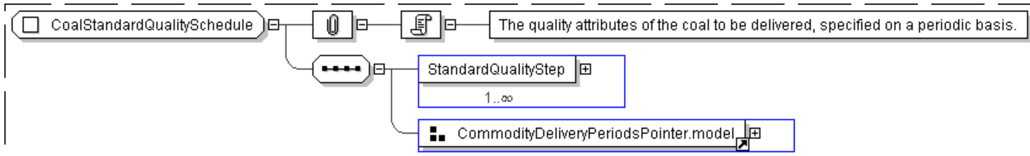
Super-types:	None
Sub-types:	None

Name	CoalStandardQualitySchedule
Used by (from the same schema document)	Complex Type **CoalProductSpecifications**
Abstract	no
Documentation	The quality attributes of the coal to be delivered, specified on a periodic basis.

XML Instance Representation

```
<...>
   <StandardQualityStep> CoalStandardQuality </StandardQualityStep> [1..*]
Start Choice [1]
      <deliveryPeriodsReference> CalculationPeriodsReference </deliveryPeriodsReference> [1]
      'A pointer style reference to the Delivery Periods defined elsewhere.'

      <deliveryPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </deliveryPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined elsewhere.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalStandardQualitySchedule">
   <xsd:sequence>
      <xsd:element name="StandardQualityStep" type=" CoalStandardQuality " maxOccurs="unbounded"/>
      <xsd:group ref=" CommodityDeliveryPeriodsPointer.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CoalTransportationEquipment

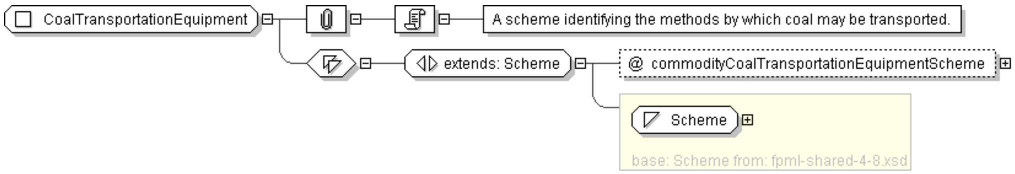
Super-types:	Scheme < **CoalTransportationEquipment** (by extension)
Sub-types:	None

Name	CoalTransportationEquipment
Used by (from the same schema document)	Model Group **CommodityUSCoalDelivery.model**
Abstract	no
Documentation	A scheme identifying the methods by which coal may be transported.

XML Instance Representation

```
<...
commodityCoalTransportationEquipmentScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CoalTransportationEquipment">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityCoalTransportationEquipmentScheme" type=" xsd:anyURI
         " default="http://www.fpml.org/coding-scheme/commodity-coal-transportation-equipment"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityAmericanExercise

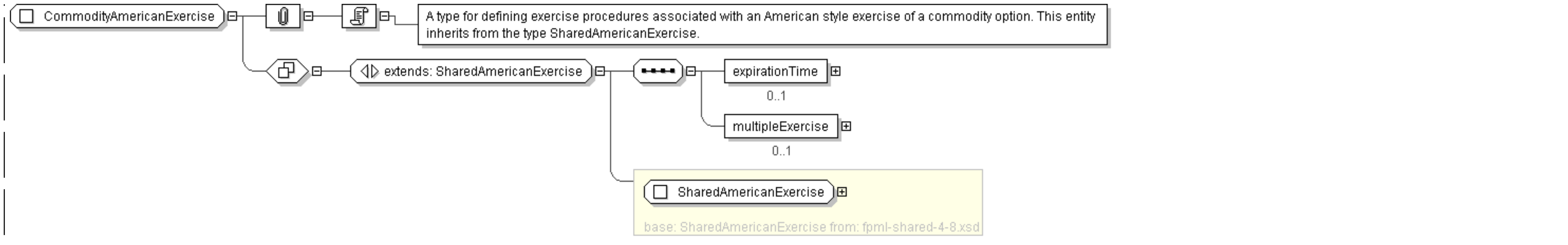
Super-types:	SharedAmericanExercise < **CommodityAmericanExercise** (by extension)
Sub-types:	None

Name	CommodityAmericanExercise
Used by (from the same schema document)	Complex Type **CommodityExercise**
Abstract	no
Documentation	A type for defining exercise procedures associated with an American style exercise of a commodity option. This entity inherits from the type SharedAmericanExercise.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <commencementDate> AdjustableOrRelativeDate </commencementDate> [1]
   'The first day of the exercise period for an American style option.'

   <expirationDate> AdjustableOrRelativeDate </expirationDate> [1]
   'The last day within an exercise period for an American style option. For a European
   style option it is the only day within the exercise period.'
Start Choice [0..1]
'Choice between latest exercise time expressed as literal time, or using a
determination method.'

      <latestExerciseTime> BusinessCenterTime </latestExerciseTime> [1]
      'For a Bermuda or American style option, the latest time on an exercise business day
      (excluding the expiration date) within the exercise period that notice can be given by
      the buyer to the seller or seller\'s agent. Notice of exercise given after this time will
      be deemed to have been given on the next exercise business day.'

      <latestExerciseTimeDetermination> DeterminationMethod </latestExerciseTimeDetermination> [1]
      'Latest exercise time determination method.'

End Choice
   <expirationTime> BusinessCenterTime </expirationTime> [0..1]
   'The specific time of day on which the option expires.'

   <multipleExercise> CommodityMultipleExercise </multipleExercise> [0..1]
   'The presence of this element indicates that the option may be partially exercised. It is
   not applicable to European or Asian options.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityAmericanExercise">
   <xsd:complexContent>
      <xsd:extension base=" SharedAmericanExercise ">
         <xsd:sequence>
            <xsd:element name="expirationTime" type=" BusinessCenterTime " minOccurs="0"/>
            <xsd:element name="multipleExercise" type=" CommodityMultipleExercise " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityCalculationPeriodsSchedule

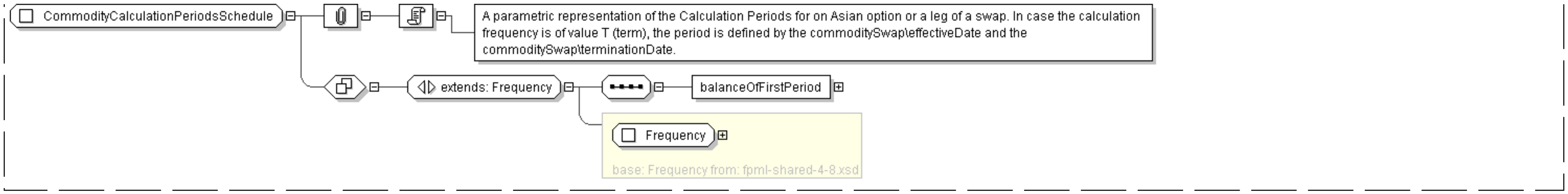
Super-types:	Frequency < **CommodityCalculationPeriodsSchedule** (by extension)
Sub-types:	None

Name	CommodityCalculationPeriodsSchedule
Used by (from the same schema document)	Complex Type **CommodityDeliveryPeriods** , Model Group **CommodityAsian.model** , Model Group **CommodityCalculationPeriods.model**
Abstract	no
Documentation	A parametric representation of the Calculation Periods for on Asian option or a leg of a swap. In case the calculation frequency is of value T (term), the period is defined by the commoditySwap\effectiveDate and the commoditySwap\terminationDate.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <periodMultiplier> xsd:integer </periodMultiplier> [1]
   'A time period multiplier, e.g. 1, 2 or 3 etc. A negative value can be used when specifying
   an offset relative to another date, e.g. -2 days. If the period value is T (Term)
   then periodMultiplier must contain the value 1.'

   <period> PeriodExtendedEnum </period> [1]
   'A time period, e.g. a day, week, month, year or term of the stream. If the
   periodMultiplier value is 0 (zero) then period must contain the value D (day).'

   <balanceOfFirstPeriod> xsd:boolean </balanceOfFirstPeriod> [1]
   'If true, indicates that that the first Calculation Period should run from the Effective
   Date to the end of the calendar period in which the Effective Date falls, e.g. Jan 15 - Jan
   31 if the calculation periods are one month long and Effective Date is Jan 15. If false,
   the first Calculation Period should run from the Effective Date for one whole period, e.g.
   Jan 15 to Feb 14 if the calculation periods are one month long and Effective Date is Jan 15.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityCalculationPeriodsSchedule">
   <xsd:complexContent>
      <xsd:extension base=" Frequency ">
         <xsd:sequence>
            <xsd:element name="balanceOfFirstPeriod" type=" xsd:boolean "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityDeliveryPeriods

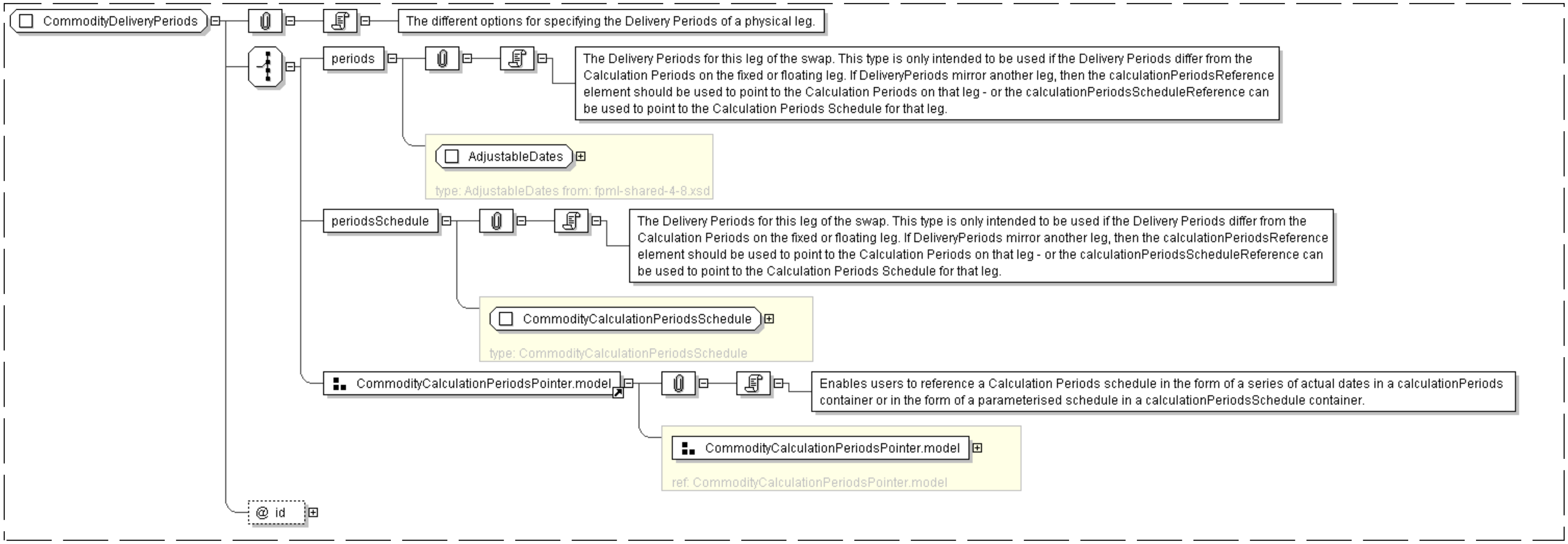
Super-types:	None
Sub-types:	• ElectricityDeliveryPeriods (by extension) • GasDeliveryPeriods (by extension)

Name	CommodityDeliveryPeriods
Used by (from the same schema document)	Complex Type **CoalPhysicalLeg** , Complex Type **ElectricityPhysicalLeg** , Complex Type **OilPhysicalLeg**
Abstract	no
Documentation	The different options for specifying the Delivery Periods of a physical leg.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <periods> AdjustableDates </periods> [1]
      'The Delivery Periods for this leg of the swap. This type is only intended to be used if
      the Delivery Periods differ from the Calculation Periods on the fixed or floating leg.
      If DeliveryPeriods mirror another leg, then the calculationPeriodsReference element should
      be used to point to the Calculation Periods on that leg - or
      the calculationPeriodsScheduleReference can be used to point to the Calculation
      Periods Schedule for that leg.'

      <periodsSchedule> CommodityCalculationPeriodsSchedule </periodsSchedule> [1]
      'The Delivery Periods for this leg of the swap. This type is only intended to be used if
      the Delivery Periods differ from the Calculation Periods on the fixed or floating leg.
      If DeliveryPeriods mirror another leg, then the calculationPeriodsReference element should
      be used to point to the Calculation Periods on that leg - or
      the calculationPeriodsScheduleReference can be used to point to the Calculation
      Periods Schedule for that leg.'

Start Choice [1]
         <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
         'A pointer style reference to the Calculation Periods defined on another leg.'

         <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
         </calculationPeriodsScheduleReference> [1]
         'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

         <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
         </calculationPeriodsDatesReference> [1]
         'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityDeliveryPeriods">
   <xsd:choice>
      <xsd:element name="periods" type=" AdjustableDates "/>
      <xsd:element name="periodsSchedule" type=" CommodityCalculationPeriodsSchedule "/>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
   </xsd:choice>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityDeliveryPoint

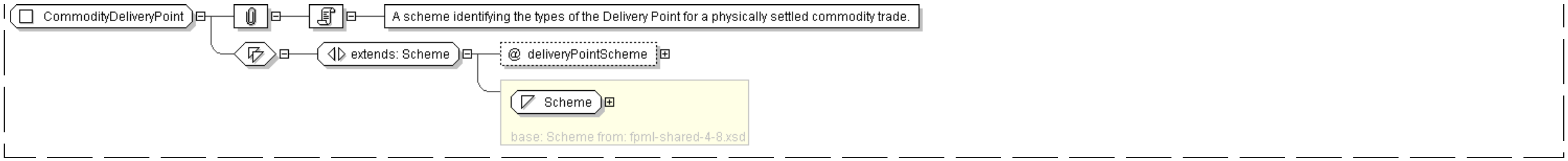
Super-types:	Scheme < **CommodityDeliveryPoint** (by extension)
Sub-types:	None

Name	CommodityDeliveryPoint
Used by (from the same schema document)	Complex Type **ElectricityDelivery** , Complex Type **ElectricityDeliverySystemFirm** , Complex Type **ElectricityDeliveryUnitFirm** , Complex Type **OilPipelineDelivery** , Complex Type **OilPipelineDelivery** , Complex Type **OilTransferDelivery** , Model Group **CommodityDeliveryPoints.model** , Model Group **CommodityDeliveryPoints.model**
Abstract	no
Documentation	A scheme identifying the types of the Delivery Point for a physically settled commodity trade.

XML Instance Representation

```
<...
deliveryPointScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityDeliveryPoint">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="deliveryPointScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityDeliveryRisk

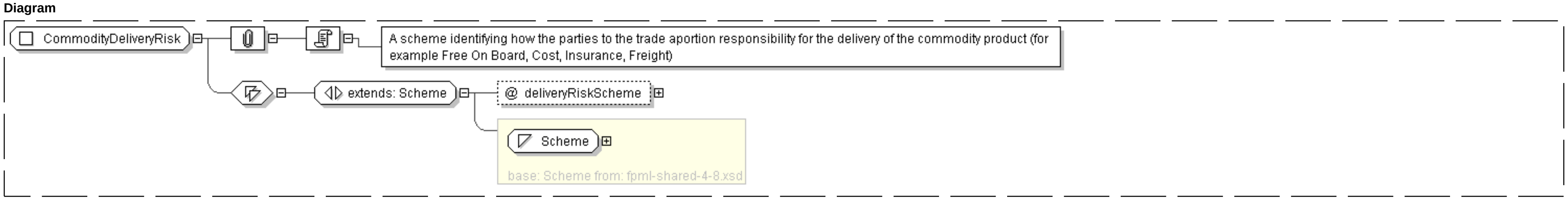
Super-types:	Scheme < **CommodityDeliveryRisk** (by extension)
Sub-types:	None

Name	CommodityDeliveryRisk
Used by (from the same schema document)	Complex Type **OilPipelineDelivery** , Model Group **CommodityUSCoalDelivery.model**
Abstract	no
Documentation	A scheme identifying how the parties to the trade aportion responsibility for the delivery of the commodity product (for example Free On Board, Cost, Insurance, Freight)

XML Instance Representation

```
<...
deliveryRiskScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityDeliveryRisk">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="deliveryRiskScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/external/incoterms"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityEuropeanExercise

Super-types:	Exercise < **CommodityEuropeanExercise** (by extension)
Sub-types:	None

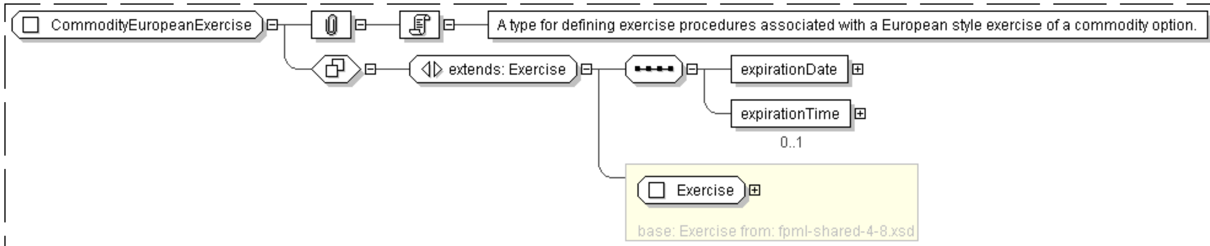
Name	CommodityEuropeanExercise
Used by (from the same schema document)	Complex Type **CommodityExercise**

Abstract	no
Documentation	A type for defining exercise procedures associated with a European style exercise of a commodity option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <expirationDate> AdjustableOrRelativeDate </expirationDate> [1]
   'The last day within an exercise period for an American style option. For a European
   style option it is the only day within the exercise period. For an averaging option this
   is equivalent to the Termination Date.'

   <expirationTime> BusinessCenterTime </expirationTime> [0..1]
   'The specific time of day on which the option expires.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityEuropeanExercise">
   <xsd:complexContent>
      <xsd:extension base=" Exercise ">
         <xsd:sequence>
            <xsd:element name="expirationDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="expirationTime" type=" BusinessCenterTime " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityExercise

Super-types:	None
Sub-types:	None

Name	CommodityExercise
Used by (from the same schema document)	Model Group **CommodityFinancialOption.model**
Abstract	no
Documentation	The parameters for defining how the commodity option can be exercised, how it is priced and how it is settled.

XML Instance Representation

```
<...>
Start Choice [1]
      <americanExercise> CommodityAmericanExercise </americanExercise> [1]
      'The parameters for defining the exercise period for an American style option together with
      the rules governing the quantity of the commodity that can be exercised on any given
      exercise date.'

      <europeanExercise> CommodityEuropeanExercise </europeanExercise> [1]
      'The parameters for defining the expiration date and time for a European or Asian style
      option. For an Asian style option the expiration date is equivalent to the termination date.'

End Choice
   <automaticExercise> xsd:boolean </automaticExercise> [0..1]
   'Specifies whether or not Automatic Exercise applies to a Commodity Option Transaction.'
```

<writtenConfirmation> xsd:boolean </writtenConfirmation> [0..1]

'Specifies whether or not Written Confirmation applies to a Commodity Option Transaction.'

<settlementCurrency> IdentifiedCurrency </settlementCurrency> [1]

'The currency into which the Commodity Option Transaction will settle. If this is not the same as the currency in which the Commodity Reference Price is quoted, then an FX determination method should also be specified.'

<fx> CommodityFx </fx> [0..1]

'FX observations to be used to convert the observed Commodity Reference Price to the Settlement Currency.'

<conversionFactor> xsd:decimal </conversionFactor> [0..1]

'If the Notional Quantity is specified in a unit that does not match the unit in which the Commodity Reference Price is quoted, the scaling or conversion factor used to convert the Commodity Reference Price unit into the Notional Quantity unit should be stated here. If there is no conversion, this element is not intended to be used.'

Start Choice [1]

<relativePaymentDates> CommodityRelativePaymentDates </relativePaymentDates> [1]

'The Payment Dates of the trade relative to the Calculation Periods.'

Start Choice [1]

<paymentDates> AdjustableDatesOrRelativeDateOffset </paymentDates> [1]

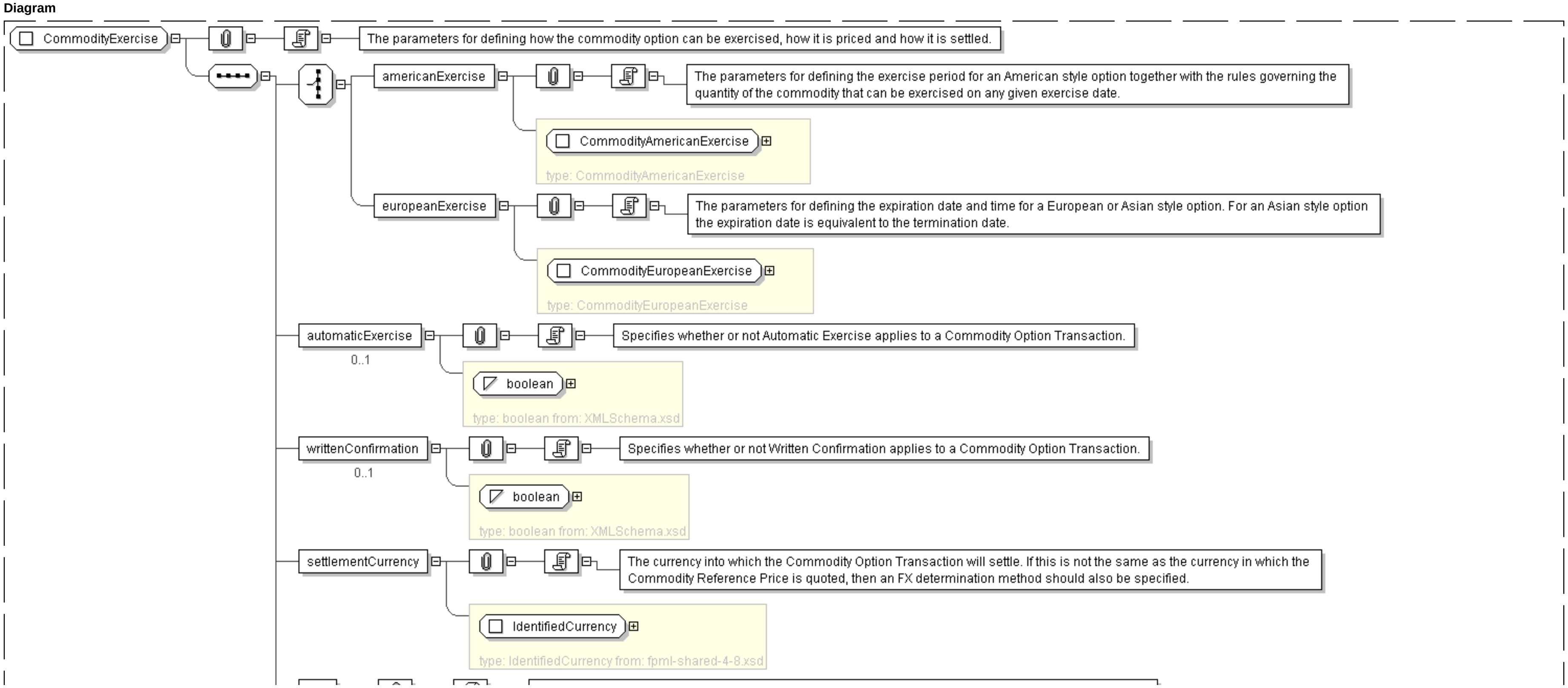
'Dates on which payments will be made.'

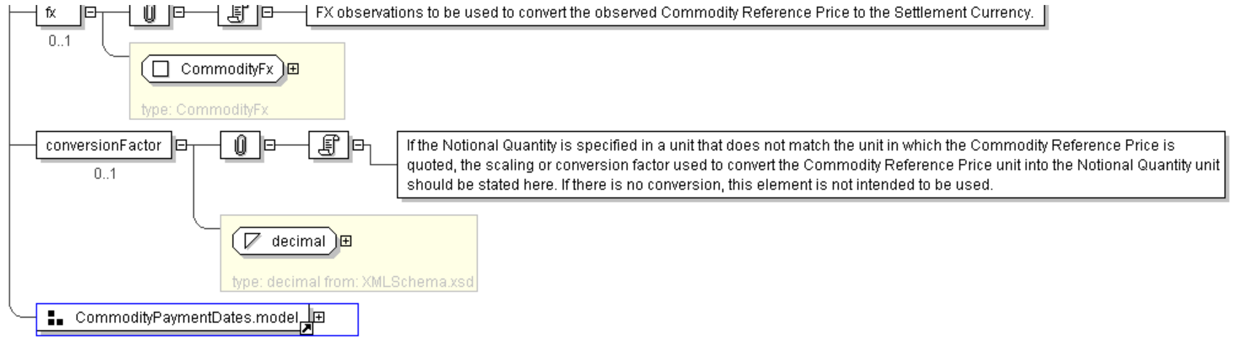
<masterAgreementPaymentDates> xsd:boolean </masterAgreementPaymentDates> [1]

'If present and true indicates that the Payment Date(s) are specified in the relevant master agreement.'

End Choice
End Choice
</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="CommodityExercise">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="americanExercise" type=" CommodityAmericanExercise "/>
         <xsd:element name="europeanExercise" type=" CommodityEuropeanExercise "/>
      </xsd:choice>
      <xsd:element name="automaticExercise" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="writtenConfirmation" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="settlementCurrency" type=" IdentifiedCurrency "/>
      <xsd:element name="fx" type=" CommodityFx " minOccurs="0"/>
      <xsd:element name="conversionFactor" type=" xsd:decimal " minOccurs="0"/>
      <xsd:group ref=" CommodityPaymentDates.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityExpireRelativeToEvent

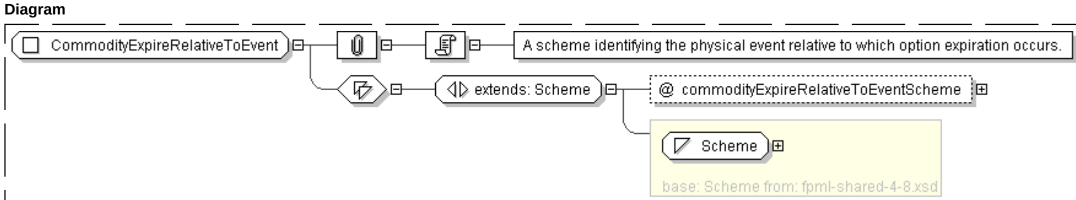
Super-types:	Scheme < **CommodityExpireRelativeToEvent** (by extension)
Sub-types:	None

Name	CommodityExpireRelativeToEvent
Used by (from the same schema document)	Complex Type **CommodityRelativeExpirationDates**
Abstract	no
Documentation	A scheme identifying the physical event relative to which option expiration occurs.

XML Instance Representation

```
<...
commodityExpireRelativeToEventScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityExpireRelativeToEvent">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityExpireRelativeToEventScheme" type=" xsd:anyURI "
         default="http://www.fpml.org/coding-scheme/commodity-expire-relative-to-event"/>
      </xsd:extension>
   </xsd:simpleContent>
```

```
</xsd:complexType>
```

top

Complex Type: CommodityFixedPriceSchedule

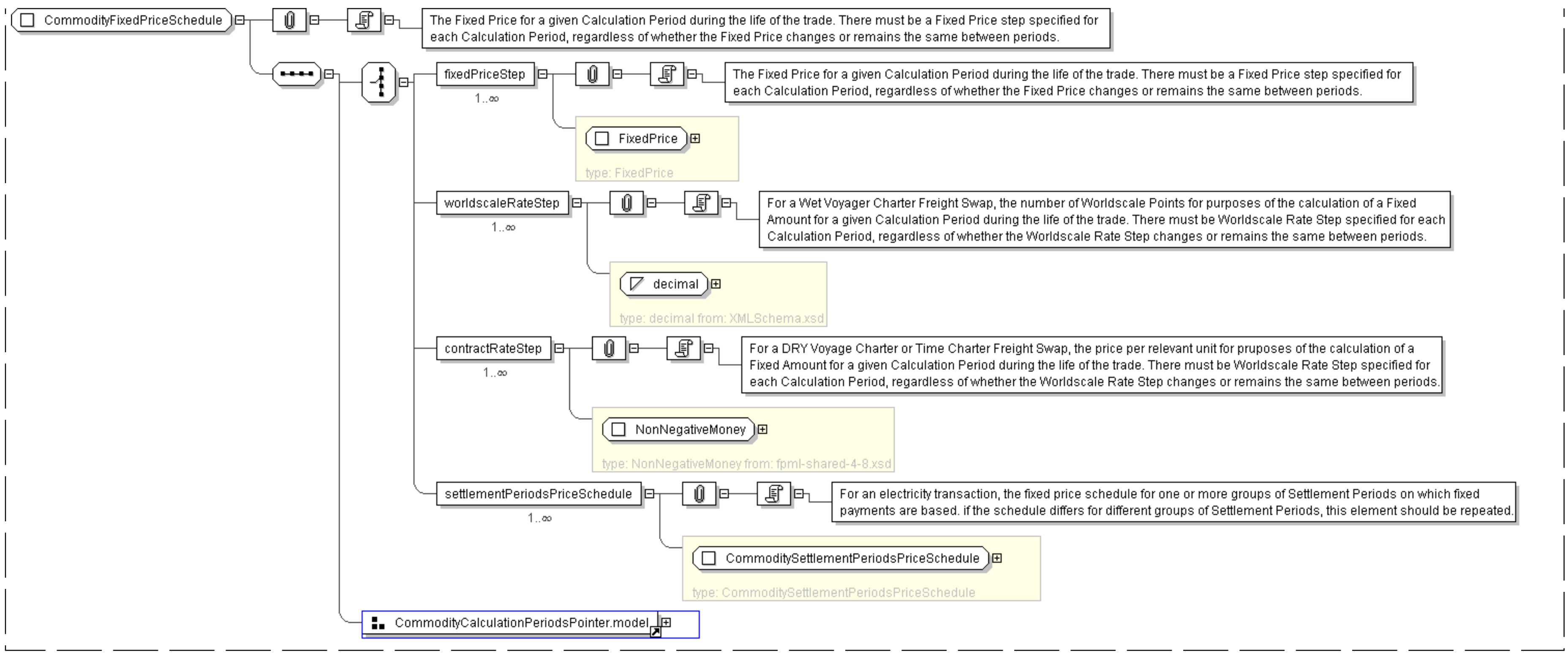
Super-types:	None
Sub-types:	None

Name	CommodityFixedPriceSchedule
Used by (from the same schema document)	Model Group **CommodityFixedPrice.model**
Abstract	no
Documentation	The Fixed Price for a given Calculation Period during the life of the trade. There must be a Fixed Price step specified for each Calculation Period, regardless of whether the Fixed Price changes or remains the same between periods.

XML Instance Representation

```
<...>
Start Choice [1]
      <fixedPriceStep> FixedPrice </fixedPriceStep> [1..*]
      'The Fixed Price for a given Calculation Period during the life of the trade. There must be
      a Fixed Price step specified for each Calculation Period, regardless of whether the Fixed
      Price changes or remains the same between periods.'

      <worldscaleRateStep> xsd:decimal </worldscaleRateStep> [1..*]
      'For a Wet Voyager Charter Freight Swap, the number of Worldscale Points for purposes of
      the calculation of a Fixed Amount for a given Calculation Period during the life of the
      trade. There must be Worldscale Rate Step specified for each Calculation Period, regardless
      of whether the Worldscale Rate Step changes or remains the same between periods.'

      <contractRateStep> NonNegativeMoney </contractRateStep> [1..*]
      'For a DRY Voyage Charter or Time Charter Freight Swap, the price per relevant unit
      for pruposes of the calculation of a Fixed Amount for a given Calculation Period during
      the life of the trade. There must be Worldscale Rate Step specified for each
      Calculation Period, regardless of whether the Worldscale Rate Step changes or remains the
      same between periods.'

      <settlementPeriodsPriceSchedule> CommoditySettlementPeriodsPriceSchedule
      </settlementPeriodsPriceSchedule> [1..*]
      'For an electricity transaction, the fixed price schedule for one or more groups of
      Settlement Periods on which fixed payments are based. if the schedule differs for
      different groups of Settlement Periods, this element should be repeated.'

End Choice
Start Choice [1]
      <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
      'A pointer style reference to the Calculation Periods defined on another leg.'

      <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </calculationPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

      <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
      </calculationPeriodsDatesReference> [1]
      'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityFixedPriceSchedule">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="fixedPriceStep" type=" FixedPrice " maxOccurs="unbounded"/>
         <xsd:element name="worldscaleRateStep" type=" xsd:decimal " maxOccurs="unbounded"/>
         <xsd:element name="contractRateStep" type=" NonNegativeMoney " maxOccurs="unbounded"/>
         <xsd:element name="settlementPeriodsPriceSchedule"
         type=" CommoditySettlementPeriodsPriceSchedule " maxOccurs="unbounded"/>
      </xsd:choice>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityForward

Super-types:	Product < **CommodityForward** (by extension)
Sub-types:	None

Name	CommodityForward
Used by (from the same schema document)	Element **commodityForward**
Abstract	no
Documentation	Commodity Forward

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'
```

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<valueDate> AdjustableOrRelativeDate **</valueDate>** [0..1]

'Specifies the value date of the Commodity Forward Transaction. This is the day on which both the cash and the physical commodity settle.'

<fixedLeg> NonPeriodicFixedPriceLeg **</fixedLeg>** [1]

'The fixed leg of a Commodity Forward Transaction'

Start Choice [1]

'This choice group is intended to allow legs based on different classes of commodity to be added to the schema as this becomes necessary.'

<bullionPhysicalLeg> BullionPhysicalLeg **</bullionPhysicalLeg>** [1]

'The physical leg of a Commodity Forward Transaction for which the underlyer is Bullion.'

<additionalCommodityForwardLeg> ... </additionalCommodityForwardLeg> [1]

End Choice

Start Group: CommodityContent.model [0..1]

<commonPricing> xsd:boolean **</commonPricing>** [0..1]

'Common pricing may be relevant for a Transaction that references more than one Commodity Reference Price. If Common Pricing is not specified as applicable, it will be deemed not to apply.'

<marketDisruption> CommodityMarketDisruption **</marketDisruption>** [0..1]

'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA 2005 Commodity Definitions, as applicable.'

<settlementDisruption> CommodityBullionSettlementDisruptionEnum **</settlementDisruption>** [0..1]

'The consequences of Bullion Settlement Disruption Events.'

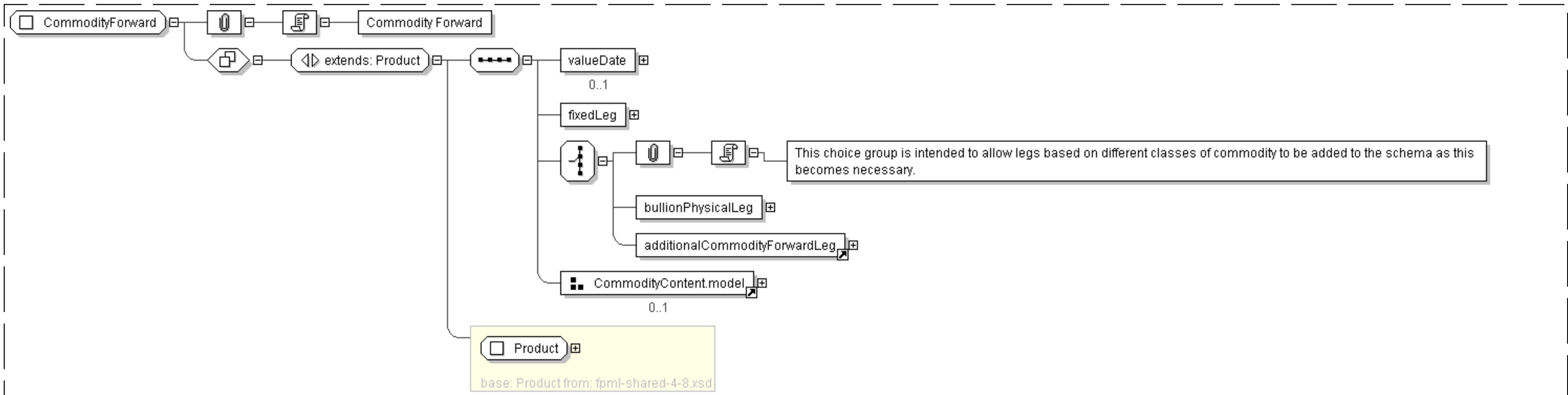
<rounding> Rounding **</rounding>** [0..1]

'Rounding direction and precision for amounts.'

End Group: CommodityContent.model

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityForward">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="valueDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
            <xsd:element name="fixedLeg" type=" NonPeriodicFixedPriceLeg "/>
```

```
            <xsd:choice>
               <xsd:element name="bullionPhysicalLeg" type=" BullionPhysicalLeg "/>
               <xsd:element ref=" additionalCommodityForwardLeg "/>
            </xsd:choice>
            <xsd:group ref=" CommodityContent.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityFrequencyType

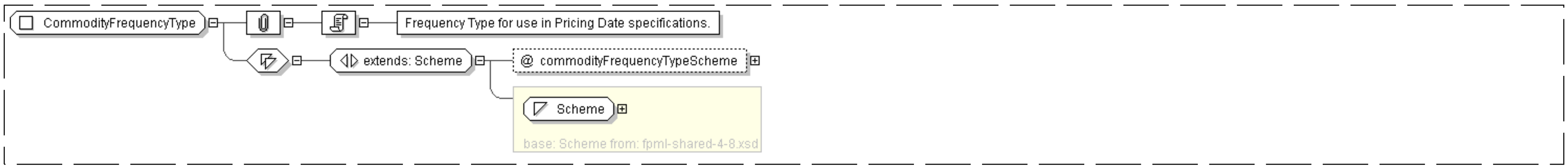
Super-types:	Scheme < **CommodityFrequencyType** (by extension)
Sub-types:	None

Name	CommodityFrequencyType
Used by (from the same schema document)	Model Group **PricingDays.model**
Abstract	no
Documentation	Frequency Type for use in Pricing Date specifications.

XML Instance Representation

```
<...
commodityFrequencyTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityFrequencyType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityFrequencyTypeScheme" type=" xsd:anyURI " default="http://www.
         fpml.org/coding-scheme/commodity-frequency-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityFx

Super-types:	None
Sub-types:	None

Name	CommodityFx
Used by (from the same schema document)	Complex Type **CommodityExercise** , Complex Type **FloatingLegCalculation**
Abstract	no
Documentation	A type defining the FX observations to be used to convert the observed Commodity Reference Price to the Settlement Currency. The rate source must be specified. Additionally, a time for the spot price to be observed on that source may be specified, or else an averaging schedule for trades priced using an average FX rate.

XML Instance Representation

```
<...>
   <primaryRateSource> InformationSource </primaryRateSource> [1]
   'The primary source for where the rate observation will occur. Will typically be either a
   page or a reference bank published rate.'
```

<secondaryRateSource> InformationSource </secondaryRateSource> [0..1]

'An alternative, or secondary, source for where the rate observation will occur. Will typically be either a page or a reference bank published rate.'

<fxType> CommodityFxType </fxType> [0..1]

'A type to identify how the FX rate will be applied. This is intended to differentiate between the various methods for applying FX to the floating price such as a daily calculation, or averaging the FX and applying the average at the end of each CalculationPeriod.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]

'The parties may specify a Method of Averaging when averaging of the FX rate is applicable.'

Start Choice [0..1]

<fixingTime> BusinessCenterTime </fixingTime> [1]

'The time at which the spot currency exchange rate will be observed. It is specified as a time in a specific business center, e.g. 11:00am London time.'

Start Choice [1]

<fxObservationDates> AdjustableDates </fxObservationDates> [1..*]

'A list of the fx observation dates for a given Calculation Period.'

Start Sequence [0..1]

<dayType> CommodityDayTypeEnum </dayType> [1]

'The type of day on which pricing occurs.'

Start Choice [1]

<dayDistribution> CommodityFrequencyType </dayDistribution> [1]

'The method by which the pricing days are distributed across the pricing period.'

<dayCount> xsd:positiveInteger </dayCount> [0..1]

'The number of days over which pricing should take place.'

<dayOfWeek> DayOfWeekEnum </dayOfWeek> [1..7]

'The day(s) of the week on which pricing will take place during the pricing period.'

<dayNumber> xsd:integer </dayNumber> [0..1]

'The occurrence of the dayOfWeek within the pricing period on which pricing will take place, e.g. the 3rd Friday within each Calculation Period. If omitted, every dayOfWeek will be a pricing day.'

End Choice

Start Group: LagOrReference.model [0..1]

Start Choice [1]

<lag> Lag </lag> [1]

'The pricing period per calculation period if the pricing days do not wholly fall within the respective calculation period.'

<lagReference> LagReference </lagReference> [1]

'Allows a lag to reference one already defined elsewhere in the trade.'

End Choice

End Group: LagOrReference.model

End Sequence

Start Choice [1]

<calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]

'A pointer style reference to the Calculation Periods defined on another leg.'

<calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference </calculationPeriodsScheduleReference> [1]

'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

<calculationPeriodsDatesReference> CalculationPeriodsDatesReference </calculationPeriodsDatesReference> [1]

'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice

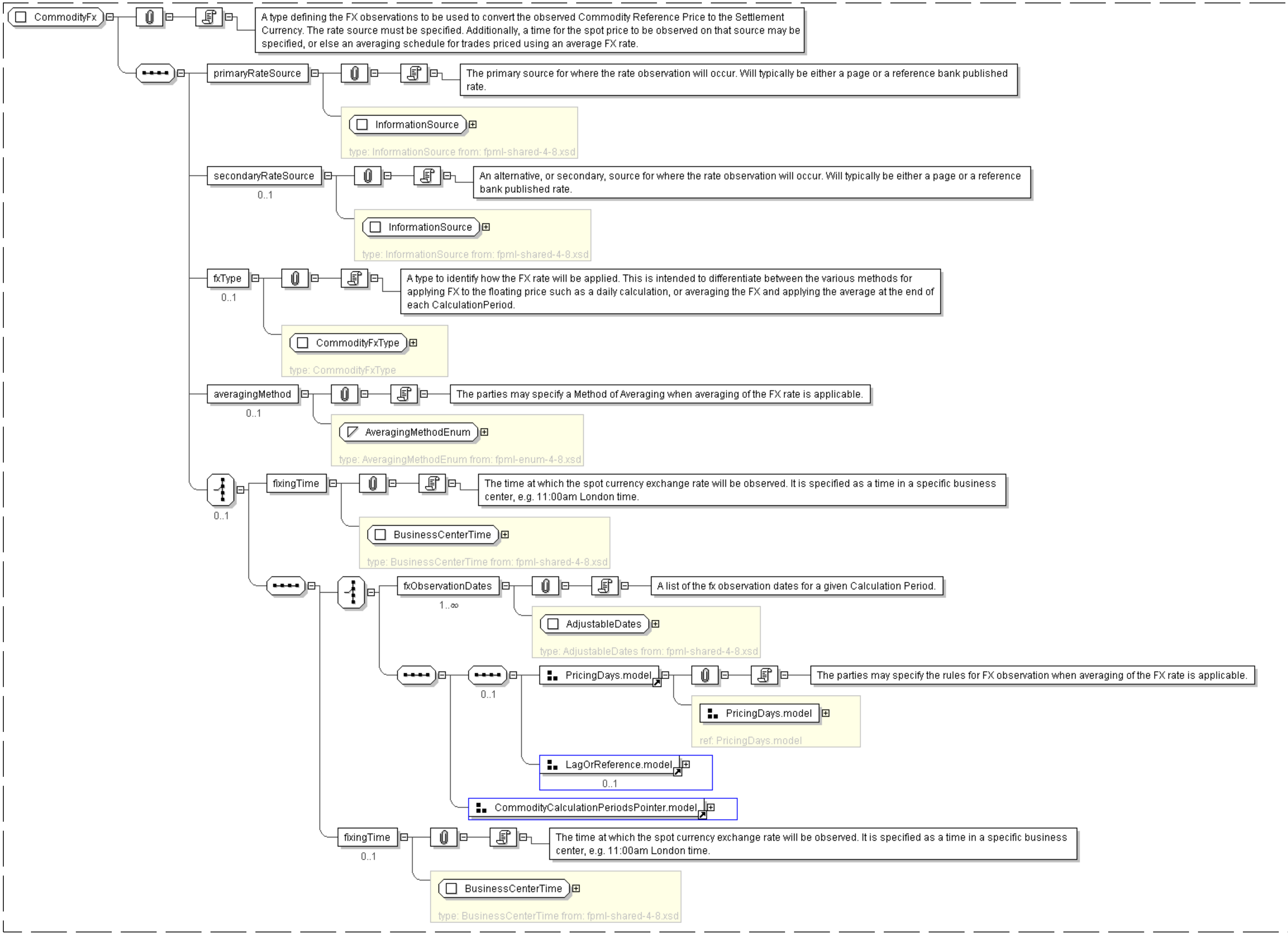
End Choice

<fixingTime> BusinessCenterTime </fixingTime> [0..1]

'The time at which the spot currency exchange rate will be observed. It is specified as a time in a specific business center, e.g. 11:00am London time.'

```
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityFx">
```

```
    <xsd:sequence>
        <xsd:element name="primaryRateSource" type=" InformationSource "/>
        <xsd:element name="secondaryRateSource" type=" InformationSource " minOccurs="0"/>
        <xsd:element name="fxType" type=" CommodityFxType " minOccurs="0"/>
        <xsd:element name="averagingMethod" type=" AveragingMethodEnum " minOccurs="0"/>
        <xsd:choice minOccurs="0">
            <xsd:element name="fixingTime" type=" BusinessCenterTime "/>
            <xsd:sequence>
                <xsd:choice>
                    <xsd:element name="fxObservationDates" type=" AdjustableDates " maxOccurs="unbounded"/>
                    <xsd:sequence>
                        <xsd:sequence minOccurs="0">
                            <xsd:group ref=" PricingDays.model "/>
                            <xsd:group ref=" LagOrReference.model " minOccurs="0"/>
                        </xsd:sequence>
                        <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
                    </xsd:sequence>
                </xsd:choice>
                <xsd:element name="fixingTime" type=" BusinessCenterTime " minOccurs="0"/>
            </xsd:sequence>
        </xsd:choice>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityFxType

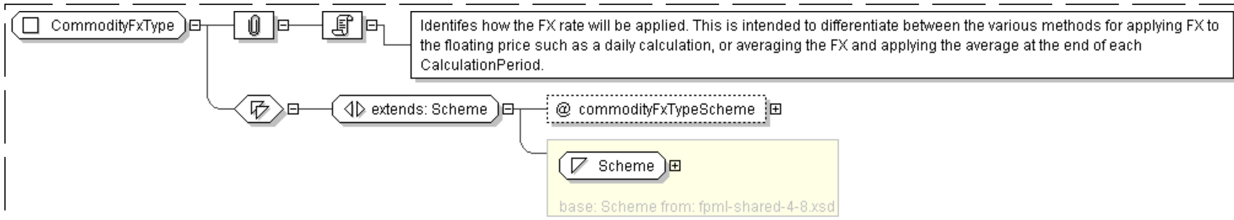
Super-types:	Scheme < **CommodityFxType** (by extension)
Sub-types:	None

Name	CommodityFxType
Used by (from the same schema document)	Complex Type **CommodityFx**
Abstract	no
Documentation	Identifes how the FX rate will be applied. This is intended to differentiate between the various methods for applying FX to the floating price such as a daily calculation, or averaging the FX and applying the average at the end of each CalculationPeriod.

XML Instance Representation

```
<...
commodityFxTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityFxType">
    <xsd:simpleContent>
        <xsd:extension base=" Scheme ">
            <xsd:attribute name="commodityFxTypeScheme" type=" xsd:anyURI " default="http://www.fpml.
            org/coding-scheme/commodity-fx-type"/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityHub

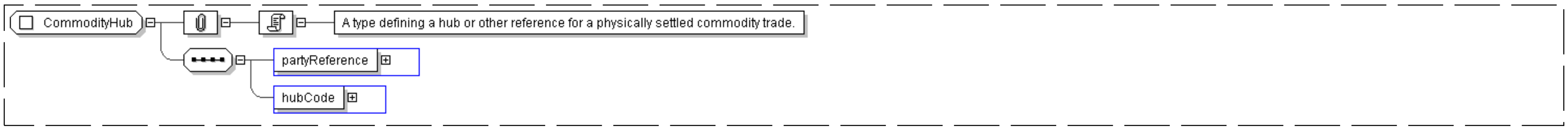
Super-types:	None
Sub-types:	None

Name	CommodityHub
Used by (from the same schema document)	Complex Type **GasDelivery** , Complex Type **GasDelivery**
Abstract	no
Documentation	A type defining a hub or other reference for a physically settled commodity trade.

XML Instance Representation

```
<...>
   <partyReference> PartyOrAccountReference </partyReference> [1]
   <hubCode> CommodityHubCode </hubCode> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityHub">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyOrAccountReference "/>
      <xsd:element name="hubCode" type=" CommodityHubCode "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityHubCode

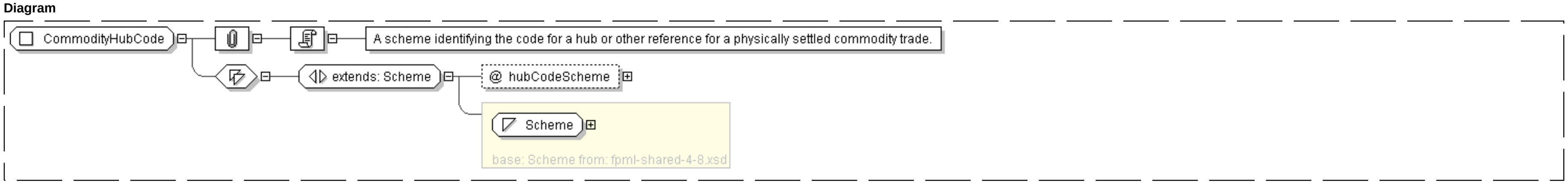
Super-types:	Scheme < **CommodityHubCode** (by extension)
Sub-types:	None

Name	CommodityHubCode
Used by (from the same schema document)	Complex Type **CommodityHub**
Abstract	no
Documentation	A scheme identifying the code for a hub or other reference for a physically settled commodity trade.

XML Instance Representation

```
<...
hubCodeScheme=" xsd:anyURI [1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityHubCode">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="hubCodeScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityMarketDisruption

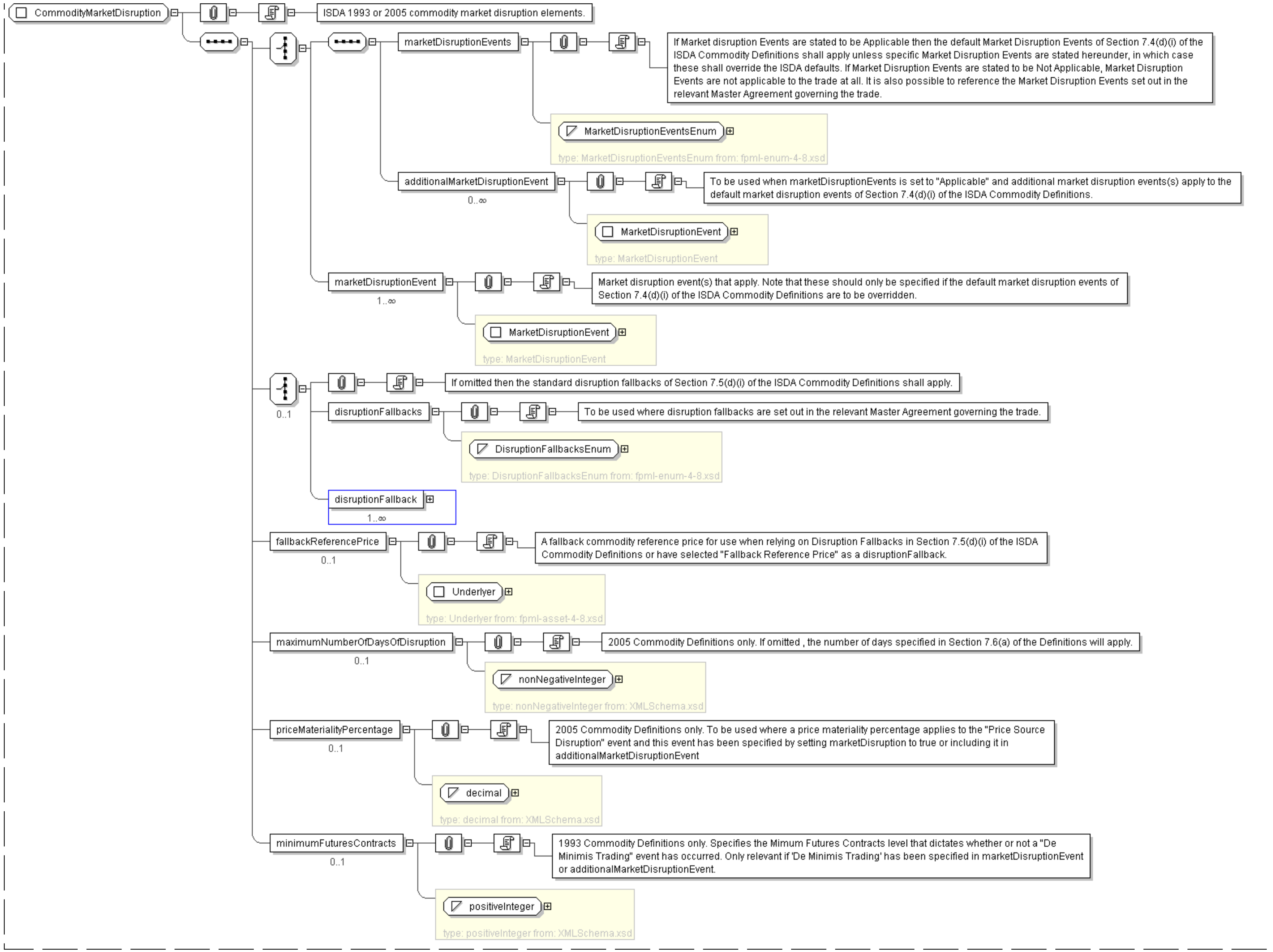
Super-types:	None
Sub-types:	None

Name	CommodityMarketDisruption
Used by (from the same schema document)	Model Group **CommodityContent.model**
Abstract	no
Documentation	ISDA 1993 or 2005 commodity market disruption elements.

XML Instance Representation

```
<...>
Start Choice [1]
      <marketDisruptionEvents> MarketDisruptionEventsEnum </marketDisruptionEvents> [1]
      'If Market disruption Events are stated to be Applicable then the default Market
      Disruption Events of Section 7.4(d)(i) of the ISDA Commodity Definitions shall apply
      unless specific Market Disruption Events are stated hereunder, in which case these
      shall override the ISDA defaults. If Market Disruption Events are stated to be Not
      Applicable, Market Disruption Events are not applicable to the trade at all. It is
      also possible to reference the Market Disruption Events set out in the relevant
      Master Agreement governing the trade.'

      <additionalMarketDisruptionEvent> MarketDisruptionEvent </additionalMarketDisruptionEvent>
      [0..*]
      'To be used when marketDisruptionEvents is set to \"Applicable\" and additional
      market disruption events(s) apply to the default market disruption events of Section 7.4(d)
      (i) of the ISDA Commodity Definitions.'

      <marketDisruptionEvent> MarketDisruptionEvent </marketDisruptionEvent> [1..*]
      'Market disruption event(s) that apply. Note that these should only be specified if the
      default market disruption events of Section 7.4(d)(i) of the ISDA Commodity Definitions are
      to be overridden.'

End Choice
Start Choice [0..1]
'If omitted then the standard disruption fallbacks of Section 7.5(d)(i) of the ISDA
Commodity Definitions shall apply.'

      <disruptionFallbacks> DisruptionFallbacksEnum </disruptionFallbacks> [1]
      'To be used where disruption fallbacks are set out in the relevant Master Agreement
      governing the trade.'

      <disruptionFallback> SequencedDisruptionFallback </disruptionFallback> [1..*]
End Choice
   <fallbackReferencePrice> Underlyer </fallbackReferencePrice> [0..1]
   'A fallback commodity reference price for use when relying on Disruption Fallbacks in
   Section 7.5(d)(i) of the ISDA Commodity Definitions or have selected \"Fallback Reference
   Price\" as a disruptionFallback.'

   <maximumNumberOfDaysOfDisruption> xsd:nonNegativeInteger </
   maximumNumberOfDaysOfDisruption> [0..1]
   '2005 Commodity Definitions only. If omitted , the number of days specified in Section 7.6
   (a) of the Definitions will apply.'

   <priceMaterialityPercentage> xsd:decimal </priceMaterialityPercentage> [0..1]
   '2005 Commodity Definitions only. To be used where a price materiality percentage applies
   to the \"Price Source Disruption\" event and this event has been specified by
   setting marketDisruption to true or including it in additionalMarketDisruptionEvent'

   <minimumFuturesContracts> xsd:positiveInteger </minimumFuturesContracts> [0..1]
   '1993 Commodity Definitions only. Specifies the Mimum Futures Contracts level that
   dictates whether or not a \"De Minimis Trading\" event has occurred. Only relevant if
   \'De Minimis Trading\' has been specified in marketDisruptionEvent
   or additionalMarketDisruptionEvent.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityMarketDisruption">
   <xsd:sequence>
      <xsd:choice>
```

```
        <xsd:sequence>
          <xsd:element name="marketDisruptionEvents" type=" MarketDisruptionEventsEnum "/>
          <xsd:element name="additionalMarketDisruptionEvent" type=" MarketDisruptionEvent
          " minOccurs="0" maxOccurs="unbounded"/>
        </xsd:sequence>
        <xsd:element name="marketDisruptionEvent" type=" MarketDisruptionEvent " maxOccurs="unbounded"/>
      </xsd:choice>
      <xsd:choice minOccurs="0">
        <xsd:element name="disruptionFallbacks" type=" DisruptionFallbacksEnum "/>
        <xsd:element name="disruptionFallback" type=" SequencedDisruptionFallback
        " maxOccurs="unbounded"/>
      </xsd:choice>
      <xsd:element name="fallbackReferencePrice" type=" Underlyer " minOccurs="0"/>
      <xsd:element name="maximumNumberOfDaysOfDisruption" type=" xsd:nonNegativeInteger
      " minOccurs="0"/>
      <xsd:element name="priceMaterialityPercentage" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="minimumFuturesContracts" type=" xsd:positiveInteger " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityMultipleExercise

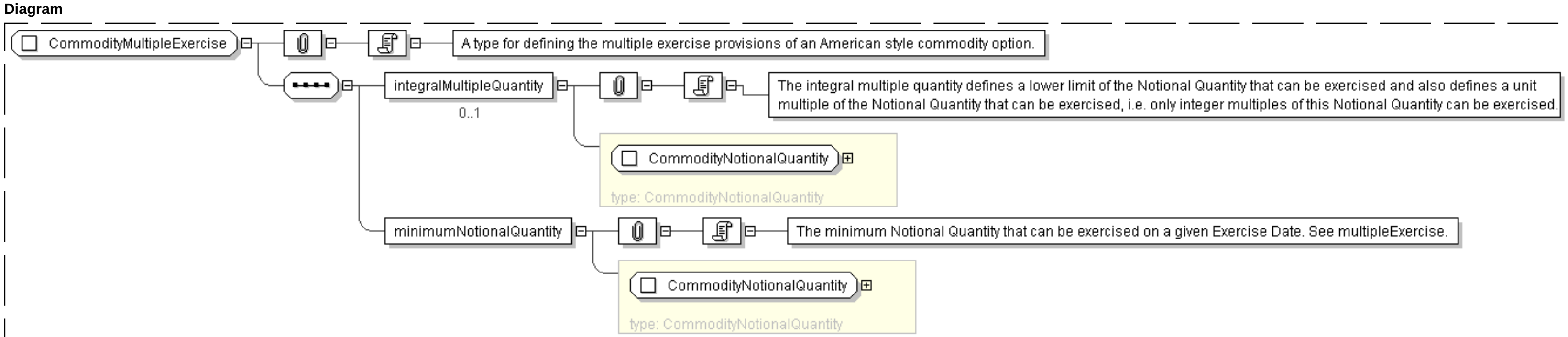
Super-types:	None
Sub-types:	None

Name	CommodityMultipleExercise
Used by (from the same schema document)	Complex Type **CommodityAmericanExercise**
Abstract	no
Documentation	A type for defining the multiple exercise provisions of an American style commodity option.

XML Instance Representation

```
<...>
  <integralMultipleQuantity> CommodityNotionalQuantity </integralMultipleQuantity> [0..1]
  'The integral multiple quantity defines a lower limit of the Notional Quantity that can
  be exercised and also defines a unit multiple of the Notional Quantity that can be exercised,
  i.e. only integer multiples of this Notional Quantity can be exercised.'

  <minimumNotionalQuantity> CommodityNotionalQuantity </minimumNotionalQuantity> [1]
  'The minimum Notional Quantity that can be exercised on a given Exercise Date.
  See multipleExercise.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityMultipleExercise">
  <xsd:sequence>
    <xsd:element name="integralMultipleQuantity" type=" CommodityNotionalQuantity " minOccurs="0"/>
    <xsd:element name="minimumNotionalQuantity" type=" CommodityNotionalQuantity "/>
  </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityNotionalQuantity

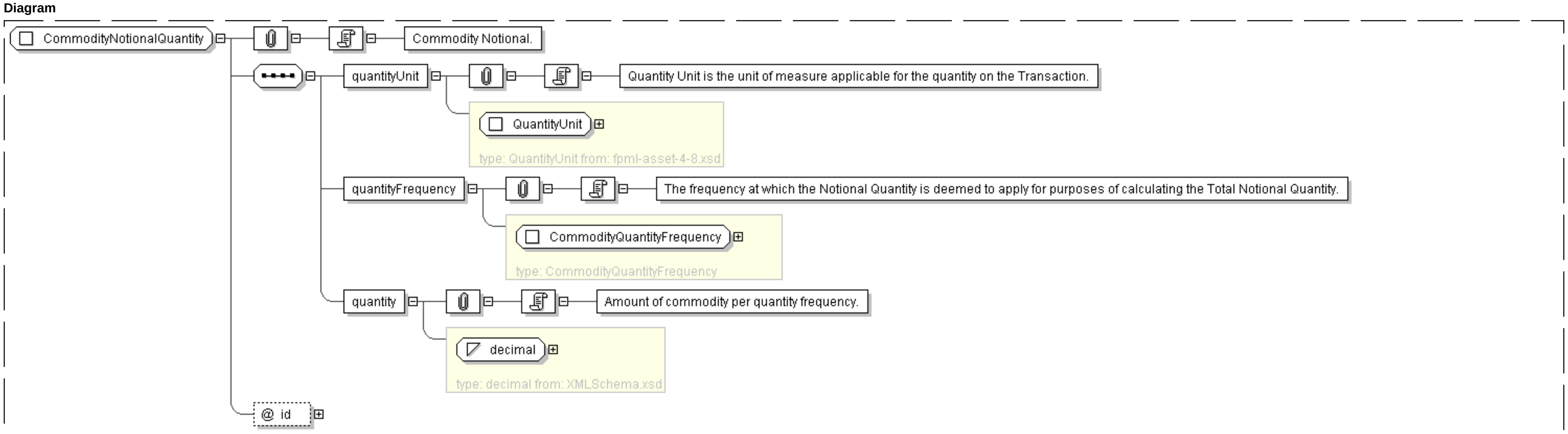
Super-types:	None
Sub-types:	• CommoditySettlementPeriodsNotionalQuantity (by extension) • ElectricityPhysicalDeliveryQuantity (by extension)

Name	CommodityNotionalQuantity
Used by (from the same schema document)	Complex Type **CommodityMultipleExercise** , Complex Type **CommodityMultipleExercise** , Complex Type **CommodityNotionalQuantitySchedule** , Complex Type **CommodityPhysicalQuantitySchedule** , Complex Type **CommoditySettlementPeriodsNotionalQuantitySchedule** , Complex Type **GasPhysicalQuantity** , Complex Type **GasPhysicalQuantity** , Model Group **CommodityFixedPhysicalQuantity.model** , Model Group **CommodityNotionalQuantity.model**
Abstract	no
Documentation	Commodity Notional.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <quantityUnit> QuantityUnit </quantityUnit> [1]
   'Quantity Unit is the unit of measure applicable for the quantity on the Transaction.'

   <quantityFrequency> CommodityQuantityFrequency </quantityFrequency> [1]
   'The frequency at which the Notional Quantity is deemed to apply for purposes of
   calculating the Total Notional Quantity.'

   <quantity> xsd:decimal </quantity> [1]
   'Amount of commodity per quantity frequency.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityNotionalQuantity">
   <xsd:sequence>
      <xsd:element name="quantityUnit" type=" QuantityUnit "/>
      <xsd:element name="quantityFrequency" type=" CommodityQuantityFrequency "/>
      <xsd:element name="quantity" type=" xsd:decimal "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityNotionalQuantitySchedule

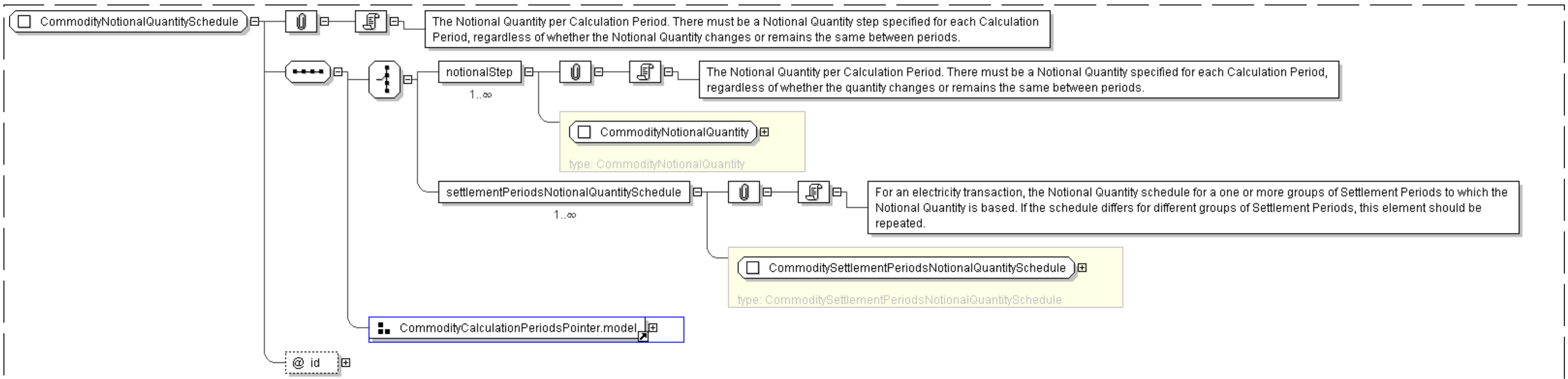
Super-types:	None
Sub-types:	None

Name	CommodityNotionalQuantitySchedule
Used by (from the same schema document)	Model Group **CommodityNotionalQuantity.model**
Abstract	no
Documentation	The Notional Quantity per Calculation Period. There must be a Notional Quantity step specified for each Calculation Period, regardless of whether the Notional Quantity changes or remains the same between periods.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <notionalStep> CommodityNotionalQuantity </notionalStep> [1..*]
      'The Notional Quantity per Calculation Period. There must be a Notional Quantity specified
      for each Calculation Period, regardless of whether the quantity changes or remains the
      same between periods.'

      <settlementPeriodsNotionalQuantitySchedule>
      CommoditySettlementPeriodsNotionalQuantitySchedule </
      settlementPeriodsNotionalQuantitySchedule> [1..*]
      'For an electricity transaction, the Notional Quantity schedule for a one or more groups
      of Settlement Periods to which the Notional Quantity is based. If the schedule differs
      for different groups of Settlement Periods, this element should be repeated.'

End Choice
Start Choice [1]
      <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
      'A pointer style reference to the Calculation Periods defined on another leg.'

      <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </calculationPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

      <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
      </calculationPeriodsDatesReference> [1]
      'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityNotionalQuantitySchedule">
```

```
    <xsd:sequence>
        <xsd:choice>
            <xsd:element name="notionalStep" type=" CommodityNotionalQuantity " maxOccurs="unbounded"/>
            <xsd:element name="settlementPeriodsNotionalQuantitySchedule"
            type=" CommoditySettlementPeriodsNotionalQuantitySchedule " maxOccurs="unbounded"/>
        </xsd:choice>
        <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
    </xsd:sequence>
    <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityOption

Super-types:	Product < **CommodityOption** (by extension)
Sub-types:	None

Name	CommodityOption
Used by (from the same schema document)	Element **commodityOption**
Abstract	no
Documentation	Commodity Option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <optionType> PutCallEnum </optionType> [1]
    'The type of option transaction.'

Start Choice [1]
        <commodity> Commodity </commodity> [1]
        'Specifies the underlying component. At the time of the initial schema design, only
        underlyers of type Commodity are supported; the choice group in the future could offer
        the possibility of adding other types later.'

Start Group: CommodityAsian.model [0..1]
'A group containing properties specific to Asian options.'

            <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
            'The effective date of the Commodity Option Transaction. Note that the Termination/
            Expiration Date should be specified in expirationDate within the CommodityAmericanExercise
            type or the CommodityEuropeanExercise type, as applicable.'

Start Choice [1]
                <calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </
                calculationPeriodsSchedule> [1]
                'A parametric representation of the Calculation Periods of the Commodity Option Transaction.'

                <calculationPeriods> AdjustableDates </calculationPeriods> [1]
                'An absolute representation of the Calculation Period start dates of the Commodity
```

Option Transaction.'

End Choice
<pricingDates> CommodityPricingDates </pricingDates> [1]

'The dates on which the option will price.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]

'The Method of Averaging if there is more than one Pricing Date.'

End Group: CommodityAsian.model
Start Choice [1]
Start Choice [1]
<notionalQuantitySchedule> CommodityNotionalQuantitySchedule </notionalQuantitySchedule> [1]

'Allows the documentation of a shaped notional trade where the notional changes over the life of the transaction.'

<notionalQuantity> CommodityNotionalQuantity </notionalQuantity> [1]

'The Notional Quantity.'

<settlementPeriodsNotionalQuantity> CommoditySettlementPeriodsNotionalQuantity </settlementPeriodsNotionalQuantity> [1..*]

'For an electricity transaction, the Notional Quantity for a one or more groups of Settlement Periods to which the Notional Quantity is based. If the schedule differs for different groups of Settlement Periods, this element should be repeated.'

End Choice
<totalNotionalQuantity> xsd:decimal </totalNotionalQuantity> [0..1]

'The Total Notional Quantity.'

<quantityReference> QuantityReference </quantityReference> [1]

'A pointer style reference to a quantity defined on another leg.'

End Choice
<exercise> CommodityExercise </exercise> [1]

'The parameters for defining how the commodity option can be exercised and how it is settled.'

Start Choice [1]
<strikePricePerUnit> NonNegativeMoney </strikePricePerUnit> [1]

'The currency amount of the strike price per unit.'

<strikePricePerUnitSchedule> CommodityStrikeSchedule </strikePricePerUnitSchedule> [1]
End Choice
Start Choice [1]
<commoditySwap> ... </commoditySwap> [1]
<commodityForward> ... </commodityForward> [1]
End Choice
<physicalExercise> CommodityPhysicalExercise </physicalExercise> [1]

'The parameters for defining how the commodity option can be exercised into a physical transaction.'

End Choice
<premium> CommodityPremium </premium> [1]

'The option premium payable by the buyer to the seller.'

Start Group: CommodityContent.model [0..1]
<commonPricing> xsd:boolean </commonPricing> [0..1]

'Common pricing may be relevant for a Transaction that references more than one Commodity Reference Price. If Common Pricing is not specified as applicable, it will be deemed not to apply.'

<marketDisruption> CommodityMarketDisruption </marketDisruption> [0..1]

'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA 2005 Commodity Definitions, as applicable.'

<settlementDisruption> CommodityBullionSettlementDisruptionEnum </settlementDisruption> [0..1]

'The consequences of Bullion Settlement Disruption Events.'

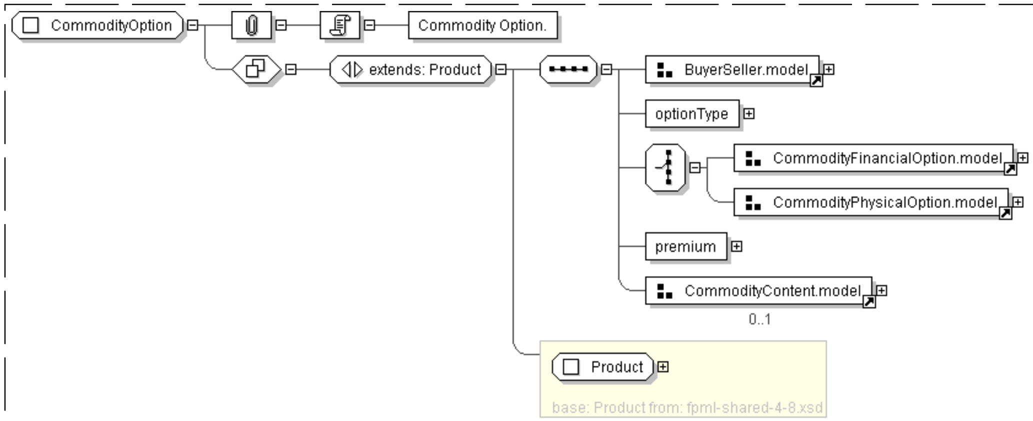
<rounding> Rounding </rounding> [0..1]

'Rounding direction and precision for amounts.'

End Group: CommodityContent.model

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityOption">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="optionType" type=" PutCallEnum "/>
            <xsd:choice>
               <xsd:group ref=" CommodityFinancialOption.model "/>
               <xsd:group ref=" CommodityPhysicalOption.model "/>
            </xsd:choice>
            <xsd:element name="premium" type=" CommodityPremium "/>
            <xsd:group ref=" CommodityContent.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityPayRelativeToEvent

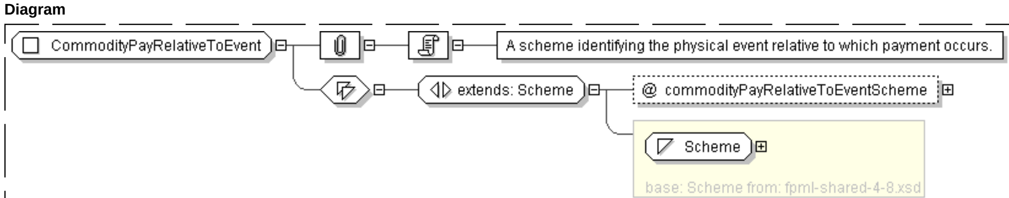
Super-types:	Scheme < **CommodityPayRelativeToEvent** (by extension)
Sub-types:	None

Name	CommodityPayRelativeToEvent
Used by (from the same schema document)	Complex Type **CommodityRelativePaymentDates**
Abstract	no
Documentation	A scheme identifying the physical event relative to which payment occurs.

XML Instance Representation

```
<...
commodityPayRelativeToEventScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPayRelativeToEvent">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityPayRelativeToEventScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/commodity-pay-relative-to-event"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityPhysicalAmericanExercise

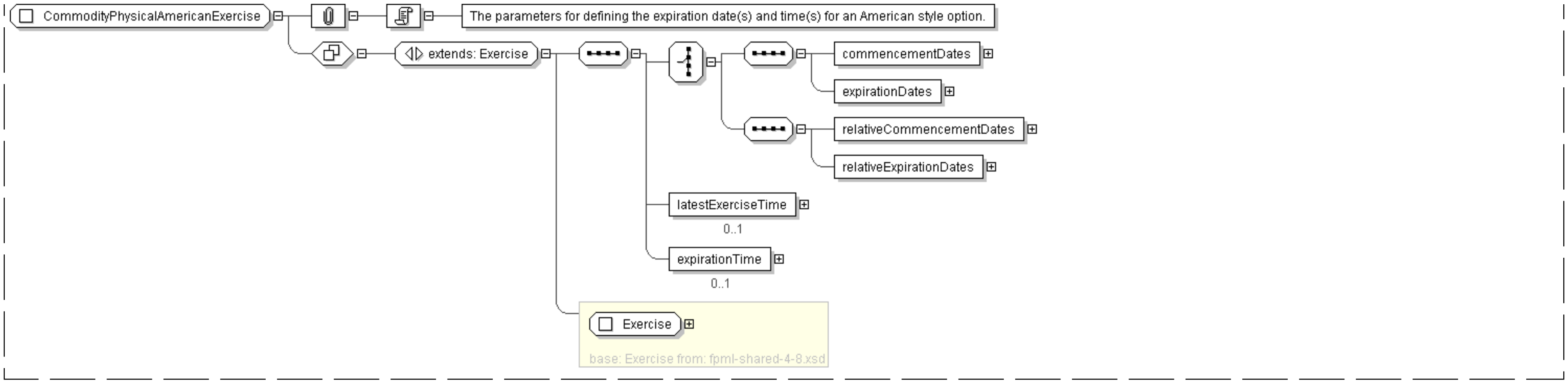
Super-types:	Exercise < **CommodityPhysicalAmericanExercise** (by extension)
Sub-types:	None

Name	CommodityPhysicalAmericanExercise
Used by (from the same schema document)	Complex Type **CommodityPhysicalExercise**
Abstract	no
Documentation	The parameters for defining the expiration date(s) and time(s) for an American style option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <commencementDates> AdjustableOrRelativeDates </commencementDates> [1]
      'The first day(s) of the exercise period(s) for an American-style option.'

      <expirationDates> AdjustableOrRelativeDates </expirationDates> [1]
      'The Expiration Date(s) of an American-style option.'

      <relativeCommencementDates> CommodityRelativeExpirationDates </relativeCommencementDates> [1]
      'The first day(s) of the exercise period(s) for an American-style option where it is
      relative to the occurrence of an external event.'

      <relativeExpirationDates> CommodityRelativeExpirationDates </relativeExpirationDates> [1]
      'The Expiration Date(s) of an American-style option where it is relative to the occurrence
      of an external event.'

End Choice
   <latestExerciseTime> PrevailingTime </latestExerciseTime> [0..1]
   'For a Bermuda or American style option, the latest time on an exercise business day
   (excluding the expiration date) within the exercise period that notice can be given by
   the buyer to the seller or seller\'s agent. Notice of exercise given after this time will
   be deemed to have been given on the next exercise business day.'

   <expirationTime> PrevailingTime </expirationTime> [0..1]
   'The specific time of day at which the option expires.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPhysicalAmericanExercise">
   <xsd:complexContent>
      <xsd:extension base=" Exercise ">
         <xsd:sequence>
            <xsd:choice>
               <xsd:sequence>
                  <xsd:element name="commencementDates" type=" AdjustableOrRelativeDates "/>
                  <xsd:element name="expirationDates" type=" AdjustableOrRelativeDates "/>
               </xsd:sequence>
               <xsd:sequence>
                  <xsd:element name="relativeCommencementDates" type=" CommodityRelativeExpirationDates "/>
                  <xsd:element name="relativeExpirationDates" type=" CommodityRelativeExpirationDates "/>
               </xsd:sequence>
            </xsd:choice>
            <xsd:element name="latestExerciseTime" type=" PrevailingTime " minOccurs="0"/>
            <xsd:element name="expirationTime" type=" PrevailingTime " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityPhysicalEuropeanExercise

Super-types:	Exercise < **CommodityPhysicalEuropeanExercise** (by extension)
Sub-types:	None

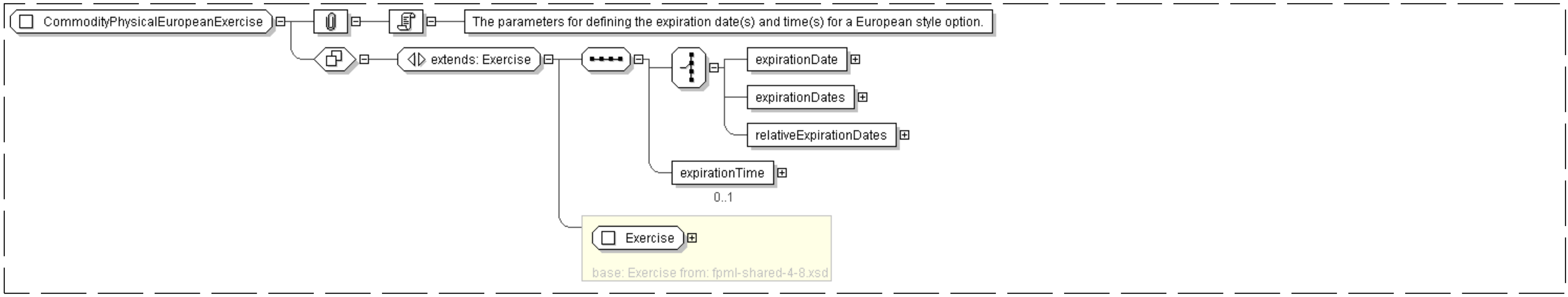
Name	CommodityPhysicalEuropeanExercise
Used by (from the same schema document)	Complex Type **CommodityPhysicalExercise**
Abstract	no
Documentation	The parameters for defining the expiration date(s) and time(s) for a European style option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <expirationDate> AdjustableOrRelativeDate </expirationDate> [1]
      'The Expiration Date of a single expiry European-style option or the first Expiration Date of
      a multiple expiry or daily expiring option.'

      <expirationDates> AdjustableRelativeOrPeriodicDates2 </expirationDates> [1]
      'The Expiration Date(s) of a European-style option.'

      <relativeExpirationDates> CommodityRelativeExpirationDates </relativeExpirationDates> [1]
      'The Expiration Date(s) of a European-style option where it is relative to the occurrence of
      an external event.'
```

```
End Choice
  <expirationTime> PrevailingTime </expirationTime> [0..1]
  'The specific time of day at which the option expires.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPhysicalEuropeanExercise">
   <xsd:complexContent>
      <xsd:extension base=" Exercise ">
         <xsd:sequence>
            <xsd:choice>
               <xsd:element name="expirationDate" type=" AdjustableOrRelativeDate "/>
               <xsd:element name="expirationDates" type=" AdjustableRelativeOrPeriodicDates2 "/>
               <xsd:element name="relativeExpirationDates" type=" CommodityRelativeExpirationDates "/>
            </xsd:choice>
            <xsd:element name="expirationTime" type=" PrevailingTime " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityPhysicalExercise

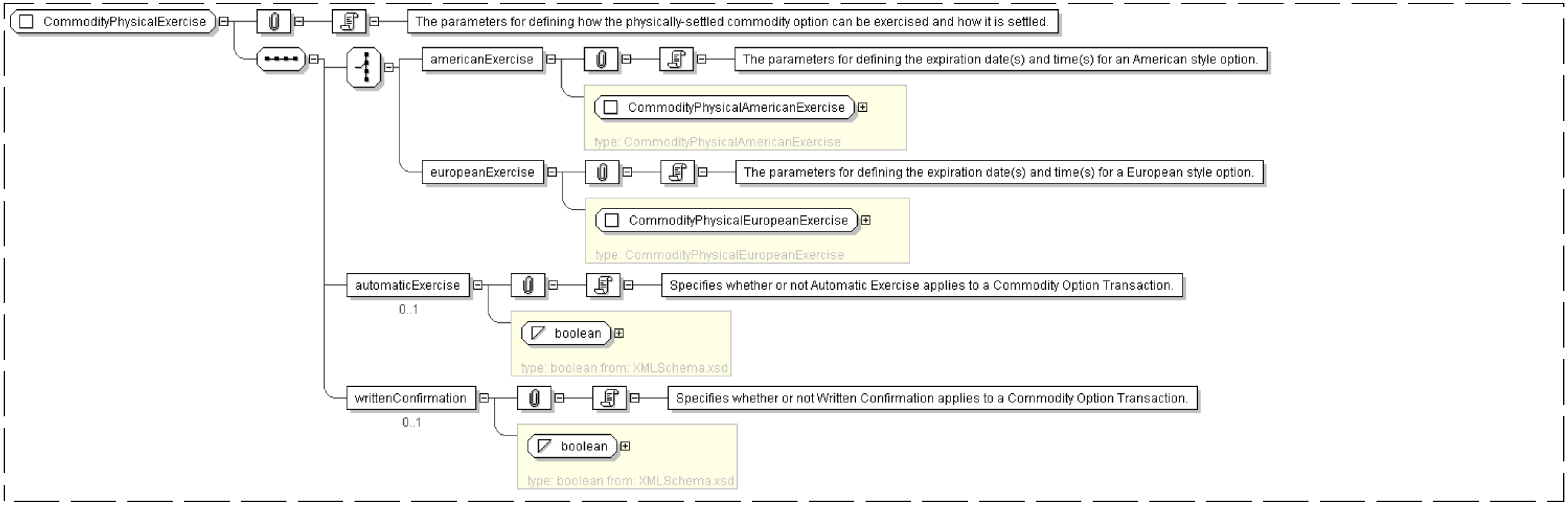
Super-types:	None
Sub-types:	None

Name	CommodityPhysicalExercise
Used by (from the same schema document)	Model Group **CommodityPhysicalOption.model**
Abstract	no
Documentation	The parameters for defining how the physically-settled commodity option can be exercised and how it is settled.

XML Instance Representation

```
<...>
Start Choice [1]
    <americanExercise> CommodityPhysicalAmericanExercise </americanExercise> [1]
    'The parameters for defining the expiration date(s) and time(s) for an American style option.'

    <europeanExercise> CommodityPhysicalEuropeanExercise </europeanExercise> [1]
    'The parameters for defining the expiration date(s) and time(s) for a European style option.'

End Choice
  <automaticExercise> xsd:boolean </automaticExercise> [0..1]
  'Specifies whether or not Automatic Exercise applies to a Commodity Option Transaction.'

  <writtenConfirmation> xsd:boolean </writtenConfirmation> [0..1]
  'Specifies whether or not Written Confirmation applies to a Commodity Option Transaction.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPhysicalExercise">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="americanExercise" type=" CommodityPhysicalAmericanExercise "/>
         <xsd:element name="europeanExercise" type=" CommodityPhysicalEuropeanExercise "/>
      </xsd:choice>
      <xsd:element name="automaticExercise" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="writtenConfirmation" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityPhysicalQuantity

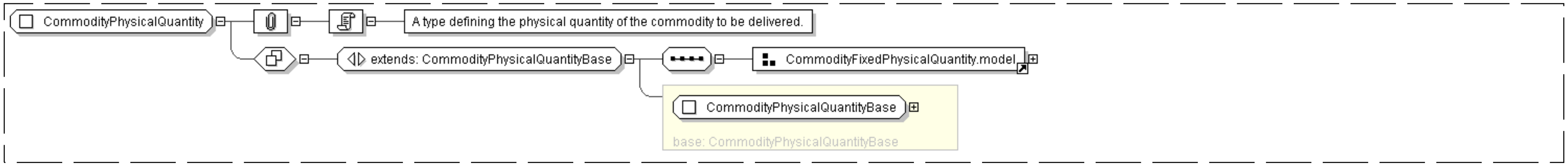
Super-types:	CommodityPhysicalQuantityBase < **CommodityPhysicalQuantity** (by extension)
Sub-types:	None

Name	CommodityPhysicalQuantity
Used by (from the same schema document)	Complex Type **CoalPhysicalLeg** , Complex Type **OilPhysicalLeg**
Abstract	no
Documentation	A type defining the physical quantity of the commodity to be delivered.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <physicalQuantity> CommodityNotionalQuantity </physicalQuantity> [1]
      'The Quantity per Delivery Period.'

      <physicalQuantitySchedule> CommodityPhysicalQuantitySchedule </physicalQuantitySchedule> [1]
      'Allows the documentation of a shaped quantity trade where the quantity changes over the
      life of the transaction.'

End Choice
   <totalPhysicalQuantity> UnitQuantity </totalPhysicalQuantity> [0..1]
   'The Total Quantity of the commodity to be delivered.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPhysicalQuantity">
   <xsd:complexContent>
      <xsd:extension base=" CommodityPhysicalQuantityBase ">
         <xsd:sequence>
            <xsd:group ref=" CommodityFixedPhysicalQuantity.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityPhysicalQuantityBase

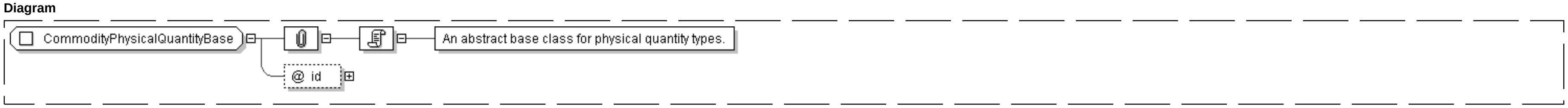
Super-types:	None
Sub-types:	• CommodityPhysicalQuantity (by extension) • ElectricityPhysicalQuantity (by extension) • GasPhysicalQuantity (by extension)

Name	CommodityPhysicalQuantityBase
Abstract	yes
Documentation	An abstract base class for physical quantity types.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPhysicalQuantityBase" abstract="true">
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityPhysicalQuantitySchedule

Super-types:	None
Sub-types:	• ElectricityPhysicalDeliveryQuantitySchedule (by extension)

Name	CommodityPhysicalQuantitySchedule
Used by (from the same schema document)	Model Group **CommodityFixedPhysicalQuantity.model**
Abstract	no
Documentation	The Quantity per Delivery Period. There must be a Quantity step specified for each Delivery Period, regardless of whether the Quantity changes or remains the same between periods.

XML Instance Representation

```
<...
```

```
id=" xsd:ID [0..1]">
   <quantityStep> CommodityNotionalQuantity </quantityStep> [1..*]
```

'The quantity per Calculation Period. There must be a quantity specified for each Calculation Period, regardless of whether the quantity changes or remains the same between periods.'

```
Start Choice [1]
      <deliveryPeriodsReference> CalculationPeriodsReference </deliveryPeriodsReference> [1]
```

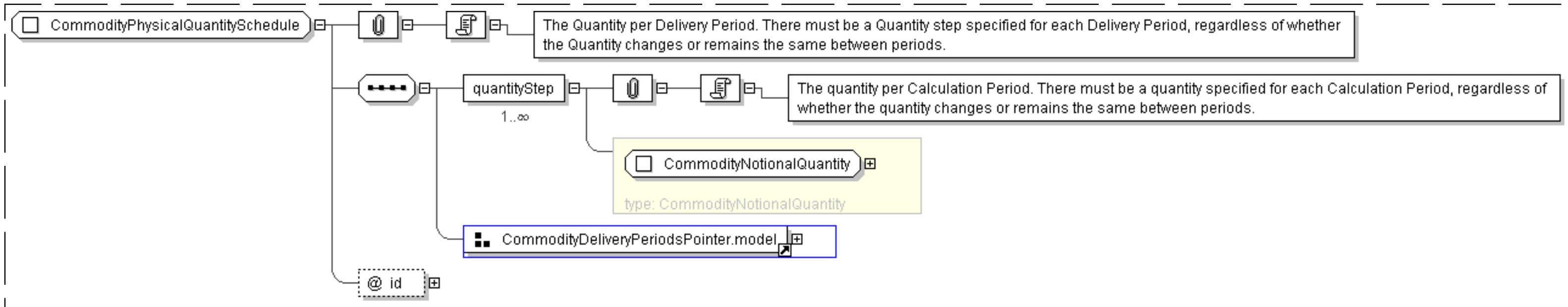
'A pointer style reference to the Delivery Periods defined elsewhere.'

```
      <deliveryPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </deliveryPeriodsScheduleReference> [1]
```

'A pointer style reference to the Calculation Periods Schedule defined elsewhere.'

```
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPhysicalQuantitySchedule">
   <xsd:sequence>
      <xsd:element name="quantityStep" type=" CommodityNotionalQuantity " maxOccurs="unbounded"/>
      <xsd:group ref=" CommodityDeliveryPeriodsPointer.model "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityPipeline

Super-types:	Scheme < **CommodityPipeline** (by extension)
Sub-types:	None

Name	CommodityPipeline
Used by (from the same schema document)	Complex Type **OilPipelineDelivery**
Abstract	no
Documentation	The pipeline through which the physical commodity will be delivered.

XML Instance Representation

```
<...
pipelineScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="CommodityPipeline">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="pipelineScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityPipelineCycle

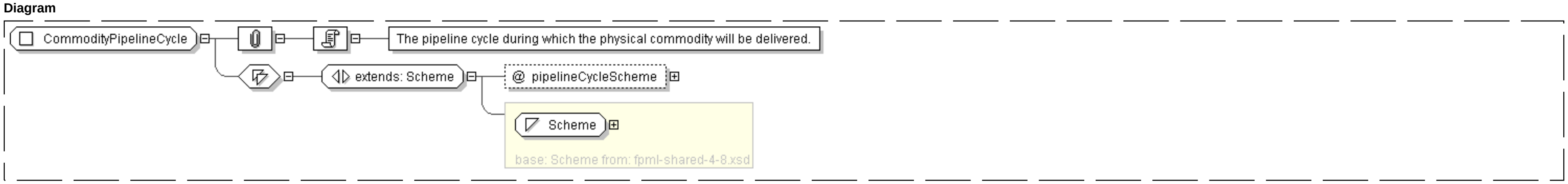
Super-types:	Scheme < **CommodityPipelineCycle** (by extension)
Sub-types:	None

Name	CommodityPipelineCycle
Used by (from the same schema document)	Complex Type **OilPipelineDelivery**
Abstract	no
Documentation	The pipeline cycle during which the physical commodity will be delivered.

XML Instance Representation

```
<...
pipelineCycleScheme=" xsd:anyURI [1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPipelineCycle">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="pipelineCycleScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityPremium

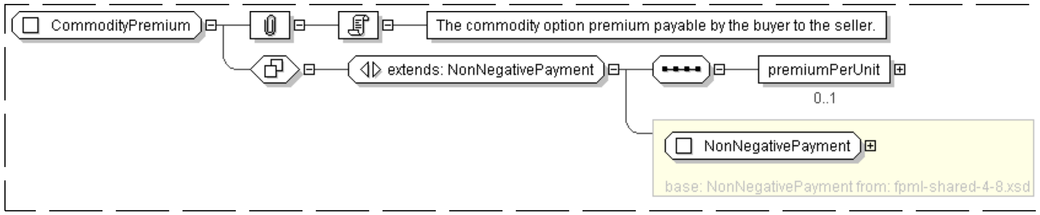
Super-types:	NonNegativePayment < **CommodityPremium** (by extension)
Sub-types:	None

Name	CommodityPremium
Used by (from the same schema document)	Complex Type **CommodityOption**
Abstract	no
Documentation	The commodity option premium payable by the buyer to the seller.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
  <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
  'A reference to the party responsible for making the payments defined by this structure.'

  <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
  'A reference to the party that receives the payments corresponding to this structure.'

  <paymentDate> AdjustableOrRelativeDate </paymentDate> [1]
  'The payment date, which can be expressed as either an adjustable or relative date.'

  <paymentAmount> NonNegativeMoney </paymentAmount> [1]
  'Non negative payment amount.'

  <premiumPerUnit> NonNegativeMoney </premiumPerUnit> [0..1]
  'The currency amount of premium to be paid per Unit of the Total Notional Quantity.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityPremium">
   <xsd:complexContent>
      <xsd:extension base=" NonNegativePayment ">
         <xsd:sequence>
            <xsd:element name="premiumPerUnit" type=" NonNegativeMoney " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommodityPricingDates

Super-types:	None
Sub-types:	None

Name	CommodityPricingDates
Used by (from the same schema document)	Complex Type **FloatingLegCalculation** , Model Group **CommodityAsian.model**
Abstract	no
Documentation	The dates on which prices are observed for the underlyer.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
    <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
    'A pointer style reference to the Calculation Periods defined on another leg.'

    <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
    </calculationPeriodsScheduleReference> [1]
    'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

    <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
    </calculationPeriodsDatesReference> [1]
```

'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
Start Choice [1]
<lag> Lag </lag> [0..1]

'The pricing period per calculation period if the pricing days do not wholly fall within the respective calculation period.'

Start Choice [1]
<dayType> CommodityDayTypeEnum </dayType> [1]

'The type of day on which pricing occurs.'

Start Choice [1]
<dayDistribution> CommodityFrequencyType </dayDistribution> [1]

'The method by which the pricing days are distributed across the pricing period.'

<dayCount> xsd:positiveInteger </dayCount> [0..1]

'The number of days over which pricing should take place.'

<dayOfWeek> DayOfWeekEnum </dayOfWeek> [1..7]

'The day(s) of the week on which pricing will take place during the pricing period.'

<dayNumber> xsd:integer </dayNumber> [0..1]

'The occurrence of the dayOfWeek within the pricing period on which pricing will take place, e.g. the 3rd Friday within each Calculation Period. If omitted, every dayOfWeek will be a pricing day.'

End Choice
<businessCalendar> CommodityBusinessCalendar </businessCalendar> [0..1]

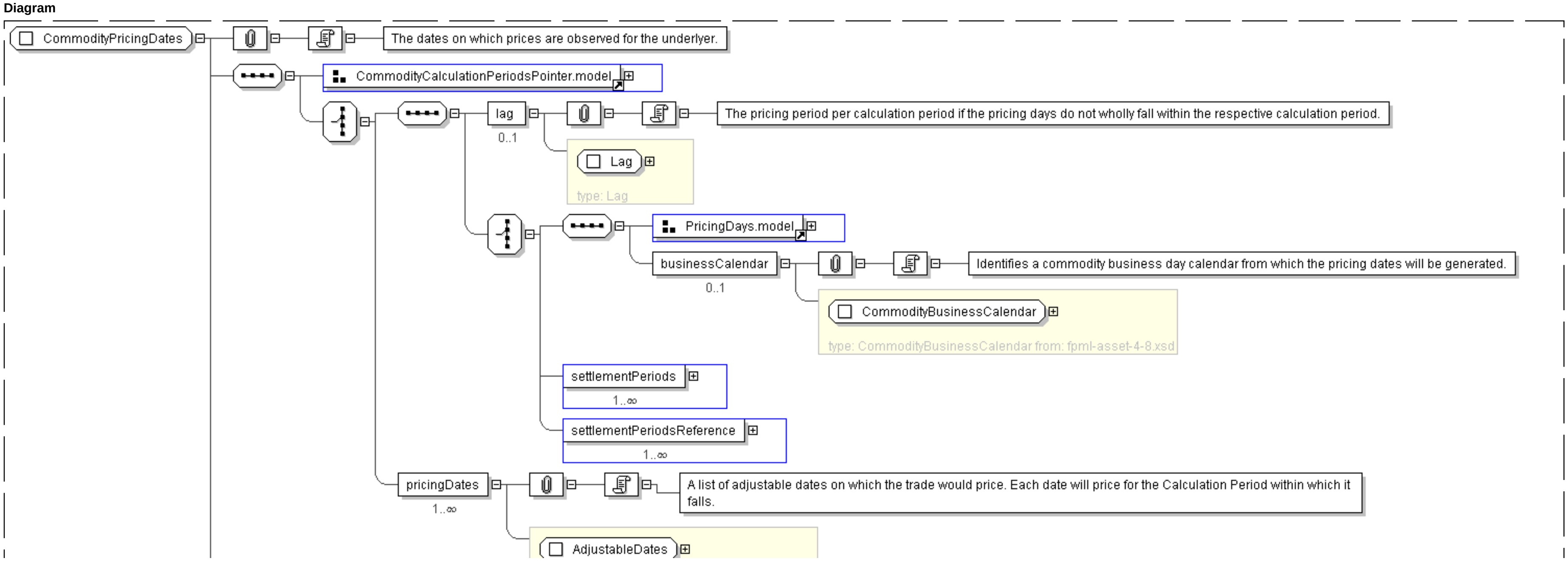
'Identifies a commodity business day calendar from which the pricing dates will be generated.'

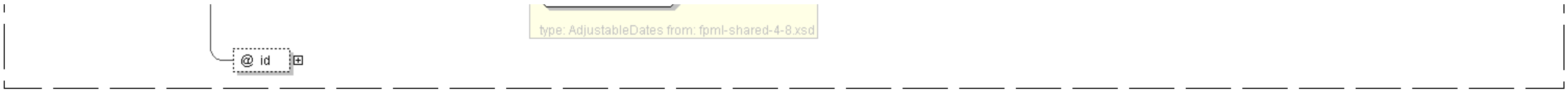
<settlementPeriods> SettlementPeriods </settlementPeriods> [1..*]
<settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]
End Choice
<pricingDates> AdjustableDates </pricingDates> [1..*]

'A list of adjustable dates on which the trade would price. Each date will price for the Calculation Period within which it falls.'

End Choice
</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="CommodityPricingDates">
   <xsd:sequence>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="lag" type=" Lag " minOccurs="0"/>
            <xsd:choice>
               <xsd:sequence>
                  <xsd:group ref=" PricingDays.model "/>
                  <xsd:element name="businessCalendar" type=" CommodityBusinessCalendar " minOccurs="0"/>
               </xsd:sequence>
               <xsd:element name="settlementPeriods" type=" SettlementPeriods " maxOccurs="unbounded"/>
               <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
               " maxOccurs="unbounded"/>
            </xsd:choice>
         </xsd:sequence>
         <xsd:element name="pricingDates" type=" AdjustableDates " maxOccurs="unbounded"/>
      </xsd:choice>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityProductGrade

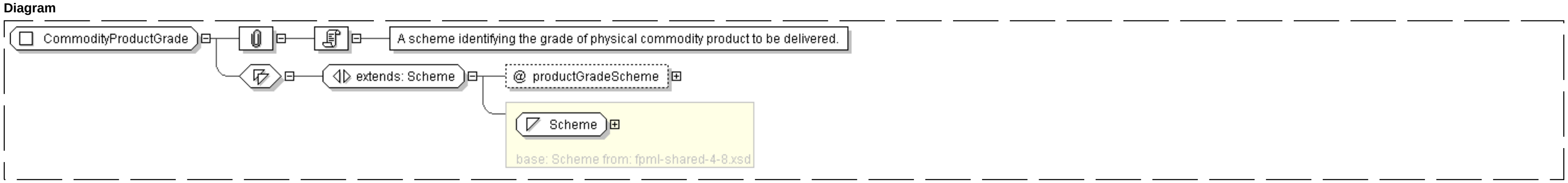
Super-types:	Scheme < **CommodityProductGrade** (by extension)
Sub-types:	None

Name	CommodityProductGrade
Used by (from the same schema document)	Complex Type **OilProduct**
Abstract	no
Documentation	A scheme identifying the grade of physical commodity product to be delivered.

XML Instance Representation

```
<...
productGradeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityProductGrade">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="productGradeScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityQuantityFrequency

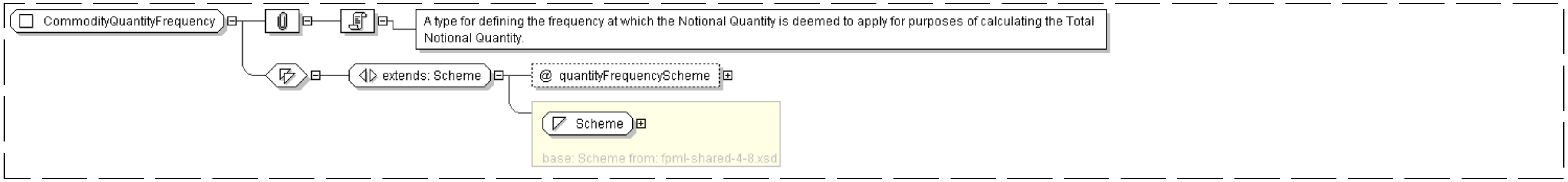
Super-types:	Scheme < **CommodityQuantityFrequency** (by extension)
Sub-types:	None

Name	CommodityQuantityFrequency
Used by (from the same schema document)	Complex Type **CommodityNotionalQuantity**
Abstract	no
Documentation	A type for defining the frequency at which the Notional Quantity is deemed to apply for purposes of calculating the Total Notional Quantity.

XML Instance Representation

```
<...
quantityFrequencyScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityQuantityFrequency">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="quantityFrequencyScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/commodity-quantity-frequency"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CommodityRelativeExpirationDates

Super-types:	None
Sub-types:	None

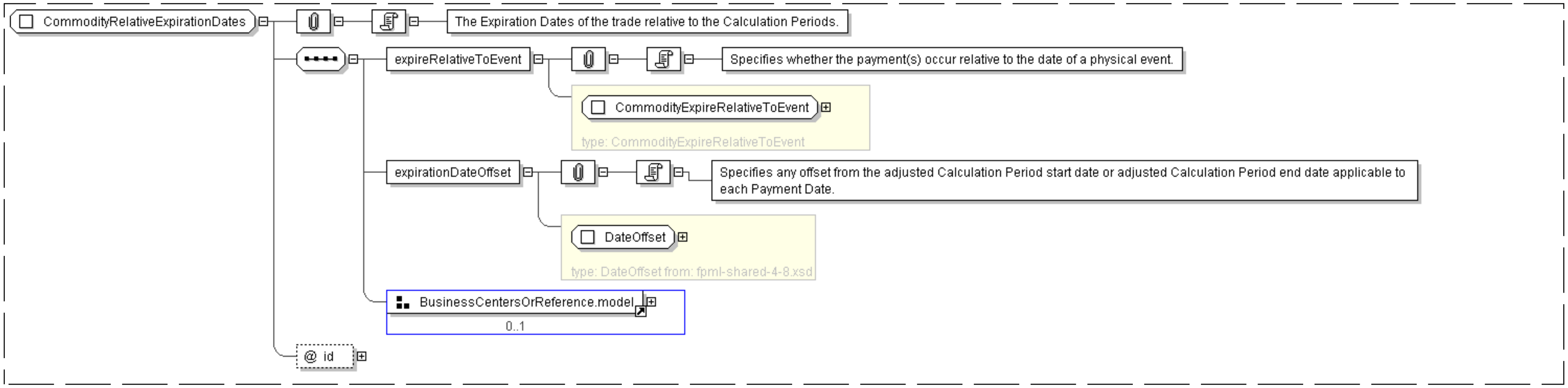
Name	CommodityRelativeExpirationDates
Used by (from the same schema document)	Complex Type **CommodityPhysicalAmericanExercise** , Complex Type **CommodityPhysicalAmericanExercise** , Complex Type **CommodityPhysicalEuropeanExercise**
Abstract	no
Documentation	The Expiration Dates of the trade relative to the Calculation Periods.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <expireRelativeToEvent> CommodityExpireRelativeToEvent </expireRelativeToEvent> [1]
   'Specifies whether the payment(s) occur relative to the date of a physical event.'

   <expirationDateOffset> DateOffset </expirationDateOffset> [1]
   'Specifies any offset from the adjusted Calculation Period start date or adjusted
   Calculation Period end date applicable to each Payment Date.'

Start Group: BusinessCentersOrReference.model [0..1]
Start Choice [1]
         <businessCentersReference> BusinessCentersReference </businessCentersReference> [1]
         'A pointer style reference to a set of financial business centers defined elsewhere in
         the document. This set of business centers is used to determine whether a particular day is
         a business day or not.'

         <businessCenters> BusinessCenters </businessCenters> [1]
End Choice
```

```
End Group: BusinessCentersOrReference.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityRelativeExpirationDates">
   <xsd:sequence>
      <xsd:element name="expireRelativeToEvent" type=" CommodityExpireRelativeToEvent "/>
      <xsd:element name="expirationDateOffset" type=" DateOffset "/>
      <xsd:group ref=" BusinessCentersOrReference.model " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommodityRelativePaymentDates

Super-types:	None
Sub-types:	None

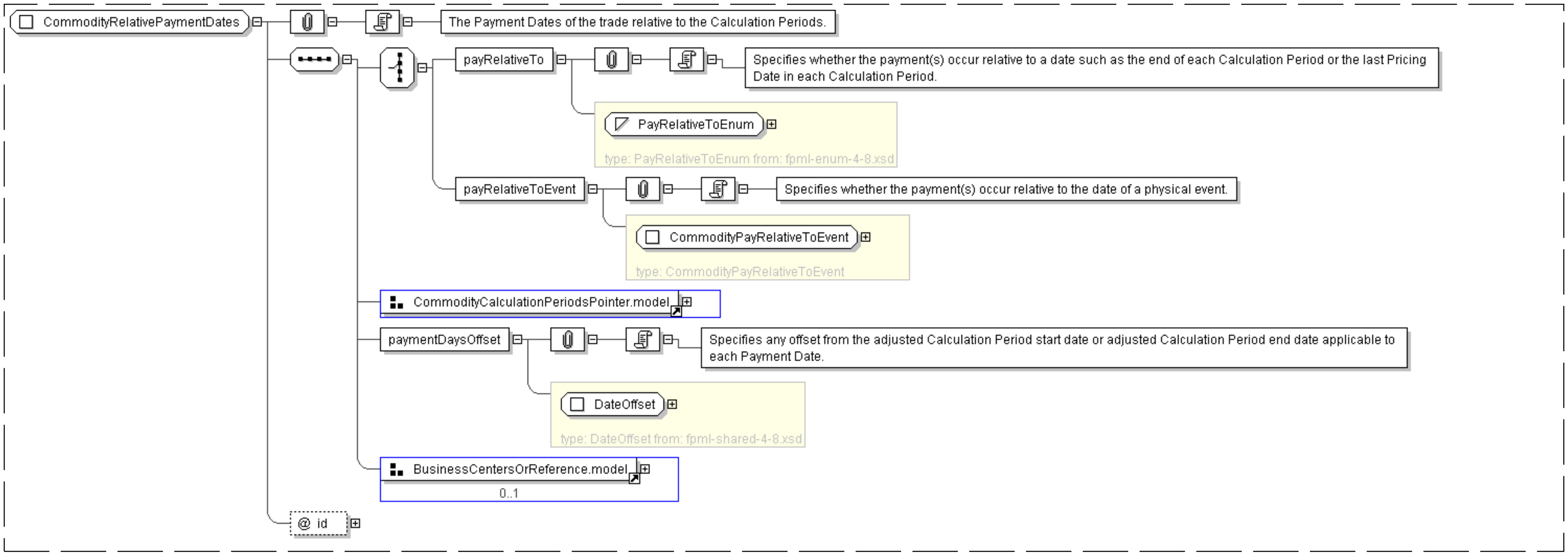
Name	CommodityRelativePaymentDates
Used by (from the same schema document)	Model Group **CommodityPaymentDates.model**
Abstract	no
Documentation	The Payment Dates of the trade relative to the Calculation Periods.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <payRelativeTo> PayRelativeToEnum </payRelativeTo> [1]
      'Specifies whether the payment(s) occur relative to a date such as the end of each
      Calculation Period or the last Pricing Date in each Calculation Period.'

      <payRelativeToEvent> CommodityPayRelativeToEvent </payRelativeToEvent> [1]
      'Specifies whether the payment(s) occur relative to the date of a physical event.'

End Choice
Start Choice [1]
      <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
      'A pointer style reference to the Calculation Periods defined on another leg.'

      <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </calculationPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

      <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
```

```
      </calculationPeriodsDatesReference> [1]
      'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'
End Choice
   <paymentDaysOffset> DateOffset </paymentDaysOffset> [1]
   'Specifies any offset from the adjusted Calculation Period start date or adjusted
   Calculation Period end date applicable to each Payment Date.'
Start Group: BusinessCentersOrReference.model [0..1]
Start Choice [1]
         <businessCentersReference> BusinessCentersReference </businessCentersReference> [1]
         'A pointer style reference to a set of financial business centers defined elsewhere in
         the document. This set of business centers is used to determine whether a particular day is
         a business day or not.'
         <businessCenters> BusinessCenters </businessCenters> [1]
End Choice
End Group: BusinessCentersOrReference.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityRelativePaymentDates">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="payRelativeTo" type=" PayRelativeToEnum "/>
         <xsd:element name="payRelativeToEvent" type=" CommodityPayRelativeToEvent "/>
      </xsd:choice>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
      <xsd:element name="paymentDaysOffset" type=" DateOffset "/>
      <xsd:group ref=" BusinessCentersOrReference.model " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CommoditySettlementPeriodsNotionalQuantity

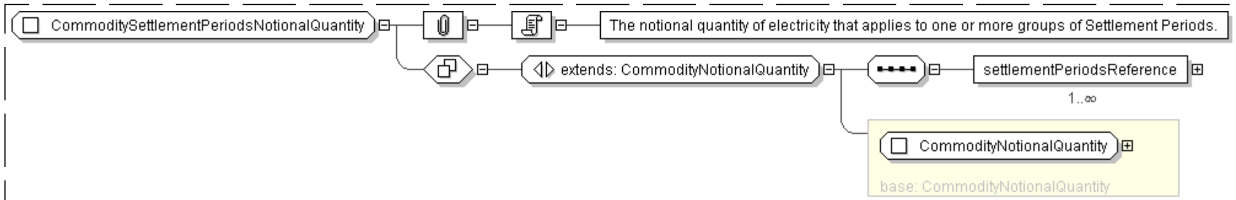
Super-types:	CommodityNotionalQuantity < **CommoditySettlementPeriodsNotionalQuantity** (by extension)
Sub-types:	None

Name	CommoditySettlementPeriodsNotionalQuantity
Used by (from the same schema document)	Model Group **CommodityNotionalQuantity.model**
Abstract	no
Documentation	The notional quantity of electricity that applies to one or more groups of Settlement Periods.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <quantityUnit> QuantityUnit </quantityUnit> [1]
   'Quantity Unit is the unit of measure applicable for the quantity on the Transaction.'

   <quantityFrequency> CommodityQuantityFrequency </quantityFrequency> [1]
   'The frequency at which the Notional Quantity is deemed to apply for purposes of
   calculating the Total Notional Quantity.'

   <quantity> xsd:decimal </quantity> [1]
   'Amount of commodity per quantity frequency.'

   <settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]
   'The range(s) of Settlement Periods to which the Notional Quantity applies.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommoditySettlementPeriodsNotionalQuantity">
   <xsd:complexContent>
      <xsd:extension base=" CommodityNotionalQuantity ">
         <xsd:sequence>
            <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
            " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CommoditySettlementPeriodsNotionalQuantitySchedule

Super-types:	None
Sub-types:	None

Name	CommoditySettlementPeriodsNotionalQuantitySchedule
Used by (from the same schema document)	Complex Type **CommodityNotionalQuantitySchedule**
Abstract	no
Documentation	The notional quantity schedule of electricity that applies to one or more groups of Settlement Periods.

XML Instance Representation

```
<...>
   <settlementPeriodsNotionalQuantityStep> CommodityNotionalQuantity
   </settlementPeriodsNotionalQuantityStep> [1..*]
   'For an electricity transaction, the Notional Quantity for a given Calculation Period
   during the life of the trade which applies to the range(s) of Settlement Periods referenced
   by settlementPeriodsReference. There must be a settlementPeriodsNotionalQuantityStep
```

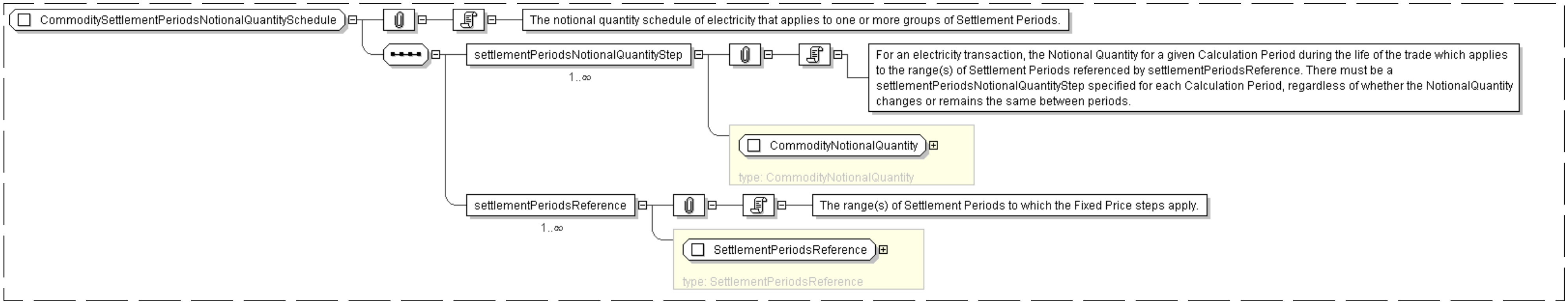
specified for each Calculation Period, regardless of whether the NotionalQuantity changes or remains the same between periods.'

<settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]

'The range(s) of Settlement Periods to which the Fixed Price steps apply.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CommoditySettlementPeriodsNotionalQuantitySchedule">
   <xsd:sequence>
      <xsd:element name="settlementPeriodsNotionalQuantityStep" type=" CommodityNotionalQuantity
      " maxOccurs="unbounded"/>
      <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
      " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommoditySettlementPeriodsPriceSchedule

Super-types:	None
Sub-types:	None

Name	CommoditySettlementPeriodsPriceSchedule
Used by (from the same schema document)	Complex Type **CommodityFixedPriceSchedule**
Abstract	no
Documentation	The fixed price schedule for electricity that applies to one or more groups of Settlement Periods.

XML Instance Representation

<...>

<settlementPeriodsPriceStep> FixedPrice </settlementPeriodsPriceStep> [1..*]

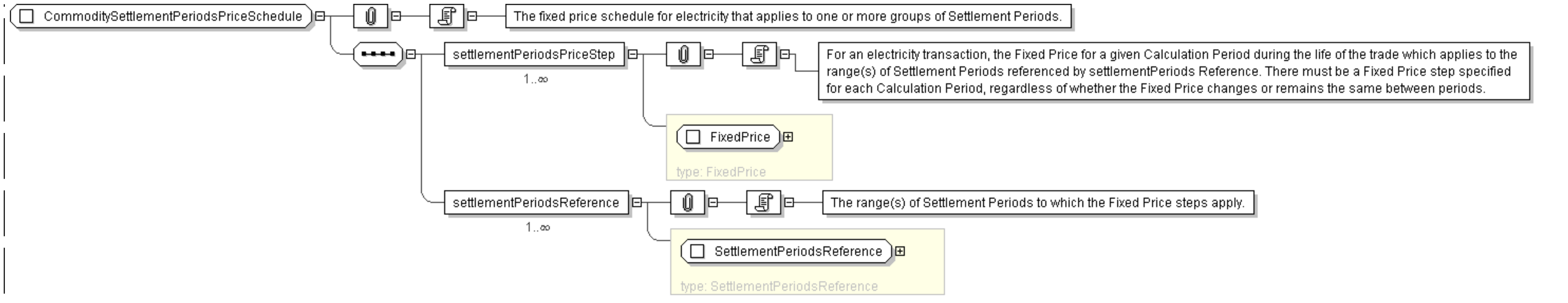
'For an electricity transaction, the Fixed Price for a given Calculation Period during the life of the trade which applies to the range(s) of Settlement Periods referenced by settlementPeriods Reference. There must be a Fixed Price step specified for each Calculation Period, regardless of whether the Fixed Price changes or remains the same between periods.'

<settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]

'The range(s) of Settlement Periods to which the Fixed Price steps apply.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CommoditySettlementPeriodsPriceSchedule">
   <xsd:sequence>
      <xsd:element name="settlementPeriodsPriceStep" type=" FixedPrice " maxOccurs="unbounded"/>
      <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
      " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommoditySpreadSchedule

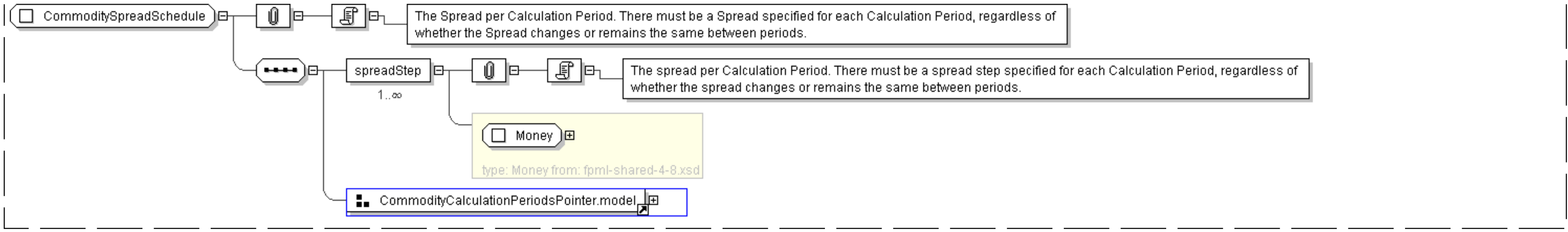
Super-types:	None
Sub-types:	None

Name	CommoditySpreadSchedule
Used by (from the same schema document)	Complex Type **FloatingLegCalculation**
Abstract	no
Documentation	The Spread per Calculation Period. There must be a Spread specified for each Calculation Period, regardless of whether the Spread changes or remains the same between periods.

XML Instance Representation

```
<...>
   <spreadStep> Money </spreadStep> [1..*]
   'The spread per Calculation Period. There must be a spread step specified for each
   Calculation Period, regardless of whether the spread changes or remains the same
   between periods.'

Start Choice [1]
      <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
      'A pointer style reference to the Calculation Periods defined on another leg.'

      <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </calculationPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

      <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
      </calculationPeriodsDatesReference> [1]
      'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommoditySpreadSchedule">
   <xsd:sequence>
      <xsd:element name="spreadStep" type=" Money " maxOccurs="unbounded"/>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommodityStrikeSchedule

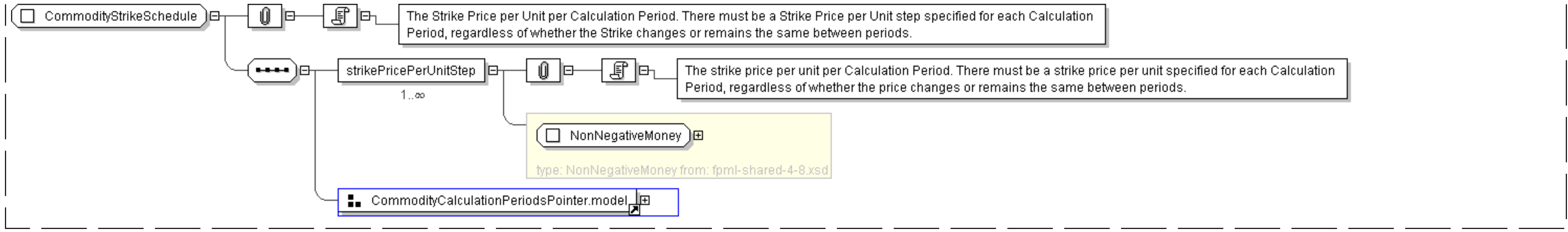
Super-types:	None
Sub-types:	None

Name	CommodityStrikeSchedule
Used by (from the same schema document)	Model Group **CommodityStrikePrice.model**
Abstract	no
Documentation	The Strike Price per Unit per Calculation Period. There must be a Strike Price per Unit step specified for each Calculation Period, regardless of whether the Strike changes or remains the same between periods.

XML Instance Representation

```
<...>
   <strikePricePerUnitStep> NonNegativeMoney </strikePricePerUnitStep> [1..*]
   'The strike price per unit per Calculation Period. There must be a strike price per
   unit specified for each Calculation Period, regardless of whether the price changes or
   remains the same between periods.'
Start Choice [1]
      <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
      'A pointer style reference to the Calculation Periods defined on another leg.'

      <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </calculationPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

      <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
      </calculationPeriodsDatesReference> [1]
      'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CommodityStrikeSchedule">
   <xsd:sequence>
      <xsd:element name="strikePricePerUnitStep" type=" NonNegativeMoney " maxOccurs="unbounded"/>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CommoditySwap

Super-types:	Product < **CommoditySwap** (by extension)
Sub-types:	None

Name	CommoditySwap
Used by (from the same schema document)	Element **commoditySwap**
Abstract	no
Documentation	Commodity Swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <settlementCurrency> IdentifiedCurrency </settlementCurrency> [1]
   'The currency into which the Commodity Swap Transaction will settle. If this is not the same
   as the currency in which the Commodity Reference Price is quoted on a given floating leg of
   the Commodity Swap Transaction, then an FX rate should also be specified for that leg.'

Start Choice [1..*]
      <fixedLeg> FixedPriceLeg </fixedLeg> [1]
      'Fixed Price Leg.'

      <floatingLeg> FloatingPriceLeg </floatingLeg> [1]
      'Floating Price leg.'

      <coalPhysicalLeg> CoalPhysicalLeg </coalPhysicalLeg> [1]
      'Physically settled coal leg.'
```

<electricityPhysicalLeg> ElectricityPhysicalLeg </electricityPhysicalLeg> [1]

'Physically settled electricity leg.'

<gasPhysicalLeg> GasPhysicalLeg </gasPhysicalLeg> [1]

'Physically settled natural gas leg.'

<oilPhysicalLeg> OilPhysicalLeg </oilPhysicalLeg> [1]

'Physically settled oil or refined products leg.'

<additionalCommoditySwapLeg> ... </additionalCommoditySwapLeg> [1]

End Choice
Start Group: CommodityContent.model [0..1]

<commonPricing> xsd:boolean </commonPricing> [0..1]

'Common pricing may be relevant for a Transaction that references more than one Commodity Reference Price. If Common Pricing is not specified as applicable, it will be deemed not to apply.'

<marketDisruption> CommodityMarketDisruption </marketDisruption> [0..1]

'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA 2005 Commodity Definitions, as applicable.'

<settlementDisruption> CommodityBullionSettlementDisruptionEnum </settlementDisruption> [0..1]

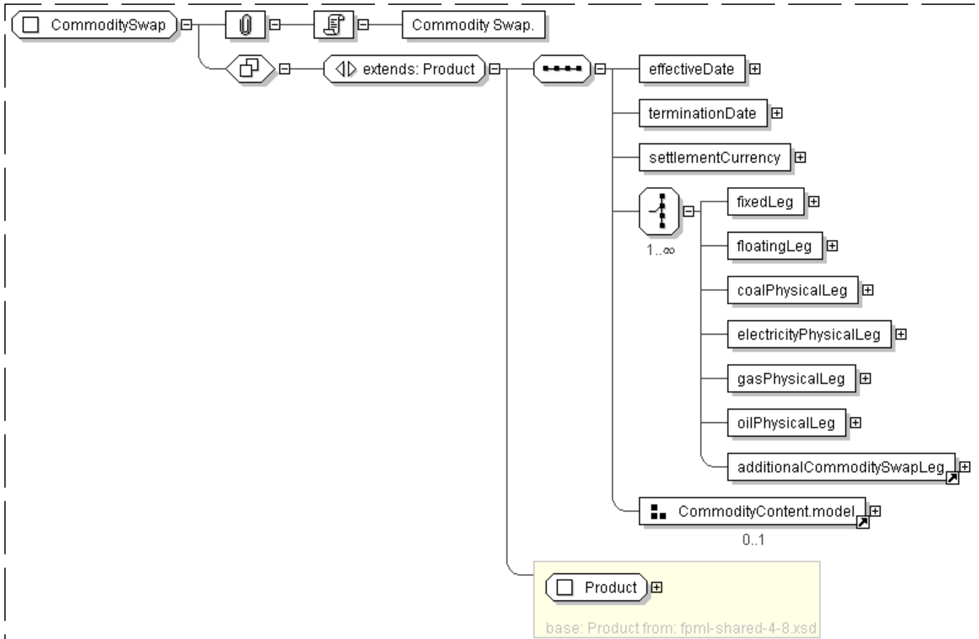
'The consequences of Bullion Settlement Disruption Events.'

<rounding> Rounding </rounding> [0..1]

'Rounding direction and precision for amounts.'

End Group: CommodityContent.model
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CommoditySwap">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="effectiveDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="terminationDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="settlementCurrency" type=" IdentifiedCurrency "/>
```

```
            <xsd:choice maxOccurs="unbounded">
               <xsd:element name="fixedLeg" type=" FixedPriceLeg "/>
               <xsd:element name="floatingLeg" type=" FloatingPriceLeg "/>
               <xsd:element name="coalPhysicalLeg" type=" CoalPhysicalLeg "/>
               <xsd:element name="electricityPhysicalLeg" type=" ElectricityPhysicalLeg "/>
               <xsd:element name="gasPhysicalLeg" type=" GasPhysicalLeg "/>
               <xsd:element name="oilPhysicalLeg" type=" OilPhysicalLeg "/>
               <xsd:element ref=" additionalCommoditySwapLeg "/>
            </xsd:choice>
            <xsd:group ref=" CommodityContent.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DisruptionFallback

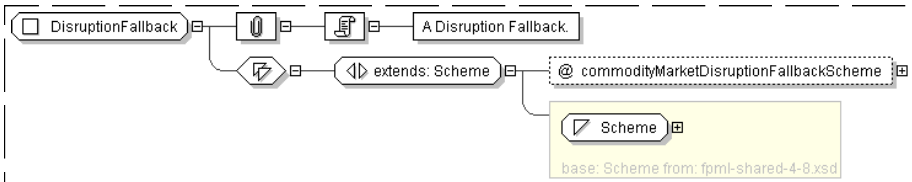
Super-types:	Scheme < **DisruptionFallback** (by extension)
Sub-types:	None

Name	DisruptionFallback
Used by (from the same schema document)	Complex Type **SequencedDisruptionFallback**
Abstract	no
Documentation	A Disruption Fallback.

XML Instance Representation

```
<...
commodityMarketDisruptionFallbackScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DisruptionFallback">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityMarketDisruptionFallbackScheme" type=" xsd:anyURI
         " default="http://www.fpml.org/coding-scheme/commodity-market-disruption-fallback"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ElectricityDelivery

Super-types:	None
Sub-types:	None

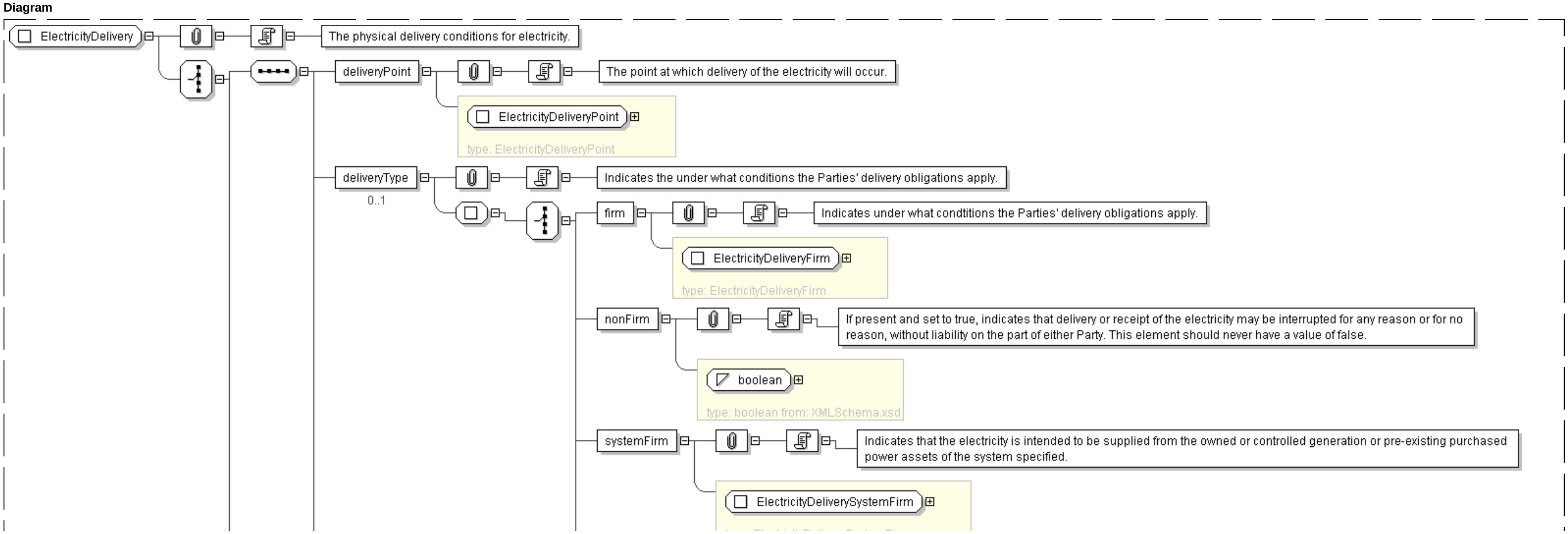
Name	ElectricityDelivery
Used by (from the same schema document)	Complex Type **ElectricityPhysicalLeg**
Abstract	no
Documentation	The physical delivery conditions for electricity.

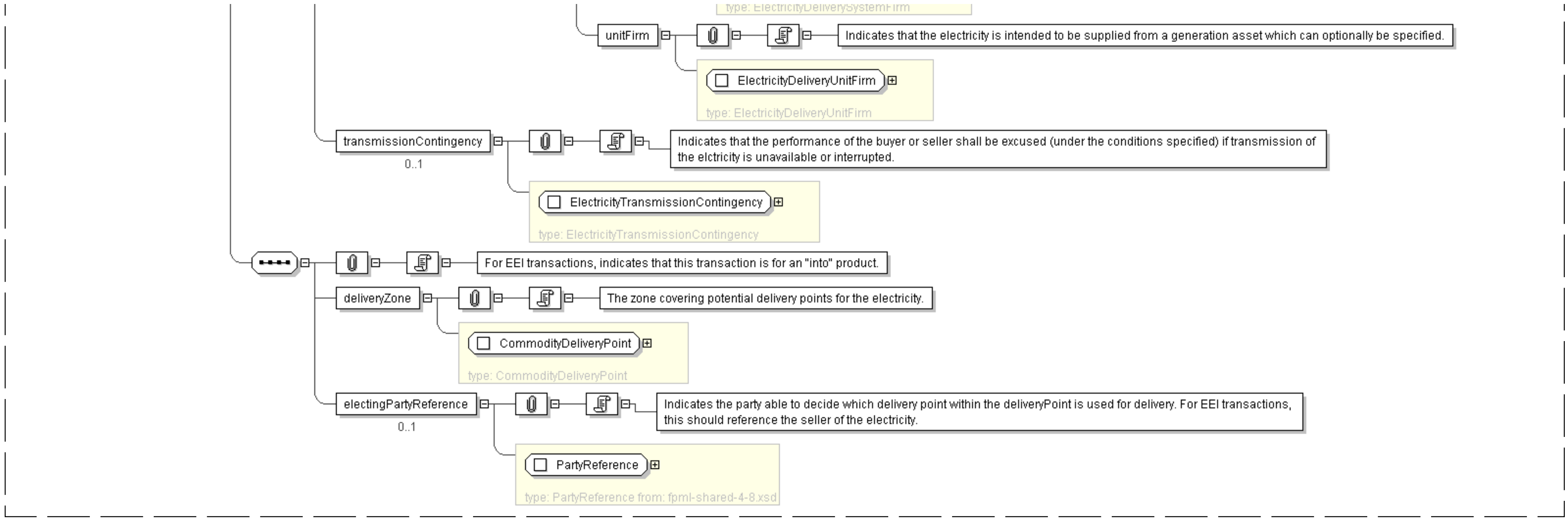
XML Instance Representation

```
<...>
```

```
Start Choice [1]
    <deliveryPoint> ElectricityDeliveryPoint </deliveryPoint> [1]
    'The point at which delivery of the electricity will occur.'

    <deliveryType> [0..1]
    'Indicates the under what conditions the Parties\' delivery obligations apply.'

    Start Choice [1]
        <firm> ElectricityDeliveryFirm </firm> [1]
        'Indicates under what condtitions the Parties\' delivery obligations apply.'

        <nonFirm> xsd:boolean </nonFirm> [1]
        'If present and set to true, indicates that delivery or receipt of the electricity may
        be interrupted for any reason or for no reason, without liability on the part of either
        Party. This element should never have a value of false.'

        <systemFirm> ElectricityDeliverySystemFirm </systemFirm> [1]
        'Indicates that the electricity is intended to be supplied from the owned or
        controlled generation or pre-existing purchased power assets of the system specified.'

        <unitFirm> ElectricityDeliveryUnitFirm </unitFirm> [1]
        'Indicates that the electricity is intended to be supplied from a generation asset which
        can optionally be specified.'

    End Choice
    </deliveryType>
    <transmissionContingency> ElectricityTransmissionContingency </transmissionContingency> [0..1]
    'Indicates that the performance of the buyer or seller shall be excused (under the
    conditions specified) if transmission of the elctricity is unavailable or interrupted.'

    <deliveryZone> CommodityDeliveryPoint </deliveryZone> [1]
    'The zone covering potential delivery points for the electricity.'

    <electingPartyReference> PartyReference </electingPartyReference> [0..1]
    'Indicates the party able to decide which delivery point within the deliveryPoint is used
    for delivery. For EEI transactions, this should reference the seller of the electricity.'

End Choice
</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="ElectricityDelivery">
   <xsd:choice>
      <xsd:sequence>
         <xsd:element name="deliveryPoint" type=" ElectricityDeliveryPoint "/>
         <xsd:element name="deliveryType" minOccurs="0">
            <xsd:complexType>
               <xsd:choice>
                  <xsd:element name="firm" type=" ElectricityDeliveryFirm "/>
                  <xsd:element name="nonFirm" type=" xsd:boolean "/>
                  <xsd:element name="systemFirm" type=" ElectricityDeliverySystemFirm "/>
                  <xsd:element name="unitFirm" type=" ElectricityDeliveryUnitFirm "/>
               </xsd:choice>
            </xsd:complexType>
         </xsd:element>
         <xsd:element name="transmissionContingency" type=" ElectricityTransmissionContingency
         " minOccurs="0"/>
      </xsd:sequence>
      <xsd:sequence>
         <xsd:element name="deliveryZone" type=" CommodityDeliveryPoint "/>
         <xsd:element name="electingPartyReference" type=" PartyReference " minOccurs="0"/>
      </xsd:sequence>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: ElectricityDeliveryFirm

Super-types:	None
Sub-types:	None

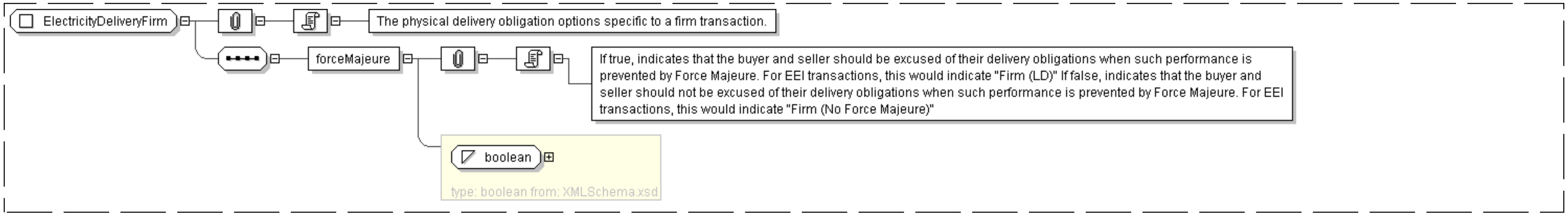
Name	ElectricityDeliveryFirm
Used by (from the same schema document)	Complex Type **ElectricityDelivery**
Abstract	no
Documentation	The physical delivery obligation options specific to a firm transaction.

XML Instance Representation

```
<...>
   <forceMajeure> xsd:boolean </forceMajeure> [1]
```

```
'If true, indicates that the buyer and seller should be excused of their delivery
obligations when such performance is prevented by Force Majeure. For EEI transactions,
this would indicate \"Firm (LD)\" If false, indicates that the buyer and seller should not
be excused of their delivery obligations when such performance is prevented by Force
Majeure. For EEI transactions, this would indicate \"Firm (No Force Majeure)\"'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityDeliveryFirm">
   <xsd:sequence>
      <xsd:element name="forceMajeure" type=" xsd:boolean "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ElectricityDeliveryPeriods

Super-types:	CommodityDeliveryPeriods < **ElectricityDeliveryPeriods** (by extension)
Sub-types:	None

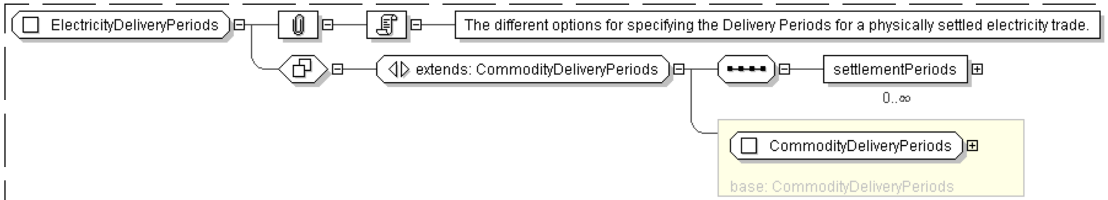
Name	ElectricityDeliveryPeriods
Abstract	no
Documentation	The different options for specifying the Delivery Periods for a physically settled electricity trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <periods> AdjustableDates </periods> [1]

      'The Delivery Periods for this leg of the swap. This type is only intended to be used if
      the Delivery Periods differ from the Calculation Periods on the fixed or floating leg.
      If DeliveryPeriods mirror another leg, then the calculationPeriodsReference element should
      be used to point to the Calculation Periods on that leg - or
      the calculationPeriodsScheduleReference can be used to point to the Calculation
      Periods Schedule for that leg.'

      <periodsSchedule> CommodityCalculationPeriodsSchedule </periodsSchedule> [1]

      'The Delivery Periods for this leg of the swap. This type is only intended to be used if
      the Delivery Periods differ from the Calculation Periods on the fixed or floating leg.
      If DeliveryPeriods mirror another leg, then the calculationPeriodsReference element should
      be used to point to the Calculation Periods on that leg - or
      the calculationPeriodsScheduleReference can be used to point to the Calculation
      Periods Schedule for that leg.'

Start Choice [1]
         <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]

         'A pointer style reference to the Calculation Periods defined on another leg.'

         <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
         </calculationPeriodsScheduleReference> [1]

         'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

         <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
         </calculationPeriodsDatesReference> [1]

         'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'
```

```
End Choice
End Choice
   <settlementPeriods> SettlementPeriods </settlementPeriods> [0..*]
   'The periods within the Delivery Periods during which the electricity will be delivered.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityDeliveryPeriods">
   <xsd:complexContent>
      <xsd:extension base=" CommodityDeliveryPeriods ">
         <xsd:sequence>
            <xsd:element name="settlementPeriods" type=" SettlementPeriods "
            minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ElectricityDeliveryPoint

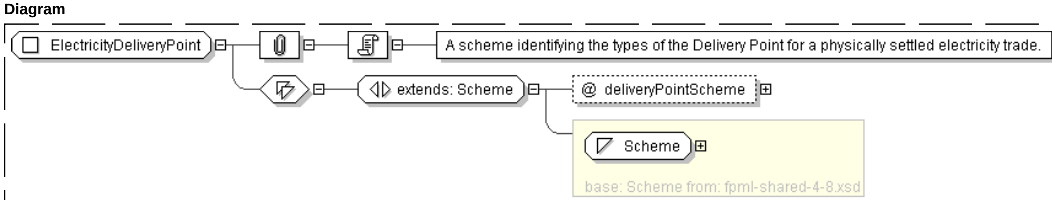
Super-types:	Scheme < **ElectricityDeliveryPoint** (by extension)
Sub-types:	None

Name	ElectricityDeliveryPoint
Used by (from the same schema document)	Complex Type **ElectricityDelivery**
Abstract	no
Documentation	A scheme identifying the types of the Delivery Point for a physically settled electricity trade.

XML Instance Representation

```
<...
deliveryPointScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityDeliveryPoint">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="deliveryPointScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ElectricityDeliverySystemFirm

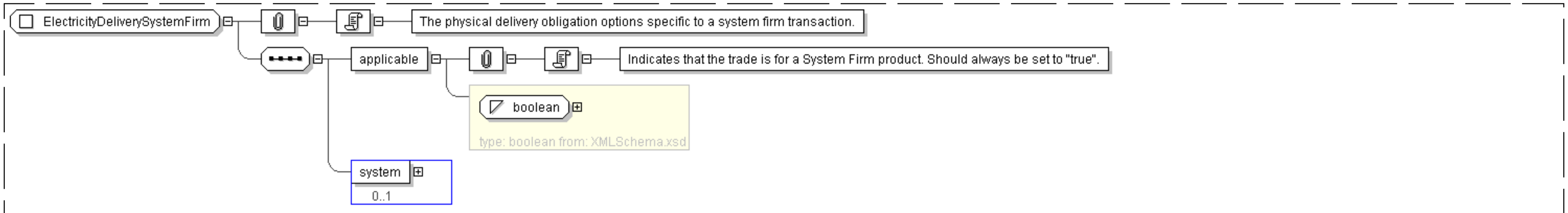
Super-types:	None
Sub-types:	None

Name	ElectricityDeliverySystemFirm
Used by (from the same schema document)	Complex Type **ElectricityDelivery**
Abstract	no
Documentation	The physical delivery obligation options specific to a system firm transaction.

XML Instance Representation

```
<...>
   <applicable> xsd:boolean </applicable> [1]
   'Indicates that the trade is for a System Firm product. Should always be set to \"true\".'

   <system> CommodityDeliveryPoint </system> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityDeliverySystemFirm">
   <xsd:sequence>
      <xsd:element name="applicable" type=" xsd:boolean "/>
      <xsd:element name="system" type=" CommodityDeliveryPoint " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ElectricityDeliveryUnitFirm

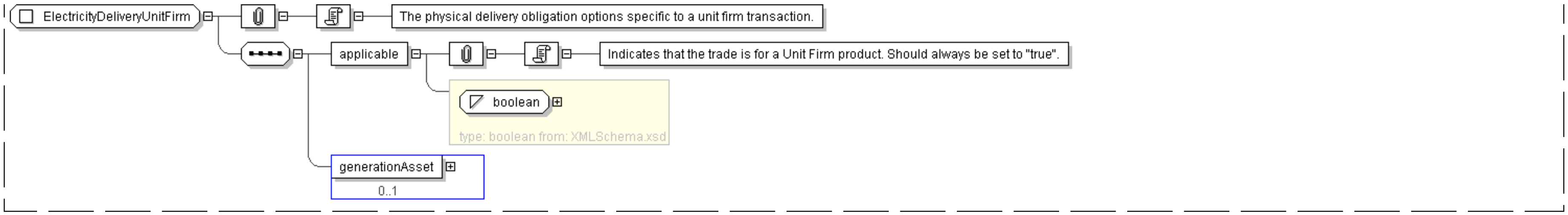
Super-types:	None
Sub-types:	None

Name	ElectricityDeliveryUnitFirm
Used by (from the same schema document)	Complex Type **ElectricityDelivery**
Abstract	no
Documentation	The physical delivery obligation options specific to a unit firm transaction.

XML Instance Representation

```
<...>
   <applicable> xsd:boolean </applicable> [1]
   'Indicates that the trade is for a Unit Firm product. Should always be set to \"true\".'

   <generationAsset> CommodityDeliveryPoint </generationAsset> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityDeliveryUnitFirm">
   <xsd:sequence>
      <xsd:element name="applicable" type=" xsd:boolean "/>
      <xsd:element name="generationAsset" type=" CommodityDeliveryPoint " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ElectricityPhysicalDeliveryQuantity

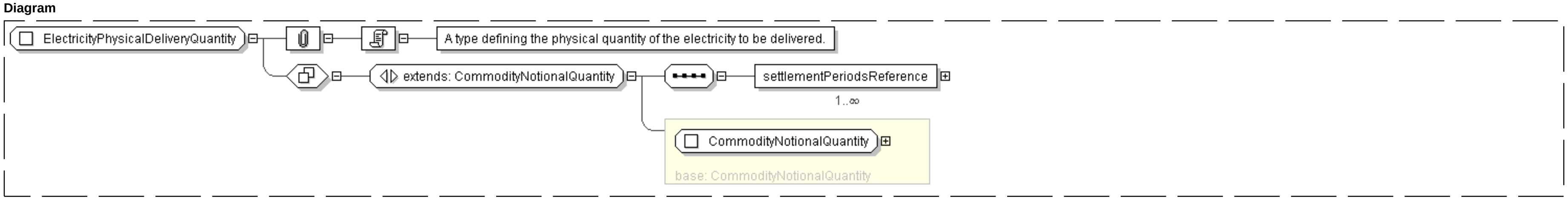
Super-types:	CommodityNotionalQuantity < **ElectricityPhysicalDeliveryQuantity** (by extension)
Sub-types:	None

Name	ElectricityPhysicalDeliveryQuantity
Used by (from the same schema document)	Complex Type **ElectricityPhysicalQuantity**
Abstract	no
Documentation	A type defining the physical quantity of the electricity to be delivered.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <quantityUnit> QuantityUnit </quantityUnit> [1]
   'Quantity Unit is the unit of measure applicable for the quantity on the Transaction.'

   <quantityFrequency> CommodityQuantityFrequency </quantityFrequency> [1]
   'The frequency at which the Notional Quantity is deemed to apply for purposes of
   calculating the Total Notional Quantity.'

   <quantity> xsd:decimal </quantity> [1]
   'Amount of commodity per quantity frequency.'

   <settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]
   'A pointer style reference to the range(s) of Settlement Periods to which this
   quantity applies.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityPhysicalDeliveryQuantity">
   <xsd:complexContent>
      <xsd:extension base=" CommodityNotionalQuantity ">
         <xsd:sequence>
            <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
```

```
            " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ElectricityPhysicalDeliveryQuantitySchedule

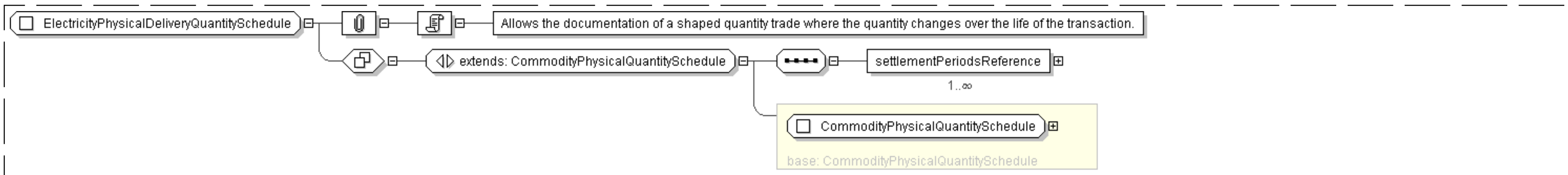
Super-types:	CommodityPhysicalQuantitySchedule < **ElectricityPhysicalDeliveryQuantitySchedule** (by extension)
Sub-types:	None

Name	ElectricityPhysicalDeliveryQuantitySchedule
Used by (from the same schema document)	Complex Type **ElectricityPhysicalQuantity**
Abstract	no
Documentation	Allows the documentation of a shaped quantity trade where the quantity changes over the life of the transaction.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <quantityStep> CommodityNotionalQuantity </quantityStep> [1..*]
   'The quantity per Calculation Period. There must be a quantity specified for each
   Calculation Period, regardless of whether the quantity changes or remains the same
   between periods.'
Start Choice [1]
      <deliveryPeriodsReference> CalculationPeriodsReference </deliveryPeriodsReference> [1]
      'A pointer style reference to the Delivery Periods defined elsewhere.'

      <deliveryPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </deliveryPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined elsewhere.'

End Choice
   <settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]
   'A pointer style reference to the range(s) of Settlement Periods to which this
   quantity applies.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityPhysicalDeliveryQuantitySchedule">
   <xsd:complexContent>
      <xsd:extension base=" CommodityPhysicalQuantitySchedule ">
         <xsd:sequence>
            <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
            " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ElectricityPhysicalLeg

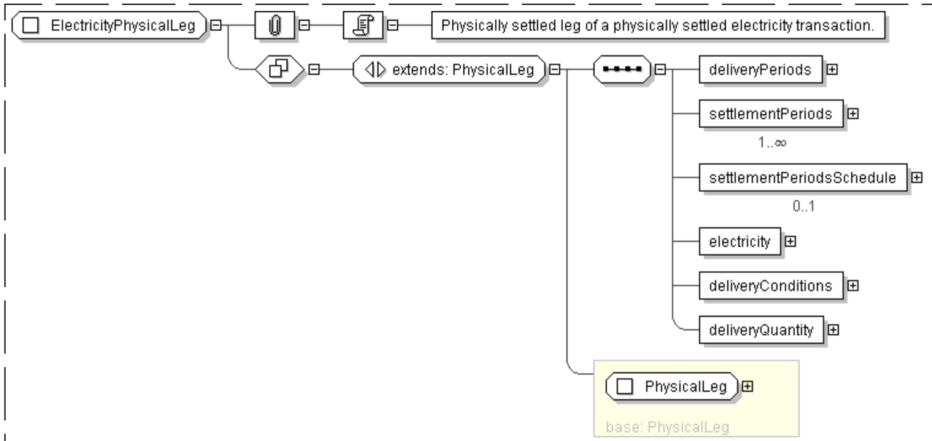
Super-types:	Leg < PhysicalLeg (by extension) < **ElectricityPhysicalLeg** (by extension)
Sub-types:	None

Name	ElectricityPhysicalLeg
Used by (from the same schema document)	Complex Type **CommoditySwap**
Abstract	no
Documentation	Physically settled leg of a physically settled electricity transaction.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <deliveryPeriods> CommodityDeliveryPeriods </deliveryPeriods> [1]
   'The different options for specifying the Delivery or Supply Periods. Unless the quantity
   or price is to vary periodically during the trade or physical delivery occurs on a
   periodic basis, periodsSchedule should be used and set to 1T.'

   <settlementPeriods> SettlementPeriods </settlementPeriods> [1..*]
   'The specification of the Settlement Periods in which the electricity will be delivered.
   The Settlement Periods will apply from and including the Effective Date up to and including
   the Termination Date. If more than one settlementPeriods element is present this
   indicates multiple ranges of Settlement Periods apply to the entire trade - for example
   off-peak weekdays and all day weekends. Settlement Period ranges should not overlap.'

   <settlementPeriodsSchedule> SettlementPeriodsSchedule </settlementPeriodsSchedule> [0..1]
   'The specification of the Settlement Periods in which the electricity will be delivered for
   a \"shaped\" trade i.e. where different Settlement Period ranges will apply to
   different periods of the trade.'

   <electricity> ElectricityProduct </electricity> [1]
   'The specification of the electricity to be delivered.'

   <deliveryConditions> ElectricityDelivery </deliveryConditions> [1]
   'The physical delivery conditions for the transaction.'

   <deliveryQuantity> ElectricityPhysicalQuantity </deliveryQuantity> [1]
   'The different options for specifying the quantity.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityPhysicalLeg">
```

```
    <xsd:complexContent>
        <xsd:extension base=" PhysicalLeg ">
            <xsd:sequence>
                <xsd:element name="deliveryPeriods" type=" CommodityDeliveryPeriods "/>
                <xsd:element name="settlementPeriods" type=" SettlementPeriods " maxOccurs="unbounded"/>
                <xsd:element name="settlementPeriodsSchedule" type=" SettlementPeriodsSchedule " minOccurs="0"/>
                <xsd:element name="electricity" type=" ElectricityProduct "/>
                <xsd:element name="deliveryConditions" type=" ElectricityDelivery "/>
                <xsd:element name="deliveryQuantity" type=" ElectricityPhysicalQuantity "/>
            </xsd:sequence>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ElectricityPhysicalQuantity

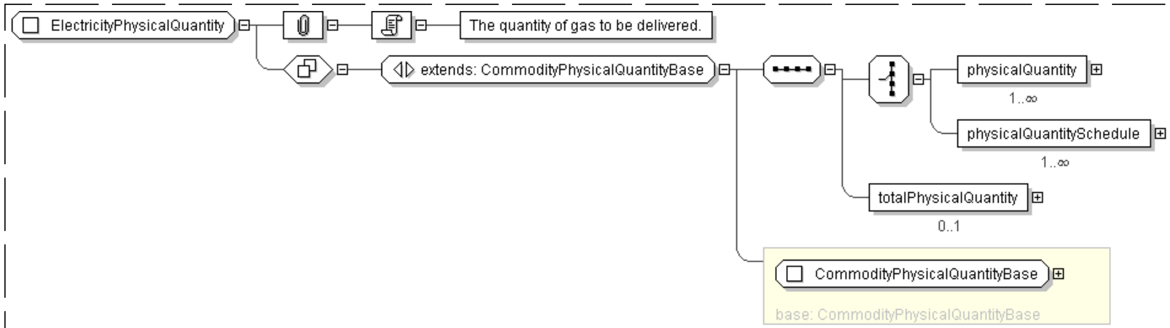
Super-types:	CommodityPhysicalQuantityBase < **ElectricityPhysicalQuantity** (by extension)
Sub-types:	None

Name	ElectricityPhysicalQuantity
Used by (from the same schema document)	Complex Type **ElectricityPhysicalLeg**
Abstract	no
Documentation	The quantity of gas to be delivered.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
    <physicalQuantity> ElectricityPhysicalDeliveryQuantity </physicalQuantity> [1..*]
    'The Quantity per Delivery Period.'

    <physicalQuantitySchedule> ElectricityPhysicalDeliveryQuantitySchedule
    </physicalQuantitySchedule> [1..*]
    'Allows the documentation of a shaped quantity trade where the quantity changes over the
    life of the transaction. Note that if the range of Settlement Periods also varies over the
    life of the transaction this element should not be used. Instead, physicalQuantity should
    be repeated for each range of Settlement Periods that apply at any point during the trade.'
End Choice
  <totalPhysicalQuantity> UnitQuantity </totalPhysicalQuantity> [0..1]
  'The Total Quantity of the commodity to be delivered.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityPhysicalQuantity">
    <xsd:complexContent>
        <xsd:extension base=" CommodityPhysicalQuantityBase ">
            <xsd:sequence>
                <xsd:choice>
                    <xsd:element name="physicalQuantity" type=" ElectricityPhysicalDeliveryQuantity
```

```
                " maxOccurs="unbounded"/>
                <xsd:element name="physicalQuantitySchedule" type="
                ElectricityPhysicalDeliveryQuantitySchedule " maxOccurs="unbounded"/>
             </xsd:choice>
             <xsd:element name="totalPhysicalQuantity" type=" UnitQuantity " minOccurs="0"/>
          </xsd:sequence>
       </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ElectricityProduct

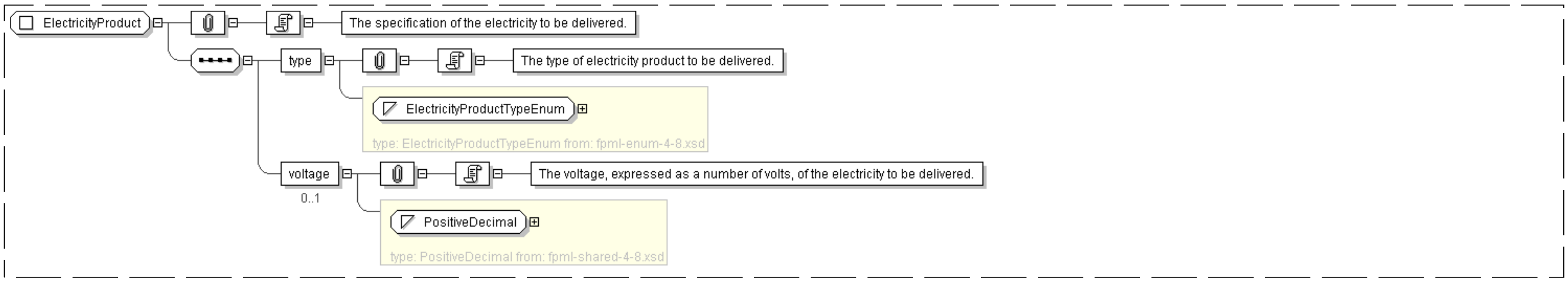
Super-types:	None
Sub-types:	None

Name	ElectricityProduct
Used by (from the same schema document)	Complex Type **ElectricityPhysicalLeg**
Abstract	no
Documentation	The specification of the electricity to be delivered.

XML Instance Representation

```
<...>
   <type> ElectricityProductTypeEnum </type> [1]
   'The type of electricity product to be delivered.'

   <voltage> PositiveDecimal </voltage> [0..1]
   'The voltage, expressed as a number of volts, of the electricity to be delivered.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityProduct">
   <xsd:sequence>
      <xsd:element name="type" type=" ElectricityProductTypeEnum "/>
      <xsd:element name="voltage" type=" PositiveDecimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ElectricityTransmissionContingency

Super-types:	None
Sub-types:	None

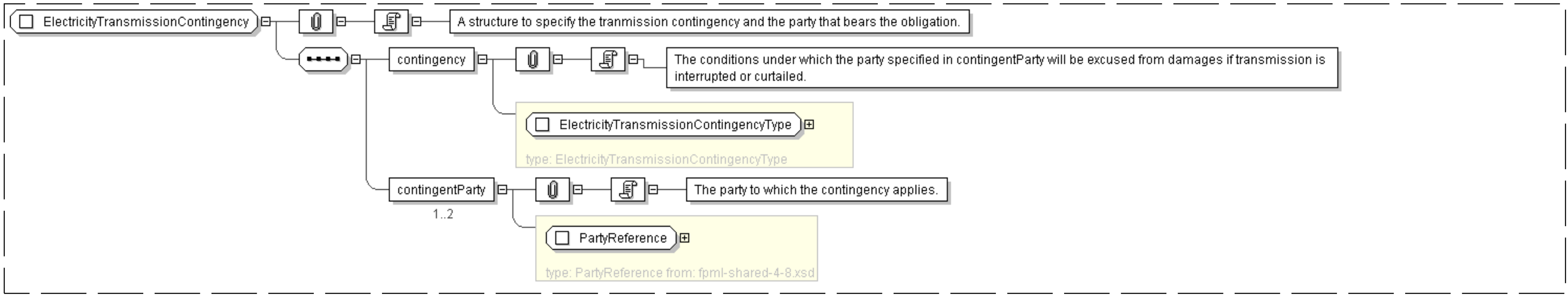
Name	ElectricityTransmissionContingency
Used by (from the same schema document)	Complex Type **ElectricityDelivery**
Abstract	no

Documentation	A structure to specify the tranmission contingency and the party that bears the obligation.

XML Instance Representation

```
<...>
   <contingency> ElectricityTransmissionContingencyType </contingency> [1]
   'The conditions under which the party specified in contingentParty will be excused from
   damages if transmission is interrupted or curtailed.'

   <contingentParty> PartyReference </contingentParty> [1..2]
   'The party to which the contingency applies.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityTransmissionContingency">
   <xsd:sequence>
      <xsd:element name="contingency" type=" ElectricityTransmissionContingencyType "/>
      <xsd:element name="contingentParty" type=" PartyReference " maxOccurs="2"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ElectricityTransmissionContingencyType

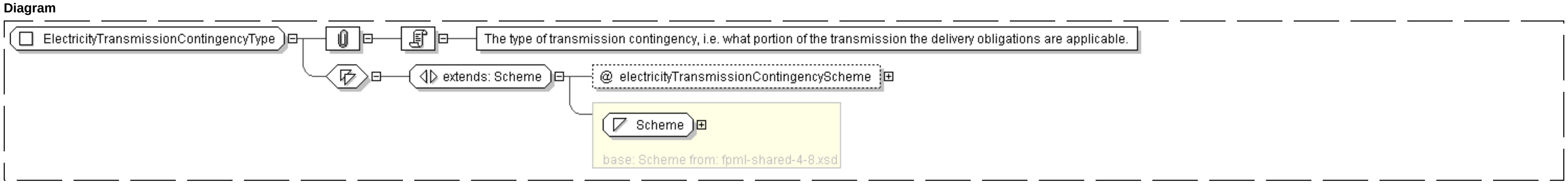
Super-types:	Scheme < **ElectricityTransmissionContingencyType** (by extension)
Sub-types:	None

Name	ElectricityTransmissionContingencyType
Used by (from the same schema document)	Complex Type **ElectricityTransmissionContingency**
Abstract	no
Documentation	The type of transmission contingency, i.e. what portion of the transmission the delivery obligations are applicable.

XML Instance Representation

```
<...
electricityTransmissionContingencyScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ElectricityTransmissionContingencyType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="electricityTransmissionContingencyScheme" type=" xsd:anyURI
         " default="http://www.fpml.org/coding-scheme/electricity-transmission-contingency"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: FixedPrice

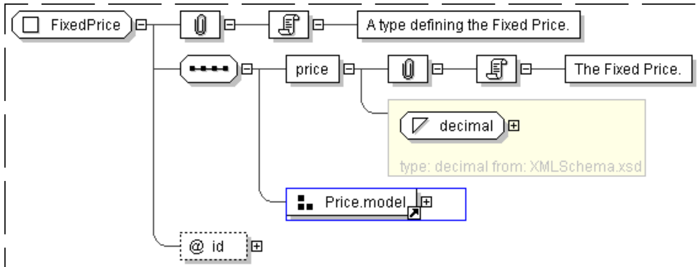
Super-types:	None
Sub-types:	• SettlementPeriodsFixedPrice (by extension)

Name	FixedPrice
Used by (from the same schema document)	Complex Type **CommodityFixedPriceSchedule** , Complex Type **CommoditySettlementPeriodsPriceSchedule** , Complex Type **NonPeriodicFixedPriceLeg** , Model Group **CommodityFixedPrice.model**
Abstract	no
Documentation	A type defining the Fixed Price.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <price> xsd:decimal </price> [1]
   'The Fixed Price.'

   <priceCurrency> Currency </priceCurrency> [1]
   'Currency of the fixed price.'

   <priceUnit> QuantityUnit </priceUnit> [1]
   'The unit of measure used to calculate the Fixed Price.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FixedPrice">
   <xsd:sequence>
      <xsd:element name="price" type=" xsd:decimal "/>
      <xsd:group ref=" Price.model "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: FixedPriceLeg

Super-types:	Leg < **FixedPriceLeg** (by extension)
Sub-types:	None

Name	FixedPriceLeg
Used by (from the same schema document)	Complex Type **CommodityEwap**
Abstract	no
Documentation	Fixed Price Leg of a Commodity Swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

Start Choice [1]
      <calculationDates> AdjustableDates </calculationDates> [1]
      'The Calculation Period dates for this leg of the trade where the Calculation Periods are
      all one day long, typically a physically-settled emissions or metals trade. Only
      dates explicitly included determine the Calculation Periods and there is a Calculation
      Period for each date specified.'

      <calculationPeriods> AdjustableDates </calculationPeriods> [1]
      'The Calculation Period start dates for this leg of the swap. This type is only intended to
      be used if the Calculation Periods differ on each leg. If Calculation Periods mirror
      another leg, then the calculationPeriodsReference element should be used to point to
      the Calculation Periods on that leg - or the calculationPeriodsScheduleReference can be used
      to point to the Calculation Periods Schedule for that leg.'

      <calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </
      calculationPeriodsSchedule> [1]
      'The Calculation Periods for this leg of the swap. This type is only intended to be used if
      the Calculation Periods differ on each leg. If Calculation Periods mirror another leg, then
      the calculationPeriodsReference element should be used to point to the Calculation Periods
      on the other leg - or the calculationPeriodsScheduleReference can be used to point to
      the Calculation Periods Schedule for that leg.'

Start Choice [1]
         <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
         'A pointer style reference to the Calculation Periods defined on another leg.'

         <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
         </calculationPeriodsScheduleReference> [1]
         'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

         <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
         </calculationPeriodsDatesReference> [1]
         'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
End Choice
Start Choice [1]
      <fixedPriceSchedule> CommodityFixedPriceSchedule </fixedPriceSchedule> [1]
      'Allows the specification of a Fixed Price that varies over the life of the trade.'

Start Choice [1]
         <fixedPrice> FixedPrice </fixedPrice> [1]
         'Fixed price on which fixed payments are based.'

         <worldscaleRate> xsd:decimal </worldscaleRate> [1]
         'For a WET Voyager Charter Commodity Swap, the number of Worldscale Points for purposes of
         the calculation of a Fixed Amount.'

         <contractRate> NonNegativeMoney </contractRate> [1]
         'For a DRY Voyage Charter or Time Charter Commodity Swap, the price per relevant unit
         for pruposes of the calculation of a Fixed Amount.'

         <settlementPeriodsPrice> SettlementPeriodsFixedPrice </settlementPeriodsPrice> [1..*]
         'For an electricity transaction, the fixed price for one or more groups of Settlement
         Periods on which fixed payments are based. If the fixed price differs for different groups
         of Settlement Periods, this element should be repeated.'

End Choice
```

End Choice
<totalPrice> NonNegativeMoney </totalPrice> [0..1]

'The total amount of all fixed payments due during the term of the trade.'

Start Choice [1]
Start Choice [1]
<notionalQuantitySchedule> CommodityNotionalQuantitySchedule </notionalQuantitySchedule> [1]

'Allows the documentation of a shaped notional trade where the notional changes over the life of the transaction.'

<notionalQuantity> CommodityNotionalQuantity </notionalQuantity> [1]

'The Notional Quantity.'

<settlementPeriodsNotionalQuantity> CommoditySettlementPeriodsNotionalQuantity </settlementPeriodsNotionalQuantity> [1..*]

'For an electricity transaction, the Notional Quantity for a one or more groups of Settlement Periods to which the Notional Quantity is based. If the schedule differs for different groups of Settlement Periods, this element should be repeated.'

End Choice
<totalNotionalQuantity> xsd:decimal </totalNotionalQuantity> [0..1]

'The Total Notional Quantity.'

<quantityReference> QuantityReference </quantityReference> [1]

'A pointer style reference to a quantity defined on another leg.'

End Choice
Start Choice [1]
<relativePaymentDates> CommodityRelativePaymentDates </relativePaymentDates> [1]

'The Payment Dates of the trade relative to the Calculation Periods.'

Start Choice [1]
<paymentDates> AdjustableDatesOrRelativeDateOffset </paymentDates> [1]

'Dates on which payments will be made.'

<masterAgreementPaymentDates> xsd:boolean </masterAgreementPaymentDates> [1]

'If present and true indicates that the Payment Date(s) are specified in the relevant master agreement.'

End Choice
End Choice
Start Group: CommodityFreightFlatRate.model [0..1]
<flatRate> FlatRateEnum </flatRate> [1]

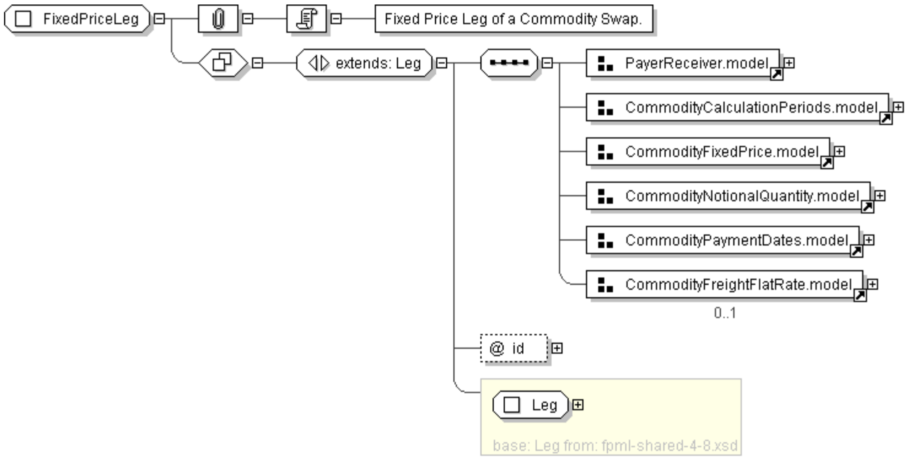
'Whether the Flat Rate is the New Worldwide Tanker Nominal Freight Scale for the Freight Index Route taken at the Trade Date of the transaction or taken on each Pricing Date.'

<flatRateAmount> NonNegativeMoney </flatRateAmount> [0..1]

'If flatRate is set to \"Fixed\", the actual value of the Flat Rate.'

End Group: CommodityFreightFlatRate.model
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FixedPriceLeg">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:group ref=" CommodityCalculationPeriods.model "/>
            <xsd:group ref=" CommodityFixedPrice.model "/>
            <xsd:group ref=" CommodityNotionalQuantity.model "/>
            <xsd:group ref=" CommodityPaymentDates.model "/>
            <xsd:group ref=" CommodityFreightFlatRate.model " minOccurs="0"/>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FloatingLegCalculation

Super-types:	None
Sub-types:	None

Name	FloatingLegCalculation
Used by (from the same schema document)	Complex Type **FloatingPriceLeg**
Abstract	no
Documentation	A type to capture details relevant to the calculation of the floating price.

XML Instance Representation

```
<...>
   <pricingDates> CommodityPricingDates </pricingDates> [1]
   'Commodity Pricing Dates.'

   <averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]
   'The parties may specify a Method of Averaging where more than one pricing Dates is
   being specified as being applicable.'

   <conversionFactor> xsd:decimal </conversionFactor> [0..1]
   'If the Notional Quantity is specified in a unit that does not match the unit in which
   the Commodity Reference Price is quoted, the scaling or conversion factor used to convert
   the Commodity Reference Price unit into the Notional Quantity unit should be stated here.
   If there is no conversion, this element is not intended to be used.'

   <rounding> Rounding </rounding> [0..1]
   'Rounding direction and precision for price values.'
```

Start Choice [0..1]
<spread> Money </spread> [1]

'The spread over or under the Commodity Reference Price for this leg of the trade. This element is intended to be used for basis trades.'

<spreadSchedule> CommoditySpreadSchedule </spreadSchedule> [1..*]

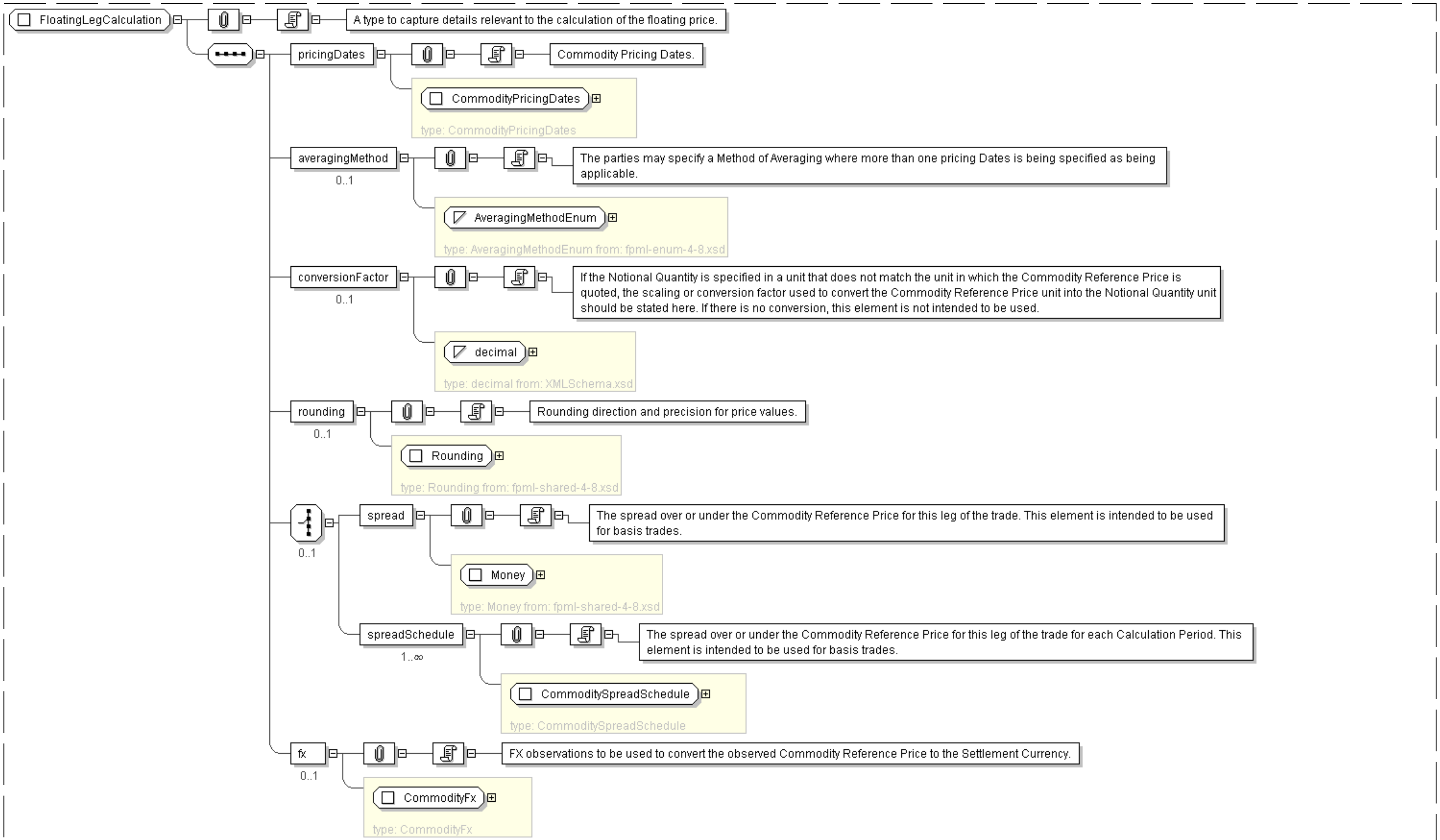
'The spread over or under the Commodity Reference Price for this leg of the trade for each Calculation Period. This element is intended to be used for basis trades.'

End Choice
<fx> CommodityFx </fx> [0..1]

'FX observations to be used to convert the observed Commodity Reference Price to the Settlement Currency.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FloatingLegCalculation">
   <xsd:sequence>
```

```
        <xsd:element name="pricingDates" type=" CommodityPricingDates "/>
        <xsd:element name="averagingMethod" type=" AveragingMethodEnum " minOccurs="0"/>
        <xsd:element name="conversionFactor" type=" xsd:decimal " minOccurs="0"/>
        <xsd:element name="rounding" type=" Rounding " minOccurs="0"/>
        <xsd:choice minOccurs="0">
            <xsd:element name="spread" type=" Money "/>
            <xsd:element name="spreadSchedule" type=" CommoditySpreadSchedule " maxOccurs="unbounded"/>
        </xsd:choice>
        <xsd:element name="fx" type=" CommodityFx " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FloatingPriceLeg

Super-types:	Leg < **FloatingPriceLeg** (by extension)
Sub-types:	None

Name	FloatingPriceLeg
Used by (from the same schema document)	Complex Type **CommoditySwap**
Abstract	no
Documentation	Floating Price Leg of a Commodity Swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
    'A reference to the party responsible for making the payments defined by this structure.'

    <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
    'A reference to the party that receives the payments corresponding to this structure.'

Start Choice [1]
        <calculationDates> AdjustableDates </calculationDates> [1]
        'The Calculation Period dates for this leg of the trade where the Calculation Periods are
        all one day long, typically a physically-settled emissions or metals trade. Only
        dates explicitly included determine the Calculation Periods and there is a Calculation
        Period for each date specified.'

        <calculationPeriods> AdjustableDates </calculationPeriods> [1]
        'The Calculation Period start dates for this leg of the swap. This type is only intended to
        be used if the Calculation Periods differ on each leg. If Calculation Periods mirror
        another leg, then the calculationPeriodsReference element should be used to point to
        the Calculation Periods on that leg - or the calculationPeriodsScheduleReference can be used
        to point to the Calculation Periods Schedule for that leg.'

        <calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </
        calculationPeriodsSchedule> [1]
        'The Calculation Periods for this leg of the swap. This type is only intended to be used if
        the Calculation Periods differ on each leg. If Calculation Periods mirror another leg, then
        the calculationPeriodsReference element should be used to point to the Calculation Periods
        on the other leg - or the calculationPeriodsScheduleReference can be used to point to
        the Calculation Periods Schedule for that leg.'

Start Choice [1]
            <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
            'A pointer style reference to the Calculation Periods defined on another leg.'

            <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
            </calculationPeriodsScheduleReference> [1]
            'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

            <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
            </calculationPeriodsDatesReference> [1]
            'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
End Choice
    <commodity> Commodity </commodity> [1]
    'Specifies the underlying instrument. At this time, only underlyers of type Commodity
```

are supported; the choice group in the future could offer the possibility of adding other types later.'

Start Choice [1]
Start Choice [1]
<notionalQuantitySchedule> CommodityNotionalQuantitySchedule </notionalQuantitySchedule> [1]

'Allows the documentation of a shaped notional trade where the notional changes over the life of the transaction.'

<notionalQuantity> CommodityNotionalQuantity </notionalQuantity> [1]

'The Notional Quantity.'

<settlementPeriodsNotionalQuantity> CommoditySettlementPeriodsNotionalQuantity </settlementPeriodsNotionalQuantity> [1..*]

'For an electricity transaction, the Notional Quantity for a one or more groups of Settlement Periods to which the Notional Quantity is based. If the schedule differs for different groups of Settlement Periods, this element should be repeated.'

End Choice
<totalNotionalQuantity> xsd:decimal </totalNotionalQuantity> [0..1]

'The Total Notional Quantity.'

<quantityReference> QuantityReference </quantityReference> [1]

'A pointer style reference to a quantity defined on another leg.'

End Choice
<calculation> FloatingLegCalculation </calculation> [1]

'Defines details relevant to the calculation of the floating price.'

Start Choice [1]
<relativePaymentDates> CommodityRelativePaymentDates </relativePaymentDates> [1]

'The Payment Dates of the trade relative to the Calculation Periods.'

Start Choice [1]
<paymentDates> AdjustableDatesOrRelativeDateOffset </paymentDates> [1]

'Dates on which payments will be made.'

<masterAgreementPaymentDates> xsd:boolean </masterAgreementPaymentDates> [1]

'If present and true indicates that the Payment Date(s) are specified in the relevant master agreement.'

End Choice
End Choice
Start Group: CommodityFreightFlatRate.model [0..1]
<flatRate> FlatRateEnum </flatRate> [1]

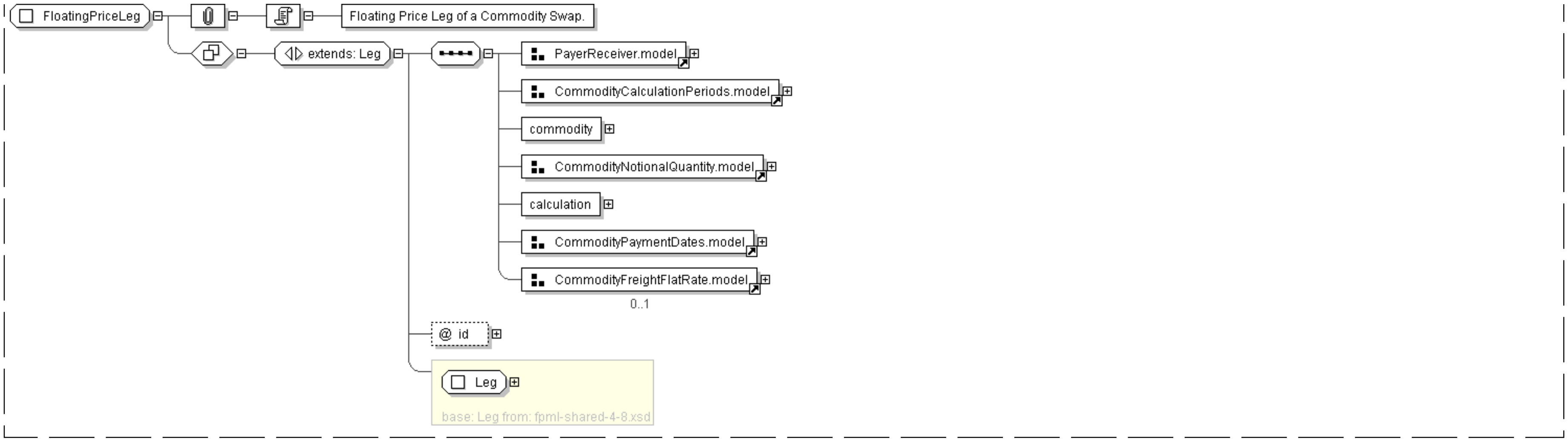
'Whether the Flat Rate is the New Worldwide Tanker Nominal Freight Scale for the Freight Index Route taken at the Trade Date of the transaction or taken on each Pricing Date.'

<flatRateAmount> NonNegativeMoney </flatRateAmount> [0..1]

'If flatRate is set to \"Fixed\", the actual value of the Flat Rate.'

End Group: CommodityFreightFlatRate.model
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FloatingPriceLeg">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:group ref=" CommodityCalculationPeriods.model "/>
            <xsd:element name="commodity" type=" Commodity "/>
            <xsd:group ref=" CommodityNotionalQuantity.model "/>
            <xsd:element name="calculation" type=" FloatingLegCalculation "/>
            <xsd:group ref=" CommodityPaymentDates.model "/>
            <xsd:group ref=" CommodityFreightFlatRate.model " minOccurs="0"/>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: GasDelivery

Super-types:	None
Sub-types:	None

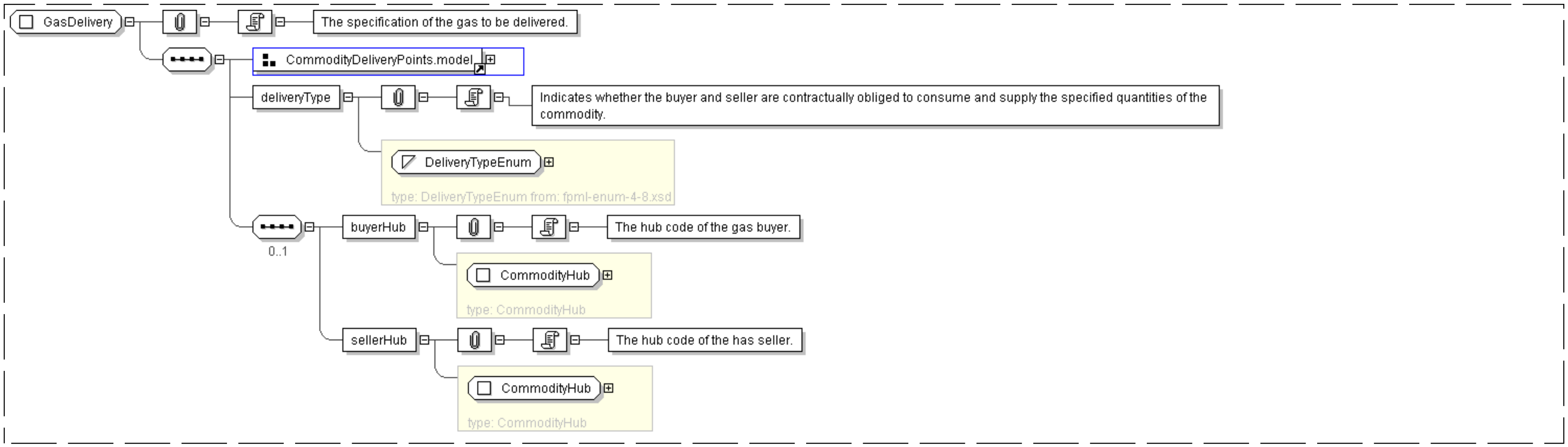
Name	GasDelivery
Used by (from the same schema document)	Complex Type **GasPhysicalLeg**
Abstract	no
Documentation	The specification of the gas to be delivered.

XML Instance Representation

```
<...>
Start Choice [1]
      <deliveryPoint> GasDeliveryPoint </deliveryPoint> [1]
      'The physical or virtual point at which the commodity will be delivered.'

      <entryPoint> CommodityDeliveryPoint </entryPoint> [1]
      'The physical or virtual point at which the commodity enters a transportation system.'

      <withdrawalPoint> CommodityDeliveryPoint </withdrawalPoint> [1]
      'The physical or virtual point at which the commodity is withdrawn from a
      transportation system.'

End Choice
   <deliveryType> DeliveryTypeEnum </deliveryType> [1]
```

```
'Indicates whether the buyer and seller are contractually obliged to consume and supply
the specified quantities of the commodity.'

Start Sequence [0..1]
      <buyerHub> CommodityHub </buyerHub> [1]
      'The hub code of the gas buyer.'

      <sellerHub> CommodityHub </sellerHub> [1]
      'The hub code of the has seller.'

End Sequence
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GasDelivery">
   <xsd:sequence>
      <xsd:group ref=" CommodityDeliveryPoints.model "/>
      <xsd:element name="deliveryType" type=" DeliveryTypeEnum "/>
      <xsd:sequence minOccurs="0">
         <xsd:element name="buyerHub" type=" CommodityHub "/>
         <xsd:element name="sellerHub" type=" CommodityHub "/>
      </xsd:sequence>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: GasDeliveryPeriods

Super-types:	CommodityDeliveryPeriods < **GasDeliveryPeriods** (by extension)
Sub-types:	None

Name	GasDeliveryPeriods
Used by (from the same schema document)	Complex Type **GasPhysicalLeg**
Abstract	no
Documentation	The different options for specifying the Delivery Periods for a physically settled gas trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <periods> AdjustableDates </periods> [1]
      'The Delivery Periods for this leg of the swap. This type is only intended to be used if
```

*the Delivery Periods differ from the Calculation Periods on the fixed or floating leg.
If DeliveryPeriods mirror another leg, then the calculationPeriodsReference element should
be used to point to the Calculation Periods on that leg - or
the calculationPeriodsScheduleReference can be used to point to the Calculation
Periods Schedule for that leg.'*

<periodsSchedule> CommodityCalculationPeriodsSchedule </periodsSchedule> [1]

*'The Delivery Periods for this leg of the swap. This type is only intended to be used if
the Delivery Periods differ from the Calculation Periods on the fixed or floating leg.
If DeliveryPeriods mirror another leg, then the calculationPeriodsReference element should
be used to point to the Calculation Periods on that leg - or
the calculationPeriodsScheduleReference can be used to point to the Calculation
Periods Schedule for that leg.'*

Start Choice [1]

<calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]

'A pointer style reference to the Calculation Periods defined on another leg.'

<calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
</calculationPeriodsScheduleReference> [1]

'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

<calculationPeriodsDatesReference> CalculationPeriodsDatesReference
</calculationPeriodsDatesReference> [1]

'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
End Choice
Start Sequence [0..1]

<supplyStartTime> PrevailingTime **</supplyStartTime>** [1]

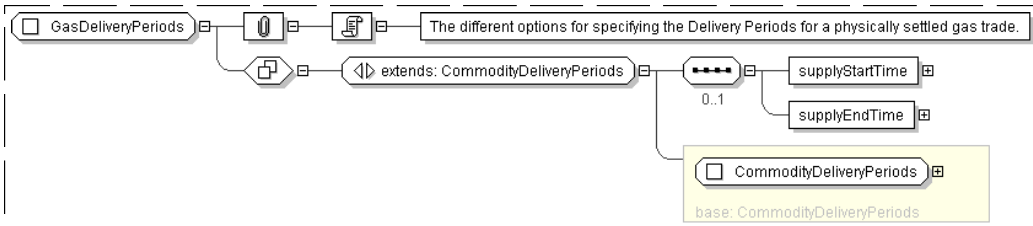
'The time at which gas delivery should start on each day of the Delivery Period(s).'

<supplyEndTime> PrevailingTime **</supplyEndTime>** [1]

'The time at which gas delivery should end on each day of the Delivery Period(s).'

End Sequence
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="GasDeliveryPeriods">
   <xsd:complexContent>
      <xsd:extension base=" CommodityDeliveryPeriods ">
         <xsd:sequence minOccurs="0">
            <xsd:element name="supplyStartTime" type=" PrevailingTime "/>
            <xsd:element name="supplyEndTime" type=" PrevailingTime "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: GasDeliveryPoint

Super-types:	Scheme < **GasDeliveryPoint** (by extension)
Sub-types:	None

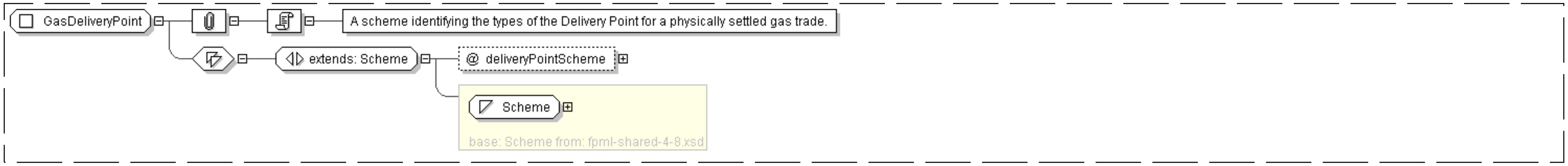
Name	GasDeliveryPoint

Used by (from the same schema document)	Model Group **CommodityDeliveryPoints.model**
Abstract	no
Documentation	A scheme identifying the types of the Delivery Point for a physically settled gas trade.

XML Instance Representation

```
<...
deliveryPointScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GasDeliveryPoint">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="deliveryPointScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: GasPhysicalLeg

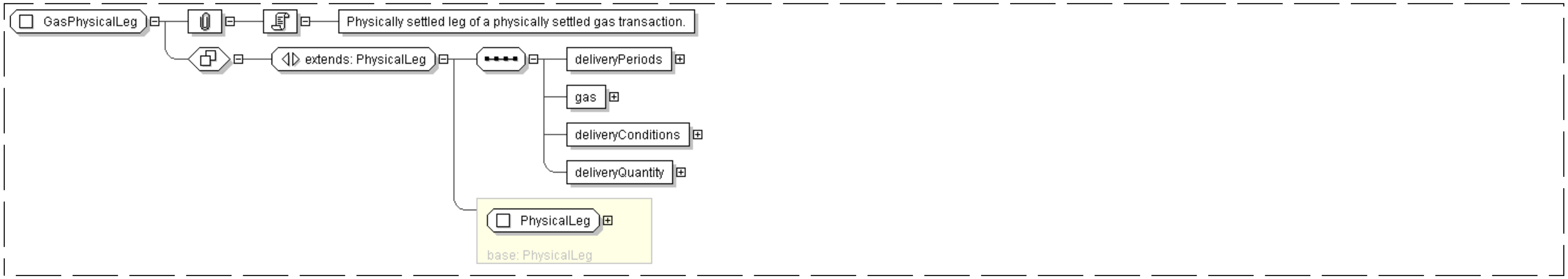
Super-types:	Leg < PhysicalLeg (by extension) < **GasPhysicalLeg** (by extension)
Sub-types:	None

Name	GasPhysicalLeg
Used by (from the same schema document)	Complex Type **CommoditySwap**
Abstract	no
Documentation	Physically settled leg of a physically settled gas transaction.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <deliveryPeriods> GasDeliveryPeriods </deliveryPeriods> [1]
   'The different options for specifying the Delivery or Supply Periods. Unless the quantity
   or price is to vary periodically during the trade or physical delivery occurs on a
   periodic basis, periodsSchedule should be used and set to 1T.'

   <gas> GasProduct </gas> [1]
   'The specification of the gas to be delivered.'

   <deliveryConditions> GasDelivery </deliveryConditions> [1]
   'The physical delivery conditions for the transaction.'

   <deliveryQuantity> GasPhysicalQuantity </deliveryQuantity> [1]
   'The different options for specifying the quantity. For Fixed trades where the quantity
   is known at the time of confirmation, a single quantity or a quantity per Delivery Period
   may be specified. For Variable trades minimum and maximum trades may be specified.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GasPhysicalLeg">
   <xsd:complexContent>
      <xsd:extension base=" PhysicalLeg ">
         <xsd:sequence>
            <xsd:element name="deliveryPeriods" type=" GasDeliveryPeriods "/>
            <xsd:element name="gas" type=" GasProduct "/>
            <xsd:element name="deliveryConditions" type=" GasDelivery "/>
            <xsd:element name="deliveryQuantity" type=" GasPhysicalQuantity "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: GasPhysicalQuantity

Super-types:	CommodityPhysicalQuantityBase < **GasPhysicalQuantity** (by extension)
Sub-types:	None

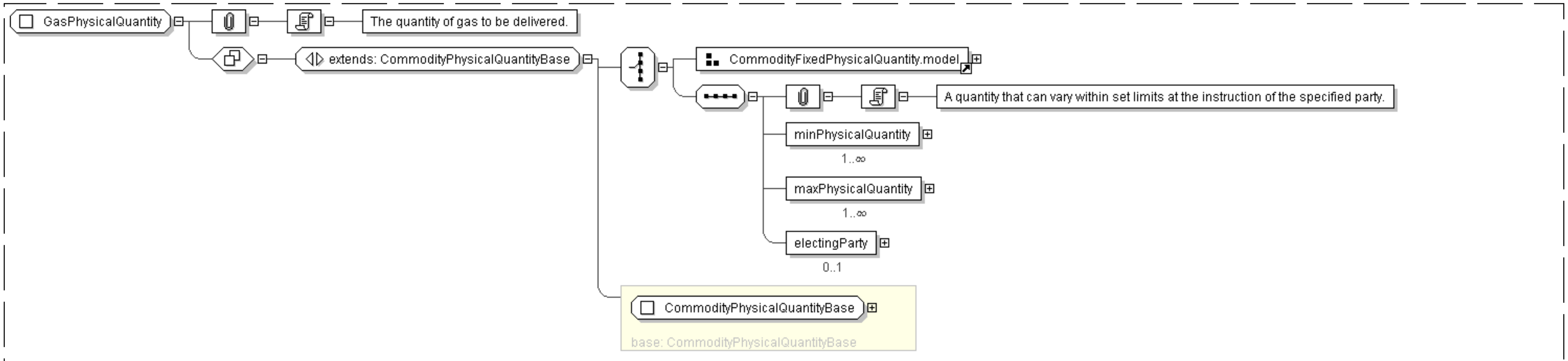
Name	GasPhysicalQuantity
Used by (from the same schema document)	Complex Type **GasPhysicalLeg**
Abstract	no
Documentation	The quantity of gas to be delivered.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
Start Choice [1]
         <physicalQuantity> CommodityNotionalQuantity </physicalQuantity> [1]
         'The Quantity per Delivery Period.'

         <physicalQuantitySchedule> CommodityPhysicalQuantitySchedule </physicalQuantitySchedule> [1]
         'Allows the documentation of a shaped quantity trade where the quantity changes over the
         life of the transaction.'
End Choice
      <totalPhysicalQuantity> UnitQuantity </totalPhysicalQuantity> [0..1]
      'The Total Quantity of the commodity to be delivered.'

      <minPhysicalQuantity> CommodityNotionalQuantity </minPhysicalQuantity> [1..*]
      'The minimum quantity to be delivered. If separate minimums need to be specified for
      different periods (e.g. a minimum per day and a minimum per month) this element should
      be repeated.'

      <maxPhysicalQuantity> CommodityNotionalQuantity </maxPhysicalQuantity> [1..*]
      'The maximum quantity to be delivered. If separate minimums need to be specified for
      different periods (e.g. a minimum per day and a minimum per month) this element should
      be repeated.'
```

```
<electingParty> PartyReference </electingParty> [0..1]
'Indicates the party able to choose whether the gas is delivered for a particular period e.g.
a swing or interruptible contract.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GasPhysicalQuantity">
   <xsd:complexContent>
      <xsd:extension base=" CommodityPhysicalQuantityBase ">
         <xsd:choice>
            <xsd:group ref=" CommodityFixedPhysicalQuantity.model "/>
            <xsd:sequence>
               <xsd:element name="minPhysicalQuantity" type=" CommodityNotionalQuantity
               " maxOccurs="unbounded"/>
               <xsd:element name="maxPhysicalQuantity" type=" CommodityNotionalQuantity
               " maxOccurs="unbounded"/>
               <xsd:element name="electingParty" type=" PartyReference " minOccurs="0"/>
            </xsd:sequence>
         </xsd:choice>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: GasProduct

Super-types:	None
Sub-types:	None

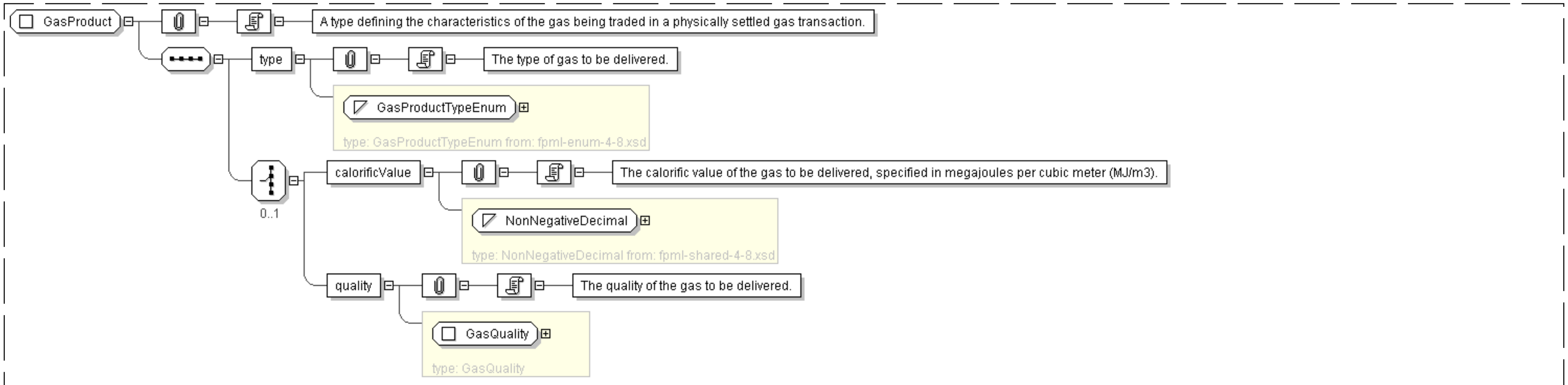
Name	GasProduct
Used by (from the same schema document)	Complex Type **GasPhysicalLeg**
Abstract	no
Documentation	A type defining the characteristics of the gas being traded in a physically settled gas transaction.

XML Instance Representation

```
<...>
   <type> GasProductTypeEnum </type> [1]
   'The type of gas to be delivered.'

Start Choice [0..1]
      <calorificValue> NonNegativeDecimal </calorificValue> [1]
      'The calorific value of the gas to be delivered, specified in megajoules per cubic meter
      (MJ/m3).'

      <quality> GasQuality </quality> [1]
```

```
'The quality of the gas to be delivered.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GasProduct">
   <xsd:sequence>
      <xsd:element name="type" type=" GasProductTypeEnum "/>
      <xsd:choice minOccurs="0">
         <xsd:element name="calorificValue" type=" NonNegativeDecimal "/>
         <xsd:element name="quality" type=" GasQuality "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: GasQuality

Super-types:	Scheme < **GasQuality** (by extension)
Sub-types:	None

Name	GasQuality
Used by (from the same schema document)	Complex Type **GasProduct**
Abstract	no
Documentation	The quantity of gas to be delivered.

XML Instance Representation

```
<...
gasQualityScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="GasQuality">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="gasQualityScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/commodity-gas-quality"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Lag

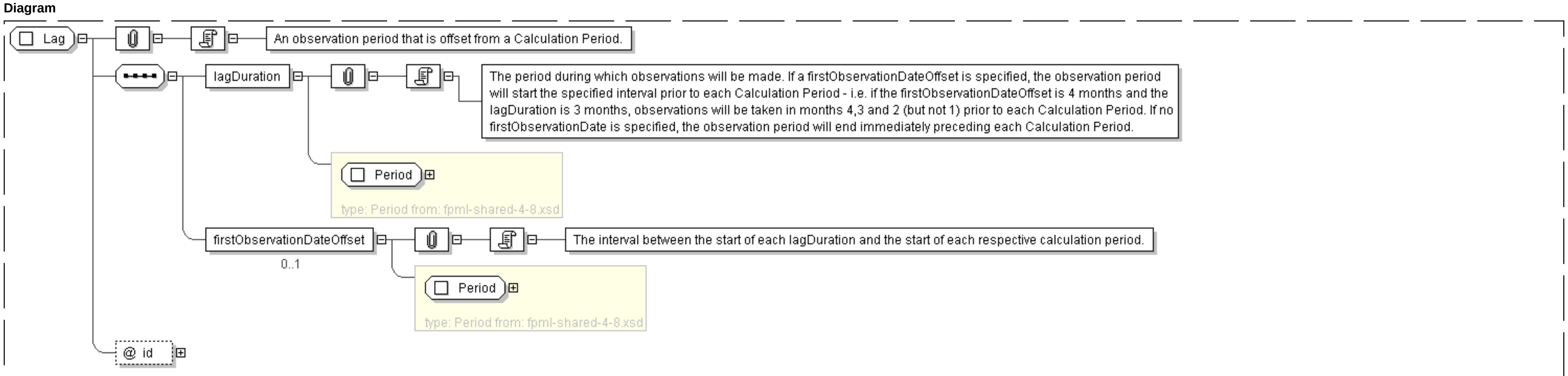
Super-types:	None
Sub-types:	None

Name	Lag
Used by (from the same schema document)	Complex Type **CommodityPricingDates** , Model Group **LagOrReference.model**
Abstract	no
Documentation	An observation period that is offset from a Calculation Period.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <lagDuration> Period </lagDuration> [1]
   'The period during which observations will be made. If a firstObservationDateOffset
   is specified, the observation period will start the specified interval prior to
   each Calculation Period - i.e. if the firstObservationDateOffset is 4 months and
   the lagDuration is 3 months, observations will be taken in months 4,3 and 2 (but not 1)
   prior to each Calculation Period. If no firstObservationDate is specified, the
   observation period will end immediately preceding each Calculation Period.'

   <firstObservationDateOffset> Period </firstObservationDateOffset> [0..1]
   'The interval between the start of each lagDuration and the start of each
   respective calculation period.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Lag">
   <xsd:sequence>
      <xsd:element name="lagDuration" type=" Period "/>
      <xsd:element name="firstObservationDateOffset" type=" Period " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: LagReference

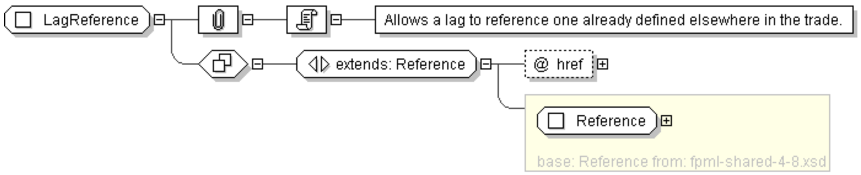
Super-types:	Reference < **LagReference** (by extension)
Sub-types:	None

Name	LagReference
Used by (from the same schema document)	Model Group **LagOrReference.model**
Abstract	no
Documentation	Allows a lag to reference one already defined elsewhere in the trade.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LagReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="Lag"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MarketDisruptionEvent

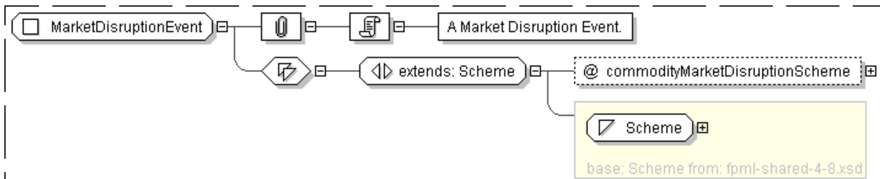
Super-types:	Scheme < **MarketDisruptionEvent** (by extension)
Sub-types:	None

Name	MarketDisruptionEvent
Used by (from the same schema document)	Complex Type **CommodityMarketDisruption** , Complex Type **CommodityMarketDisruption**
Abstract	no
Documentation	A Market Disruption Event.

XML Instance Representation

```
<...
commodityMarketDisruptionScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MarketDisruptionEvent">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
```

```
        <xsd:attribute name="commodityMarketDisruptionScheme" type=" xsd:anyURI " default="http://
        www.fpml.org/coding-scheme/commodity-market-disruption"/>
      </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: NonPeriodicFixedPriceLeg

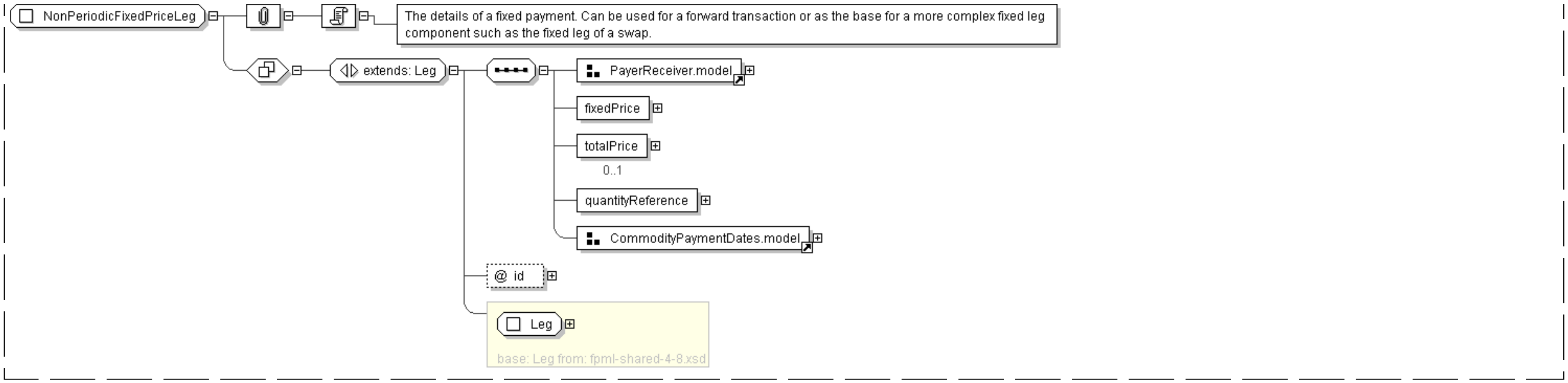
Super-types:	Leg < **NonPeriodicFixedPriceLeg** (by extension)
Sub-types:	None

Name	NonPeriodicFixedPriceLeg
Used by (from the same schema document)	Complex Type **CommodityForward**
Abstract	no
Documentation	The details of a fixed payment. Can be used for a forward transaction or as the base for a more complex fixed leg component such as the fixed leg of a swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
    'A reference to the party responsible for making the payments defined by this structure.'

    <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
    'A reference to the party that receives the payments corresponding to this structure.'

    <fixedPrice> FixedPrice </fixedPrice> [1]
    'Fixed price on which fixed payments are based.'

    <totalPrice> NonNegativeMoney </totalPrice> [0..1]
    'The total amount of the fixed payment for all units of the underlying commodity.'

    <quantityReference> QuantityReference </quantityReference> [1]
    'A pointer style reference to a quantity defined on another leg.'

Start Choice [1]
        <relativePaymentDates> CommodityRelativePaymentDates </relativePaymentDates> [1]
        'The Payment Dates of the trade relative to the Calculation Periods.'

Start Choice [1]
            <paymentDates> AdjustableDatesOrRelativeDateOffset </paymentDates> [1]
            'Dates on which payments will be made.'

            <masterAgreementPaymentDates> xsd:boolean </masterAgreementPaymentDates> [1]
            'If present and true indicates that the Payment Date(s) are specified in the relevant
            master agreement.'

End Choice
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NonPeriodicFixedPriceLeg">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="fixedPrice" type=" FixedPrice "/>
            <xsd:element name="totalPrice" type=" NonNegativeMoney " minOccurs="0"/>
            <xsd:element name="quantityReference" type=" QuantityReference "/>
            <xsd:group ref=" CommodityPaymentDates.model "/>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OilDelivery

Super-types:	None
Sub-types:	None

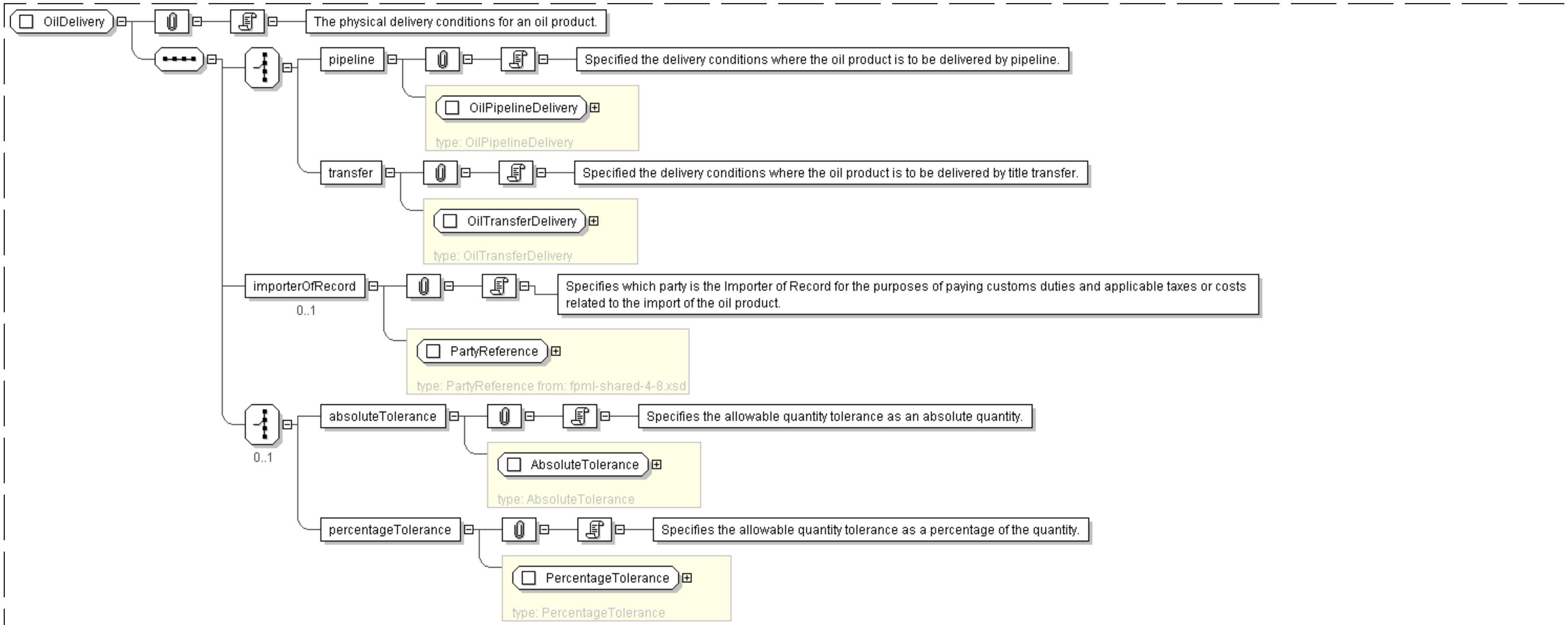
Name	OilDelivery
Used by (from the same schema document)	Complex Type **OilPhysicalLeg**
Abstract	no
Documentation	The physical delivery conditions for an oil product.

XML Instance Representation

```
<...>
Start Choice [1]
      <pipeline> OilPipelineDelivery </pipeline> [1]
      'Specified the delivery conditions where the oil product is to be delivered by pipeline.'

      <transfer> OilTransferDelivery </transfer> [1]
      'Specified the delivery conditions where the oil product is to be delivered by title transfer.'

End Choice
   <importerOfRecord> PartyReference </importerOfRecord> [0..1]
   'Specifies which party is the Importer of Record for the purposes of paying customs duties
   and applicable taxes or costs related to the import of the oil product.'

Start Choice [0..1]
      <absoluteTolerance> AbsoluteTolerance </absoluteTolerance> [1]
      'Specifies the allowable quantity tolerance as an absolute quantity.'

      <percentageTolerance> PercentageTolerance </percentageTolerance> [1]
      'Specifies the allowable quantity tolerance as a percentage of the quantity.'
```

```
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OilDelivery">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="pipeline" type=" OilPipelineDelivery "/>
         <xsd:element name="transfer" type=" OilTransferDelivery "/>
      </xsd:choice>
      <xsd:element name="importerOfRecord" type=" PartyReference " minOccurs="0"/>
      <xsd:choice minOccurs="0">
         <xsd:element name="absoluteTolerance" type=" AbsoluteTolerance "/>
         <xsd:element name="percentageTolerance" type=" PercentageTolerance "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OilPhysicalLeg

Super-types:	Leg < PhysicalLeg (by extension) < **OilPhysicalLeg** (by extension)
Sub-types:	None

Name	OilPhysicalLeg
Used by (from the same schema document)	Complex Type **CommoditySwap**
Abstract	no
Documentation	Physically settled leg of a physically settled oil product transaction.

XML Instance Representation

```
<...
```

' id=" xsd:ID [0..1]">
<payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]

'A reference to the party responsible for making the payments defined by this structure.'

<receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]

'A reference to the party that receives the payments corresponding to this structure.'

<deliveryPeriods> CommodityDeliveryPeriods **</deliveryPeriods>** [1]

'The different options for specifying the Delivery or Supply Periods. Unless the quantity or price is to vary periodically during the trade or physical delivery occurs on a periodic basis, periodsSchedule should be used and set to 1T.'

<oil> OilProduct **</oil>** [1]

'The specification of the oil product to be delivered.'

<deliveryConditions> OilDelivery **</deliveryConditions>** [1]

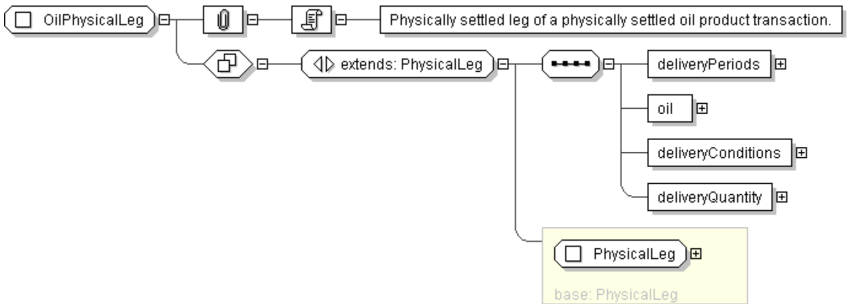
'The physical delivery conditions for the transaction.'

<deliveryQuantity> CommodityPhysicalQuantity **</deliveryQuantity>** [1]

'The different options for specifying the quantity.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="OilPhysicalLeg">
   <xsd:complexContent>
      <xsd:extension base=" PhysicalLeg ">
         <xsd:sequence>
            <xsd:element name="deliveryPeriods" type=" CommodityDeliveryPeriods "/>
            <xsd:element name="oil" type=" OilProduct "/>
            <xsd:element name="deliveryConditions" type=" OilDelivery "/>
            <xsd:element name="deliveryQuantity" type=" CommodityPhysicalQuantity "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OilPipelineDelivery

Super-types:	None
Sub-types:	None

Name	OilPipelineDelivery
Used by (from the same schema document)	Complex Type **OilDelivery**
Abstract	no
Documentation	The physical delivery conditions specific to an oil product delivered by pipeline.

XML Instance Representation

<...>
<pipelineName> CommodityPipeline </pipelineName> [1]

'The name of pipeline by which the oil product will be delivered.'

<withdrawalPoint> CommodityDeliveryPoint </withdrawalPoint> [0..1]

'The location at which the transfer of the title to the commodity takes place.'

<entryPoint> CommodityDeliveryPoint </entryPoint> [0..1]

'The point at which the oil product will enter the pipeline.'

<deliverableByBarge> xsd:boolean </deliverableByBarge> [1]

'Whether or not the delivery can go to barge. For trades documented under the ISDA Master Agreement and Oil Annex, this should always be set to \'false\'.'

<risk> CommodityDeliveryRisk </risk> [0..1]

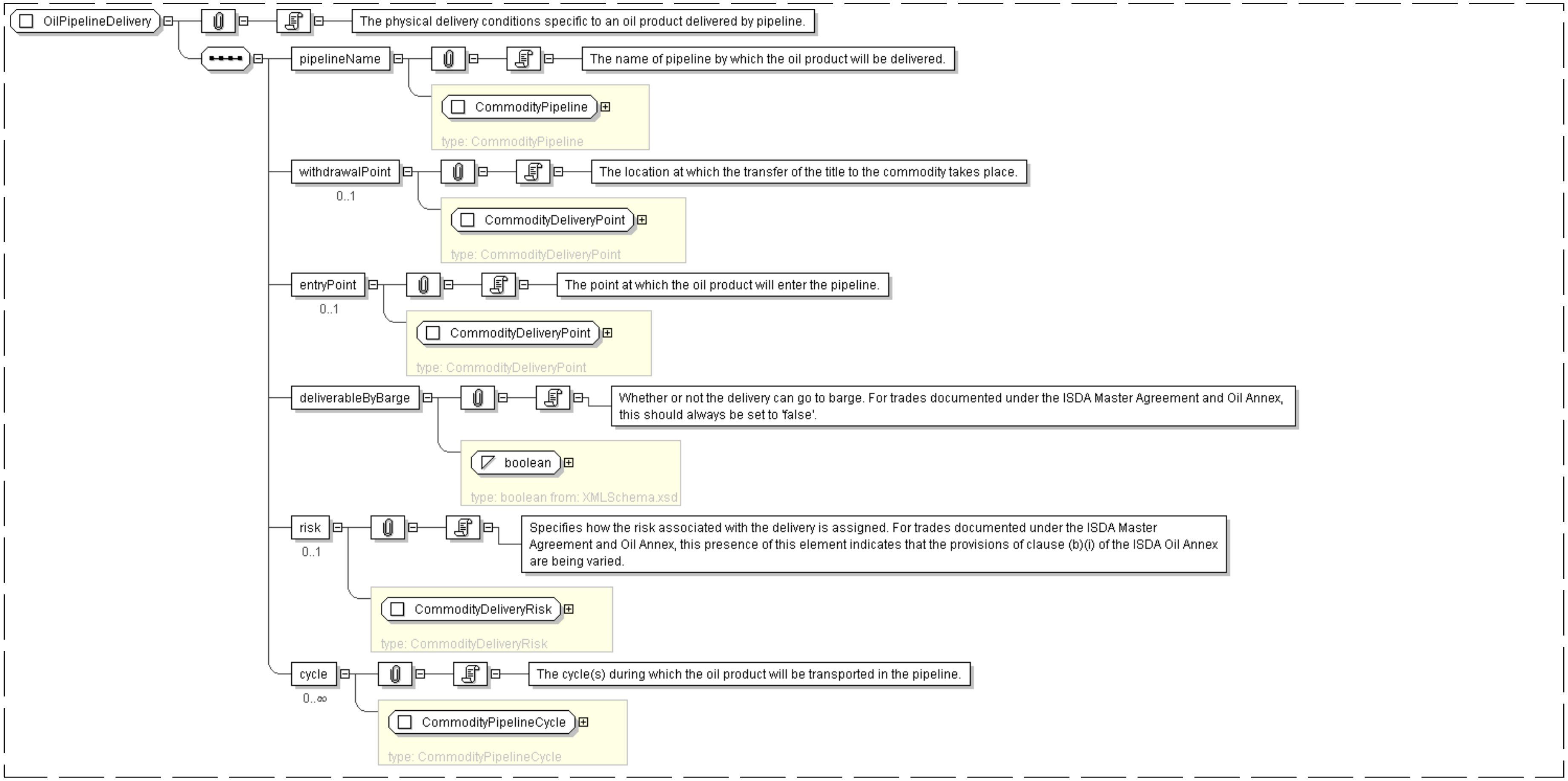
'Specifies how the risk associated with the delivery is assigned. For trades documented under the ISDA Master Agreement and Oil Annex, this presence of this element indicates that the provisions of clause (b)(i) of the ISDA Oil Annex are being varied.'

<cycle> CommodityPipelineCycle </cycle> [0..*]

'The cycle(s) during which the oil product will be transported in the pipeline.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="OilPipelineDelivery">
   <xsd:sequence>
      <xsd:element name="pipelineName" type=" CommodityPipeline "/>
```

```
        <xsd:element name="withdrawalPoint" type=" CommodityDeliveryPoint " minOccurs="0"/>
        <xsd:element name="entryPoint" type=" CommodityDeliveryPoint " minOccurs="0"/>
        <xsd:element name="deliverableByBarge" type=" xsd:boolean "/>
        <xsd:element name="risk" type=" CommodityDeliveryRisk " minOccurs="0"/>
        <xsd:element name="cycle" type=" CommodityPipelineCycle " minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OilProduct

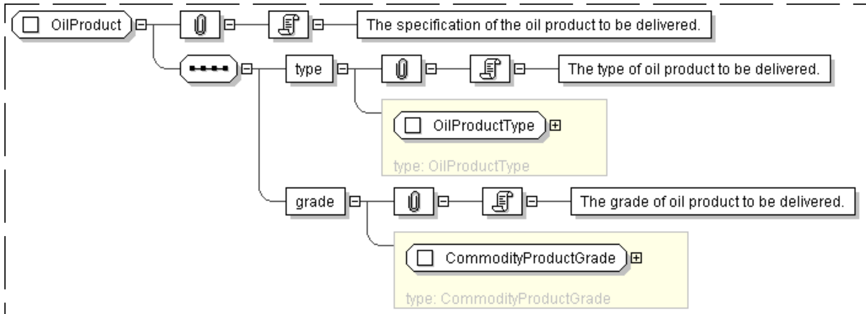
Super-types:	None
Sub-types:	None

Name	OilProduct
Used by (from the same schema document)	Complex Type **OilPhysicalLeg**
Abstract	no
Documentation	The specification of the oil product to be delivered.

XML Instance Representation

```
<...>
    <type> OilProductType </type> [1]
    'The type of oil product to be delivered.'

    <grade> CommodityProductGrade </grade> [1]
    'The grade of oil product to be delivered.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OilProduct">
    <xsd:sequence>
        <xsd:element name="type" type=" OilProductType "/>
        <xsd:element name="grade" type=" CommodityProductGrade "/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OilProductType

Super-types:	Scheme < **OilProductType** (by extension)
Sub-types:	None

Name	OilProductType
Used by (from the same schema document)	Complex Type **OilProduct**
Abstract	no
Documentation	The type of physical commodity product to be delivered.

XML Instance Representation

```
<...
commodityOilProductTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="OilProductType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="commodityOilProductTypeScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/commodity-oil-product-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: OilTransferDelivery

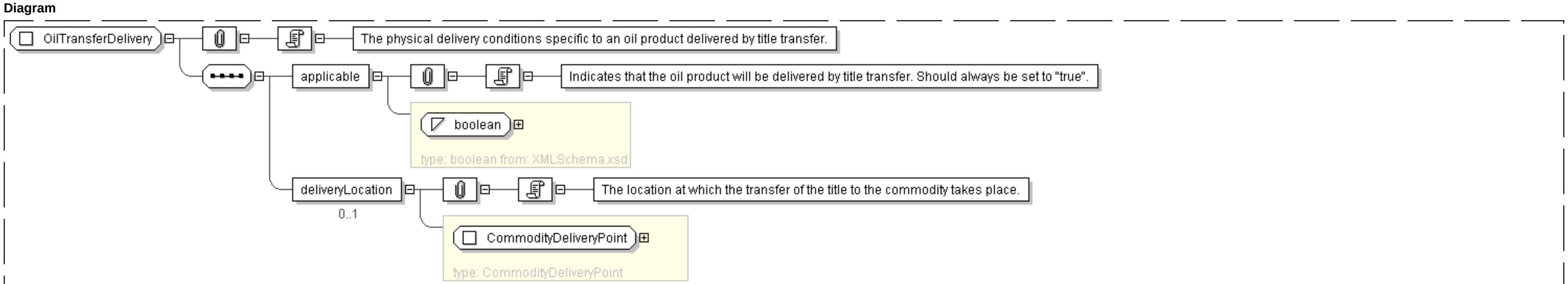
Super-types:	None
Sub-types:	None

Name	OilTransferDelivery
Used by (from the same schema document)	Complex Type **OilDelivery**
Abstract	no
Documentation	The physical delivery conditions specific to an oil product delivered by title transfer.

XML Instance Representation

```
<...>
   <applicable> xsd:boolean </applicable> [1]
   'Indicates that the oil product will be delivered by title transfer. Should always be set
   to \"true\".'

   <deliveryLocation> CommodityDeliveryPoint </deliveryLocation> [0..1]
   'The location at which the transfer of the title to the commodity takes place.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OilTransferDelivery">
```

```
    <xsd:sequence>
        <xsd:element name="applicable" type=" xsd:boolean "/>
        <xsd:element name="deliveryLocation" type=" CommodityDeliveryPoint " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PercentageTolerance

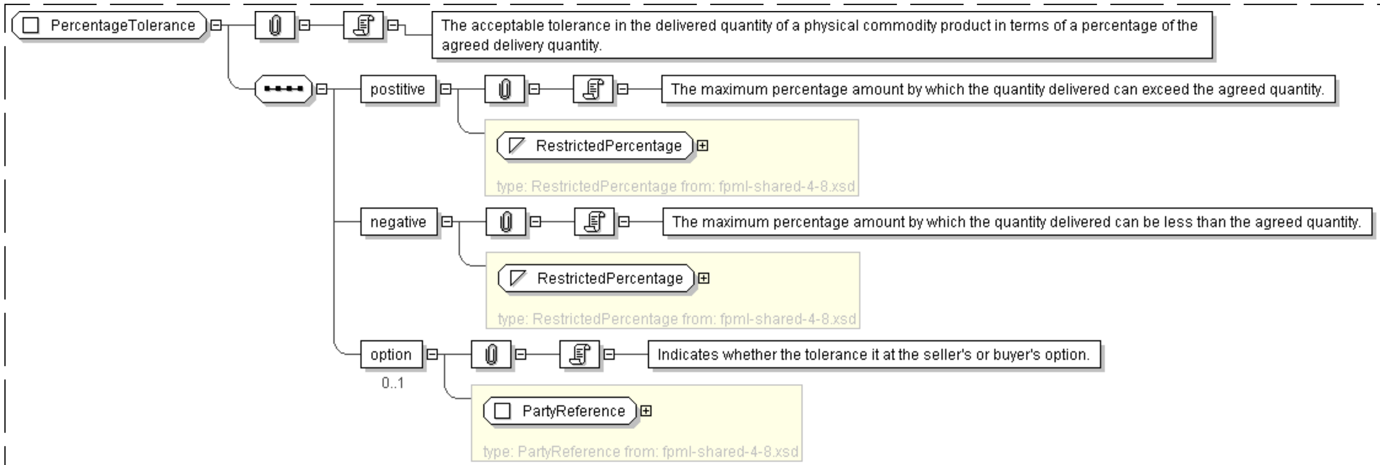
Super-types:	None
Sub-types:	None

Name	PercentageTolerance
Used by (from the same schema document)	Complex Type **OilDelivery**
Abstract	no
Documentation	The acceptable tolerance in the delivered quantity of a physical commodity product in terms of a percentage of the agreed delivery quantity.

XML Instance Representation

```
<...>
    <postitive> RestrictedPercentage </postitive> [1]
    'The maximum percentage amount by which the quantity delivered can exceed the agreed quantity.'

    <negative> RestrictedPercentage </negative> [1]
    'The maximum percentage amount by which the quantity delivered can be less than the
    agreed quantity.'

    <option> PartyReference </option> [0..1]
    'Indicates whether the tolerance it at the seller\'s or buyer\'s option.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PercentageTolerance">
    <xsd:sequence>
        <xsd:element name="postitive" type=" RestrictedPercentage "/>
        <xsd:element name="negative" type=" RestrictedPercentage "/>
        <xsd:element name="option" type=" PartyReference " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PhysicalDeliveryDatesReference

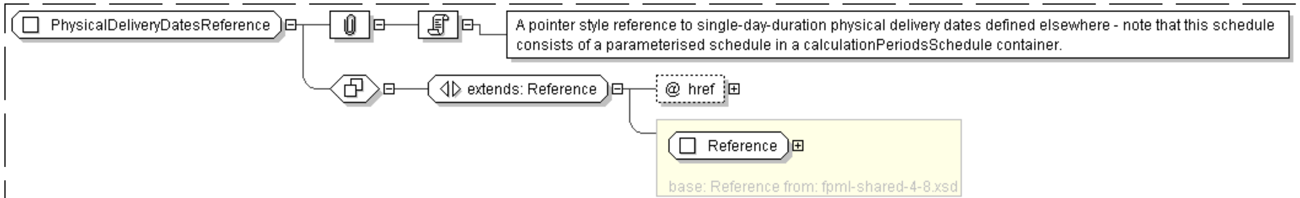
Super-types:	Reference < **PhysicalDeliveryDatesReference** (by extension)
Sub-types:	None

Name	PhysicalDeliveryDatesReference
Abstract	no
Documentation	A pointer style reference to single-day-duration physical delivery dates defined elsewhere - note that this schedule consists of a parameterised schedule in a calculationPeriodsSchedule container.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PhysicalDeliveryDatesReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="CommodityCalculationPeriodsSchedule"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PhysicalLeg

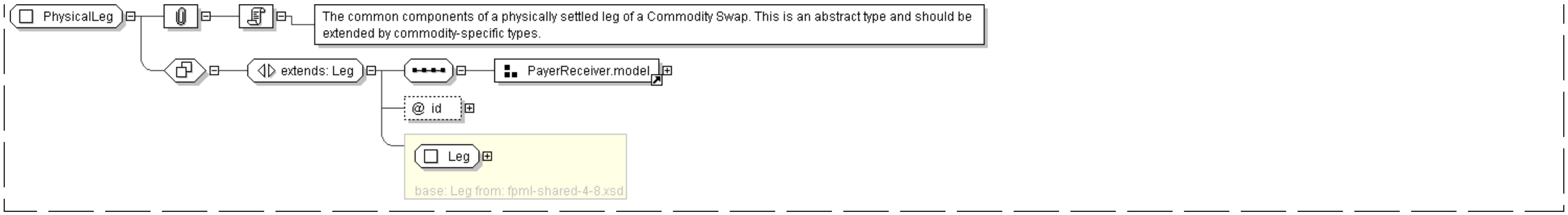
Super-types:	Leg < **PhysicalLeg** (by extension)
Sub-types:	• BullionPhysicalLeg (by extension) • CoalPhysicalLeg (by extension) • ElectricityPhysicalLeg (by extension) • GasPhysicalLeg (by extension) • OilPhysicalLeg (by extension)

Name	PhysicalLeg
Abstract	yes
Documentation	The common components of a physically settled leg of a Commodity Swap. This is an abstract type and should be extended by commodity-specific types.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PhysicalLeg" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuantityReference

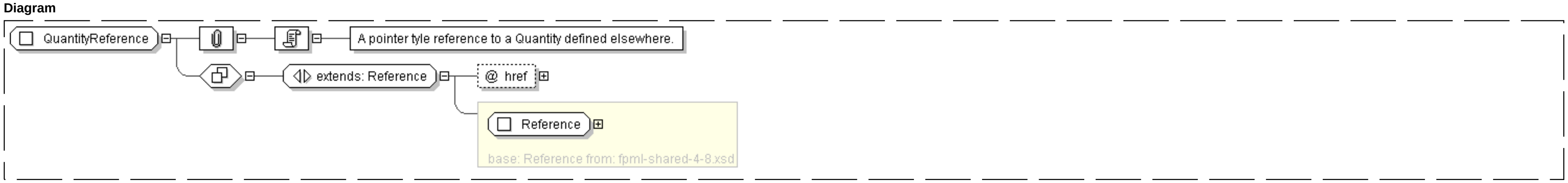
Super-types:	Reference < **QuantityReference** (by extension)
Sub-types:	None

Name	QuantityReference
Used by (from the same schema document)	Complex Type **NonPeriodicFixedPriceLeg** , Model Group **CommodityNotionalQuantity.model**
Abstract	no
Documentation	A pointer tyle reference to a Quantity defined elsewhere.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuantityReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="CommodityPhysicalQuantityBase"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuantityScheduleReference

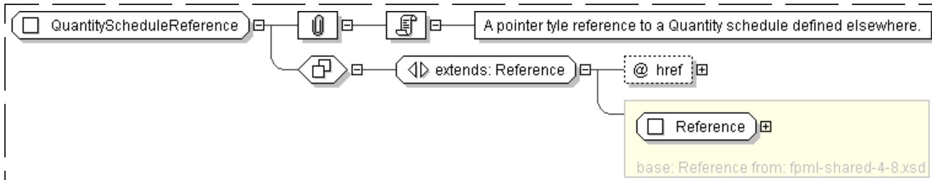
Super-types:	Reference < **QuantityScheduleReference** (by extension)
Sub-types:	None

Name	QuantityScheduleReference
Abstract	no
Documentation	A pointer tyle reference to a Quantity schedule defined elsewhere.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuantityScheduleReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="CommodityNotionalQuantitySchedule"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SequencedDisruptionFallback

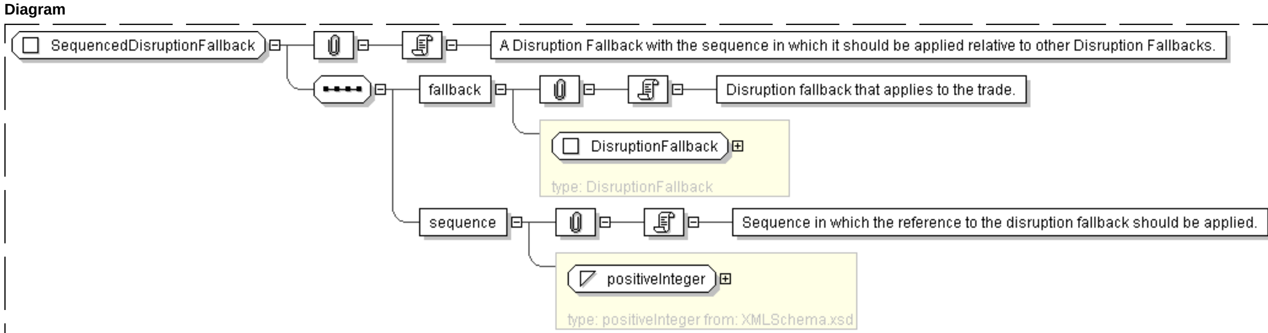
Super-types:	None
Sub-types:	None

Name	SequencedDisruptionFallback
Used by (from the same schema document)	Complex Type **CommodityMarketDisruption**
Abstract	no
Documentation	A Disruption Fallback with the sequence in which it should be applied relative to other Disruption Fallbacks.

XML Instance Representation

```
<...>
   <fallback> DisruptionFallback </fallback> [1]
   'Disruption fallback that applies to the trade.'

   <sequence> xsd:positiveInteger </sequence> [1]
   'Sequence in which the reference to the disruption fallback should be applied.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SequencedDisruptionFallback">
   <xsd:sequence>
      <xsd:element name="fallback" type=" DisruptionFallback "/>
      <xsd:element name="sequence" type=" xsd:positiveInteger "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SettlementPeriods

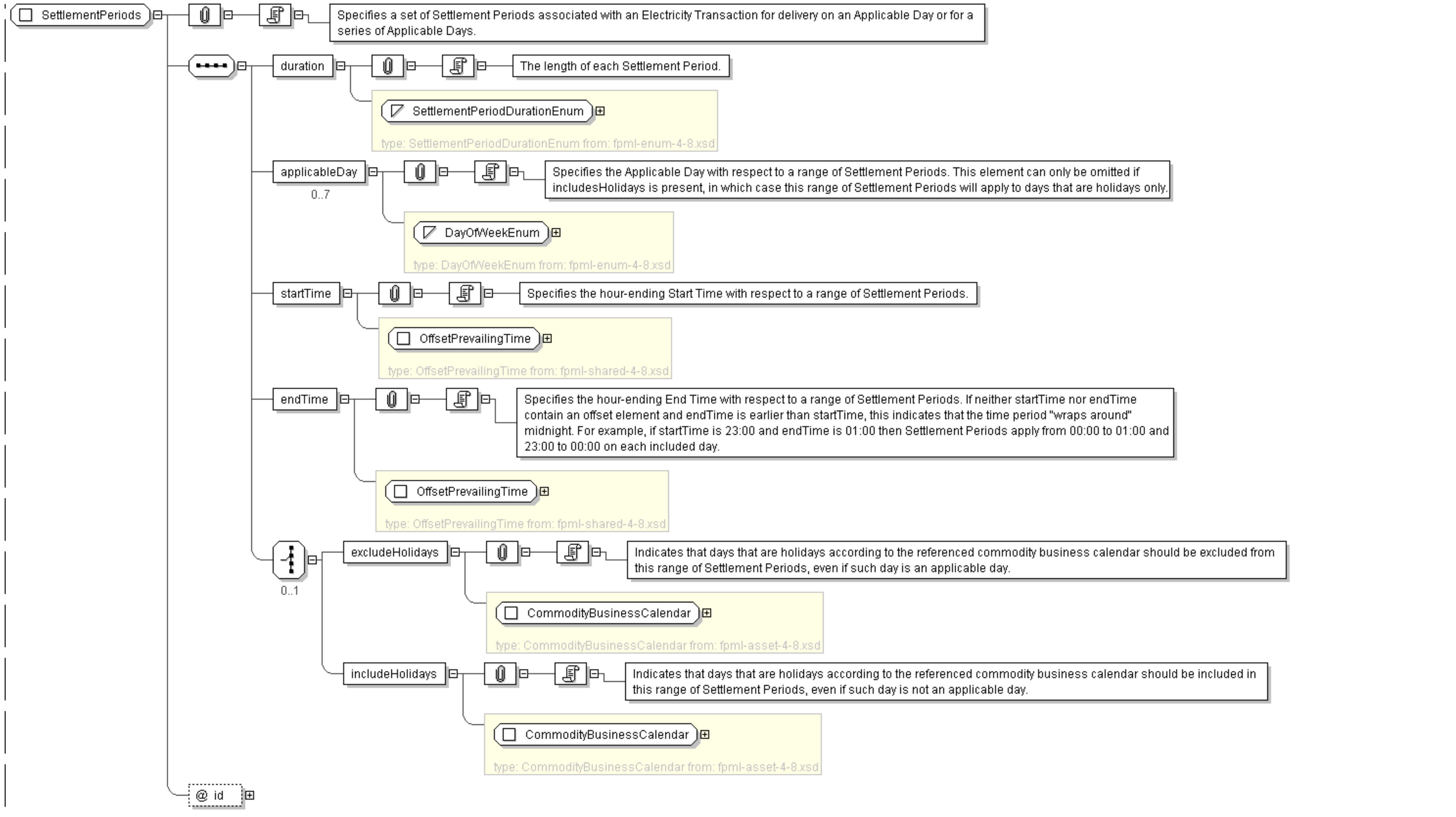
Super-types:	None
Sub-types:	None

Name	SettlementPeriods
Used by (from the same schema document)	Complex Type **CommodityPricingDates** , Complex Type **ElectricityDeliveryPeriods** , Complex Type **ElectricityPhysicalLeg**
Abstract	no
Documentation	Specifies a set of Settlement Periods associated with an Electricity Transaction for delivery on an Applicable Day or for a series of Applicable Days.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <duration> SettlementPeriodDurationEnum </duration> [1]
   'The length of each Settlement Period.'

   <applicableDay> DayOfWeekEnum </applicableDay> [0..7]
   'Specifies the Applicable Day with respect to a range of Settlement Periods. This element
   can only be omitted if includesHolidays is present, in which case this range of
   Settlement Periods will apply to days that are holidays only.'

   <startTime> OffsetPrevailingTime </startTime> [1]
   'Specifies the hour-ending Start Time with respect to a range of Settlement Periods.'

   <endTime> OffsetPrevailingTime </endTime> [1]
   'Specifies the hour-ending End Time with respect to a range of Settlement Periods. If
   neither startTime nor endTime contain an offset element and endTime is earlier than
   startTime, this indicates that the time period \"wraps around\" midnight. For example,
   if startTime is 23:00 and endTime is 01:00 then Settlement Periods apply from 00:00 to
   01:00 and 23:00 to 00:00 on each included day.'

Start Choice [0..1]
      <excludeHolidays> CommodityBusinessCalendar </excludeHolidays> [1]
      'Indicates that days that are holidays according to the referenced commodity business
      calendar should be excluded from this range of Settlement Periods, even if such day is
      an applicable day.'

      <includeHolidays> CommodityBusinessCalendar </includeHolidays> [1]
      'Indicates that days that are holidays according to the referenced commodity business
      calendar should be included in this range of Settlement Periods, even if such day is not
      an applicable day.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementPeriods">
   <xsd:sequence>
      <xsd:element name="duration" type=" SettlementPeriodDurationEnum "/>
      <xsd:element name="applicableDay" type=" DayOfWeekEnum " minOccurs="0" maxOccurs="7"/>
      <xsd:element name="startTime" type=" OffsetPrevailingTime "/>
      <xsd:element name="endTime" type=" OffsetPrevailingTime "/>
      <xsd:choice minOccurs="0">
         <xsd:element name="excludeHolidays" type=" CommodityBusinessCalendar "/>
         <xsd:element name="includeHolidays" type=" CommodityBusinessCalendar "/>
      </xsd:choice>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: SettlementPeriodsFixedPrice

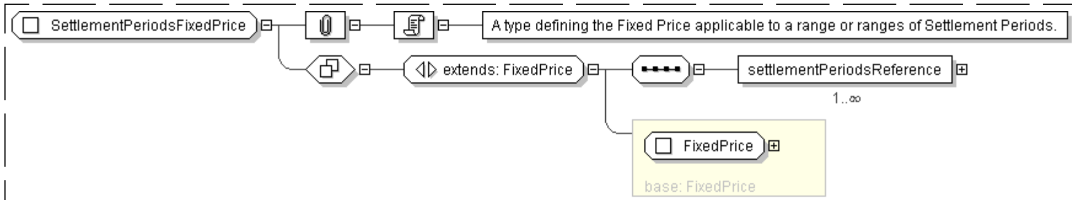
Super-types:	FixedPrice < **SettlementPeriodsFixedPrice** (by extension)
Sub-types:	None

Name	SettlementPeriodsFixedPrice
Used by (from the same schema document)	Model Group **CommodityFixedPrice.model**
Abstract	no
Documentation	A type defining the Fixed Price applicable to a range or ranges of Settlement Periods.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <price> xsd:decimal </price> [1]
   'The Fixed Price.'

   <priceCurrency> Currency </priceCurrency> [1]
   'Currency of the fixed price.'

   <priceUnit> QuantityUnit </priceUnit> [1]
   'The unit of measure used to calculate the Fixed Price.'

   <settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementPeriodsFixedPrice">
   <xsd:complexContent>
      <xsd:extension base=" FixedPrice ">
         <xsd:sequence>
            <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
            " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SettlementPeriodsReference

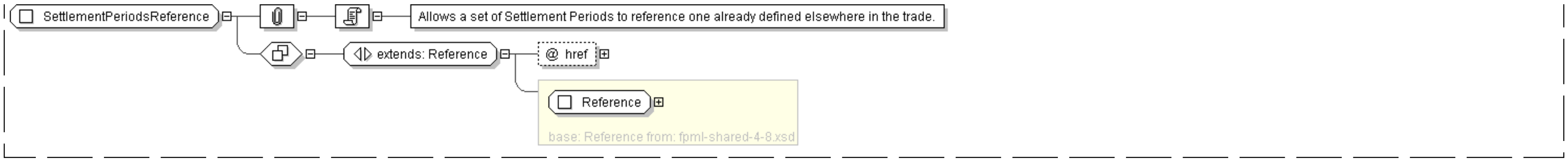
Super-types:	Reference < **SettlementPeriodsReference** (by extension)
Sub-types:	None

Name	SettlementPeriodsReference
Used by (from the same schema document)	Complex Type **CommodityPricingDates** , Complex Type **CommoditySettlementPeriodsNotionalQuantity** , Complex Type **CommoditySettlementPeriodsNotionalQuantitySchedule** , Complex Type **CommoditySettlementPeriodsPriceSchedule** , Complex Type **ElectricityPhysicalDeliveryQuantity** , Complex Type **ElectricityPhysicalDeliveryQuantitySchedule** , Complex Type **SettlementPeriodsFixedPrice** , Complex Type **SettlementPeriodsStep**
Abstract	no
Documentation	Allows a set of Settlement Periods to reference one already defined elsewhere in the trade.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementPeriodsReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="SettlementPeriods"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SettlementPeriodsSchedule

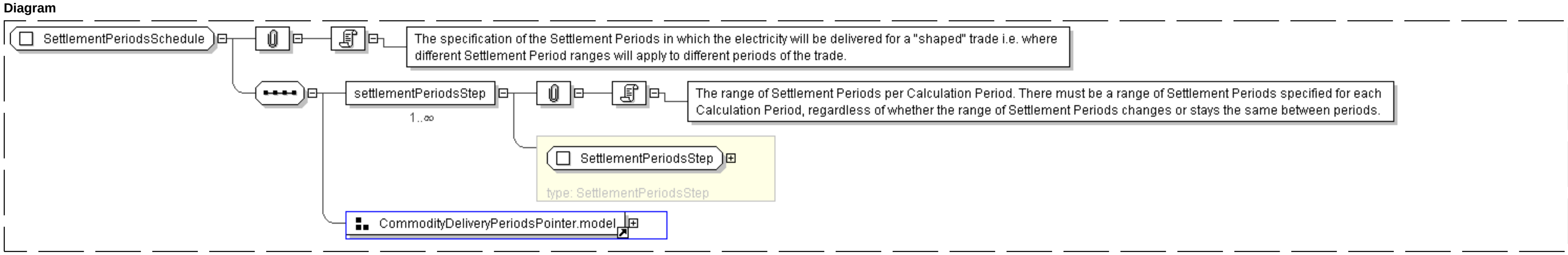
Super-types:	None
Sub-types:	None

Name	SettlementPeriodsSchedule
Used by (from the same schema document)	Complex Type **ElectricityPhysicalLeg**
Abstract	no
Documentation	The specification of the Settlement Periods in which the electricity will be delivered for a "shaped" trade i.e. where different Settlement Period ranges will apply to different periods of the trade.

XML Instance Representation

```
<...>
   <settlementPeriodsStep> SettlementPeriodsStep </settlementPeriodsStep> [1..*]
   'The range of Settlement Periods per Calculation Period. There must be a range of
   Settlement Periods specified for each Calculation Period, regardless of whether the range
   of Settlement Periods changes or stays the same between periods.'

Start Choice [1]
      <deliveryPeriodsReference> CalculationPeriodsReference </deliveryPeriodsReference> [1]
      'A pointer style reference to the Delivery Periods defined elsewhere.'

      <deliveryPeriodsScheduleReference> CalculationPeriodsScheduleReference
      </deliveryPeriodsScheduleReference> [1]
      'A pointer style reference to the Calculation Periods Schedule defined elsewhere.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementPeriodsSchedule">
   <xsd:sequence>
      <xsd:element name="settlementPeriodsStep" type=" SettlementPeriodsStep " maxOccurs="unbounded"/>
      <xsd:group ref=" CommodityDeliveryPeriodsPointer.model "/>
```

```
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SettlementPeriodsStep

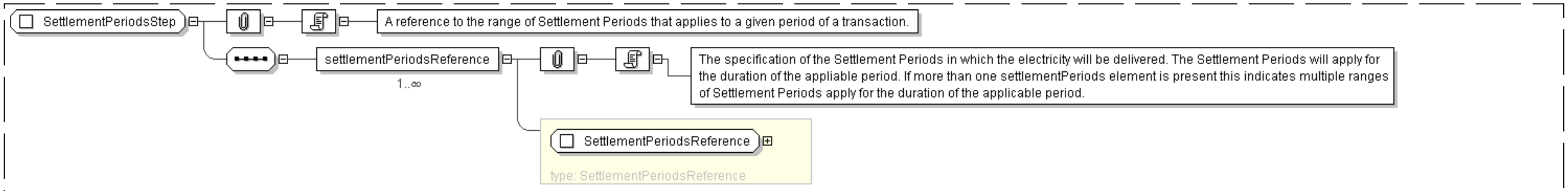
Super-types:	None
Sub-types:	None

Name	SettlementPeriodsStep
Used by (from the same schema document)	Complex Type **SettlementPeriodsSchedule**
Abstract	no
Documentation	A reference to the range of Settlement Periods that applies to a given period of a transaction.

XML Instance Representation

```
<...>
    <settlementPeriodsReference> SettlementPeriodsReference </settlementPeriodsReference> [1..*]
    'The specification of the Settlement Periods in which the electricity will be delivered.
    The Settlement Periods will apply for the duration of the appliable period. If more than
    one settlementPeriods element is present this indicates multiple ranges of Settlement
    Periods apply for the duration of the applicable period.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementPeriodsStep">
    <xsd:sequence>
        <xsd:element name="settlementPeriodsReference" type=" SettlementPeriodsReference
        " maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: UnitQuantity

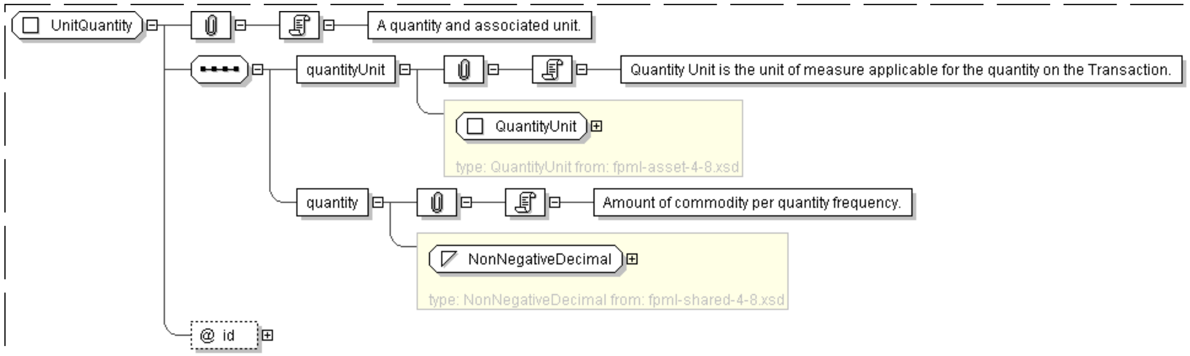
Super-types:	None
Sub-types:	None

Name	UnitQuantity
Used by (from the same schema document)	Complex Type **ElectricityPhysicalQuantity** , Model Group **CommodityFixedPhysicalQuantity.model**
Abstract	no
Documentation	A quantity and associated unit.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <quantityUnit> QuantityUnit </quantityUnit> [1]
    'Quantity Unit is the unit of measure applicable for the quantity on the Transaction.'

    <quantity> NonNegativeDecimal </quantity> [1]
    'Amount of commodity per quantity frequency.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="UnitQuantity">
   <xsd:sequence>
      <xsd:element name="quantityUnit" type=" QuantityUnit "/>
      <xsd:element name="quantity" type=" NonNegativeDecimal "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

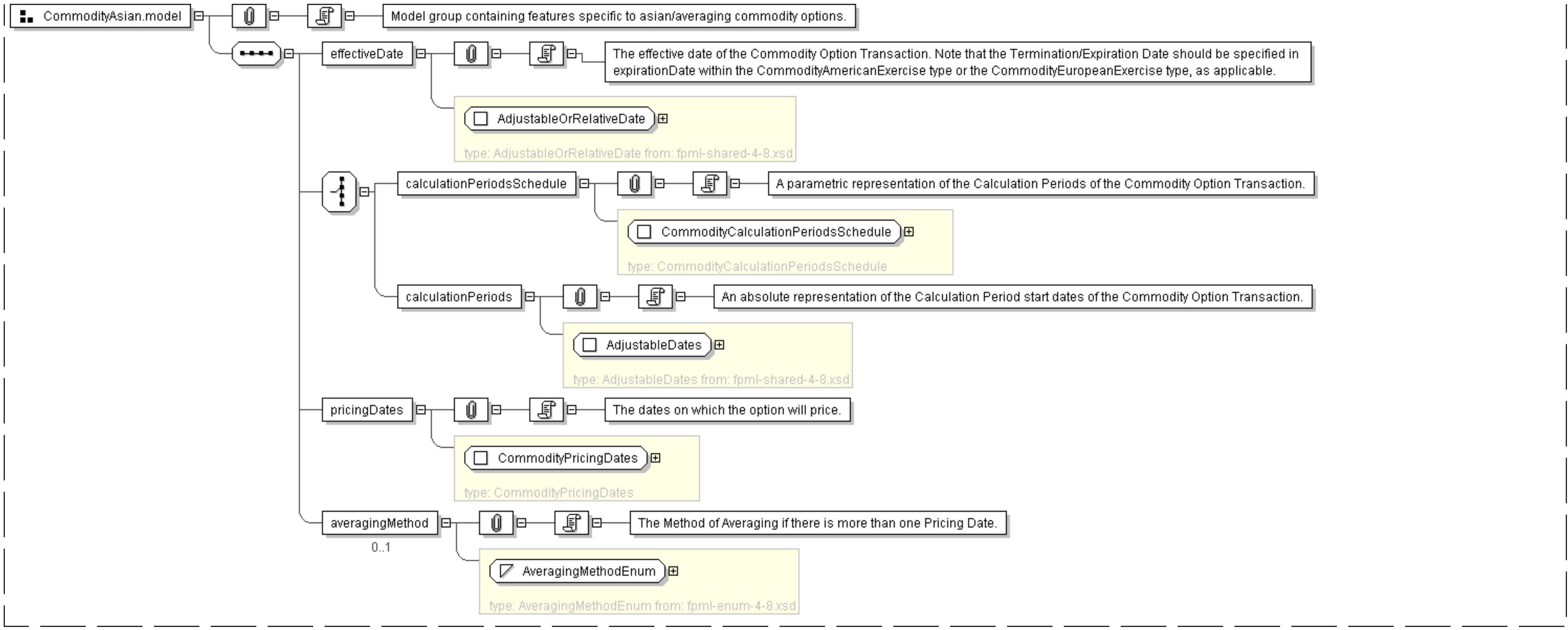
Model Group: CommodityAsian.model

Name	CommodityAsian.model
Used by (from the same schema document)	Model Group **CommodityFinancialOption.model**
Documentation	Model group containing features specific to asian/averaging commodity options.

XML Instance Representation

```
<effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
'The effective date of the Commodity Option Transaction. Note that the Termination/
Expiration Date should be specified in expirationDate within the CommodityAmericanExercise
type or the CommodityEuropeanExercise type, as applicable.'

Start Choice [1]
   <calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </
   calculationPeriodsSchedule> [1]
   'A parametric representation of the Calculation Periods of the Commodity Option Transaction.'

   <calculationPeriods> AdjustableDates </calculationPeriods> [1]
   'An absolute representation of the Calculation Period start dates of the Commodity
   Option Transaction.'

End Choice
<pricingDates> CommodityPricingDates </pricingDates> [1]
'The dates on which the option will price.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]
'The Method of Averaging if there is more than one Pricing Date.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityAsian.model">
   <xsd:sequence>
      <xsd:element name="effectiveDate" type=" AdjustableOrRelativeDate "/>
      <xsd:choice>
         <xsd:element name="calculationPeriodsSchedule" type=" CommodityCalculationPeriodsSchedule "/>
         <xsd:element name="calculationPeriods" type=" AdjustableDates "/>
      </xsd:choice>
      <xsd:element name="pricingDates" type=" CommodityPricingDates "/>
      <xsd:element name="averagingMethod" type=" AveragingMethodEnum " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CommodityCalculationPeriods.model

Name	CommodityCalculationPeriods.model
Used by (from the same schema document)	Complex Type **FixedPriceLeg** , Complex Type **FloatingPriceLeg**
Documentation	The different options for specifying the Calculation Periods.

XML Instance Representation

```
Start Choice [1]
   <calculationDates> AdjustableDates </calculationDates> [1]
   'The Calculation Period dates for this leg of the trade where the Calculation Periods are
   all one day long, typically a physically-settled emissions or metals trade. Only
   dates explicitly included determine the Calculation Periods and there is a Calculation
   Period for each date specified.'

   <calculationPeriods> AdjustableDates </calculationPeriods> [1]
   'The Calculation Period start dates for this leg of the swap. This type is only intended to
   be used if the Calculation Periods differ on each leg. If Calculation Periods mirror
   another leg, then the calculationPeriodsReference element should be used to point to
   the Calculation Periods on that leg - or the calculationPeriodsScheduleReference can be used
   to point to the Calculation Periods Schedule for that leg.'
```

<calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </
calculationPeriodsSchedule> [1]

'The Calculation Periods for this leg of the swap. This type is only intended to be used if the Calculation Periods differ on each leg. If Calculation Periods mirror another leg, then the calculationPeriodsReference element should be used to point to the Calculation Periods on the other leg - or the calculationPeriodsScheduleReference can be used to point to the Calculation Periods Schedule for that leg.'

Start Choice [1]

<calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]

'A pointer style reference to the Calculation Periods defined on another leg.'

<calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
</calculationPeriodsScheduleReference> [1]

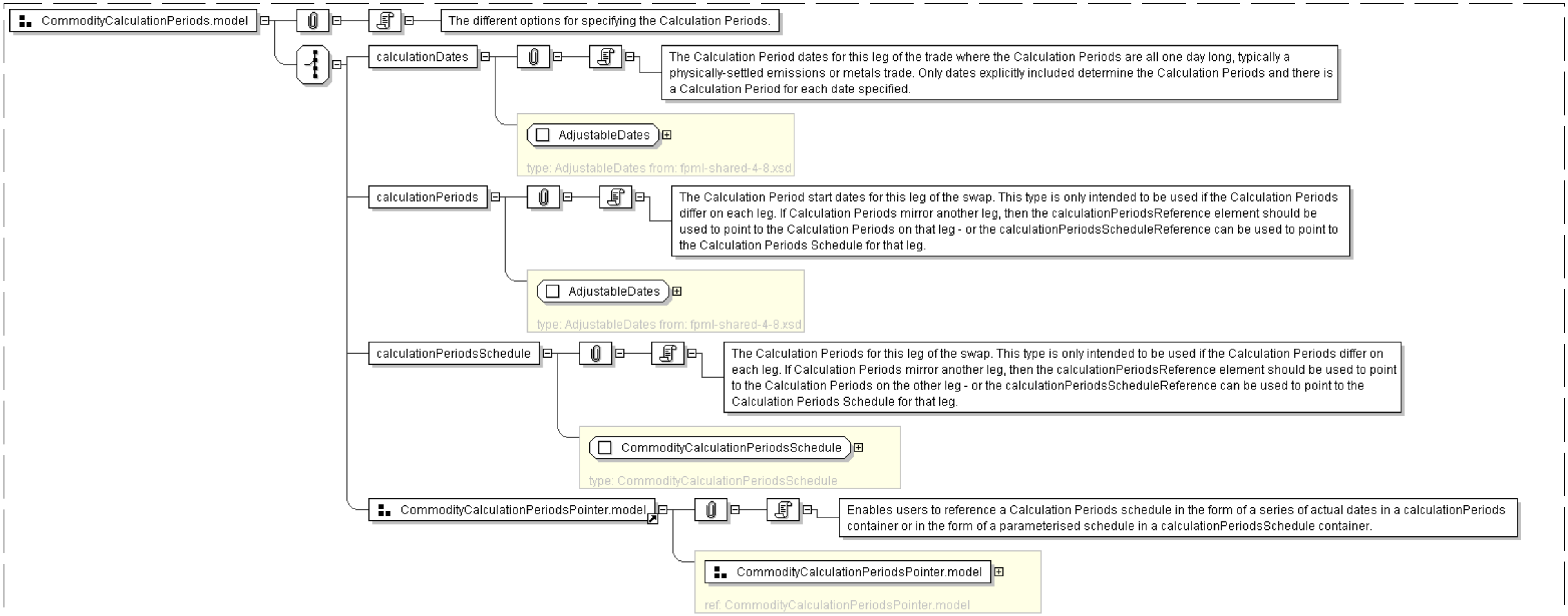
'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

<calculationPeriodsDatesReference> CalculationPeriodsDatesReference
</calculationPeriodsDatesReference> [1]

'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'

End Choice
End Choice

Diagram



Schema Component Representation

```
<xsd:group name="CommodityCalculationPeriods.model">
   <xsd:choice>
      <xsd:element name="calculationDates" type=" AdjustableDates "/>
      <xsd:element name="calculationPeriods" type=" AdjustableDates "/>
      <xsd:element name="calculationPeriodsSchedule" type=" CommodityCalculationPeriodsSchedule "/>
      <xsd:group ref=" CommodityCalculationPeriodsPointer.model "/>
   </xsd:choice>
</xsd:group>
```

top

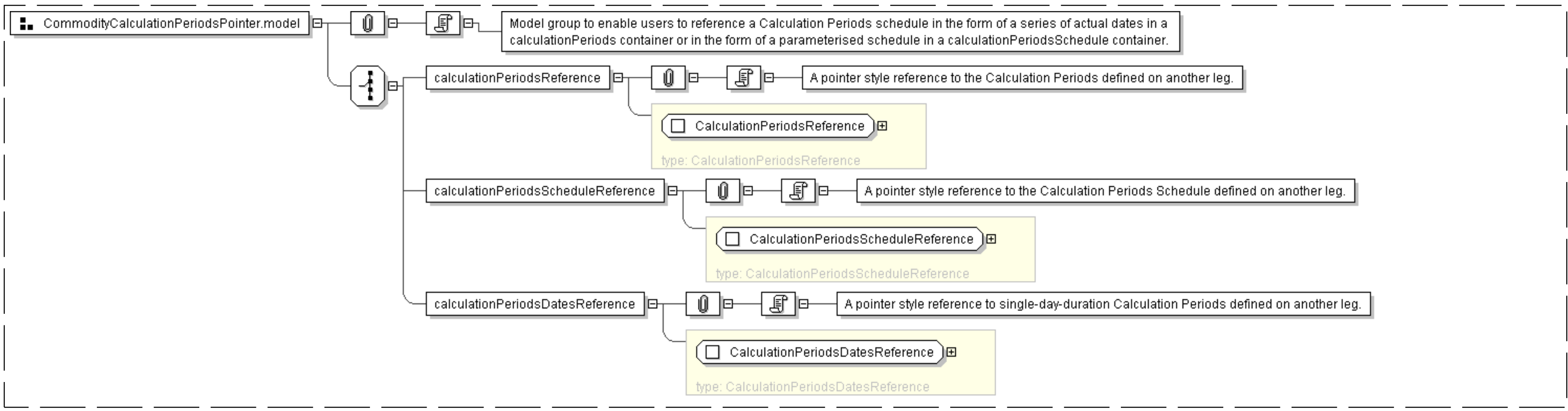
Model Group: CommodityCalculationPeriodsPointer.model

Name	CommodityCalculationPeriodsPointer.model
Used by (from the same schema document)	Complex Type **CommodityDeliveryPeriods** , Complex Type **CommodityFixedPriceSchedule** , Complex Type **CommodityFx** , Complex Type **CommodityNotionalQuantitySchedule** , Complex Type **CommodityPricingDates** , Complex Type **CommodityRelativePaymentDates** , Complex Type **CommoditySpreadSchedule** , Complex Type **CommodityStrikeSchedule** , Model Group **CommodityCalculationPeriods.model**
Documentation	Model group to enable users to reference a Calculation Periods schedule in the form of a series of actual dates in a calculationPeriods container or in the form of a parameterised schedule in a calculationPeriodsSchedule container.

XML Instance Representation

```
Start Choice [1]
    <calculationPeriodsReference> CalculationPeriodsReference </calculationPeriodsReference> [1]
    'A pointer style reference to the Calculation Periods defined on another leg.'

    <calculationPeriodsScheduleReference> CalculationPeriodsScheduleReference
    </calculationPeriodsScheduleReference> [1]
    'A pointer style reference to the Calculation Periods Schedule defined on another leg.'

    <calculationPeriodsDatesReference> CalculationPeriodsDatesReference
    </calculationPeriodsDatesReference> [1]
    'A pointer style reference to single-day-duration Calculation Periods defined on another leg.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityCalculationPeriodsPointer.model">
   <xsd:choice>
      <xsd:element name="calculationPeriodsReference" type=" CalculationPeriodsReference "/>
      <xsd:element name="calculationPeriodsScheduleReference"
      type=" CalculationPeriodsScheduleReference "/>
      <xsd:element name="calculationPeriodsDatesReference" type=" CalculationPeriodsDatesReference "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: CommodityCoalComposition.model

Name	CommodityCoalComposition.model
Used by (from the same schema document)	Complex Type **CoalStandardQuality**
Documentation	Items defining the chemical composition of the coal product.

XML Instance Representation

<moisture> CoalAttributePercentage </moisture> [0..1]
'The moisture content of the coal product.'

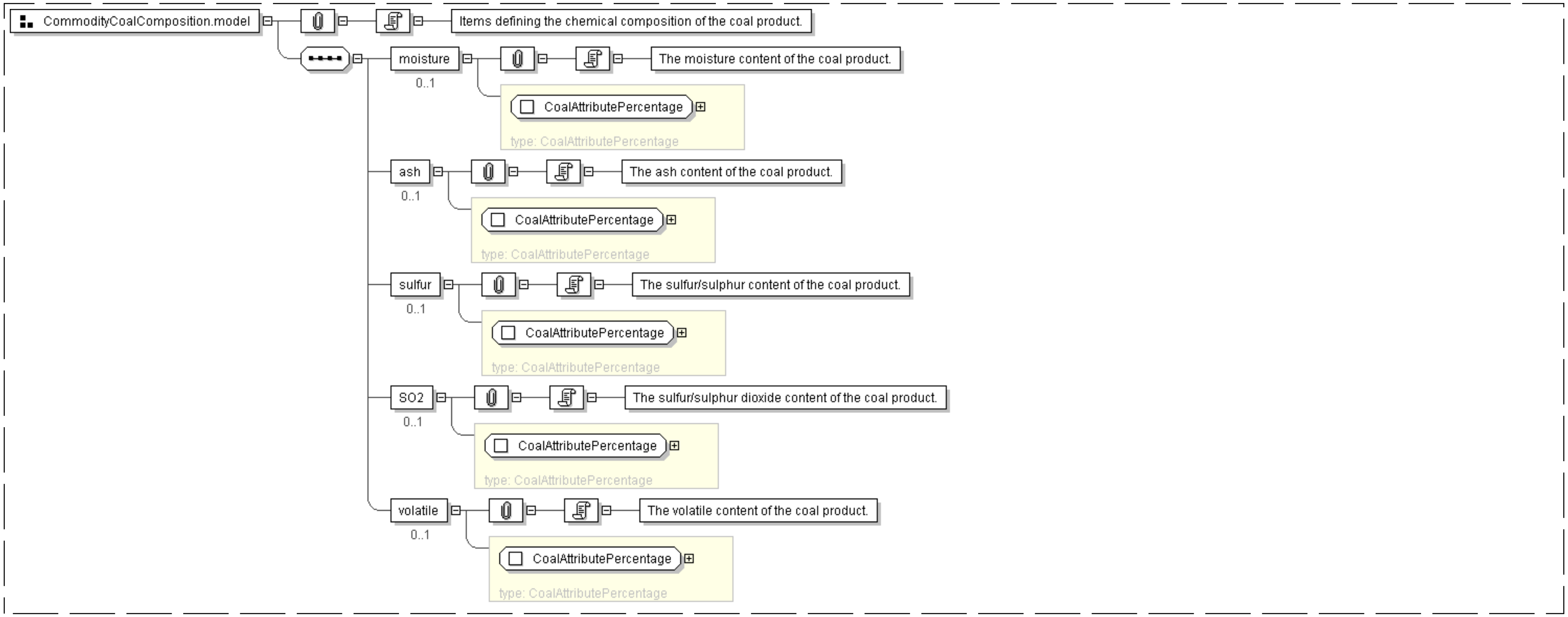
<ash> CoalAttributePercentage </ash> [0..1]
'The ash content of the coal product.'

<sulfur> CoalAttributePercentage </sulfur> [0..1]
'The sulfur/sulphur content of the coal product.'

<SO2> CoalAttributePercentage </SO2> [0..1]
'The sulfur/sulphur dioxide content of the coal product.'

<volatile> CoalAttributePercentage </volatile> [0..1]
'The volatile content of the coal product.'

Diagram



Schema Component Representation

```
<xsd:group name="CommodityCoalComposition.model">
   <xsd:sequence>
      <xsd:element name="moisture" type=" CoalAttributePercentage " minOccurs="0"/>
      <xsd:element name="ash" type=" CoalAttributePercentage " minOccurs="0"/>
      <xsd:element name="sulfur" type=" CoalAttributePercentage " minOccurs="0"/>
      <xsd:element name="SO2" type=" CoalAttributePercentage " minOccurs="0"/>
      <xsd:element name="volatile" type=" CoalAttributePercentage " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CommodityCoalProperties.model

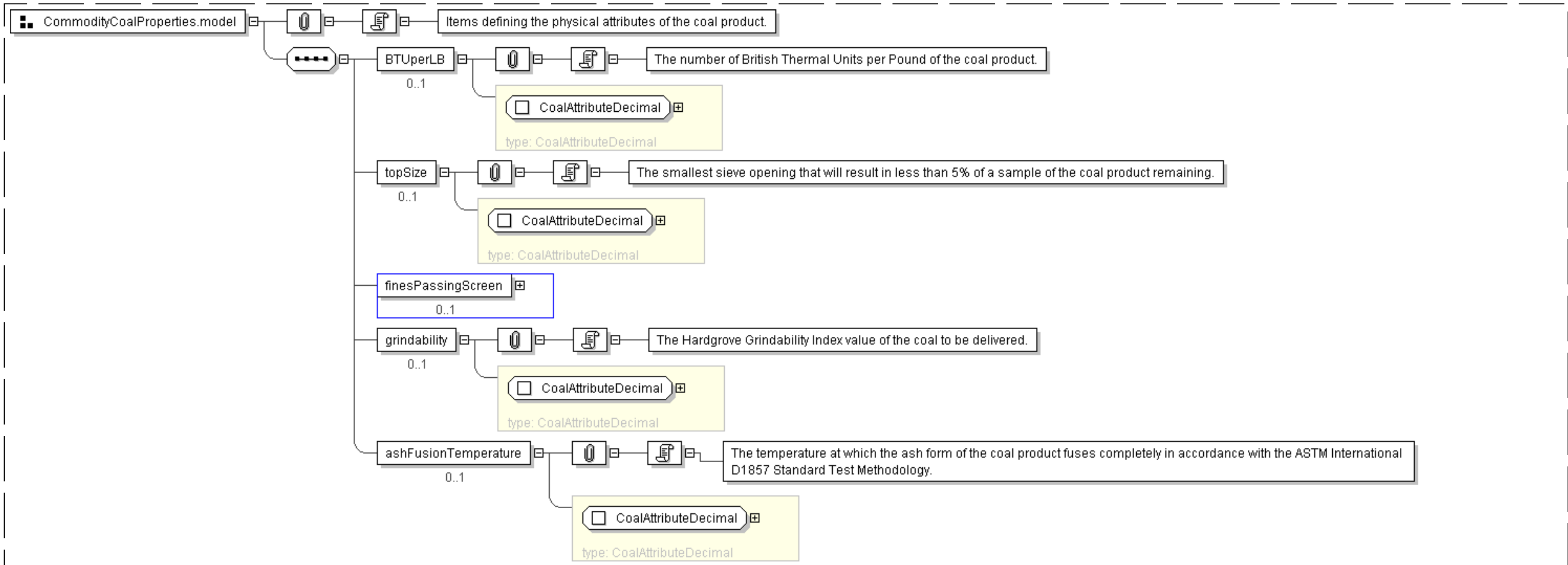
Name	CommodityCoalProperties.model
Used by (from the same schema document)	Complex Type **CoalStandardQuality**

Documentation	Items defining the physical attributes of the coal product.

XML Instance Representation

```
<BTUperLB> CoalAttributeDecimal </BTUperLB> [0..1]
'The number of British Thermal Units per Pound of the coal product.'

<topSize> CoalAttributeDecimal </topSize> [0..1]
'The smallest sieve opening that will result in less than 5% of a sample of the coal
product remaining.'

<finesPassingScreen> CoalAttributeDecimal </finesPassingScreen> [0..1]
<grindability> CoalAttributeDecimal </grindability> [0..1]
'The Hardgrove Grindability Index value of the coal to be delivered.'

<ashFusionTemperature> CoalAttributeDecimal </ashFusionTemperature> [0..1]
'The temperature at which the ash form of the coal product fuses completely in accordance
with the ASTM International D1857 Standard Test Methodology.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityCoalProperties.model">
   <xsd:sequence>
      <xsd:element name="BTUperLB" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="topSize" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="finesPassingScreen" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="grindability" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="ashFusionTemperature" type=" CoalAttributeDecimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CommodityCoalReducingAtmosphere.model

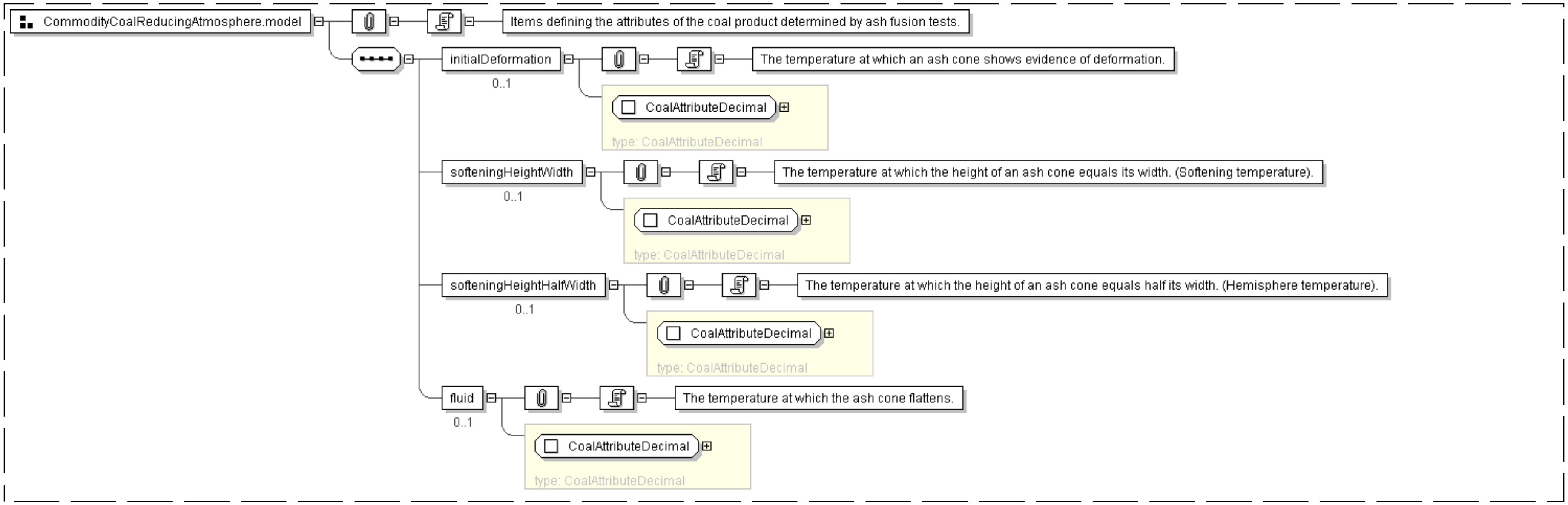
Name	CommodityCoalReducingAtmosphere.model
Used by (from the same schema document)	Complex Type **CoalStandardQuality**

Documentation	Items defining the attributes of the coal product determined by ash fusion tests.

XML Instance Representation

```
<initialDeformation> CoalAttributeDecimal </initialDeformation> [0..1]
'The temperature at which an ash cone shows evidence of deformation.'

<softeningHeightWidth> CoalAttributeDecimal </softeningHeightWidth> [0..1]
'The temperature at which the height of an ash cone equals its width. (Softening temperature).'

<softeningHeightHalfWidth> CoalAttributeDecimal </softeningHeightHalfWidth> [0..1]
'The temperature at which the height of an ash cone equals half its width.
(Hemisphere temperature).'

<fluid> CoalAttributeDecimal </fluid> [0..1]
'The temperature at which the ash cone flattens.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityCoalReducingAtmosphere.model">
   <xsd:sequence>
      <xsd:element name="initialDeformation" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="softeningHeightWidth" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="softeningHeightHalfWidth" type=" CoalAttributeDecimal " minOccurs="0"/>
      <xsd:element name="fluid" type=" CoalAttributeDecimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CommodityContent.model

Name	CommodityContent.model
Used by (from the same schema document)	Complex Type **CommodityForward** , Complex Type **CommodityOption** , Complex Type **CommoditySwap**
Documentation	Items common to all Commodity Transactions.

XML Instance Representation

```
<commonPricing> xsd:boolean </commonPricing> [0..1]
'Common pricing may be relevant for a Transaction that references more than one
Commodity Reference Price. If Common Pricing is not specified as applicable, it will be
deemed not to apply.'
```

<marketDisruption> CommodityMarketDisruption </marketDisruption> [0..1]

'Market disruption events as defined in the ISDA 1993 Commodity Definitions or in ISDA 2005 Commodity Definitions, as applicable.'

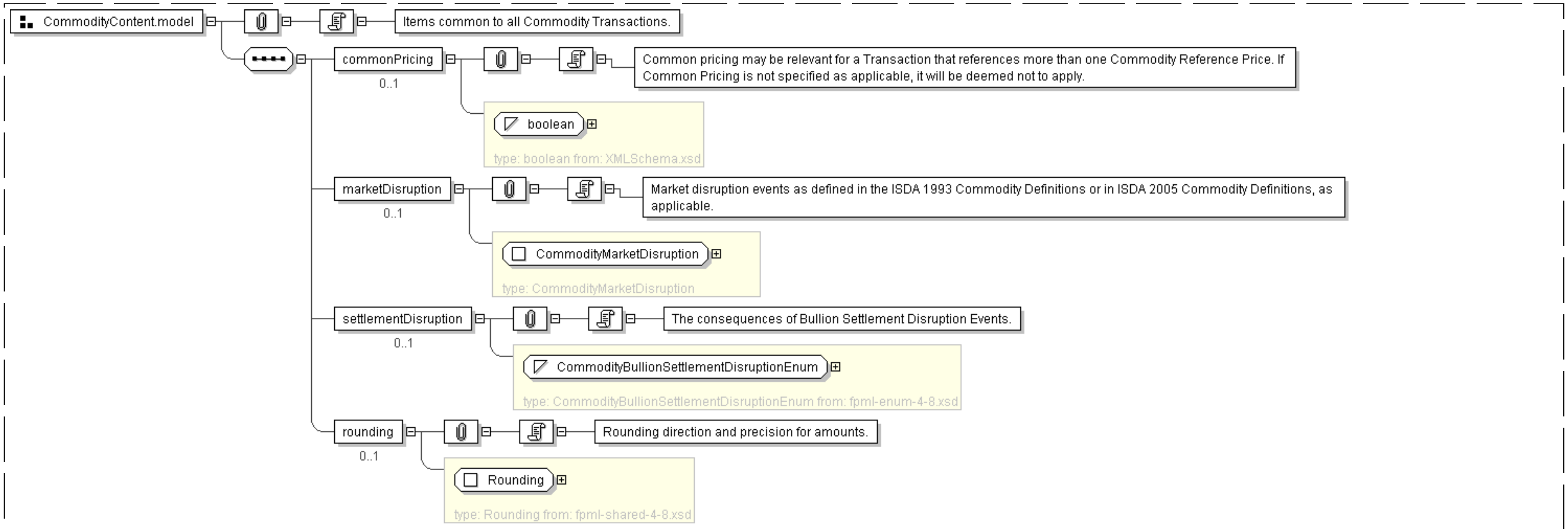
<settlementDisruption> CommodityBullionSettlementDisruptionEnum </settlementDisruption> [0..1]

'The consequences of Bullion Settlement Disruption Events.'

<rounding> Rounding </rounding> [0..1]

'Rounding direction and precision for amounts.'

Diagram



Schema Component Representation

```
<xsd:group name="CommodityContent.model">
   <xsd:sequence>
      <xsd:element name="commonPricing" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="marketDisruption" type=" CommodityMarketDisruption " minOccurs="0"/>
      <xsd:element name="settlementDisruption" type=" CommodityBullionSettlementDisruptionEnum
      " minOccurs="0"/>
      <xsd:element name="rounding" type=" Rounding " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CommodityDeliveryPeriodsPointer.model

Name	CommodityDeliveryPeriodsPointer.model
Used by (from the same schema document)	Complex Type **CoalStandardQualitySchedule** , Complex Type **CommodityPhysicalQuantitySchedule** , Complex Type **SettlementPeriodsSchedule**
Documentation	Model group to enable users to reference a Delivery Periods schedule in the form of a series of actual dates in a deliveryPeriods container or in the form of a parameterised schedule in a deliveryPeriodsSchedule container.

XML Instance Representation

Start Choice [1]

<deliveryPeriodsReference> CalculationPeriodsReference </deliveryPeriodsReference> [1]

'A pointer style reference to the Delivery Periods defined elsewhere.'

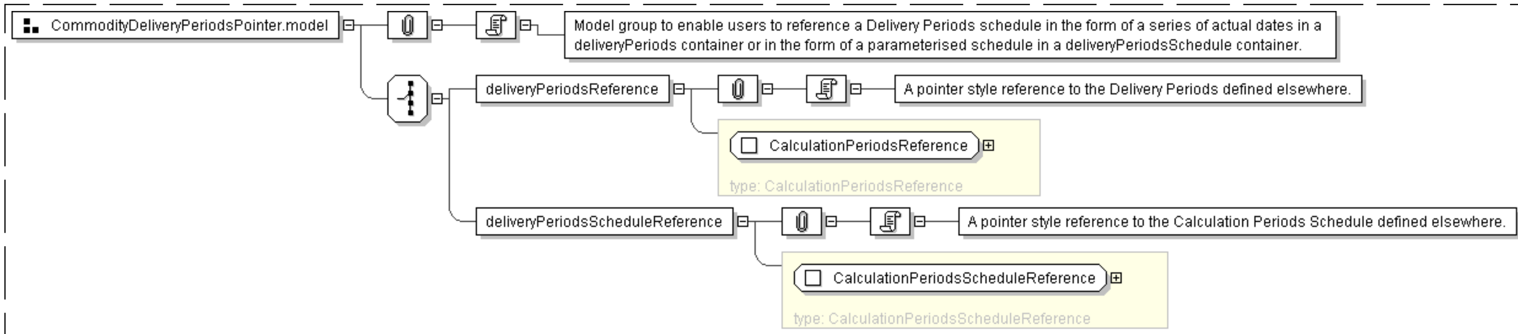
<deliveryPeriodsScheduleReference> CalculationPeriodsScheduleReference

</deliveryPeriodsScheduleReference> [1]

'A pointer style reference to the Calculation Periods Schedule defined elsewhere.'

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="CommodityDeliveryPeriodsPointer.model">
   <xsd:choice>
      <xsd:element name="deliveryPeriodsReference" type=" CalculationPeriodsReference "/>
      <xsd:element name="deliveryPeriodsScheduleReference" type="
      CalculationPeriodsScheduleReference "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: CommodityDeliveryPoints.model

Name	CommodityDeliveryPoints.model
Used by (from the same schema document)	Complex Type **GasDelivery**
Documentation	A Delivery Point, applicable to physically settled commodity transactions.

XML Instance Representation

Start Choice [1]

<deliveryPoint> GasDeliveryPoint </deliveryPoint> [1]

'The physical or virtual point at which the commodity will be delivered.'

<entryPoint> CommodityDeliveryPoint </entryPoint> [1]

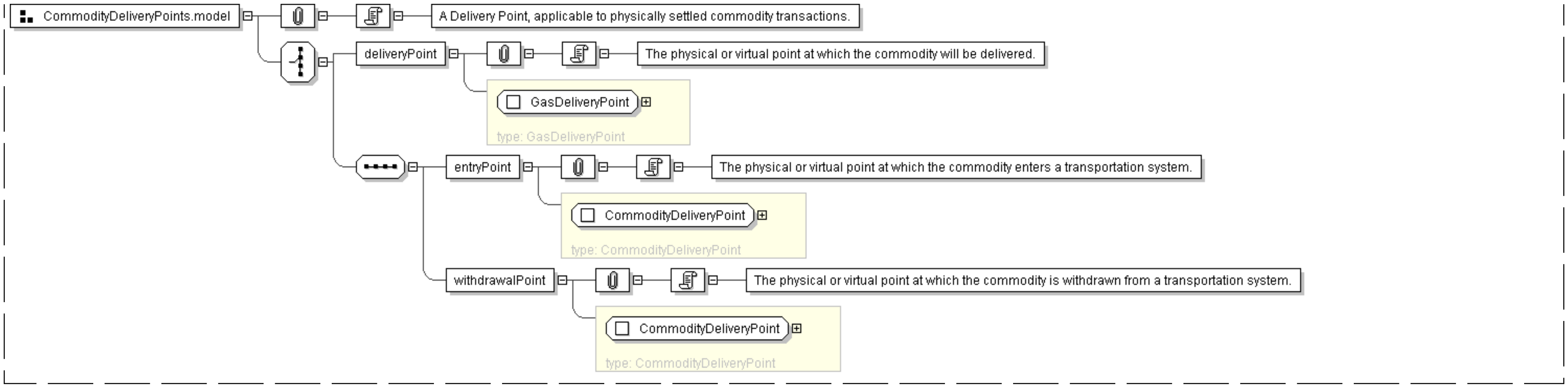
'The physical or virtual point at which the commodity enters a transportation system.'

<withdrawalPoint> CommodityDeliveryPoint </withdrawalPoint> [1]

'The physical or virtual point at which the commodity is withdrawn from a transportation system.'

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="CommodityDeliveryPoints.model">
   <xsd:choice>
      <xsd:element name="deliveryPoint" type=" GasDeliveryPoint "/>
      <xsd:sequence>
         <xsd:element name="entryPoint" type=" CommodityDeliveryPoint "/>
         <xsd:element name="withdrawalPoint" type=" CommodityDeliveryPoint "/>
      </xsd:sequence>
   </xsd:choice>
</xsd:group>
```

top

Model Group: CommodityFinancialOption.model

Name	CommodityFinancialOption.model
Used by (from the same schema document)	Complex Type **CommodityOption**
Documentation	Items specific to financially-settled commodity options.

XML Instance Representation

```
<commodity> Commodity </commodity> [1]
'Specifies the underlying component. At the time of the initial schema design, only
underlyers of type Commodity are supported; the choice group in the future could offer
the possibility of adding other types later.'

Start Group: CommodityAsian.model [0..1]
'A group containing properties specific to Asian options.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'The effective date of the Commodity Option Transaction. Note that the Termination/
   Expiration Date should be specified in expirationDate within the CommodityAmericanExercise
   type or the CommodityEuropeanExercise type, as applicable.'

Start Choice [1]
      <calculationPeriodsSchedule> CommodityCalculationPeriodsSchedule </
      calculationPeriodsSchedule> [1]
      'A parametric representation of the Calculation Periods of the Commodity Option Transaction.'

      <calculationPeriods> AdjustableDates </calculationPeriods> [1]
      'An absolute representation of the Calculation Period start dates of the Commodity
      Option Transaction.'

End Choice
   <pricingDates> CommodityPricingDates </pricingDates> [1]
   'The dates on which the option will price.'

   <averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]
```

'The Method of Averaging if there is more than one Pricing Date.'

End Group: CommodityAsian.model
Start Choice [1]
Start Choice [1]
<notionalQuantitySchedule> CommodityNotionalQuantitySchedule </notionalQuantitySchedule> [1]

'Allows the documentation of a shaped notional trade where the notional changes over the life of the transaction.'

<notionalQuantity> CommodityNotionalQuantity </notionalQuantity> [1]

'The Notional Quantity.'

<settlementPeriodsNotionalQuantity> CommoditySettlementPeriodsNotionalQuantity
</settlementPeriodsNotionalQuantity> [1..*]

'For an electricity transaction, the Notional Quantity for a one or more groups of Settlement Periods to which the Notional Quantity is based. If the schedule differs for different groups of Settlement Periods, this element should be repeated.'

End Choice
<totalNotionalQuantity> xsd:decimal </totalNotionalQuantity> [0..1]

'The Total Notional Quantity.'

<quantityReference> QuantityReference </quantityReference> [1]

'A pointer style reference to a quantity defined on another leg.'

End Choice
<exercise> CommodityExercise </exercise> [1]

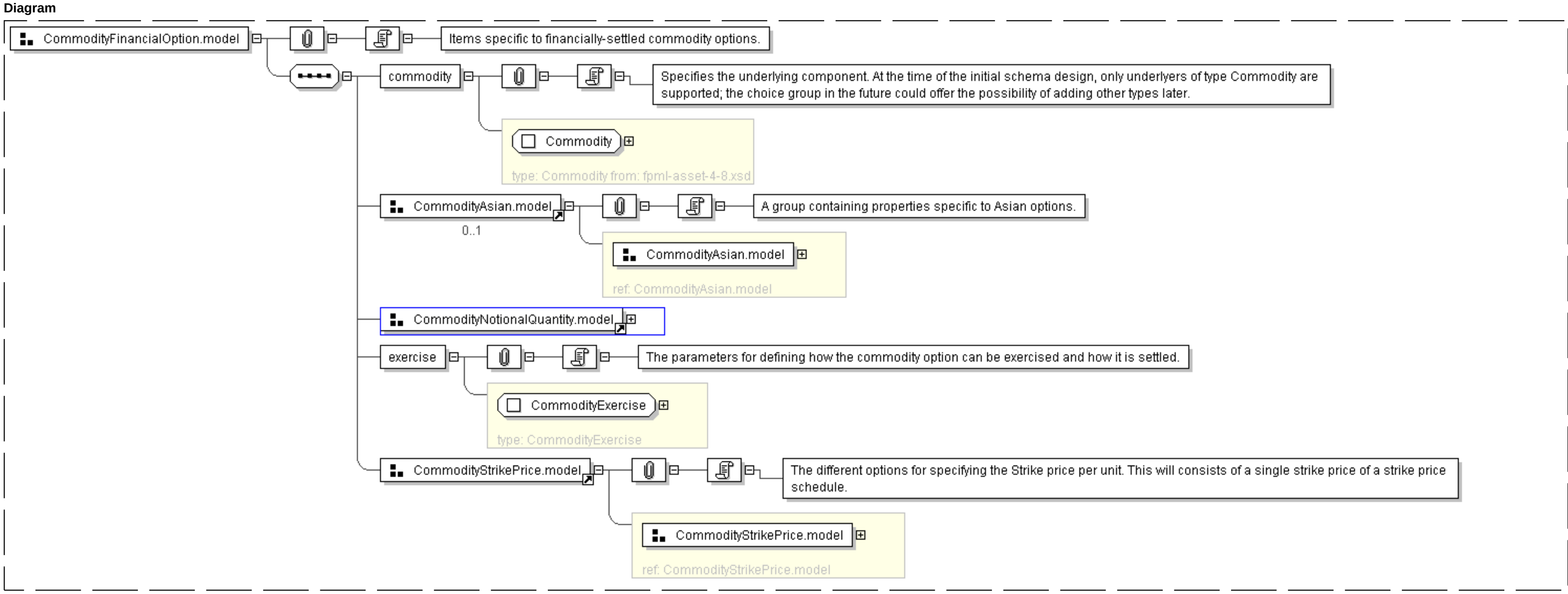
'The parameters for defining how the commodity option can be exercised and how it is settled.'

Start Choice [1]
<strikePricePerUnit> NonNegativeMoney </strikePricePerUnit> [1]

'The currency amount of the strike price per unit.'

<strikePricePerUnitSchedule> CommodityStrikeSchedule </strikePricePerUnitSchedule> [1]
End Choice

Diagram



Schema Component Representation

```
<xsd:group name="CommodityFinancialOption.model">
```

```
    <xsd:sequence>
        <xsd:element name="commodity" type=" Commodity "/>
        <xsd:group ref=" CommodityAsian.model " minOccurs="0"/>
        <xsd:group ref=" CommodityNotionalQuantity.model "/>
        <xsd:element name="exercise" type=" CommodityExercise "/>
        <xsd:group ref=" CommodityStrikePrice.model "/>
    </xsd:sequence>
</xsd:group>
```

top

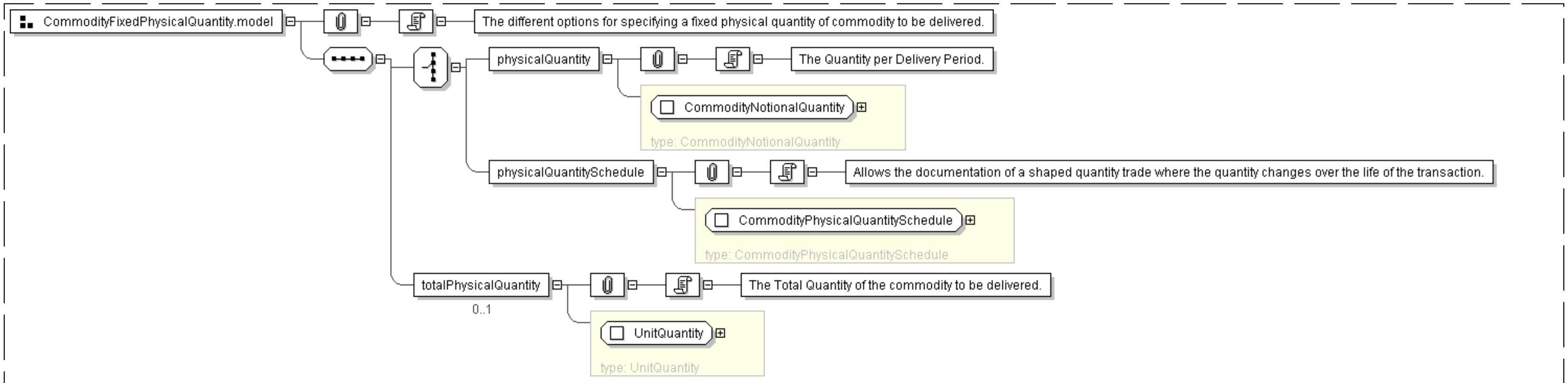
Model Group: CommodityFixedPhysicalQuantity.model

Name	CommodityFixedPhysicalQuantity.model
Used by (from the same schema document)	Complex Type **BullionPhysicalLeg** , Complex Type **CommodityPhysicalQuantity** , Complex Type **GasPhysicalQuantity**
Documentation	The different options for specifying a fixed physical quantity of commodity to be delivered.

XML Instance Representation

```
Start Choice [1]
    <physicalQuantity> CommodityNotionalQuantity </physicalQuantity> [1]
    'The Quantity per Delivery Period.'

    <physicalQuantitySchedule> CommodityPhysicalQuantitySchedule </physicalQuantitySchedule> [1]
    'Allows the documentation of a shaped quantity trade where the quantity changes over the
    life of the transaction.'

End Choice
<totalPhysicalQuantity> UnitQuantity </totalPhysicalQuantity> [0..1]
'The Total Quantity of the commodity to be delivered.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityFixedPhysicalQuantity.model">
    <xsd:sequence>
        <xsd:choice>
            <xsd:element name="physicalQuantity" type=" CommodityNotionalQuantity "/>
            <xsd:element name="physicalQuantitySchedule" type=" CommodityPhysicalQuantitySchedule "/>
        </xsd:choice>
        <xsd:element name="totalPhysicalQuantity" type=" UnitQuantity " minOccurs="0"/>
    </xsd:sequence>
</xsd:group>
```

top

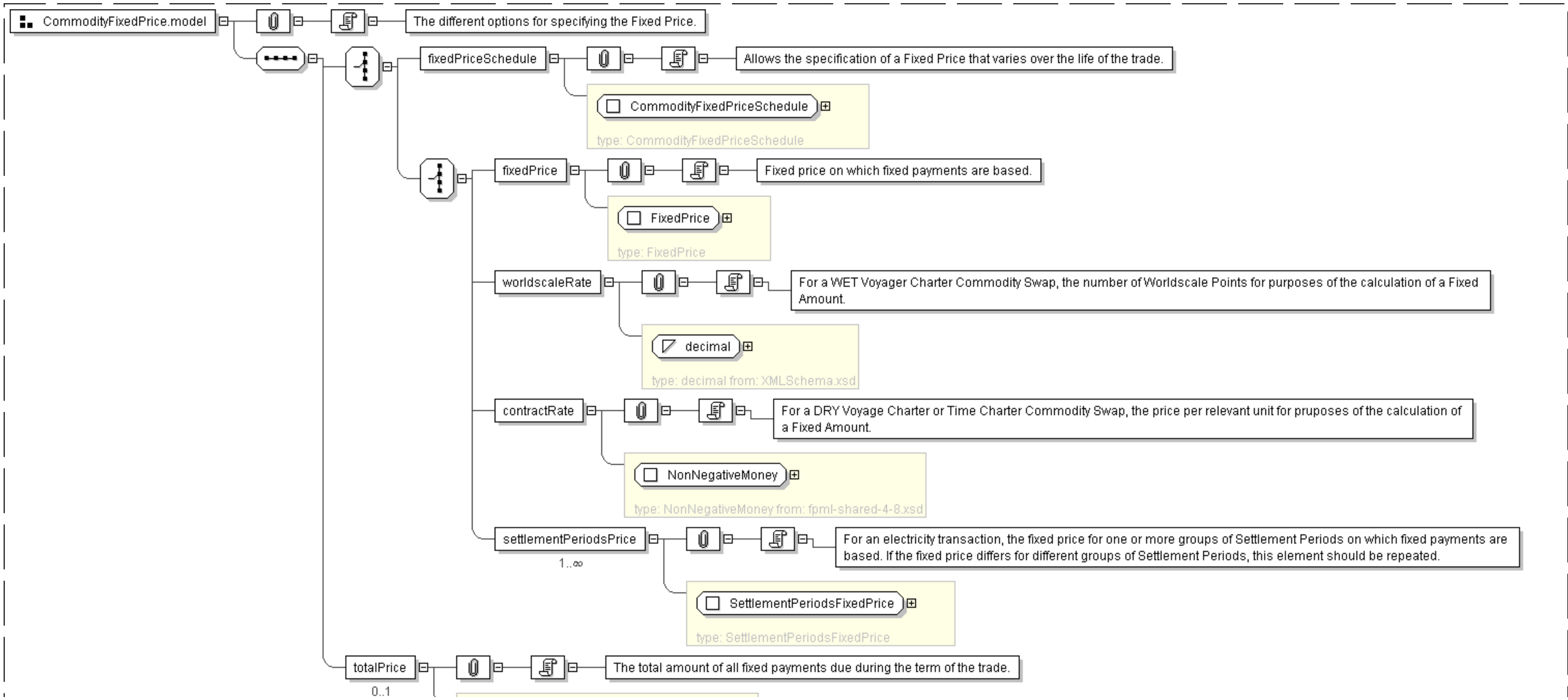
Model Group: CommodityFixedPrice.model

Name	CommodityFixedPrice.model
Used by (from the same schema document)	Complex Type **FixedPriceLeg**
Documentation	The different options for specifying the Fixed Price.

XML Instance Representation

```
Start Choice [1]
   <fixedPriceSchedule> CommodityFixedPriceSchedule </fixedPriceSchedule> [1]
   'Allows the specification of a Fixed Price that varies over the life of the trade.'

Start Choice [1]
      <fixedPrice> FixedPrice </fixedPrice> [1]
      'Fixed price on which fixed payments are based.'

      <worldscaleRate> xsd:decimal </worldscaleRate> [1]
      'For a WET Voyager Charter Commodity Swap, the number of Worldscale Points for purposes of
      the calculation of a Fixed Amount.'

      <contractRate> NonNegativeMoney </contractRate> [1]
      'For a DRY Voyage Charter or Time Charter Commodity Swap, the price per relevant unit
      for pruposes of the calculation of a Fixed Amount.'

      <settlementPeriodsPrice> SettlementPeriodsFixedPrice </settlementPeriodsPrice> [1..*]
      'For an electricity transaction, the fixed price for one or more groups of Settlement
      Periods on which fixed payments are based. If the fixed price differs for different groups
      of Settlement Periods, this element should be repeated.'

End Choice
End Choice
<totalPrice> NonNegativeMoney </totalPrice> [0..1]
'The total amount of all fixed payments due during the term of the trade.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityFixedPrice.model">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="fixedPriceSchedule" type=" CommodityFixedPriceSchedule "/>
         <xsd:choice>
            <xsd:element name="fixedPrice" type=" FixedPrice "/>
            <xsd:element name="worldscaleRate" type=" xsd:decimal "/>
            <xsd:element name="contractRate" type=" NonNegativeMoney "/>
            <xsd:element name="settlementPeriodsPrice" type=" SettlementPeriodsFixedPrice
            " maxOccurs="unbounded"/>
         </xsd:choice>
      </xsd:choice>
      <xsd:element name="totalPrice" type=" NonNegativeMoney " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

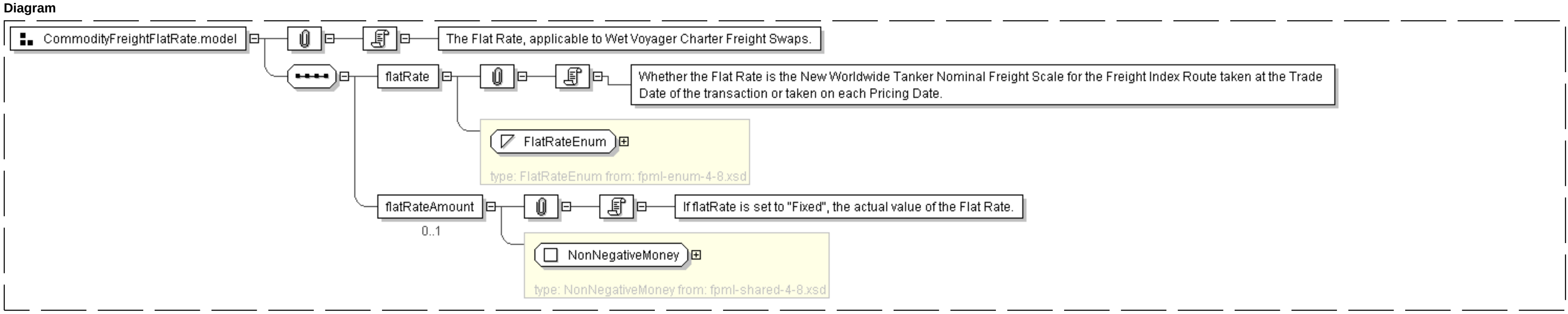
Model Group: CommodityFreightFlatRate.model

Name	CommodityFreightFlatRate.model
Used by (from the same schema document)	Complex Type **FixedPriceLeg** , Complex Type **FloatingPriceLeg**
Documentation	The Flat Rate, applicable to Wet Voyager Charter Freight Swaps.

XML Instance Representation

```
<flatRate> FlatRateEnum </flatRate> [1]
'Whether the Flat Rate is the New Worldwide Tanker Nominal Freight Scale for the Freight
Index Route taken at the Trade Date of the transaction or taken on each Pricing Date.'

<flatRateAmount> NonNegativeMoney </flatRateAmount> [0..1]
'If flatRate is set to \"Fixed\", the actual value of the Flat Rate.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityFreightFlatRate.model">
   <xsd:sequence>
      <xsd:element name="flatRate" type=" FlatRateEnum "/>
      <xsd:element name="flatRateAmount" type=" NonNegativeMoney " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

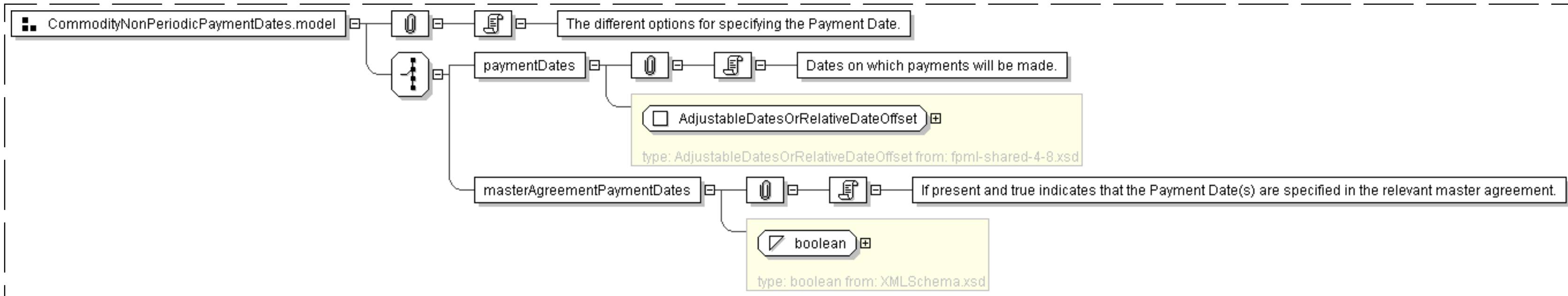
Model Group: CommodityNonPeriodicPaymentDates.model

Name	CommodityNonPeriodicPaymentDates.model
Used by (from the same schema document)	Model Group **CommodityPaymentDates.model**
Documentation	The different options for specifying the Payment Date.

XML Instance Representation

```
Start Choice [1]
   <paymentDates> AdjustableDatesOrRelativeDateOffset </paymentDates> [1]
   'Dates on which payments will be made.'

   <masterAgreementPaymentDates> xsd:boolean </masterAgreementPaymentDates> [1]
   'If present and true indicates that the Payment Date(s) are specified in the relevant
   master agreement.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityNonPeriodicPaymentDates.model">
   <xsd:choice>
      <xsd:element name="paymentDates" type=" AdjustableDatesOrRelativeDateOffset "/>
      <xsd:element name="masterAgreementPaymentDates" type=" xsd:boolean "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: CommodityNotionalQuantity.model

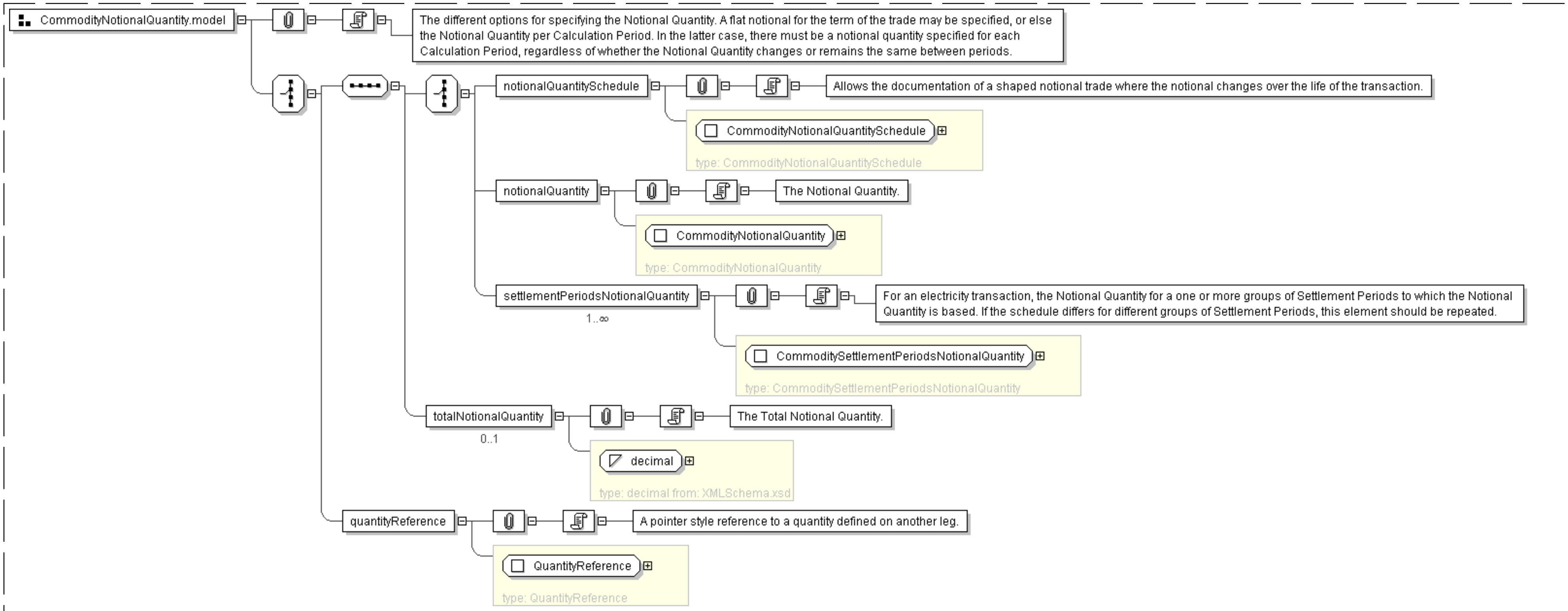
Name	CommodityNotionalQuantity.model
Used by (from the same schema document)	Complex Type **FixedPriceLeg** , Complex Type **FloatingPriceLeg** , Model Group **CommodityFinancialOption.model**
Documentation	The different options for specifying the Notional Quantity. A flat notional for the term of the trade may be specified, or else the Notional Quantity per Calculation Period. In the latter case, there must be a notional quantity specified for each Calculation Period, regardless of whether the Notional Quantity changes or remains the same between periods.

XML Instance Representation

```
Start Choice [1]
Start Choice [1]
      <notionalQuantitySchedule> CommodityNotionalQuantitySchedule </notionalQuantitySchedule> [1]
      'Allows the documentation of a shaped notional trade where the notional changes over the
      life of the transaction.'

      <notionalQuantity> CommodityNotionalQuantity </notionalQuantity> [1]
      'The Notional Quantity.'

      <settlementPeriodsNotionalQuantity> CommoditySettlementPeriodsNotionalQuantity
      </settlementPeriodsNotionalQuantity> [1..*]
      'For an electricity transaction, the Notional Quantity for a one or more groups of
      Settlement Periods to which the Notional Quantity is based. If the schedule differs
      for different groups of Settlement Periods, this element should be repeated.'

End Choice
   <totalNotionalQuantity> xsd:decimal </totalNotionalQuantity> [0..1]
   'The Total Notional Quantity.'
```

```
<quantityReference> QuantityReference </quantityReference> [1]
'A pointer style reference to a quantity defined on another leg.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityNotionalQuantity.model">
   <xsd:choice>
      <xsd:sequence>
         <xsd:choice>
            <xsd:element name="notionalQuantitySchedule" type=" CommodityNotionalQuantitySchedule "/>
            <xsd:element name="notionalQuantity" type=" CommodityNotionalQuantity "/>
            <xsd:element name="settlementPeriodsNotionalQuantity"
            type=" CommoditySettlementPeriodsNotionalQuantity " maxOccurs="unbounded"/>
         </xsd:choice>
         <xsd:element name="totalNotionalQuantity" type=" xsd:decimal " minOccurs="0"/>
      </xsd:sequence>
      <xsd:element name="quantityReference" type=" QuantityReference "/>
   </xsd:choice>
</xsd:group>
```

top

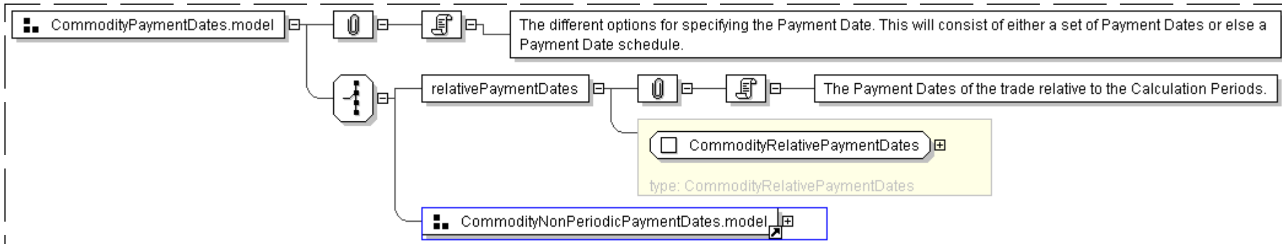
Model Group: CommodityPaymentDates.model

Name	CommodityPaymentDates.model
Used by (from the same schema document)	Complex Type **CommodityExercise** , Complex Type **FixedPriceLeg** , Complex Type **FloatingPriceLeg** , Complex Type **NonPeriodicFixedPriceLeg**
Documentation	The different options for specifying the Payment Date. This will consist of either a set of Payment Dates or else a Payment Date schedule.

XML Instance Representation

```
Start Choice [1]
   <relativePaymentDates> CommodityRelativePaymentDates </relativePaymentDates> [1]
   'The Payment Dates of the trade relative to the Calculation Periods.'
Start Choice [1]
      <paymentDates> AdjustableDatesOrRelativeDateOffset </paymentDates> [1]
      'Dates on which payments will be made.'

      <masterAgreementPaymentDates> xsd:boolean </masterAgreementPaymentDates> [1]
      'If present and true indicates that the Payment Date(s) are specified in the relevant
      master agreement.'

End Choice
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityPaymentDates.model">
   <xsd:choice>
      <xsd:element name="relativePaymentDates" type=" CommodityRelativePaymentDates "/>
      <xsd:group ref=" CommodityNonPeriodicPaymentDates.model "/>
   </xsd:choice>
</xsd:group>
```

top

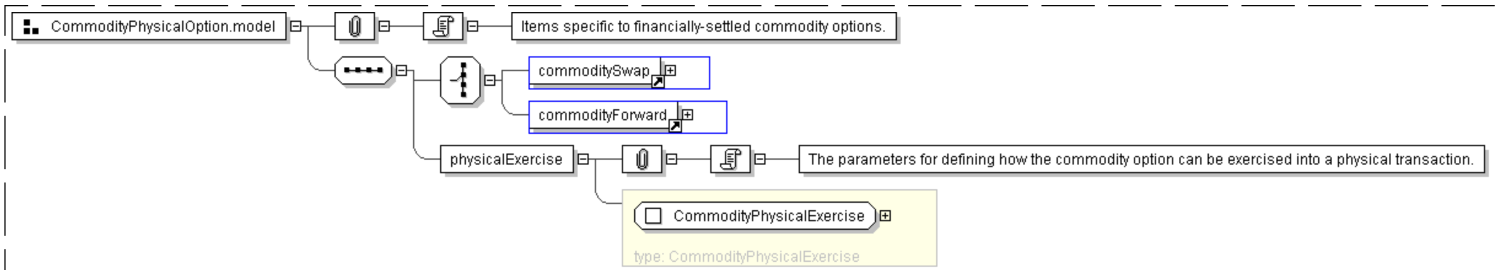
Model Group: CommodityPhysicalOption.model

Name	CommodityPhysicalOption.model
Used by (from the same schema document)	Complex Type **CommodityOption**
Documentation	Items specific to financially-settled commodity options.

XML Instance Representation

```
Start Choice [1]
   <commoditySwap> ... </commoditySwap> [1]
   <commodityForward> ... </commodityForward> [1]
End Choice
<physicalExercise> CommodityPhysicalExercise </physicalExercise> [1]
'The parameters for defining how the commodity option can be exercised into a
physical transaction.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityPhysicalOption.model">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element ref=" commoditySwap "/>
         <xsd:element ref=" commodityForward "/>
      </xsd:choice>
      <xsd:element name="physicalExercise" type=" CommodityPhysicalExercise "/>
   </xsd:sequence>
</xsd:group>
```

top

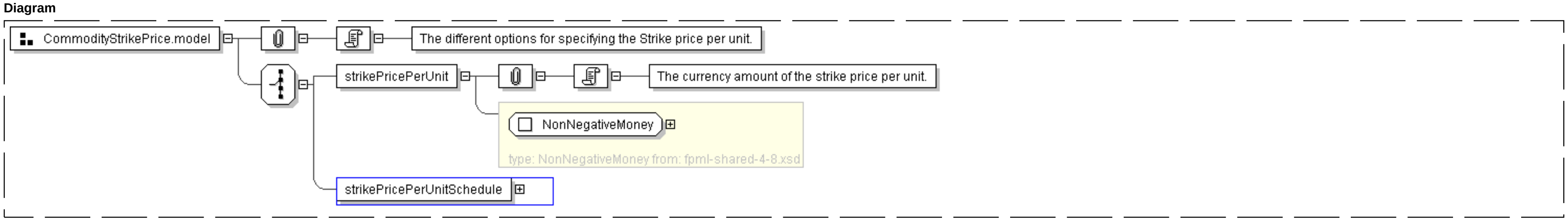
Model Group: CommodityStrikePrice.model

Name	CommodityStrikePrice.model
Used by (from the same schema document)	Model Group **CommodityFinancialOption.model**
Documentation	The different options for specifying the Strike price per unit.

XML Instance Representation

```
Start Choice [1]
   <strikePricePerUnit> NonNegativeMoney </strikePricePerUnit> [1]
   'The currency amount of the strike price per unit.'

   <strikePricePerUnitSchedule> CommodityStrikeSchedule </strikePricePerUnitSchedule> [1]
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityStrikePrice.model">
   <xsd:choice>
      <xsd:element name="strikePricePerUnit" type=" NonNegativeMoney "/>
      <xsd:element name="strikePricePerUnitSchedule" type=" CommodityStrikeSchedule "/>
   </xsd:choice>
</xsd:group>
```

top

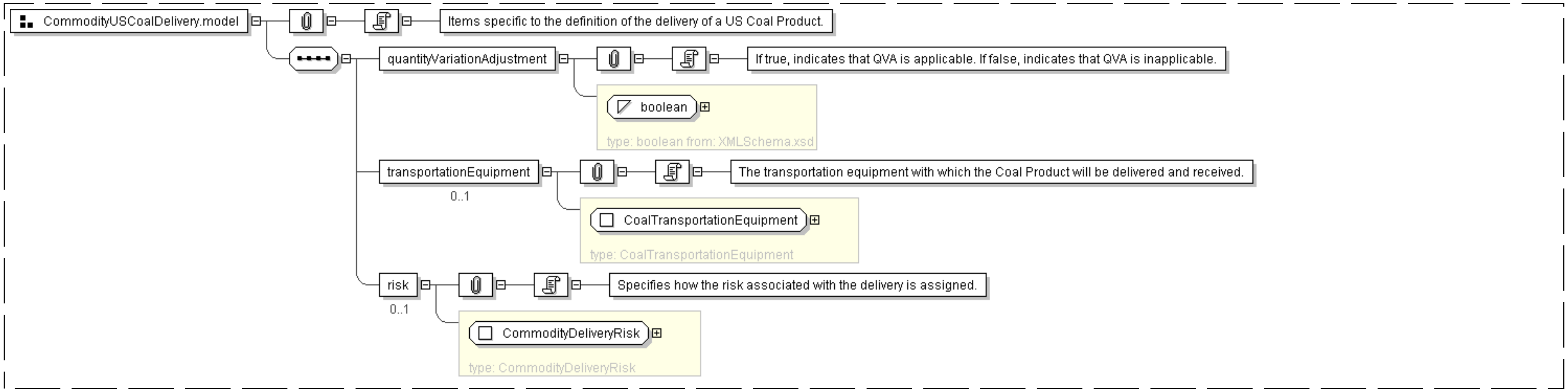
Model Group: CommodityUSCoalDelivery.model

Name	CommodityUSCoalDelivery.model
Used by (from the same schema document)	Complex Type **CoalDelivery**
Documentation	Items specific to the definition of the delivery of a US Coal Product.

XML Instance Representation

```
<quantityVariationAdjustment> xsd:boolean </quantityVariationAdjustment> [1]
'If true, indicates that QVA is applicable. If false, indicates that QVA is inapplicable.'

<transportationEquipment> CoalTransportationEquipment </transportationEquipment> [0..1]
'The transportation equipment with which the Coal Product will be delivered and received.'

<risk> CommodityDeliveryRisk </risk> [0..1]
'Specifies how the risk associated with the delivery is assigned.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityUSCoalDelivery.model">
   <xsd:sequence>
      <xsd:element name="quantityVariationAdjustment" type=" xsd:boolean "/>
      <xsd:element name="transportationEquipment" type=" CoalTransportationEquipment " minOccurs="0"/>
      <xsd:element name="risk" type=" CommodityDeliveryRisk " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

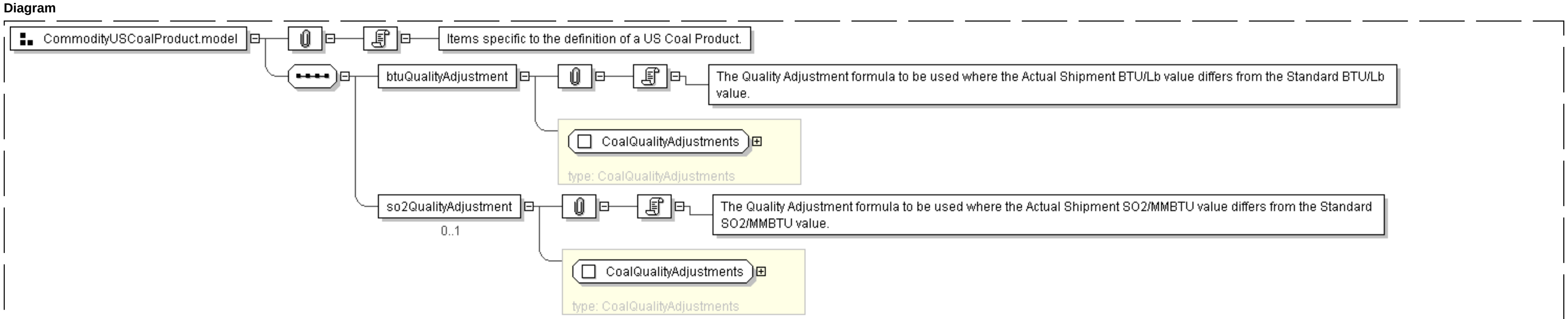
Model Group: CommodityUSCoalProduct.model

Name	CommodityUSCoalProduct.model
Used by (from the same schema document)	Complex Type **CoalProduct**
Documentation	Items specific to the definition of a US Coal Product.

XML Instance Representation

```
<btuQualityAdjustment> CoalQualityAdjustments </btuQualityAdjustment> [1]
'The Quality Adjustment formula to be used where the Actual Shipment BTU/Lb value differs
from the Standard BTU/Lb value.'

<so2QualityAdjustment> CoalQualityAdjustments </so2QualityAdjustment> [0..1]
'The Quality Adjustment formula to be used where the Actual Shipment SO2/MMBTU value
differs from the Standard SO2/MMBTU value.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CommodityUSCoalProduct.model">
```

```
    <xsd:sequence>
       <xsd:element name="btuQualityAdjustment" type=" CoalQualityAdjustments "/>
       <xsd:element name="so2QualityAdjustment" type=" CoalQualityAdjustments " minOccurs="0"/>
    </xsd:sequence>
</xsd:group>
```

top

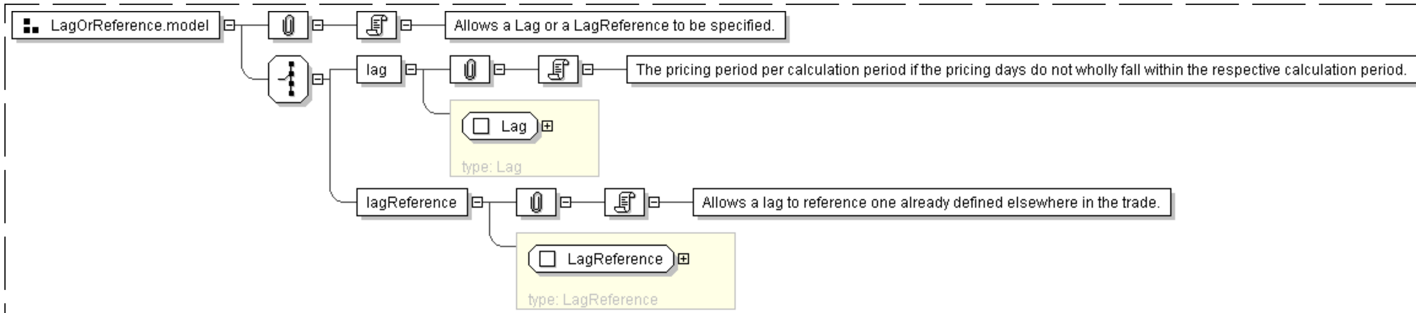
Model Group: LagOrReference.model

Name	LagOrReference.model
Used by (from the same schema document)	Complex Type **CommodityFx**
Documentation	Allows a Lag or a LagReference to be specified.

XML Instance Representation

```
Start Choice [1]
   <lag> Lag </lag> [1]
   'The pricing period per calculation period if the pricing days do not wholly fall within
   the respective calculation period.'

   <lagReference> LagReference </lagReference> [1]
   'Allows a lag to reference one already defined elsewhere in the trade.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="LagOrReference.model">
    <xsd:choice>
       <xsd:element name="lag" type=" Lag "/>
       <xsd:element name="lagReference" type=" LagReference "/>
    </xsd:choice>
</xsd:group>
```

top

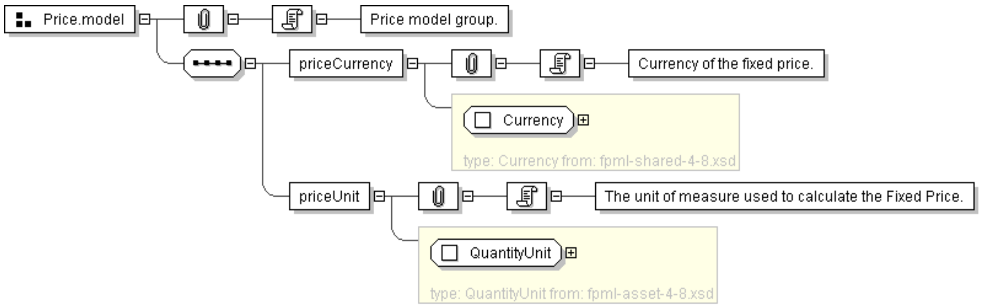
Model Group: Price.model

Name	Price.model
Used by (from the same schema document)	Complex Type **FixedPrice**
Documentation	Price model group.

XML Instance Representation

```
<priceCurrency> Currency </priceCurrency> [1]
'Currency of the fixed price.'

<priceUnit> QuantityUnit </priceUnit> [1]
'The unit of measure used to calculate the Fixed Price.'
```

Diagram



Schema Component Representation

```
<xsd:group name="Price.model">
   <xsd:sequence>
      <xsd:element name="priceCurrency" type=" Currency "/>
      <xsd:element name="priceUnit" type=" QuantityUnit "/>
   </xsd:sequence>
</xsd:group>
```

top

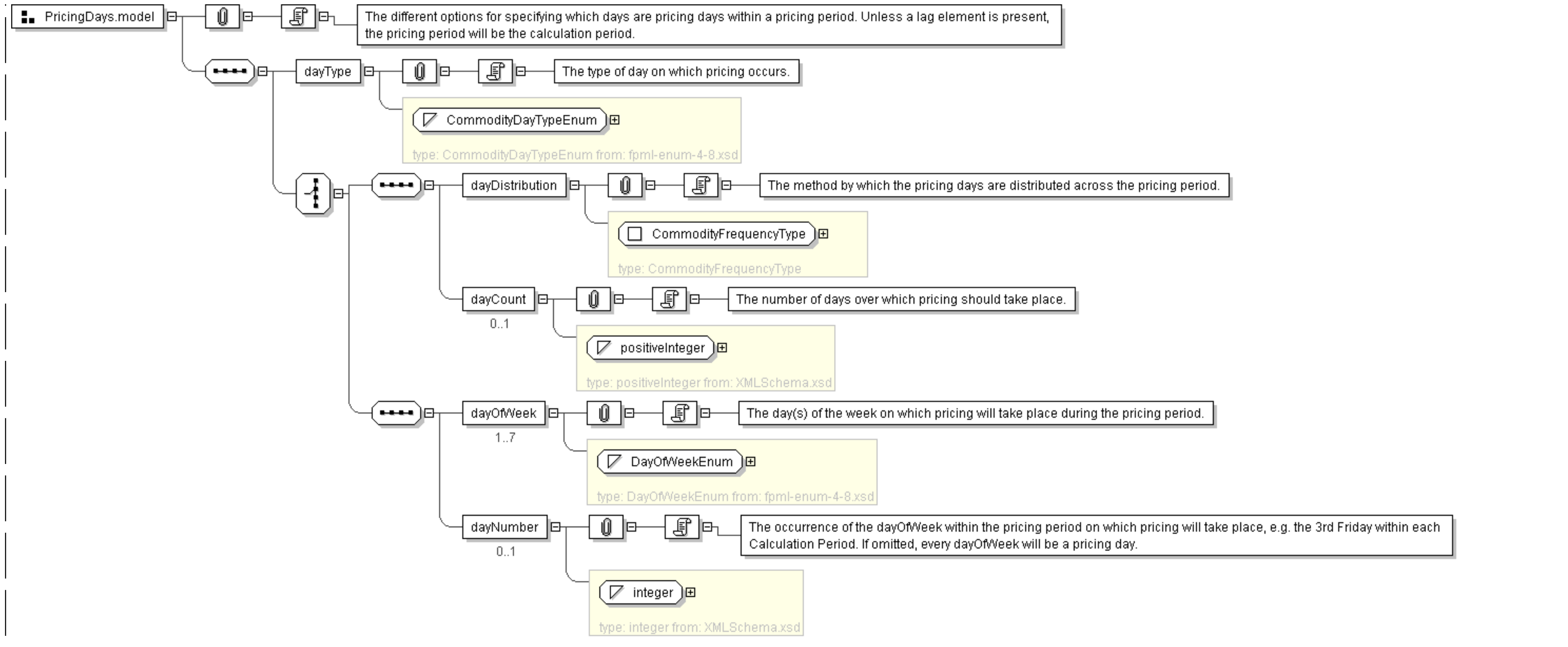
Model Group: PricingDays.model

Name	PricingDays.model
Used by (from the same schema document)	Complex Type **CommodityFx** , Complex Type **CommodityPricingDates**
Documentation	The different options for specifying which days are pricing days within a pricing period. Unless a lag element is present, the pricing period will be the calculation period.

XML Instance Representation

```
<dayType> CommodityDayTypeEnum </dayType> [1]
'The type of day on which pricing occurs.'

Start Choice [1]
   <dayDistribution> CommodityFrequencyType </dayDistribution> [1]
   'The method by which the pricing days are distributed across the pricing period.'

   <dayCount> xsd:positiveInteger </dayCount> [0..1]
   'The number of days over which pricing should take place.'

   <dayOfWeek> DayOfWeekEnum </dayOfWeek> [1..7]
   'The day(s) of the week on which pricing will take place during the pricing period.'

   <dayNumber> xsd:integer </dayNumber> [0..1]
   'The occurrence of the dayOfWeek within the pricing period on which pricing will take place,
   e.g. the 3rd Friday within each Calculation Period. If omitted, every dayOfWeek will be
   a pricing day.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="PricingDays.model">
   <xsd:sequence>
      <xsd:element name="dayType" type=" CommodityDayTypeEnum "/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="dayDistribution" type=" CommodityFrequencyType "/>
            <xsd:element name="dayCount" type=" xsd:positiveInteger " minOccurs="0"/>
         </xsd:sequence>
         <xsd:sequence>
            <xsd:element name="dayOfWeek" type=" DayOfWeekEnum " maxOccurs="7"/>
            <xsd:element name="dayNumber" type=" xsd:integer " minOccurs="0"/>
         </xsd:sequence>
      </xsd:choice>
   </xsd:sequence>
</xsd:group>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-msg-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
```

```
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-msg-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Definitions

Complex Type: CancelTradeConfirmation

Super-types:	RequestMessage < **CancelTradeConfirmation** (by extension)
Sub-types:	None

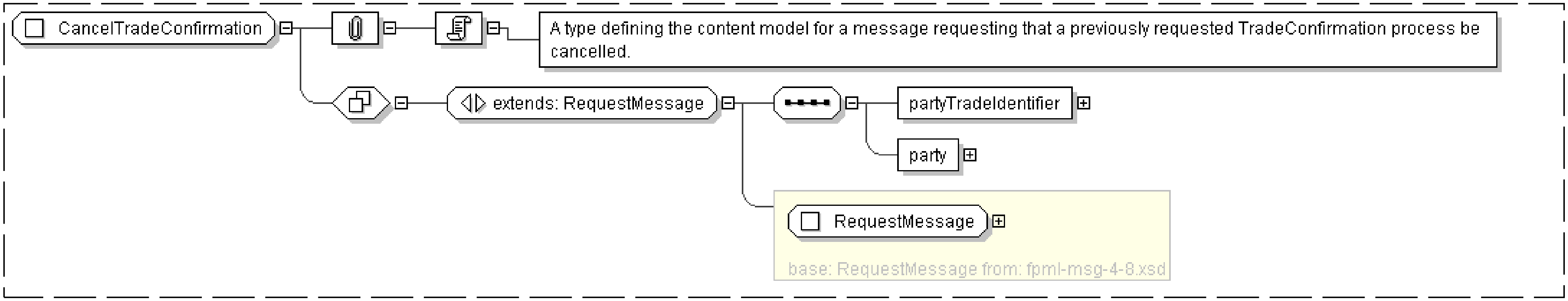
Name	CancelTradeConfirmation
Abstract	no
Documentation	A type defining the content model for a message requesting that a previously requested TradeConfirmation process be cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1]
   'The trade reference identifier(s) allocated to the trade by the parties involved.'

   <party> Party </party> [1]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
```

```
a trade lifecycle. For example, the principal parties obligated to make payments from time
to time during the term of the trade, but may include other parties involved in, or
incidental to, the trade, such as parties acting in the role of novation transferor/
transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CancelTradeConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier "/>
            <xsd:element name="party" type=" Party "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ConfirmTrade

Super-types:	RequestMessage < **ConfirmTrade** (by extension)
Sub-types:	None

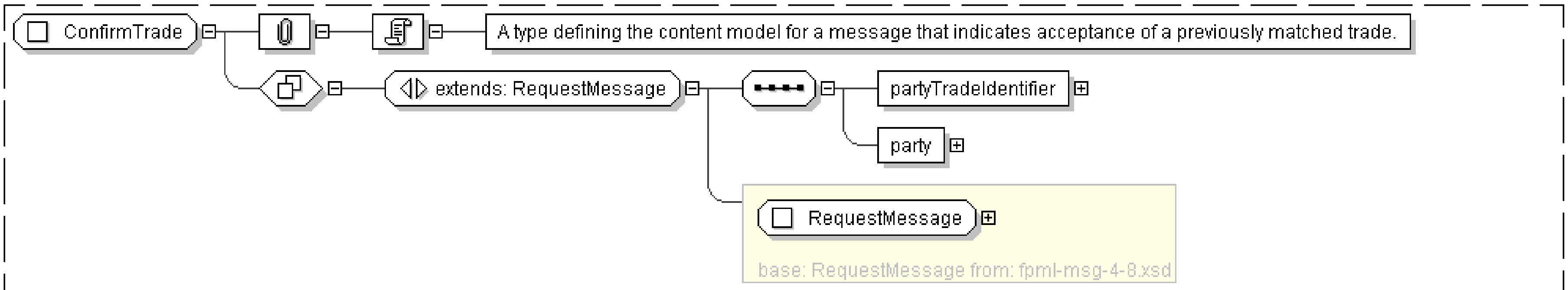
Name	ConfirmTrade
Abstract	no
Documentation	A type defining the content model for a message that indicates acceptance of a previously matched trade.

XML Instance Representation

```
<...
```

```
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1]
   'The trade reference identifier(s) allocated to the trade by the parties involved.'

   <party> Party </party> [1]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ConfirmTrade">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier "/>
            <xsd:element name="party" type=" Party "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ConfirmationCancelled

Super-types:	ResponseMessage < **ConfirmationCancelled** (by extension)
Sub-types:	None

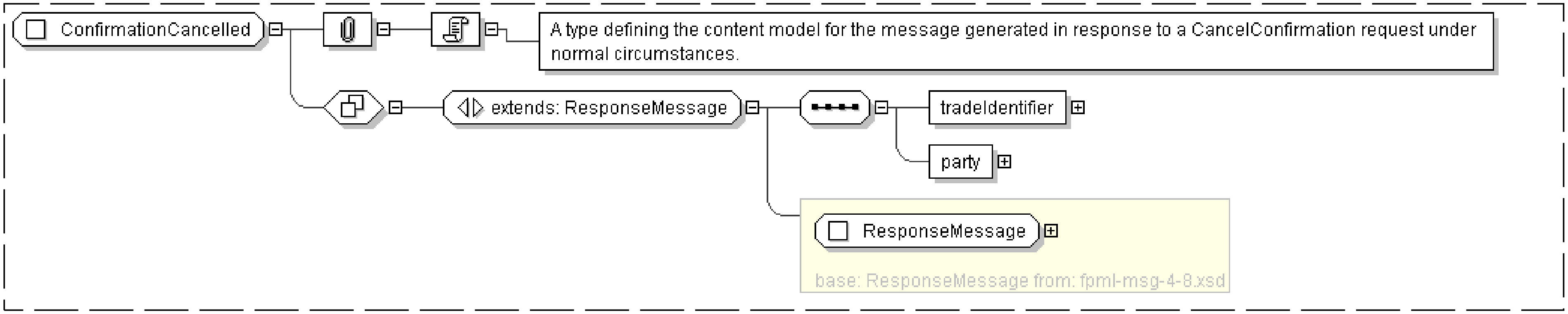
Name	ConfirmationCancelled
Abstract	no
Documentation	A type defining the content model for the message generated in response to a CancelConfirmation request under normal circumstances.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]
   'An instance of a unique trade identifier.'
```

```
<party> Party </party> [1]
'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
a trade lifecycle. For example, the principal parties obligated to make payments from time
to time during the term of the trade, but may include other parties involved in, or
incidental to, the trade, such as parties acting in the role of novation transferor/
transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
within a document.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ConfirmationCancelled">
  <xsd:complexContent>
    <xsd:extension base=" ResponseMessage ">
      <xsd:sequence>
        <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
        <xsd:element name="party" type=" Party "/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ModifyTradeConfirmation

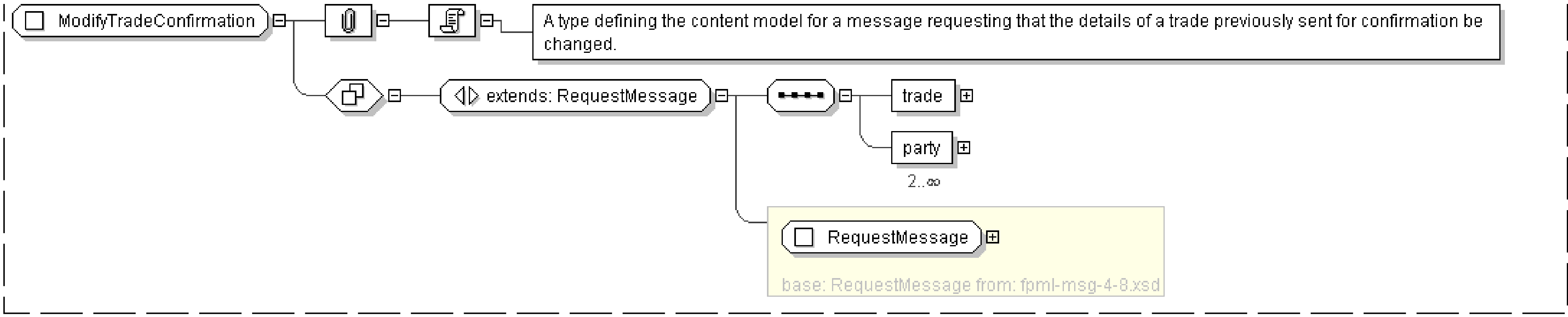
Super-types:	RequestMessage < **ModifyTradeConfirmation** (by extension)
Sub-types:	None

Name	ModifyTradeConfirmation
Abstract	no
Documentation	A type defining the content model for a message requesting that the details of a trade previously sent for confirmation be changed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <trade> Trade </trade> [1]
   'The root element in an FpML trade document.'

   <party> Party </party> [2..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ModifyTradeConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestTradeConfirmation

Super-types:	RequestMessage < **RequestTradeConfirmation** (by extension)
Sub-types:	None

Name	RequestTradeConfirmation
Abstract	no
Documentation	A type defining the content model for a message requesting that the contained trade be put forward for matching and confirmation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'
```

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> RequestMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<trade> Trade **</trade>** [1]

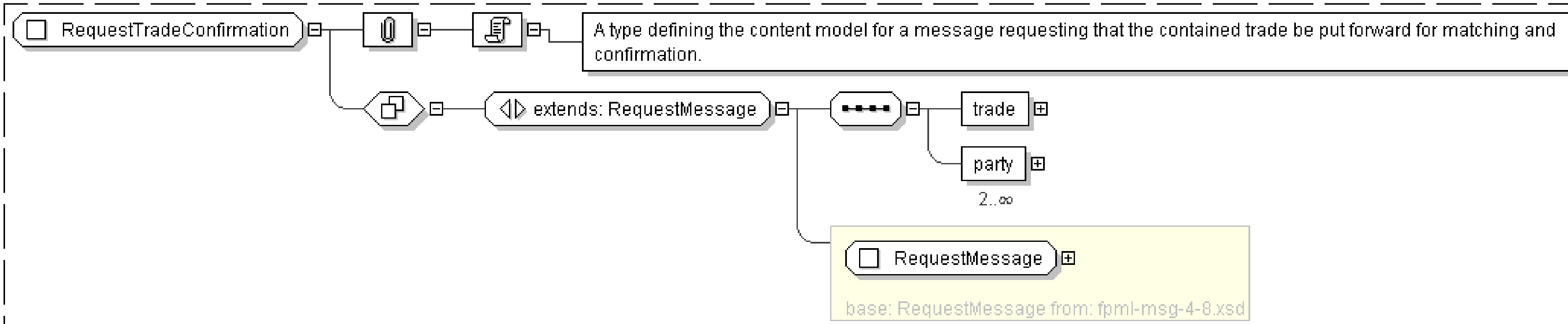
'The root element in an FpML trade document.'

<party> Party **</party>** [2..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestTradeConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAffirmation

Super-types:	NotificationMessage < **TradeAffirmation** (by extension)
Sub-types:	None

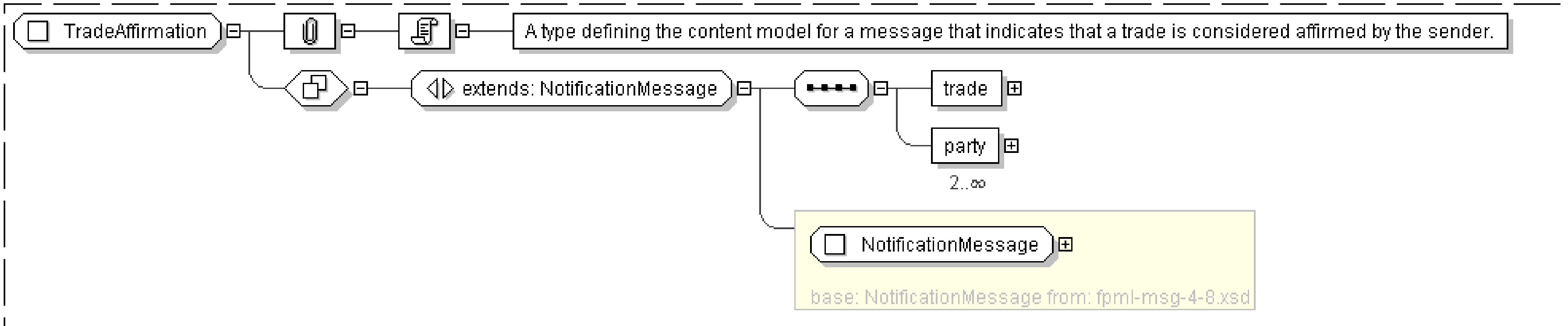
Name	TradeAffirmation
Abstract	no
Documentation	A type defining the content model for a message that indicates that a trade is considered affirmed by the sender.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <trade> Trade </trade> [1]
   'The root element in an FpML trade document.'

   <party> Party </party> [2..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAffirmation">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAffirmed

Super-types:	ResponseMessage < **TradeAffirmed** (by extension)
Sub-types:	None

Name	TradeAffirmed
Abstract	no
Documentation	A type defining the content model for a message generated when a party confirms that a trade is affirmed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
"
```

expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> ResponseMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<tradeIdentifier> TradeIdentifier </tradeIdentifier> [1..*]

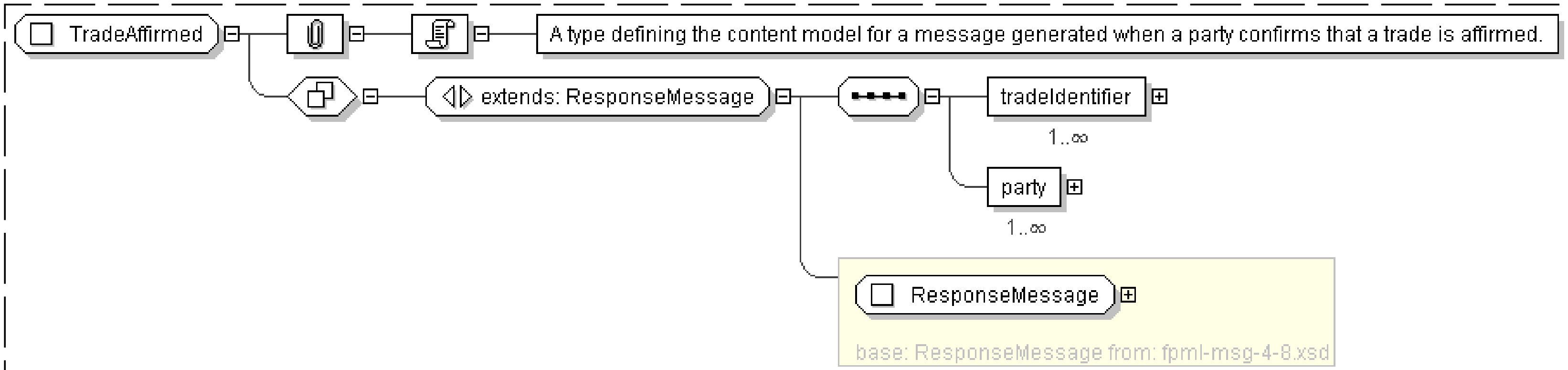
'An instance of a unique trade identifier.'

<party> Party </party> [1..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAffirmed">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
```

```
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAlreadyAffirmed

Super-types:	TradeErrorResponse < **TradeAlreadyAffirmed** (by extension)
Sub-types:	None

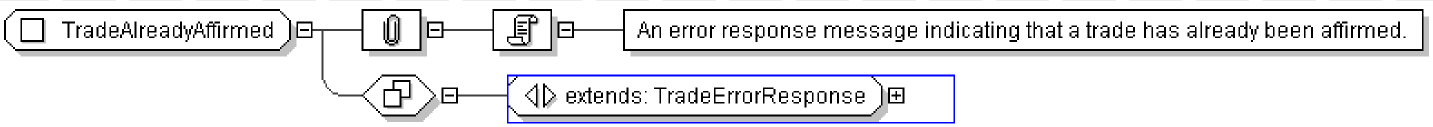
Name	TradeAlreadyAffirmed
Abstract	no
Documentation	An error response message indicating that a trade has already been affirmed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Choice [1]
      <trade> Trade </trade> [1]
      'An element that allows the full details of the trade to be used as a mechanism for
      identifying the trade for which the post-trade event pertains'

      <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
```

```
    'A container since an individual trade can be referenced by two or more
    different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAlreadyAffirmed">
   <xsd:complexContent>
      <xsd:extension base=" TradeErrorResponse "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAlreadyConfirmed

Super-types:	TradeErrorResponse < **TradeAlreadyConfirmed** (by extension)
Sub-types:	None

Name	TradeAlreadyConfirmed
Abstract	no
Documentation	An error response message indicating that a trade has already been confirmed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
```

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> ResponseMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
Start Choice [1]
<trade> Trade </trade> [1]

'An element that allows the full details of the trade to be used as a mechanism for identifying the trade for which the post-trade event pertains'

<tradeReference> PartyTradeIdentifiers </tradeReference> [1]

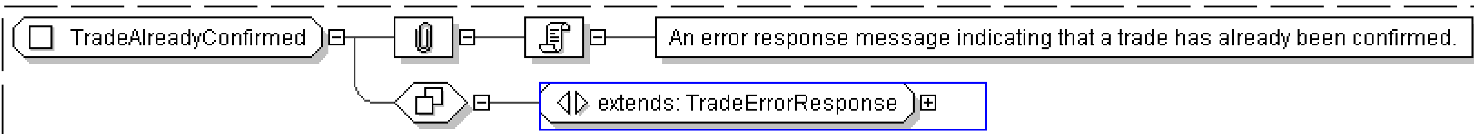
'A container since an individual trade can be referenced by two or more different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
<party> Party </party> [1..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAlreadyConfirmed">
   <xsd:complexContent>
      <xsd:extension base=" TradeErrorResponse "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeConfirmed

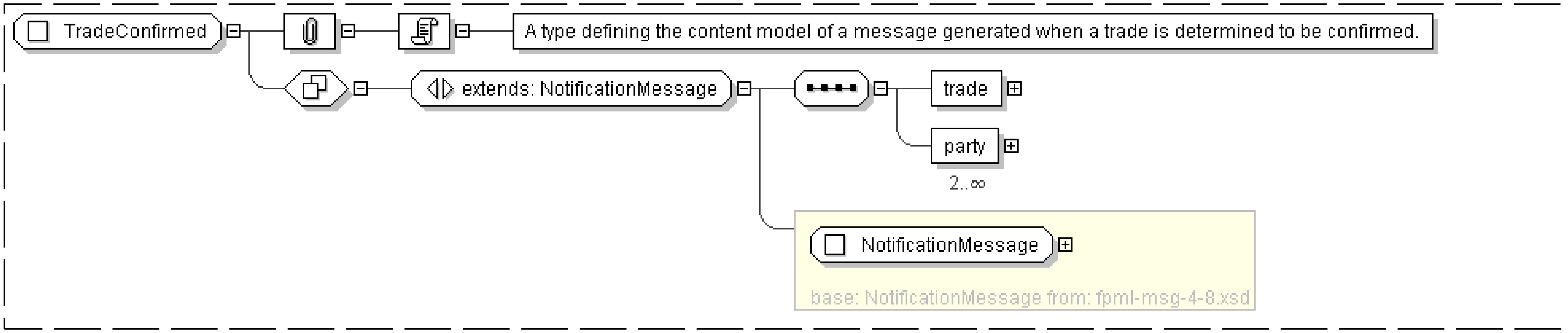
Super-types:	NotificationMessage < **TradeConfirmed** (by extension)
Sub-types:	None

Name	TradeConfirmed
Abstract	no
Documentation	A type defining the content model of a message generated when a trade is determined to be confirmed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <trade> Trade </trade> [1]
   'The root element in an FpML trade document.'

   <party> Party </party> [2..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeConfirmed">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
```

```
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Schema Composition	• This schema includes components from the following schema document(s):
	  ○ fpml-msg-4-8.xsd
	  ○ fpml-reconciliation-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-msg-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-reconciliation-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Declarations

Element: changeEvent

- *The following elements can be used wherever this element is referenced:*
  - indexChange

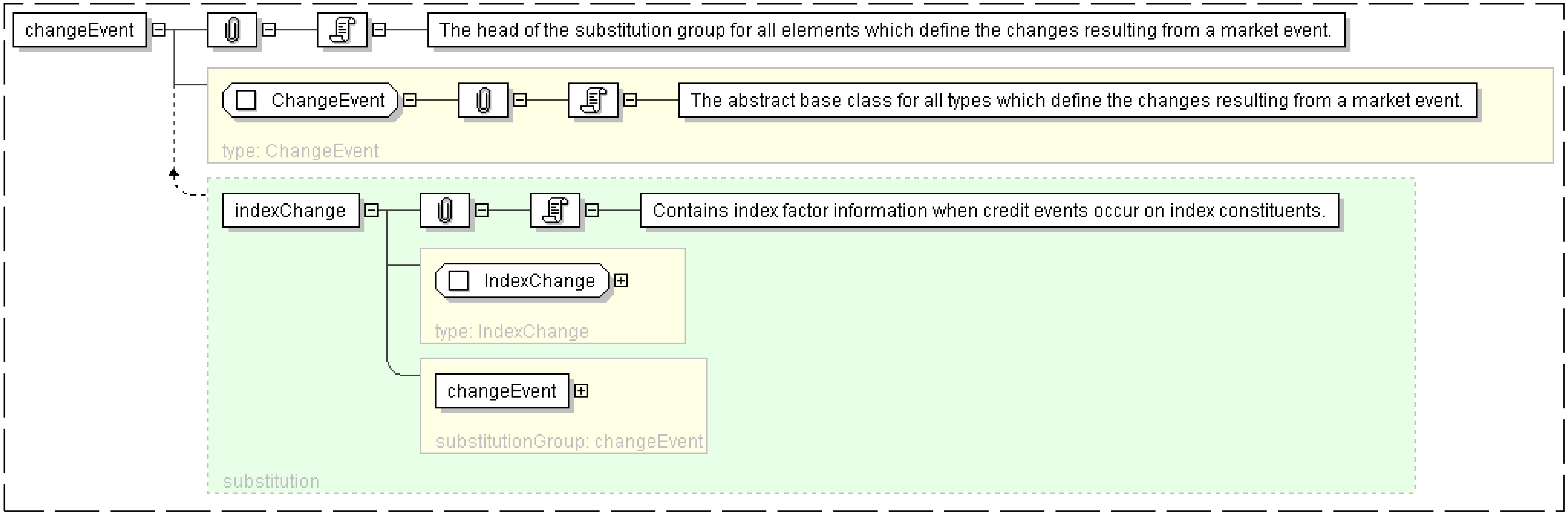
Name	changeEvent
Used by (from the same schema document)	Complex Type **ContractChange**
Type	ChangeEvent
Nillable	no
Abstract	yes
Documentation	The head of the substitution group for all elements which define the changes resulting from a market event.

Logical Diagram

XML Instance Representation

```
<changeEvent/>
```

Diagram



Schema Component Representation

```
<xsd:element name="changeEvent" type=" ChangeEvent " abstract="true"/>
```

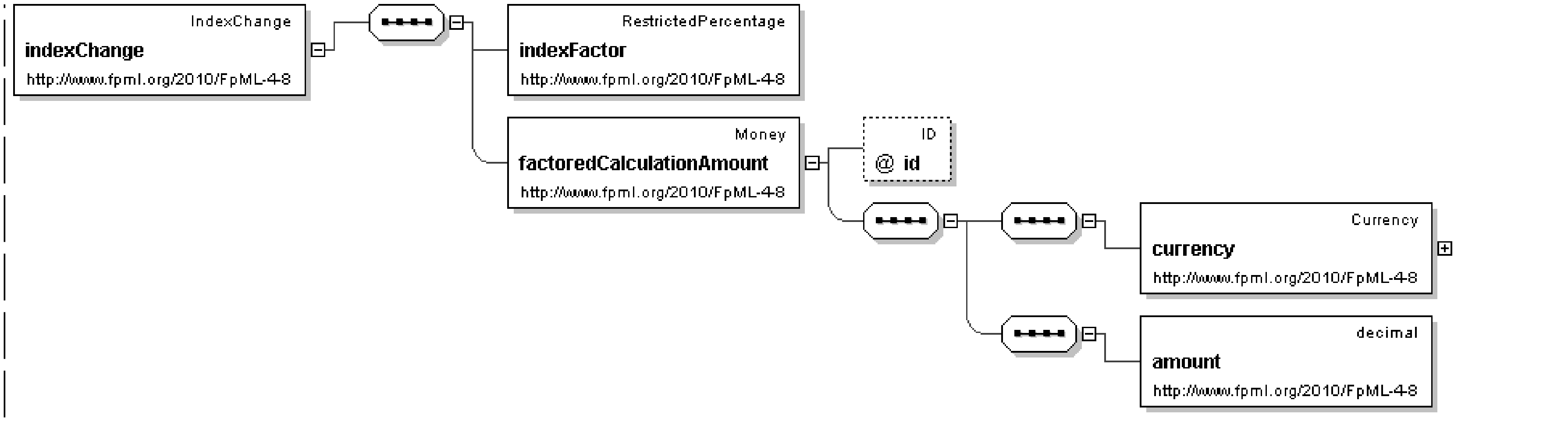
top

Element: indexChange

- *This element can be used wherever the following element is referenced:*
  - changeEvent

Name	indexChange
Type	IndexChange
Nillable	no
Abstract	no
Documentation	Contains index factor information when credit events occur on index constituents.

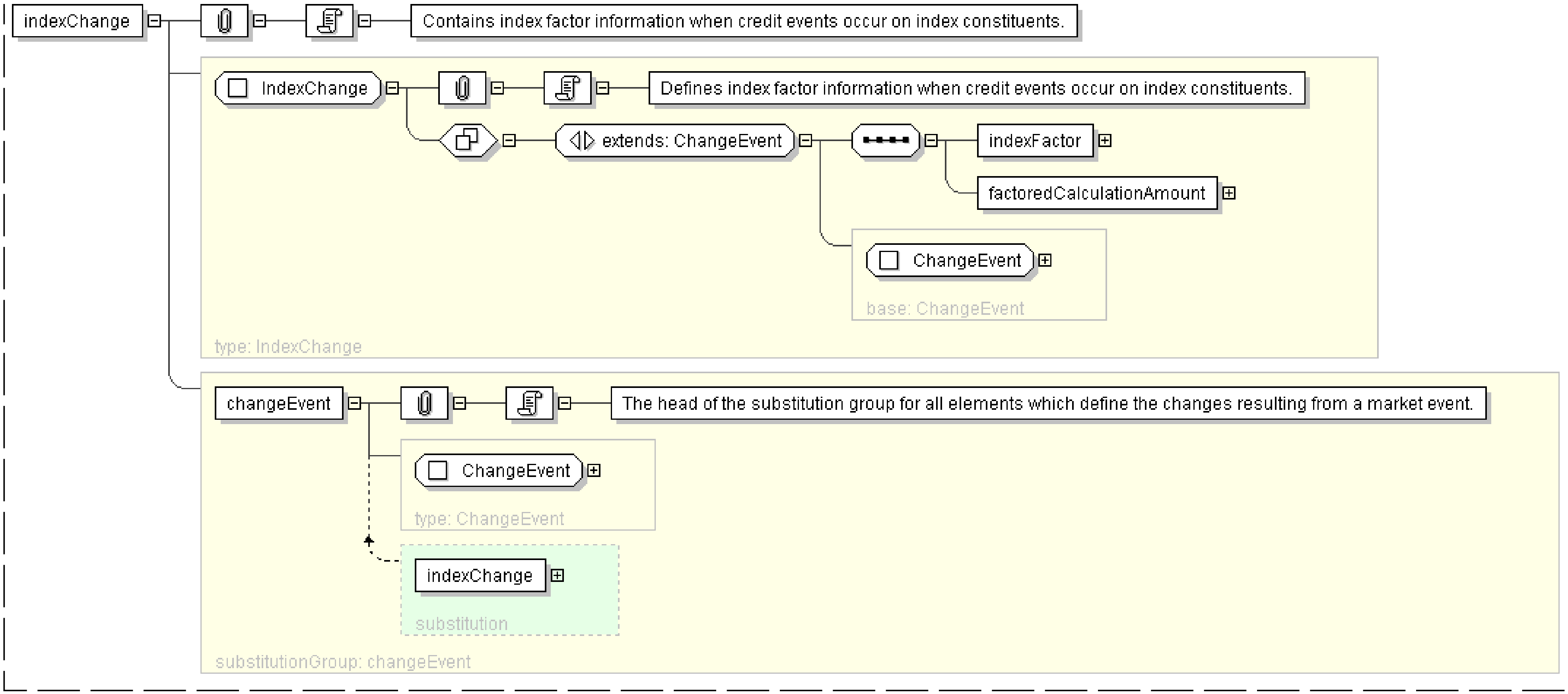
Logical Diagram



XML Instance Representation

```
<indexChange>
   <indexFactor> RestrictedPercentage </indexFactor> [1]
   'The index version factor, expressed as a decimal, that multiplied by the original
   notional amount yields the notional amount covered by the seller. A factor of 75% would
   be represented as 0.75.'

   <factoredCalculationAmount> Money </factoredCalculationAmount> [1]
   'This relates only to CDS index contracts and represents the factored notional amount,
   obtained by multiplying the index factor to the contract notional amount. See
   indexFactor description above.'

</indexChange>
```

Diagram



Schema Component Representation

```
<xsd:element name="indexChange" type=" IndexChange " substitutionGroup="changeEvent"/>
```

top

Global Definitions

Complex Type: ChangeEvent

Super-types:	None
Sub-types:	• IndexChange (by extension)

Name	ChangeEvent
Used by (from the same schema document)	Element **changeEvent**
Abstract	yes
Documentation	The abstract base class for all types which define the changes resulting from a market event.

XML Instance Representation

```
<.../>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="ChangeEvent" abstract="true"/>
```

top

Complex Type: ContractAmended

Super-types:	NotificationMessage < **ContractAmended** (by extension)
Sub-types:	None

Name	ContractAmended
Abstract	no
Documentation	Notification that a Contract has been Amended.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
```

<amendment> ContractAmendment </amendment> [1]

'Details of the amendment'

<paymentDetails> PaymentDetails </paymentDetails> [0..*]

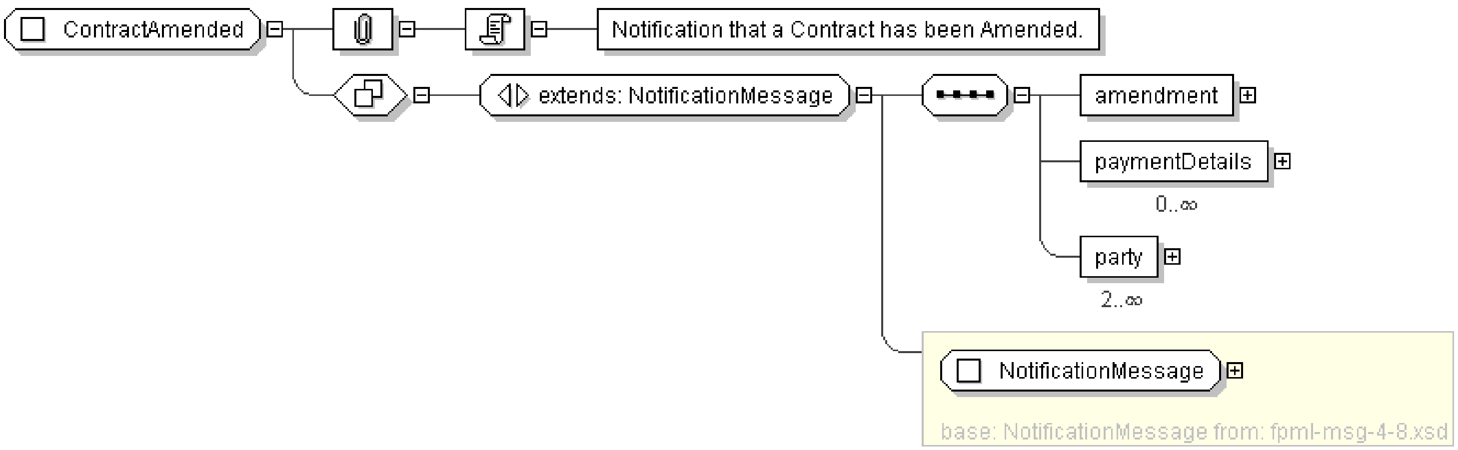
'Details of the payments, like amount breakdowns, settlement information.'

<party> Party </party> [2..*]

'Identification of the Parties to this Contract.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractAmended">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="amendment" type=" ContractAmendment "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractAmendedCancelled

Super-types:	NotificationMessage < **ContractAmendedCancelled** (by extension)

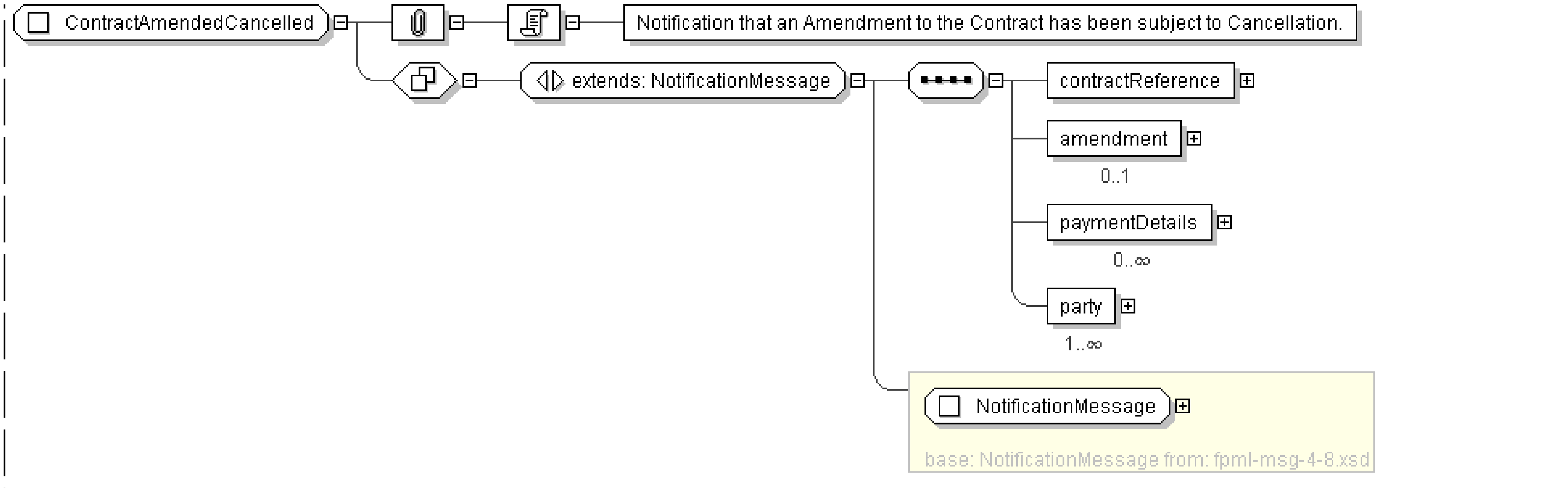
Sub-types:	None

Name	ContractAmendedCancelled
Abstract	no
Documentation	Notification that an Amendment to the Contract has been subject to Cancellation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <contractReference> ContractReference </contractReference> [1]
   'Identification of a single Contract which is the subject of this message. Each Party
   may provide one to many identifiers for this contract.'

   <amendment> ContractAmendment </amendment> [0..1]
   'Details of the amendment being cancelled'

   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'

   <party> Party </party> [1..*]
   'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractAmendedCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="amendment" type=" ContractAmendment " minOccurs="0"/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractAmendment

Super-types:	None
Sub-types:	None

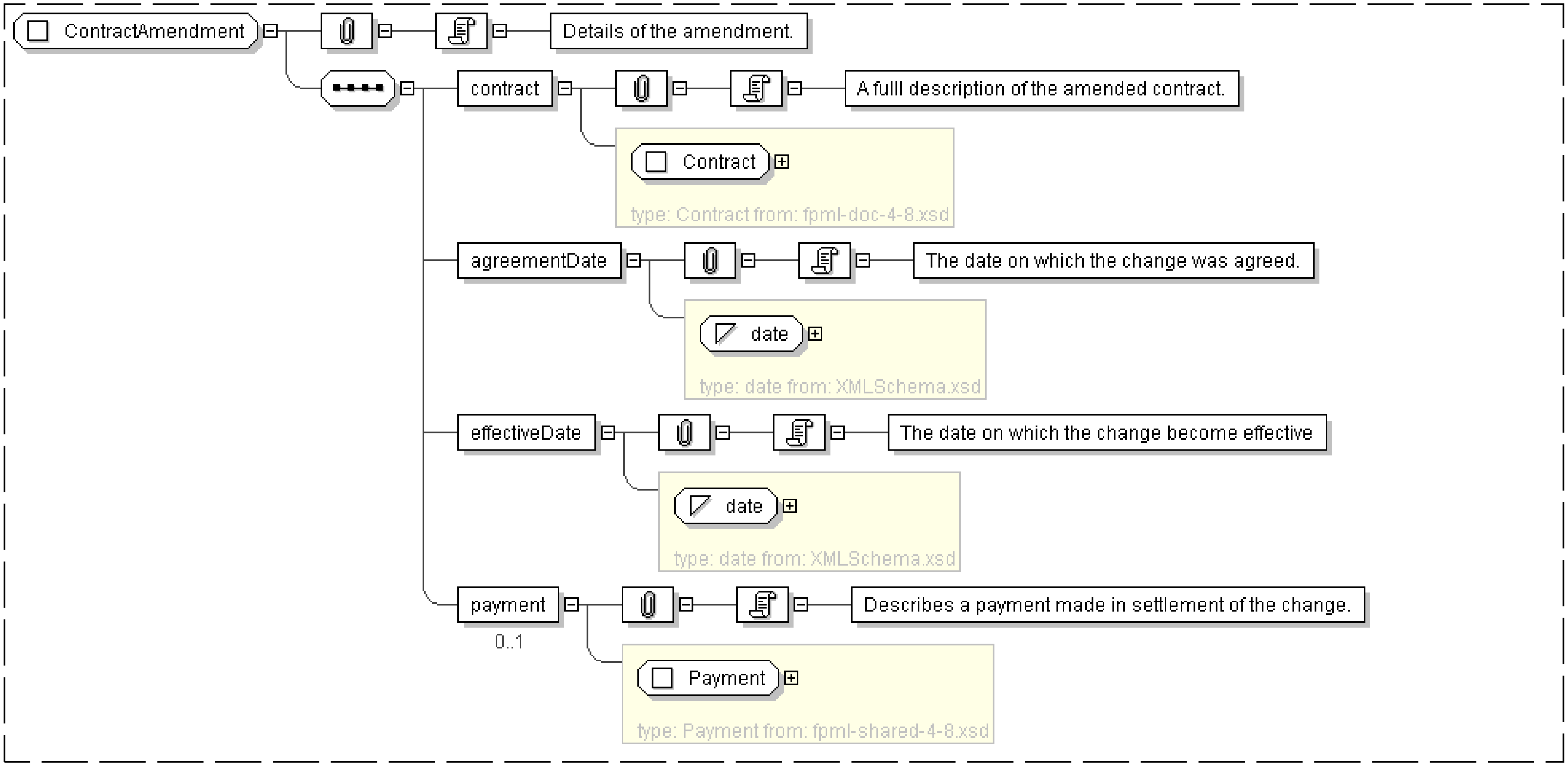
Name	ContractAmendment
Used by (from the same schema document)	Complex Type **ContractAmended** , Complex Type **ContractAmendedCancelled**
Abstract	no
Documentation	Details of the amendment.

XML Instance Representation

```
<...>
```

```
<contract> Contract </contract> [1]
'A fulll description of the amended contract.'

<agreementDate> xsd:date </agreementDate> [1]
'The date on which the change was agreed.'

<effectiveDate> xsd:date </effectiveDate> [1]
'The date on which the change become effective'

<payment> Payment </payment> [0..1]
'Describes a payment made in settlement of the change.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractAmendment">
   <xsd:sequence>
```

```
        <xsd:element name="contract" type=" Contract "/>
        <xsd:element name="agreementDate" type=" xsd:date "/>
        <xsd:element name="effectiveDate" type=" xsd:date "/>
        <xsd:element name="payment" type=" Payment " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractCancelled

Super-types:	NotificationMessage < ContractReferenceMessage (by extension) < **ContractCancelled** (by extension)
Sub-types:	None

Name	ContractCancelled
Abstract	no
Documentation	Notification that a Contract has been subject to Cancellation.

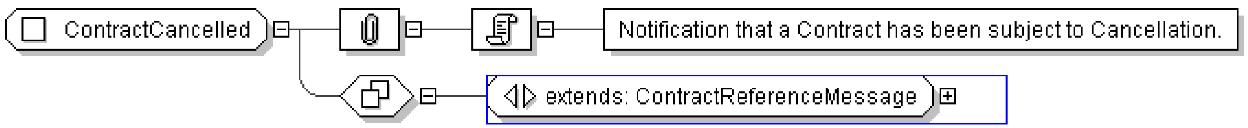
XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <contractReference> ContractReference </contractReference> [1]
   'Identification of a single Contract which is the subject of this message. Each Party
   may provide one to many identifiers for this contract.'

   <party> Party </party> [2..*]
```

'Identification of the Parties to this Contract.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractCancelled">
   <xsd:complexContent>
      <xsd:extension base=" ContractReferenceMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractChange

Super-types:	None
Sub-types:	None

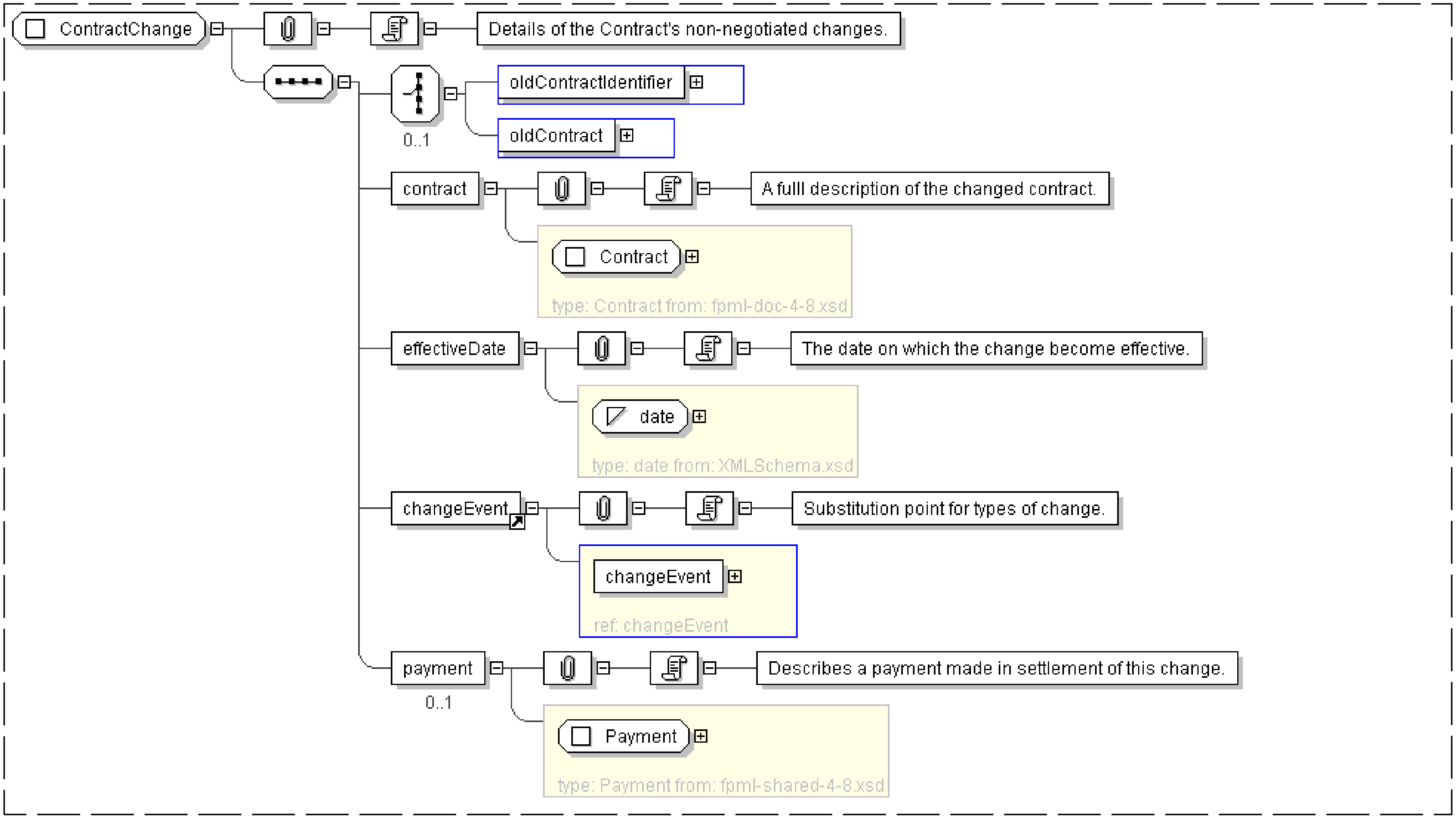
Name	ContractChange
Used by (from the same schema document)	Complex Type **ContractChanged** , Complex Type **ContractChangedCancelled**
Abstract	no
Documentation	Details of the Contract's non-negotiated changes.

XML Instance Representation

```
<...>
Start Choice [0..1]
      <oldContractIdentifier> PartyTradeIdentifier </oldContractIdentifier> [1]
      <oldContract> Contract </oldContract> [1]
End Choice
   <contract> Contract </contract> [1]
   'A fulll description of the changed contract.'

   <effectiveDate> xsd:date </effectiveDate> [1]
   'The date on which the change become effective.'

   <changeEvent> ... </changeEvent> [1]
   'Substitution point for types of change.'
```

```
<payment> Payment </payment> [0..1]
'Describes a payment made in settlement of this change.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractChange">
   <xsd:sequence>
      <xsd:choice minOccurs="0">
         <xsd:element name="oldContractIdentifier" type=" PartyTradeIdentifier "/>
         <xsd:element name="oldContract" type=" Contract "/>
      </xsd:choice>
      <xsd:element name="contract" type=" Contract "/>
      <xsd:element name="effectiveDate" type=" xsd:date "/>
```

```
        <xsd:element ref=" changeEvent "/>
        <xsd:element name="payment" type=" Payment " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractChanged

Super-types:	NotificationMessage < **ContractChanged** (by extension)
Sub-types:	None

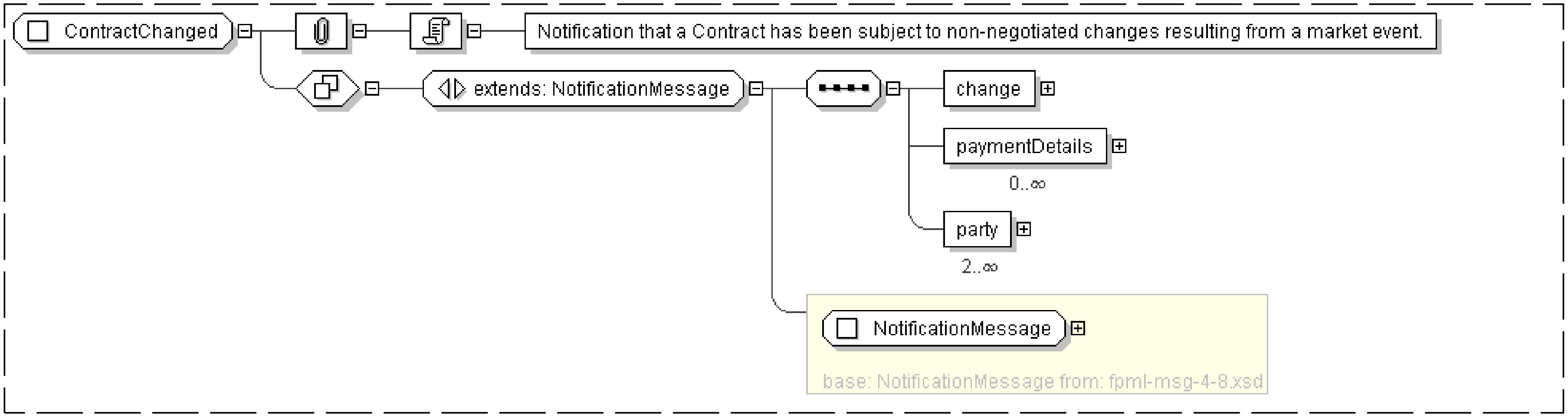
Name	ContractChanged
Abstract	no
Documentation	Notification that a Contract has been subject to non-negotiated changes resulting from a market event.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <change> ContractChange </change> [1]
   'Details of the Contract\'s non-negotiated changes.'

   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'
```

```
<party> Party </party> [2..*]
'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractChanged">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="change" type=" ContractChange "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractChangedCancelled

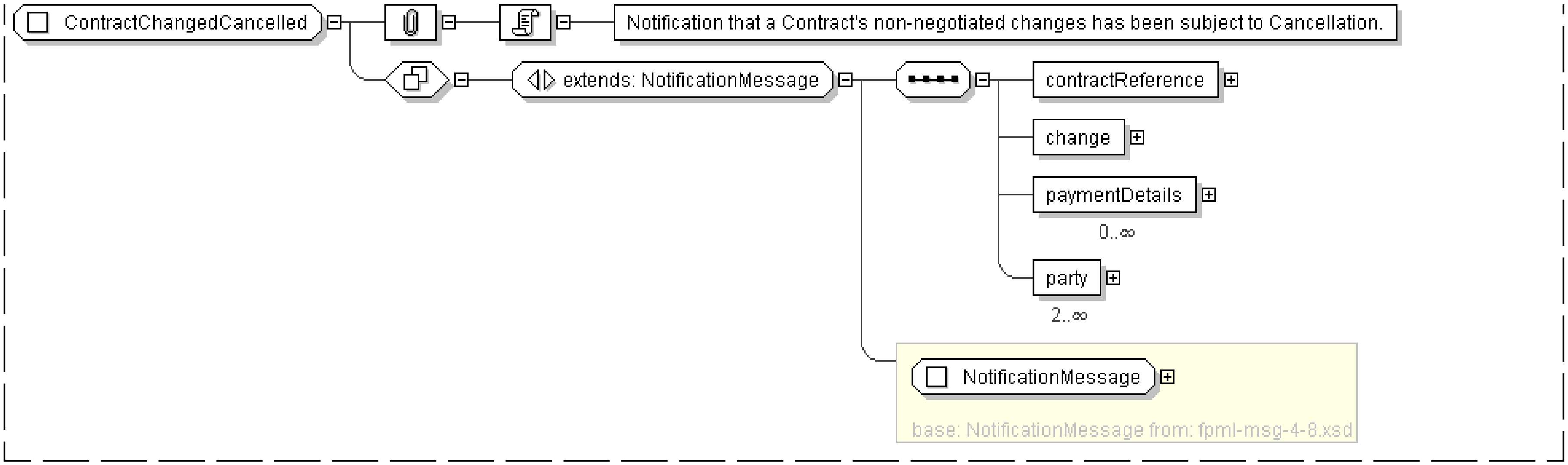
Super-types:	NotificationMessage < **ContractChangedCancelled** (by extension)
Sub-types:	None

Name	ContractChangedCancelled
Abstract	no
Documentation	Notification that a Contract's non-negotiated changes has been subject to Cancellation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <contractReference> ContractReference </contractReference> [1]
   'Identification of a single Contract which is the subject of this message. Each Party
   may provide one to many identifiers for this contract.'

   <change> ContractChange </change> [1]
   'Details of the changes being cancelled.'

   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'

   <party> Party </party> [2..*]
   'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractChangedCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="change" type=" ContractChange "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractCreated

Super-types:	NotificationMessage < **ContractCreated** (by extension)
Sub-types:	None

Name	ContractCreated
Abstract	no
Documentation	Notification that a Contract has been Created.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
```

'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> NotificationMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<tradeReference> PartyTradeIdentifiers </tradeReference> [0..1]

'Optional reference to trade execution.'

<contract> Contract </contract> [1]

'Contract which has been created.'

<paymentDetails> PaymentDetails </paymentDetails> [0..*]

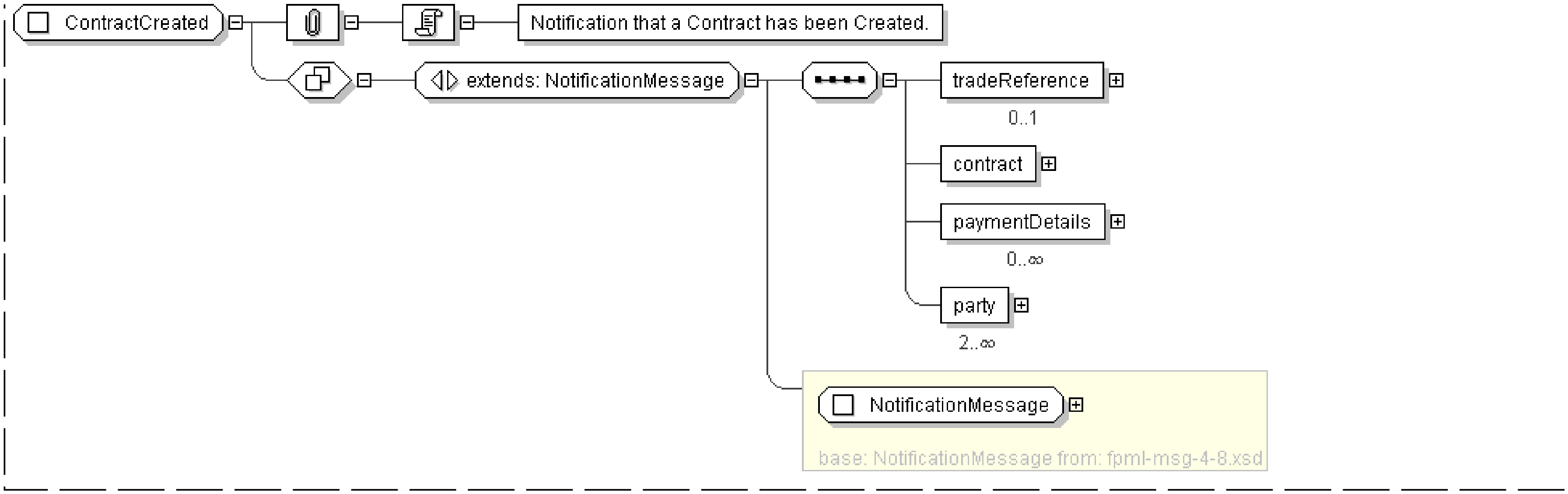
'Details of the payments, like amount breakdowns, settlement information.'

<party> Party </party> [2..*]

'Identification of the Parties to this Contract.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractCreated">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="tradeReference" type=" PartyTradeIdentifiers " minOccurs="0"/>
            <xsd:element name="contract" type=" Contract "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractFullTermination

Super-types:	NotificationMessage < **ContractFullTermination** (by extension)
Sub-types:	None

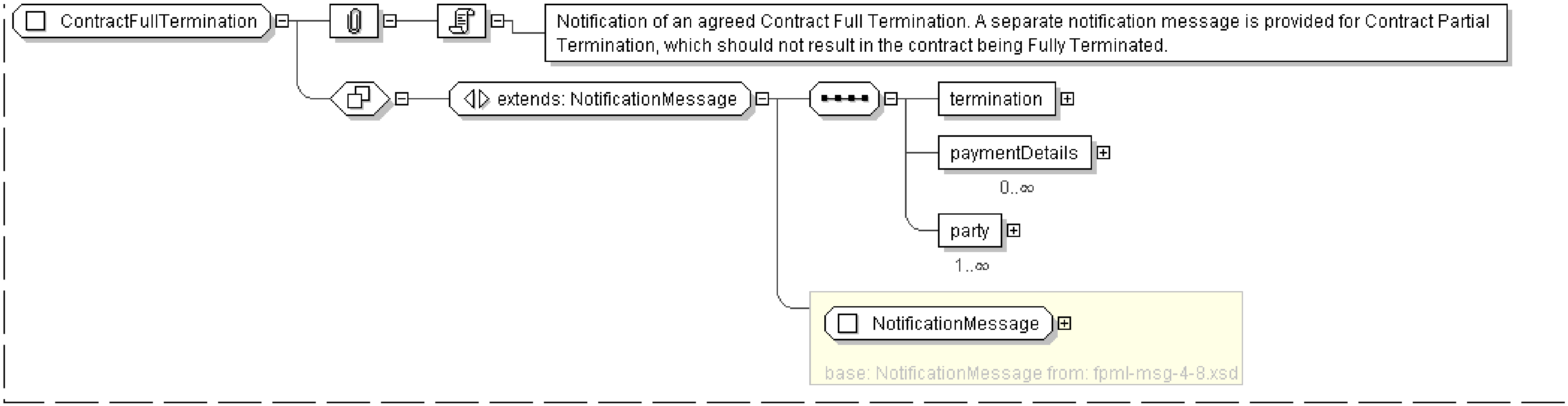
Name	ContractFullTermination
Abstract	no
Documentation	Notification of an agreed Contract Full Termination. A separate notification message is provided for Contract Partial Termination, which should not result in the contract being Fully Terminated.

XML Instance Representation

```
<...
```

```
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <termination> ContractTermination </termination> [1]
   'Details of the full termination.'

   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'

   <party> Party </party> [1..*]
   'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractFullTermination">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="termination" type=" ContractTermination "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractFullTerminationCancelled

Super-types:	NotificationMessage < **ContractFullTerminationCancelled** (by extension)
Sub-types:	None

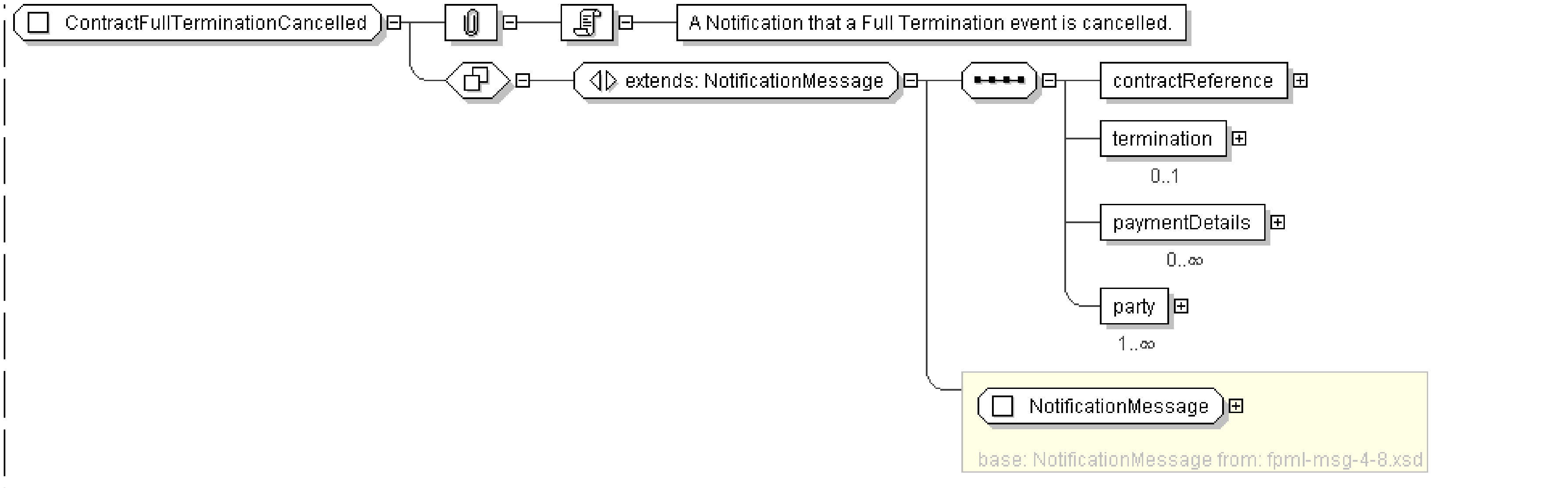
Name	ContractFullTerminationCancelled
Abstract	no
Documentation	A Notification that a Full Termination event is cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
```

```
"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <contractReference> ContractReference </contractReference> [1]
   'Reference to the contract affected by the cancellation.'

   <termination> ContractTermination </termination> [0..1]
   'Details of the Full Termination being cancelled.'

   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'

   <party> Party </party> [1..*]
   'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractFullTerminationCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="termination" type=" ContractTermination " minOccurs="0"/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractIncreased

Super-types:	NotificationMessage < **ContractIncreased** (by extension)
Sub-types:	None

Name	ContractIncreased
Abstract	no
Documentation	Notification that a Contract has been Increased.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
```

7'|'4-8'}) [1]

'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> NotificationMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<increase> ChangeContractSize </increase> [1]

'Increase Details.'

<paymentDetails> PaymentDetails </paymentDetails> [0..*]

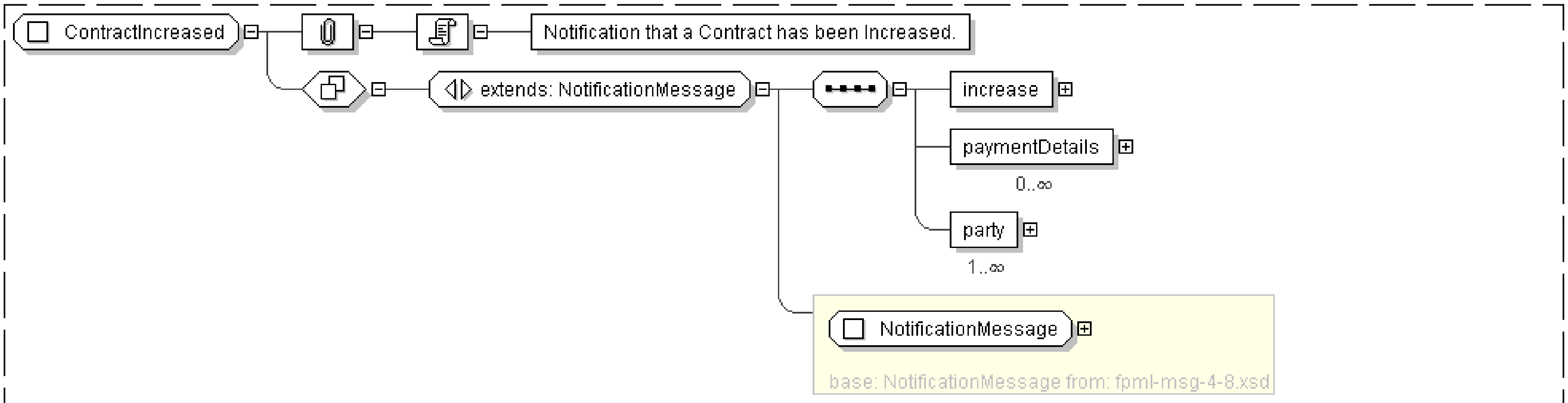
'Details of the payments, like amount breakdowns, settlement information.'

<party> Party </party> [1..*]

'Identification of the Parties to this Contract.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractIncreased">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="increase" type=" ChangeContractSize "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractIncreasedCancelled

Super-types:	NotificationMessage < **ContractIncreasedCancelled** (by extension)
Sub-types:	None

Name	ContractIncreasedCancelled
Abstract	no
Documentation	A Notification that an Increase event is cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
```

<validation> Validation </validation> [0..*]

<contractReference> ContractReference **</contractReference>** [1]

'Reference to the contract affected by the cancellation.'

<increase> ChangeContractSize **</increase>** [0..1]

'Details of the Increase being cancelled.'

<paymentDetails> PaymentDetails **</paymentDetails>** [0..*]

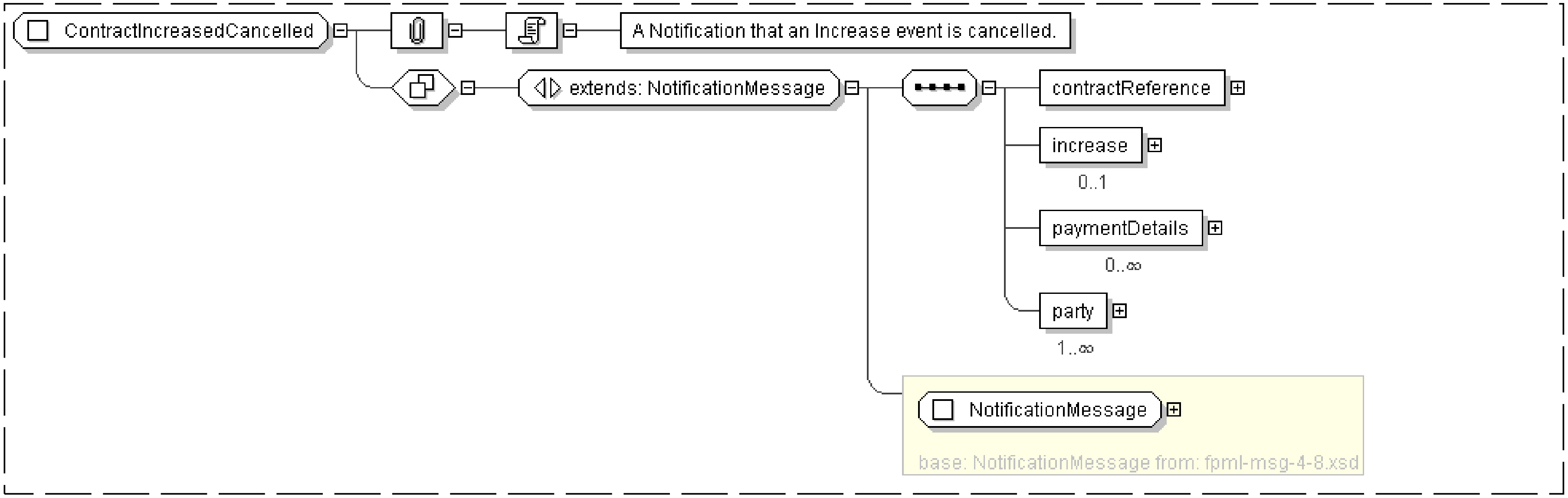
'Details of the payments, like amount breakdowns, settlement information.'

<party> Party **</party>** [1..*]

'Identification of the Parties to this Contract.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractIncreasedCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="increase" type=" ChangeContractSize " minOccurs="0"/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractNovated

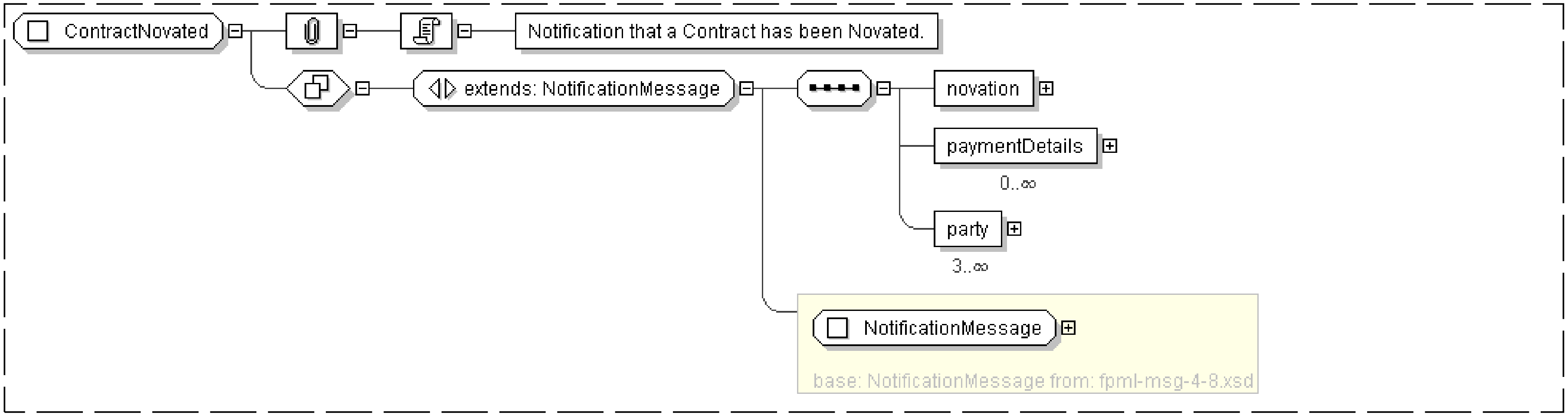
Super-types:	NotificationMessage < **ContractNovated** (by extension)
Sub-types:	None

Name	ContractNovated
Abstract	no
Documentation	Notification that a Contract has been Novated.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> ContractNovation </novation> [1]
   'Novation Details.'

   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'

   <party> Party </party> [3..*]
   'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractNovated">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="novation" type=" ContractNovation "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="3" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractNovatedCancelled

Super-types:	NotificationMessage < **ContractNovatedCancelled** (by extension)
Sub-types:	None

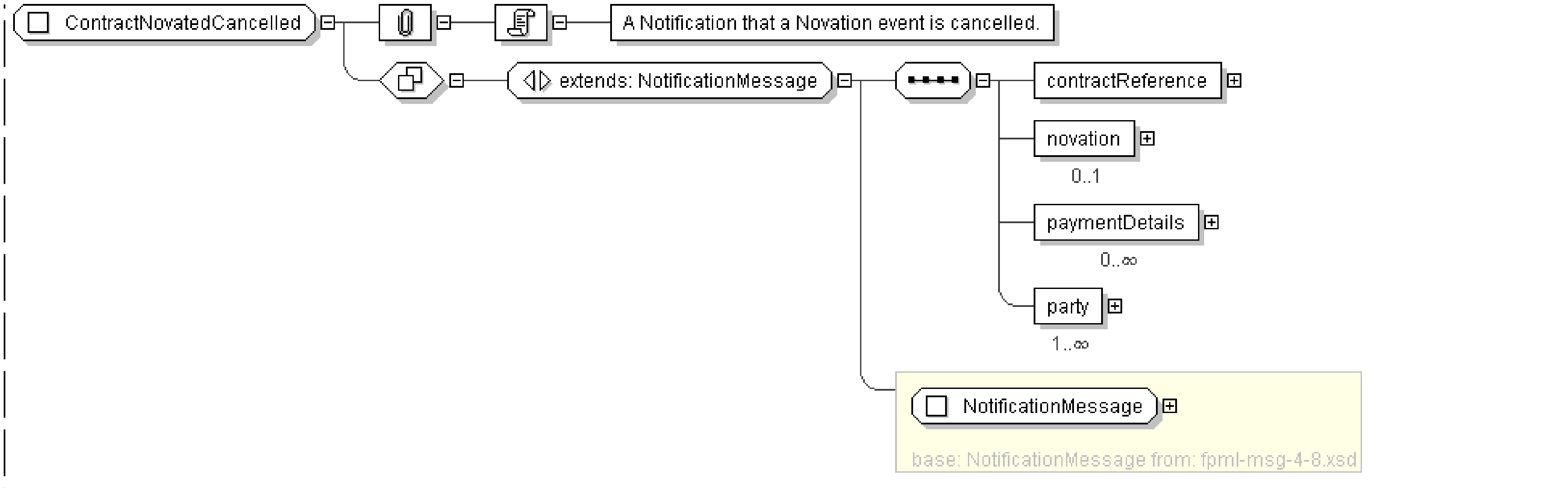
Name	ContractNovatedCancelled
Abstract	no
Documentation	A Notification that a Novation event is cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
```

```
"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'
"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'
">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <contractReference> ContractReference </contractReference> [1]
   'Reference to the contract affected by the cancellation.'
   <novation> ContractNovation </novation> [0..1]
   'Details of the Novation being cancelled.'
   <paymentDetails> PaymentDetails </paymentDetails> [0..*]
   'Details of the payments, like amount breakdowns, settlement information.'
   <party> Party </party> [1..*]
   'Identification of the Parties to this Contract.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractNovatedCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="novation" type=" ContractNovation " minOccurs="0"/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractPartialTermination

Super-types:	NotificationMessage < **ContractPartialTermination** (by extension)
Sub-types:	None

Name	ContractPartialTermination
Abstract	no
Documentation	Notification that a Contract has been subject to Partial Termination.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
```

7'|'4-8'}) [1]

'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> NotificationMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<termination> ChangeContractSize </termination> [1]

'Termination details.'

<paymentDetails> PaymentDetails </paymentDetails> [0..*]

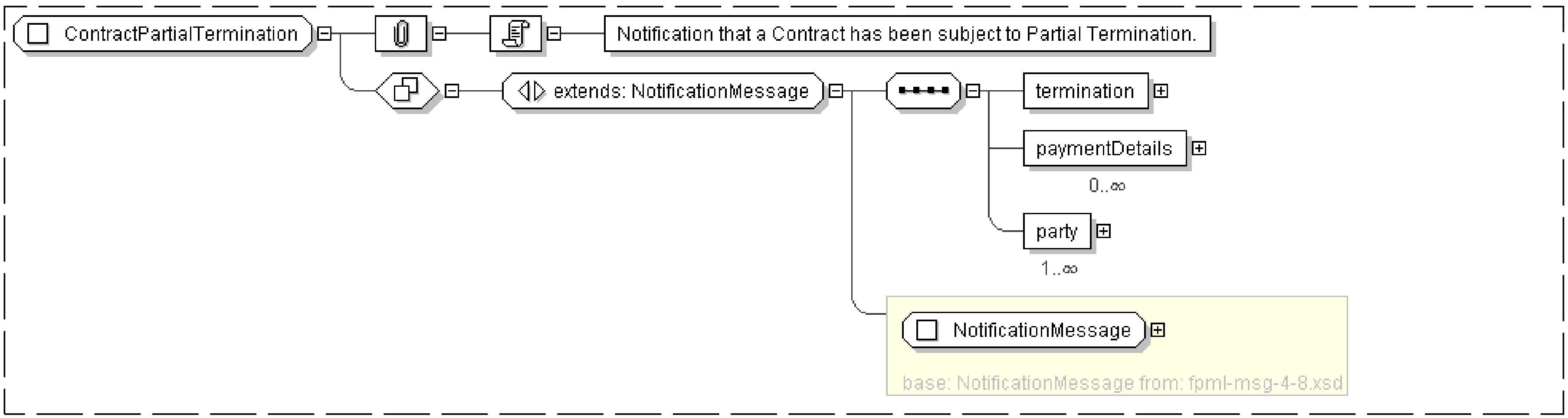
'Details of the payments, like amount breakdowns, settlement information.'

<party> Party </party> [1..*]

'Identification of the Parties to this Contract.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractPartialTermination">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="termination" type=" ChangeContractSize "/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractPartialTerminationCancelled

Super-types:	NotificationMessage < **ContractPartialTerminationCancelled** (by extension)
Sub-types:	None

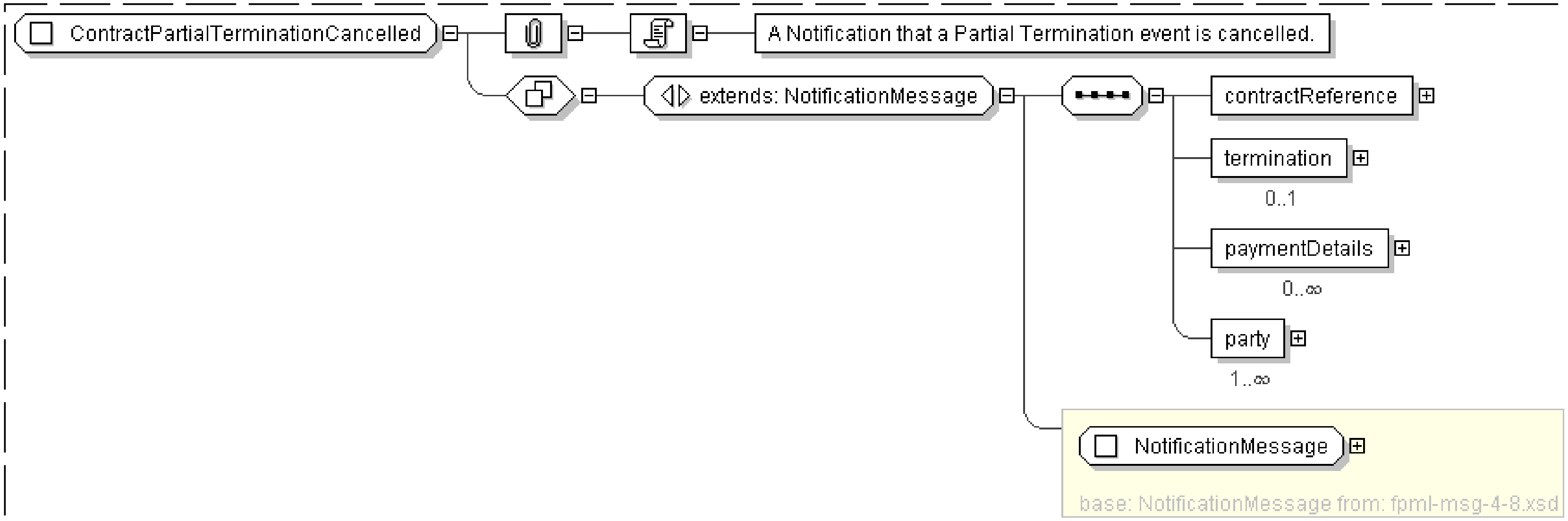
Name	ContractPartialTerminationCancelled
Abstract	no
Documentation	A Notification that a Partial Termination event is cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
```

```
    <validation> Validation </validation> [0..*]
    <contractReference> ContractReference </contractReference> [1]
    'Reference to the contract affected by the cancellation.'

    <termination> ChangeContractSize </termination> [0..1]
    'Details of the Termination being cancelled.'

    <paymentDetails> PaymentDetails </paymentDetails> [0..*]
    'Details of the payments, like amount breakdowns, settlement information.'

    <party> Party </party> [1..*]
    'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractPartialTerminationCancelled">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="termination" type=" ChangeContractSize " minOccurs="0"/>
            <xsd:element name="paymentDetails" type=" PaymentDetails " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ContractReferenceMessage

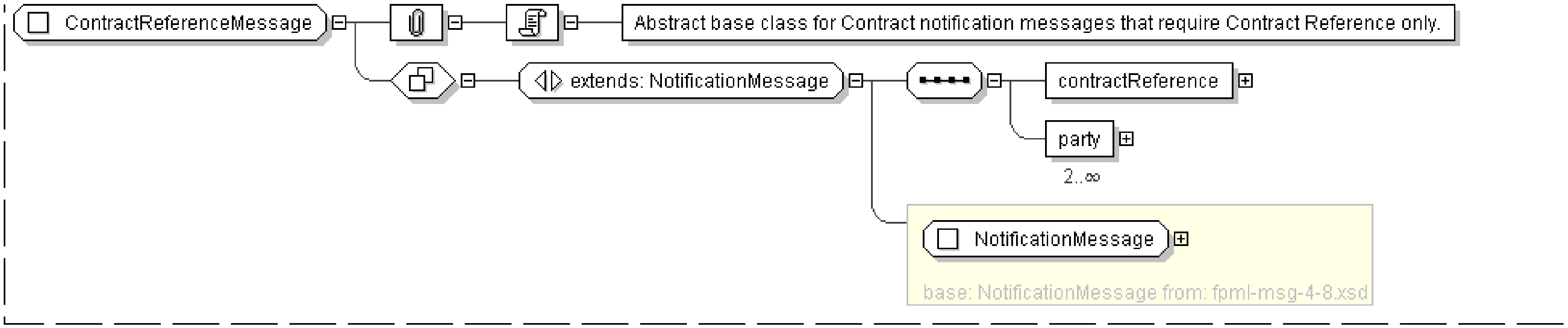
Super-types:	NotificationMessage < **ContractReferenceMessage** (by extension)
Sub-types:	• ContractCancelled (by extension)

Name	ContractReferenceMessage
Abstract	yes
Documentation	Abstract base class for Contract notification messages that require Contract Reference only.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <contractReference> ContractReference </contractReference> [1]
   'Identification of a single Contract which is the subject of this message. Each Party
   may provide one to many identifiers for this contract.'

   <party> Party </party> [2..*]
   'Identification of the Parties to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractReferenceMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="contractReference" type=" ContractReference "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: IndexChange

Super-types:	ChangeEvent < **IndexChange** (by extension)
Sub-types:	None

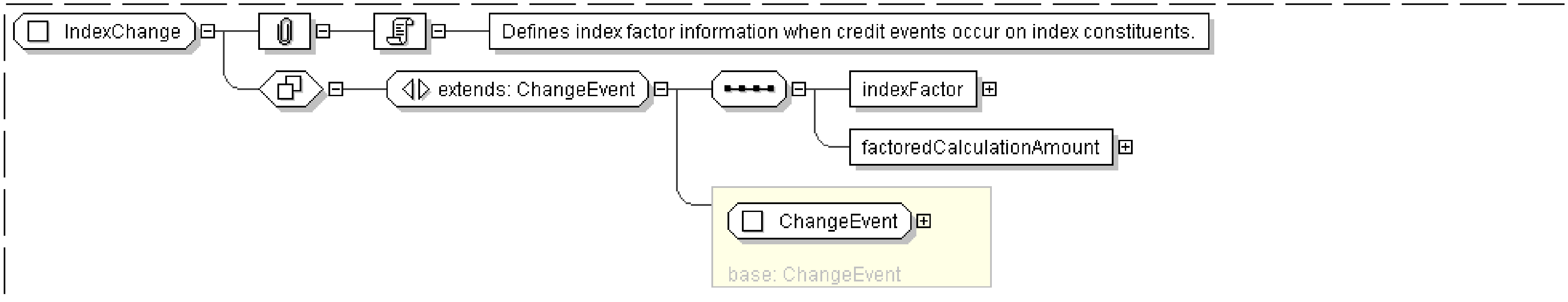
Name	IndexChange
Used by (from the same schema document)	Element **indexChange**
Abstract	no
Documentation	Defines index factor information when credit events occur on index constituents.

XML Instance Representation

```
<...>
   <indexFactor> RestrictedPercentage </indexFactor> [1]
   'The index version factor, expressed as a decimal, that multiplied by the original
   notional amount yields the notional amount covered by the seller. A factor of 75% would
   be represented as 0.75.'

   <factoredCalculationAmount> Money </factoredCalculationAmount> [1]
   'This relates only to CDS index contracts and represents the factored notional amount,
   obtained by multiplying the index factor to the contract notional amount. See
```

```
 indexFactor description above.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="IndexChange">
   <xsd:complexContent>
      <xsd:extension base=" ChangeEvent ">
         <xsd:sequence>
            <xsd:element name="indexFactor" type=" RestrictedPercentage "/>
            <xsd:element name="factoredCalculationAmount" type=" Money "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**
Schema Component Type Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 2527 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-eq-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 2527 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-eq-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

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Global Declarations

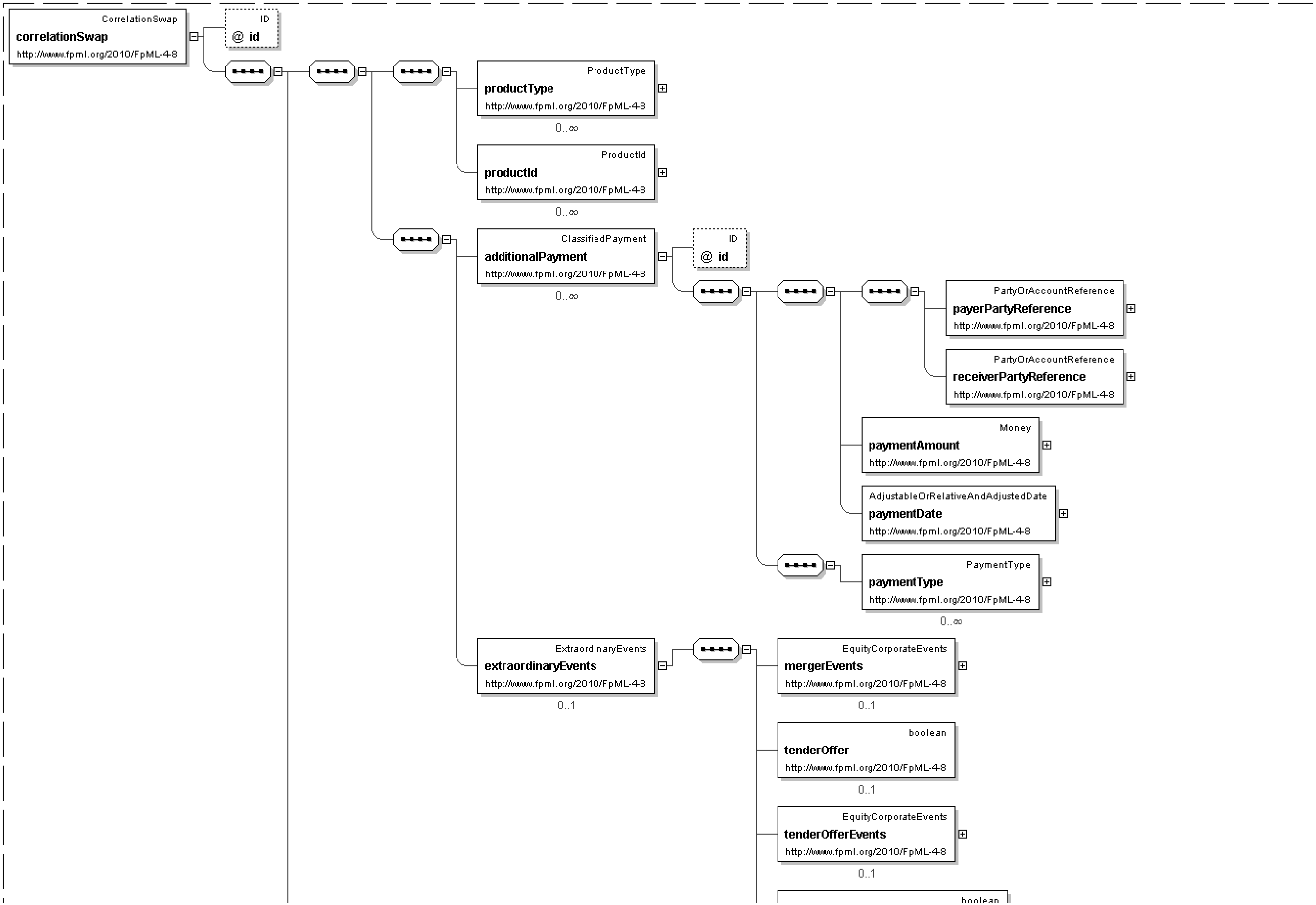
Element: correlationSwap

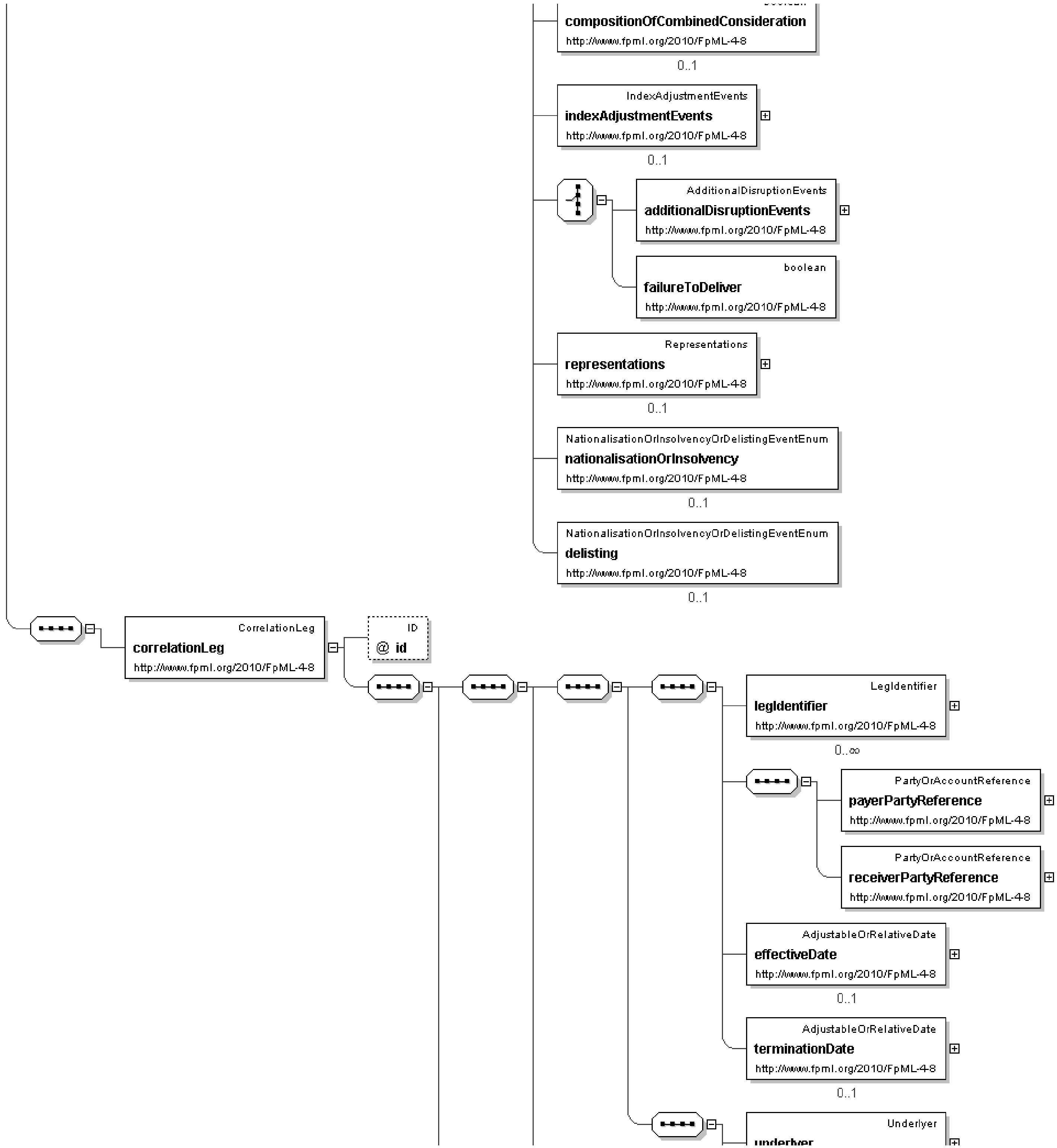
- *This element can be used wherever the following element is referenced:*
  - product

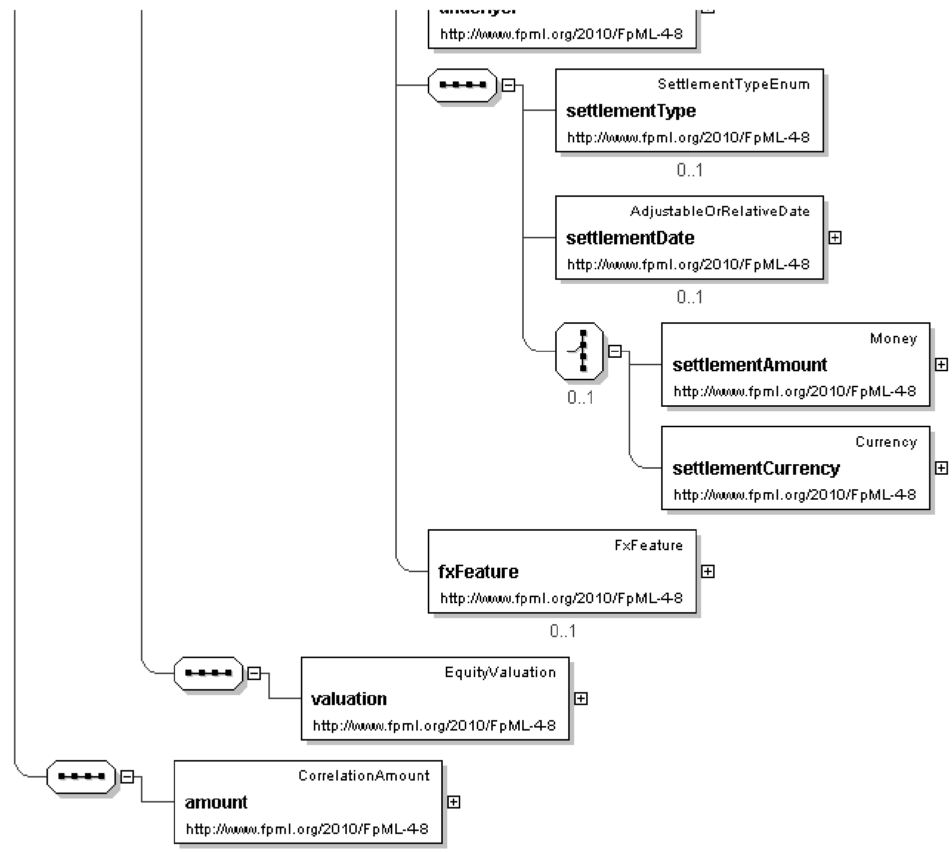
Name	correlationSwap

Type	CorrelationSwap
Nillable	no
Abstract	no
Documentation	Specifies the structure of a correlation swap.

Logical Diagram



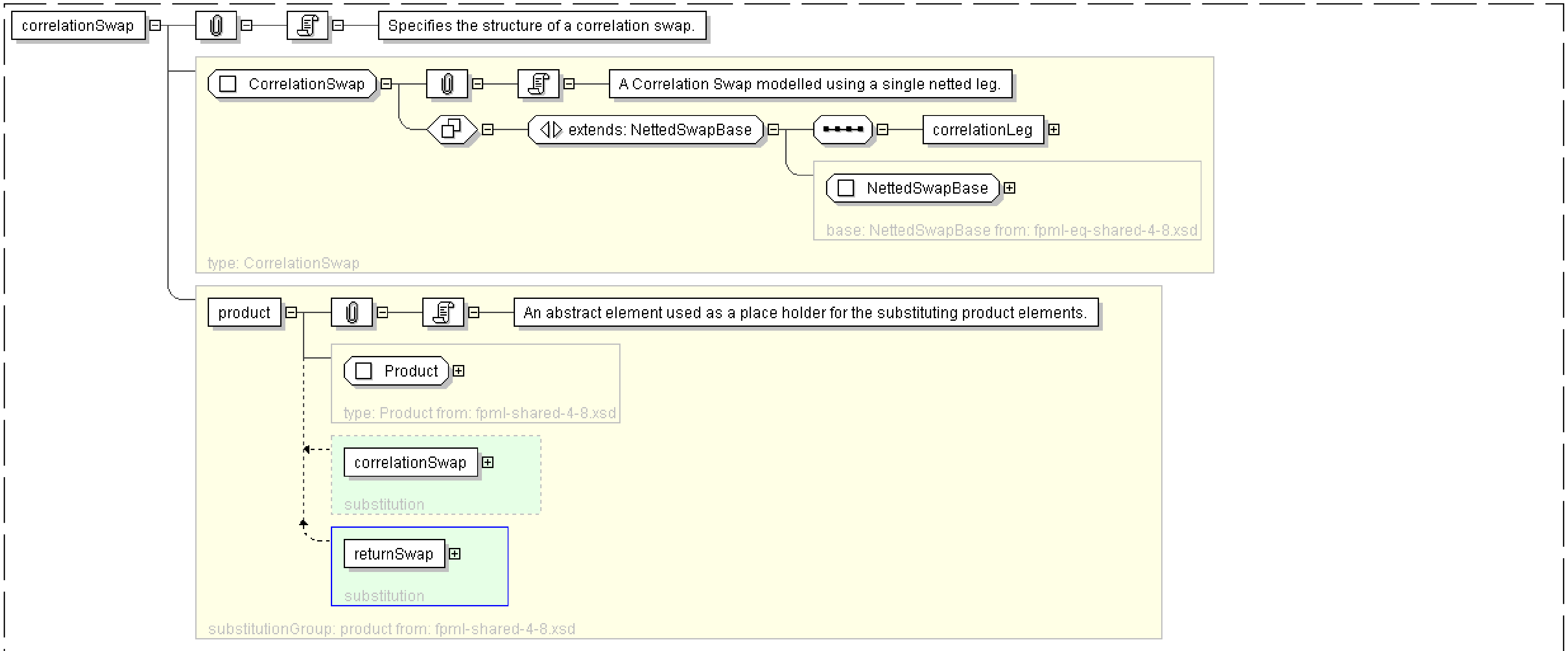

compositionOfCombinedConsideration
http://www.fpml.org/2010/FpML-4-8
0..1
IndexAdjustmentEvents
indexAdjustmentEvents
http://www.fpml.org/2010/FpML-4-8
0..1
AdditionalDisruptionEvents
additionalDisruptionEvents
http://www.fpml.org/2010/FpML-4-8
boolean
failureToDeliver
http://www.fpml.org/2010/FpML-4-8
Representations
representations
http://www.fpml.org/2010/FpML-4-8
0..1
NationalisationOrInsolvencyOrDelistingEventEnum
nationalisationOrInsolvency
http://www.fpml.org/2010/FpML-4-8
0..1
NationalisationOrInsolvencyOrDelistingEventEnum
delisting
http://www.fpml.org/2010/FpML-4-8
0..1
CorrelationLeg
correlationLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
LegIdentifier
legIdentifier
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
effectiveDate
http://www.fpml.org/2010/FpML-4-8
0..1
AdjustableOrRelativeDate
terminationDate
http://www.fpml.org/2010/FpML-4-8
0..1
Underlyer



XML Instance Representation

```
<correlationSwap
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <additionalPayment> ClassifiedPayment </additionalPayment> [0..*]
   'Specifies additional payment(s) between the principal parties to the netted swap.'

   <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]
   'Where the underlying is shares, specifies events affecting the issuer of those shares that
   may require the terms of the transaction to be adjusted.'

   <correlationLeg> CorrelationLeg </correlationLeg> [1]
   'Correlation Leg. Correlation Buyer is deemed to be the Equity Amount Receiver,
   Correlation Seller is deemed to be the Equity Amount Payer.'

</correlationSwap>
```

Diagram



Schema Component Representation

```
<xsd:element name="correlationSwap" type=" CorrelationSwap " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: CorrelationAmount

Super-types:	CalculatedAmount < **CorrelationAmount** (by extension)
Sub-types:	None

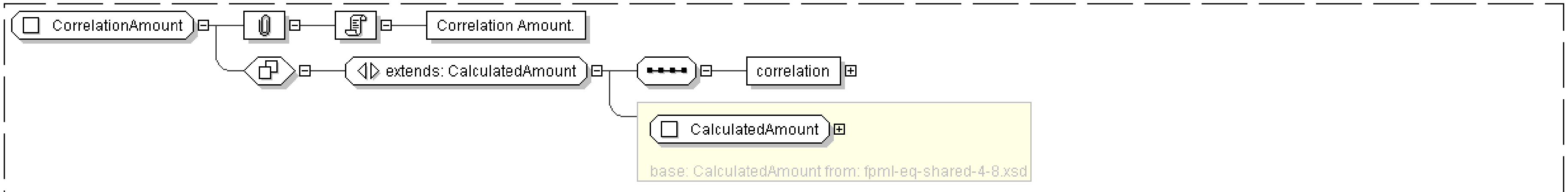
Name	CorrelationAmount
Used by (from the same schema document)	Complex Type **CorrelationLeg**
Abstract	no
Documentation	Correlation Amount.

XML Instance Representation

```
<...>
   <calculationDates> AdjustableRelativeOrPeriodicDates </calculationDates> [0..1]
   'Specifies the date on which a calculation or an observation will be performed for the
   purpose of calculating the amount.'

   <observationStartDate> AdjustableOrRelativeDate </observationStartDate> [0..1]
   'The start of the period over which observations are made which are used in the
```

```
calculation Used when the observation start date differs from the trade date such as
for forward starting swaps.'

<optionsExchangeDividends> xsd:boolean </optionsExchangeDividends> [0..1]

'If present and true, then options exchange dividends are applicable.'

<additionalDividends> xsd:boolean </additionalDividends> [0..1]

'If present and true, then additional dividends are applicable.'

<allDividends> xsd:boolean </allDividends> [0..1]

'Represents the European Master Confirmation value of \'All Dividends\' which, when
applicable, signifies that, for a given Ex-Date, the daily observed Share Price for that day
is adjusted (reduced) by the cash dividend and/or the cash value of any non cash dividend
per Share (including Extraordinary Dividends) declared by the Issuer.'

<correlation> Correlation </correlation> [1]

'Specifies Correlation.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CorrelationAmount">
   <xsd:complexContent>
      <xsd:extension base=" CalculatedAmount ">
         <xsd:sequence>
            <xsd:element name="correlation" type=" Correlation "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CorrelationLeg

Super-types:	DirectionalLegUnderlyerValuation < **CorrelationLeg** (by extension)
Sub-types:	None

Name	CorrelationLeg
Used by (from the same schema document)	Complex Type **CorrelationSwap**
Abstract	no
Documentation	A type describing return which is driven by a Correlation calculation.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
```

<legIdentifier> LegIdentifier </legIdentifier> [0..*]

'Version aware identification of this leg.'

<payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]

'A reference to the party responsible for making the payments defined by this structure.'

<receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]

'A reference to the party that receives the payments corresponding to this structure.'

<effectiveDate> AdjustableOrRelativeDate </effectiveDate> [0..1]

'Specifies the effective date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the effective date of the other leg of the swap.'

<terminationDate> AdjustableOrRelativeDate </terminationDate> [0..1]

'Specifies the termination date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the termination date of the other leg of the swap.'

<underlyer> Underlyer </underlyer> [1]

'Specifies the underlyer of the leg.'

<settlementType> SettlementTypeEnum </settlementType> [0..1]
<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
<settlementAmount> Money </settlementAmount> [1]

'Settlement Amount'

<settlementCurrency> Currency </settlementCurrency> [1]

'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

<valuation> EquityValuation </valuation> [1]

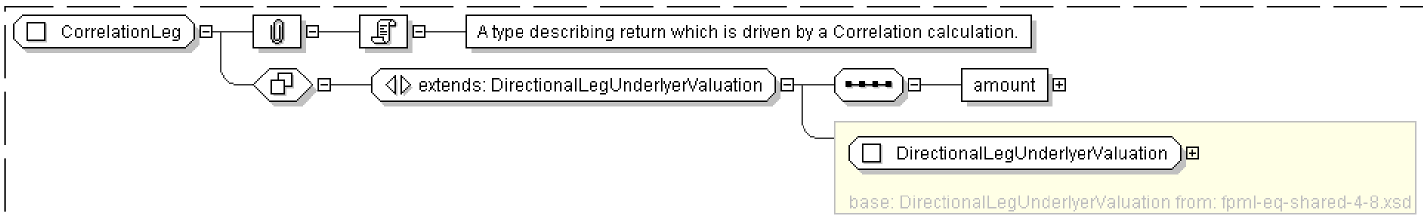
'Valuation of the underlyer.'

<amount> CorrelationAmount </amount> [1]

'Specifies, in relation to each Equity Payment Date, the Equity Amount to which the Equity Payment Date relates. Unless otherwise specified, this term has the meaning defined in the ISDA 2002 Equity Derivatives Definitions.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CorrelationLeg">
   <xsd:complexContent>
      <xsd:extension base=" DirectionalLegUnderlyerValuation ">
         <xsd:sequence>
            <xsd:element name="amount" type=" CorrelationAmount "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CorrelationSwap

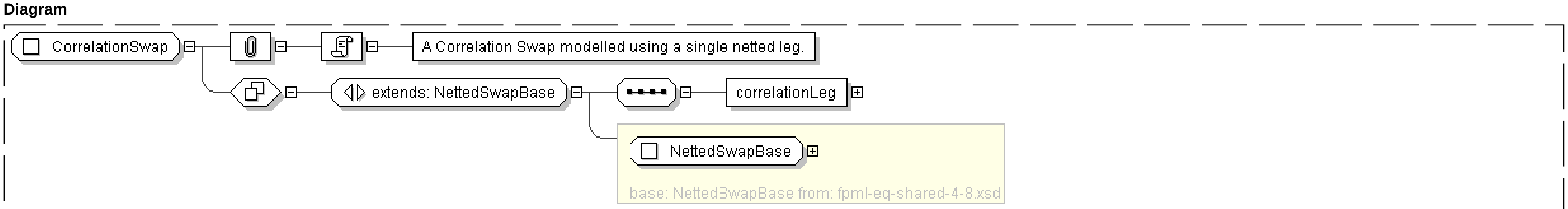
Super-types:	NettedSwapBase < **CorrelationSwap** (by extension)
Sub-types:	None

Name	CorrelationSwap
Used by (from the same schema document)	Element **correlationSwap**
Abstract	no
Documentation	A Correlation Swap modelled using a single netted leg.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <additionalPayment> ClassifiedPayment </additionalPayment> [0..*]
   'Specifies additional payment(s) between the principal parties to the netted swap.'

   <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]
   'Where the underlying is shares, specifies events affecting the issuer of those shares that
   may require the terms of the transaction to be adjusted.'

   <correlationLeg> CorrelationLeg </correlationLeg> [1]
   'Correlation Leg. Correlation Buyer is deemed to be the Equity Amount Receiver,
   Correlation Seller is deemed to be the Equity Amount Payer.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CorrelationSwap">
   <xsd:complexContent>
      <xsd:extension base=" NettedSwapBase ">
         <xsd:sequence>
            <xsd:element name="correlationLeg" type=" CorrelationLeg "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
```

```
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-posttrade-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore

fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-posttrade-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Declarations

Element: bankruptcy

- *This element can be used wherever the following element is referenced:*
  - creditEvent

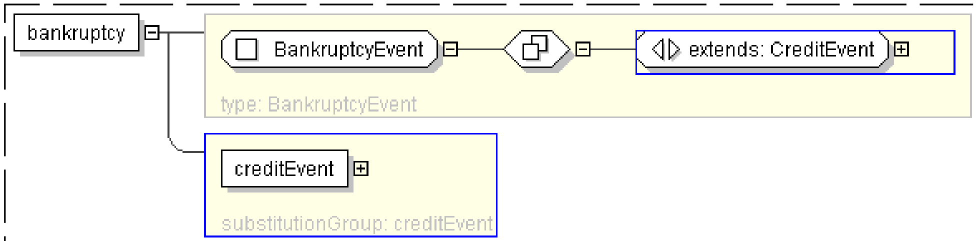
Name	bankruptcy
Type	BankruptcyEvent
Nillable	no
Abstract	no

Logical Diagram

XML Instance Representation

```
<bankruptcy/>
```

Diagram



Schema Component Representation

```
<xsd:element name="bankruptcy" type=" BankruptcyEvent " substitutionGroup="creditEvent"/>
```

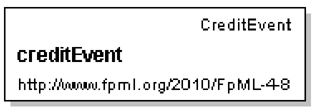
top

Element: creditEvent

- *The following elements can be used wherever this element is referenced:*
  - bankruptcy
  - failureToPay
  - obligationAcceleration
  - obligationDefault
  - repudiationMoratorium
  - restructuring

Name	creditEvent
Used by (from the same schema document)	Complex Type **CreditEventNoticeDocument**
Type	CreditEvent
Nillable	no
Abstract	yes

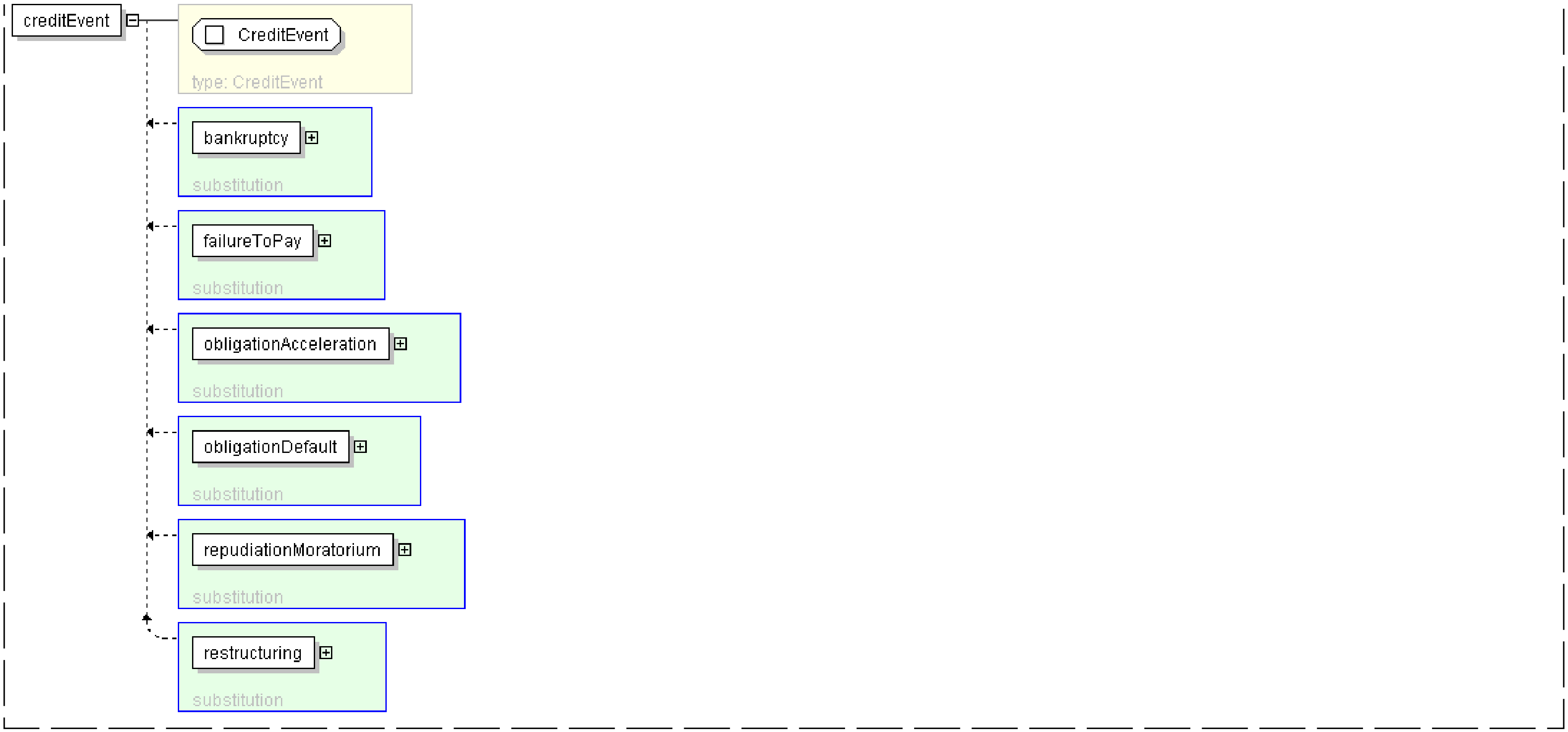
Logical Diagram



XML Instance Representation

```
<creditEvent/>
```

Diagram



Schema Component Representation

```
<xsd:element name="creditEvent" type=" CreditEvent " abstract="true"/>
```

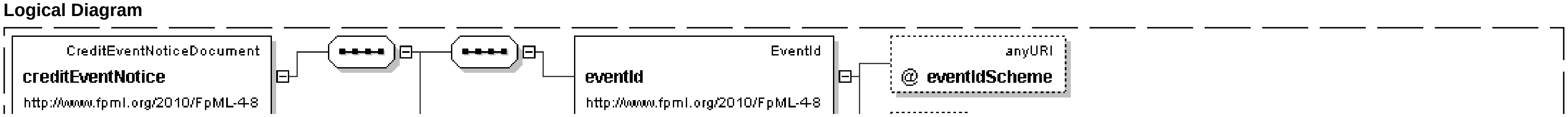
top

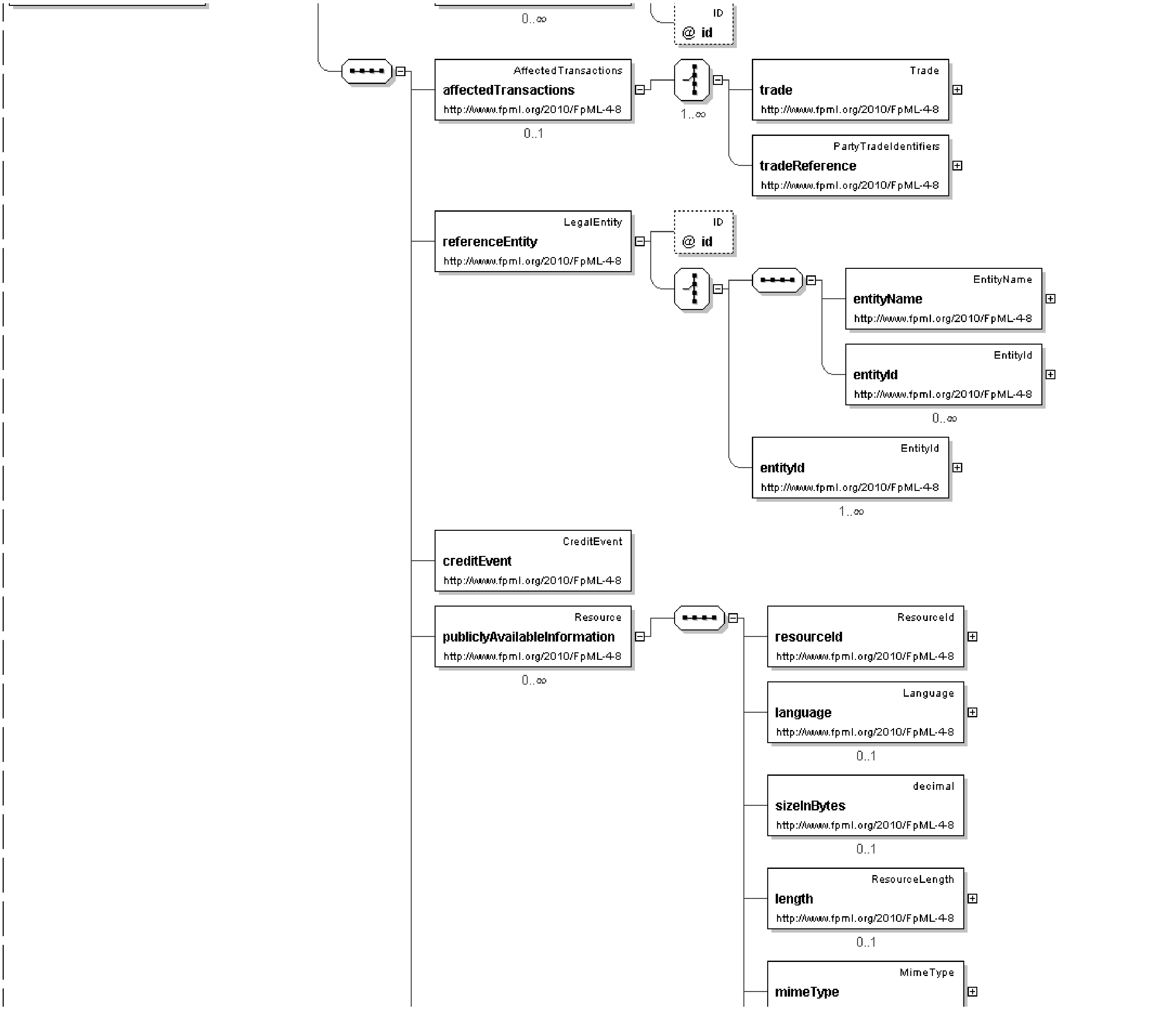
Element: creditEventNotice

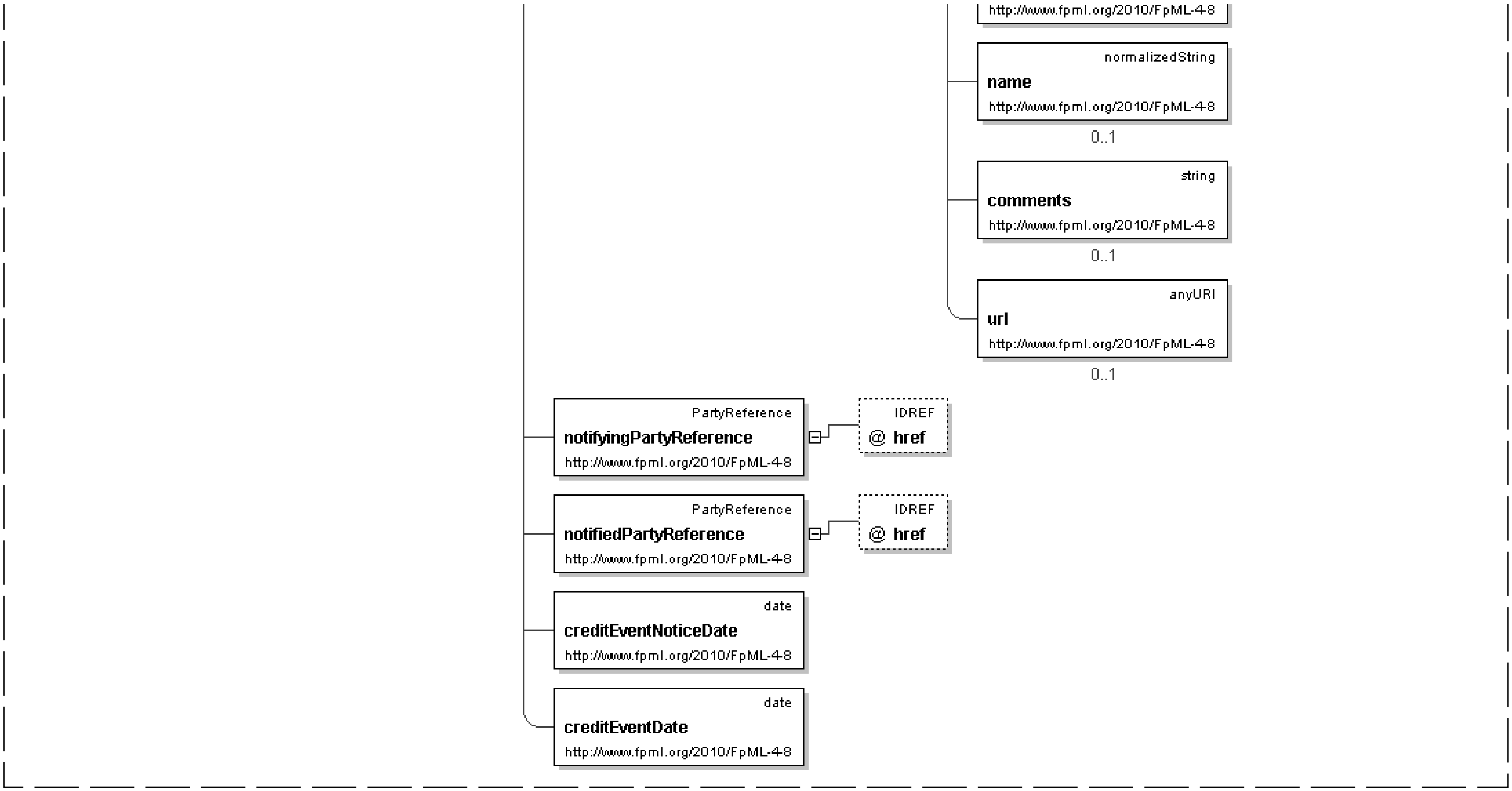
- *This element can be used wherever the following element is referenced:*
  - event

Name	creditEventNotice
Type	CreditEventNoticeDocument
Nillable	no
Abstract	no
Documentation	A global element used to hold CENs.

Logical Diagram




0..∞
ID
@ id
AffectedTransactions
affectedTransactions
http://www.fpml.org/2010/FpML-4-8
0..1
1..∞
Trade
trade
http://www.fpml.org/2010/FpML-4-8
PartyTradeIdentifiers
tradeReference
http://www.fpml.org/2010/FpML-4-8
LegalEntity
referenceEntity
http://www.fpml.org/2010/FpML-4-8
ID
@ id
EntityName
entityName
http://www.fpml.org/2010/FpML-4-8
EntityId
entityId
http://www.fpml.org/2010/FpML-4-8
0..∞
EntityId
entityId
http://www.fpml.org/2010/FpML-4-8
1..∞
CreditEvent
creditEvent
http://www.fpml.org/2010/FpML-4-8
Resource
publiclyAvailableInformation
http://www.fpml.org/2010/FpML-4-8
0..∞
ResourceId
resourceId
http://www.fpml.org/2010/FpML-4-8
Language
language
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
sizeInBytes
http://www.fpml.org/2010/FpML-4-8
0..1
ResourceLength
length
http://www.fpml.org/2010/FpML-4-8
0..1
MimeType
mimeType

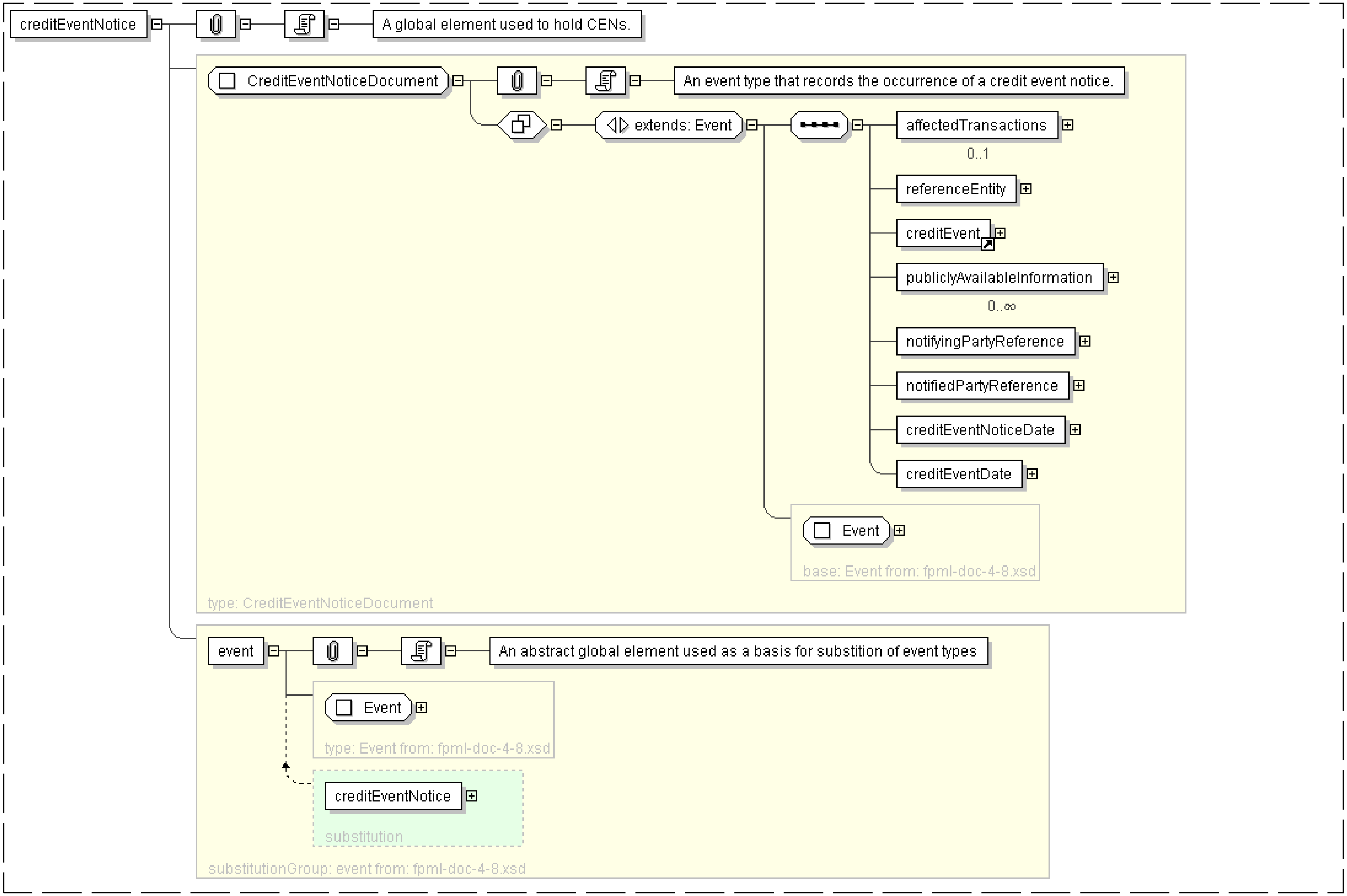


XML Instance Representation

```
<creditEventNotice>
   <eventId> EventId </eventId> [0..*]
   ''

   <affectedTransactions> AffectedTransactions </affectedTransactions> [0..1]
   'Trades affected by this event.'

   <referenceEntity> LegalEntity </referenceEntity> [1]
   <creditEvent> ... </creditEvent> [1]
   <publiclyAvailableInformation> Resource </publiclyAvailableInformation> [0..*]
   'A public information source, e.g. a particular newspaper or electronic news service, that
   may publish relevant information used in the determination of whether or not a credit event
   has occurred.'

   <notifyingPartyReference> PartyReference </notifyingPartyReference> [1]
   <notifiedPartyReference> PartyReference </notifiedPartyReference> [1]
   <creditEventNoticeDate> xsd:date </creditEventNoticeDate> [1]
   <creditEventDate> xsd:date </creditEventDate> [1]
```

```
</creditEventNotice>
```

Diagram



Schema Component Representation

```
<xsd:element name="creditEventNotice" type=" CreditEventNoticeDocument
" substitutionGroup="event"/>
```

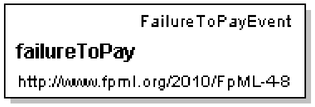
top

Element: failureToPay

- *This element can be used wherever the following element is referenced:*
  - creditEvent

Name	failureToPay
Type	FailureToPayEvent
Nillable	no
Abstract	no

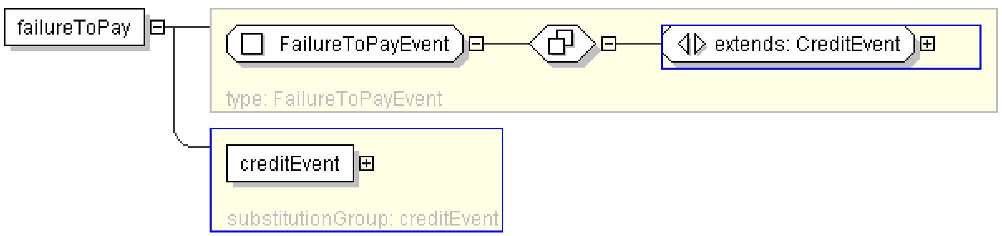
Logical Diagram



XML Instance Representation

```
<failureToPay/>
```

Diagram



Schema Component Representation

```
<xsd:element name="failureToPay" type=" FailureToPayEvent " substitutionGroup="creditEvent"/>
```

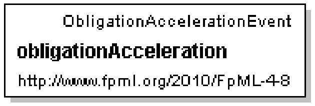
top

Element: obligationAcceleration

- *This element can be used wherever the following element is referenced:*
  - creditEvent

Name	obligationAcceleration
Type	ObligationAccelerationEvent
Nillable	no
Abstract	no

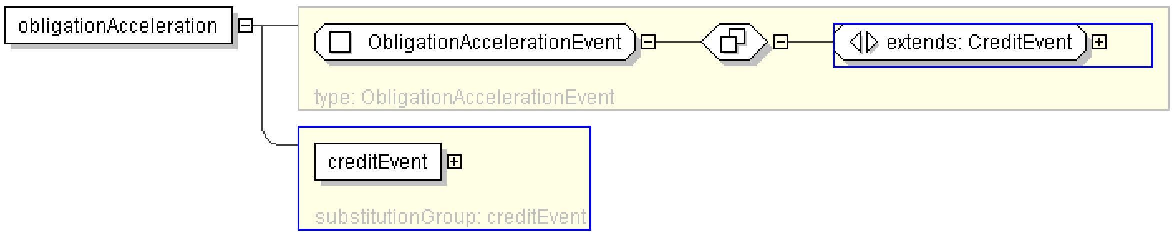
Logical Diagram



XML Instance Representation

```
<obligationAcceleration/>
```

Diagram



Schema Component Representation

```
<xsd:element name="obligationAcceleration" type=" ObligationAccelerationEvent
" substitutionGroup="creditEvent"/>
```

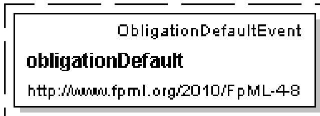
top

Element: obligationDefault

- *This element can be used wherever the following element is referenced:*
  - creditEvent

Name	obligationDefault
Type	ObligationDefaultEvent
Nillable	no
Abstract	no

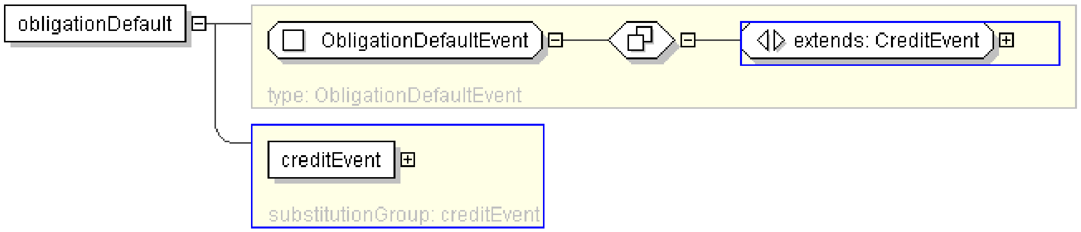
Logical Diagram



XML Instance Representation

```
<obligationDefault/>
```

Diagram



Schema Component Representation

```
<xsd:element name="obligationDefault" type=" ObligationDefaultEvent
" substitutionGroup="creditEvent"/>
```

top

Element: repudiationMoratorium

- *This element can be used wherever the following element is referenced:*
  - creditEvent

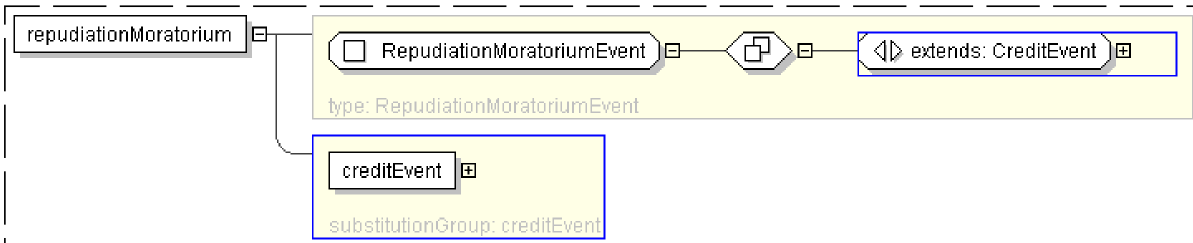
Name	repudiationMoratorium
Type	RepudiationMoratoriumEvent
Nillable	no
Abstract	no

Logical Diagram

XML Instance Representation

```
<repudiationMoratorium/>
```

Diagram



Schema Component Representation

```
<xsd:element name="repudiationMoratorium" type=" RepudiationMoratoriumEvent
" substitutionGroup="creditEvent"/>
```

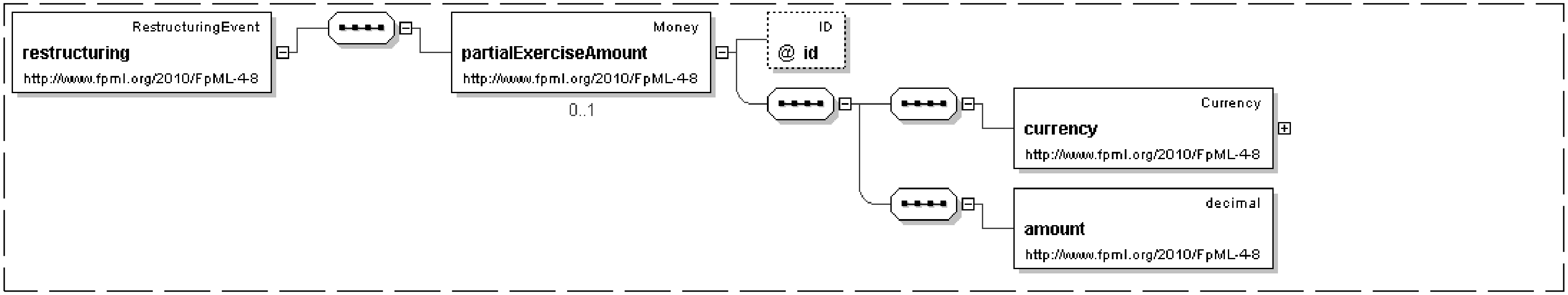
top

Element: restructuring

- *This element can be used wherever the following element is referenced:*
  - creditEvent

Name	restructuring
Type	RestructuringEvent
Nillable	no
Abstract	no

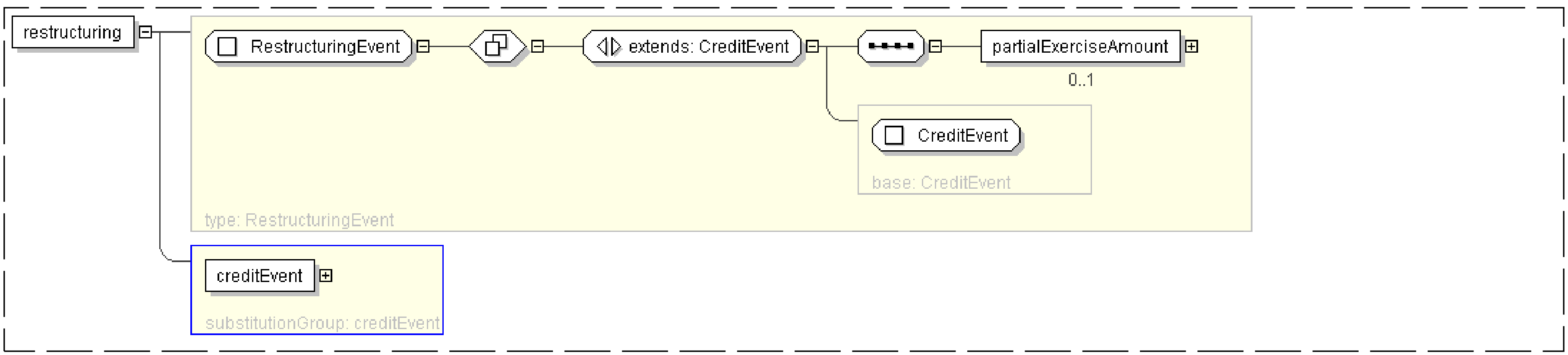
Logical Diagram



XML Instance Representation

```
<restructuring>
   <partialExerciseAmount> Money </partialExerciseAmount> [0..1]
</restructuring>
```

Diagram



Schema Component Representation

```
<xsd:element name="restructuring" type=" RestructuringEvent " substitutionGroup="creditEvent"/>
```

top

Global Definitions

Complex Type: BankruptcyEvent

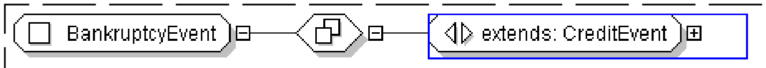
Super-types:	CreditEvent < **BankruptcyEvent** (by extension)
Sub-types:	None

Name	BankruptcyEvent
Used by (from the same schema document)	Element **bankruptcy**
Abstract	no

XML Instance Representation

```
<.../>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BankruptcyEvent">
   <xsd:complexContent>
      <xsd:extension base=" CreditEvent "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditEvent

Super-types:	None
Sub-types:	• BankruptcyEvent (by extension) • FailureToPayEvent (by extension) • ObligationAccelerationEvent (by extension) • ObligationDefaultEvent (by extension) • RepudiationMoratoriumEvent (by extension) • RestructuringEvent (by extension)

Name	CreditEvent
Used by (from the same schema document)	Element **creditEvent**
Abstract	no

XML Instance Representation

```
<.../>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="CreditEvent"/>
```

top

Complex Type: CreditEventNoticeDocument

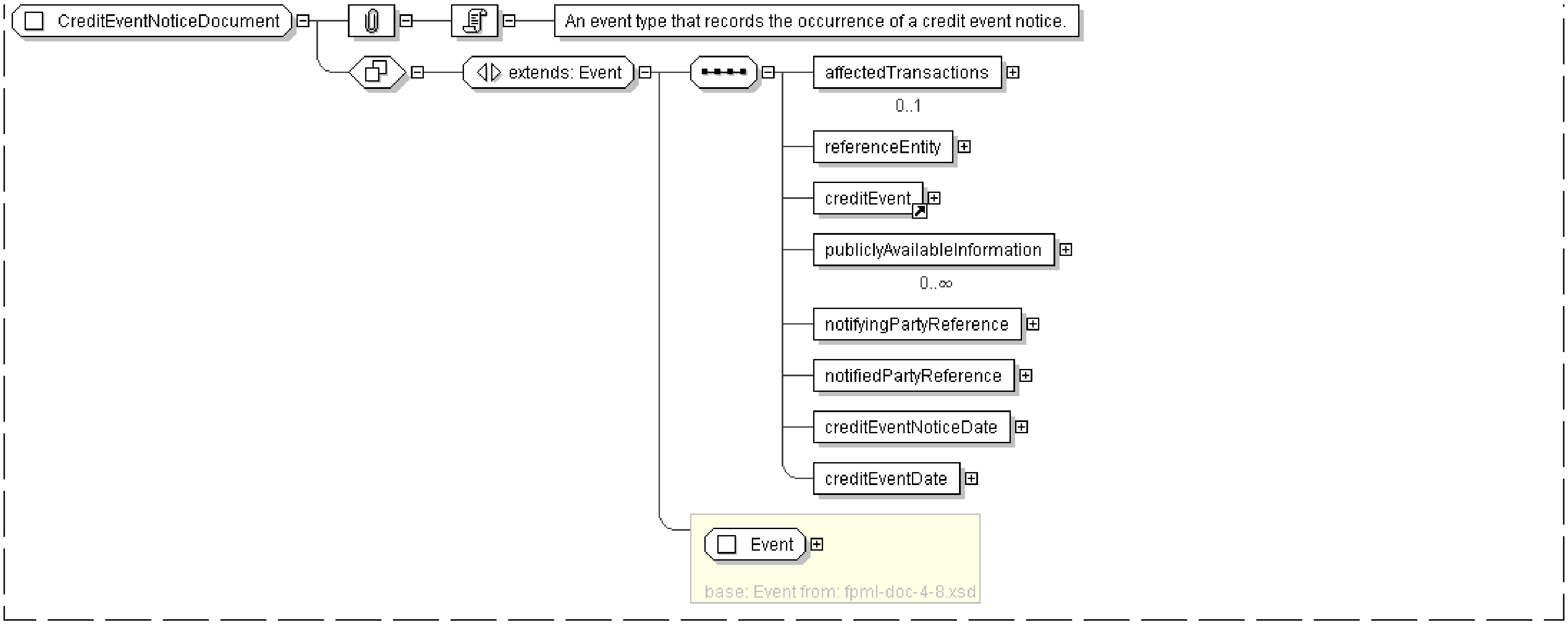
Super-types:	Event < **CreditEventNoticeDocument** (by extension)
Sub-types:	None

Name	CreditEventNoticeDocument
Used by (from the same schema document)	Complex Type **CreditEventNotification** , Element **creditEventNotice**
Abstract	no
Documentation	An event type that records the occurrence of a credit event notice.

XML Instance Representation

```
<...>
   <eventId> EventId </eventId> [0..*]
   ''
   <affectedTransactions> AffectedTransactions </affectedTransactions> [0..1]
   'Trades affected by this event.'
   <referenceEntity> LegalEntity </referenceEntity> [1]
   <creditEvent> ... </creditEvent> [1]
   <publiclyAvailableInformation> Resource </publiclyAvailableInformation> [0..*]
   'A public information source, e.g. a particular newspaper or electronic news service, that
   may publish relevant information used in the determination of whether or not a credit event
   has occurred.'
   <notifyingPartyReference> PartyReference </notifyingPartyReference> [1]
   <notifiedPartyReference> PartyReference </notifiedPartyReference> [1]
   <creditEventNoticeDate> xsd:date </creditEventNoticeDate> [1]
   <creditEventDate> xsd:date </creditEventDate> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditEventNoticeDocument">
   <xsd:complexContent>
      <xsd:extension base=" Event ">
         <xsd:sequence>
            <xsd:element name="affectedTransactions" type=" AffectedTransactions " minOccurs="0"/>
            <xsd:element name="referenceEntity" type=" LegalEntity "/>
            <xsd:element ref=" creditEvent "/>
            <xsd:element name="publiclyAvailableInformation" type=" Resource "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="notifyingPartyReference" type=" PartyReference "/>
            <xsd:element name="notifiedPartyReference" type=" PartyReference "/>
            <xsd:element name="creditEventNoticeDate" type=" xsd:date "/>
            <xsd:element name="creditEventDate" type=" xsd:date "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditEventNotification

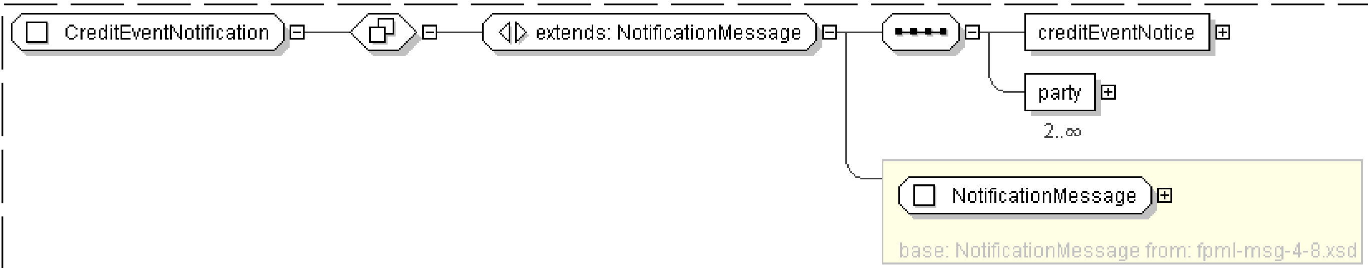
Super-types:	NotificationMessage < **CreditEventNotification** (by extension)
Sub-types:	None

Name	CreditEventNotification
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <creditEventNotice> CreditEventNoticeDocument </creditEventNotice> [1]
   <party> Party </party> [2..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditEventNotification">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="creditEventNotice" type=" CreditEventNoticeDocument "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FailureToPayEvent

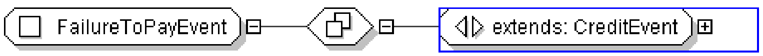
Super-types:	CreditEvent < **FailureToPayEvent** (by extension)
Sub-types:	None

Name	FailureToPayEvent
Used by (from the same schema document)	Element **failureToPay**
Abstract	no

XML Instance Representation

```
<.../>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FailureToPayEvent">
   <xsd:complexContent>
      <xsd:extension base=" CreditEvent "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Language

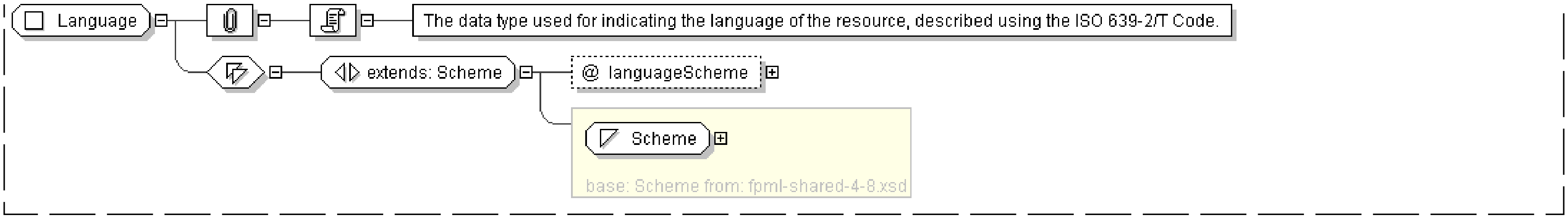
Super-types:	Scheme < **Language** (by extension)
Sub-types:	None

Name	Language
Used by (from the same schema document)	Complex Type **Resource**
Abstract	no
Documentation	The data type used for indicating the language of the resource, described using the ISO 639-2/T Code.

XML Instance Representation

```
<...
languageScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Language">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="languageScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ObligationAccelerationEvent

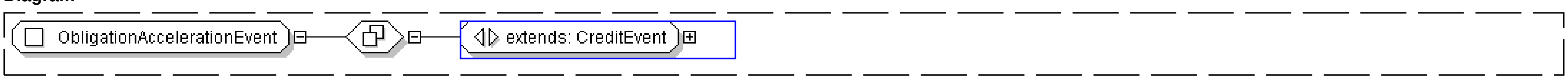
Super-types:	CreditEvent < **ObligationAccelerationEvent** (by extension)
Sub-types:	None

Name	ObligationAccelerationEvent
Used by (from the same schema document)	Element **obligationAcceleration**
Abstract	no

XML Instance Representation

```
<.../>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ObligationAccelerationEvent">
   <xsd:complexContent>
      <xsd:extension base=" CreditEvent "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ObligationDefaultEvent

Super-types:	CreditEvent < **ObligationDefaultEvent** (by extension)

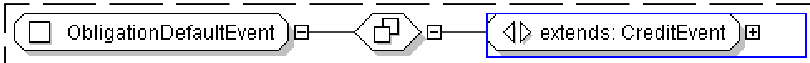
Sub-types:	None

Name	ObligationDefaultEvent
Used by (from the same schema document)	Element **obligationDefault**
Abstract	no

XML Instance Representation

```
<.../>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ObligationDefaultEvent">
   <xsd:complexContent>
      <xsd:extension base=" CreditEvent "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RepudiationMoratoriumEvent

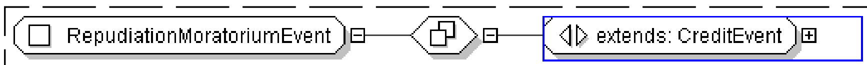
Super-types:	CreditEvent < **RepudiationMoratoriumEvent** (by extension)
Sub-types:	None

Name	RepudiationMoratoriumEvent
Used by (from the same schema document)	Element **repudiationMoratorium**
Abstract	no

XML Instance Representation

```
<.../>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RepudiationMoratoriumEvent">
   <xsd:complexContent>
      <xsd:extension base=" CreditEvent "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Resource

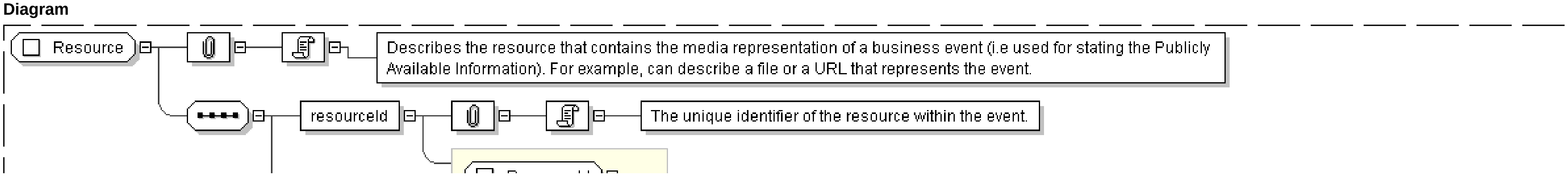
Super-types:	None
Sub-types:	None

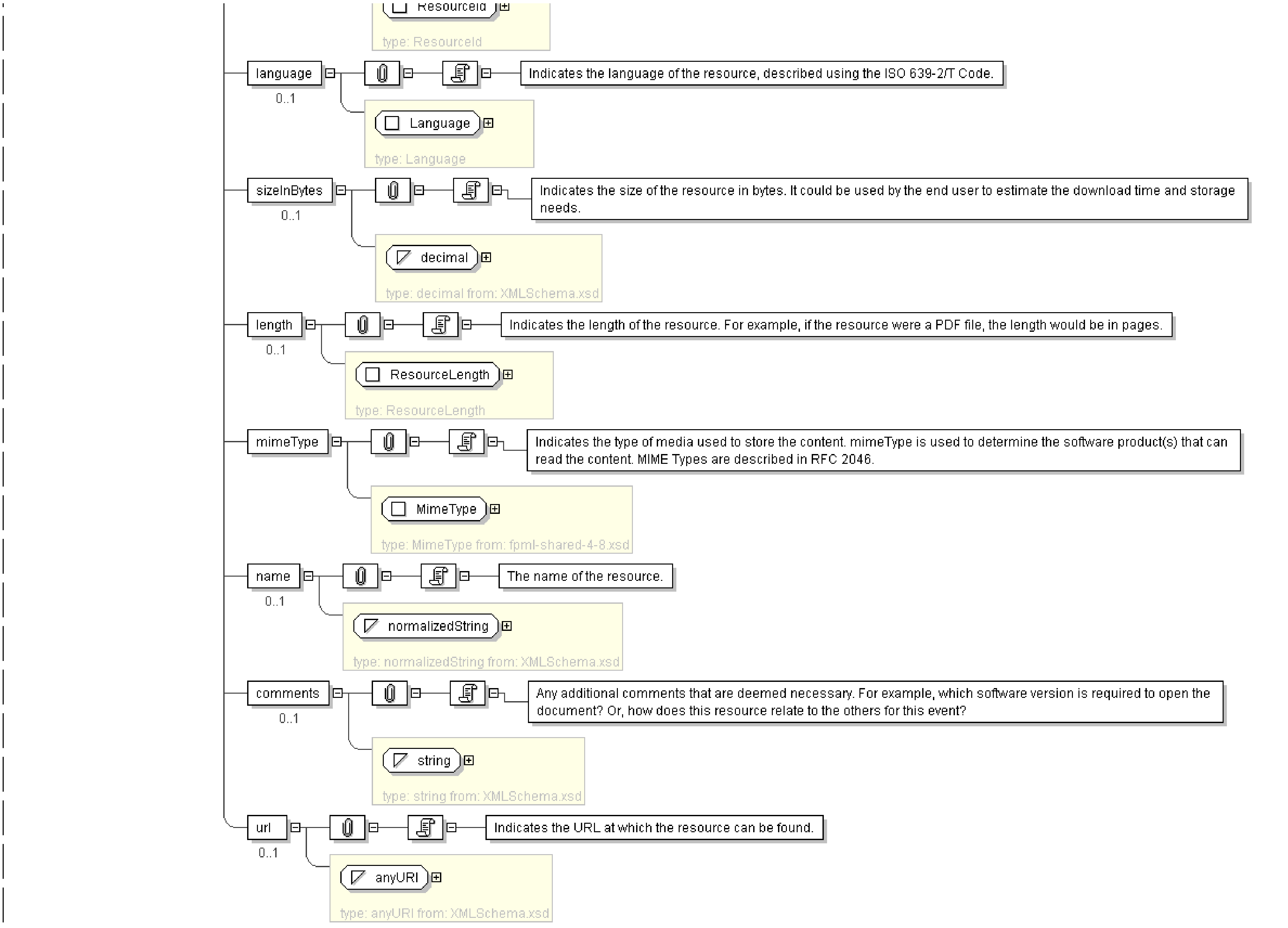
Name	Resource
Used by (from the same schema document)	Complex Type **CreditEventNoticeDocument**
Abstract	no
Documentation	Describes the resource that contains the media representation of a business event (i.e used for stating the Publicly Available Information). For example, can describe a file or a URL that represents the event.

XML Instance Representation

```
<...>
  <resourceId> ResourceId </resourceId> [1]
  'The unique identifier of the resource within the event.'

  <language> Language </language> [0..1]
  'Indicates the language of the resource, described using the ISO 639-2/T Code.'

  <sizeInBytes> xsd:decimal </sizeInBytes> [0..1]
  'Indicates the size of the resource in bytes. It could be used by the end user to estimate
  the download time and storage needs.'

  <length> ResourceLength </length> [0..1]
  'Indicates the length of the resource. For example, if the resource were a PDF file, the
  length would be in pages.'

  <mimeType> MimeType </mimeType> [1]
  'Indicates the type of media used to store the content. mimeType is used to determine
  the software product(s) that can read the content. MIME Types are described in RFC 2046.'

  <name> xsd:normalizedString </name> [0..1]
  'The name of the resource.'

  <comments> xsd:string </comments> [0..1]
  'Any additional comments that are deemed necessary. For example, which software version
  is required to open the document? Or, how does this resource relate to the others for
  this event?'

  <url> xsd:anyURI </url> [0..1]
  'Indicates the URL at which the resource can be found.'
</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="Resource">
```

```
    <xsd:sequence>
        <xsd:element name="resourceId" type=" ResourceId "/>
        <xsd:element name="language" type=" Language " minOccurs="0"/>
        <xsd:element name="sizeInBytes" type=" xsd:decimal " minOccurs="0"/>
        <xsd:element name="length" type=" ResourceLength " minOccurs="0"/>
        <xsd:element name="mimeType" type=" MimeType "/>
        <xsd:element name="name" type=" xsd:normalizedString " minOccurs="0"/>
        <xsd:element name="comments" type=" xsd:string " minOccurs="0"/>
        <xsd:element name="url" type=" xsd:anyURI " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ResourceId

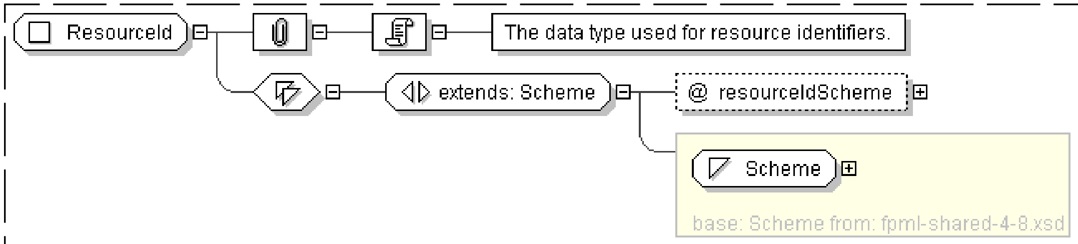
Super-types:	Scheme < **ResourceId** (by extension)
Sub-types:	None

Name	ResourceId
Used by (from the same schema document)	Complex Type **Resource**
Abstract	no
Documentation	The data type used for resource identifiers.

XML Instance Representation

```
<...
resourceIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ResourceId">
    <xsd:simpleContent>
        <xsd:extension base=" Scheme ">
            <xsd:attribute name="resourceIdScheme" type=" xsd:anyURI "/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ResourceLength

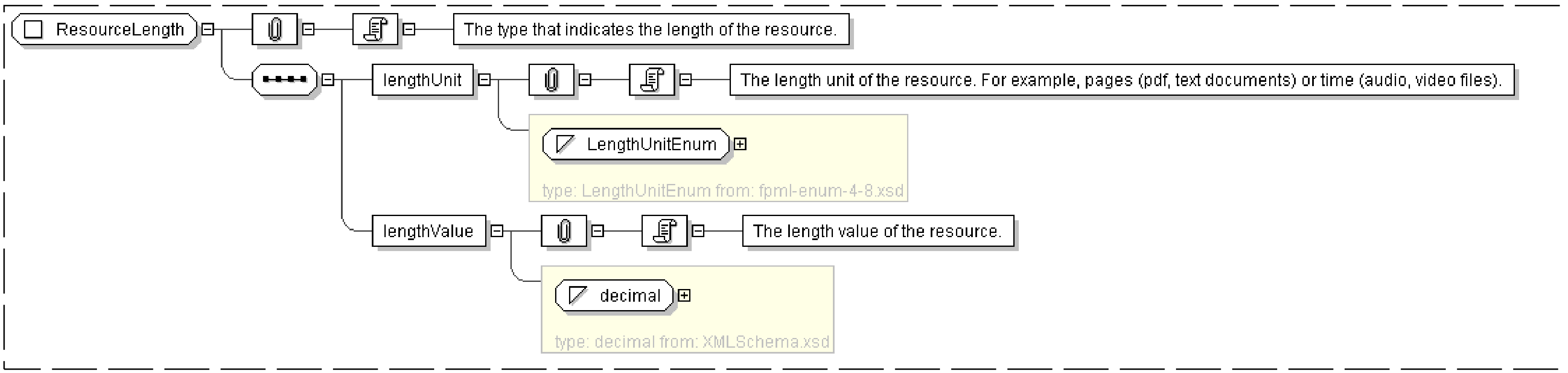
Super-types:	None
Sub-types:	None

Name	ResourceLength
Used by (from the same schema document)	Complex Type **Resource**
Abstract	no
Documentation	The type that indicates the length of the resource.

XML Instance Representation

```
<...>
   <lengthUnit> LengthUnitEnum </lengthUnit> [1]
   'The length unit of the resource. For example, pages (pdf, text documents) or time
   (audio, video files).'

   <lengthValue> xsd:decimal </lengthValue> [1]
   'The length value of the resource.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ResourceLength">
   <xsd:sequence>
      <xsd:element name="lengthUnit" type=" LengthUnitEnum "/>
      <xsd:element name="lengthValue" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: RestructuringEvent

Super-types:	CreditEvent < **RestructuringEvent** (by extension)
Sub-types:	None

Name	RestructuringEvent
Used by (from the same schema document)	Element **restructuring**
Abstract	no

XML Instance Representation

```
<...>
   <partialExerciseAmount> Money </partialExerciseAmount> [0..1]
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="RestructuringEvent">
   <xsd:complexContent>
      <xsd:extension base=" CreditEvent ">
         <xsd:sequence>
            <xsd:element name="partialExerciseAmount" type=" Money " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 2527 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Schema Composition	• This schema includes components from the following schema document(s):
	  ○ fpml-eq-shared-4-8.xsd
	  ○ fpml-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 2527 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-eq-shared-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

top

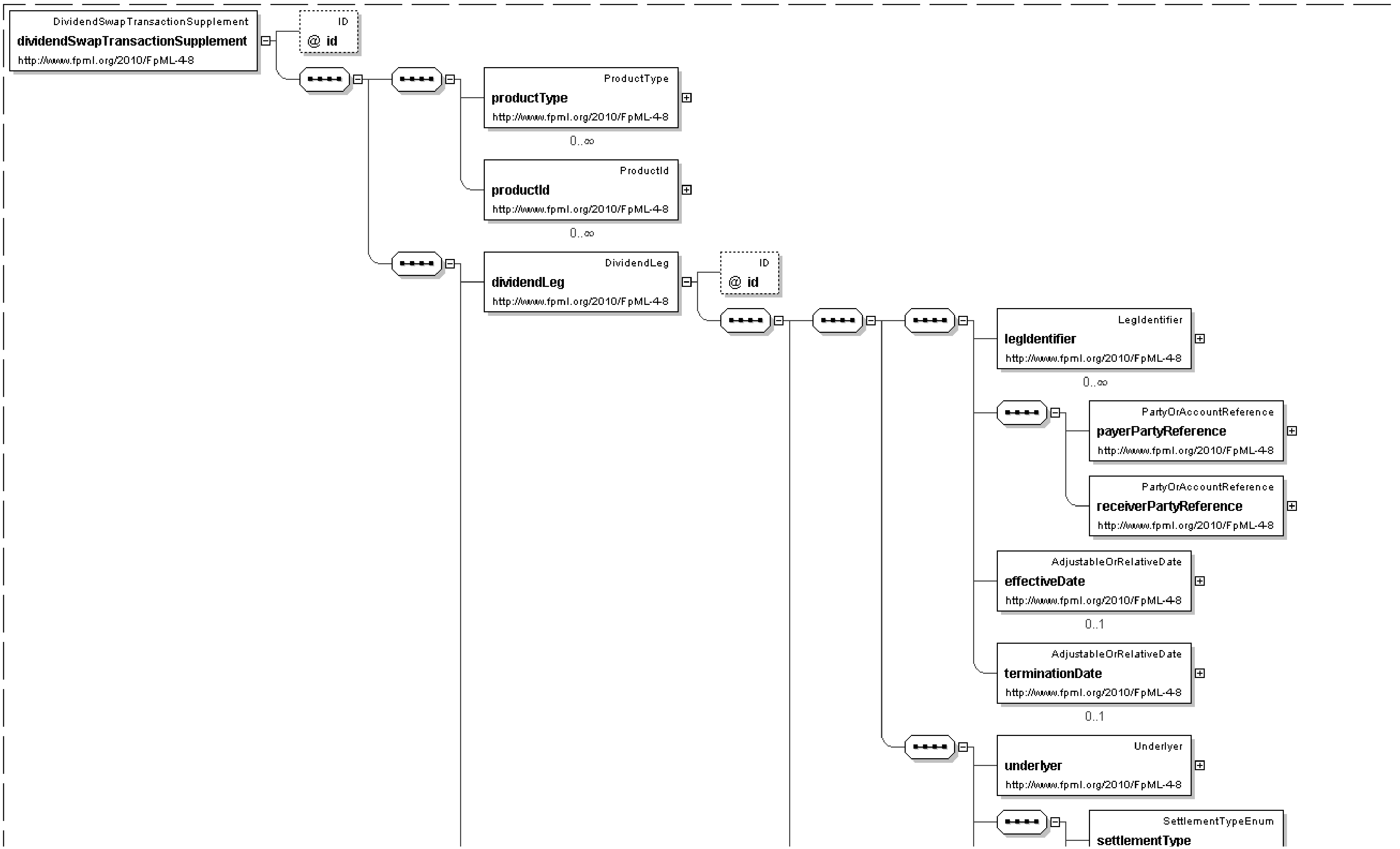
Global Declarations

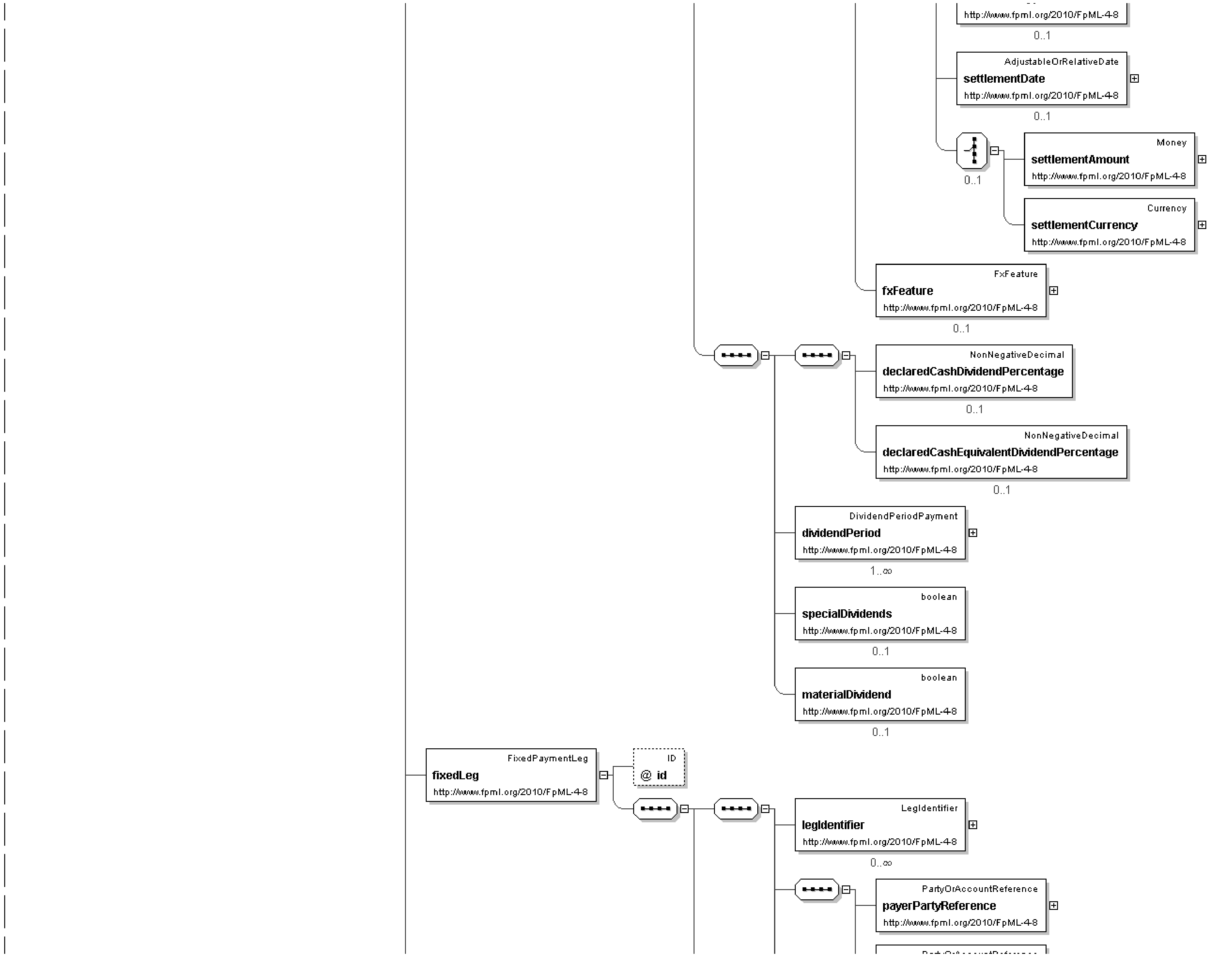
Element: dividendSwapTransactionSupplement

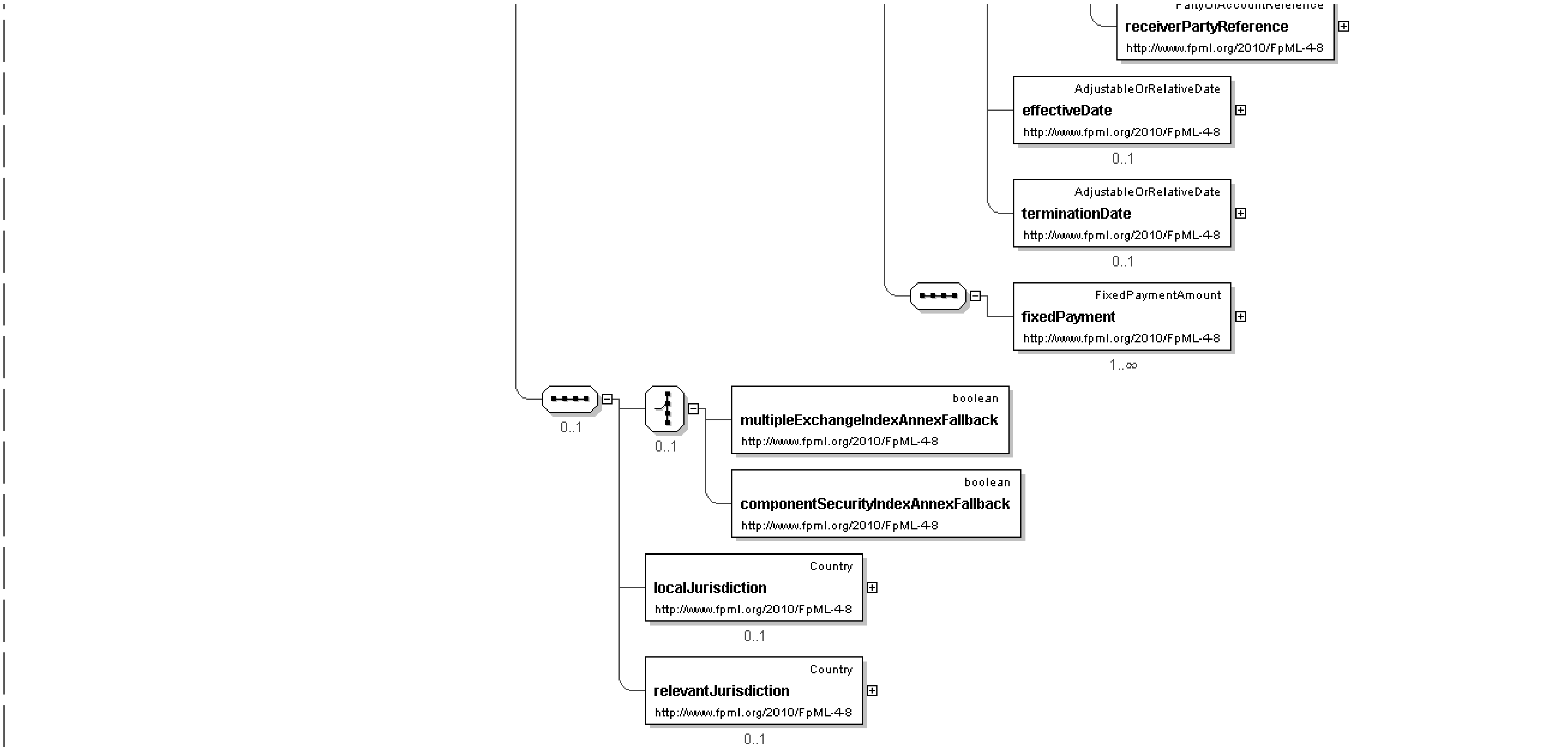
- *This element can be used wherever the following element is referenced:*
  - product

Name	dividendSwapTransactionSupplement
Type	DividendSwapTransactionSupplement
Nillable	no
Abstract	no
Documentation	Specifies the structure of the dividend swap transaction supplement.

Logical Diagram




http://www.fpml.org/2010/FpML-4-8
0..1
AdjustableOrRelativeDate
settlementDate
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
Money
settlementAmount
http://www.fpml.org/2010/FpML-4-8
Currency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
declaredCashDividendPercentage
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
declaredCashEquivalentDividendPercentage
http://www.fpml.org/2010/FpML-4-8
0..1
DividendPeriodPayment
dividendPeriod
http://www.fpml.org/2010/FpML-4-8
1..∞
boolean
specialDividends
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
materialDividend
http://www.fpml.org/2010/FpML-4-8
0..1
FixedPaymentLeg
fixedLeg
http://www.fpml.org/2010/FpML-4-8
ID
@ id
LegIdentifier
legIdentifier
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8



XML Instance Representation

<dividendSwapTransactionSupplement
id=" xsd:ID [0..1]">

<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<dividendLeg> DividendLeg </dividendLeg> [1]

'Dividend leg.'

<fixedLeg> FixedPaymentLeg </fixedLeg> [1]

'Fixed payment leg.'

Start Group: EquityUnderlyerProvisions.model [0..1]
Start Group: IndexAnnexFallback.model [0..1]

Start Choice [1]
<multipleExchangeIndexAnnexFallback> xsd:boolean </multipleExchangeIndexAnnexFallback> [1]

'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange Index Annex is applicable to the transaction. This annex defines additional provisions which are applicable where an index is comprised of component securities that are traded on multiple exchanges.'

<componentSecurityIndexAnnexFallback> xsd:boolean </componentSecurityIndexAnnexFallback> [1]

'For an index option transaction, a flag to indicate whether a relevant Component Security Index Annex is applicable to the transaction.'

End Choice
End Group: IndexAnnexFallback.model
<localJurisdiction> Country </localJurisdiction> [0..1]

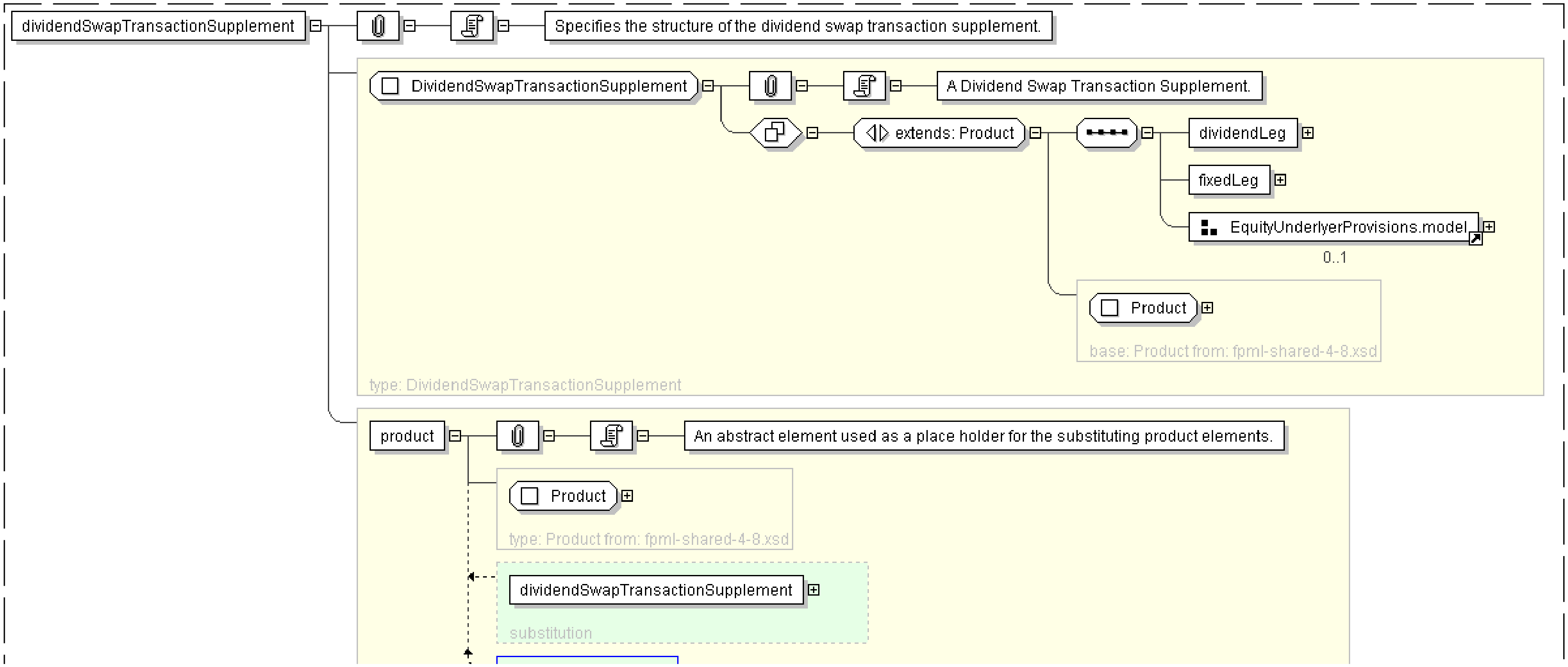
'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties, and similar charges imposed by the taxing authority of the Local Jurisdiction If this element is not present Local Jurisdiction is Not Applicable.'

<relevantJurisdiction> Country </relevantJurisdiction> [0..1]

'Relevent Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties and similar charges that would be imposed by the taxing authority of the Country of Underlyer on a Hypothetical Broker Dealer assuming the Applicable Hedge Positions are held by its office in the Relevant Jurisdiction. If this element is not present Relevant Jurisdiction is Not Applicable.'

End Group: EquityUnderlyerProvisions.model
</dividendSwapTransactionSupplement>

Diagram



Schema Component Representation

```
<xsd:element name="dividendSwapTransactionSupplement" type="
DividendSwapTransactionSupplement " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: DividendLeg

Super-types:	DirectionalLegUnderlyer < **DividendLeg** (by extension)
Sub-types:	None

Name	DividendLeg
Used by (from the same schema document)	Complex Type **DividendSwapTransactionSupplement**
Abstract	no
Documentation	Floating Payment Leg of a Dividend Swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <legIdentifier> LegIdentifier </legIdentifier> [0..*]
   'Version aware identification of this leg.'

   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [0..1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [0..1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlyer of the leg.'

   <settlementType> SettlementTypeEnum </settlementType> [0..1]
   <settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
         <settlementAmount> Money </settlementAmount> [1]
```

'Settlement Amount'

<settlementCurrency> Currency </settlementCurrency> [1]

'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

<declaredCashDividendPercentage> NonNegativeDecimal **</declaredCashDividendPercentage>** [0..1]

'Declared Cash Dividend Percentage.'

<declaredCashEquivalentDividendPercentage> NonNegativeDecimal
</declaredCashEquivalentDividendPercentage> [0..1]

'Declared Cash Equivalent Dividend Percentage.'

<dividendPeriod> DividendPeriodPayment **</dividendPeriod>** [1..*]

'One to many time bounded dividend payment periods, each with a fixed strike and dividend payment date per period.'

<specialDividends> xsd:boolean **</specialDividends>** [0..1]

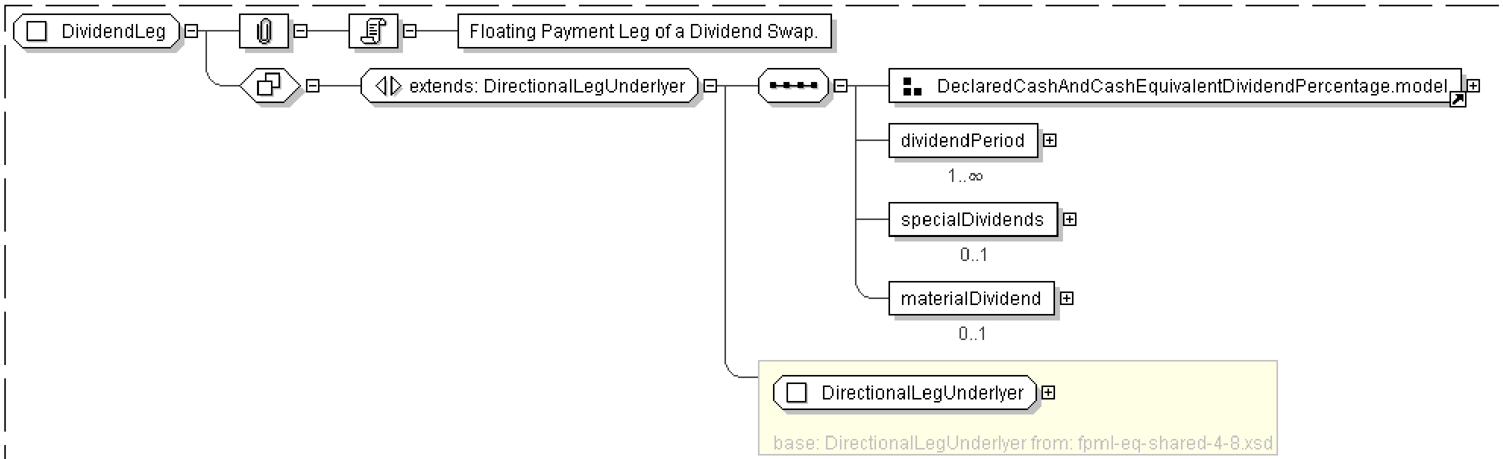
'If present and true, then special dividends and memorial dividends are applicable.'

<materialDividend> xsd:boolean **</materialDividend>** [0..1]

'If present and true, then material non cash dividends are applicable.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendLeg">
   <xsd:complexContent>
      <xsd:extension base=" DirectionalLegUnderlyer ">
         <xsd:sequence>
            <xsd:group ref=" DeclaredCashAndCashEquivalentDividendPercentage.model "/>
            <xsd:element name="dividendPeriod" type=" DividendPeriodPayment " maxOccurs="unbounded"/>
            <xsd:element name="specialDividends" type=" xsd:boolean " minOccurs="0"/>
```

```
            <xsd:element name="materialDividend" type=" xsd:boolean " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DividendPeriodPayment

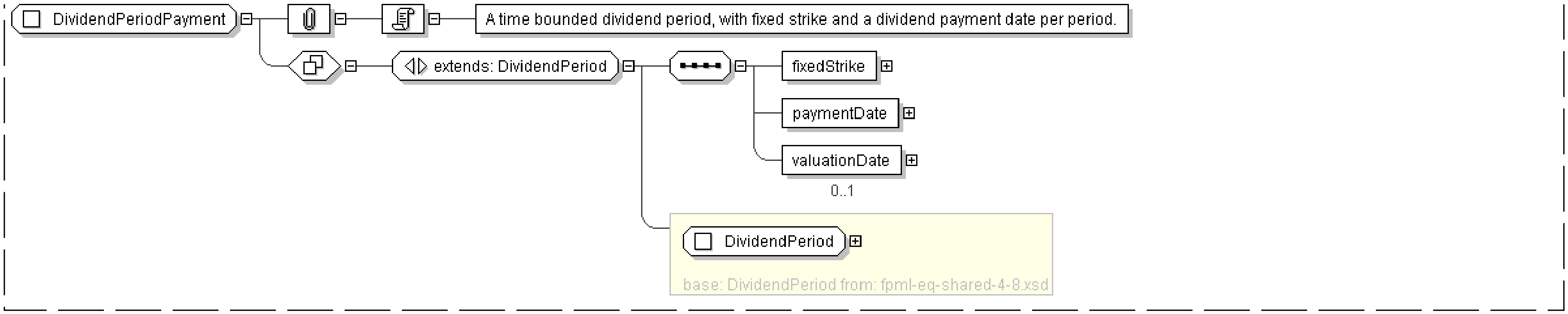
Super-types:	DividendPeriod < **DividendPeriodPayment** (by extension)
Sub-types:	None

Name	DividendPeriodPayment
Used by (from the same schema document)	Complex Type **DividendLeg**
Abstract	no
Documentation	A time bounded dividend period, with fixed strike and a dividend payment date per period.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <unadjustedStartDate> IdentifiedDate </unadjustedStartDate> [1]
   'Unadjusted inclusive dividend period start date.'

   <unadjustedEndDate> IdentifiedDate </unadjustedEndDate> [1]
   'Unadjusted inclusive dividend period end date.'

   <dateAdjustments> BusinessDayAdjustments </dateAdjustments> [1]
   'Date adjustments for all unadjusted dates in this dividend period.'

   <underlyerReference> AssetReference </underlyerReference> [0..1]
   'Reference to the underlyer which is paying dividends. This should be used in all cases,
   and must be used where there are multiple underlying assets, to avoid any ambiguity about
   which asset the dividend period relates to.'

   <fixedStrike> PositiveDecimal </fixedStrike> [1]
   'Fixed strike.'

   <paymentDate> AdjustableOrRelativeDate </paymentDate> [1]
   'Dividend period amount payment date.'

   <valuationDate> AdjustableOrRelativeDate </valuationDate> [0..1]
   'Dividend period amount valuation date.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendPeriodPayment">
   <xsd:complexContent>
      <xsd:extension base=" DividendPeriod ">
         <xsd:sequence>
            <xsd:element name="fixedStrike" type=" PositiveDecimal "/>
            <xsd:element name="paymentDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="valuationDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DividendSwapTransactionSupplement

Super-types:	Product < **DividendSwapTransactionSupplement** (by extension)
Sub-types:	None

Name	DividendSwapTransactionSupplement
Used by (from the same schema document)	Element **dividendSwapTransactionSupplement**
Abstract	no
Documentation	A Dividend Swap Transaction Supplement.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <dividendLeg> DividendLeg </dividendLeg> [1]
   'Dividend leg.'

   <fixedLeg> FixedPaymentLeg </fixedLeg> [1]
```

'Fixed payment leg.'

Start Group: EquityUnderlyerProvisions.model [0..1]
Start Group: IndexAnnexFallback.model [0..1]
Start Choice [1]

<multipleExchangeIndexAnnexFallback> xsd:boolean **</multipleExchangeIndexAnnexFallback>** [1]

'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange Index Annex is applicable to the transaction. This annex defines additional provisions which are applicable where an index is comprised of component securities that are traded on multiple exchanges.'

<componentSecurityIndexAnnexFallback> xsd:boolean **</componentSecurityIndexAnnexFallback>** [1]

'For an index option transaction, a flag to indicate whether a relevant Component Security Index Annex is applicable to the transaction.'

End Choice
End Group: IndexAnnexFallback.model

<localJurisdiction> Country **</localJurisdiction>** [0..1]

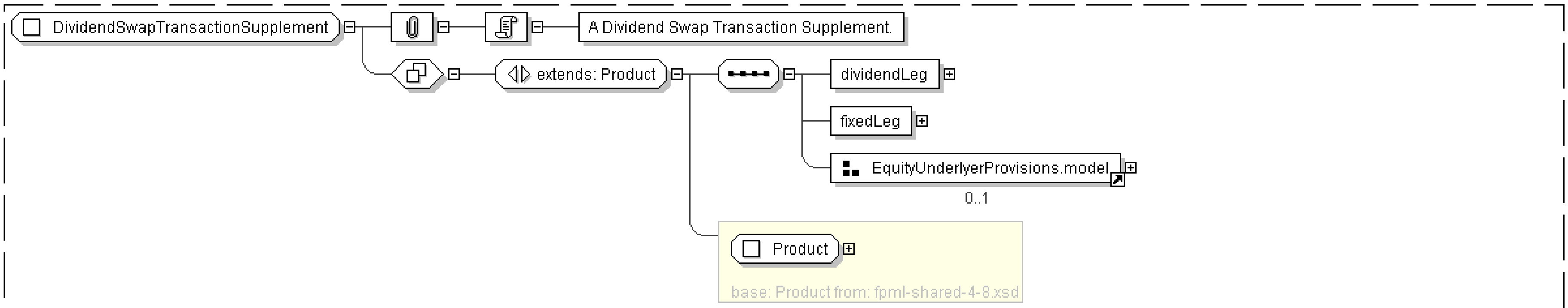
'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties, and similar charges imposed by the taxing authority of the Local Jurisdiction If this element is not present Local Jurisdiction is Not Applicable.'

<relevantJurisdiction> Country **</relevantJurisdiction>** [0..1]

'Relevent Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties and similar charges that would be imposed by the taxing authority of the Country of Underlyer on a Hypothetical Broker Dealer assuming the Applicable Hedge Positions are held by its office in the Relevant Jurisdiction. If this element is not present Relevant Jurisdiction is Not Applicable.'

End Group: EquityUnderlyerProvisions.model
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendSwapTransactionSupplement">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="dividendLeg" type=" DividendLeg "/>
            <xsd:element name="fixedLeg" type=" FixedPaymentLeg "/>
            <xsd:group ref=" EquityUnderlyerProvisions.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FixedPaymentAmount

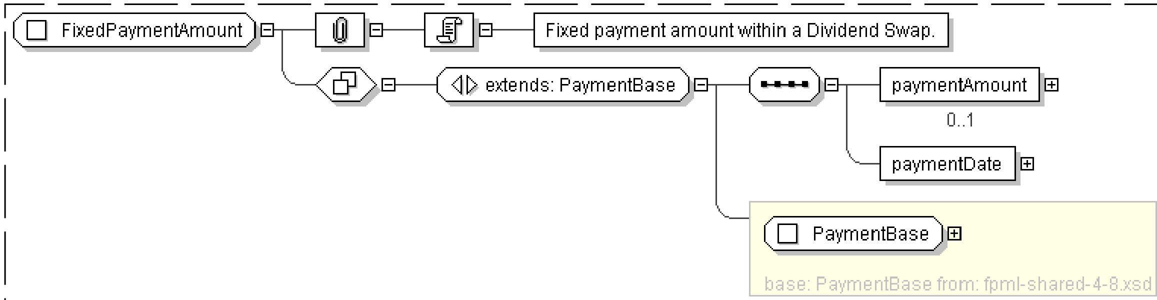
Super-types:	PaymentBase < **FixedPaymentAmount** (by extension)
Sub-types:	None

Name	FixedPaymentAmount
Used by (from the same schema document)	Complex Type **FixedPaymentLeg**
Abstract	no
Documentation	Fixed payment amount within a Dividend Swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <paymentAmount> Money </paymentAmount> [0..1]
   'Payment amount, which is optional since the payment amount may be calculated using
   fixed strike and number of open units.'

   <paymentDate> RelativeDateOffset </paymentDate> [1]
   'Payment date relative to another date.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FixedPaymentAmount">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="paymentAmount" type=" Money " minOccurs="0"/>
            <xsd:element name="paymentDate" type=" RelativeDateOffset "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FixedPaymentLeg

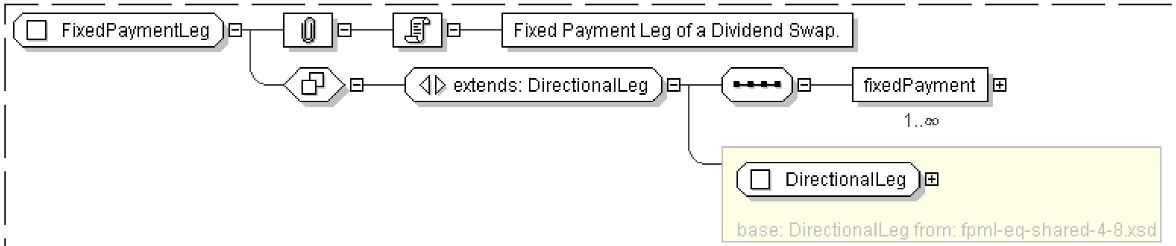
Super-types:	DirectionalLeg < **FixedPaymentLeg** (by extension)
Sub-types:	None

Name	FixedPaymentLeg
Used by (from the same schema document)	Complex Type **DividendSwapTransactionSupplement**
Abstract	no
Documentation	Fixed Payment Leg of a Dividend Swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <legIdentifier> LegIdentifier </legIdentifier> [0..*]
   'Version aware identification of this leg.'

   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [0..1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [0..1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <fixedPayment> FixedPaymentAmount </fixedPayment> [1..*]
   'Fixed payment of a dividend swap, payment date is relative to a dividend period payment
   date. Commonly the dividend leg and the fixed payment leg will pay out on the same date,
   and the payments will be netted.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FixedPaymentLeg">
   <xsd:complexContent>
      <xsd:extension base=" DirectionalLeg ">
         <xsd:sequence>
            <xsd:element name="fixedPayment" type=" FixedPaymentAmount " maxOccurs="unbounded"/>
```

```
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
```

```
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ◦ fpml-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

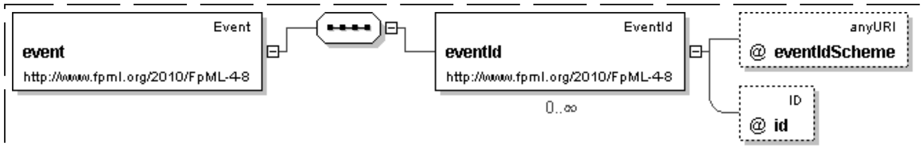
top

Global Declarations

Element: event

Name	event
Used by (from the same schema document)	Complex Type **DataDocument**
Type	Event
Nillable	no
Abstract	yes
Documentation	An abstract global element used as a basis for substition of event types

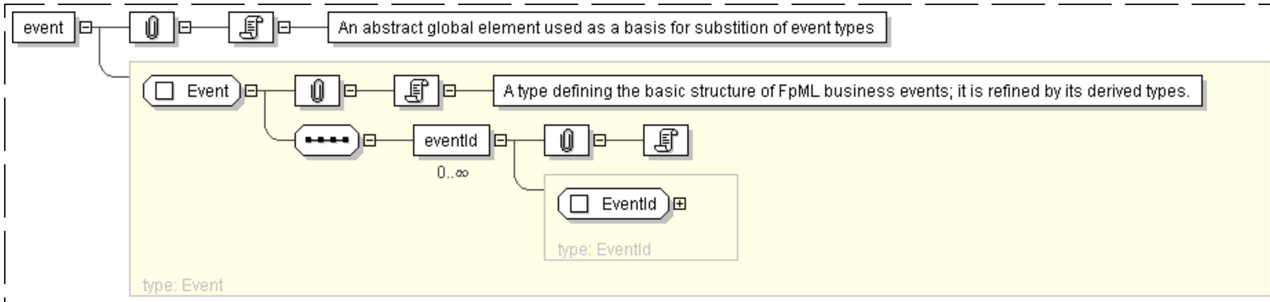
Logical Diagram



XML Instance Representation

```
<event>
   <eventId> EventId </eventId> [0..*]
   ''

</event>
```

Diagram



Schema Component Representation

```
<xsd:element name="event" type=" Event " abstract="true"/>
```

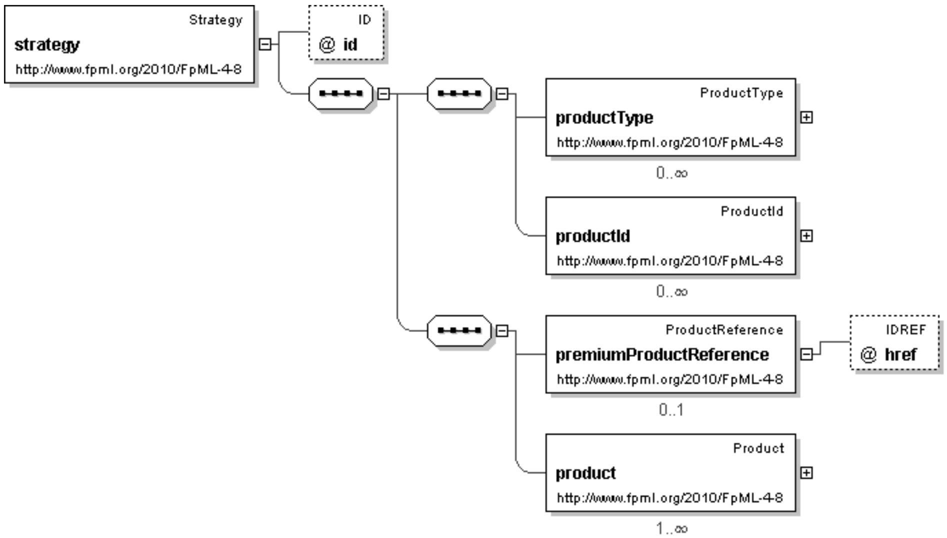
top

Element: strategy

- *This element can be used wherever the following element is referenced:*
  - product

Name	strategy
Type	Strategy
Nillable	no
Abstract	no
Documentation	A strategy product.

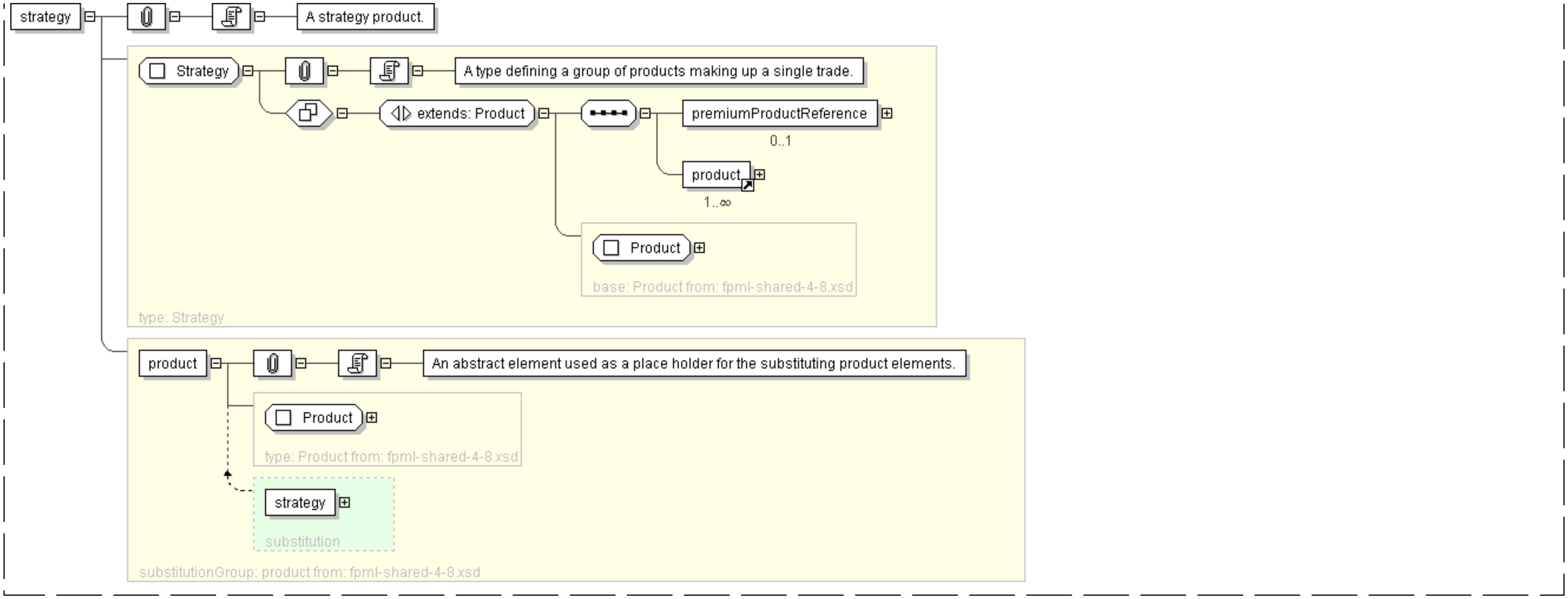
Logical Diagram



XML Instance Representation

```
<strategy
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <premiumProductReference> ProductReference </premiumProductReference> [0..1]
   'Indicates which product within a strategy represents the premium payment.'

   <product> ... </product> [1..*]
</strategy>
```

Diagram



Schema Component Representation

```
<xsd:element name="strategy" type=" Strategy " substitutionGroup="product"/>
```

top

Global Definitions

Attribute Group: VersionAttributes.atts

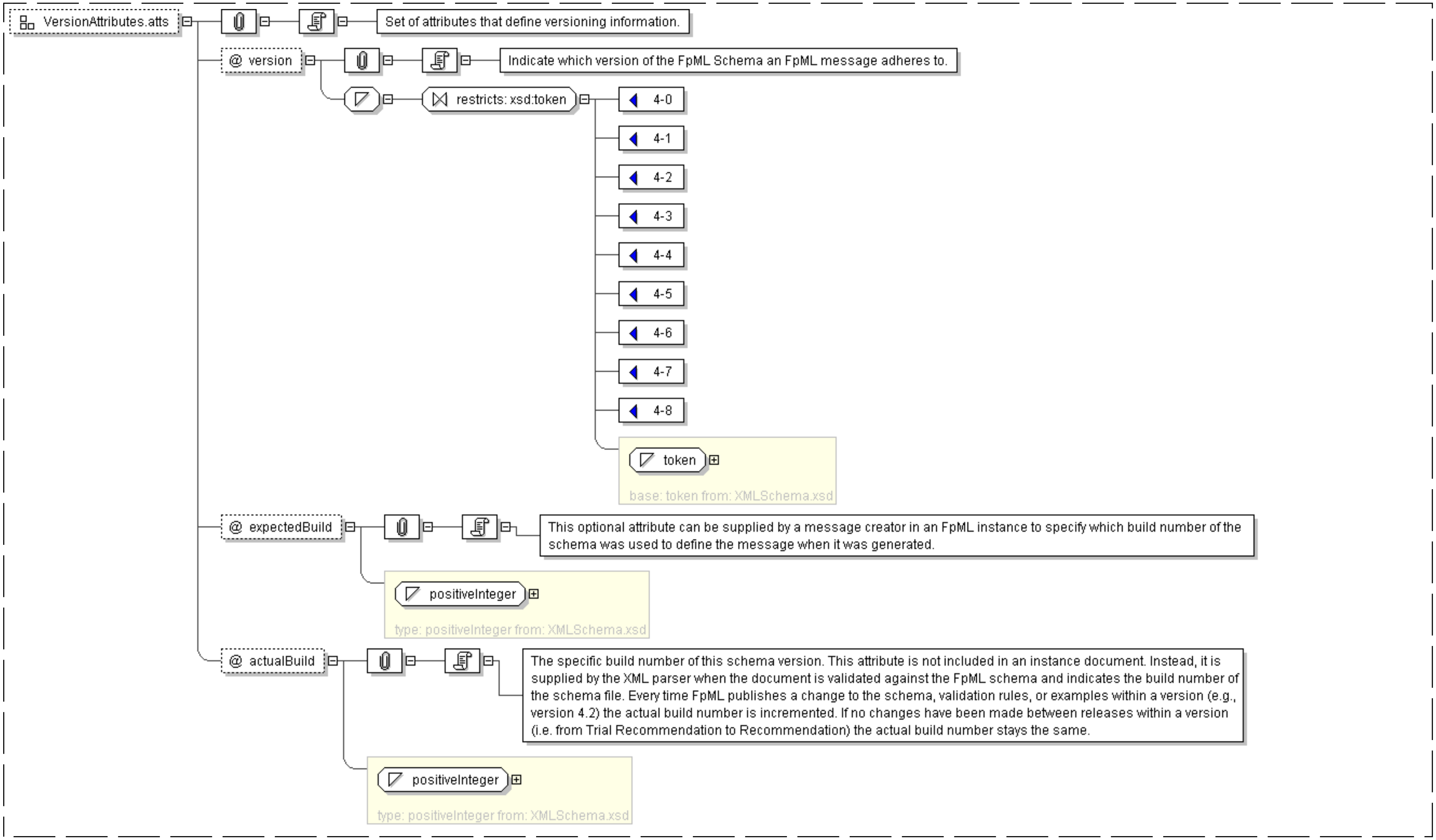
Name	VersionAttributes.atts
Used by (from the same schema document)	Complex Type **Document**
Documentation	Set of attributes that define versioning information.

XML Instance Representation

```
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'
```

"

Diagram



Schema Component Representation

```
<xsd:attributeGroup name="VersionAttributes.atts">
   <xsd:attribute name="version" use="required">
      <xsd:simpleType>
         <xsd:restriction base=" xsd:token ">
            <xsd:enumeration value="4-0"/>
            <xsd:enumeration value="4-1"/>
            <xsd:enumeration value="4-2"/>
            <xsd:enumeration value="4-3"/>
            <xsd:enumeration value="4-4"/>
            <xsd:enumeration value="4-5"/>
            <xsd:enumeration value="4-6"/>
            <xsd:enumeration value="4-7"/>
            <xsd:enumeration value="4-8"/>
         </xsd:restriction>
      </xsd:simpleType>
```

```
    </xsd:attribute>
    <xsd:attribute name="expectedBuild" type=" xsd:positiveInteger "/>
    <xsd:attribute name="actualBuild" type=" xsd:positiveInteger " fixed="1"/>
</xsd:attributeGroup>
```

top

Complex Type: Allocation

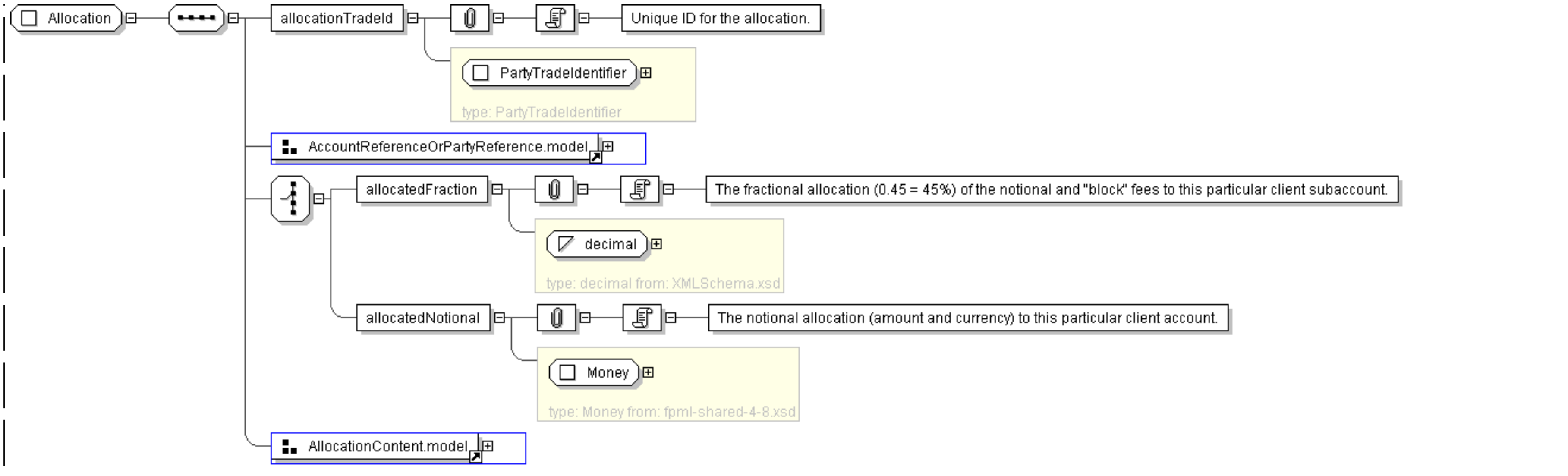
Super-types:	None
Sub-types:	None

Name	Allocation
Used by (from the same schema document)	Complex Type **Allocations**
Abstract	no

XML Instance Representation

```
<...>
    <allocationTradeId> PartyTradeIdentifier </allocationTradeId> [1]
    'Unique ID for the allocation.'

Start Choice [1]
        <accountReference> AccountReference </accountReference> [1]
        'Reference to the subaccount definition in the Party list.'

        <partyReference> PartyReference </partyReference> [1]
        'Reference to the party definition.'

End Choice
Start Choice [1]
        <allocatedFraction> xsd:decimal </allocatedFraction> [1]
        'The fractional allocation (0.45 = 45%) of the notional and \"block\" fees to this
        particular client subaccount.'

        <allocatedNotional> Money </allocatedNotional> [1]
        'The notional allocation (amount and currency) to this particular client account.'

End Choice
    <collateral> Collateral </collateral> [0..1]
    'The sum that must be posted upfront to collateralize against counterparty credit risk.'

    <creditChargeAmount> Money </creditChargeAmount> [0..1]
    'Special credit fee assessed to certain institutions.'

    <approvals> Approvals </approvals> [0..1]
    'A container for approval states in the workflow.'

    <masterConfirmationDate> xsd:date </masterConfirmationDate> [0..1]
    'The date of the confirmation executed between the parties and intended to govern the
    allocated trade between those parties.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Allocation">
   <xsd:sequence>
      <xsd:element name="allocationTradeId" type=" PartyTradeIdentifier "/>
      <xsd:group ref=" AccountReferenceOrPartyReference.model "/>
      <xsd:choice>
         <xsd:element name="allocatedFraction" type=" xsd:decimal "/>
         <xsd:element name="allocatedNotional" type=" Money "/>
      </xsd:choice>
      <xsd:group ref=" AllocationContent.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AllocationTradeIdentifier

Super-types:	TradeIdentifier < PartyTradeIdentifier (by extension) < **AllocationTradeIdentifier** (by extension)
Sub-types:	None

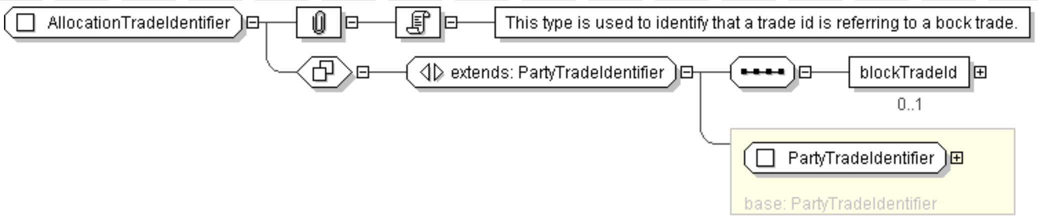
Name	AllocationTradeIdentifier
Abstract	no
Documentation	This type is used to identify that a trade id is referring to a bock trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyReference> PartyReference </partyReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party referenced has allocated the trade identifier.'

Start Choice [1..*]
      <tradeId> TradeId </tradeId> [1]
      <versionedTradeId> VersionedTradeId </versionedTradeId> [1]
End Choice
   <linkId> LinkId </linkId> [0..*]
   'A link identifier allowing the trade to be associated with other related trades, e.g.
   the linkId may contain a tradeId for an associated trade or several related trades may be
   given the same linkId. FpML does not define the domain values associated with this
```

```
element. Note that the domain values for this element are not strictly an enumerated list.'

<blockTradeId> PartyTradeIdentifier </blockTradeId> [0..1]
'The trade id of the block trade. This is used by each one of the allocated trades to
reference the block trade.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AllocationTradeIdentifier">
   <xsd:complexContent>
      <xsd:extension base=" PartyTradeIdentifier ">
         <xsd:sequence>
            <xsd:element name="blockTradeId" type=" PartyTradeIdentifier " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Allocations

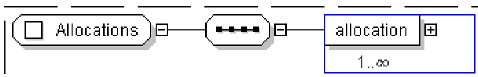
Super-types:	None
Sub-types:	None

Name	Allocations
Used by (from the same schema document)	Complex Type **Trade**
Abstract	no

XML Instance Representation

```
<...>
   <allocation> Allocation </allocation> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Allocations">
   <xsd:sequence>
      <xsd:element name="allocation" type=" Allocation " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Amendment

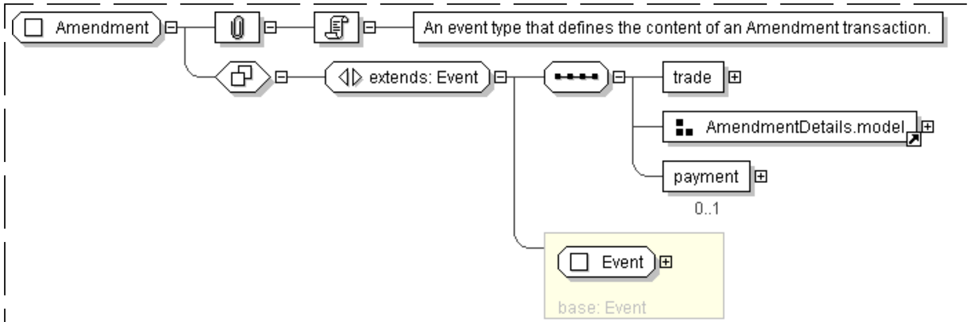
Super-types:	Event < **Amendment** (by extension)
Sub-types:	None

Name	Amendment
Abstract	no
Documentation	An event type that defines the content of an Amendment transaction.

XML Instance Representation

```
<...>
   <eventId> EventId </eventId> [0..*]
   ''

   <trade> Trade </trade> [1]
   <amendmentTradeDate> xsd:date </amendmentTradeDate> [1]
   'The date on which the the parties enter into the Amendment transaction'

   <amendmentEffectiveDate> xsd:date </amendmentEffectiveDate> [1]
   'The date on which the Amendment becomes effective'

   <payment> Payment </payment> [0..1]
   'A payment for the right to amend the trade.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Amendment">
   <xsd:complexContent>
      <xsd:extension base=" Event ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade "/>
            <xsd:group ref=" AmendmentDetails.model "/>
            <xsd:element name="payment" type=" Payment " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Approval

Super-types:	None

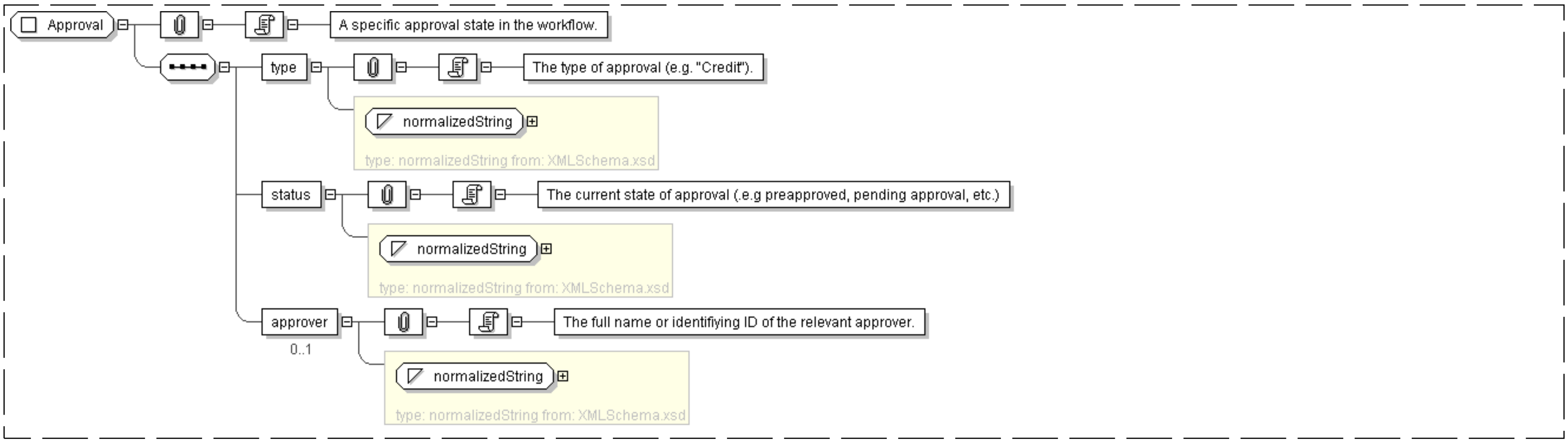
Sub-types:	None

Name	Approval
Used by (from the same schema document)	Complex Type **Approvals**
Abstract	no
Documentation	A specific approval state in the workflow.

XML Instance Representation

```
<...>
   <type> xsd:normalizedString </type> [1]
   'The type of approval (e.g. \"Credit\").'

   <status> xsd:normalizedString </status> [1]
   'The current state of approval (.e.g preapproved, pending approval, etc.)'

   <approver> xsd:normalizedString </approver> [0..1]
   'The full name or identifiying ID of the relevant approver.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Approval">
   <xsd:sequence>
      <xsd:element name="type" type=" xsd:normalizedString "/>
      <xsd:element name="status" type=" xsd:normalizedString "/>
      <xsd:element name="approver" type=" xsd:normalizedString " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Approvals

Super-types:	None
Sub-types:	None

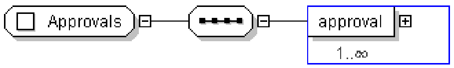
Name	Approvals

Used by (from the same schema document)	Model Group **AllocationContent.model**
Abstract	no

XML Instance Representation

```
<...>
   <approval> Approval </approval> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Approvals">
   <xsd:sequence>
      <xsd:element name="approval" type=" Approval " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: BestFitTrade

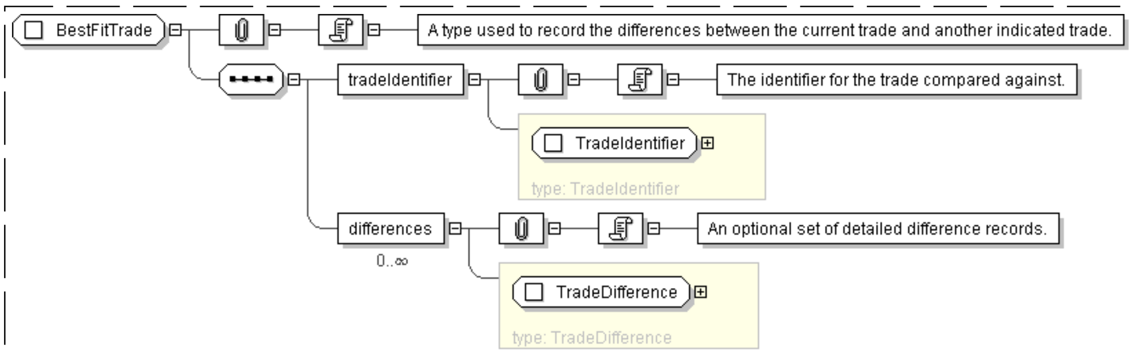
Super-types:	None
Sub-types:	None

Name	BestFitTrade
Abstract	no
Documentation	A type used to record the differences between the current trade and another indicated trade.

XML Instance Representation

```
<...>
   <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]
   'The identifier for the trade compared against.'

   <differences> TradeDifference </differences> [0..*]
   'An optional set of detailed difference records.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BestFitTrade">
```

```
    <xsd:sequence>
        <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
        <xsd:element name="differences" type=" TradeDifference " minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: BlockTradeIdentifier

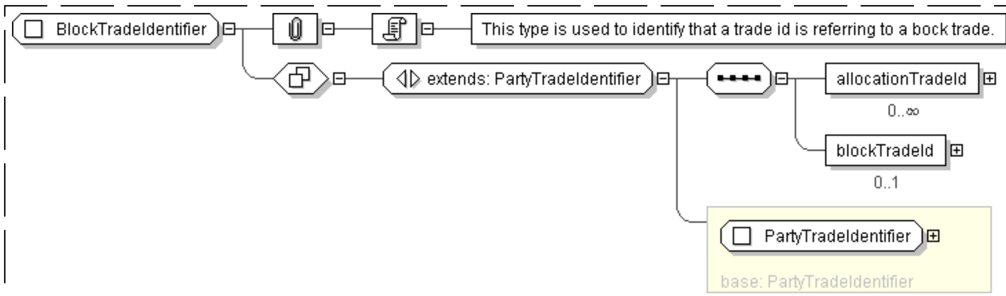
Super-types:	TradeIdentifier < PartyTradeIdentifier (by extension) < **BlockTradeIdentifier** (by extension)
Sub-types:	None

Name	BlockTradeIdentifier
Abstract	no
Documentation	This type is used to identify that a trade id is referring to a bock trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <partyReference> PartyReference </partyReference> [1]
    'A pointer style reference to a party identifier defined elsewhere in the document. The
    party referenced has allocated the trade identifier.'
Start Choice [1..*]
        <tradeId> TradeId </tradeId> [1]
        <versionedTradeId> VersionedTradeId </versionedTradeId> [1]
End Choice
    <linkId> LinkId </linkId> [0..*]
    'A link identifier allowing the trade to be associated with other related trades, e.g.
    the linkId may contain a tradeId for an associated trade or several related trades may be
    given the same linkId. FpML does not define the domain values associated with this
    element. Note that the domain values for this element are not strictly an enumerated list.'
    <allocationTradeId> PartyTradeIdentifier </allocationTradeId> [0..*]
    'The trade id of the allocated trade. This is used by the block trade to reference
    the allocated trade.'
    <blockTradeId> PartyTradeIdentifier </blockTradeId> [0..1]
    'The trade id of the parent trade for N-level allocations. This element is only used to model
    N-level allocations in which the trade acts as block and allocated trade at the same time.
    This basically means the ability to allocate a block trade to multiple allocation trades,
    and then allocate these in turn to other allocation trades (and so on if desired).'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BlockTradeIdentifier">
   <xsd:complexContent>
      <xsd:extension base=" PartyTradeIdentifier ">
         <xsd:sequence>
            <xsd:element name="allocationTradeId" type=" PartyTradeIdentifier "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="blockTradeId" type=" PartyTradeIdentifier " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ChangeContract

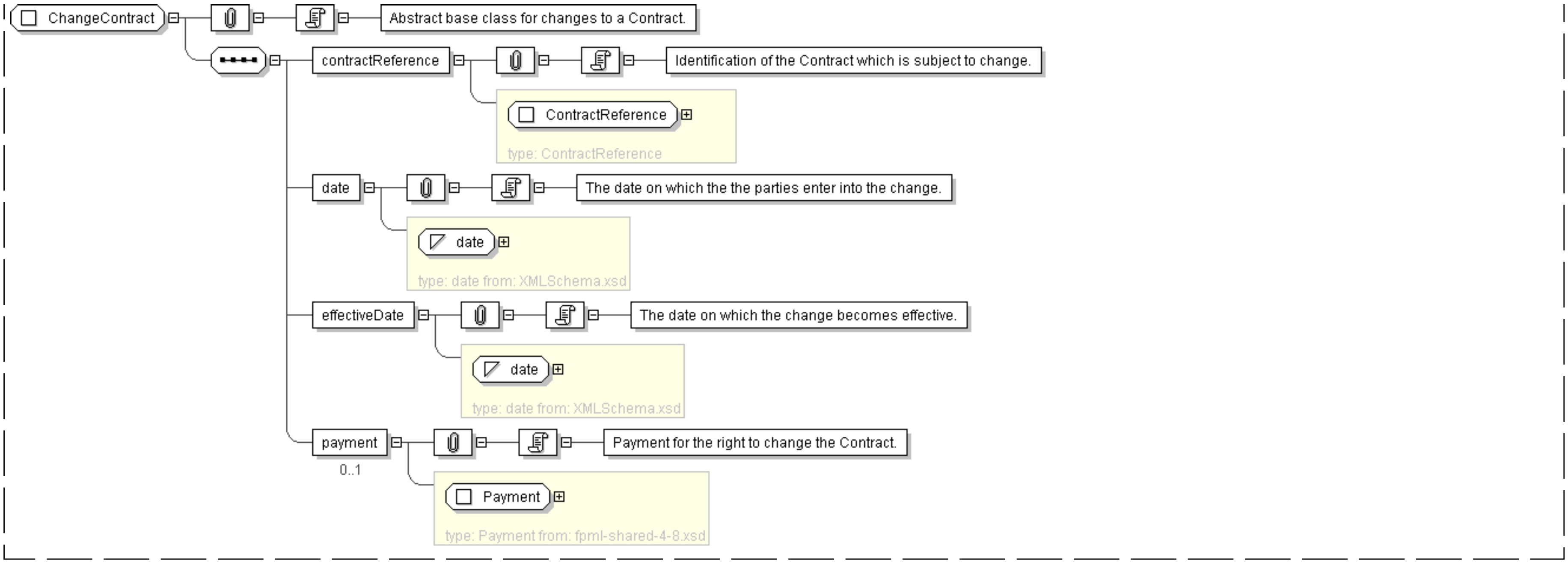
Super-types:	None
Sub-types:	• ChangeContractSize (by extension) • ContractTermination (by extension)

Name	ChangeContract
Abstract	yes
Documentation	Abstract base class for changes to a Contract.

XML Instance Representation

```
<...>
   <contractReference> ContractReference </contractReference> [1]
   'Identification of the Contract which is subject to change.'

   <date> xsd:date </date> [1]
   'The date on which the the parties enter into the change.'

   <effectiveDate> xsd:date </effectiveDate> [1]
   'The date on which the change becomes effective.'

   <payment> Payment </payment> [0..1]
   'Payment for the right to change the Contract.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ChangeContract" abstract="true">
   <xsd:sequence>
      <xsd:element name="contractReference" type=" ContractReference "/>
      <xsd:element name="date" type=" xsd:date "/>
      <xsd:element name="effectiveDate" type=" xsd:date "/>
      <xsd:element name="payment" type=" Payment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ChangeContractSize

Super-types:	ChangeContract < **ChangeContractSize** (by extension)
Sub-types:	None

Name	ChangeContractSize
Abstract	no
Documentation	Represent a change in Contract Size.

XML Instance Representation

```
<...>
   <contractReference> ContractReference </contractReference> [1]
   'Identification of the Contract which is subject to change.'

   <date> xsd:date </date> [1]
   'The date on which the the parties enter into the change.'

   <effectiveDate> xsd:date </effectiveDate> [1]
   'The date on which the change becomes effective.'

   <payment> Payment </payment> [0..1]
```

'Payment for the right to change the Contract.'

Start Choice [1]

<changeInNotionalAmount> Money **</changeInNotionalAmount>** [1]

'Specifies the fixed amount by which the Notional Amount changes.'

<outstandingNotionalAmount> Money **</outstandingNotionalAmount>** [1]

'Specifies the Notional amount after the Change.'

<changeInNumberOfOptions> xsd:decimal **</changeInNumberOfOptions>** [1]

'Specifies the fixed amount by which the Number of Options changes.'

<outstandingNumberOfOptions> xsd:decimal **</outstandingNumberOfOptions>** [1]

'Specifies the Number of Options after the Change.'

<changeInNumberOfUnits> xsd:decimal **</changeInNumberOfUnits>** [1]

'Specifies the fixed amount by which the Number of Units changes.'

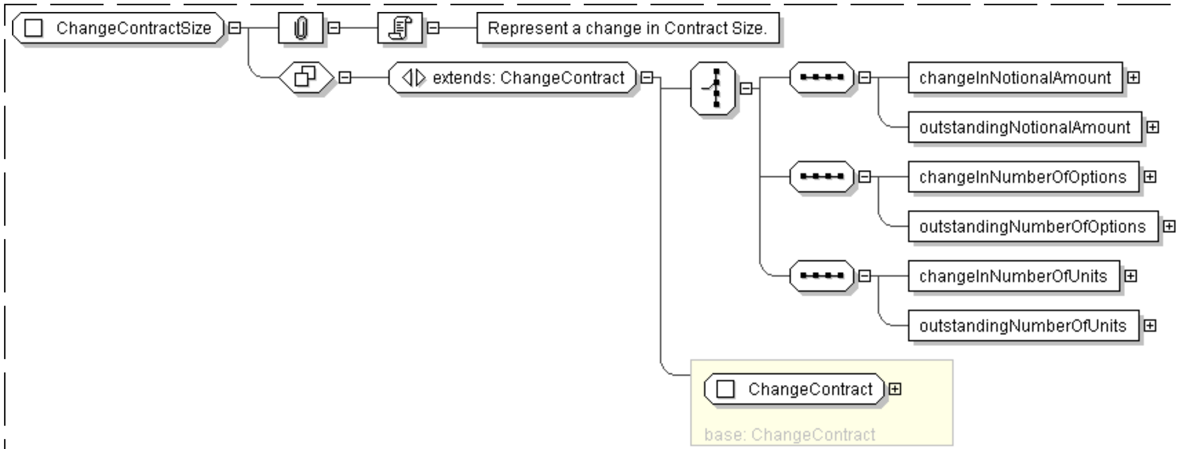
<outstandingNumberOfUnits> xsd:decimal **</outstandingNumberOfUnits>** [1]

'Specifies the Number of Units.'

End Choice

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ChangeContractSize">
   <xsd:complexContent>
      <xsd:extension base=" ChangeContract ">
         <xsd:choice>
            <xsd:sequence>
               <xsd:element name="changeInNotionalAmount" type=" Money "/>
               <xsd:element name="outstandingNotionalAmount" type=" Money "/>
            </xsd:sequence>
            <xsd:sequence>
               <xsd:element name="changeInNumberOfOptions" type=" xsd:decimal "/>
               <xsd:element name="outstandingNumberOfOptions" type=" xsd:decimal "/>
            </xsd:sequence>
            <xsd:sequence>
               <xsd:element name="changeInNumberOfUnits" type=" xsd:decimal "/>
               <xsd:element name="outstandingNumberOfUnits" type=" xsd:decimal "/>
            </xsd:sequence>
         </xsd:choice>
      </xsd:extension>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Collateral

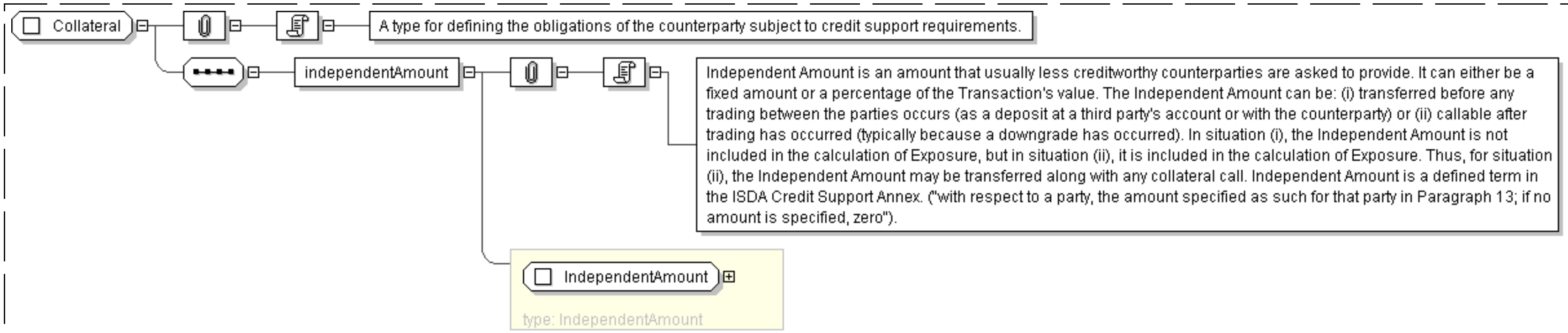
Super-types:	None
Sub-types:	None

Name	Collateral
Used by (from the same schema document)	Complex Type **Contract** , Complex Type **Trade** , Model Group **AllocationContent.model**
Abstract	no
Documentation	A type for defining the obligations of the counterparty subject to credit support requirements.

XML Instance Representation

```
<...>
   <independentAmount> IndependentAmount </independentAmount> [1]
   'Independent Amount is an amount that usually less creditworthy counterparties are asked
   to provide. It can either be a fixed amount or a percentage of the Transaction\'s value.
   The Independent Amount can be: (i) transferred before any trading between the parties
   occurs (as a deposit at a third party\'s account or with the counterparty) or (ii)
   callable after trading has occurred (typically because a downgrade has occurred). In
   situation (i), the Independent Amount is not included in the calculation of Exposure, but
   in situation (ii), it is included in the calculation of Exposure. Thus, for situation (ii),
   the Independent Amount may be transferred along with any collateral call. Independent Amount
   is a defined term in the ISDA Credit Support Annex. (\"with respect to a party, the
   amount specified as such for that party in Paragraph 13; if no amount is specified, zero\").'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Collateral">
   <xsd:sequence>
      <xsd:element name="independentAmount" type=" IndependentAmount "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Contract

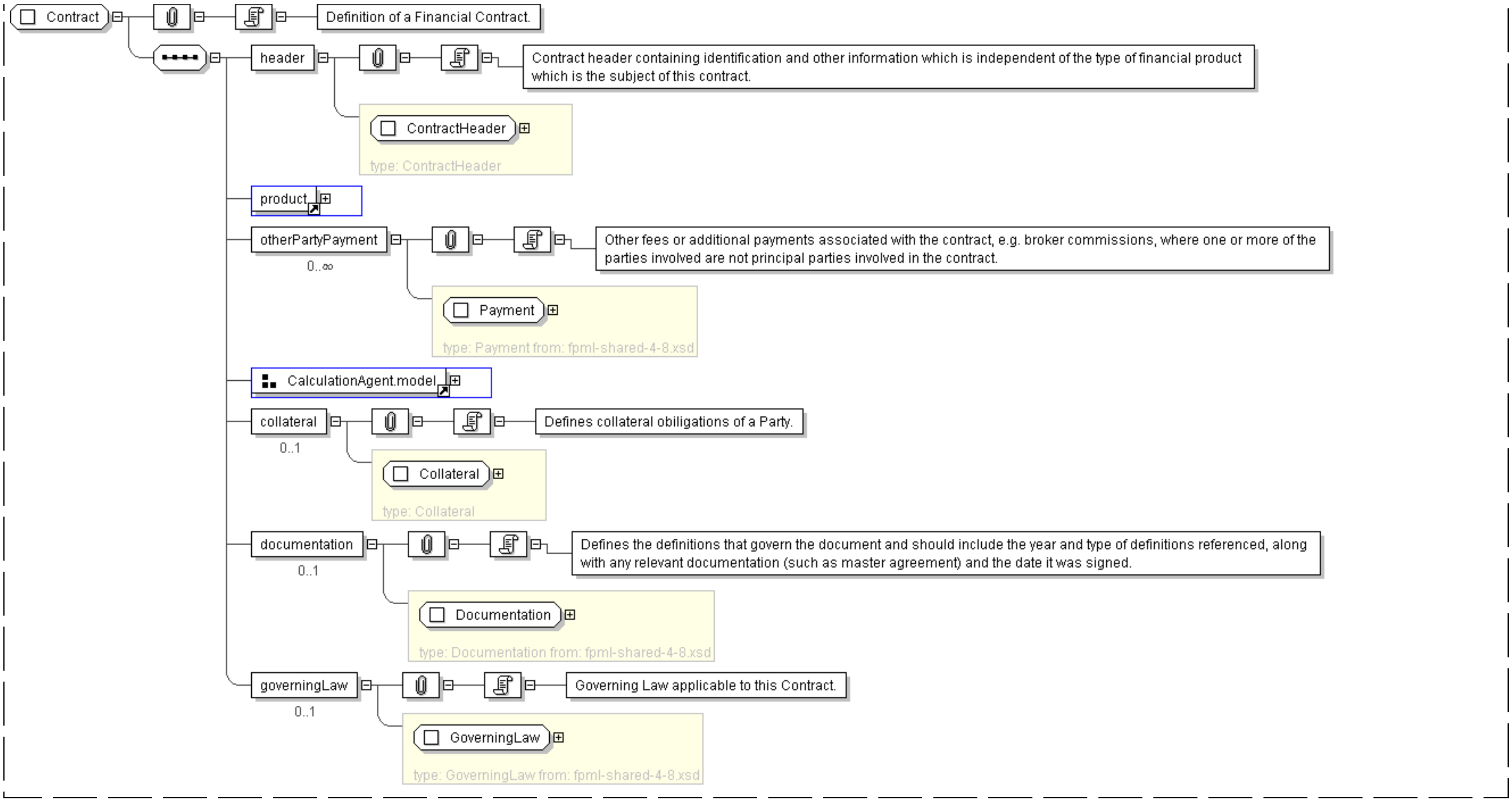
Super-types:	None
Sub-types:	None

Name	Contract
Used by (from the same schema document)	Model Group **ContractNovationDetails.model** , Model Group **ContractNovationDetails.model** , Model Group **ContractNovationDetails.model** , Model Group **ContractOrContractReference.model**
Abstract	no
Documentation	Definition of a Financial Contract.

XML Instance Representation

```
<...>
    <header> ContractHeader </header> [1]
    'Contract header containing identification and other information which is independent of
    the type of financial product which is the subject of this contract.'

    <product> ... </product> [1]
    <otherPartyPayment> Payment </otherPartyPayment> [0..*]
    'Other fees or additional payments associated with the contract, e.g. broker commissions,
    where one or more of the parties involved are not principal parties involved in the contract.'

    <calculationAgent> CalculationAgent </calculationAgent> [0..1]
    'The ISDA calculation agent responsible for performing duties as defined in the
    applicable product definitions.'

    <calculationAgentBusinessCenter> BusinessCenter </calculationAgentBusinessCenter> [0..1]
    'The city in which the office through which ISDA Calculation Agent is acting for purposes
    of the transaction is located The short-form confirm for a trade that is executed under
    a Sovereign or Asia Pacific Master Confirmation Agreement ( MCA ), does not need to specify
    the Calculation Agent. However, the confirm does need to specify the Calculation Agent
    City. This is due to the fact that the MCA sets the value for Calculation Agent but does
    not set the value for Calculation Agent City.'

    <collateral> Collateral </collateral> [0..1]
    'Defines collateral obiligations of a Party.'

    <documentation> Documentation </documentation> [0..1]
    'Defines the definitions that govern the document and should include the year and type
    of definitions referenced, along with any relevant documentation (such as master agreement)
    and the date it was signed.'

    <governingLaw> GoverningLaw </governingLaw> [0..1]
    'Governing Law applicable to this Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Contract">
   <xsd:sequence>
      <xsd:element name="header" type=" ContractHeader "/>
      <xsd:element ref=" product "/>
      <xsd:element name="otherPartyPayment" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:group ref=" CalculationAgent.model "/>
      <xsd:element name="collateral" type=" Collateral " minOccurs="0"/>
      <xsd:element name="documentation" type=" Documentation " minOccurs="0"/>
      <xsd:element name="governingLaw" type=" GoverningLaw " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractHeader

Super-types:	None
Sub-types:	None

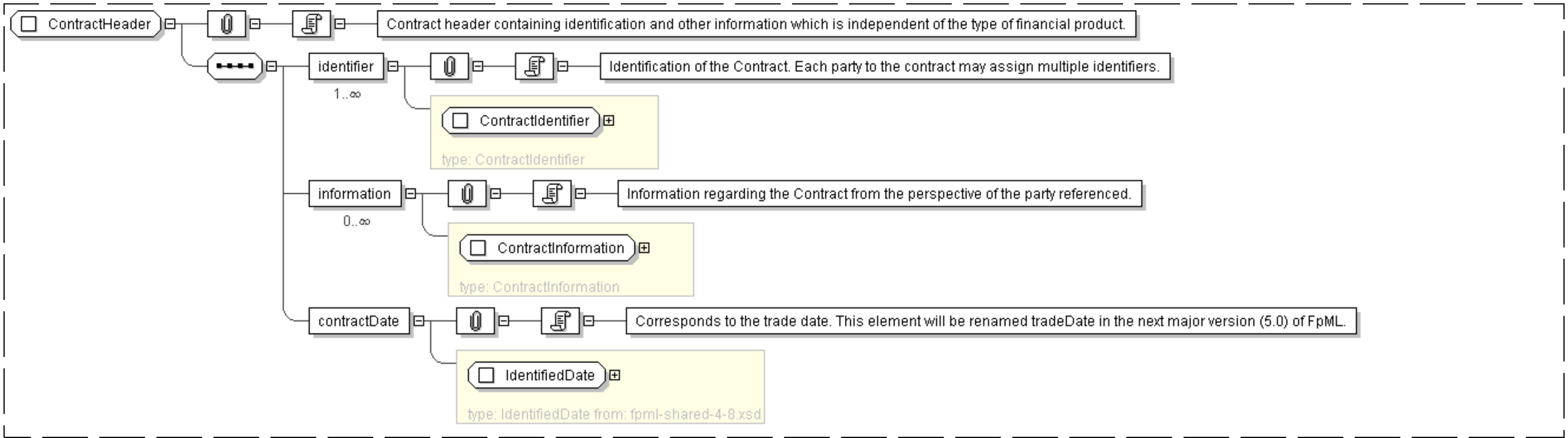
Name	ContractHeader

Used by (from the same schema document)	Complex Type **Contract**
Abstract	no
Documentation	Contract header containing identification and other information which is independent of the type of financial product.

XML Instance Representation

```
<...>
   <identifier> ContractIdentifier </identifier> [1..*]
   'Identification of the Contract. Each party to the contract may assign multiple identifiers.'

   <information> ContractInformation </information> [0..*]
   'Information regarding the Contract from the perspective of the party referenced.'

   <contractDate> IdentifiedDate </contractDate> [1]
   'Corresponds to the trade date. This element will be renamed tradeDate in the next
   major version (5.0) of FpML.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractHeader">
   <xsd:sequence>
      <xsd:element name="identifier" type=" ContractIdentifier " maxOccurs="unbounded"/>
      <xsd:element name="information" type=" ContractInformation "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="contractDate" type=" IdentifiedDate "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractId

Super-types:	Scheme < **ContractId** (by extension)
Sub-types:	None

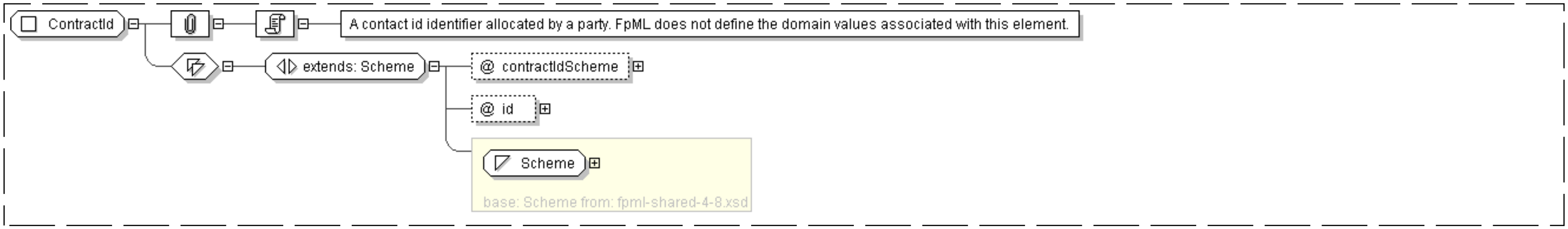
Name	ContractId
Used by (from the same schema document)	Complex Type **ContractIdentifier** , Complex Type **VersionedContractId**

Abstract	no
Documentation	A contact id identifier allocated by a party. FpML does not define the domain values associated with this element.

XML Instance Representation

```
<...
contractIdScheme=" xsd:anyURI [1]"
id=" xsd:ID [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="contractIdScheme" type=" xsd:anyURI " use="required"/>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ContractIdentifier

Super-types:	None
Sub-types:	None

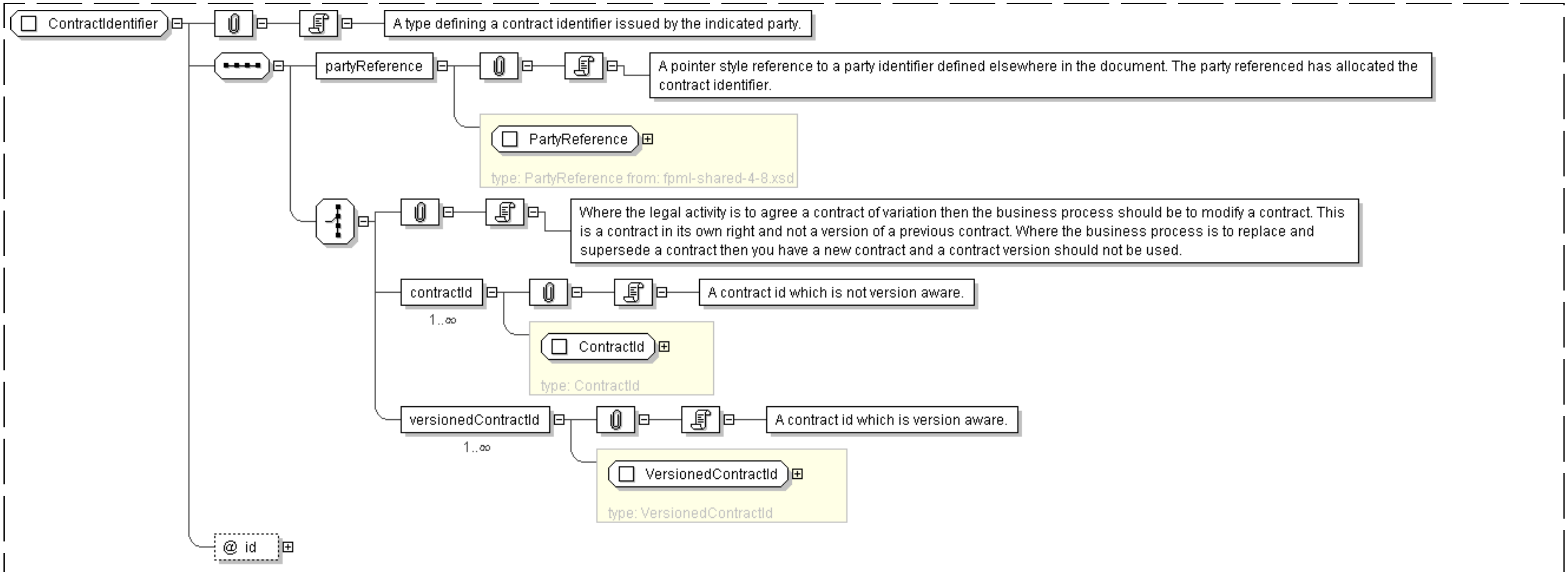
Name	ContractIdentifier
Used by (from the same schema document)	Complex Type **ContractHeader** , Complex Type **ContractReference**
Abstract	no
Documentation	A type defining a contract identifier issued by the indicated party.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyReference> PartyReference </partyReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party referenced has allocated the contract identifier.'

Start Choice [1]
'Where the legal activity is to agree a contract of variation then the business process
should be to modify a contract. This is a contract in its own right and not a version of
a previous contract. Where the business process is to replace and supersede a contract then
you have a new contract and a contract version should not be used.'

      <contractId> ContractId </contractId> [1..*]
      'A contract id which is not version aware.'
```

```
<versionedContractId> VersionedContractId </versionedContractId> [1..*]
'A contract id which is version aware.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractIdentifier">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
      <xsd:choice>
         <xsd:element name="contractId" type=" ContractId " maxOccurs="unbounded"/>
         <xsd:element name="versionedContractId" type=" VersionedContractId " maxOccurs="unbounded"/>
      </xsd:choice>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ContractInformation

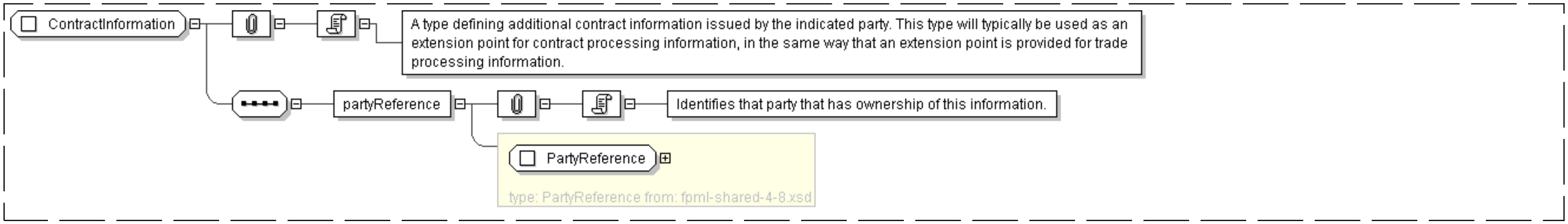
Super-types:	None
Sub-types:	None

Name	ContractInformation
Used by (from the same schema document)	Complex Type ContractHeader
Abstract	no
Documentation	A type defining additional contract information issued by the indicated party. This type will typically be used as an extension point for contract processing information, in the same way that an extension point is provided for trade processing information.

XML Instance Representation

```
<...>
   <partyReference> PartyReference </partyReference> [1]
   'Identifies that party that has ownership of this information.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractInformation">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractNovation

Super-types:	None
Sub-types:	None

Name	ContractNovation
Abstract	no
Documentation	Details of the Contract Novation.

XML Instance Representation

```
<...>
Start Choice [1]
Start Choice [1]
'Choice between identification and representation of the new contract.'


         <newContractReference> ContractReference </newContractReference> [1]
         'Indicates a reference to the new Contract between the transferee and the remaining party.'

         <newContract> Contract </newContract> [1]
         'Indicates the new Contract between the transferee and the remaining party.'

End Choice
Start Choice [1]
         <oldContractReference> ContractReference </oldContractReference> [1]
         'Indicates a reference to the original contract between the transferor and the remaining party.'

         <oldContract> Contract </oldContract> [1]
         'Indicates the original Contract between the transferor and the remaining party.'

End Choice
Start Choice [0..1]
'Choice between identification and representation of the new contract.'
```

<newContractReference> ContractReference </newContractReference> [1]
<newContract> Contract </newContract> [1]
End Choice
End Choice
<transferor> PartyReference </transferor> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Transferor (outgoing party) in the novation. The Transferor means a party which transfers by novation to a Transferee all of its rights, liabilities, duties and obligations with respect to a Remaining Party. In a four-way novation the party referenced is Transferor 1 which transfers by novation to Transferee 1 all of its rights, liabilities, duties and obligations with respect to Transferor 2. ISDA 2004 Novation Term: Transferor (three-way novation) or Transferor 1 (four-way novation).'

<transferee> PartyReference </transferee> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Transferee (incoming party) in the novation. Transferee means a party which accepts by way of novation all rights, liabilities, duties and obligations of a Transferor with respect to a Remaining Party. In a four-way novation the party referenced is Transferee 1 which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 1. ISDA 2004 Novation Term: Transferee (three-way novation) or Transferee 1 (four-way novation).'

<remainingParty> PartyReference </remainingParty> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Remaining Party in the novation. Remaining Party means a party which consents to a Transferor\'s transfer by novation and the acceptance thereof by the Transferee of all of the Transferor\'s rights, liabilities, duties and obligations with respect to such Remaining Party under and with respect of the Novated Amount of a transaction. In a four-way novation the party referenced is Transferor 2 per the ISDA definition and acts in the role of a Transferor. Transferor 2 transfers by novation to Transferee 2 all of its rights, liabilities, duties and obligations with respect to Transferor 1. ISDA 2004 Novation Term: Remaining Party (three-way novation) or Transferor 2 (four-way novation).'

<otherRemainingParty> PartyReference </otherRemainingParty> [0..1]

'A pointer style reference to a party identifier defined elsewhere in the document. This element is not applicable in a three-way novation and should be omitted. In a four-way novation the party referenced is Transferee 2. Transferee 2 means a party which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 2. ISDA 2004 Novation Term: Transferee 2 (four-way novation).'

<novationDate> xsd:date </novationDate> [1]

'Specifies the date that one party\'s legal obligations with regard to a trade are transferred to another party. It corresponds to the Novation Date section of the 2004 ISDA Novation Definitions, section 1.16.'

<novationContractDate> xsd:date </novationContractDate> [0..1]

'Specifies the date the parties agree to assign or novate a Contract. If this element is not specified, the novationContractDate will be deemed to be the novationDate. It corresponds to the Novation Trade Date section of the 2004 ISDA Novation Definitions, section 1.17.'

Start Choice [1]

'Choice for expressing the novated amount as either a money amount, number of options, or number of units, according the the financial product which is being novated.'

<novatedAmount> Money </novatedAmount> [1]

'The amount which represents the portion of the Old Contract being novated.'

<novatedNumberOfOptions> xsd:decimal </novatedNumberOfOptions> [1]

'The number of options which represent the portion of the Old Contract being novated.'

<novatedNumberOfUnits> xsd:decimal </novatedNumberOfUnits> [1]

'The number of options which represent the portion of the Old Contract being novated.'

' End Choice

<fullFirstCalculationPeriod> xsd:boolean </fullFirstCalculationPeriod> [0..1]

'This element corresponds to the applicability of the Full First Calculation Period as defined in the 2004 ISDA Novation Definitions, section 1.20.'

<firstPeriodStartDate> FirstPeriodStartDate </firstPeriodStartDate> [0..2]

'Element that is used to be able to make sense of the "new transaction" without requiring reference back to the "old transaction". In the case of interest rate products there are potentially 2 "first period start dates" to reference - one with respect to each party to the new transaction. For Credit Default Swaps there is just the one with respect to the party that is the fixed rate payer.'

<nonReliance> Empty </nonReliance> [0..1]

'This element corresponds to the non-Reliance section in the 2004 ISDA Novation Definitions, section 2.1 (c) (i). The element appears in the instance document when non-Reliance is applicable.'

<creditDerivativesNotices> CreditDerivativesNotices </creditDerivativesNotices> [0..1]

'This element should be specified if one or more of either a Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party. The type of notice or notices that have been delivered should be indicated by setting the relevant boolean element value(s) to true. The absence of the element means that no Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party.'

<contractualDefinitions> ContractualDefinitions </contractualDefinitions> [0..*]

'The definitions (such as those published by ISDA) that will define the terms of the novation transaction.'

<contractualTermsSupplement> ContractualTermsSupplement </contractualTermsSupplement> [0..*]

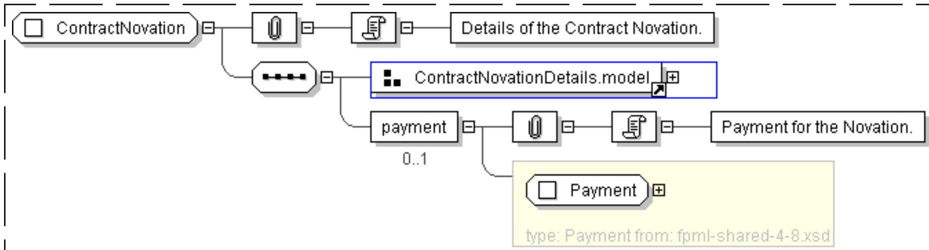
'A contractual supplement (such as those published by ISDA) that will apply to the trade.'

<payment> Payment </payment> [0..1]

'Payment for the Novation.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractNovation">
   <xsd:sequence>
      <xsd:group ref=" ContractNovationDetails.model "/>
      <xsd:element name="payment" type=" Payment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractReference

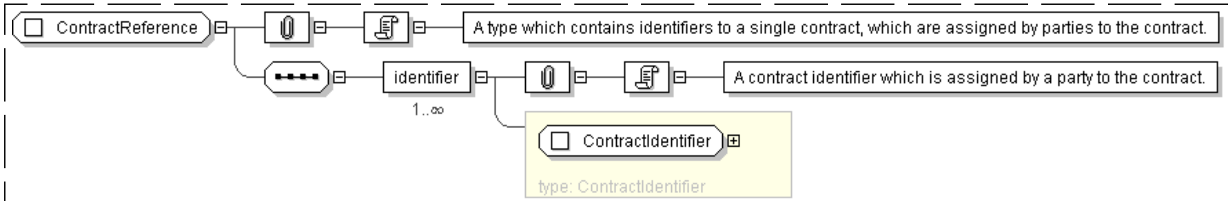
Super-types:	None
Sub-types:	None

Name	ContractReference
Used by (from the same schema document)	Complex Type **ChangeContract** , Model Group **ContractNovationDetails.model** , Model Group **ContractNovationDetails.model** , Model Group **ContractNovationDetails.model** , Model Group **ContractOrContractReference.model**
Abstract	no
Documentation	A type which contains identifiers to a single contract, which are assigned by parties to the contract.

XML Instance Representation

```
<...>
   <identifier> ContractIdentifier </identifier> [1..*]
   'A contract identifier which is assigned by a party to the contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractReference">
   <xsd:sequence>
      <xsd:element name="identifier" type=" ContractIdentifier " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ContractTermination

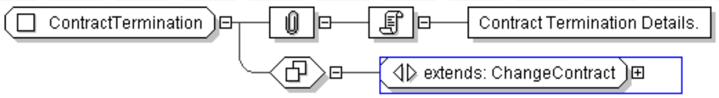
Super-types:	ChangeContract < **ContractTermination** (by extension)
Sub-types:	None

Name	ContractTermination
Abstract	no
Documentation	Contract Termination Details.

XML Instance Representation

```
<...>
   <contractReference> ContractReference </contractReference> [1]
   'Identification of the Contract which is subject to change.'

   <date> xsd:date </date> [1]
   'The date on which the the parties enter into the change.'

   <effectiveDate> xsd:date </effectiveDate> [1]
   'The date on which the change becomes effective.'

   <payment> Payment </payment> [0..1]
   'Payment for the right to change the Contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ContractTermination">
   <xsd:complexContent>
      <xsd:extension base=" ChangeContract "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditDerivativesNotices

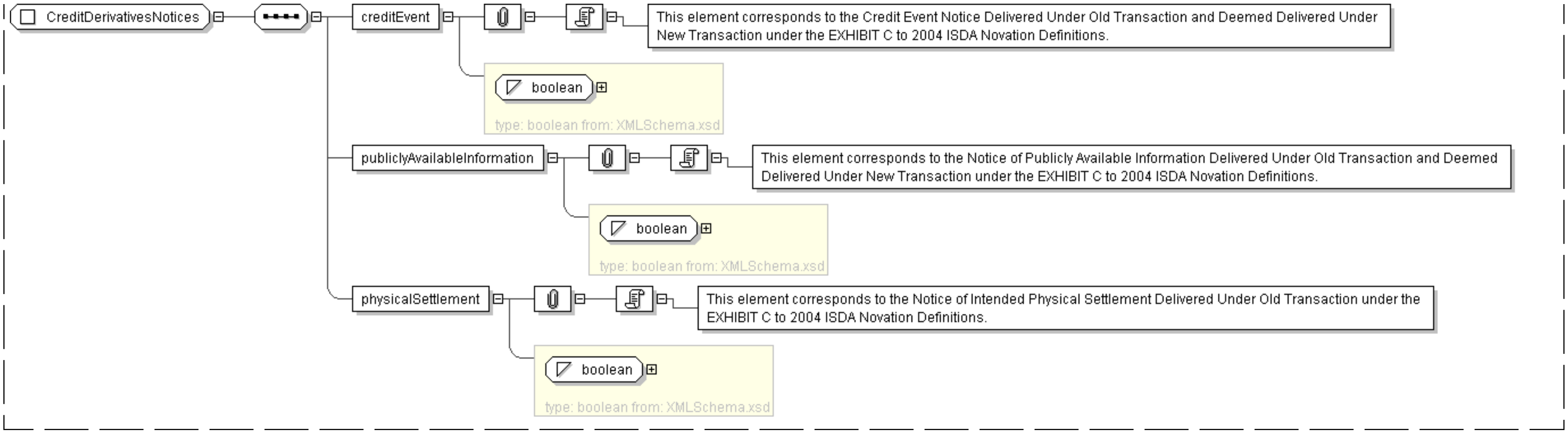
Super-types:	None
Sub-types:	None

Name	CreditDerivativesNotices
Used by (from the same schema document)	Model Group **ContractNovationDetails.model**
Abstract	no

XML Instance Representation

```
<...>
   <creditEvent> xsd:boolean </creditEvent> [1]
   'This element corresponds to the Credit Event Notice Delivered Under Old Transaction and
   Deemed Delivered Under New Transaction under the EXHIBIT C to 2004 ISDA Novation Definitions.'

   <publiclyAvailableInformation> xsd:boolean </publiclyAvailableInformation> [1]
   'This element corresponds to the Notice of Publicly Available Information Delivered Under
   Old Transaction and Deemed Delivered Under New Transaction under the EXHIBIT C to 2004
   ISDA Novation Definitions.'

   <physicalSettlement> xsd:boolean </physicalSettlement> [1]
   'This element corresponds to the Notice of Intended Physical Settlement Delivered Under
   Old Transaction under the EXHIBIT C to 2004 ISDA Novation Definitions.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditDerivativesNotices">
   <xsd:sequence>
      <xsd:element name="creditEvent" type=" xsd:boolean "/>
      <xsd:element name="publiclyAvailableInformation" type=" xsd:boolean "/>
      <xsd:element name="physicalSettlement" type=" xsd:boolean "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DataDocument

Super-types:	Document < **DataDocument** (by extension)
Sub-types:	None

Name	DataDocument
Abstract	no
Documentation	A type defining a content model that is backwards compatible with older FpML releases and which can be used to contain sets of data without expressing any processing intention.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
```

the actual build number stays the same.'

">
<validation> Validation </validation> [0..*]
Start Choice [1]
<trade> Trade </trade> [0..*]

'The root element in an FpML trade document.'

<portfolio> Portfolio </portfolio> [0..*]

'An arbitary grouping of trade references (and possibly other portfolios).'

<event> ... </event> [1..*]

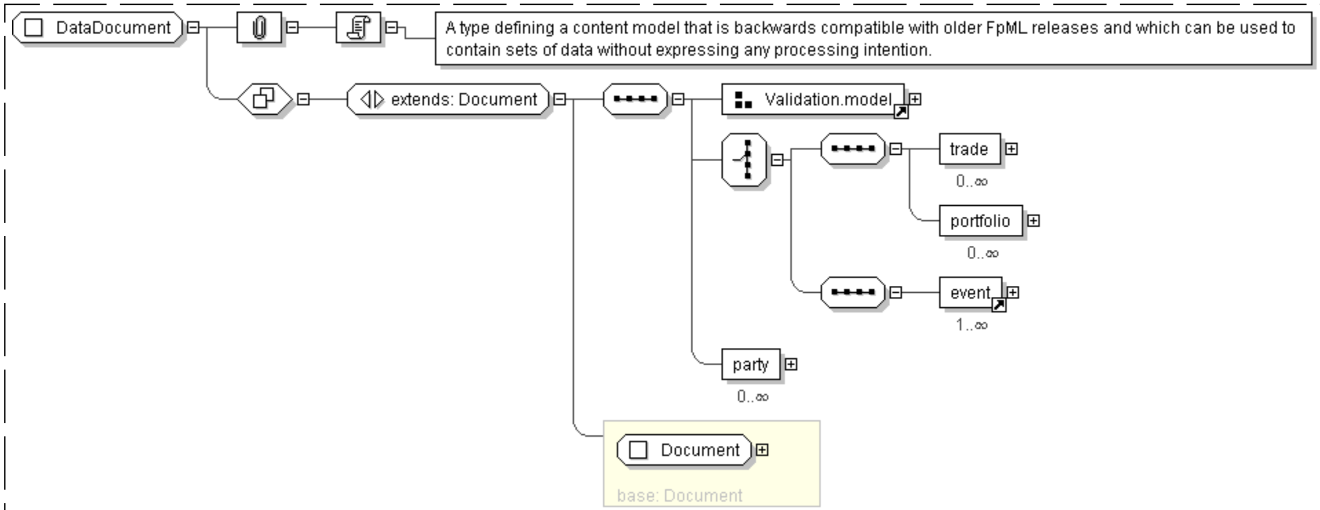
'A business event.'

End Choice
<party> Party </party> [0..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DataDocument">
   <xsd:complexContent>
      <xsd:extension base=" Document ">
         <xsd:sequence>
            <xsd:group ref=" Validation.model "/>
            <xsd:choice>
               <xsd:sequence>
                  <xsd:element name="trade" type=" Trade " minOccurs="0" maxOccurs="unbounded"/>
                  <xsd:element name="portfolio" type=" Portfolio " minOccurs="0" maxOccurs="unbounded"/>
               </xsd:sequence>
               <xsd:sequence>
                  <xsd:element ref=" event " maxOccurs="unbounded"/>
               </xsd:sequence>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="0" maxOccurs="unbounded"/>
```

```
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

[top](#)

Complex Type: Document

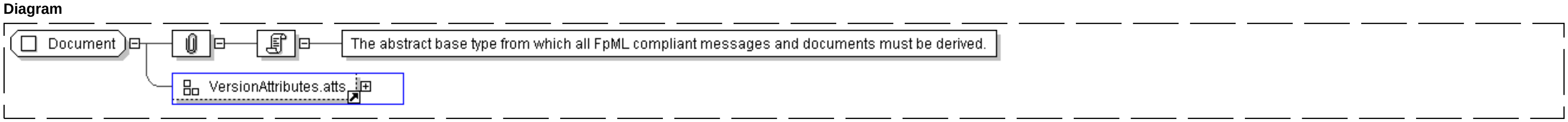
Super-types:	None
Sub-types:	• [DataDocument](#) (by extension)

Name	Document
[Abstract](#)	yes
Documentation	The abstract base type from which all FpML compliant messages and documents must be derived.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Document" abstract="true">
    <xsd:attributeGroup ref=" VersionAttributes.atts "/>
</xsd:complexType>
```

[top](#)

Complex Type: Event

Super-types:	None
Sub-types:	• [Amendment](#) (by extension) • [Increase](#) (by extension)

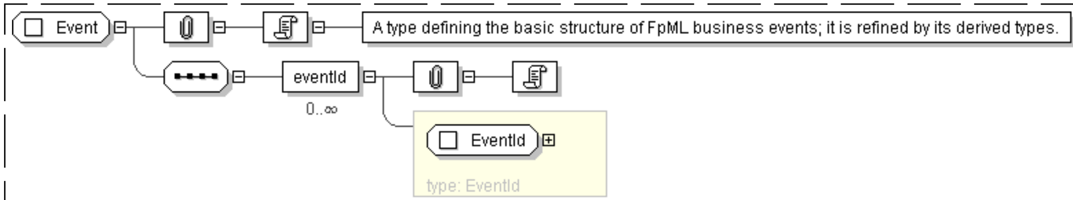
Name	Event
Used by (from the same schema document)	Element **[event](#)**

Abstract	yes
Documentation	A type defining the basic structure of FpML business events; it is refined by its derived types.

XML Instance Representation

```
<...>
  <eventId> EventId </eventId> [0..*]
  ''

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Event" abstract="true">
  <xsd:sequence>
    <xsd:element name="eventId" type=" EventId " minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EventId

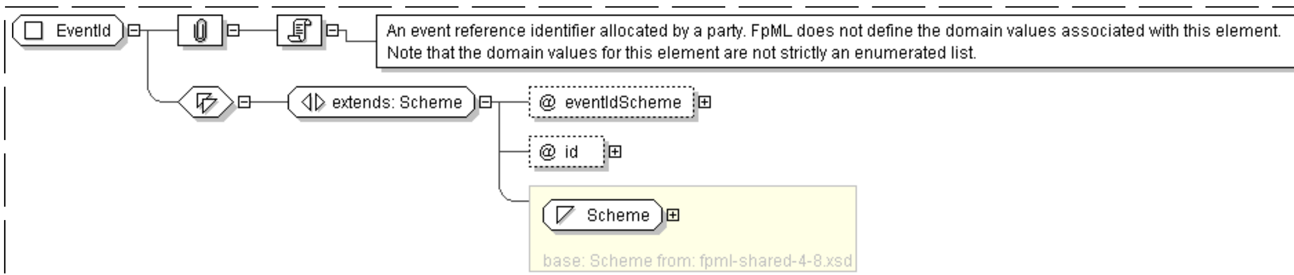
Super-types:	Scheme < **EventId** (by extension)
Sub-types:	None

Name	EventId
Used by (from the same schema document)	Complex Type **Event**
Abstract	no
Documentation	An event reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.

XML Instance Representation

```
<...
eventIdScheme=" xsd:anyURI [1]"
id=" xsd:ID [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EventId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="eventIdScheme" type=" xsd:anyURI " use="required"/>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ExecutionDateTime

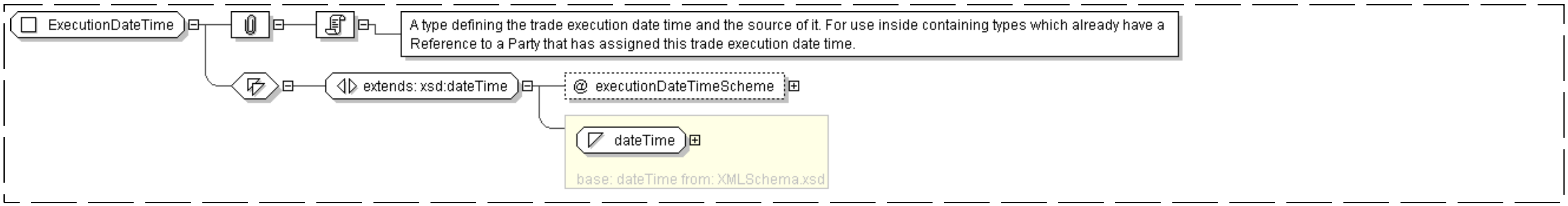
Super-types:	xsd:dateTime < **ExecutionDateTime** (by extension)
Sub-types:	None

Name	ExecutionDateTime
Used by (from the same schema document)	Complex Type **PartyTradeInformation**
Abstract	no
Documentation	A type defining the trade execution date time and the source of it. For use inside containing types which already have a Reference to a Party that has assigned this trade execution date time.

XML Instance Representation

```
<...
executionDateTimeScheme=" xsd:anyURI [0..1]
'Identification of the source (e.g. clock id) generating the execution date time.'

">
xsd:dateTime
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExecutionDateTime">
   <xsd:simpleContent>
      <xsd:extension base=" xsd:dateTime ">
         <xsd:attribute name="executionDateTimeScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: FirstPeriodStartDate

Super-types:	xsd:date < **FirstPeriodStartDate** (by extension)
Sub-types:	None

Name	FirstPeriodStartDate
Used by (from the same schema document)	Model Group **ContractNovationDetails.model**
Abstract	no

XML Instance Representation

```
<...
href=" xsd:IDREF [1]">
xsd:date
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="FirstPeriodStartDate">
   <xsd:simpleContent>
      <xsd:extension base=" xsd:date ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="Party"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Increase

Super-types:	Event < **Increase** (by extension)
Sub-types:	None

Name	Increase
Abstract	no
Documentation	An event type that defines the content of an Increase transaction.

XML Instance Representation

```
<...>
   <eventId> EventId </eventId> [0..*]
   ''

Start Choice [1]
      <trade> Trade </trade> [1]
      'An element that allows the full details of the trade to be used as a mechanism for
      identifying the trade for which the post-trade event pertains'

      <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
      'A container since an individual trade can be referenced by two or more
      different partyTradeIdentifier elements - each allocated by a different party.'
End Choice
   <increaseTradeDate> xsd:date </increaseTradeDate> [1]
   'The date on which the the parties enter into the Increase transaction'

   <increaseEffectiveDate> xsd:date </increaseEffectiveDate> [1]
   'The date on which the Increase becomes effective'

Start Choice [1]
```

<increaseInNotionalAmount> Money </increaseInNotionalAmount> [1]

'Specifies the fixed amount by which the Notional increases due to the Increase transaction.'

<outstandingNotionalAmount> Money </outstandingNotionalAmount> [1]

'Specifies the Notional amount after the Increase.'

<increaseInNumberOfOptions> xsd:decimal </increaseInNumberOfOptions> [1]

'Specifies the fixed amount by which the Number of Options increases due to the Increase transaction.'

<outstandingNumberOfOptions> xsd:decimal </outstandingNumberOfOptions> [1]

'Specifies the Number of Options after the Increase.'

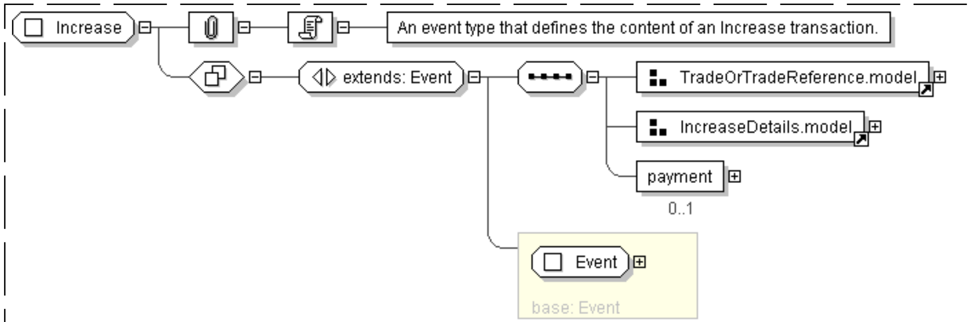
End Choice

<payment> Payment </payment> [0..1]

'A payment for the right to increase the trade.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Increase">
   <xsd:complexContent>
      <xsd:extension base=" Event ">
         <xsd:sequence>
            <xsd:group ref=" TradeOrTradeReference.model "/>
            <xsd:group ref=" IncreaseDetails.model "/>
            <xsd:element name="payment" type=" Payment " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: IndependentAmount

Super-types:	None
Sub-types:	None

Name	IndependentAmount
Used by (from the same schema document)	Complex Type **Collateral**
Abstract	no

XML Instance Representation

<...>

<payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]

'A reference to the party responsible for making the payments defined by this structure.'

<receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]

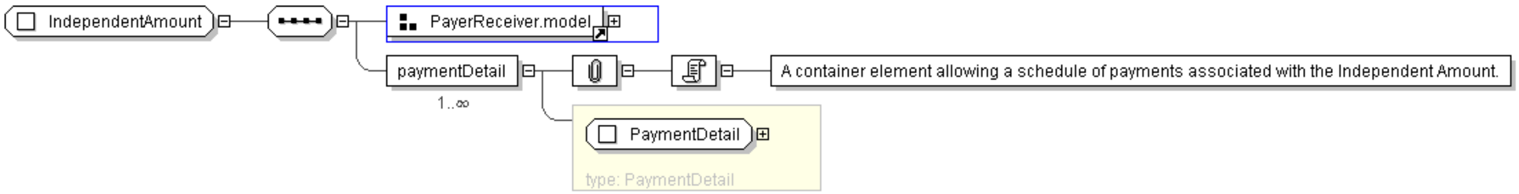
'A reference to the party that receives the payments corresponding to this structure.'

<paymentDetail> PaymentDetail </paymentDetail> [1..*]

'A container element allowing a schedule of payments associated with the Independent Amount.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="IndependentAmount">
   <xsd:sequence>
      <xsd:group ref=" PayerReceiver.model "/>
      <xsd:element name="paymentDetail" type=" PaymentDetail " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LinkId

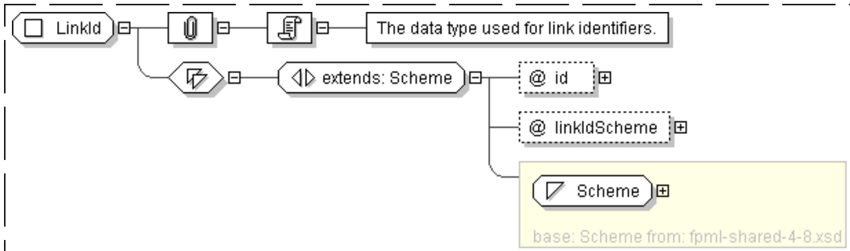
Super-types:	Scheme < **LinkId** (by extension)
Sub-types:	None

Name	LinkId
Used by (from the same schema document)	Complex Type **PartyTradeIdentifier**
Abstract	no
Documentation	The data type used for link identifiers.

XML Instance Representation

<...
id=" xsd:ID [0..1]**"**
linkIdScheme=" xsd:anyURI [1]**">**
Scheme
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="LinkId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="id" type=" xsd:ID "/>
         <xsd:attribute name="linkIdScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PartyPortfolioName

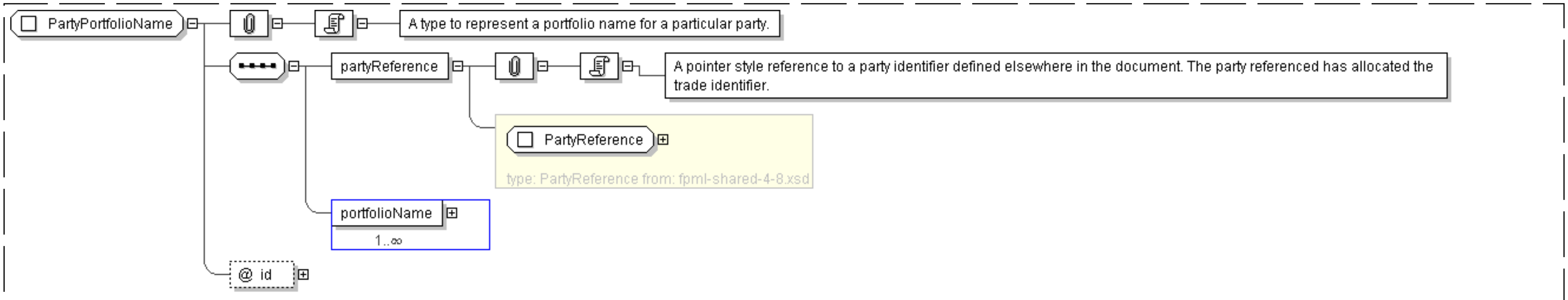
Super-types:	None
Sub-types:	None

Name	PartyPortfolioName
Used by (from the same schema document)	Complex Type **Portfolio**
Abstract	no
Documentation	A type to represent a portfolio name for a particular party.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyReference> PartyReference </partyReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party referenced has allocated the trade identifier.'

   <portfolioName> PortfolioName </portfolioName> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartyPortfolioName">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
      <xsd:element name="portfolioName" type=" PortfolioName " maxOccurs="unbounded"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: PartyRole

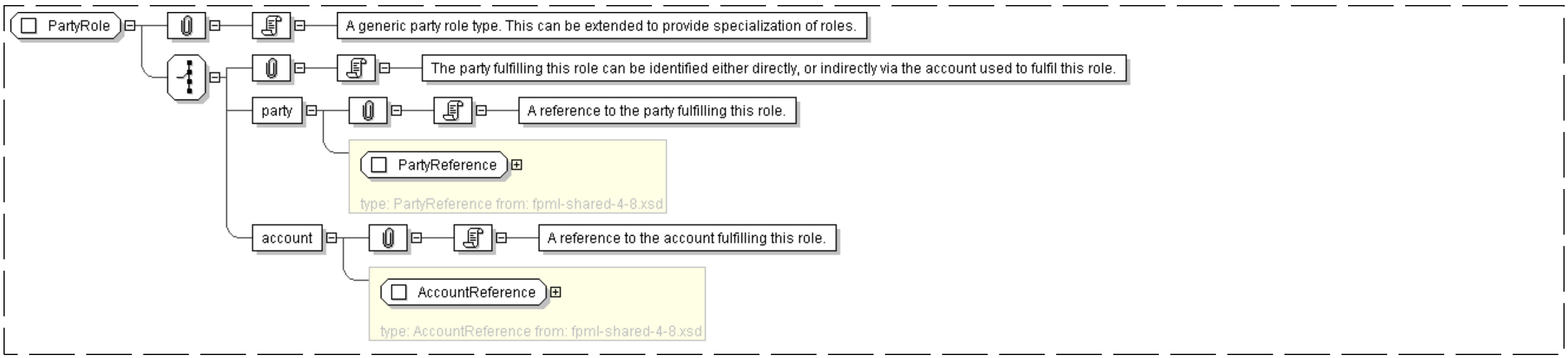
Super-types:	None
Sub-types:	None

Name	PartyRole
Used by (from the same schema document)	Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide** , Complex Type **TradeSide**
Abstract	no
Documentation	A generic party role type. This can be extended to provide specialization of roles.

XML Instance Representation

```
<...>
Start Choice [1]
'The party fulfilling this role can be identified either directly, or indirectly via
the account used to fulfil this role.'

      <party> PartyReference </party> [1]
      'A reference to the party fulfilling this role.'

      <account> AccountReference </account> [1]
      'A reference to the account fulfilling this role.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartyRole">
   <xsd:choice>
      <xsd:element name="party" type=" PartyReference "/>
      <xsd:element name="account" type=" AccountReference "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: PartyTradeIdentifier

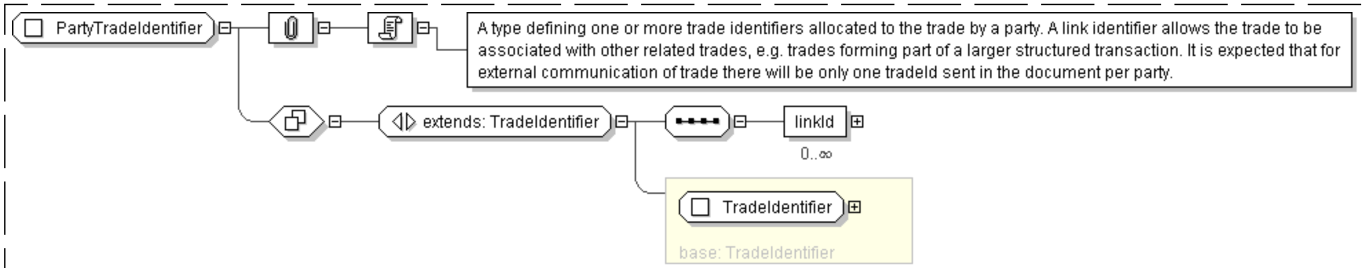
Super-types:	TradeIdentifier < **PartyTradeIdentifier** (by extension)
Sub-types:	• AllocationTradeIdentifier (by extension) • BlockTradeIdentifier (by extension)

Name	PartyTradeIdentifier
Used by (from the same schema document)	Complex Type **Allocation** , Complex Type **AllocationTradeIdentifier** , Complex Type **BlockTradeIdentifier** , Complex Type **BlockTradeIdentifier** , Complex Type **PartyTradeIdentifiers** , Complex Type **TradeHeader**
Abstract	no
Documentation	A type defining one or more trade identifiers allocated to the trade by a party. A link identifier allows the trade to be associated with other related trades, e.g. trades forming part of a larger structured transaction. It is expected that for external communication of trade there will be only one tradeId sent in the document per party.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyReference> PartyReference </partyReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party referenced has allocated the trade identifier.'
Start Choice [1..*]
      <tradeId> TradeId </tradeId> [1]
      <versionedTradeId> VersionedTradeId </versionedTradeId> [1]
End Choice
   <linkId> LinkId </linkId> [0..*]
   'A link identifier allowing the trade to be associated with other related trades, e.g.
   the linkId may contain a tradeId for an associated trade or several related trades may be
   given the same linkId. FpML does not define the domain values associated with this
   element. Note that the domain values for this element are not strictly an enumerated list.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartyTradeIdentifier">
   <xsd:complexContent>
      <xsd:extension base=" TradeIdentifier ">
         <xsd:sequence>
            <xsd:element name="linkId" type=" LinkId " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PartyTradeIdentifiers

Super-types:	None
Sub-types:	None

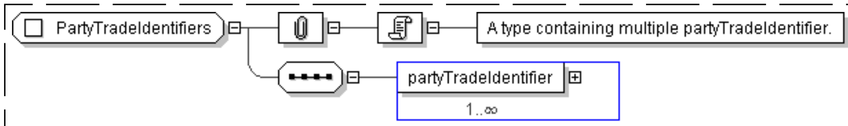
Name	PartyTradeIdentifiers
Used by (from the same schema document)	Model Group **TradeOrTradeReference.model**
Abstract	no

Documentation	A type containing multiple partyTradeIdentifier.

XML Instance Representation

```
<...>
   <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartyTradeIdentifiers">
   <xsd:sequence>
      <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PartyTradeInformation

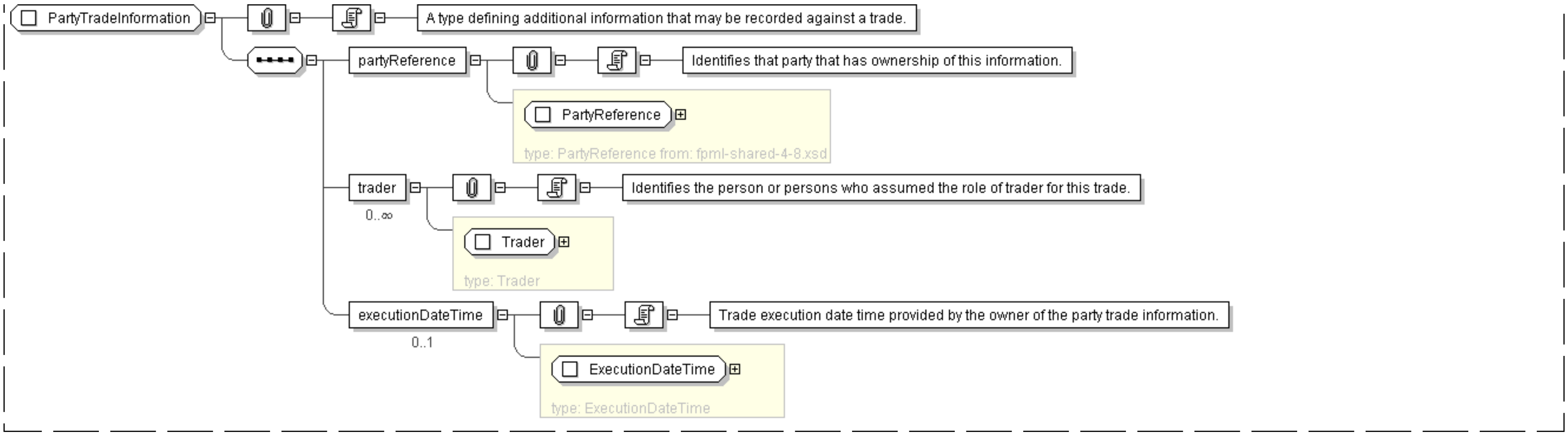
Super-types:	None
Sub-types:	None

Name	PartyTradeInformation
Used by (from the same schema document)	Complex Type **TradeHeader**
Abstract	no
Documentation	A type defining additional information that may be recorded against a trade.

XML Instance Representation

```
<...>
   <partyReference> PartyReference </partyReference> [1]
   'Identifies that party that has ownership of this information.'

   <trader> Trader </trader> [0..*]
   'Identifies the person or persons who assumed the role of trader for this trade.'

   <executionDateTime> ExecutionDateTime </executionDateTime> [0..1]
   'Trade execution date time provided by the owner of the party trade information.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartyTradeInformation">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
      <xsd:element name="trader" type=" Trader " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="executionDateTime" type=" ExecutionDateTime " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PaymentDetail

Super-types:	PaymentBase < **PaymentDetail** (by extension)
Sub-types:	None

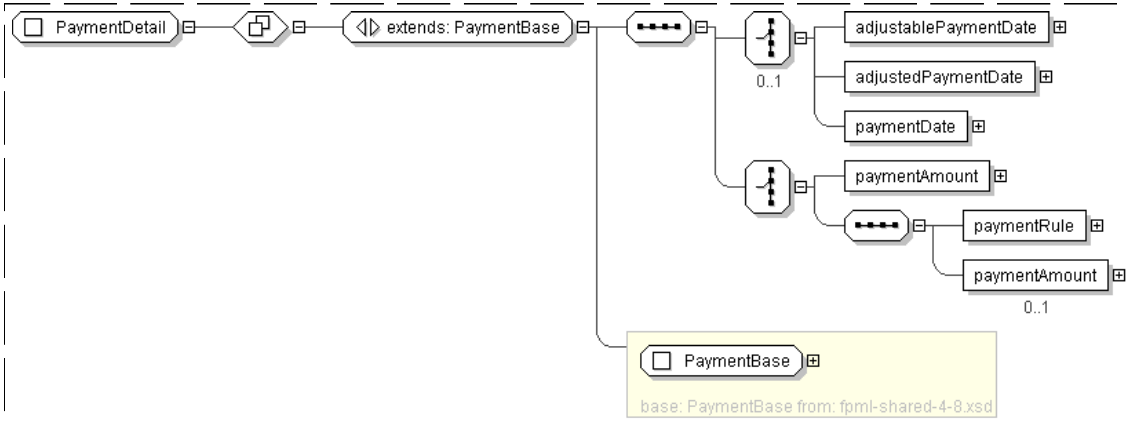
Name	PaymentDetail
Used by (from the same schema document)	Complex Type **IndependentAmount**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [0..1]
      <adjustablePaymentDate> AdjustableDate2 </adjustablePaymentDate> [1]
      'A fixed amount payment date that shall be subject to adjustment in accordance with
      the applicable business day convention if it would otherwise fall on a day that is not
      a business day. The applicable business day convention and business day are those specified
      in the dateAdjustments element within the generalTerms component. ISDA 2003 Term: Fixed
      Rate Payer Payment Date.'

      <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
      'The adjusted payment date. This date should already be adjusted for any applicable
      business day convention. This component is not intended for use in trade confirmation but
      may be specified to allow the fee structure to also serve as a cashflow type component.'

      <paymentDate> AdjustableOrRelativeDate </paymentDate> [1]
      'Payment date.'

End Choice
```

```
Start Choice [1]
      <paymentAmount> Money </paymentAmount> [1]
      'A fixed payment amount.'

      <paymentRule> PaymentRule </paymentRule> [1]
      'A type defining the calculation rule.'

      <paymentAmount> Money </paymentAmount> [0..1]
      'A fixed payment amount.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentDetail">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:choice minOccurs="0">
               <xsd:element name="adjustablePaymentDate" type=" AdjustableDate2 "
               deprecated="true" deprecatedReason="This structure doesn't provide the ability to provide
               a payment date relative to another date. The paymentDate element of
               type AdjustableOrRelativeDate should be used instead. In version 5.0 the date structures
               will be rationalized."/>
               <xsd:element name="adjustedPaymentDate" type=" xsd:date "
               deprecated="true" deprecatedReason="In version 5.0 the date structures will be rationalized."/>
               <xsd:element name="paymentDate" type=" AdjustableOrRelativeDate "/>
            </xsd:choice>
            <xsd:choice>
               <xsd:element name="paymentAmount" type=" Money "/>
               <xsd:sequence>
                  <xsd:element name="paymentRule" type=" PaymentRule "/>
                  <xsd:element name="paymentAmount" type=" Money " minOccurs="0"/>
               </xsd:sequence>
            </xsd:choice>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PaymentRule

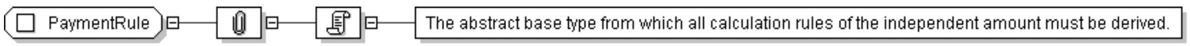
Super-types:	None
Sub-types:	• PercentageRule (by extension)

Name	PaymentRule
Used by (from the same schema document)	Complex Type **PaymentDetail**
Abstract	yes
Documentation	The abstract base type from which all calculation rules of the independent amount must be derived.

XML Instance Representation

```
<.../>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentRule" abstract="true"/>
```

top

Complex Type: PercentageRule

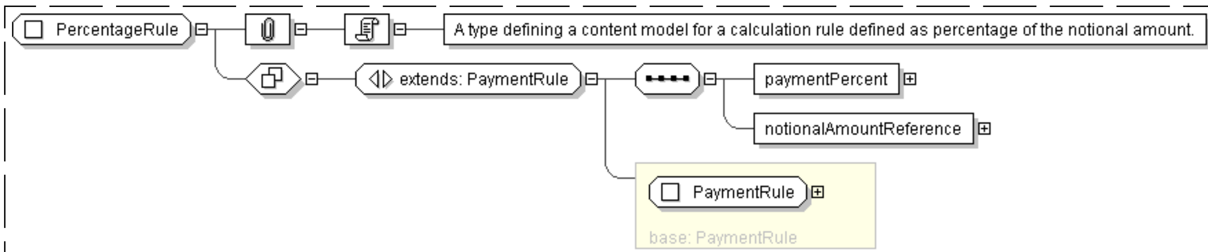
Super-types:	PaymentRule < **PercentageRule** (by extension)
Sub-types:	None

Name	PercentageRule
Abstract	no
Documentation	A type defining a content model for a calculation rule defined as percentage of the notional amount.

XML Instance Representation

```
<...>
   <paymentPercent> xsd:decimal </paymentPercent> [1]
   'A percentage of the notional amount.'

   <notionalAmountReference> NotionalAmountReference </notionalAmountReference> [1]
   'A reference to the notional amount.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PercentageRule">
   <xsd:complexContent>
      <xsd:extension base=" PaymentRule ">
         <xsd:sequence>
            <xsd:element name="paymentPercent" type=" xsd:decimal "/>
            <xsd:element name="notionalAmountReference" type=" NotionalAmountReference "/>
```

```
        </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Portfolio

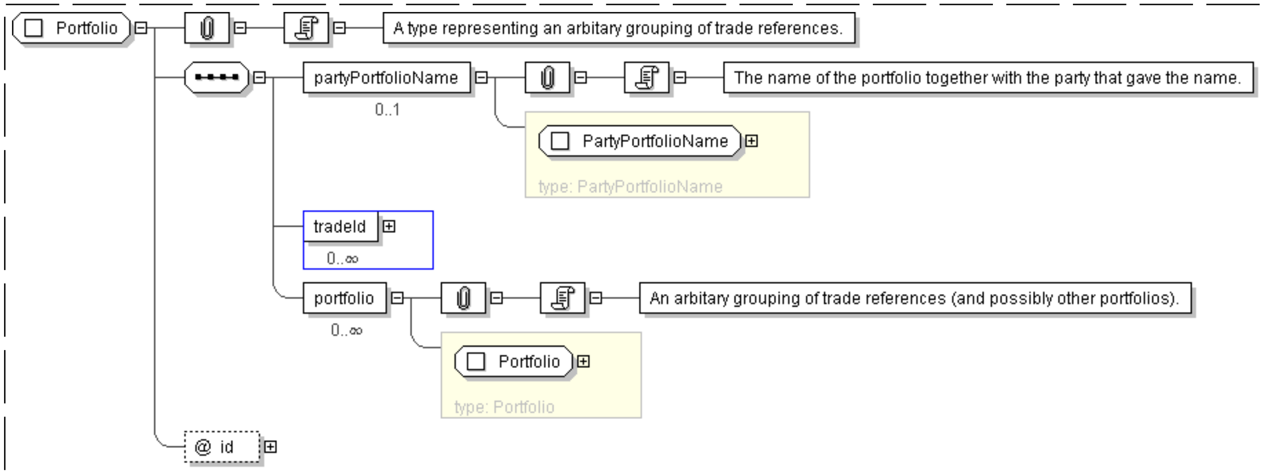
Super-types:	None
Sub-types:	• QueryPortfolio (by extension)

Name	Portfolio
Used by (from the same schema document)	Complex Type **DataDocument** , Complex Type **Portfolio**
Abstract	no
Documentation	A type representing an arbitary grouping of trade references.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyPortfolioName> PartyPortfolioName </partyPortfolioName> [0..1]
   'The name of the portfolio together with the party that gave the name.'

   <tradeId> TradeId </tradeId> [0..*]
   <portfolio> Portfolio </portfolio> [0..*]
   'An arbitary grouping of trade references (and possibly other portfolios).'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Portfolio">
   <xsd:sequence>
      <xsd:element name="partyPortfolioName" type=" PartyPortfolioName " minOccurs="0"/>
      <xsd:element name="tradeId" type=" TradeId " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="portfolio" type=" Portfolio " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: PortfolioName

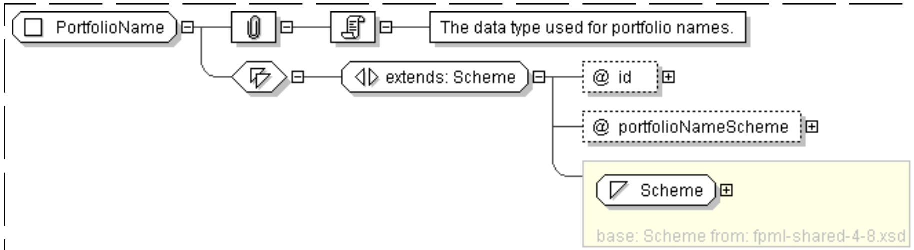
Super-types:	Scheme < **PortfolioName** (by extension)
Sub-types:	None

Name	PortfolioName
Used by (from the same schema document)	Complex Type **PartyPortfolioName**
Abstract	no
Documentation	The data type used for portfolio names.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
portfolioNameScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PortfolioName">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="id" type=" xsd:ID "/>
         <xsd:attribute name="portfolioNameScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: QueryParameter

Super-types:	None
Sub-types:	None

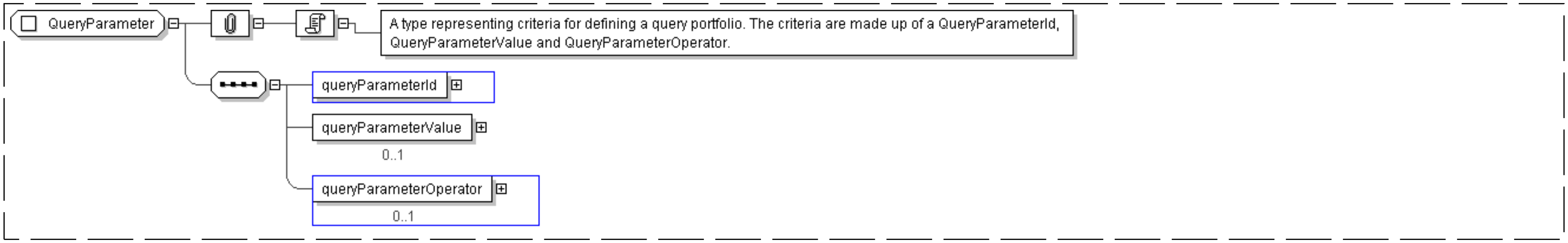
Name	QueryParameter
Used by (from the same schema document)	Complex Type **QueryPortfolio**
Abstract	no
Documentation	A type representing criteria for defining a query portfolio. The criteria are made up of a QueryParameterId, QueryParameterValue and QueryParameterOperator.

XML Instance Representation

```
<...>
   <queryParameterId> QueryParameterId </queryParameterId> [1]
   <queryParameterValue> xsd:normalizedString </queryParameterValue> [0..1]
   <queryParameterOperator> QueryParameterOperator </queryParameterOperator> [0..1]
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QueryParameter">
   <xsd:sequence>
      <xsd:element name="queryParameterId" type=" QueryParameterId "/>
      <xsd:element name="queryParameterValue" type=" xsd:normalizedString " minOccurs="0"/>
      <xsd:element name="queryParameterOperator" type=" QueryParameterOperator " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: QueryParameterId

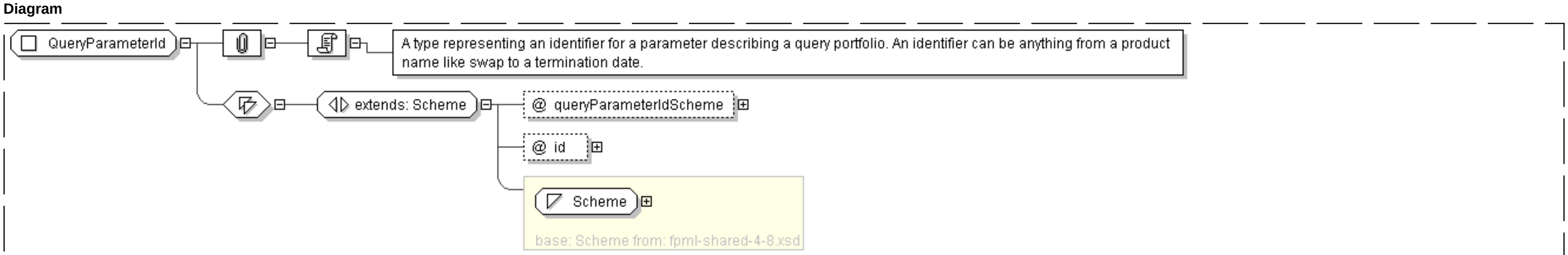
Super-types:	Scheme < **QueryParameterId** (by extension)
Sub-types:	None

Name	QueryParameterId
Used by (from the same schema document)	Complex Type **QueryParameter**
Abstract	no
Documentation	A type representing an identifier for a parameter describing a query portfolio. An identifier can be anything from a product name like swap to a termination date.

XML Instance Representation

```
<...
queryParameterIdScheme=" xsd:anyURI [1]"
id=" xsd:ID [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QueryParameterId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
```

```
            <xsd:attribute name="queryParameterIdScheme" type=" xsd:anyURI " use="required"/>
            <xsd:attribute name="id" type=" xsd:ID "/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: QueryParameterOperator

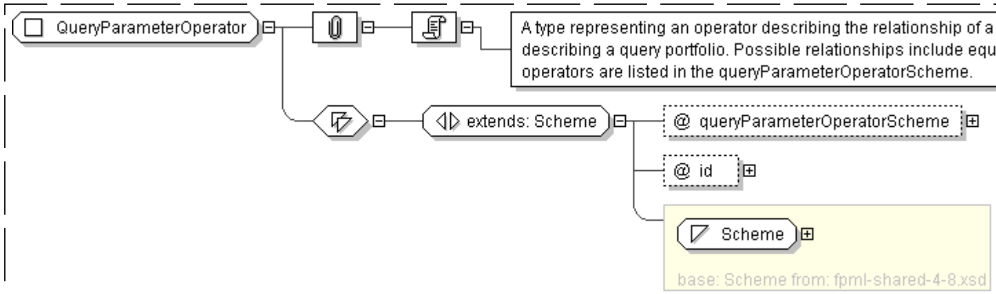
Super-types:	Scheme < **QueryParameterOperator** (by extension)
Sub-types:	None

Name	QueryParameterOperator
Used by (from the same schema document)	Complex Type **QueryParameter**
Abstract	no
Documentation	A type representing an operator describing the relationship of a value to its corresponding identifier for a parameter describing a query portfolio. Possible relationships include equals, not equals, less than, greater than. Possible operators are listed in the queryParameterOperatorScheme.

XML Instance Representation

```
<...
queryParameterOperatorScheme=" xsd:anyURI [0..1]"
id=" xsd:ID [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QueryParameterOperator">
    <xsd:simpleContent>
        <xsd:extension base=" Scheme ">
            <xsd:attribute name="queryParameterOperatorScheme" type=" xsd:anyURI " default="http://www.
            fpml.org/coding-scheme/query-parameter-operator"/>
            <xsd:attribute name="id" type=" xsd:ID "/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: QueryPortfolio

Super-types:	Portfolio < **QueryPortfolio** (by extension)
Sub-types:	None

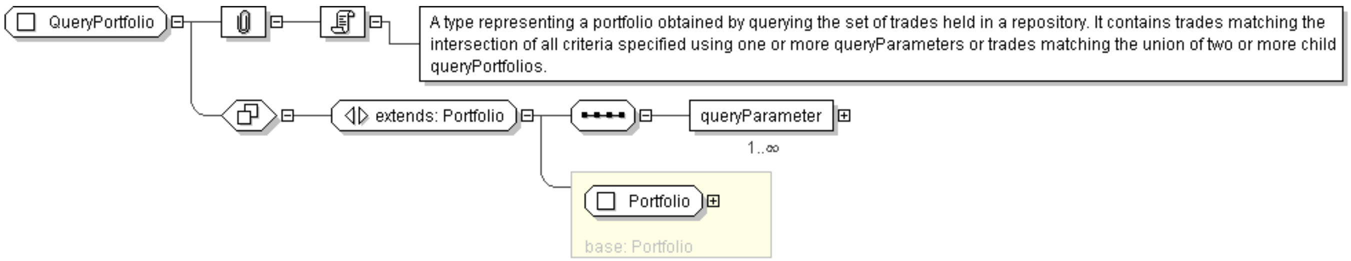
Name	QueryPortfolio

Abstract	no
Documentation	A type representing a portfolio obtained by querying the set of trades held in a repository. It contains trades matching the intersection of all criteria specified using one or more queryParameters or trades matching the union of two or more child queryPortfolios.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyPortfolioName> PartyPortfolioName </partyPortfolioName> [0..1]
   'The name of the portfolio together with the party that gave the name.'

   <tradeId> TradeId </tradeId> [0..*]
   <portfolio> Portfolio </portfolio> [0..*]
   'An arbitary grouping of trade references (and possibly other portfolios).'

   <queryParameter> QueryParameter </queryParameter> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QueryPortfolio">
   <xsd:complexContent>
      <xsd:extension base=" Portfolio ">
         <xsd:sequence>
            <xsd:element name="queryParameter" type=" QueryParameter " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Strategy

Super-types:	Product < **Strategy** (by extension)
Sub-types:	None

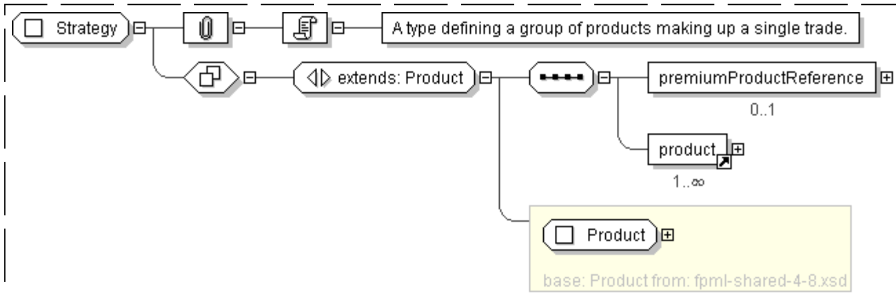
Name	Strategy
Used by (from the same schema document)	Element **strategy**
Abstract	no
Documentation	A type defining a group of products making up a single trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'
```

```
    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <premiumProductReference> ProductReference </premiumProductReference> [0..1]
    'Indicates which product within a strategy represents the premium payment.'

    <product> ... </product> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Strategy">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="premiumProductReference" type=" ProductReference " minOccurs="0"/>
            <xsd:element ref=" product " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Trade

Super-types:	None
Sub-types:	None

Name	Trade
Used by (from the same schema document)	Complex Type **Amendment** , Complex Type **DataDocument** , Model Group **TradeOrTradeReference.model**
Abstract	no
Documentation	A type defining an FpML trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <tradeHeader> TradeHeader </tradeHeader> [1]
    'The information on the trade which is not product specific, e.g. trade date.'

    <product> ... </product> [1]
    <otherPartyPayment> Payment </otherPartyPayment> [0..*]
    'Other fees or additional payments associated with the trade, e.g. broker commissions,
    where one or more of the parties involved are not principal parties involved in the trade.'

    <brokerPartyReference> PartyReference </brokerPartyReference> [0..*]
```

'Identifies that party (or parties) that brokered this trade.'

<calculationAgent> CalculationAgent </calculationAgent> [0..1]

'The ISDA calculation agent responsible for performing duties as defined in the applicable product definitions.'

<calculationAgentBusinessCenter> BusinessCenter </calculationAgentBusinessCenter> [0..1]

'The city in which the office through which ISDA Calculation Agent is acting for purposes of the transaction is located The short-form confirm for a trade that is executed under a Sovereign or Asia Pacific Master Confirmation Agreement (MCA), does not need to specify the Calculation Agent. However, the confirm does need to specify the Calculation Agent City. This is due to the fact that the MCA sets the value for Calculation Agent but does not set the value for Calculation Agent City.'

<determiningParty> PartyReference </determiningParty> [0..2]

'The party referenced is the ISDA Determination Party that specified in the related Confirmation as Determination Party.'

<hedgingParty> PartyReference </hedgingParty> [0..2]

'The party referenced is the ISDA Hedging Party that specified in the related Confirmation as Hedging, or if no Hedging Party is specified, either party to the Transaction.'

<collateral> Collateral </collateral> [0..1]

'Defines collateral obiligations of a Party'

<documentation> Documentation </documentation> [0..1]

'Defines the definitions that govern the document and should include the year and type of definitions referenced, along with any relevant documentation (such as master agreement) and the date it was signed.'

<governingLaw> GoverningLaw </governingLaw> [0..1]

'Identification of the law governing the transaction.'

<allocations> Allocations </allocations> [0..1]

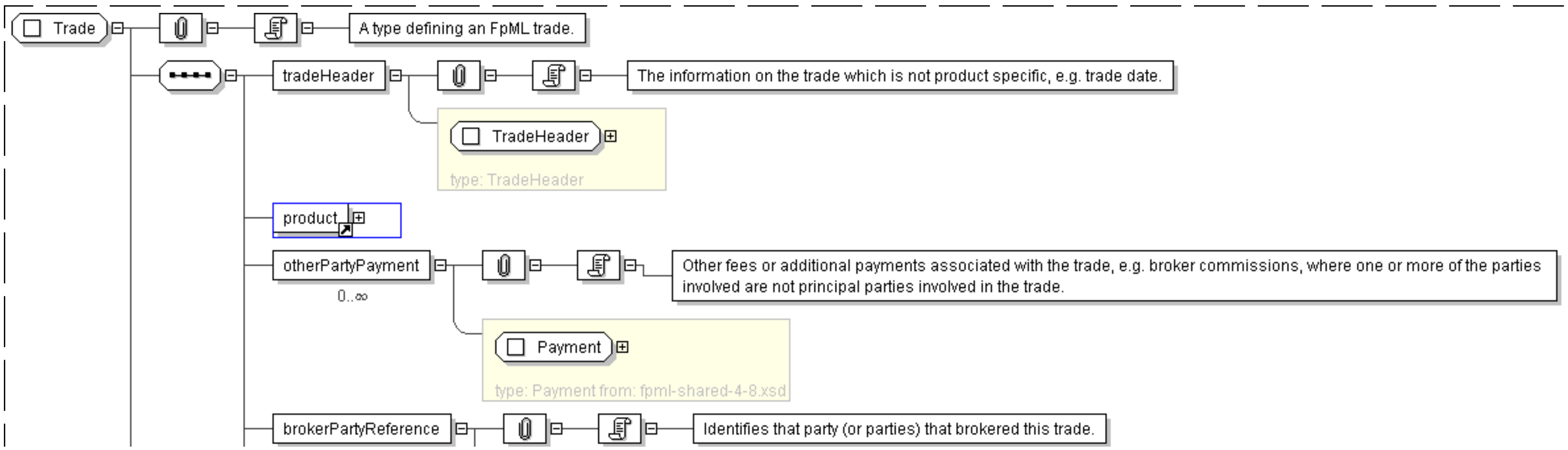
'"Short-form" representation of allocations in which the key block economics are stated once within the trade structure, and the allocation data is contained in this allocations structure.'

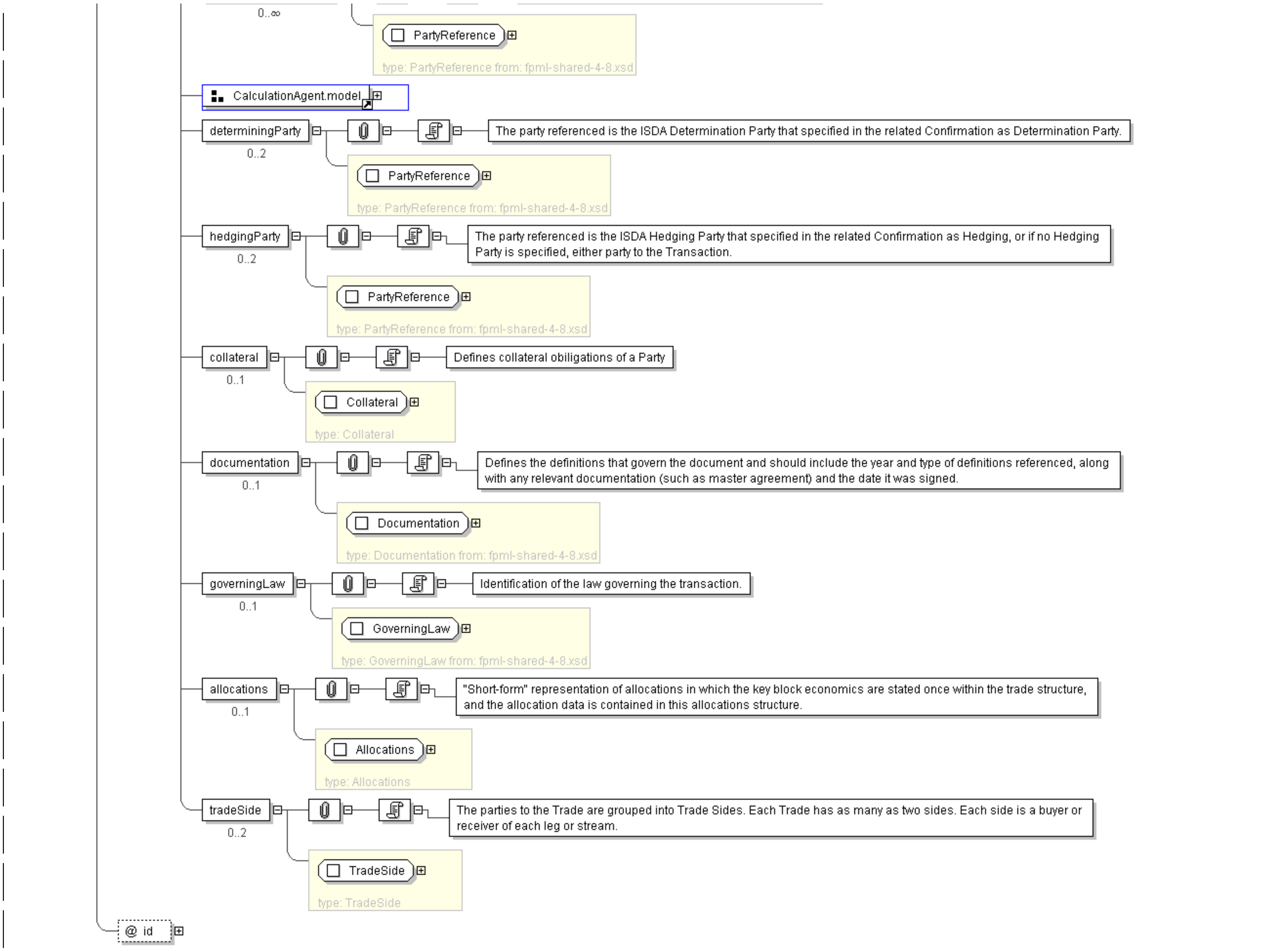
<tradeSide> TradeSide </tradeSide> [0..2]

'The parties to the Trade are grouped into Trade Sides. Each Trade has as many as two sides. Each side is a buyer or receiver of each leg or stream.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="Trade">
   <xsd:sequence>
      <xsd:element name="tradeHeader" type=" TradeHeader "/>
      <xsd:element ref=" product "/>
      <xsd:element name="otherPartyPayment" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="brokerPartyReference" type=" PartyReference "
```

```
        minOccurs="0" maxOccurs="unbounded"/>
        <xsd:group ref=" CalculationAgent.model "/>
        <xsd:element name="determiningParty" type=" PartyReference " minOccurs="0" maxOccurs="2"/>
        <xsd:element name="hedgingParty" type=" PartyReference " minOccurs="0" maxOccurs="2"/>
        <xsd:element name="collateral" type=" Collateral " minOccurs="0"/>
        <xsd:element name="documentation" type=" Documentation " minOccurs="0"/>
        <xsd:element name="governingLaw" type=" GoverningLaw " minOccurs="0"/>
        <xsd:element name="allocations" type=" Allocations " minOccurs="0"/>
        <xsd:element name="tradeSide" type=" TradeSide " minOccurs="0" maxOccurs="2"/>
    </xsd:sequence>
    <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: TradeDifference

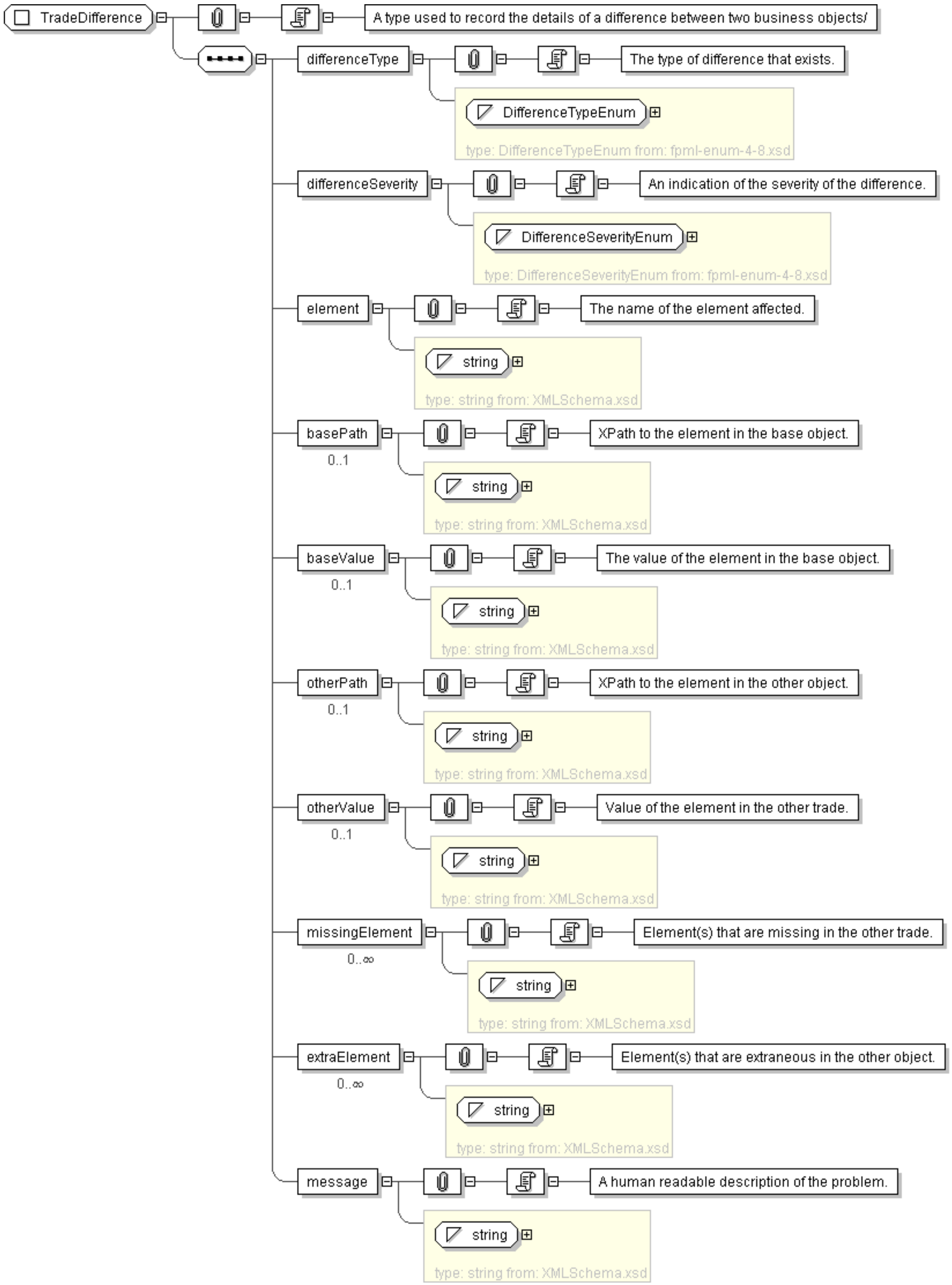
Super-types:	None
Sub-types:	None

Name	TradeDifference
Used by (from the same schema document)	Complex Type **BestFitTrade**
Abstract	no
Documentation	A type used to record the details of a difference between two business objects/

XML Instance Representation

```
<...>
    <differenceType> DifferenceTypeEnum </differenceType> [1]
    'The type of difference that exists.'

    <differenceSeverity> DifferenceSeverityEnum </differenceSeverity> [1]
    'An indication of the severity of the difference.'

    <element> xsd:string </element> [1]
    'The name of the element affected.'

    <basePath> xsd:string </basePath> [0..1]
    'XPath to the element in the base object.'

    <baseValue> xsd:string </baseValue> [0..1]
    'The value of the element in the base object.'

    <otherPath> xsd:string </otherPath> [0..1]
    'XPath to the element in the other object.'

    <otherValue> xsd:string </otherValue> [0..1]
    'Value of the element in the other trade.'

    <missingElement> xsd:string </missingElement> [0..*]
    'Element(s) that are missing in the other trade.'

    <extraElement> xsd:string </extraElement> [0..*]
    'Element(s) that are extraneous in the other object.'

    <message> xsd:string </message> [1]
    'A human readable description of the problem.'
</...>
```

Diagram


TradeDifference
A type used to record the details of a difference between two business objects/
differenceType
The type of difference that exists.
DifferenceTypeEnum
type: DifferenceTypeEnum from: fpml-enum-4-8.xsd
differenceSeverity
An indication of the severity of the difference.
DifferenceSeverityEnum
type: DifferenceSeverityEnum from: fpml-enum-4-8.xsd
element
The name of the element affected.
string
type: string from: XMLSchema.xsd
basePath
0..1
XPath to the element in the base object.
string
type: string from: XMLSchema.xsd
baseValue
0..1
The value of the element in the base object.
string
type: string from: XMLSchema.xsd
otherPath
0..1
XPath to the element in the other object.
string
type: string from: XMLSchema.xsd
otherValue
0..1
Value of the element in the other trade.
string
type: string from: XMLSchema.xsd
missingElement
0..∞
Element(s) that are missing in the other trade.
string
type: string from: XMLSchema.xsd
extraElement
0..∞
Element(s) that are extraneous in the other object.
string
type: string from: XMLSchema.xsd
message
A human readable description of the problem.
string
type: string from: XMLSchema.xsd

Schema Component Representation

```
<xsd:complexType name="TradeDifference">
   <xsd:sequence>
      <xsd:element name="differenceType" type=" DifferenceTypeEnum "/>
      <xsd:element name="differenceSeverity" type=" DifferenceSeverityEnum "/>
      <xsd:element name="element" type=" xsd:string "/>
      <xsd:element name="basePath" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="baseValue" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="otherPath" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="otherValue" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="missingElement" type=" xsd:string " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="extraElement" type=" xsd:string " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="message" type=" xsd:string "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TradeHeader

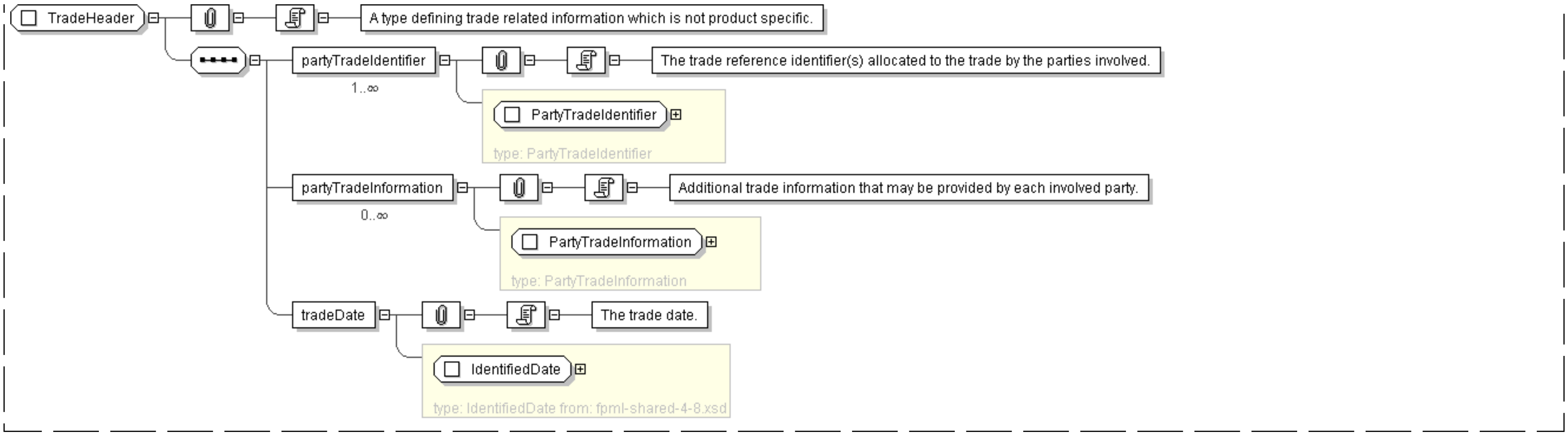
Super-types:	None
Sub-types:	None

Name	TradeHeader
Used by (from the same schema document)	Complex Type **Trade**
Abstract	no
Documentation	A type defining trade related information which is not product specific.

XML Instance Representation

```
<...>
   <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1..*]
   'The trade reference identifier(s) allocated to the trade by the parties involved.'

   <partyTradeInformation> PartyTradeInformation </partyTradeInformation> [0..*]
   'Additional trade information that may be provided by each involved party.'

   <tradeDate> IdentifiedDate </tradeDate> [1]
   'The trade date.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeHeader">
   <xsd:sequence>
      <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier " maxOccurs="unbounded"/>
      <xsd:element name="partyTradeInformation" type=" PartyTradeInformation "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="tradeDate" type=" IdentifiedDate "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TradeId

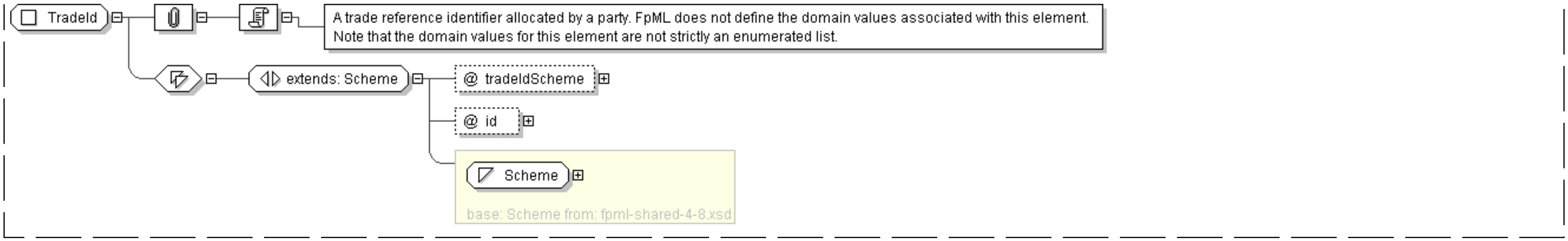
Super-types:	Scheme < **TradeId** (by extension)
Sub-types:	None

Name	TradeId
Used by (from the same schema document)	Complex Type **Portfolio** , Complex Type **TradeIdentifier** , Complex Type **VersionedTradeId**
Abstract	no
Documentation	A trade reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.

XML Instance Representation

```
<...
tradeIdScheme=" xsd:anyURI [1]"
id=" xsd:ID [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="tradeIdScheme" type=" xsd:anyURI " use="required"/>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: TradeIdentifier

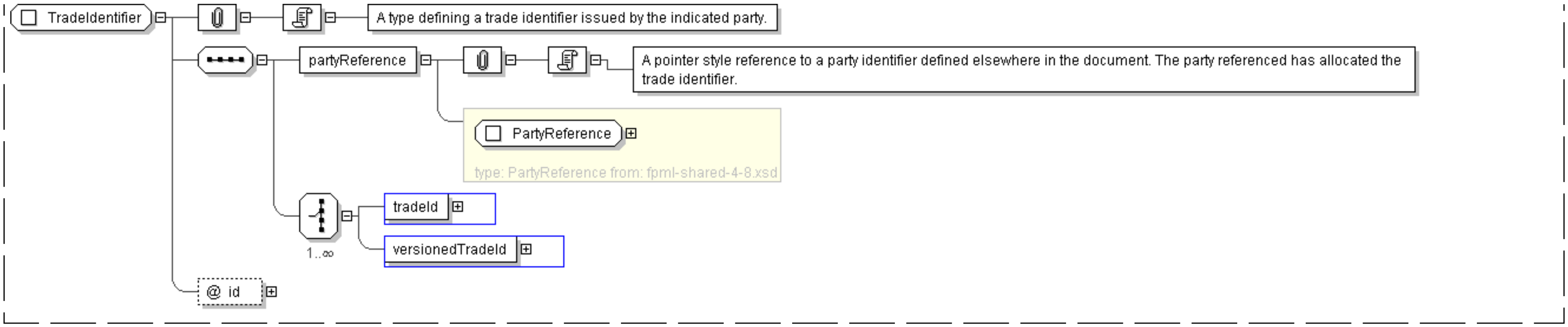
Super-types:	None
Sub-types:	• PartyTradeIdentifier (by extension) ○ AllocationTradeIdentifier (by extension) ○ BlockTradeIdentifier (by extension)

Name	TradeIdentifier
Used by (from the same schema document)	Complex Type **BestFitTrade**
Abstract	no
Documentation	A type defining a trade identifier issued by the indicated party.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <partyReference> PartyReference </partyReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party referenced has allocated the trade identifier.'
Start Choice [1..*]
      <tradeId> TradeId </tradeId> [1]
      <versionedTradeId> VersionedTradeId </versionedTradeId> [1]
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeIdentifier">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
      <xsd:choice maxOccurs="unbounded">
         <xsd:element name="tradeId" type=" TradeId "/>
         <xsd:element name="versionedTradeId" type=" VersionedTradeId "/>
      </xsd:choice>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: TradeSide

Super-types:	None
Sub-types:	None

Name	TradeSide
Used by (from the same schema document)	Complex Type **Trade**
Abstract	no
Documentation	The parties to the trade form into sides. Each side has defined roles in the lifecycle of the trade fulfilled by parties. Each party role is given in the likely order they would be filled during the lifecycle of a trade.

XML Instance Representation

```
<...
id=" xsd:ID [1]">
   <orderer> PartyRole </orderer> [0..1]
   'The Party placing the order. This could be a fund manager acting on behalf of a client, or
   a hedge fund acting on it\'s own behalf. This is the role with the investment discretion.'

   <introducer> PartyRole </introducer> [0..1]
   'Party that can relay an order directly to the trading floor at a firm. This is potentially
   a different firm, but may be the same as that taking the order. In effect the introducer is
   the first dealer to take the order. The reason an introducing dealer may forward a trade
   is sometime because it doesn\'t have the capacity to execute effectively but does have
   the relationship with the Orderer. Introducing Party is an industry standard term. This
   is semantically equivalent to the FIX and ISO20022 Introducing Firm.'

   <executor> PartyRole </executor> [0..1]
   'The Party executing or striking the trade. Executing Party is an industry standard term.
   This is semantically equivalent to the FIX and ISO20022 Executing Firm or Trader.'

   <confirmer> PartyRole </confirmer> [0..1]
   'The party that undertakes the confirmation process for this Trade Side. The
```

confirmer essentially manages the matching and affirmation of trades. This is often the creditor or is increasingly outsourced to service providers such as Swapswire.'

<creditor> PartyRole </creditor> [1]

'The party whose name appears on the contract as being responsible for credit of the trade. This is the party in the Trade Side the credit risk is against. For example if a hedge fund was to trade in the name of it\'s prime broker, then the prime broker would be the creditor.'

<calculater> PartyRole </calculater> [0..1]

'The calculater is the Party that calculates, negotiates, and agrees the values to be paid at each payment date.'

<settler> PartyRole </settler> [0..1]

'The Settler is the party that makes the payments. Increasingly this is a service that can be externalized from the other roles. An example of a settlement service provide is SwapClear.'

<beneficiary> PartyRole </beneficiary> [0..1]

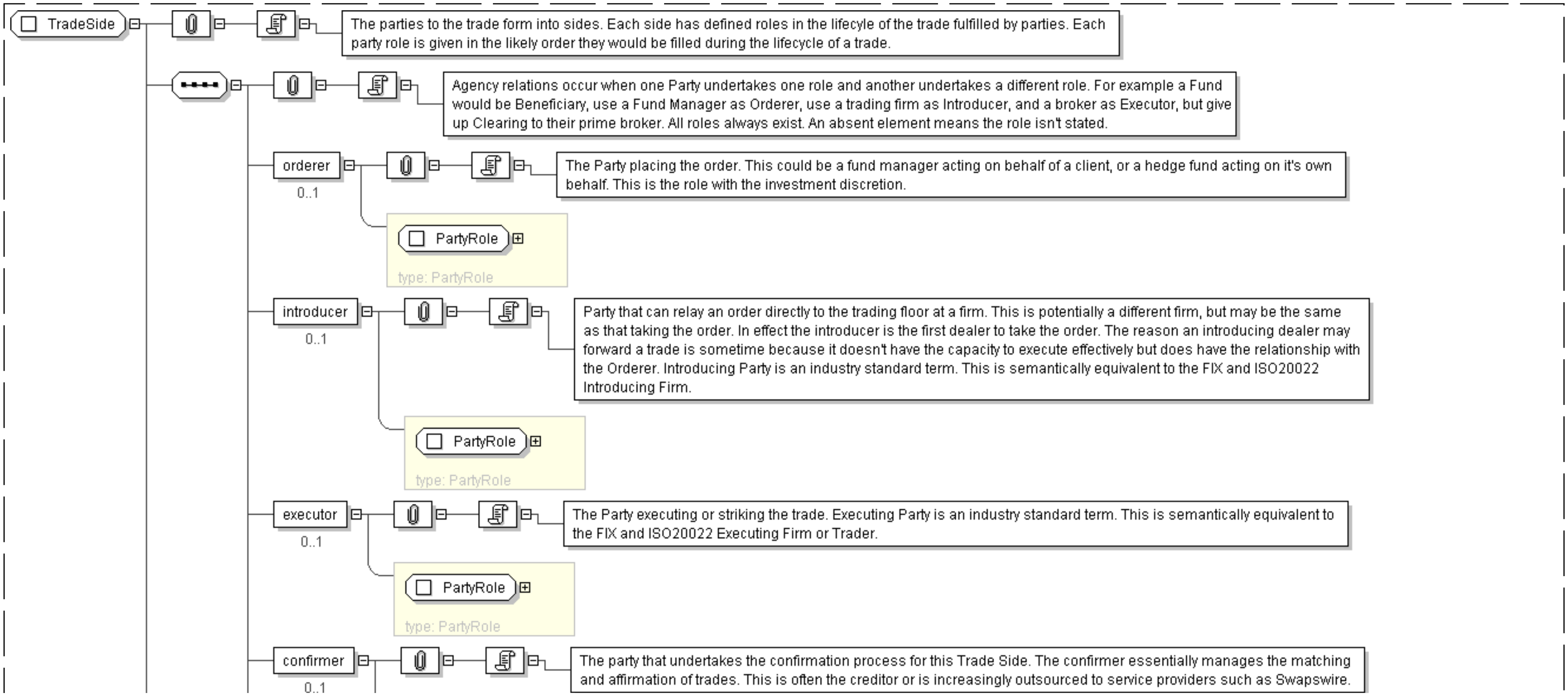
'The party that suffers the economic effect of the trade. This is usually referred to as the primary Principal in FIX and ISO20022 - which is slightly confusing in that there are potentially many Princiapal/Agency relationships. The beneficiary may be distinct from the creditor - an example is a Hedge Fund trading in the name of it\'s Prime Broker.'

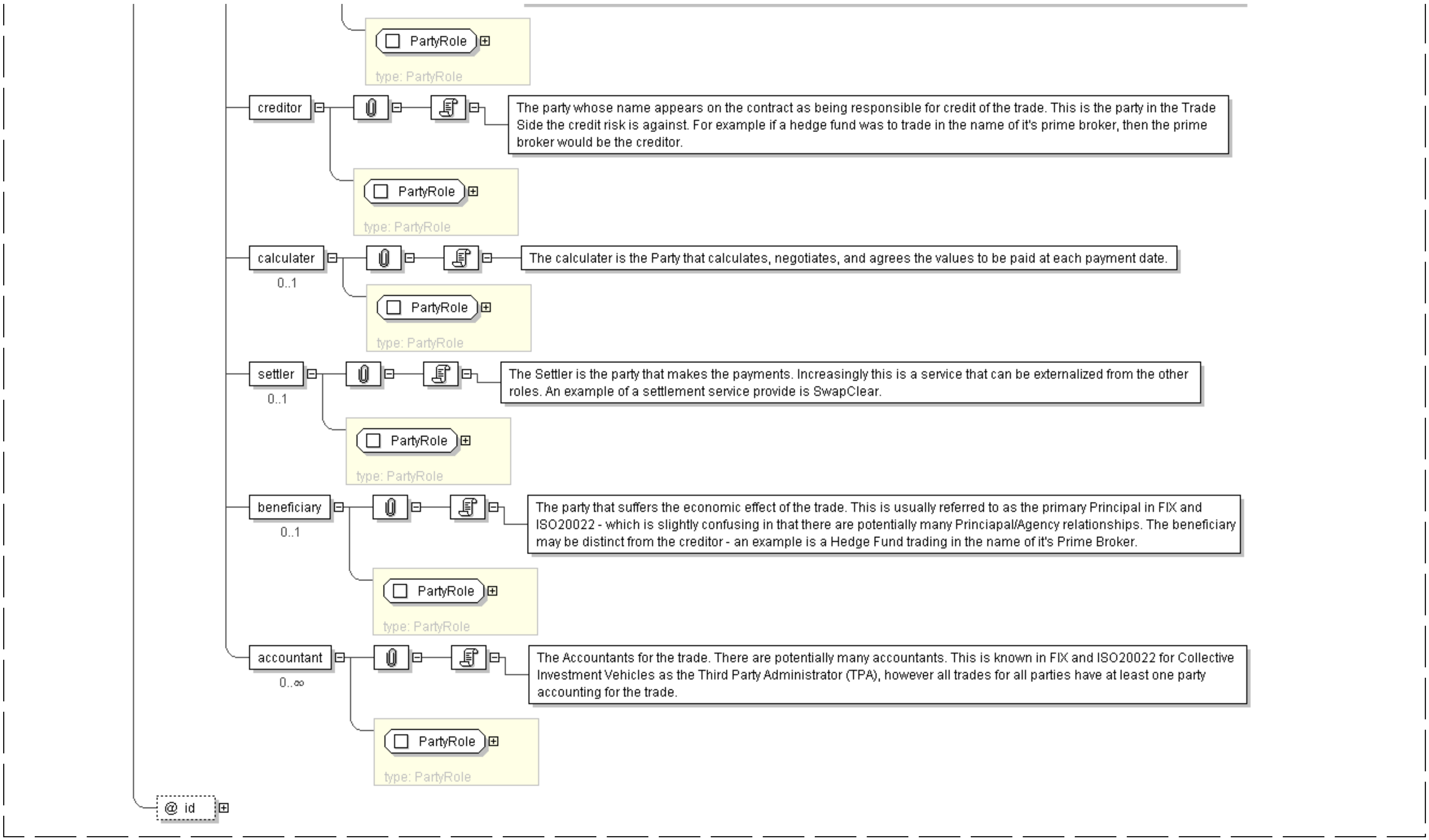
<accountant> PartyRole </accountant> [0..*]

'The Accountants for the trade. There are potentially many accountants. This is known in FIX and ISO20022 for Collective Investment Vehicles as the Third Party Administrator (TPA), however all trades for all parties have at least one party accounting for the trade.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="TradeSide">
   <xsd:sequence>
      <xsd:element name="orderer" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="introducer" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="executor" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="confirmer" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="creditor" type=" PartyRole "/>
      <xsd:element name="calculater" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="settler" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="beneficiary" type=" PartyRole " minOccurs="0"/>
      <xsd:element name="accountant" type=" PartyRole " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="required"/>
</xsd:complexType>
```

top

Complex Type: Trader

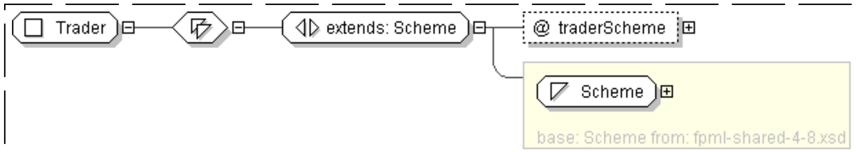
Super-types:	Scheme < **Trader** (by extension)
Sub-types:	None

Name	Trader
Used by (from the same schema document)	Complex Type **PartyTradeInformation**
Abstract	no

XML Instance Representation

```
<...
traderScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Trader">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="traderScheme" type=" xsd:anyURI " use="optional"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Validation

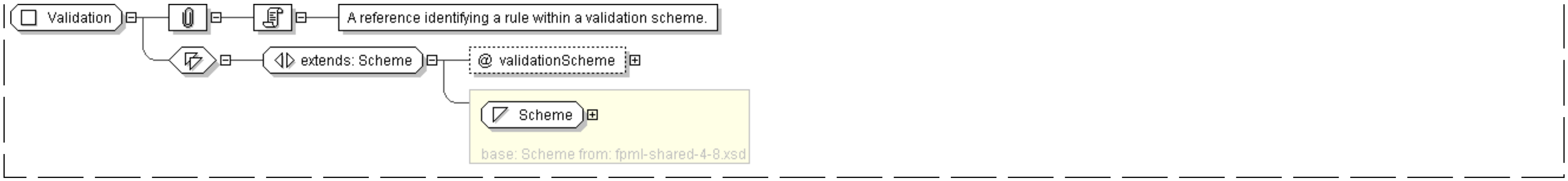
Super-types:	Scheme < **Validation** (by extension)
Sub-types:	None

Name	Validation
Used by (from the same schema document)	Model Group **Validation.model**
Abstract	no
Documentation	A reference identifying a rule within a validation scheme.

XML Instance Representation

```
<...
validationScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Validation">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="validationScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: VersionedContractId

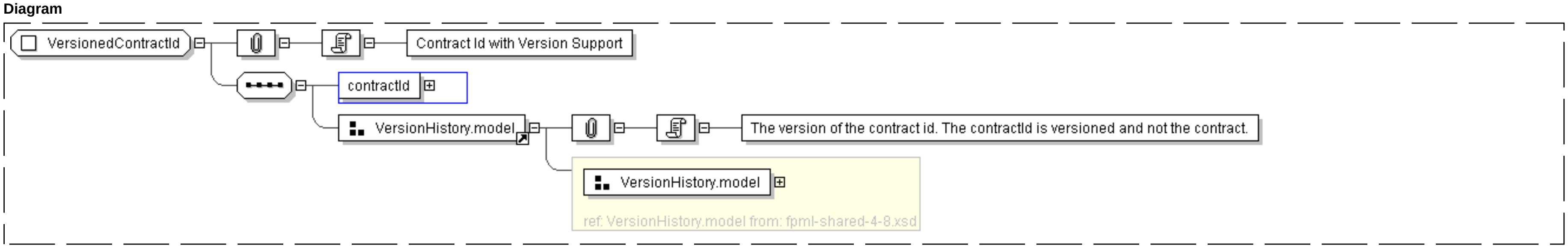
Super-types:	None
Sub-types:	None

Name	VersionedContractId
Used by (from the same schema document)	Complex Type **ContractIdentifier**
Abstract	no
Documentation	Contract Id with Version Support

XML Instance Representation

```
<...>
   <contractId> ContractId </contractId> [1]
   <version> xsd:nonNegativeInteger </version> [1]
   'The version number'

   <effectiveDate> IdentifiedDate </effectiveDate> [0..1]
   'Optionally it is possible to specify a version effective date when a versionId is supplied.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="VersionedContractId">
   <xsd:sequence>
      <xsd:element name="contractId" type=" ContractId "/>
      <xsd:group ref=" VersionHistory.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: VersionedTradeId

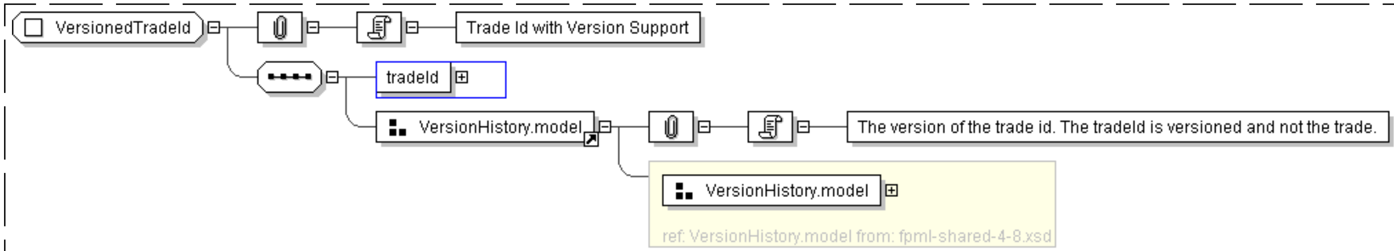
Super-types:	None
Sub-types:	None

Name	VersionedTradeId
Used by (from the same schema document)	Complex Type **TradeIdentifier**
Abstract	no
Documentation	Trade Id with Version Support

XML Instance Representation

```
<...>
   <tradeId> TradeId </tradeId> [1]
   <version> xsd:nonNegativeInteger </version> [1]
   'The version number'

   <effectiveDate> IdentifiedDate </effectiveDate> [0..1]
   'Optionally it is possible to specify a version effective date when a versionId is supplied.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="VersionedTradeId">
   <xsd:sequence>
      <xsd:element name="tradeId" type=" TradeId "/>
      <xsd:group ref=" VersionHistory.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Model Group: AccountReferenceOrPartyReference.model

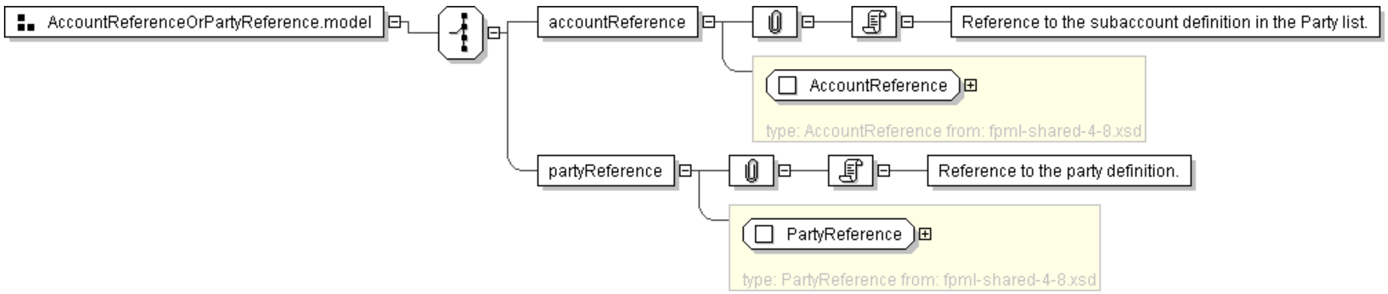
Name	AccountReferenceOrPartyReference.model
Used by (from the same schema document)	Complex Type **Allocation**

XML Instance Representation

```
Start Choice [1]
   <accountReference> AccountReference </accountReference> [1]
   'Reference to the subaccount definition in the Party list.'

   <partyReference> PartyReference </partyReference> [1]
   'Reference to the party definition.'
```

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="AccountReferenceOrPartyReference.model">
   <xsd:choice>
      <xsd:element name="accountReference" type=" AccountReference "/>
      <xsd:element name="partyReference" type=" PartyReference "/>
   </xsd:choice>
</xsd:group>
```

top

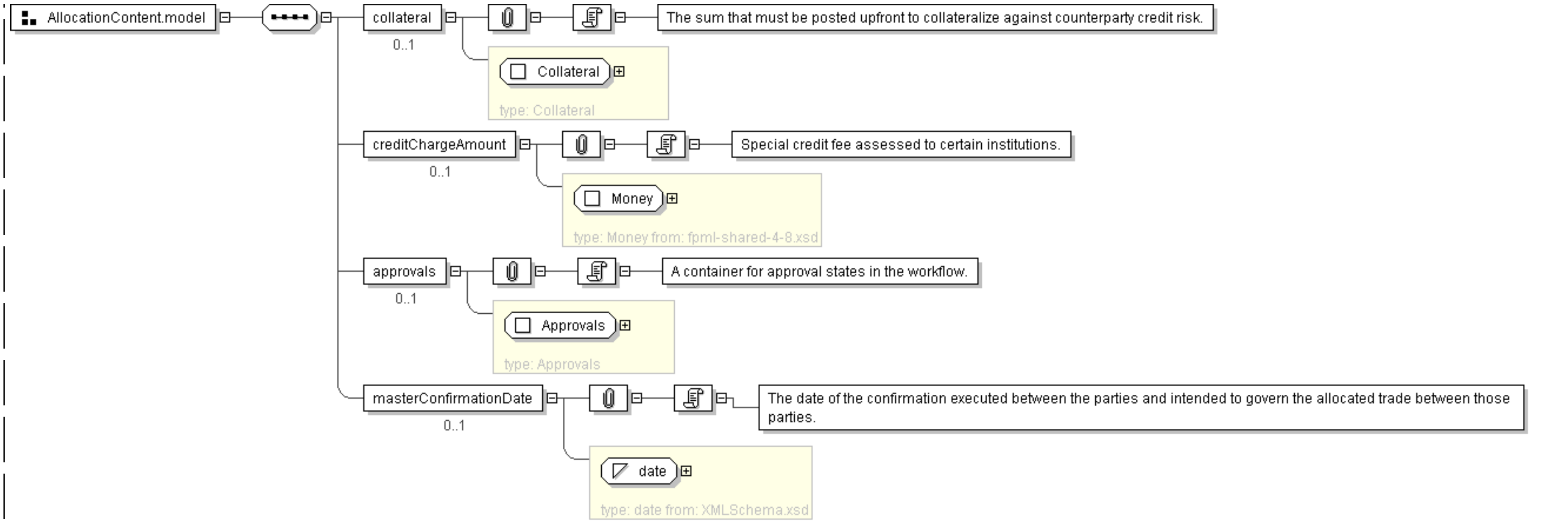
Model Group: AllocationContent.model

Name	AllocationContent.model
Used by (from the same schema document)	Complex Type **Allocation**

XML Instance Representation

```
<collateral> Collateral </collateral> [0..1]
'The sum that must be posted upfront to collateralize against counterparty credit risk.'
<creditChargeAmount> Money </creditChargeAmount> [0..1]
'Special credit fee assessed to certain institutions.'
<approvals> Approvals </approvals> [0..1]
'A container for approval states in the workflow.'
<masterConfirmationDate> xsd:date </masterConfirmationDate> [0..1]
'The date of the confirmation executed between the parties and intended to govern the
allocated trade between those parties.'
```

Diagram



Schema Component Representation

```
<xsd:group name="AllocationContent.model">
   <xsd:sequence>
      <xsd:element name="collateral" type=" Collateral " minOccurs="0"/>
      <xsd:element name="creditChargeAmount" type=" Money " minOccurs="0"/>
      <xsd:element name="approvals" type=" Approvals " minOccurs="0"/>
      <xsd:element name="masterConfirmationDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

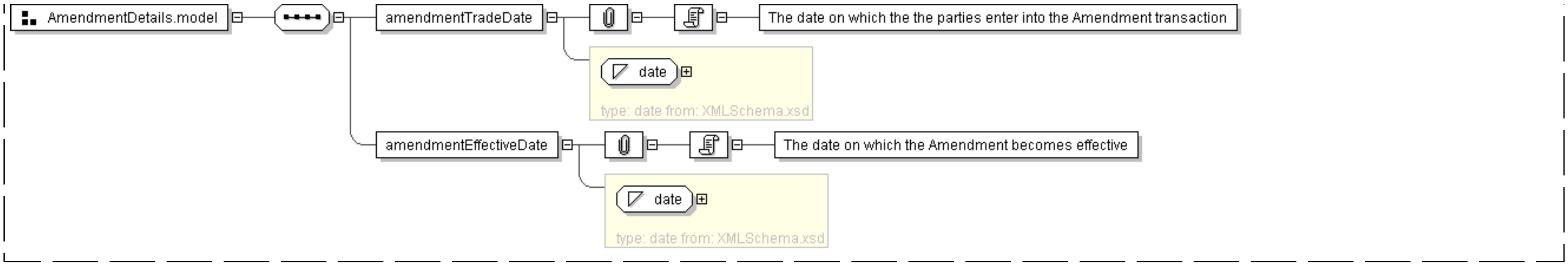
Model Group: AmendmentDetails.model

Name	AmendmentDetails.model
Used by (from the same schema document)	Complex Type **Amendment**

XML Instance Representation

```
<amendmentTradeDate> xsd:date </amendmentTradeDate> [1]
'The date on which the the parties enter into the Amendment transaction'

<amendmentEffectiveDate> xsd:date </amendmentEffectiveDate> [1]
'The date on which the Amendment becomes effective'
```

Diagram



Schema Component Representation

```
<xsd:group name="AmendmentDetails.model">
   <xsd:sequence>
      <xsd:element name="amendmentTradeDate" type=" xsd:date "/>
      <xsd:element name="amendmentEffectiveDate" type=" xsd:date "/>
   </xsd:sequence>
</xsd:group>
```

top

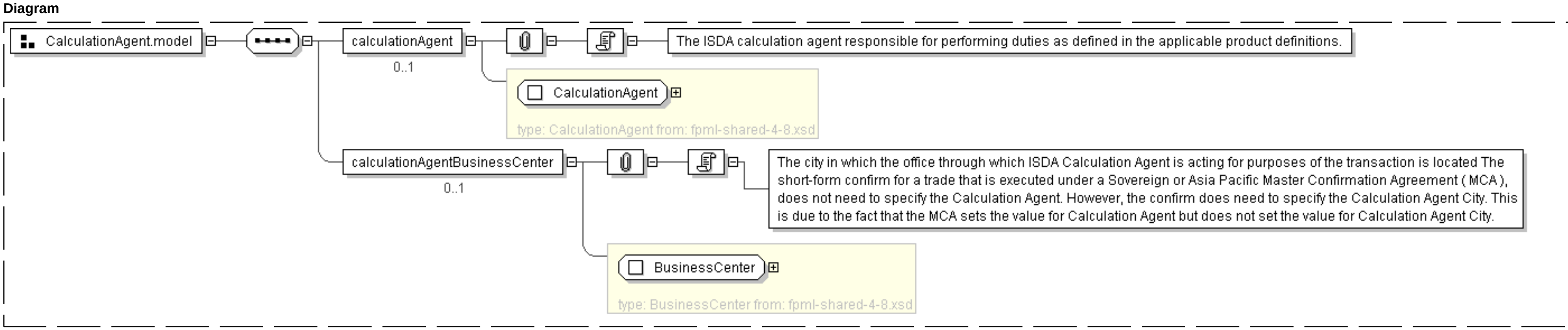
Model Group: CalculationAgent.model

Name	CalculationAgent.model
Used by (from the same schema document)	Complex Type **Contract** , Complex Type **Trade**

XML Instance Representation

```
<calculationAgent> CalculationAgent </calculationAgent> [0..1]
'The ISDA calculation agent responsible for performing duties as defined in the
applicable product definitions.'

<calculationAgentBusinessCenter> BusinessCenter </calculationAgentBusinessCenter> [0..1]
'The city in which the office through which ISDA Calculation Agent is acting for purposes
of the transaction is located The short-form confirm for a trade that is executed under
a Sovereign or Asia Pacific Master Confirmation Agreement ( MCA ), does not need to specify
the Calculation Agent. However, the confirm does need to specify the Calculation Agent
City. This is due to the fact that the MCA sets the value for Calculation Agent but does
not set the value for Calculation Agent City.'
```

Diagram



Schema Component Representation

```
<xsd:group name="CalculationAgent.model">
```

```
   <xsd:sequence>
      <xsd:element name="calculationAgent" type=" CalculationAgent " minOccurs="0"/>
      <xsd:element name="calculationAgentBusinessCenter" type=" BusinessCenter " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: ContractNovationDetails.model

Name	ContractNovationDetails.model
Used by (from the same schema document)	Complex Type **ContractNovation**
Documentation	Model group with Contract Novation element content.

XML Instance Representation

```
Start Choice [1]
Start Choice [1]
'Choice between identification and representation of the new contract.'

      <newContractReference> ContractReference </newContractReference> [1]
      'Indicates a reference to the new Contract between the transferee and the remaining party.'

      <newContract> Contract </newContract> [1]
      'Indicates the new Contract between the transferee and the remaining party.'

End Choice
Start Choice [1]
      <oldContractReference> ContractReference </oldContractReference> [1]
      'Indicates a reference to the original contract between the transferor and the remaining party.'

      <oldContract> Contract </oldContract> [1]
      'Indicates the original Contract between the transferor and the remaining party.'

End Choice
Start Choice [0..1]
'Choice between identification and representation of the new contract.'

      <newContractReference> ContractReference </newContractReference> [1]
      <newContract> Contract </newContract> [1]
End Choice
End Choice
<transferor> PartyReference </transferor> [1]
'A pointer style reference to a party identifier defined elsewhere in the document. In a
three-way novation the party referenced is the Transferor (outgoing party) in the novation.
The Transferor means a party which transfers by novation to a Transferee all of its
rights, liabilities, duties and obligations with respect to a Remaining Party. In a four-
way novation the party referenced is Transferor 1 which transfers by novation to Transferee
1 all of its rights, liabilities, duties and obligations with respect to Transferor 2.
ISDA 2004 Novation Term: Transferor (three-way novation) or Transferor 1 (four-way novation).'

<transferee> PartyReference </transferee> [1]
'A pointer style reference to a party identifier defined elsewhere in the document. In a
three-way novation the party referenced is the Transferee (incoming party) in the
novation. Transferee means a party which accepts by way of novation all rights,
liabilities, duties and obligations of a Transferor with respect to a Remaining Party. In
a four-way novation the party referenced is Transferee 1 which accepts by way of novation
the rights, liabilities, duties and obligations of Transferor 1. ISDA 2004 Novation
Term: Transferee (three-way novation) or Transferee 1 (four-way novation).'

<remainingParty> PartyReference </remainingParty> [1]
'A pointer style reference to a party identifier defined elsewhere in the document. In a
three-way novation the party referenced is the Remaining Party in the novation. Remaining
```

Party means a party which consents to a Transferor\'s transfer by novation and the acceptance thereof by the Transferee of all of the Transferor\'s rights, liabilities, duties and obligations with respect to such Remaining Party under and with respect of the Novated Amount of a transaction. In a four-way novation the party referenced is Transferor 2 per the ISDA definition and acts in the role of a Transferor. Transferor 2 transfers by novation to Transferee 2 all of its rights, liabilities, duties and obligations with respect to Transferor 1. ISDA 2004 Novation Term: Remaining Party (three-way novation) or Transferor 2 (four-way novation).'

<otherRemainingParty> PartyReference </otherRemainingParty> [0..1]

'A pointer style reference to a party identifier defined elsewhere in the document. This element is not applicable in a three-way novation and should be omitted. In a four-way novation the party referenced is Transferee 2. Transferee 2 means a party which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 2. ISDA 2004 Novation Term: Transferee 2 (four-way novation).'

<novationDate> xsd:date </novationDate> [1]

'Specifies the date that one party\'s legal obligations with regard to a trade are transferred to another party. It corresponds to the Novation Date section of the 2004 ISDA Novation Definitions, section 1.16.'

<novationContractDate> xsd:date </novationContractDate> [0..1]

'Specifies the date the parties agree to assign or novate a Contract. If this element is not specified, the novationContractDate will be deemed to be the novationDate. It corresponds to the Novation Trade Date section of the 2004 ISDA Novation Definitions, section 1.17.'

Start Choice [1]

'Choice for expressing the novated amount as either a money amount, number of options, or number of units, according the the financial product which is being novated.'

<novatedAmount> Money </novatedAmount> [1]

'The amount which represents the portion of the Old Contract being novated.'

<novatedNumberOfOptions> xsd:decimal </novatedNumberOfOptions> [1]

'The number of options which represent the portion of the Old Contract being novated.'

<novatedNumberOfUnits> xsd:decimal </novatedNumberOfUnits> [1]

'The number of options which represent the portion of the Old Contract being novated.'

End Choice

<fullFirstCalculationPeriod> xsd:boolean </fullFirstCalculationPeriod> [0..1]

'This element corresponds to the applicability of the Full First Calculation Period as defined in the 2004 ISDA Novation Definitions, section 1.20.'

<firstPeriodStartDate> FirstPeriodStartDate </firstPeriodStartDate> [0..2]

'Element that is used to be able to make sense of the “new transaction” without requiring reference back to the “old transaction”. In the case of interest rate products there are potentially 2 “first period start dates” to reference – one with respect to each party to the new transaction. For Credit Default Swaps there is just the one with respect to the party that is the fixed rate payer.'

<nonReliance> Empty </nonReliance> [0..1]

'This element corresponds to the non-Reliance section in the 2004 ISDA Novation Definitions, section 2.1 (c) (i). The element appears in the instance document when non-Reliance is applicable.'

<creditDerivativesNotices> CreditDerivativesNotices </creditDerivativesNotices> [0..1]

'This element should be specified if one or more of either a Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party. The type of notice or notices that have been delivered should be indicated by setting the relevant boolean element value(s) to true. The absence of the element means that no Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party.'

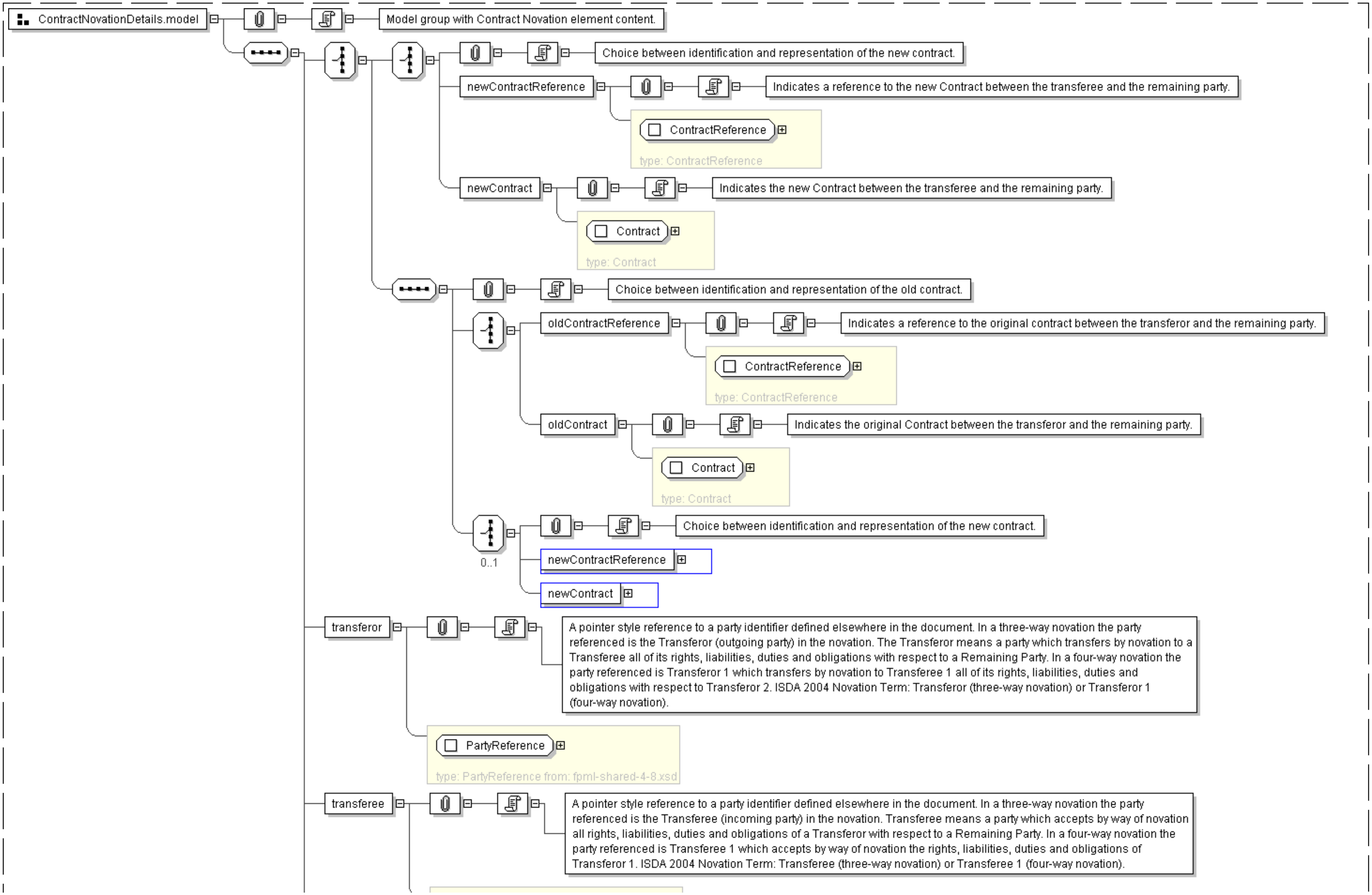
<contractualDefinitions> ContractualDefinitions </contractualDefinitions> [0..*]

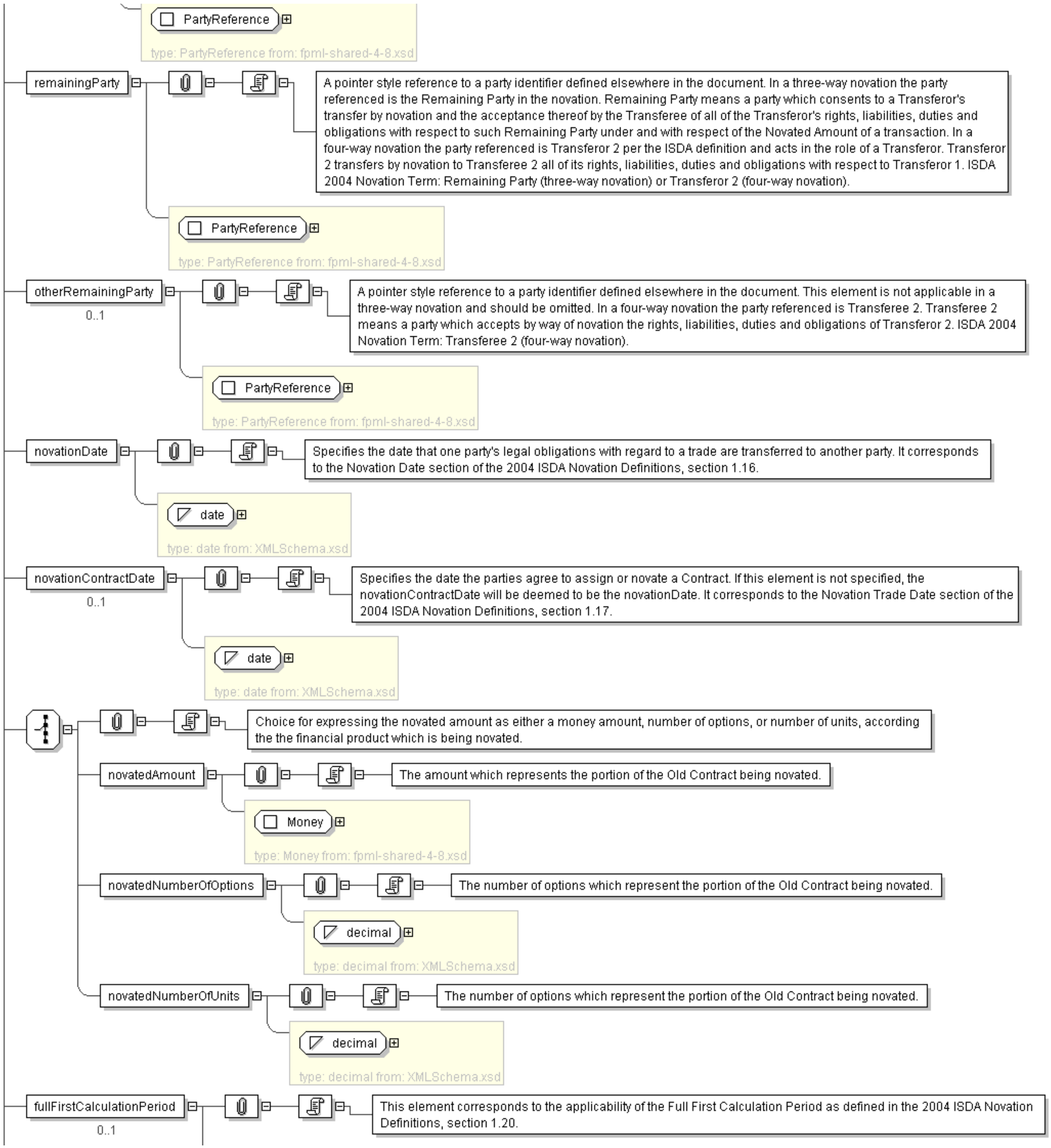
'The definitions (such as those published by ISDA) that will define the terms of the novation transaction.'

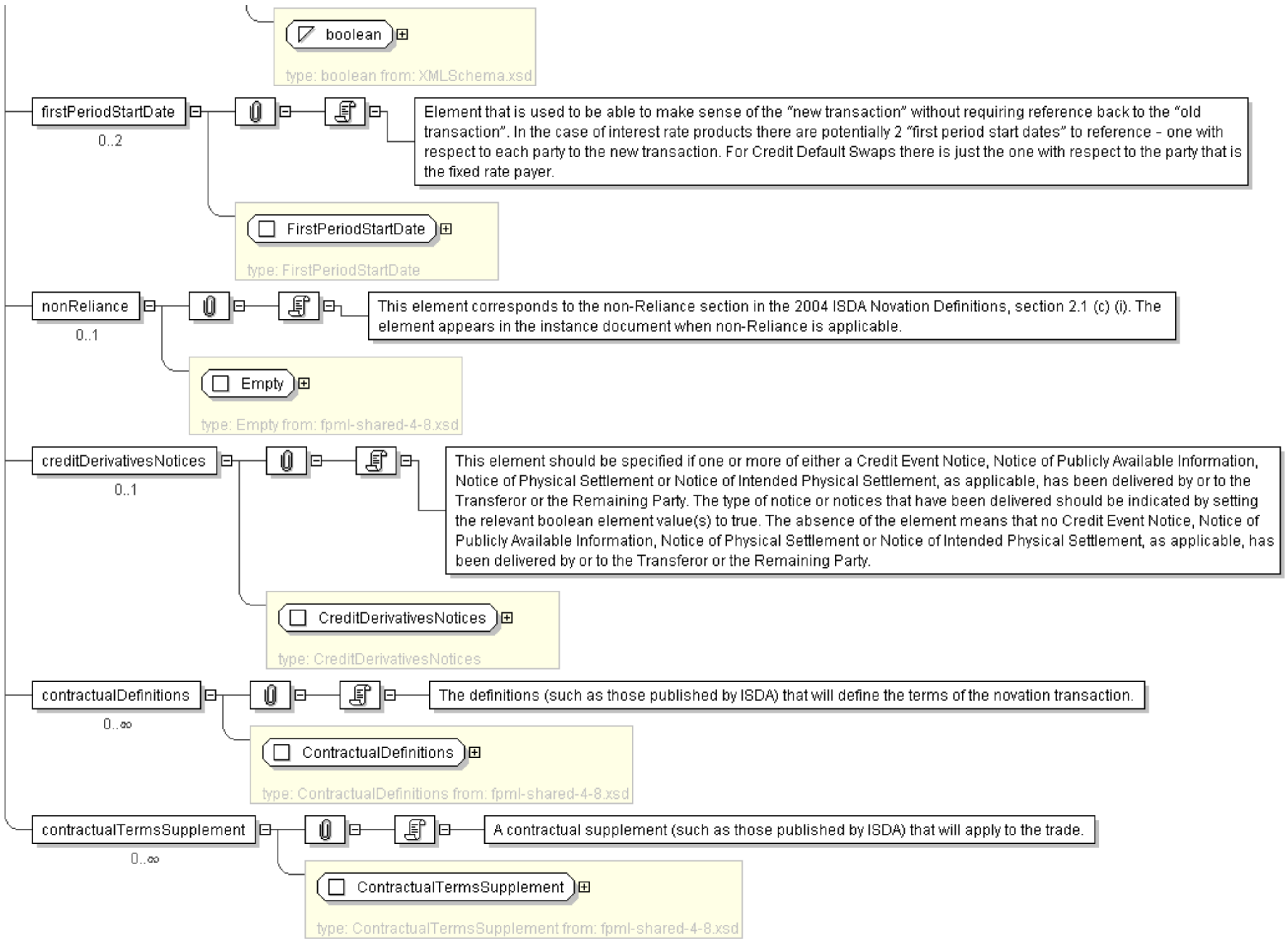
<contractualTermsSupplement> ContractualTermsSupplement </contractualTermsSupplement> [0..*]

'A contractual supplement (such as those published by ISDA) that will apply to the trade.'

Diagram




PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
remainingParty
A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Remaining Party in the novation. Remaining Party means a party which consents to a Transferor's transfer by novation and the acceptance thereof by the Transferee of all of the Transferor's rights, liabilities, duties and obligations with respect to such Remaining Party under and with respect of the Novated Amount of a transaction. In a four-way novation the party referenced is Transferor 2 per the ISDA definition and acts in the role of a Transferor. Transferor 2 transfers by novation to Transferee 2 all of its rights, liabilities, duties and obligations with respect to Transferor 1. ISDA 2004 Novation Term: Remaining Party (three-way novation) or Transferor 2 (four-way novation).
PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
otherRemainingParty
0..1
A pointer style reference to a party identifier defined elsewhere in the document. This element is not applicable in a three-way novation and should be omitted. In a four-way novation the party referenced is Transferee 2. Transferee 2 means a party which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 2. ISDA 2004 Novation Term: Transferee 2 (four-way novation).
PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
novationDate
Specifies the date that one party's legal obligations with regard to a trade are transferred to another party. It corresponds to the Novation Date section of the 2004 ISDA Novation Definitions, section 1.16.
date
type: date from: XMLSchema.xsd
novationContractDate
0..1
Specifies the date the parties agree to assign or novate a Contract. If this element is not specified, the novationContractDate will be deemed to be the novationDate. It corresponds to the Novation Trade Date section of the 2004 ISDA Novation Definitions, section 1.17.
date
type: date from: XMLSchema.xsd
Choice for expressing the novated amount as either a money amount, number of options, or number of units, according the the financial product which is being novated.
novatedAmount
The amount which represents the portion of the Old Contract being novated.
Money
type: Money from: fpml-shared-4-8.xsd
novatedNumberOfOptions
The number of options which represent the portion of the Old Contract being novated.
decimal
type: decimal from: XMLSchema.xsd
novatedNumberOfUnits
The number of options which represent the portion of the Old Contract being novated.
decimal
type: decimal from: XMLSchema.xsd
fullFirstCalculationPeriod
0..1
This element corresponds to the applicability of the Full First Calculation Period as defined in the 2004 ISDA Novation Definitions, section 1.20.



Schema Component Representation

```
<xsd:group name="ContractNovationDetails.model">
   <xsd:sequence>
      <xsd:choice>
         <xsd:choice>
            <xsd:element name="newContractReference" type=" ContractReference "/>
            <xsd:element name="newContract" type=" Contract "/>
         </xsd:choice>
         <xsd:sequence>
            <xsd:choice>
               <xsd:element name="oldContractReference" type=" ContractReference "/>
               <xsd:element name="oldContract" type=" Contract "/>
            </xsd:choice>
            <xsd:choice minOccurs="0">
               <xsd:element name="newContractReference" type=" ContractReference "/>
               <xsd:element name="newContract" type=" Contract "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:choice>
      <xsd:element name="transferor" type=" PartyReference "/>
```

```
      <xsd:element name="transferee" type=" PartyReference "/>
      <xsd:element name="remainingParty" type=" PartyReference "/>
      <xsd:element name="otherRemainingParty" type=" PartyReference " minOccurs="0"/>
      <xsd:element name="novationDate" type=" xsd:date "/>
      <xsd:element name="novationContractDate" type=" xsd:date " minOccurs="0"/>
      <xsd:choice>
         <xsd:element name="novatedAmount" type=" Money "/>
         <xsd:element name="novatedNumberOfOptions" type=" xsd:decimal "/>
         <xsd:element name="novatedNumberOfUnits" type=" xsd:decimal "/>
      </xsd:choice>
      <xsd:element name="fullFirstCalculationPeriod" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="firstPeriodStartDate" type=" FirstPeriodStartDate "
      minOccurs="0" maxOccurs="2"/>
      <xsd:element name="nonReliance" type=" Empty " minOccurs="0"/>
      <xsd:element name="creditDerivativesNotices" type=" CreditDerivativesNotices " minOccurs="0"/>
      <xsd:element name="contractualDefinitions" type=" ContractualDefinitions "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="contractualTermsSupplement" type=" ContractualTermsSupplement
      " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:group>
```

top

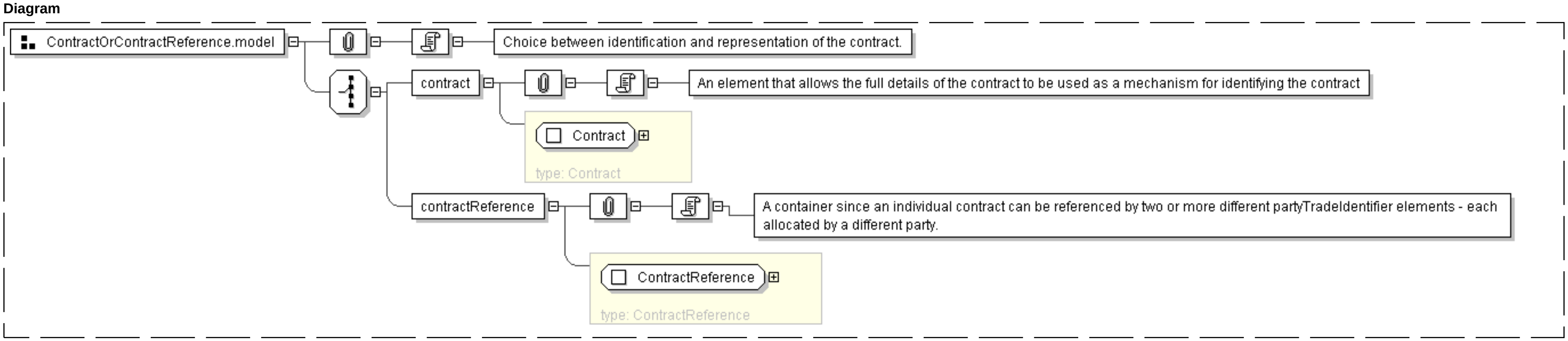
Model Group: ContractOrContractReference.model

Name	ContractOrContractReference.model
Documentation	Choice between identification and representation of the contract.

XML Instance Representation

```
Start Choice [1]
   <contract> Contract </contract> [1]
   'An element that allows the full details of the contract to be used as a mechanism
   for identifying the contract'

   <contractReference> ContractReference </contractReference> [1]
   'A container since an individual contract can be referenced by two or more
   different partyTradeIdentifier elements - each allocated by a different party.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="ContractOrContractReference.model">
   <xsd:choice>
      <xsd:element name="contract" type=" Contract "/>
```

```
        <xsd:element name="contractReference" type=" ContractReference "/>
    </xsd:choice>
</xsd:group>
```

top

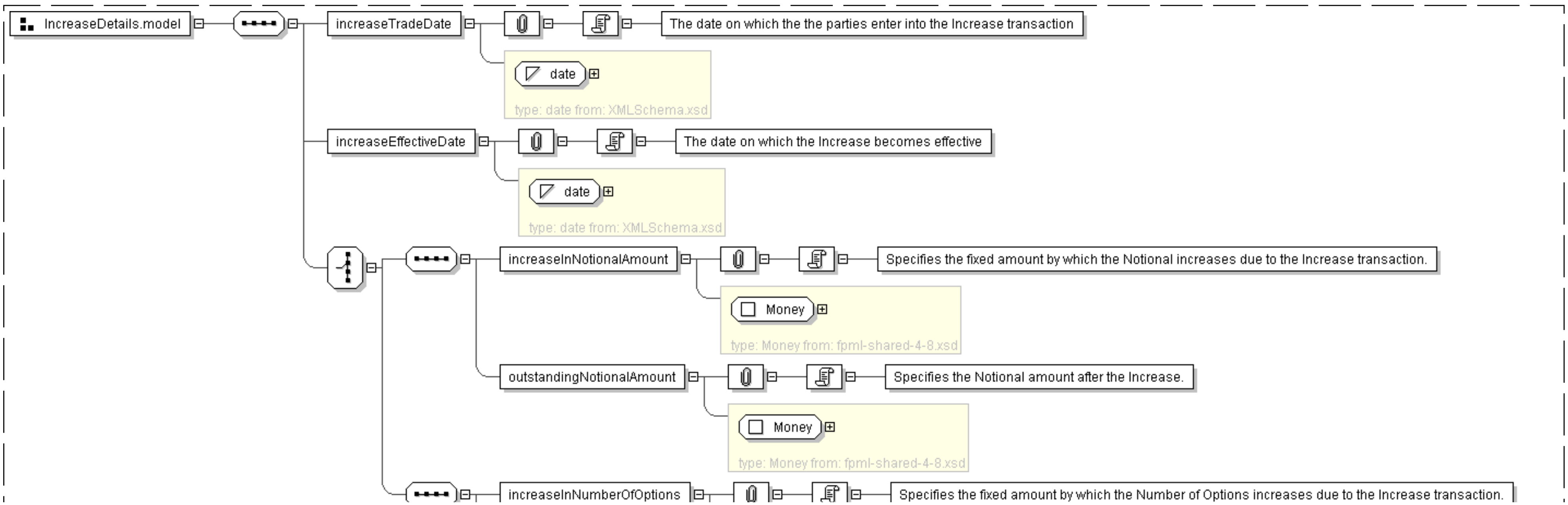
Model Group: IncreaseDetails.model

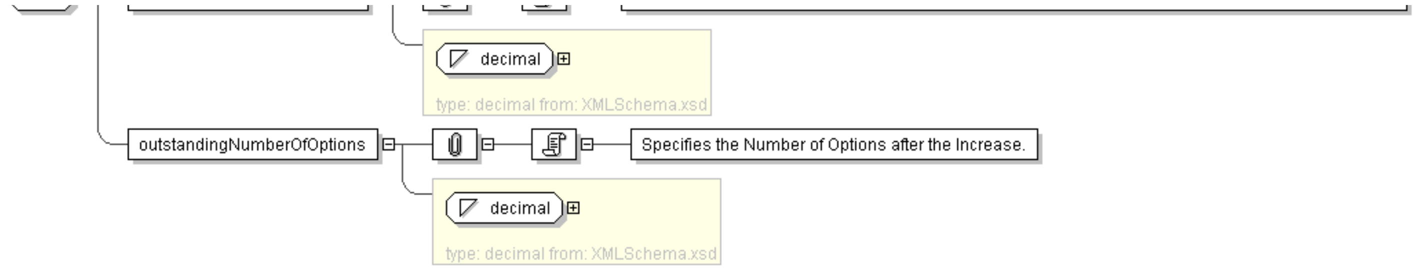
Name	IncreaseDetails.model
Used by (from the same schema document)	Complex Type **Increase**

XML Instance Representation

```
<increaseTradeDate> xsd:date </increaseTradeDate> [1]
'The date on which the the parties enter into the Increase transaction'

<increaseEffectiveDate> xsd:date </increaseEffectiveDate> [1]
'The date on which the Increase becomes effective'

Start Choice [1]
    <increaseInNotionalAmount> Money </increaseInNotionalAmount> [1]
    'Specifies the fixed amount by which the Notional increases due to the Increase transaction.'

    <outstandingNotionalAmount> Money </outstandingNotionalAmount> [1]
    'Specifies the Notional amount after the Increase.'

    <increaseInNumberOfOptions> xsd:decimal </increaseInNumberOfOptions> [1]
    'Specifies the fixed amount by which the Number of Options increases due to the
    Increase transaction.'

    <outstandingNumberOfOptions> xsd:decimal </outstandingNumberOfOptions> [1]
    'Specifies the Number of Options after the Increase.'

End Choice
```

Diagram





Schema Component Representation

```
<xsd:group name="IncreaseDetails.model">
   <xsd:sequence>
      <xsd:element name="increaseTradeDate" type=" xsd:date "/>
      <xsd:element name="increaseEffectiveDate" type=" xsd:date "/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="increaseInNotionalAmount" type=" Money "/>
            <xsd:element name="outstandingNotionalAmount" type=" Money "/>
         </xsd:sequence>
         <xsd:sequence>
            <xsd:element name="increaseInNumberOfOptions" type=" xsd:decimal "/>
            <xsd:element name="outstandingNumberOfOptions" type=" xsd:decimal "/>
         </xsd:sequence>
      </xsd:choice>
   </xsd:sequence>
</xsd:group>
```

top

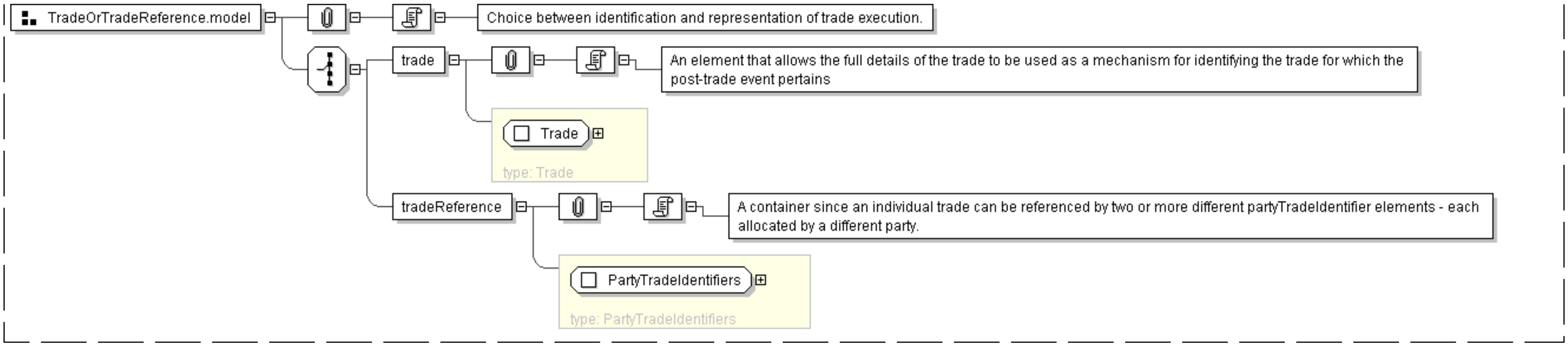
Model Group: TradeOrTradeReference.model

Name	TradeOrTradeReference.model
Used by (from the same schema document)	Complex Type **Increase**
Documentation	Choice between identification and representation of trade execution.

XML Instance Representation

```
Start Choice [1]
   <trade> Trade </trade> [1]
   'An element that allows the full details of the trade to be used as a mechanism for
   identifying the trade for which the post-trade event pertains'

   <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
   'A container since an individual trade can be referenced by two or more
   different partyTradeIdentifier elements - each allocated by a different party.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="TradeOrTradeReference.model">
   <xsd:choice>
      <xsd:element name="trade" type=" Trade "/>
      <xsd:element name="tradeReference" type=" PartyTradeIdentifiers "/>
   </xsd:choice>
</xsd:group>
```

top

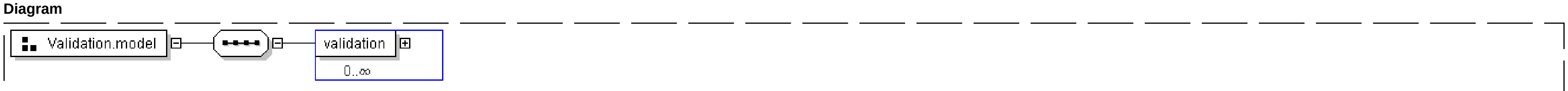
Model Group: Validation.model

Name	Validation.model
Used by (from the same schema document)	Complex Type **DataDocument**

XML Instance Representation

```
<validation> Validation </validation> [0..*]
```

Diagram



Schema Component Representation

```
<xsd:group name="Validation.model">
   <xsd:sequence>
      <xsd:element name="validation" type=" Validation " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:group>
```

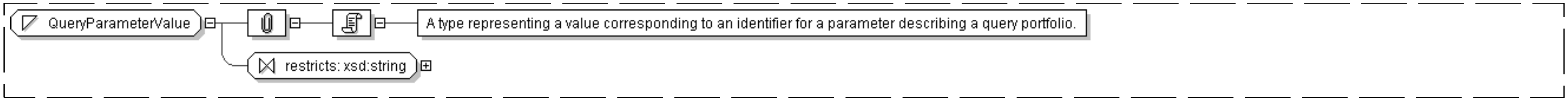
top

Simple Type: QueryParameterValue

Super-types:	xsd:string < **QueryParameterValue** (by restriction)
Sub-types:	None

Name	QueryParameterValue
Content	• Base XSD Type: string
Documentation	A type representing a value corresponding to an identifier for a parameter describing a query portfolio.

Diagram



Schema Component Representation

```
<xsd:simpleType name="QueryParameterValue">
   <xsd:restriction base=" xsd:string "/>
</xsd:simpleType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
```

```
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 7129 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 7129 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   ...
</xsd:schema>
```

top

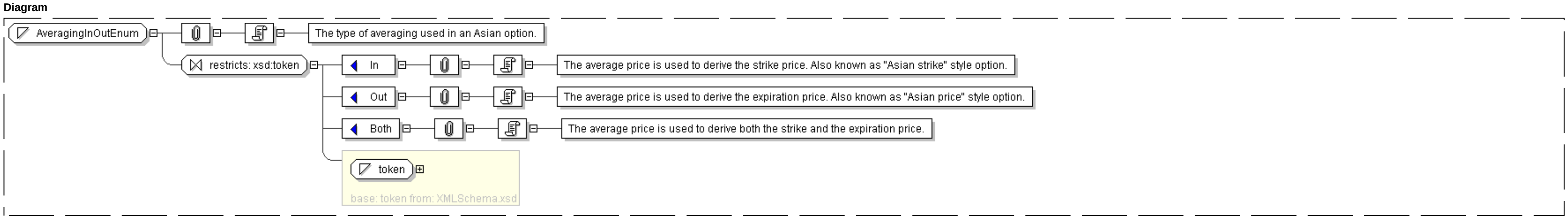
Global Definitions

Simple Type: AveragingInOutEnum

Super-types:	xsd:token < **AveragingInOutEnum** (by restriction)
Sub-types:	None

Name	AveragingInOutEnum
Content	• Base XSD Type: token • *value* comes from list: {'In'|'Out'|'Both'}
Documentation	The type of averaging used in an Asian option.

Diagram



Schema Component Representation

```
<xsd:simpleType name="AveragingInOutEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="In"/>
      <xsd:enumeration value="Out"/>
      <xsd:enumeration value="Both"/>
   </xsd:restriction>
</xsd:simpleType>
```

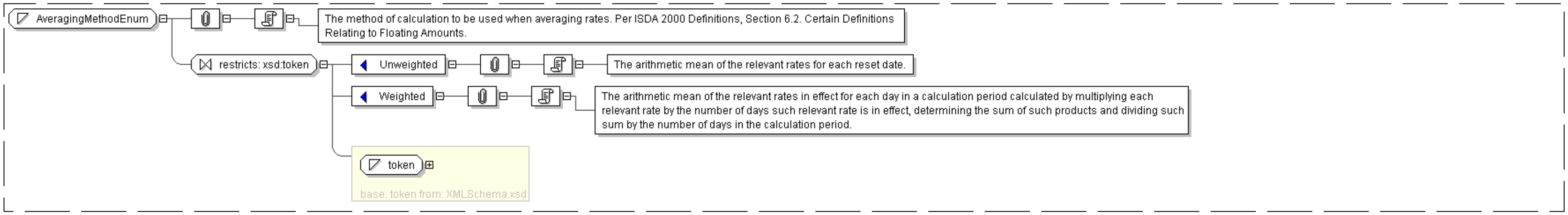
top

Simple Type: AveragingMethodEnum

Super-types:	xsd:token < **AveragingMethodEnum** (by restriction)
Sub-types:	None

Name	AveragingMethodEnum
Content	• Base XSD Type: token • *value* comes from list: {'Unweighted'|'Weighted'}
Documentation	The method of calculation to be used when averaging rates. Per ISDA 2000 Definitions, Section 6.2. Certain Definitions Relating to Floating Amounts.

Diagram



Schema Component Representation

```
<xsd:simpleType name="AveragingMethodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Unweighted"/>
      <xsd:enumeration value="Weighted"/>
   </xsd:restriction>
</xsd:simpleType>
```

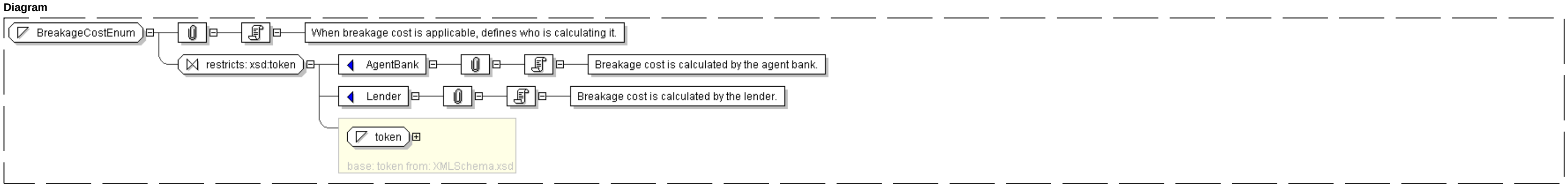
top

Simple Type: BreakageCostEnum

Super-types:	xsd:token < **BreakageCostEnum** (by restriction)
Sub-types:	None

Name	BreakageCostEnum
Content	• Base XSD Type: token • *value* comes from list: {'AgentBank'|'Lender'}
Documentation	When breakage cost is applicable, defines who is calculating it.

Diagram



Schema Component Representation

```
<xsd:simpleType name="BreakageCostEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="AgentBank"/>
      <xsd:enumeration value="Lender"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

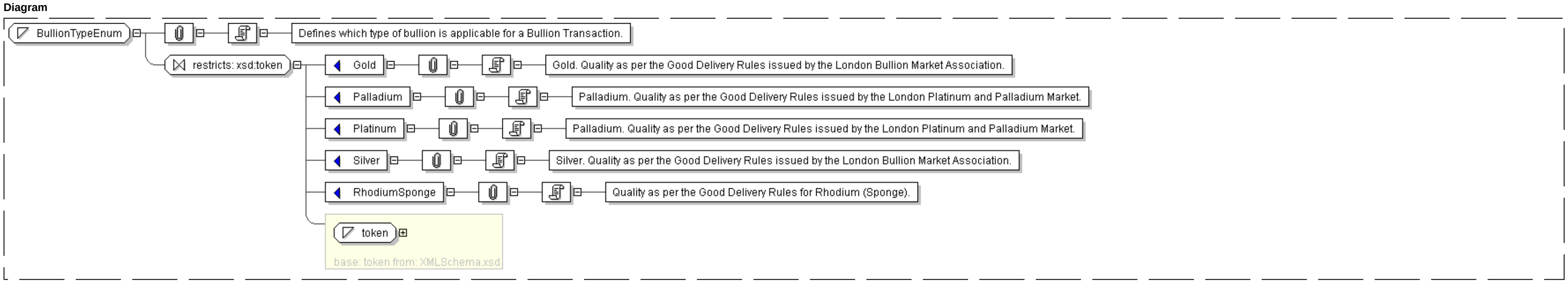
Simple Type: BullionTypeEnum

Super-types:	xsd:token < **BullionTypeEnum** (by restriction)
Sub-types:	None

Name	BullionTypeEnum

Content	• Base XSD Type: token • *value* comes from list: {'Gold'|'Palladium'|'Platinum'|'Silver'|'RhodiumSponge'}
Documentation	Defines which type of bullion is applicable for a Bullion Transaction.

Diagram



Schema Component Representation

```
<xsd:simpleType name="BullionTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Gold"/>
      <xsd:enumeration value="Palladium"/>
      <xsd:enumeration value="Platinum"/>
      <xsd:enumeration value="Silver"/>
      <xsd:enumeration value="RhodiumSponge"/>
   </xsd:restriction>
</xsd:simpleType>
```

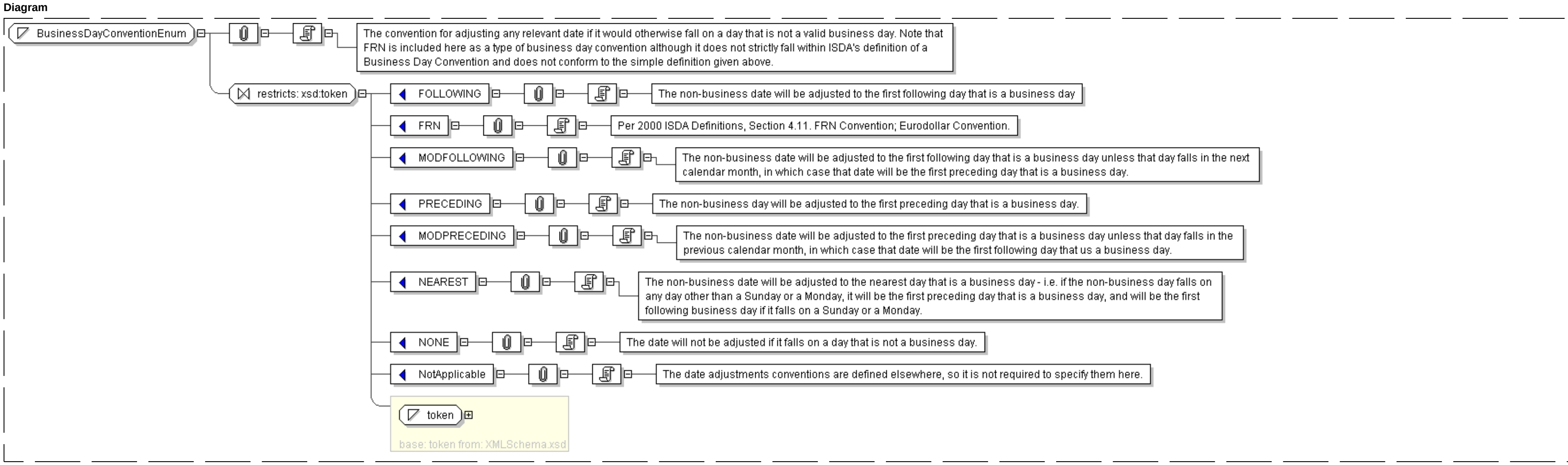
top

Simple Type: BusinessDayConventionEnum

Super-types:	xsd:token < **BusinessDayConventionEnum** (by restriction)
Sub-types:	None

Name	BusinessDayConventionEnum
Content	• Base XSD Type: token • *value* comes from list: {'FOLLOWING'|'FRN'|'MODFOLLOWING'|'PRECEDING'|'MODPRECEDING'|'NEAREST'|'NONE'|'NotApplicable'}
Documentation	The convention for adjusting any relevant date if it would otherwise fall on a day that is not a valid business day. Note that FRN is included here as a type of business day convention although it does not strictly fall within ISDA's definition of a Business Day Convention and does not conform to the simple definition given above.

Diagram



Schema Component Representation

```
<xsd:simpleType name="BusinessDayConventionEnum">
```

```
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="FOLLOWING"/>
      <xsd:enumeration value="FRN"/>
      <xsd:enumeration value="MODFOLLOWING"/>
      <xsd:enumeration value="PRECEDING"/>
      <xsd:enumeration value="MODPRECEDING"/>
      <xsd:enumeration value="NEAREST"/>
      <xsd:enumeration value="NONE"/>
      <xsd:enumeration value="NotApplicable"/>
   </xsd:restriction>
</xsd:simpleType>
```

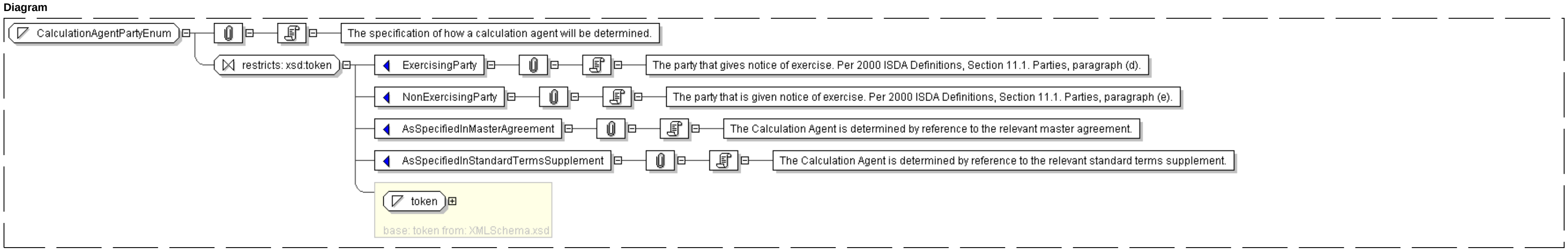
top

Simple Type: CalculationAgentPartyEnum

Super-types:	xsd:token < **CalculationAgentPartyEnum** (by restriction)
Sub-types:	None

Name	CalculationAgentPartyEnum
Content	• Base XSD Type: token • *value* comes from list: {'ExercisingParty'|'NonExercisingParty'|'AsSpecifiedInMasterAgreement'|'AsSpecifiedInStandardTermsSupplement'}
Documentation	The specification of how a calculation agent will be determined.

Diagram



Schema Component Representation

```
<xsd:simpleType name="CalculationAgentPartyEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="ExercisingParty"/>
      <xsd:enumeration value="NonExercisingParty"/>
      <xsd:enumeration value="AsSpecifiedInMasterAgreement"/>
      <xsd:enumeration value="AsSpecifiedInStandardTermsSupplement"/>
   </xsd:restriction>
</xsd:simpleType>
```

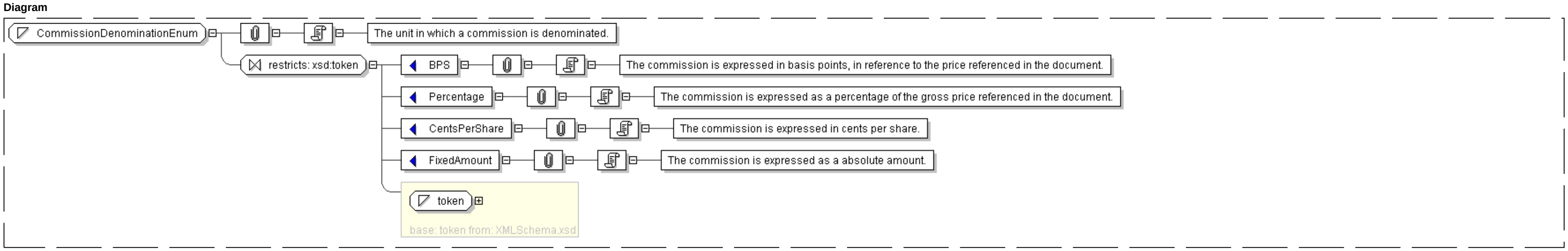
top

Simple Type: CommissionDenominationEnum

Super-types:	xsd:token < **CommissionDenominationEnum** (by restriction)
Sub-types:	None

Name	CommissionDenominationEnum
Content	• Base XSD Type: token • *value* comes from list: {'BPS'|'Percentage'|'CentsPerShare'|'FixedAmount'}
Documentation	The unit in which a commission is denominated.

Diagram



Schema Component Representation

```
<xsd:simpleType name="CommissionDenominationEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="BPS"/>
      <xsd:enumeration value="Percentage"/>
      <xsd:enumeration value="CentsPerShare"/>
      <xsd:enumeration value="FixedAmount"/>
   </xsd:restriction>
</xsd:simpleType>
```

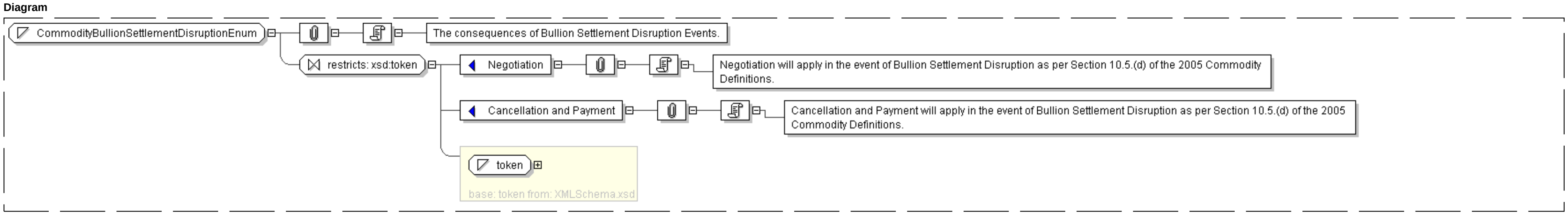
top

Simple Type: CommodityBullionSettlementDisruptionEnum

Super-types:	xsd:token < **CommodityBullionSettlementDisruptionEnum** (by restriction)
Sub-types:	None

Name	CommodityBullionSettlementDisruptionEnum
Content	• Base XSD Type: token • *value* comes from list: {'Negotiation'|'Cancellation and Payment'}
Documentation	The consequences of Bullion Settlement Disruption Events.

Diagram



Schema Component Representation

```
<xsd:simpleType name="CommodityBullionSettlementDisruptionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Negotiation"/>
      <xsd:enumeration value="Cancellation and Payment"/>
   </xsd:restriction>
</xsd:simpleType>
```

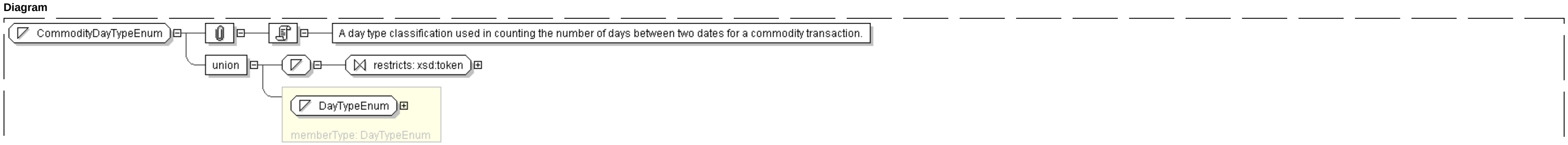
top

Simple Type: CommodityDayTypeEnum

Super-types:	None
Sub-types:	None

Name	CommodityDayTypeEnum
Content	• Union of following types: ○ DayTypeEnum ○ Locally defined type: ▪ Base XSD Type: token ▪ *value* comes from list: {'GasFlow'}
Documentation	A day type classification used in counting the number of days between two dates for a commodity transaction.

Diagram



Schema Component Representation

```
<xsd:simpleType name="CommodityDayTypeEnum">
   <xsd:union memberTypes=" DayTypeEnum ">
      <xsd:simpleType>
         <xsd:restriction base=" xsd:token ">
            <xsd:enumeration value="GasFlow"/>
         </xsd:restriction>
      </xsd:simpleType>
   </xsd:union>
</xsd:simpleType>
```

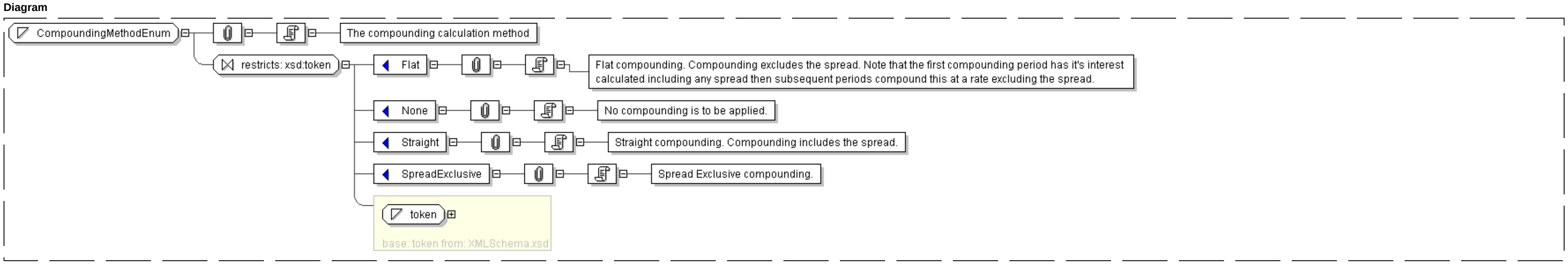
top

Simple Type: CompoundingMethodEnum

Super-types:	xsd:token < **CompoundingMethodEnum** (by restriction)
Sub-types:	None

Name	CompoundingMethodEnum
Content	• Base XSD Type: token • *value* comes from list: {'Flat'|'None'|'Straight'|'SpreadExclusive'}
Documentation	The compounding calculation method

Diagram



Schema Component Representation

```
<xsd:simpleType name="CompoundingMethodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Flat"/>
      <xsd:enumeration value="None"/>
      <xsd:enumeration value="Straight"/>
      <xsd:enumeration value="SpreadExclusive"/>
   </xsd:restriction>
</xsd:simpleType>
```

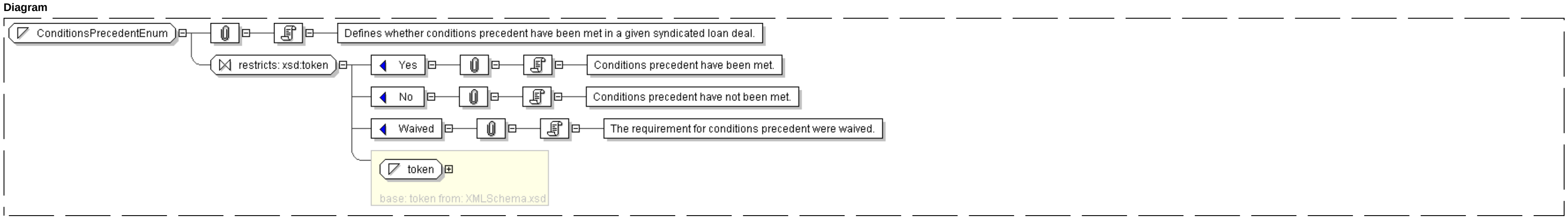
top

Simple Type: ConditionsPrecedentEnum

Super-types:	xsd:token < **ConditionsPrecedentEnum** (by restriction)
Sub-types:	None

Name	ConditionsPrecedentEnum
Content	• Base XSD Type: token • *value* comes from list: {'Yes'|'No'|'Waived'}
Documentation	Defines whether conditions precedent have been met in a given syndicated loan deal.

Diagram



Schema Component Representation

```
<xsd:simpleType name="ConditionsPrecedentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Yes"/>
      <xsd:enumeration value="No"/>
      <xsd:enumeration value="Waived"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: DayOfWeekEnum

Super-types:	xsd:token < **DayOfWeekEnum** (by restriction)
Sub-types:	None

Name	DayOfWeekEnum
Content	• Base XSD Type: token • *value* comes from list: {'MON'|'TUE'|'WED'|'THU'|'FRI'|'SAT'|'SUN'}
Documentation	A day of the seven-day week.

Diagram

Schema Component Representation

```
<xsd:simpleType name="DayOfWeekEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="MON"/>
      <xsd:enumeration value="TUE"/>
      <xsd:enumeration value="WED"/>
      <xsd:enumeration value="THU"/>
      <xsd:enumeration value="FRI"/>
      <xsd:enumeration value="SAT"/>
      <xsd:enumeration value="SUN"/>
   </xsd:restriction>
</xsd:simpleType>
```

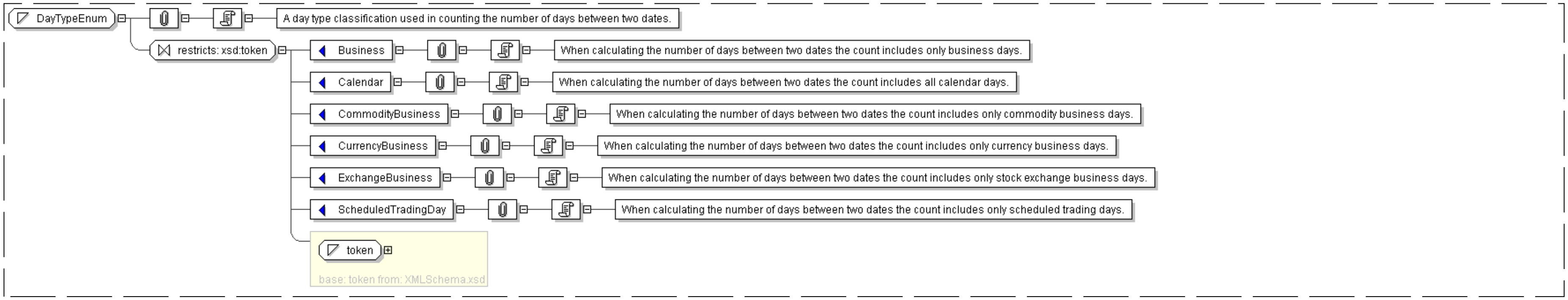
top

Simple Type: DayTypeEnum

Super-types:	xsd:token < **DayTypeEnum** (by restriction)
Sub-types:	None

Name	DayTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Business'|'Calendar'|'CommodityBusiness'|'CurrencyBusiness'|'ExchangeBusiness'|'ScheduledTradingDay'}
Documentation	A day type classification used in counting the number of days between two dates.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DayTypeEnum">
```

```
    <xsd:restriction base=" xsd:token ">
       <xsd:enumeration value="Business"/>
       <xsd:enumeration value="Calendar"/>
       <xsd:enumeration value="CommodityBusiness"/>
       <xsd:enumeration value="CurrencyBusiness"/>
       <xsd:enumeration value="ExchangeBusiness"/>
       <xsd:enumeration value="ScheduledTradingDay"/>
    </xsd:restriction>
</xsd:simpleType>
```

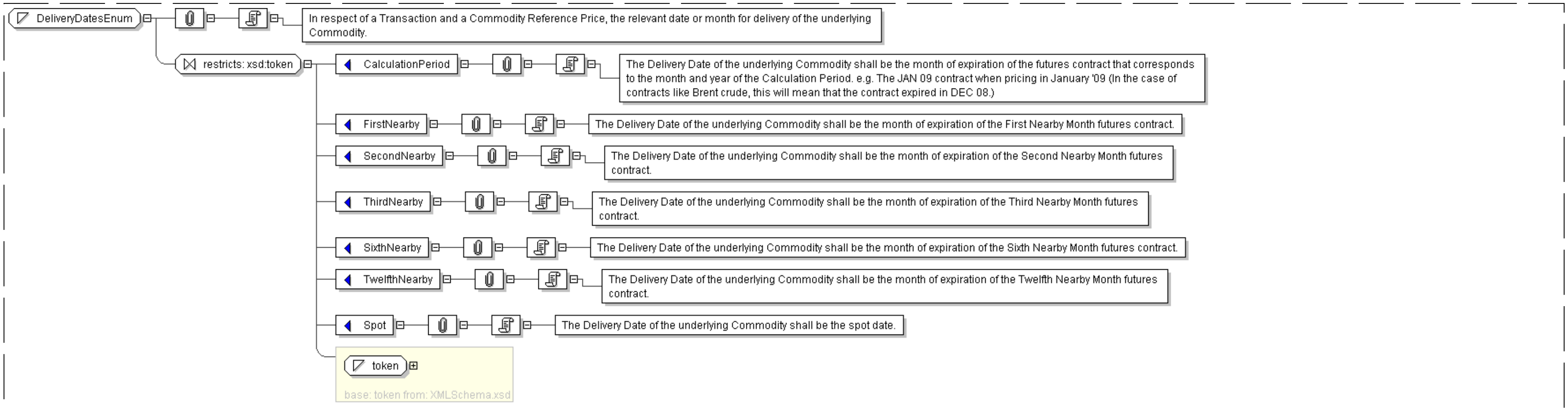
top

Simple Type: DeliveryDatesEnum

Super-types:	xsd:token < **DeliveryDatesEnum** (by restriction)
Sub-types:	None

Name	DeliveryDatesEnum
Content	• Base XSD Type: token • *value* comes from list: {'CalculationPeriod'|'FirstNearby'|'SecondNearby'|'ThirdNearby'|'SixthNearby'|'TwelfthNearby'|'Spot'}
Documentation	In respect of a Transaction and a Commodity Reference Price, the relevant date or month for delivery of the underlying Commodity.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DeliveryDatesEnum">
    <xsd:restriction base=" xsd:token ">
       <xsd:enumeration value="CalculationPeriod"/>
       <xsd:enumeration value="FirstNearby"/>
       <xsd:enumeration value="SecondNearby"/>
       <xsd:enumeration value="ThirdNearby"/>
       <xsd:enumeration value="SixthNearby"/>
       <xsd:enumeration value="TwelfthNearby"/>
       <xsd:enumeration value="Spot"/>
    </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: DeliveryTypeEnum

Super-types:	xsd:token < **DeliveryTypeEnum** (by restriction)
Sub-types:	None

Name	DeliveryTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Firm'|'Interruptible'}

Diagram

Schema Component Representation

```
<xsd:simpleType name="DeliveryTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Firm"/>
      <xsd:enumeration value="Interruptible"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: DifferenceSeverityEnum

Super-types:	xsd:token < **DifferenceSeverityEnum** (by restriction)
Sub-types:	None

Name	DifferenceSeverityEnum
Content	• Base XSD Type: token • *value* comes from list: {'Warning'|'Error'}
Documentation	The ISDA defined value indicating the severity of a difference.

Diagram

Schema Component Representation

```
<xsd:simpleType name="DifferenceSeverityEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Warning"/>
      <xsd:enumeration value="Error"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: DifferenceTypeEnum

Super-types:	xsd:token < **DifferenceTypeEnum** (by restriction)
Sub-types:	None

Name	DifferenceTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Value'|'Reference'|'Structure'|'Scheme'}
Documentation	The ISDA defined value indicating the nature of a difference.

Diagram

Schema Component Representation

```
<xsd:simpleType name="DifferenceTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Value"/>
      <xsd:enumeration value="Reference"/>
      <xsd:enumeration value="Structure"/>
      <xsd:enumeration value="Scheme"/>
   </xsd:restriction>
</xsd:simpleType>
```

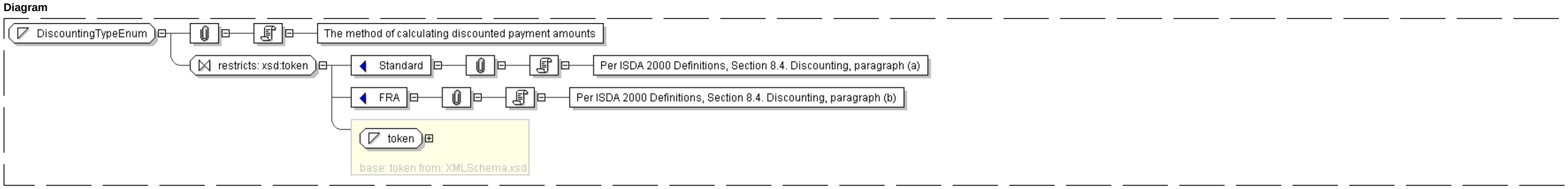
top

Simple Type: DiscountingTypeEnum

Super-types:	xsd:token < **DiscountingTypeEnum** (by restriction)
Sub-types:	None

Name	DiscountingTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Standard'|'FRA'}
Documentation	The method of calculating discounted payment amounts

Diagram



Schema Component Representation

```
<xsd:simpleType name="DiscountingTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Standard"/>
      <xsd:enumeration value="FRA"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: DisruptionFallbacksEnum

Super-types:	xsd:token < **DisruptionFallbacksEnum** (by restriction)
Sub-types:	None

Name	DisruptionFallbacksEnum
Content	• Base XSD Type: token • *value* comes from list: {'AsSpecifiedInMasterAgreement'}
Documentation	The specification of how disruption fallbacks will be represented.

Diagram

Schema Component Representation

```
<xsd:simpleType name="DisruptionFallbacksEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="AsSpecifiedInMasterAgreement"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

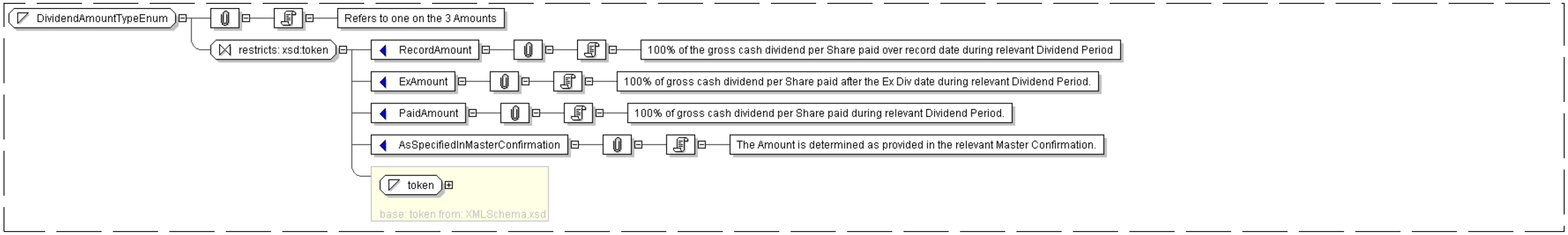
Simple Type: DividendAmountTypeEnum

Super-types:	xsd:token < **DividendAmountTypeEnum** (by restriction)

Sub-types:	None

Name	DividendAmountTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'RecordAmount'|'ExAmount'|'PaidAmount'|'AsSpecifiedInMasterConfirmation'}
Documentation	Refers to one on the 3 Amounts

Diagram



Schema Component Representation

```
<xsd:simpleType name="DividendAmountTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="RecordAmount"/>
      <xsd:enumeration value="ExAmount"/>
      <xsd:enumeration value="PaidAmount"/>
      <xsd:enumeration value="AsSpecifiedInMasterConfirmation"/>
   </xsd:restriction>
</xsd:simpleType>
```

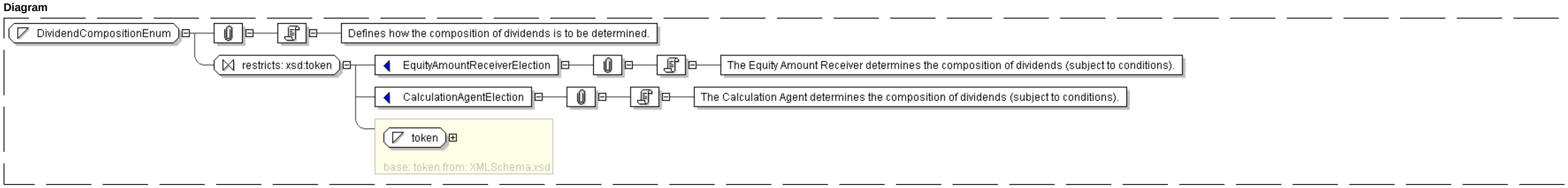
top

Simple Type: DividendCompositionEnum

Super-types:	xsd:token < **DividendCompositionEnum** (by restriction)
Sub-types:	None

Name	DividendCompositionEnum
Content	• Base XSD Type: token • *value* comes from list: {'EquityAmountReceiverElection'|'CalculationAgentElection'}
Documentation	Defines how the composition of dividends is to be determined.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DividendCompositionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="EquityAmountReceiverElection"/>
      <xsd:enumeration value="CalculationAgentElection"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

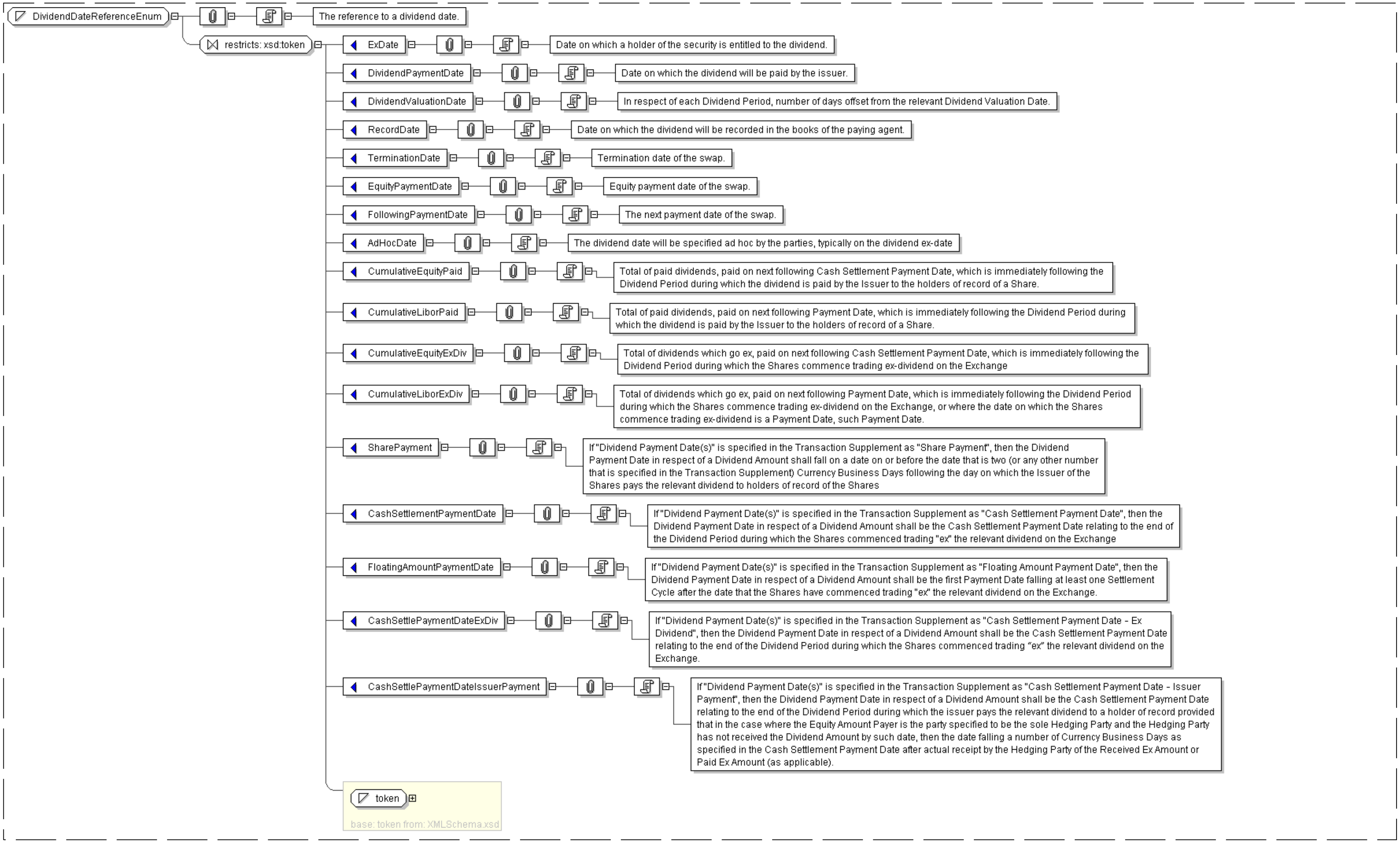
Simple Type: DividendDateReferenceEnum

Super-types:	xsd:token < **DividendDateReferenceEnum** (by restriction)
Sub-types:	None

Name	DividendDateReferenceEnum
Content	• Base XSD Type: token • *value* comes from list: {'ExDate'|'DividendPaymentDate'|'DividendValuationDate'|'RecordDate'|'TerminationDate'|'EquityPaymentDate'|'FollowingPaymentDate'|'AdHocDate'|'CumulativeEquityPaid'|'CumulativeLiborPaid'|'CumulativeEquityExDiv'|'CumulativeLiborExDiv'|'SharePayment'|'CashSettlementPaymentDate'|'FloatingAmountPaymentDate'|'CashSettlePaymentDateExDiv'|'CashSettlePaymentDateIssuerPayment'}

Documentation The reference to a dividend date.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DividendDateReferenceEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="ExDate"/>
      <xsd:enumeration value="DividendPaymentDate"/>
      <xsd:enumeration value="DividendValuationDate"/>
      <xsd:enumeration value="RecordDate"/>
      <xsd:enumeration value="TerminationDate"/>
      <xsd:enumeration value="EquityPaymentDate"/>
      <xsd:enumeration value="FollowingPaymentDate"/>
      <xsd:enumeration value="AdHocDate"/>
      <xsd:enumeration value="CumulativeEquityPaid"/>
      <xsd:enumeration value="CumulativeLiborPaid"/>
      <xsd:enumeration value="CumulativeEquityExDiv"/>
      <xsd:enumeration value="CumulativeLiborExDiv"/>
      <xsd:enumeration value="SharePayment"/>
      <xsd:enumeration value="CashSettlementPaymentDate"/>
      <xsd:enumeration value="FloatingAmountPaymentDate"/>
      <xsd:enumeration value="CashSettlePaymentDateExDiv"/>
      <xsd:enumeration value="CashSettlePaymentDateIssuerPayment"/>
   </xsd:restriction>
```

```
</xsd:simpleType>
```

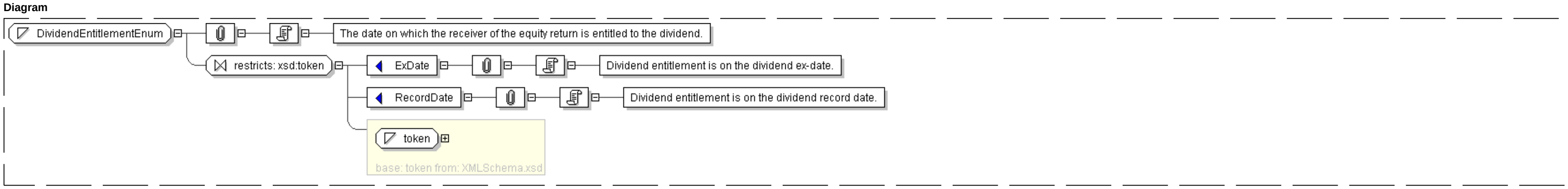
top

Simple Type: DividendEntitlementEnum

Super-types:	xsd:token < **DividendEntitlementEnum** (by restriction)
Sub-types:	None

Name	DividendEntitlementEnum
Content	• Base XSD Type: token • *value* comes from list: {'ExDate'|'RecordDate'}
Documentation	The date on which the receiver of the equity return is entitled to the dividend.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DividendEntitlementEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="ExDate"/>
      <xsd:enumeration value="RecordDate"/>
   </xsd:restriction>
</xsd:simpleType>
```

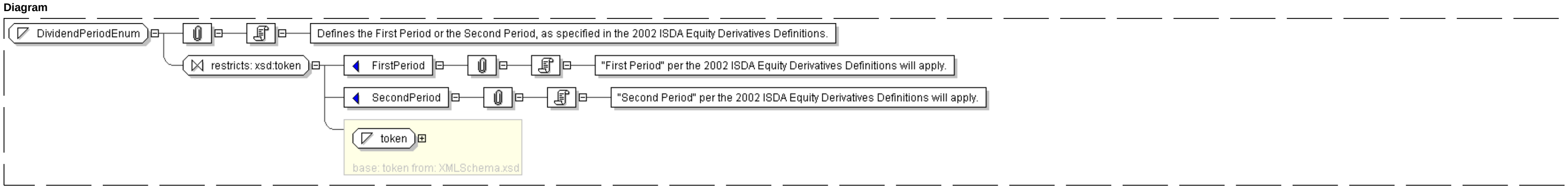
top

Simple Type: DividendPeriodEnum

Super-types:	xsd:token < **DividendPeriodEnum** (by restriction)
Sub-types:	None

Name	DividendPeriodEnum
Content	• Base XSD Type: token • *value* comes from list: {'FirstPeriod'|'SecondPeriod'}
Documentation	Defines the First Period or the Second Period, as specified in the 2002 ISDA Equity Derivatives Definitions.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DividendPeriodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="FirstPeriod"/>
      <xsd:enumeration value="SecondPeriod"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

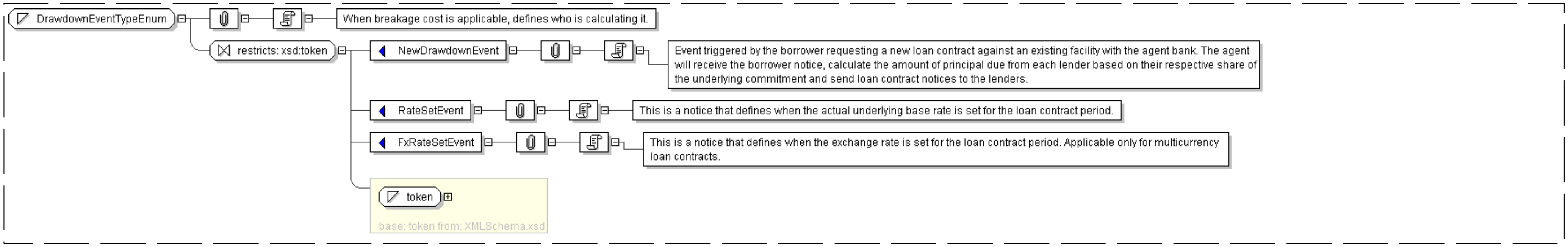
Simple Type: DrawdownEventTypeEnum

Super-types:	xsd:token < **DrawdownEventTypeEnum** (by restriction)
Sub-types:	None

Name	DrawdownEventTypeEnum

Content	• Base XSD Type: token • *value* comes from list: {'NewDrawdownEvent'|'RateSetEvent'|'FxRateSetEvent'}
Documentation	When breakage cost is applicable, defines who is calculating it.

Diagram



Schema Component Representation

```
<xsd:simpleType name="DrawdownEventTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="NewDrawdownEvent"/>
      <xsd:enumeration value="RateSetEvent"/>
      <xsd:enumeration value="FxRateSetEvent"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: ElectricityProductTypeEnum

Super-types:	xsd:token < **ElectricityProductTypeEnum** (by restriction)
Sub-types:	None

Name	ElectricityProductTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Electricity'}
Documentation	The type of electricity product.

Diagram

Schema Component Representation

```
<xsd:simpleType name="ElectricityProductTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Electricity"/>
   </xsd:restriction>
</xsd:simpleType>
```

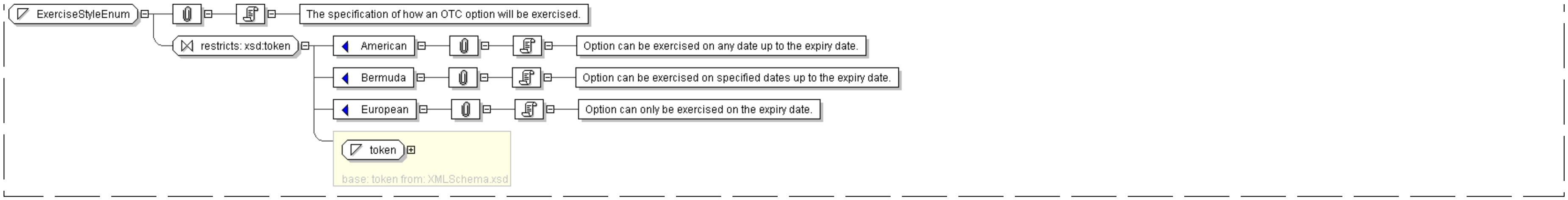
top

Simple Type: ExerciseStyleEnum

Super-types:	xsd:token < **ExerciseStyleEnum** (by restriction)
Sub-types:	None

Name	ExerciseStyleEnum
Content	• Base XSD Type: token • *value* comes from list: {'American'|'Bermuda'|'European'}
Documentation	The specification of how an OTC option will be exercised.

Diagram



Schema Component Representation

```
<xsd:simpleType name="ExerciseStyleEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="American"/>
      <xsd:enumeration value="Bermuda"/>
      <xsd:enumeration value="European"/>
   </xsd:restriction>
</xsd:simpleType>
```

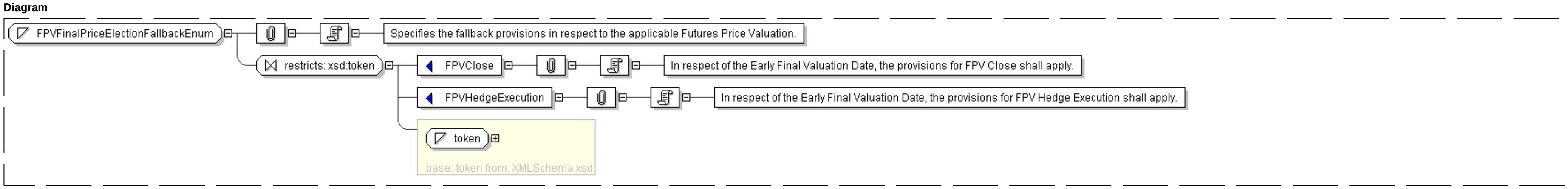
top

Simple Type: FPVFinalPriceElectionFallbackEnum

Super-types:	xsd:token < **FPVFinalPriceElectionFallbackEnum** (by restriction)
Sub-types:	None

Name	FPVFinalPriceElectionFallbackEnum
Content	• Base XSD Type: token • *value* comes from list: {'FPVClose'|'FPVHedgeExecution'}
Documentation	Specifies the fallback provisions in respect to the applicable Futures Price Valuation.

Diagram



Schema Component Representation

```
<xsd:simpleType name="FPVFinalPriceElectionFallbackEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="FPVClose"/>
      <xsd:enumeration value="FPVHedgeExecution"/>
   </xsd:restriction>
</xsd:simpleType>
```

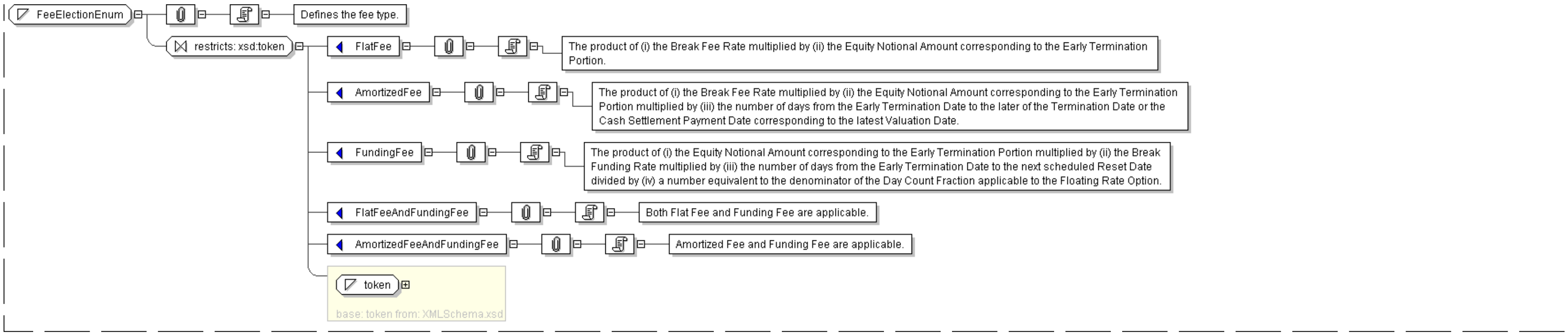
top

Simple Type: FeeElectionEnum

Super-types:	xsd:token < **FeeElectionEnum** (by restriction)
Sub-types:	None

Name	FeeElectionEnum
Content	• Base XSD Type: token • *value* comes from list: {'FlatFee'|'AmortizedFee'|'FundingFee'|'FlatFeeAndFundingFee'|'AmortizedFeeAndFundingFee'}
Documentation	Defines the fee type.

Diagram



Schema Component Representation

```
<xsd:simpleType name="FeeElectionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="FlatFee"/>
      <xsd:enumeration value="AmortizedFee"/>
      <xsd:enumeration value="FundingFee"/>
      <xsd:enumeration value="FlatFeeAndFundingFee"/>
      <xsd:enumeration value="AmortizedFeeAndFundingFee"/>
   </xsd:restriction>
</xsd:simpleType>
```

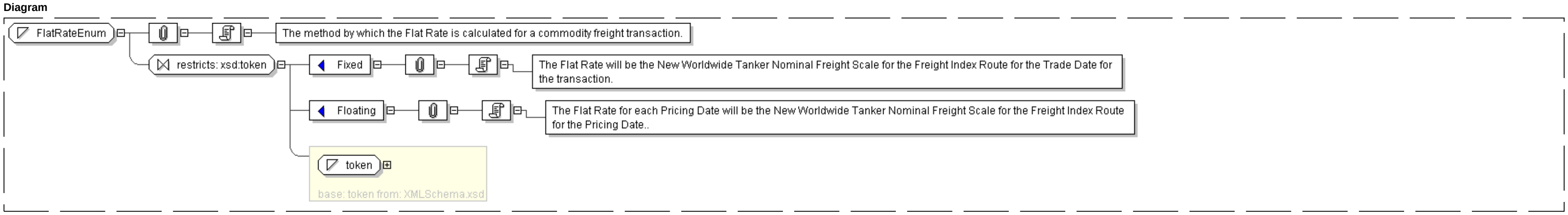
top

Simple Type: FlatRateEnum

Super-types:	xsd:token < **FlatRateEnum** (by restriction)
Sub-types:	None

Name	FlatRateEnum
Content	• Base XSD Type: token • *value* comes from list: {'Fixed'|'Floating'}
Documentation	The method by which the Flat Rate is calculated for a commodity freight transaction.

Diagram



Schema Component Representation

```
<xsd:simpleType name="FlatRateEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Fixed"/>
      <xsd:enumeration value="Floating"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: FraDiscountingEnum

Super-types:	xsd:token < **FraDiscountingEnum** (by restriction)
Sub-types:	None

Name	FraDiscountingEnum
Content	• Base XSD Type: token • *value* comes from list: {'ISDA'|'AFMA'|'NONE'}
Documentation	The method of FRA discounting, if any, that will apply.

Diagram

Schema Component Representation

```
<xsd:simpleType name="FraDiscountingEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="ISDA"/>
      <xsd:enumeration value="AFMA"/>
      <xsd:enumeration value="NONE"/>
   </xsd:restriction>
</xsd:simpleType>
```

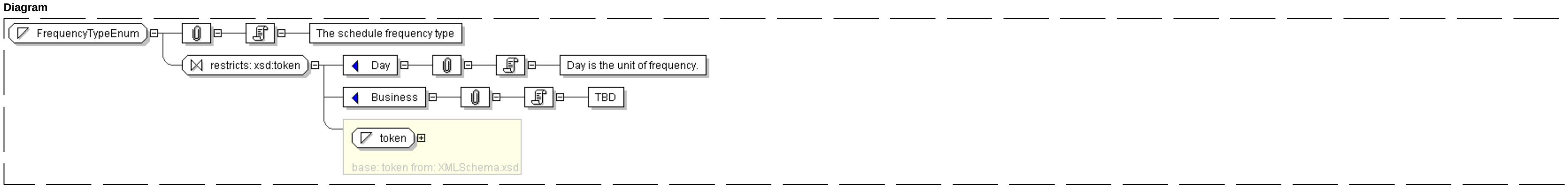
top

Simple Type: FrequencyTypeEnum

Super-types:	xsd:token < **FrequencyTypeEnum** (by restriction)
Sub-types:	None

Name	FrequencyTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Day'|'Business'}
Documentation	The schedule frequency type

Diagram



Schema Component Representation

```
<xsd:simpleType name="FrequencyTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Day"/>
      <xsd:enumeration value="Business"/>
   </xsd:restriction>
</xsd:simpleType>
```

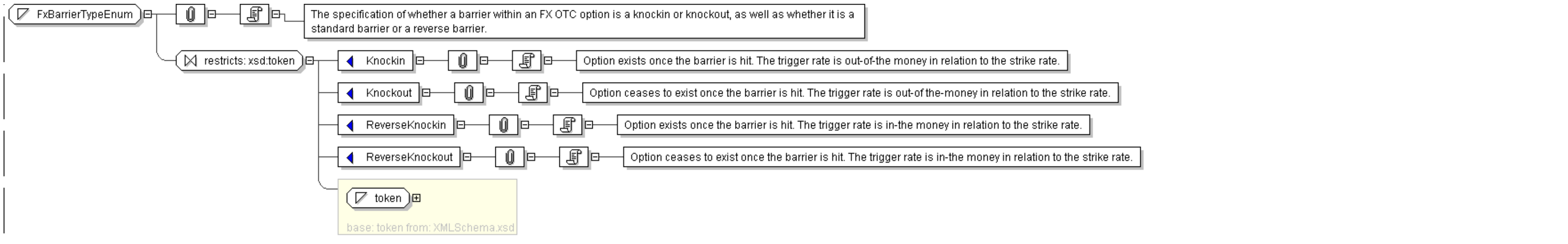
top

Simple Type: FxBarrierTypeEnum

Super-types:	xsd:token < **FxBarrierTypeEnum** (by restriction)
Sub-types:	None

Name	FxBarrierTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Knockin'|'Knockout'|'ReverseKnockin'|'ReverseKnockout'}
Documentation	The specification of whether a barrier within an FX OTC option is a knockin or knockout, as well as whether it is a standard barrier or a reverse barrier.

Diagram



Schema Component Representation

```
<xsd:simpleType name="FxBarrierTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Knockin"/>
      <xsd:enumeration value="Knockout"/>
      <xsd:enumeration value="ReverseKnockin"/>
      <xsd:enumeration value="ReverseKnockout"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: GasProductTypeEnum

Super-types:	xsd:token < **GasProductTypeEnum** (by restriction)
Sub-types:	None

Name	GasProductTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'NaturalGas'}
Documentation	The type of gas product.

Diagram

Schema Component Representation

```
<xsd:simpleType name="GasProductTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="NaturalGas"/>
   </xsd:restriction>
</xsd:simpleType>
```

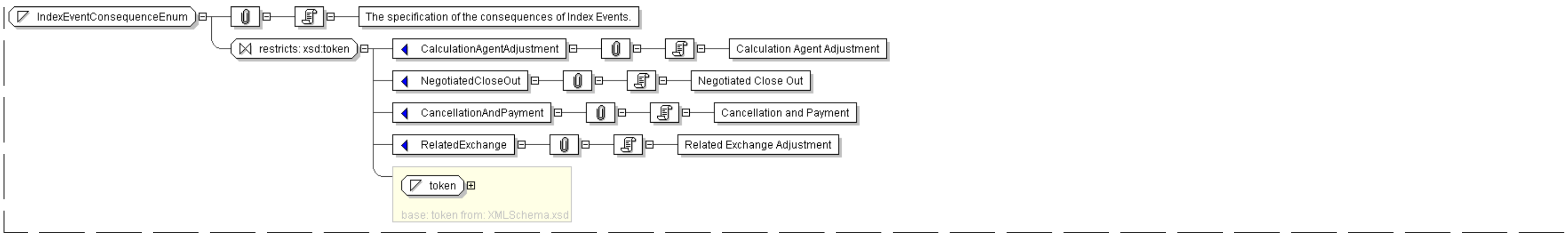
top

Simple Type: IndexEventConsequenceEnum

Super-types:	xsd:token < **IndexEventConsequenceEnum** (by restriction)
Sub-types:	None

Name	IndexEventConsequenceEnum
Content	• Base XSD Type: token • *value* comes from list: {'CalculationAgentAdjustment'|'NegotiatedCloseOut'|'CancellationAndPayment'|'RelatedExchange'}
Documentation	The specification of the consequences of Index Events.

Diagram



Schema Component Representation

```
<xsd:simpleType name="IndexEventConsequenceEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="CalculationAgentAdjustment"/>
      <xsd:enumeration value="NegotiatedCloseOut"/>
      <xsd:enumeration value="CancellationAndPayment"/>
      <xsd:enumeration value="RelatedExchange"/>
   </xsd:restriction>
</xsd:simpleType>
```

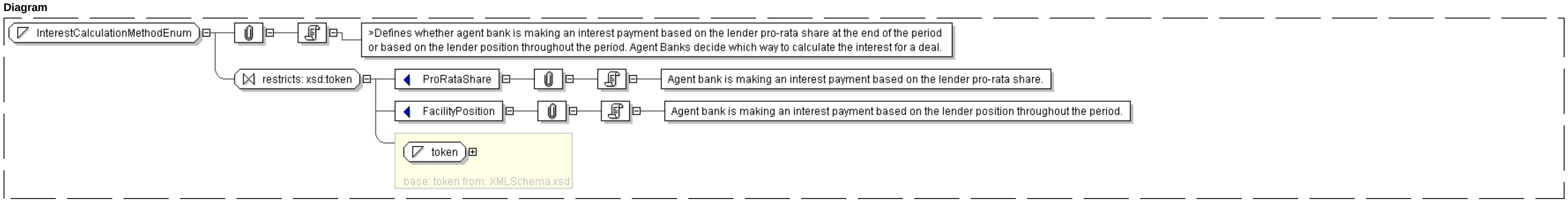
top

Simple Type: InterestCalculationMethodEnum

Super-types:	xsd:token < **InterestCalculationMethodEnum** (by restriction)
Sub-types:	None

Name	InterestCalculationMethodEnum
Content	• Base XSD Type: token • *value* comes from list: {'ProRataShare'|'FacilityPosition'}
Documentation	>Defines whether agent bank is making an interest payment based on the lender pro-rata share at the end of the period or based on the lender position throughout the period. Agent Banks decide which way to calculate the interest for a deal.

Diagram



Schema Component Representation

```
<xsd:simpleType name="InterestCalculationMethodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="ProRataShare"/>
      <xsd:enumeration value="FacilityPosition"/>
   </xsd:restriction>
</xsd:simpleType>
```

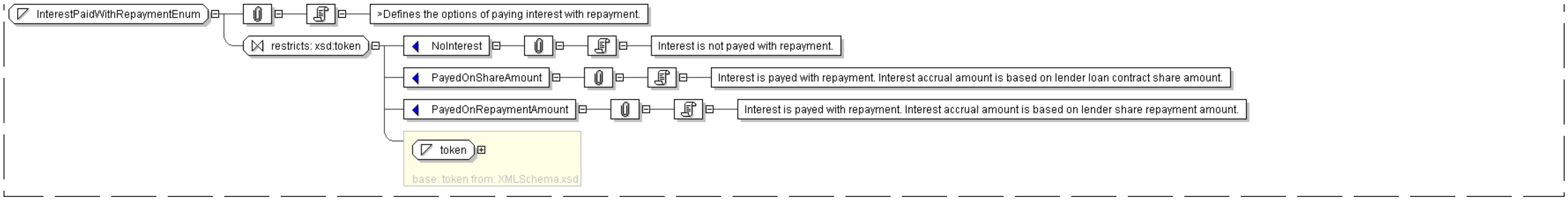
top

Simple Type: InterestPaidWithRepaymentEnum

Super-types:	xsd:token < **InterestPaidWithRepaymentEnum** (by restriction)
Sub-types:	None

Name	InterestPaidWithRepaymentEnum
Content	• Base XSD Type: token • *value* comes from list: {'NoInterest'|'PayedOnShareAmount'|'PayedOnRepaymentAmount'}
Documentation	>Defines the options of paying interest with repayment.

Diagram



Schema Component Representation

```
<xsd:simpleType name="InterestPaidWithRepaymentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="NoInterest"/>
      <xsd:enumeration value="PayedOnShareAmount"/>
      <xsd:enumeration value="PayedOnRepaymentAmount"/>
   </xsd:restriction>
</xsd:simpleType>
```

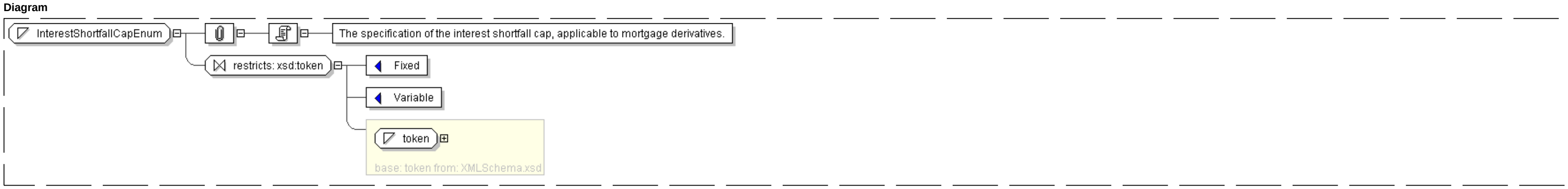
top

Simple Type: InterestShortfallCapEnum

Super-types:	xsd:token < **InterestShortfallCapEnum** (by restriction)
Sub-types:	None

Name	InterestShortfallCapEnum
Content	• Base XSD Type: token • *value* comes from list: {'Fixed'|'Variable'}
Documentation	The specification of the interest shortfall cap, applicable to mortgage derivatives.

Diagram



Schema Component Representation

```
<xsd:simpleType name="InterestShortfallCapEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Fixed"/>
      <xsd:enumeration value="Variable"/>
   </xsd:restriction>
</xsd:simpleType>
```

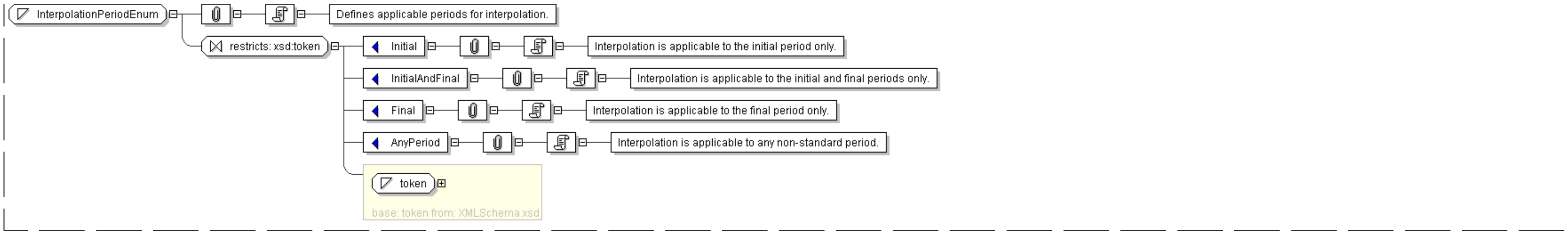
top

Simple Type: InterpolationPeriodEnum

Super-types:	xsd:token < **InterpolationPeriodEnum** (by restriction)
Sub-types:	None

Name	InterpolationPeriodEnum
Content	• Base XSD Type: token • *value* comes from list: {'Initial'|'InitialAndFinal'|'Final'|'AnyPeriod'}
Documentation	Defines applicable periods for interpolation.

Diagram



Schema Component Representation

```
<xsd:simpleType name="InterpolationPeriodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Initial"/>
      <xsd:enumeration value="InitialAndFinal"/>
      <xsd:enumeration value="Final"/>
      <xsd:enumeration value="AnyPeriod"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: LcPurposeEnum

Super-types:	xsd:token < **LcPurposeEnum** (by restriction)
Sub-types:	None

Name	LcPurposeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Financial'|'Performance'}
Documentation	Defines the purpose of a Letter of Credit.

Diagram

Schema Component Representation

```
<xsd:simpleType name="LcPurposeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Financial"/>
      <xsd:enumeration value="Performance"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: LcTypeEnum

Super-types:	xsd:token < **LcTypeEnum** (by restriction)
Sub-types:	None

Name	LcTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Standby'|'Commercial'}
Documentation	Defines the type of a Letter of Credit.

Diagram

Schema Component Representation

```
<xsd:simpleType name="LcTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Standby"/>
      <xsd:enumeration value="Commercial"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: LengthUnitEnum

Super-types:	xsd:token < **LengthUnitEnum** (by restriction)
Sub-types:	None

Name	LengthUnitEnum
Content	• Base XSD Type: token • *value* comes from list: {'Pages'|'TimeUnit'}
Documentation	Used for indicating the length unit in the Resource type.

Diagram

Schema Component Representation

```
<xsd:simpleType name="LengthUnitEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Pages"/>
      <xsd:enumeration value="TimeUnit"/>
   </xsd:restriction>
</xsd:simpleType>
```

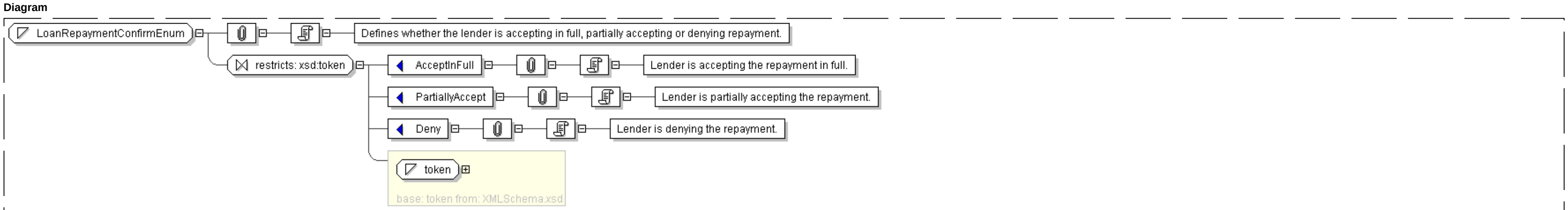
top

Simple Type: LoanRepaymentConfirmEnum

Super-types:	xsd:token < **LoanRepaymentConfirmEnum** (by restriction)
Sub-types:	None

Name	LoanRepaymentConfirmEnum
Content	• Base XSD Type: token • *value* comes from list: {'AcceptInFull'|'PartiallyAccept'|'Deny'}
Documentation	Defines whether the lender is accepting in full, partially accepting or denying repayment.

Diagram



Schema Component Representation

```
<xsd:simpleType name="LoanRepaymentConfirmEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="AcceptInFull"/>
      <xsd:enumeration value="PartiallyAccept"/>
      <xsd:enumeration value="Deny"/>
   </xsd:restriction>
</xsd:simpleType>
```

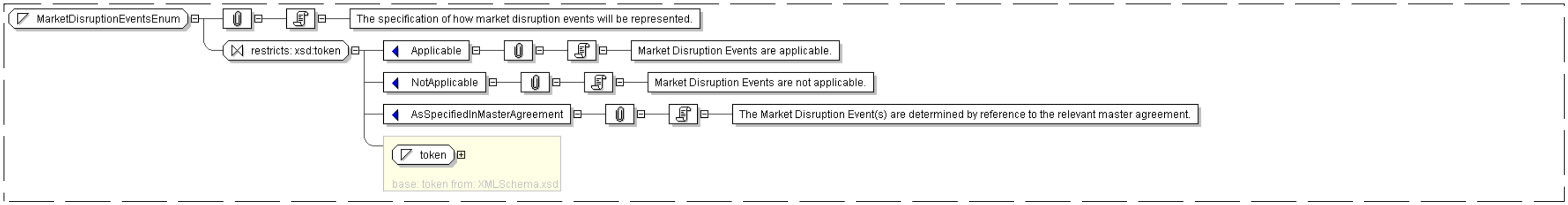
top

Simple Type: MarketDisruptionEventsEnum

Super-types:	xsd:token < **MarketDisruptionEventsEnum** (by restriction)
Sub-types:	None

Name	MarketDisruptionEventsEnum
Content	• Base XSD Type: token • *value* comes from list: {'Applicable'|'NotApplicable'|'AsSpecifiedInMasterAgreement'}
Documentation	The specification of how market disruption events will be represented.

Diagram



Schema Component Representation

```
<xsd:simpleType name="MarketDisruptionEventsEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Applicable"/>
      <xsd:enumeration value="NotApplicable"/>
      <xsd:enumeration value="AsSpecifiedInMasterAgreement"/>
   </xsd:restriction>
</xsd:simpleType>
```

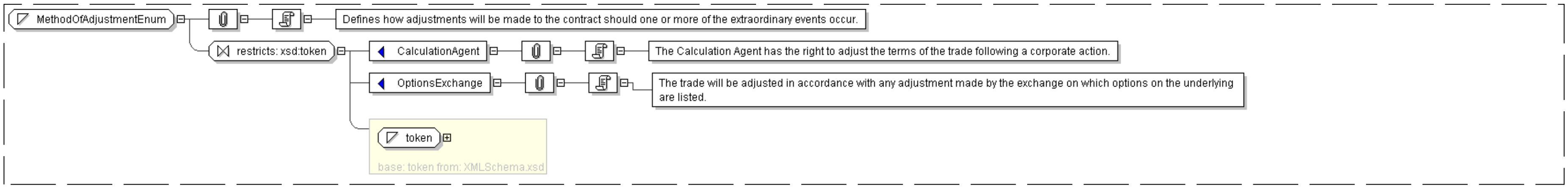
top

Simple Type: MethodOfAdjustmentEnum

Super-types:	xsd:token < **MethodOfAdjustmentEnum** (by restriction)
Sub-types:	None

Name	MethodOfAdjustmentEnum
Content	• Base XSD Type: token • *value* comes from list: {'CalculationAgent'|'OptionsExchange'}
Documentation	Defines how adjustments will be made to the contract should one or more of the extraordinary events occur.

Diagram



Schema Component Representation

```
<xsd:simpleType name="MethodOfAdjustmentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="CalculationAgent"/>
      <xsd:enumeration value="OptionsExchange"/>
   </xsd:restriction>
</xsd:simpleType>
```

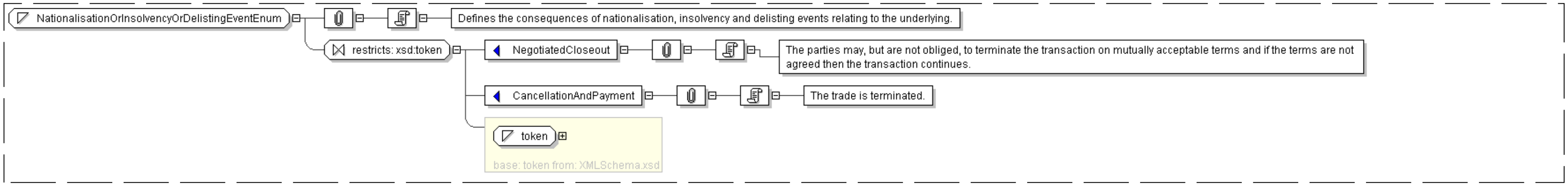
top

Simple Type: NationalisationOrInsolvencyOrDelistingEventEnum

Super-types:	xsd:token < **NationalisationOrInsolvencyOrDelistingEventEnum** (by restriction)
Sub-types:	None

Name	NationalisationOrInsolvencyOrDelistingEventEnum
Content	• Base XSD Type: token • *value* comes from list: {'NegotiatedCloseout'|'CancellationAndPayment'}
Documentation	Defines the consequences of nationalisation, insolvency and delisting events relating to the underlying.

Diagram



Schema Component Representation

```
<xsd:simpleType name="NationalisationOrInsolvencyOrDelistingEventEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="NegotiatedCloseout"/>
      <xsd:enumeration value="CancellationAndPayment"/>
   </xsd:restriction>
</xsd:simpleType>
```

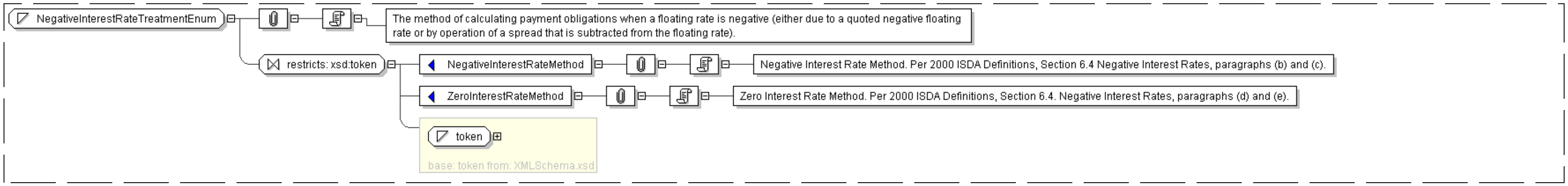
top

Simple Type: NegativeInterestRateTreatmentEnum

Super-types:	xsd:token < **NegativeInterestRateTreatmentEnum** (by restriction)
Sub-types:	None

Name	NegativeInterestRateTreatmentEnum
Content	• Base XSD Type: token • *value* comes from list: {'NegativeInterestRateMethod'|'ZeroInterestRateMethod'}
Documentation	The method of calculating payment obligations when a floating rate is negative (either due to a quoted negative floating rate or by operation of a spread that is subtracted from the floating rate).

Diagram



Schema Component Representation

```
<xsd:simpleType name="NegativeInterestRateTreatmentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="NegativeInterestRateMethod"/>
      <xsd:enumeration value="ZeroInterestRateMethod"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

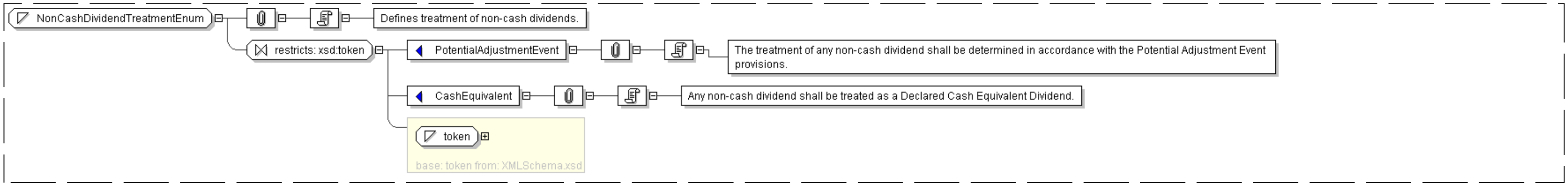
Simple Type: NonCashDividendTreatmentEnum

Super-types:	xsd:token < **NonCashDividendTreatmentEnum** (by restriction)
Sub-types:	None

Name	NonCashDividendTreatmentEnum

Content	• Base XSD Type: token • *value* comes from list: {'PotentialAdjustmentEvent'|'CashEquivalent'}
Documentation	Defines treatment of non-cash dividends.

Diagram



Schema Component Representation

```
<xsd:simpleType name="NonCashDividendTreatmentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="PotentialAdjustmentEvent"/>
      <xsd:enumeration value="CashEquivalent"/>
   </xsd:restriction>
</xsd:simpleType>
```

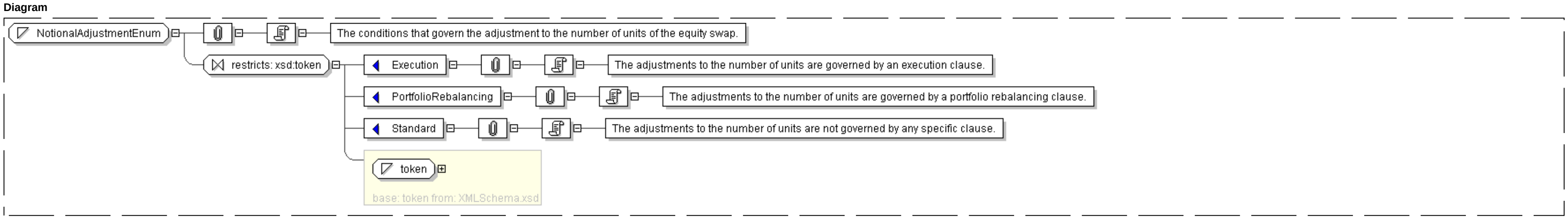
top

Simple Type: NotionalAdjustmentEnum

Super-types:	xsd:token < **NotionalAdjustmentEnum** (by restriction)
Sub-types:	None

Name	NotionalAdjustmentEnum
Content	• Base XSD Type: token • *value* comes from list: {'Execution'|'PortfolioRebalancing'|'Standard'}
Documentation	The conditions that govern the adjustment to the number of units of the equity swap.

Diagram



Schema Component Representation

```
<xsd:simpleType name="NotionalAdjustmentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Execution"/>
      <xsd:enumeration value="PortfolioRebalancing"/>
      <xsd:enumeration value="Standard"/>
   </xsd:restriction>
</xsd:simpleType>
```

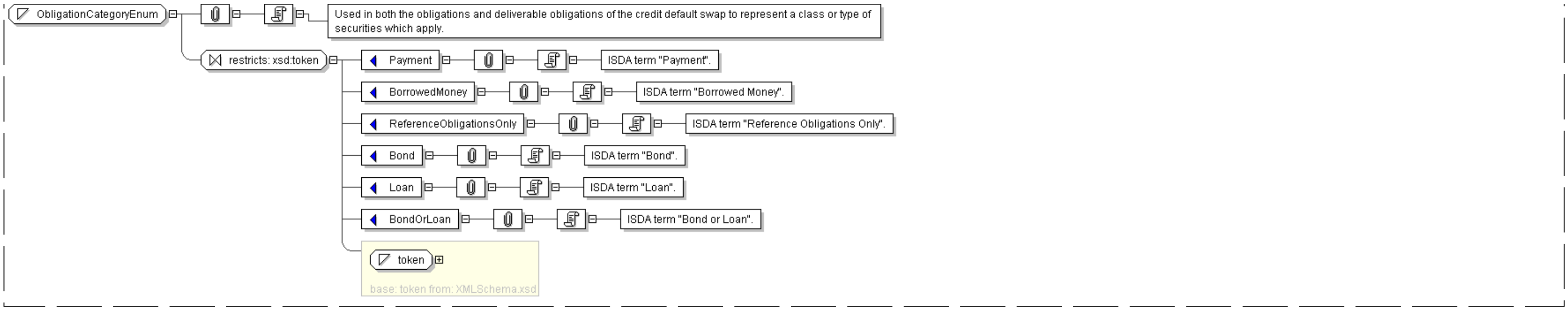
top

Simple Type: ObligationCategoryEnum

Super-types:	xsd:token < **ObligationCategoryEnum** (by restriction)
Sub-types:	None

Name	ObligationCategoryEnum
Content	• Base XSD Type: token • *value* comes from list: {'Payment'|'BorrowedMoney'|'ReferenceObligationsOnly'|'Bond'|'Loan'|'BondOrLoan'}
Documentation	Used in both the obligations and deliverable obligations of the credit default swap to represent a class or type of securities which apply.

Diagram



Schema Component Representation

```
<xsd:simpleType name="ObligationCategoryEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Payment"/>
      <xsd:enumeration value="BorrowedMoney"/>
      <xsd:enumeration value="ReferenceObligationsOnly"/>
      <xsd:enumeration value="Bond"/>
      <xsd:enumeration value="Loan"/>
      <xsd:enumeration value="BondOrLoan"/>
   </xsd:restriction>
</xsd:simpleType>
```

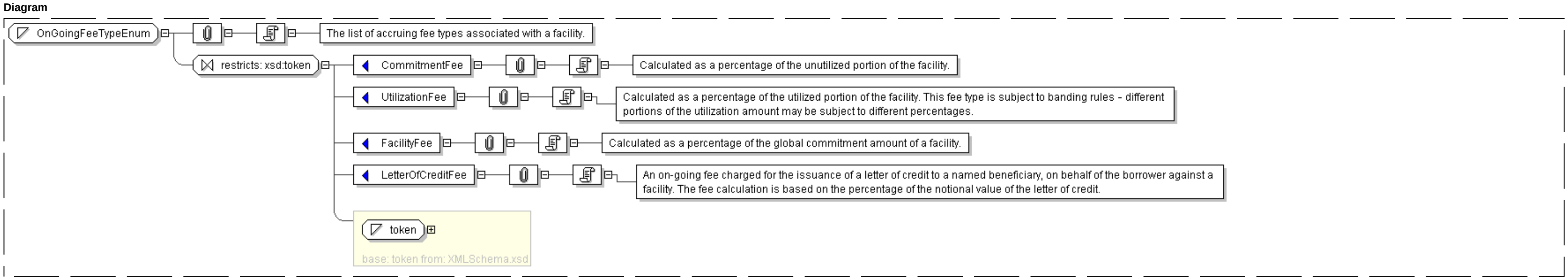
top

Simple Type: OnGoingFeeTypeEnum

Super-types:	xsd:token < **OnGoingFeeTypeEnum** (by restriction)
Sub-types:	None

Name	OnGoingFeeTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'CommitmentFee'|'UtilizationFee'|'FacilityFee'|'LetterOfCreditFee'}
Documentation	The list of accruing fee types associated with a facility.

Diagram



Schema Component Representation

```
<xsd:simpleType name="OnGoingFeeTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="CommitmentFee"/>
      <xsd:enumeration value="UtilizationFee"/>
      <xsd:enumeration value="FacilityFee"/>
      <xsd:enumeration value="LetterOfCreditFee"/>
   </xsd:restriction>
</xsd:simpleType>
```

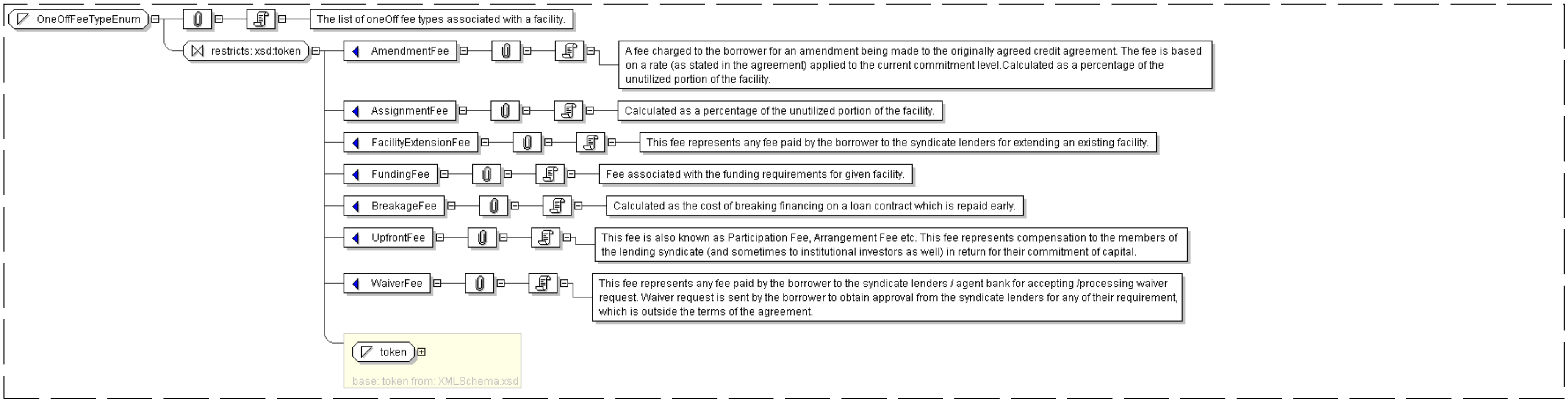
top

Simple Type: OneOffFeeTypeEnum

Super-types:	xsd:token < **OneOffFeeTypeEnum** (by restriction)
Sub-types:	None

Name	OneOffFeeTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'AmendmentFee'|'AssignmentFee'|'FacilityExtensionFee'|'FundingFee'|'BreakageFee'|'UpfrontFee'|'WaiverFee'}
Documentation	The list of oneOff fee types associated with a facility.

Diagram



Schema Component Representation

```
<xsd:simpleType name="OneOffFeeTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="AmendmentFee"/>
      <xsd:enumeration value="AssignmentFee"/>
      <xsd:enumeration value="FacilityExtensionFee"/>
      <xsd:enumeration value="FundingFee"/>
      <xsd:enumeration value="BreakageFee"/>
      <xsd:enumeration value="UpfrontFee"/>
      <xsd:enumeration value="WaiverFee"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: OptionTypeEnum

Super-types:	None
Sub-types:	None

Name	OptionTypeEnum

Content	• Union of following types:
	  ◦ PutCallEnum
	  ◦ Locally defined type:
	    ▪ Base XSD Type: token
	    ▪ *value* comes from list: {'Forward'|'Payer'|'Receiver'|'Straddle'}

Documentation	Specifies the type of the option.

Diagram

Schema Component Representation

```
<xsd:simpleType name="OptionTypeEnum">
   <xsd:union memberTypes=" PutCallEnum ">
      <xsd:simpleType>
         <xsd:restriction base=" xsd:token ">
            <xsd:enumeration value="Forward" deprecated="true" deprecatedReason="The optionType is to
            be used if the underlyer does not carry any mention of the resulting trade direction."/>
            <xsd:enumeration value="Payer"/>
            <xsd:enumeration value="Receiver"/>
            <xsd:enumeration value="Straddle"/>
         </xsd:restriction>
      </xsd:simpleType>
```

```
   </xsd:union>
</xsd:simpleType>
```

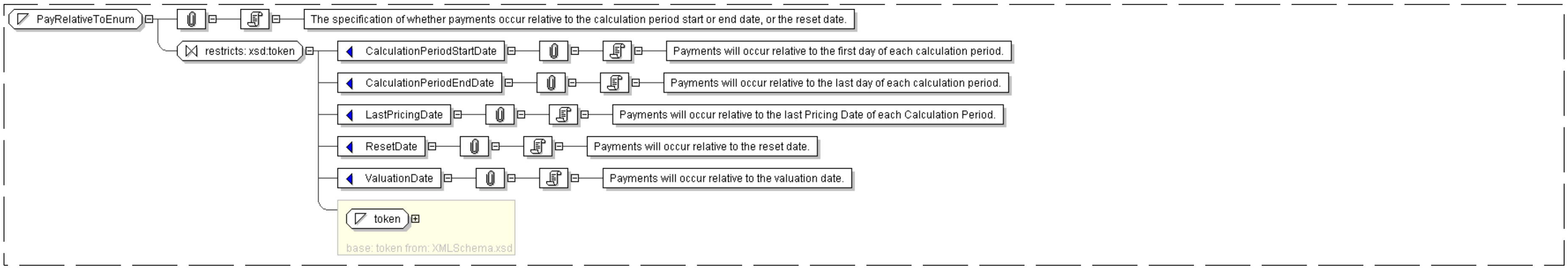
top

Simple Type: PayRelativeToEnum

Super-types:	xsd:token < **PayRelativeToEnum** (by restriction)
Sub-types:	None

Name	PayRelativeToEnum
Content	• Base XSD Type: token • *value* comes from list: {'CalculationPeriodStartDate'|'CalculationPeriodEndDate'|'LastPricingDate'|'ResetDate'|'ValuationDate'}
Documentation	The specification of whether payments occur relative to the calculation period start or end date, or the reset date.

Diagram



Schema Component Representation

```
<xsd:simpleType name="PayRelativeToEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="CalculationPeriodStartDate"/>
      <xsd:enumeration value="CalculationPeriodEndDate"/>
      <xsd:enumeration value="LastPricingDate"/>
      <xsd:enumeration value="ResetDate"/>
      <xsd:enumeration value="ValuationDate"/>
   </xsd:restriction>
</xsd:simpleType>
```

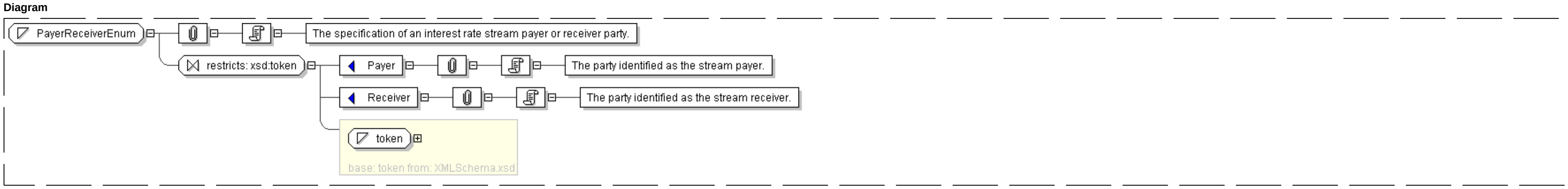
top

Simple Type: PayerReceiverEnum

Super-types:	xsd:token < **PayerReceiverEnum** (by restriction)
Sub-types:	None

Name	PayerReceiverEnum
Content	• Base XSD Type: token • *value* comes from list: {'Payer'|'Receiver'}
Documentation	The specification of an interest rate stream payer or receiver party.

Diagram



Schema Component Representation

```
<xsd:simpleType name="PayerReceiverEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Payer"/>
      <xsd:enumeration value="Receiver"/>
   </xsd:restriction>
</xsd:simpleType>
```

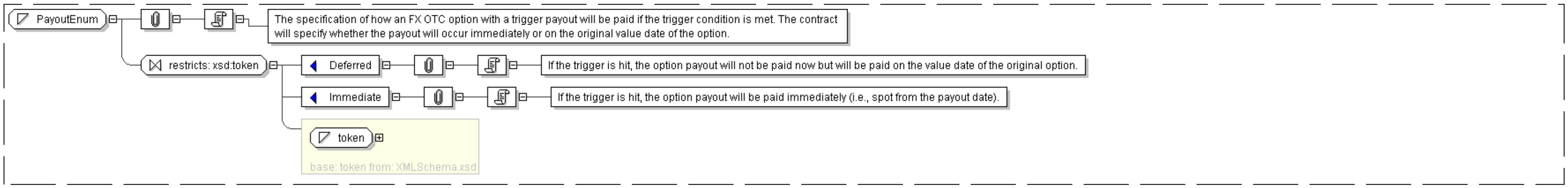
top

Simple Type: PayoutEnum

Super-types:	xsd:token < **PayoutEnum** (by restriction)
Sub-types:	None

Name	PayoutEnum
Content	• Base XSD Type: token • *value* comes from list: {'Deferred'|'Immediate'}
Documentation	The specification of how an FX OTC option with a trigger payout will be paid if the trigger condition is met. The contract will specify whether the payout will occur immediately or on the original value date of the option.

Diagram



Schema Component Representation

```
<xsd:simpleType name="PayoutEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Deferred"/>
      <xsd:enumeration value="Immediate"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: PeriodEnum

Super-types:	xsd:token < **PeriodEnum** (by restriction)
Sub-types:	None

Name	PeriodEnum
Content	• Base XSD Type: token • *value* comes from list: {'D'|'W'|'M'|'Y'}
Documentation	The specification of a time period

Diagram

Schema Component Representation

```
<xsd:simpleType name="PeriodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="D"/>
      <xsd:enumeration value="W"/>
      <xsd:enumeration value="M"/>
      <xsd:enumeration value="Y"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: PeriodExtendedEnum

Super-types:	None
Sub-types:	None

Name	PeriodExtendedEnum
Content	• Union of following types: ◦ [PeriodEnum] ◦ Locally defined type: ▪ Base XSD Type: token ▪ *value* comes from list: {'T'}
Documentation	The specification of a time period containing additional values such as Term.

Diagram

Schema Component Representation

```
<xsd:simpleType name="PeriodExtendedEnum">
   <xsd:union memberTypes=" PeriodEnum ">
      <xsd:simpleType>
         <xsd:restriction base=" xsd:token ">
            <xsd:enumeration value="T"/>
         </xsd:restriction>
      </xsd:simpleType>
   </xsd:union>
</xsd:simpleType>
```

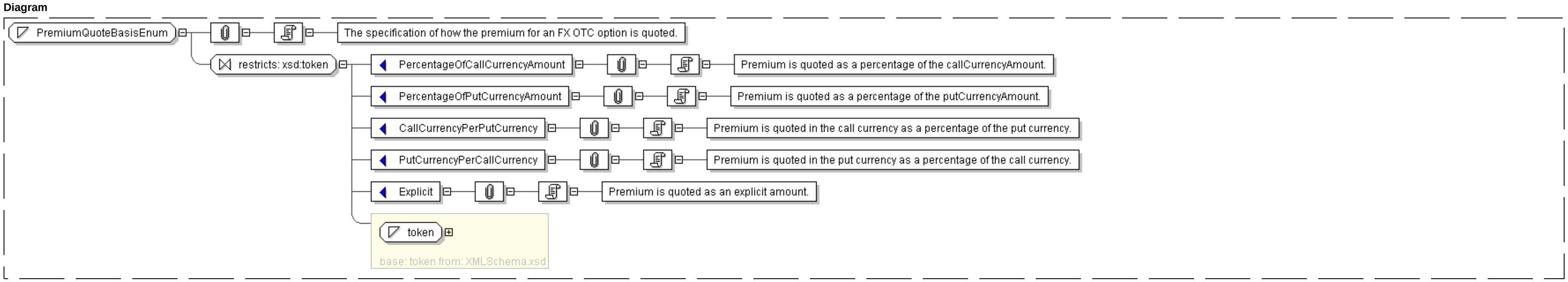
[top]

Simple Type: PremiumQuoteBasisEnum

Super-types:	[xsd]:token < **PremiumQuoteBasisEnum** (by restriction)
Sub-types:	None

Name	PremiumQuoteBasisEnum
Content	• Base XSD Type: token • *value* comes from list: {'PercentageOfCallCurrencyAmount'|'PercentageOfPutCurrencyAmount'|'CallCurrencyPerPutCurrency'|'PutCurrencyPerCallCurrency'|'Explicit'}
Documentation	The specification of how the premium for an FX OTC option is quoted.

Diagram



Schema Component Representation

```
<xsd:simpleType name="PremiumQuoteBasisEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="PercentageOfCallCurrencyAmount"/>
      <xsd:enumeration value="PercentageOfPutCurrencyAmount"/>
      <xsd:enumeration value="CallCurrencyPerPutCurrency"/>
      <xsd:enumeration value="PutCurrencyPerCallCurrency"/>
      <xsd:enumeration value="Explicit"/>
   </xsd:restriction>
</xsd:simpleType>
```

[top]

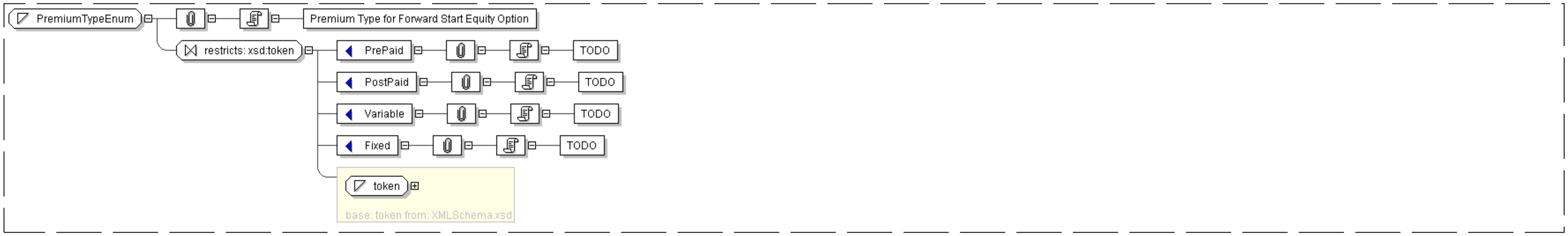
Simple Type: PremiumTypeEnum

Super-types:	[xsd]:token < **PremiumTypeEnum** (by restriction)
Sub-types:	None

Name	PremiumTypeEnum

Content	• Base XSD Type: token • *value* comes from list: {'PrePaid'|'PostPaid'|'Variable'|'Fixed'}
Documentation	Premium Type for Forward Start Equity Option

Diagram



Schema Component Representation

```
<xsd:simpleType name="PremiumTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="PrePaid"/>
      <xsd:enumeration value="PostPaid"/>
      <xsd:enumeration value="Variable"/>
      <xsd:enumeration value="Fixed"/>
   </xsd:restriction>
</xsd:simpleType>
```

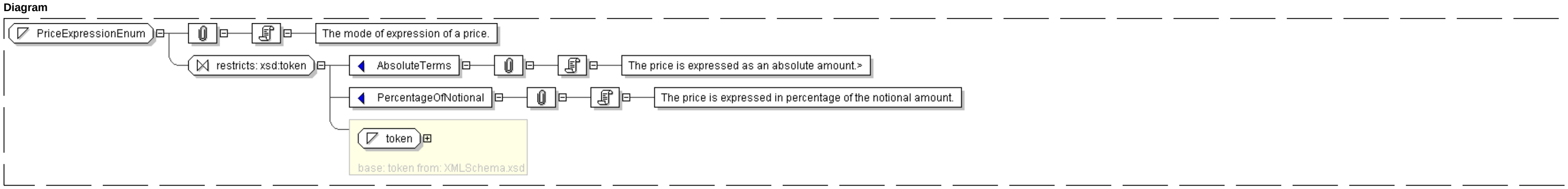
top

Simple Type: PriceExpressionEnum

Super-types:	xsd:token < **PriceExpressionEnum** (by restriction)
Sub-types:	None

Name	PriceExpressionEnum
Content	• Base XSD Type: token • *value* comes from list: {'AbsoluteTerms'|'PercentageOfNotional'}
Documentation	The mode of expression of a price.

Diagram



Schema Component Representation

```
<xsd:simpleType name="PriceExpressionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="AbsoluteTerms"/>
      <xsd:enumeration value="PercentageOfNotional"/>
   </xsd:restriction>
</xsd:simpleType>
```

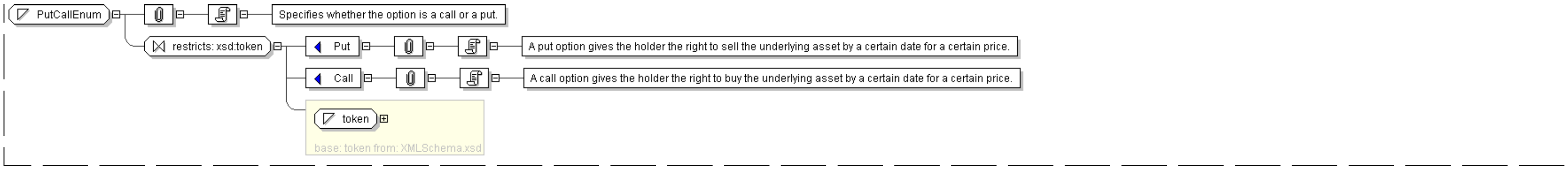
top

Simple Type: PutCallEnum

Super-types:	xsd:token < **PutCallEnum** (by restriction)
Sub-types:	None

Name	PutCallEnum
Content	• Base XSD Type: token • *value* comes from list: {'Put'|'Call'}
Documentation	Specifies whether the option is a call or a put.

Diagram



Schema Component Representation

```
<xsd:simpleType name="PutCallEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Put"/>
      <xsd:enumeration value="Call"/>
   </xsd:restriction>
</xsd:simpleType>
```

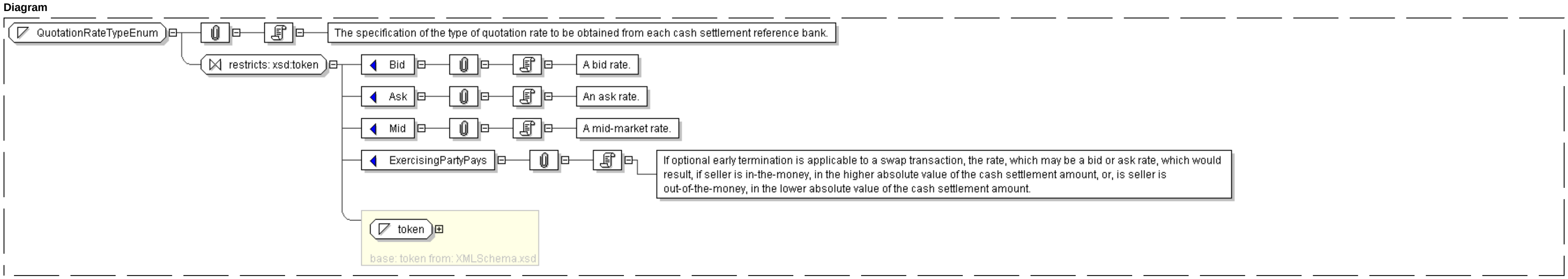
top

Simple Type: QuotationRateTypeEnum

Super-types:	xsd:token < **QuotationRateTypeEnum** (by restriction)
Sub-types:	None

Name	QuotationRateTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Bid'|'Ask'|'Mid'|'ExercisingPartyPays'}
Documentation	The specification of the type of quotation rate to be obtained from each cash settlement reference bank.

Diagram



Schema Component Representation

```
<xsd:simpleType name="QuotationRateTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Bid"/>
      <xsd:enumeration value="Ask"/>
      <xsd:enumeration value="Mid"/>
      <xsd:enumeration value="ExercisingPartyPays"/>
   </xsd:restriction>
</xsd:simpleType>
```

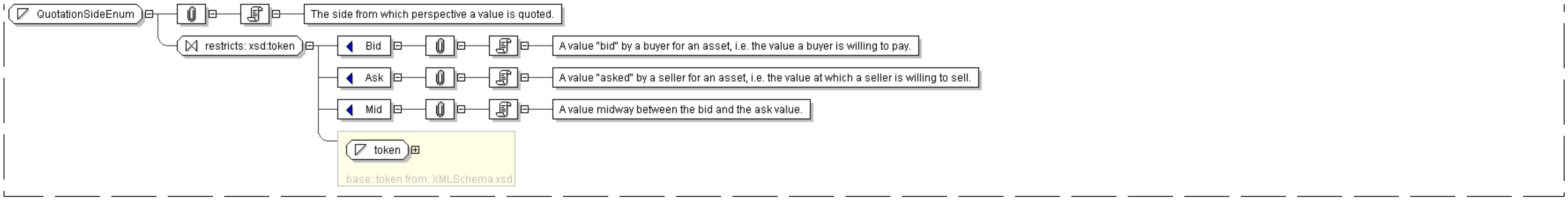
top

Simple Type: QuotationSideEnum

Super-types:	xsd:token < **QuotationSideEnum** (by restriction)
Sub-types:	None

Name	QuotationSideEnum
Content	• Base XSD Type: token • *value* comes from list: {'Bid'|'Ask'|'Mid'}
Documentation	The side from which perspective a value is quoted.

Diagram



Schema Component Representation

```
<xsd:simpleType name="QuotationSideEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Bid"/>
      <xsd:enumeration value="Ask"/>
      <xsd:enumeration value="Mid"/>
   </xsd:restriction>
</xsd:simpleType>
```

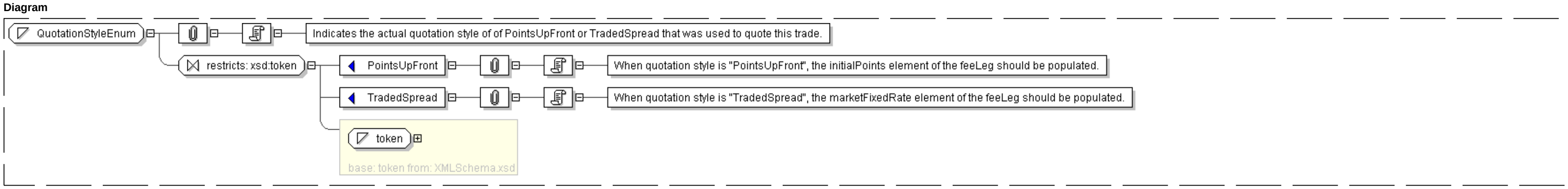
top

Simple Type: QuotationStyleEnum

Super-types:	xsd:token < **QuotationStyleEnum** (by restriction)
Sub-types:	None

Name	QuotationStyleEnum
Content	• Base XSD Type: token • *value* comes from list: {'PointsUpFront'|'TradedSpread'}
Documentation	Indicates the actual quotation style of of PointsUpFront or TradedSpread that was used to quote this trade.

Diagram



Schema Component Representation

```
<xsd:simpleType name="QuotationStyleEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="PointsUpFront"/>
      <xsd:enumeration value="TradedSpread"/>
   </xsd:restriction>
</xsd:simpleType>
```

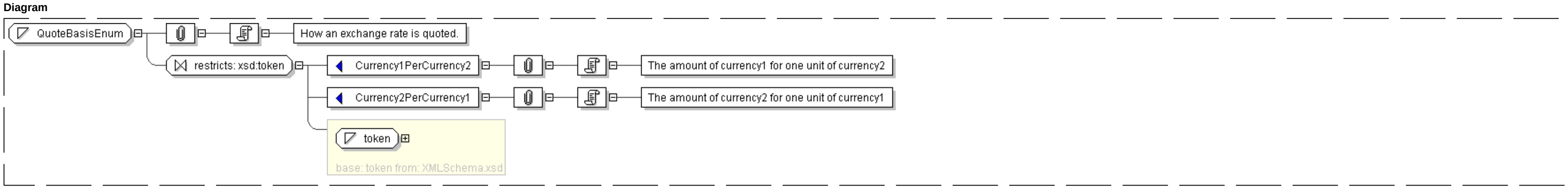
top

Simple Type: QuoteBasisEnum

Super-types:	xsd:token < **QuoteBasisEnum** (by restriction)
Sub-types:	None

Name	QuoteBasisEnum
Content	• Base XSD Type: token • *value* comes from list: {'Currency1PerCurrency2'|'Currency2PerCurrency1'}
Documentation	How an exchange rate is quoted.

Diagram



Schema Component Representation

```
<xsd:simpleType name="QuoteBasisEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Currency1PerCurrency2"/>
      <xsd:enumeration value="Currency2PerCurrency1"/>
   </xsd:restriction>
</xsd:simpleType>
```

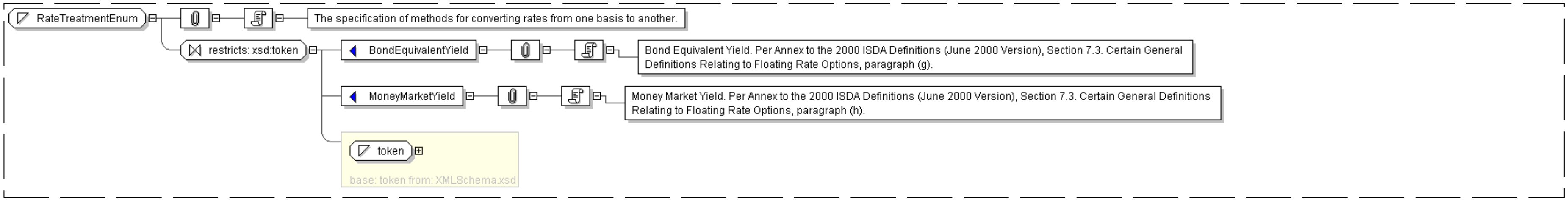
top

Simple Type: RateTreatmentEnum

Super-types:	xsd:token < **RateTreatmentEnum** (by restriction)
Sub-types:	None

Name	RateTreatmentEnum
Content	• Base XSD Type: token • *value* comes from list: {'BondEquivalentYield'|'MoneyMarketYield'}
Documentation	The specification of methods for converting rates from one basis to another.

Diagram



Schema Component Representation

```
<xsd:simpleType name="RateTreatmentEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="BondEquivalentYield"/>
      <xsd:enumeration value="MoneyMarketYield"/>
   </xsd:restriction>
</xsd:simpleType>
```

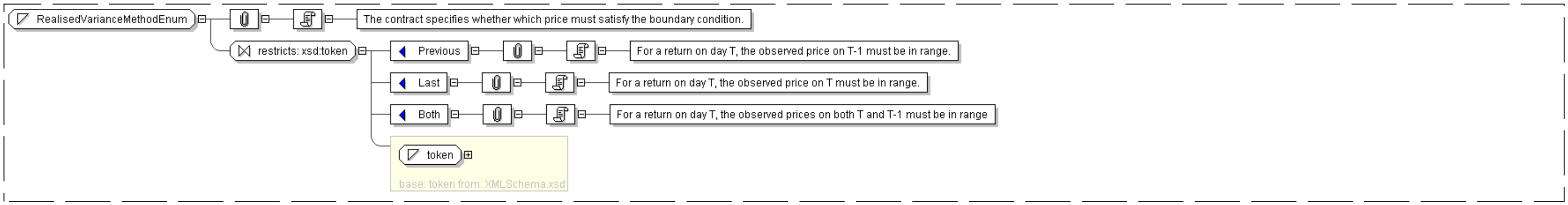
top

Simple Type: RealisedVarianceMethodEnum

Super-types:	xsd:token < **RealisedVarianceMethodEnum** (by restriction)
Sub-types:	None

Name	RealisedVarianceMethodEnum
Content	• Base XSD Type: token • *value* comes from list: {'Previous'|'Last'|'Both'}
Documentation	The contract specifies whether which price must satisfy the boundary condition.

Diagram



Schema Component Representation

```
<xsd:simpleType name="RealisedVarianceMethodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Previous"/>
      <xsd:enumeration value="Last"/>
      <xsd:enumeration value="Both"/>
   </xsd:restriction>
</xsd:simpleType>
```

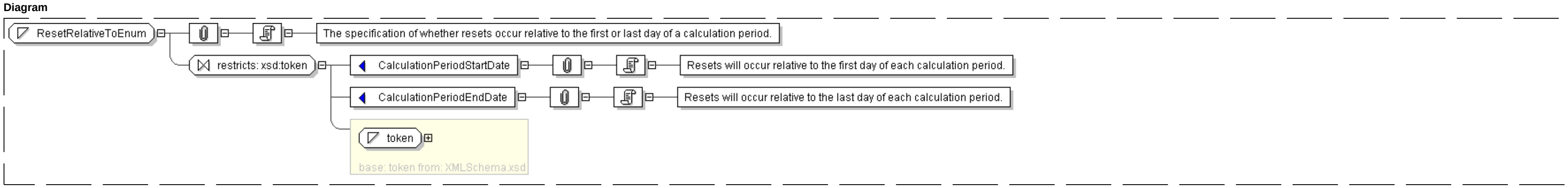
[top](#top)

Simple Type: ResetRelativeToEnum

Super-types:	xsd:token < **ResetRelativeToEnum** (by restriction)
Sub-types:	None

Name	ResetRelativeToEnum
Content	• Base XSD Type: token • *value* comes from list: {'CalculationPeriodStartDate'|'CalculationPeriodEndDate'}
Documentation	The specification of whether resets occur relative to the first or last day of a calculation period.

Diagram



Schema Component Representation

```
<xsd:simpleType name="ResetRelativeToEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="CalculationPeriodStartDate"/>
      <xsd:enumeration value="CalculationPeriodEndDate"/>
   </xsd:restriction>
</xsd:simpleType>
```

[top](#top)

Simple Type: ReturnTypeEnum

Super-types:	xsd:token < **ReturnTypeEnum** (by restriction)
Sub-types:	None

Name	ReturnTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Dividend'|'Price'|'Total'}
Documentation	The type of return associated with the equity swap.

Diagram

Schema Component Representation

```
<xsd:simpleType name="ReturnTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Dividend"/>
      <xsd:enumeration value="Price"/>
      <xsd:enumeration value="Total"/>
   </xsd:restriction>
</xsd:simpleType>
```

[top](#top)

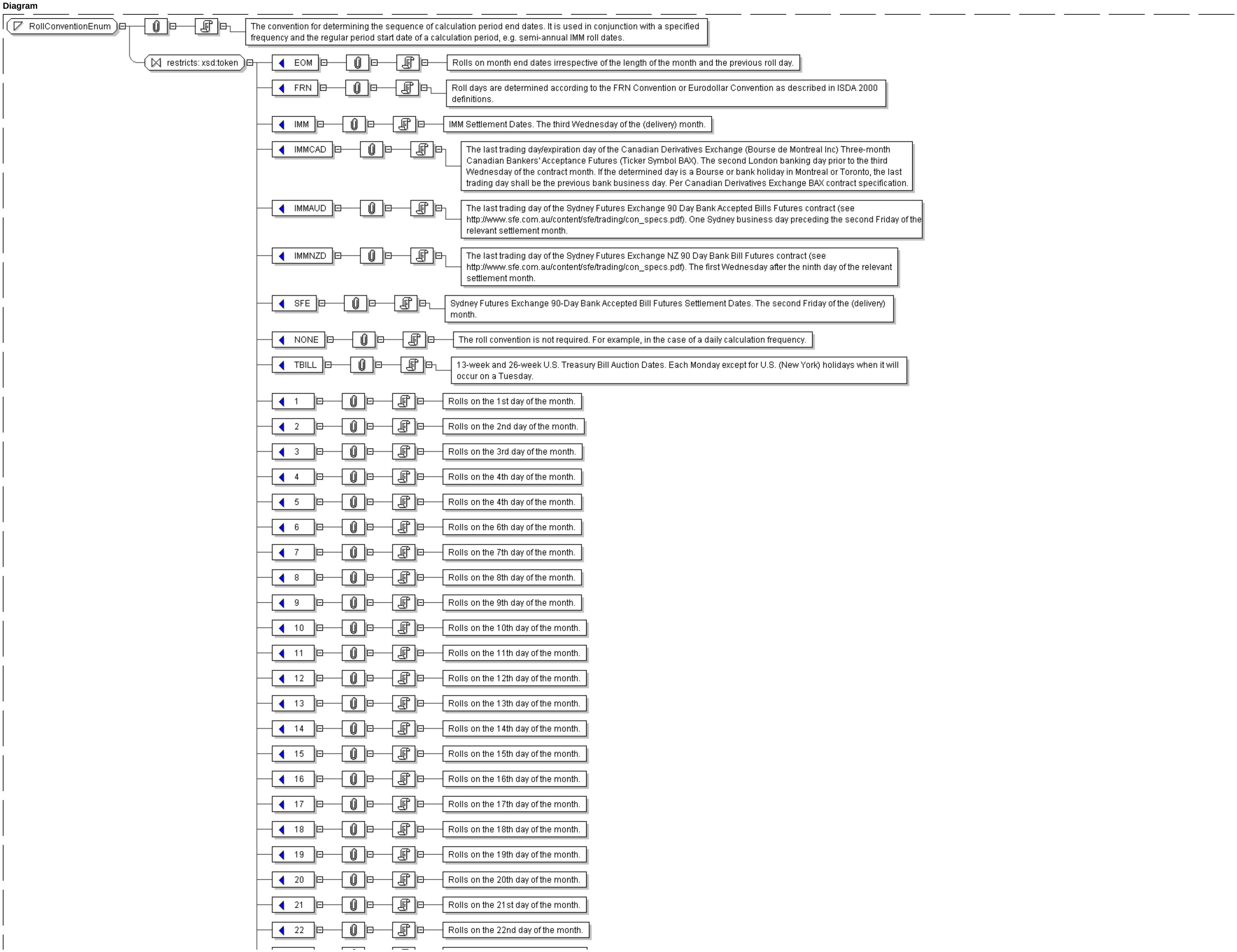
Simple Type: RollConventionEnum

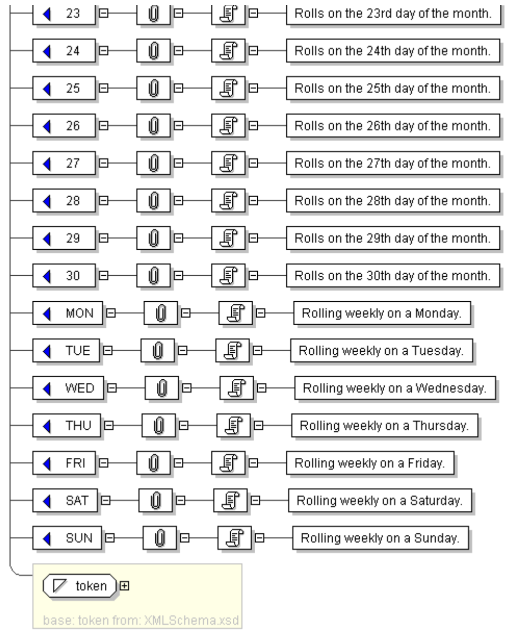
Super-types:	xsd:token < **RollConventionEnum** (by restriction)
Sub-types:	None

Name	RollConventionEnum

Content	• Base XSD Type: token • *value* comes from list: {'EOM'|'FRN'|'IMM'|'IMMCAD'|'IMMAUD'|'IMMNZD'|'SFE'|'NONE'|'TBILL'|'1'|'2'|'3'|'4'|'5'|'6'|'7'|'8'|'9'|'10'|'11'|'12'|'13'|'14'|'15'|'16'|'17'|'18'|'19'|'20'|'21'|'22'|'23'|'24'|'25'|'26'|'27'|'28'|'29'|'30'|'MON'|'TUE'|'WED'|'THU'|'FRI'|'SAT'|'SUN'}
Documentation	The convention for determining the sequence of calculation period end dates. It is used in conjunction with a specified frequency and the regular period start date of a calculation period, e.g. semi-annual IMM roll dates.

Diagram





Schema Component Representation

```
<xsd:simpleType name="RollConventionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="EOM"/>
      <xsd:enumeration value="FRN"/>
      <xsd:enumeration value="IMM"/>
      <xsd:enumeration value="IMMCAD"/>
      <xsd:enumeration value="IMMAUD"/>
      <xsd:enumeration value="IMMNZD"/>
      <xsd:enumeration value="SFE"/>
      <xsd:enumeration value="NONE"/>
      <xsd:enumeration value="TBILL"/>
      <xsd:enumeration value="1"/>
      <xsd:enumeration value="2"/>
      <xsd:enumeration value="3"/>
      <xsd:enumeration value="4"/>
      <xsd:enumeration value="5"/>
      <xsd:enumeration value="6"/>
      <xsd:enumeration value="7"/>
      <xsd:enumeration value="8"/>
      <xsd:enumeration value="9"/>
      <xsd:enumeration value="10"/>
      <xsd:enumeration value="11"/>
      <xsd:enumeration value="12"/>
      <xsd:enumeration value="13"/>
      <xsd:enumeration value="14"/>
      <xsd:enumeration value="15"/>
      <xsd:enumeration value="16"/>
      <xsd:enumeration value="17"/>
      <xsd:enumeration value="18"/>
      <xsd:enumeration value="19"/>
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      <xsd:enumeration value="26"/>
      <xsd:enumeration value="27"/>
      <xsd:enumeration value="28"/>
      <xsd:enumeration value="29"/>
      <xsd:enumeration value="30"/>
      <xsd:enumeration value="MON"/>
      <xsd:enumeration value="TUE"/>
      <xsd:enumeration value="WED"/>
      <xsd:enumeration value="THU"/>
      <xsd:enumeration value="FRI"/>
      <xsd:enumeration value="SAT"/>
      <xsd:enumeration value="SUN"/>
   </xsd:restriction>
</xsd:simpleType>
```

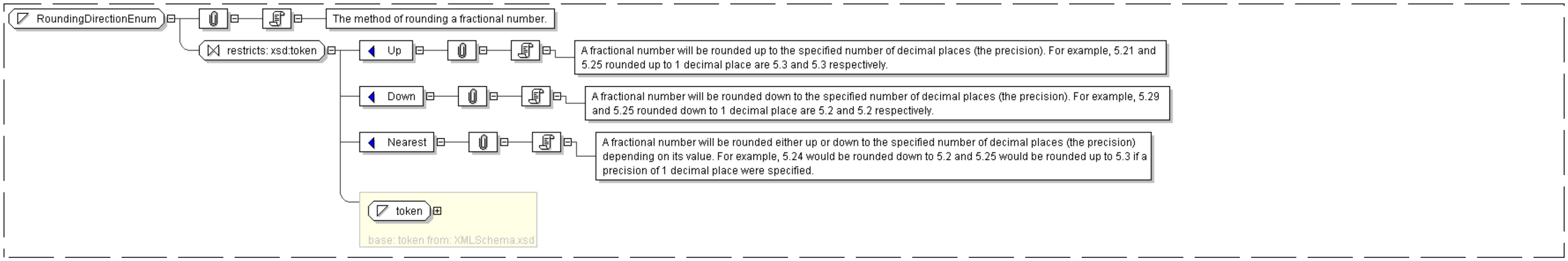
top

Simple Type: RoundingDirectionEnum

Super-types:	xsd:token < **RoundingDirectionEnum** (by restriction)
Sub-types:	None

Name	RoundingDirectionEnum
Content	• Base XSD Type: token • *value* comes from list: {'Up'|'Down'|'Nearest'}
Documentation	The method of rounding a fractional number.

Diagram



Schema Component Representation

```
<xsd:simpleType name="RoundingDirectionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Up"/>
      <xsd:enumeration value="Down"/>
      <xsd:enumeration value="Nearest"/>
   </xsd:restriction>
</xsd:simpleType>
```

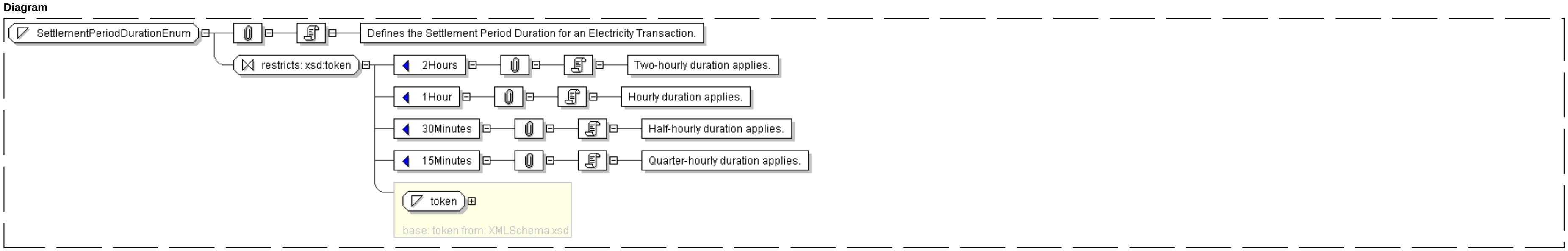
top

Simple Type: SettlementPeriodDurationEnum

Super-types:	xsd:token < **SettlementPeriodDurationEnum** (by restriction)
Sub-types:	None

Name	SettlementPeriodDurationEnum
Content	• Base XSD Type: token • *value* comes from list: {'2Hours'|'1Hour'|'30Minutes'|'15Minutes'}
Documentation	Defines the Settlement Period Duration for an Electricity Transaction.

Diagram



Schema Component Representation

```
<xsd:simpleType name="SettlementPeriodDurationEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="2Hours"/>
      <xsd:enumeration value="1Hour"/>
      <xsd:enumeration value="30Minutes"/>
      <xsd:enumeration value="15Minutes"/>
   </xsd:restriction>
</xsd:simpleType>
```

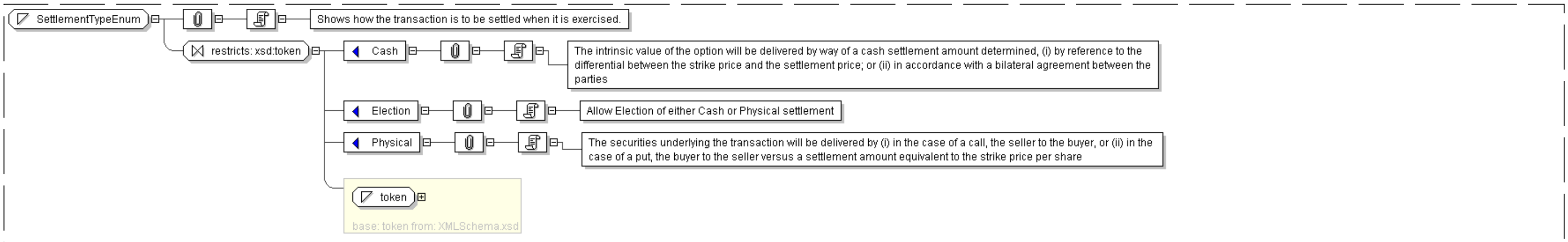
top

Simple Type: SettlementTypeEnum

Super-types:	xsd:token < **SettlementTypeEnum** (by restriction)
Sub-types:	None

Name	SettlementTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Cash'|'Election'|'Physical'}
Documentation	Shows how the transaction is to be settled when it is exercised.

Diagram



Schema Component Representation

```
<xsd:simpleType name="SettlementTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Cash"/>
      <xsd:enumeration value="Election"/>
      <xsd:enumeration value="Physical"/>
   </xsd:restriction>
</xsd:simpleType>
```

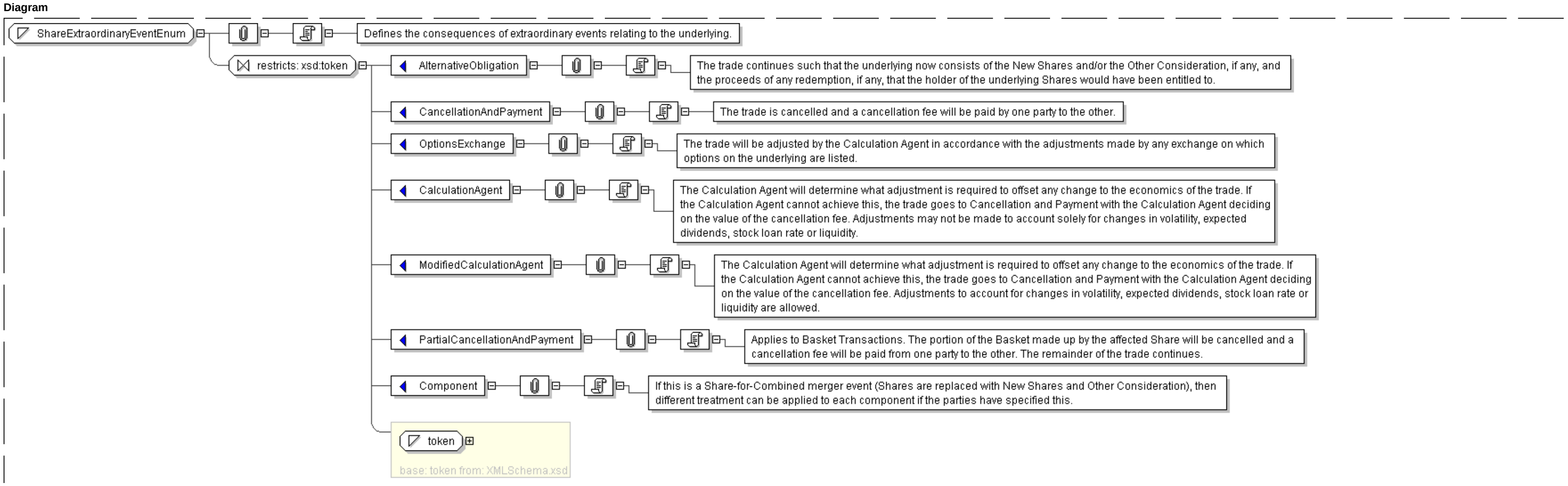
top

Simple Type: ShareExtraordinaryEventEnum

Super-types:	xsd:token < **ShareExtraordinaryEventEnum** (by restriction)
Sub-types:	None

Name	ShareExtraordinaryEventEnum
Content	• Base XSD Type: token • *value* comes from list: {'AlternativeObligation'|'CancellationAndPayment'|'OptionsExchange'|'CalculationAgent'|'ModifiedCalculationAgent'|'PartialCancellationAndPayment'|'Component'}
Documentation	Defines the consequences of extraordinary events relating to the underlying.

Diagram



Schema Component Representation

```
<xsd:simpleType name="ShareExtraordinaryEventEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="AlternativeObligation"/>
      <xsd:enumeration value="CancellationAndPayment"/>
      <xsd:enumeration value="OptionsExchange"/>
      <xsd:enumeration value="CalculationAgent"/>
      <xsd:enumeration value="ModifiedCalculationAgent"/>
      <xsd:enumeration value="PartialCancellationAndPayment"/>
      <xsd:enumeration value="Component"/>
   </xsd:restriction>
</xsd:simpleType>
```

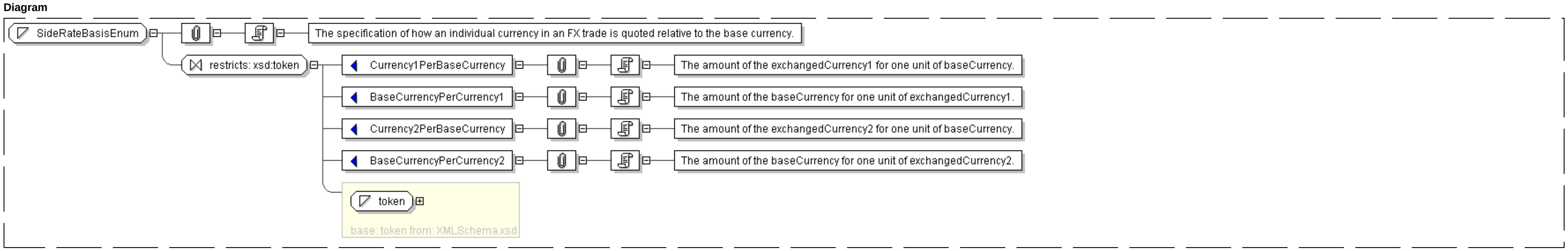
top

Simple Type: SideRateBasisEnum

Super-types:	xsd:token < **SideRateBasisEnum** (by restriction)
Sub-types:	None

Name	SideRateBasisEnum
Content	• Base XSD Type: token • *value* comes from list: {'Currency1PerBaseCurrency'|'BaseCurrencyPerCurrency1'|'Currency2PerBaseCurrency'|'BaseCurrencyPerCurrency2'}
Documentation	The specification of how an individual currency in an FX trade is quoted relative to the base currency.

Diagram



Schema Component Representation

```
<xsd:simpleType name="SideRateBasisEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Currency1PerBaseCurrency"/>
      <xsd:enumeration value="BaseCurrencyPerCurrency1"/>
      <xsd:enumeration value="Currency2PerBaseCurrency"/>
      <xsd:enumeration value="BaseCurrencyPerCurrency2"/>
   </xsd:restriction>
</xsd:simpleType>
```

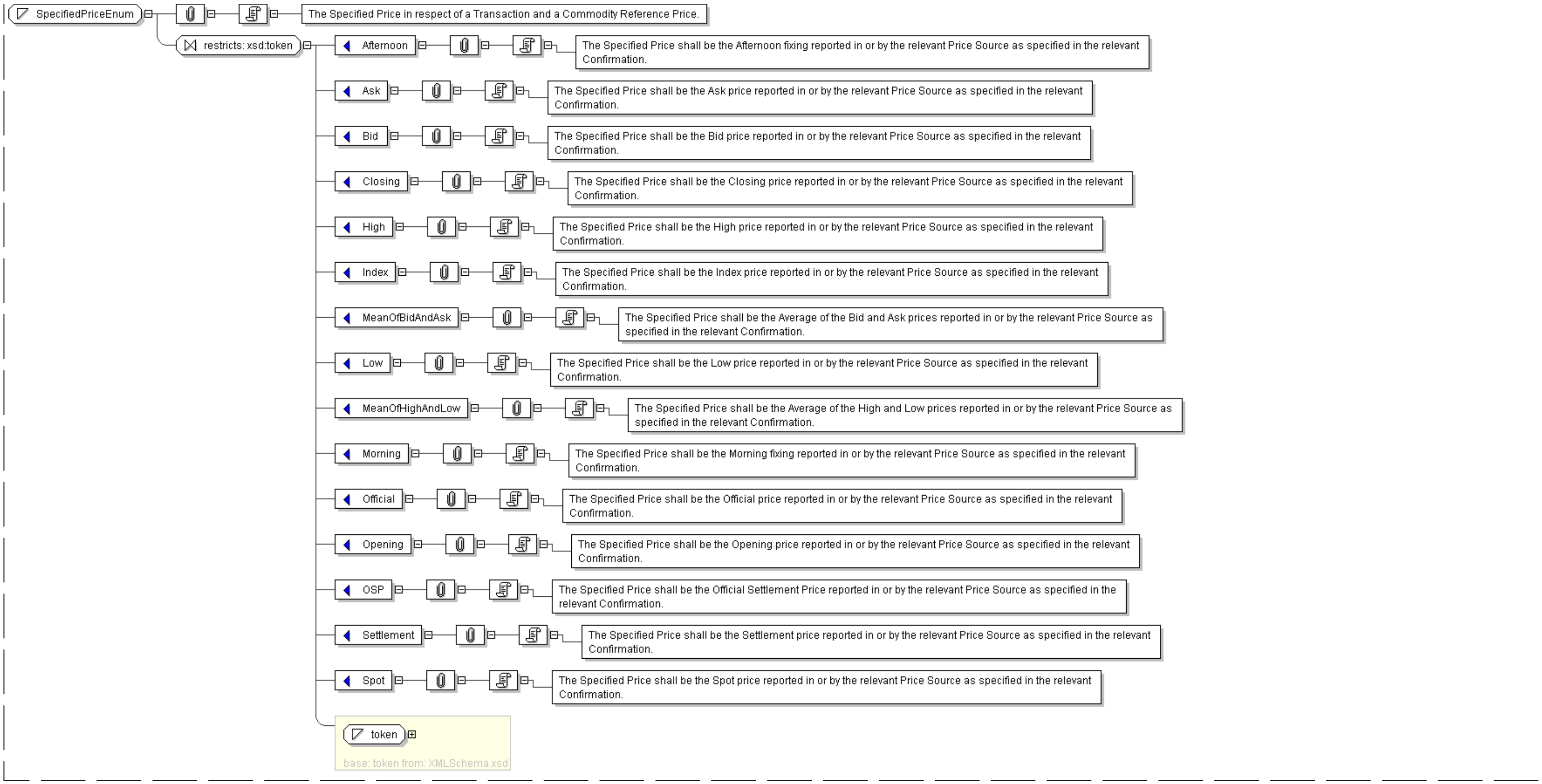
top

Simple Type: SpecifiedPriceEnum

Super-types:	xsd:token < **SpecifiedPriceEnum** (by restriction)
Sub-types:	None

Name	SpecifiedPriceEnum
Content	• Base XSD Type: token • *value* comes from list: {'Afternoon'|'Ask'|'Bid'|'Closing'|'High'|'Index'|'MeanOfBidAndAsk'|'Low'|'MeanOfHighAndLow'|'Morning'|'Official'|'Opening'|'OSP'|'Settlement'|'Spot'}
Documentation	The Specified Price in respect of a Transaction and a Commodity Reference Price.

Diagram



Schema Component Representation

```
<xsd:simpleType name="SpecifiedPriceEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Afternoon"/>
      <xsd:enumeration value="Ask"/>
      <xsd:enumeration value="Bid"/>
      <xsd:enumeration value="Closing"/>
      <xsd:enumeration value="High"/>
      <xsd:enumeration value="Index"/>
      <xsd:enumeration value="MeanOfBidAndAsk"/>
      <xsd:enumeration value="Low"/>
      <xsd:enumeration value="MeanOfHighAndLow"/>
      <xsd:enumeration value="Morning"/>
      <xsd:enumeration value="Official"/>
      <xsd:enumeration value="Opening"/>
      <xsd:enumeration value="OSP"/>
      <xsd:enumeration value="Settlement"/>
      <xsd:enumeration value="Spot"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

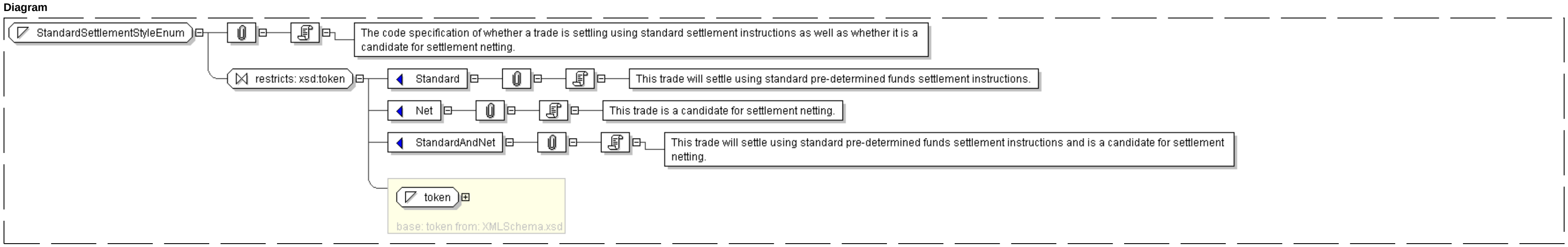
Simple Type: StandardSettlementStyleEnum

Super-types:	xsd:token < **StandardSettlementStyleEnum** (by restriction)
Sub-types:	None

Name	StandardSettlementStyleEnum
Content	• Base XSD Type: token • *value* comes from list: {'Standard'|'Net'|'StandardAndNet'}

Documentation	The code specification of whether a trade is settling using standard settlement instructions as well as whether it is a candidate for settlement netting.

Diagram



Schema Component Representation

```
<xsd:simpleType name="StandardSettlementStyleEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Standard"/>
      <xsd:enumeration value="Net"/>
      <xsd:enumeration value="StandardAndNet"/>
   </xsd:restriction>
</xsd:simpleType>
```

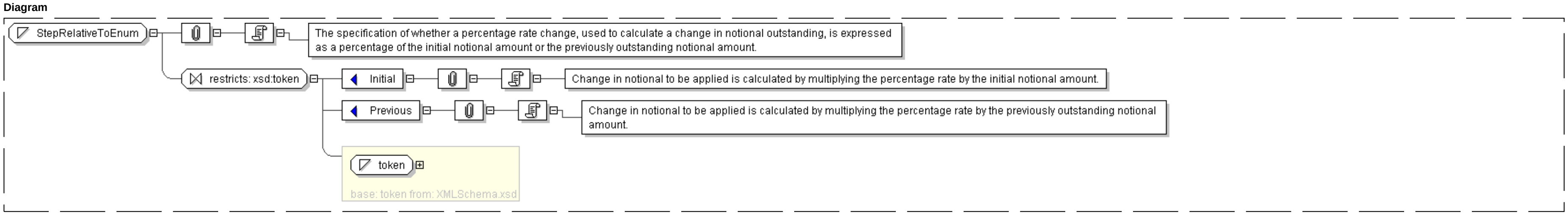
top

Simple Type: StepRelativeToEnum

Super-types:	xsd:token < **StepRelativeToEnum** (by restriction)
Sub-types:	None

Name	StepRelativeToEnum
Content	• Base XSD Type: token • *value* comes from list: {'Initial'|'Previous'}
Documentation	The specification of whether a percentage rate change, used to calculate a change in notional outstanding, is expressed as a percentage of the initial notional amount or the previously outstanding notional amount.

Diagram



Schema Component Representation

```
<xsd:simpleType name="StepRelativeToEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Initial"/>
      <xsd:enumeration value="Previous"/>
   </xsd:restriction>
</xsd:simpleType>
```

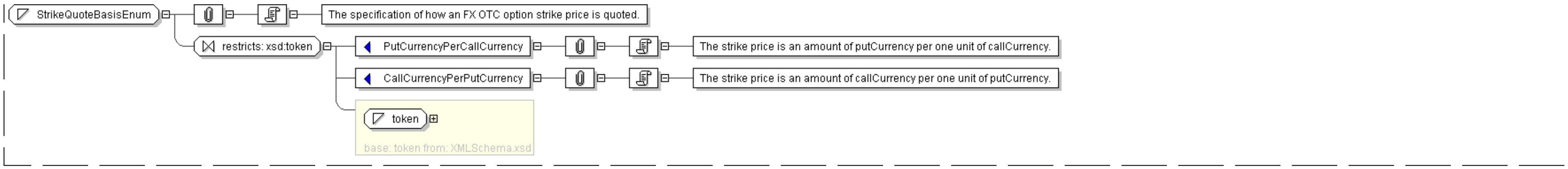
top

Simple Type: StrikeQuoteBasisEnum

Super-types:	xsd:token < **StrikeQuoteBasisEnum** (by restriction)
Sub-types:	None

Name	StrikeQuoteBasisEnum
Content	• Base XSD Type: token • *value* comes from list: {'PutCurrencyPerCallCurrency'|'CallCurrencyPerPutCurrency'}
Documentation	The specification of how an FX OTC option strike price is quoted.

Diagram



Schema Component Representation

```
<xsd:simpleType name="StrikeQuoteBasisEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="PutCurrencyPerCallCurrency"/>
      <xsd:enumeration value="CallCurrencyPerPutCurrency"/>
   </xsd:restriction>
</xsd:simpleType>
```

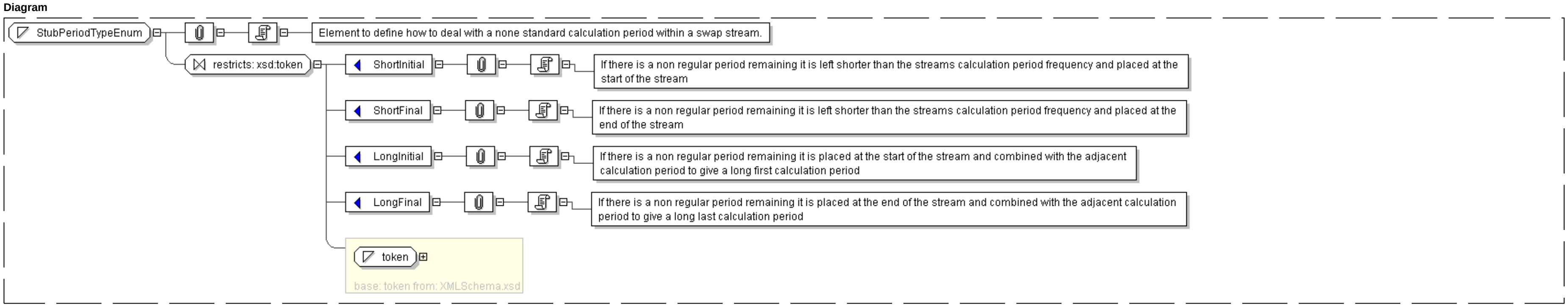
top

Simple Type: StubPeriodTypeEnum

Super-types:	xsd:token < **StubPeriodTypeEnum** (by restriction)
Sub-types:	None

Name	StubPeriodTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'ShortInitial'|'ShortFinal'|'LongInitial'|'LongFinal'}
Documentation	Element to define how to deal with a none standard calculation period within a swap stream.

Diagram



Schema Component Representation

```
<xsd:simpleType name="StubPeriodTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="ShortInitial"/>
      <xsd:enumeration value="ShortFinal"/>
      <xsd:enumeration value="LongInitial"/>
      <xsd:enumeration value="LongFinal"/>
   </xsd:restriction>
</xsd:simpleType>
```

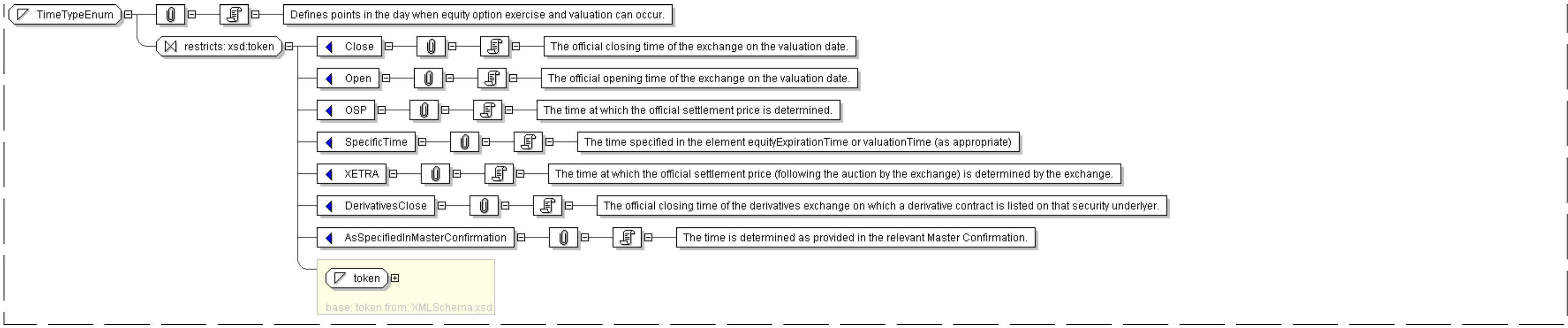
top

Simple Type: TimeTypeEnum

Super-types:	xsd:token < **TimeTypeEnum** (by restriction)
Sub-types:	None

Name	TimeTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Close'|'Open'|'OSP'|'SpecificTime'|'XETRA'|'DerivativesClose'|'AsSpecifiedInMasterConfirmation'}
Documentation	Defines points in the day when equity option exercise and valuation can occur.

Diagram



Schema Component Representation

```
<xsd:simpleType name="TimeTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Close"/>
      <xsd:enumeration value="Open"/>
      <xsd:enumeration value="OSP"/>
      <xsd:enumeration value="SpecificTime"/>
      <xsd:enumeration value="XETRA"/>
      <xsd:enumeration value="DerivativesClose"/>
      <xsd:enumeration value="AsSpecifiedInMasterConfirmation"/>
   </xsd:restriction>
</xsd:simpleType>
```

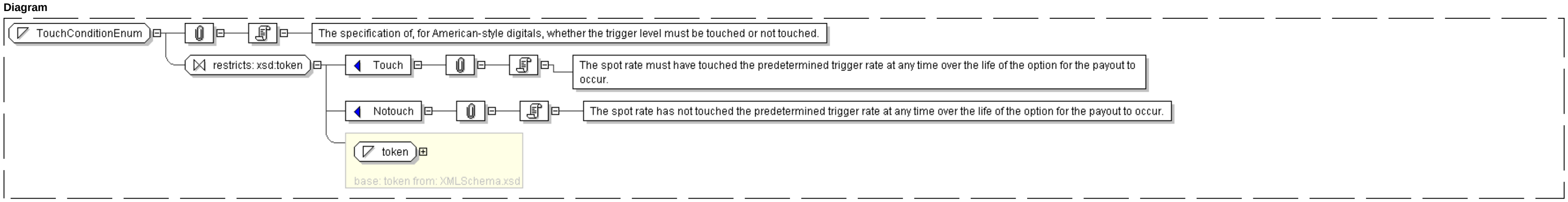
top

Simple Type: TouchConditionEnum

Super-types:	xsd:token < **TouchConditionEnum** (by restriction)
Sub-types:	None

Name	TouchConditionEnum
Content	• Base XSD Type: token • *value* comes from list: {'Touch'|'Notouch'}
Documentation	The specification of, for American-style digitals, whether the trigger level must be touched or not touched.

Diagram



Schema Component Representation

```
<xsd:simpleType name="TouchConditionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Touch"/>
      <xsd:enumeration value="Notouch"/>
   </xsd:restriction>
</xsd:simpleType>
```

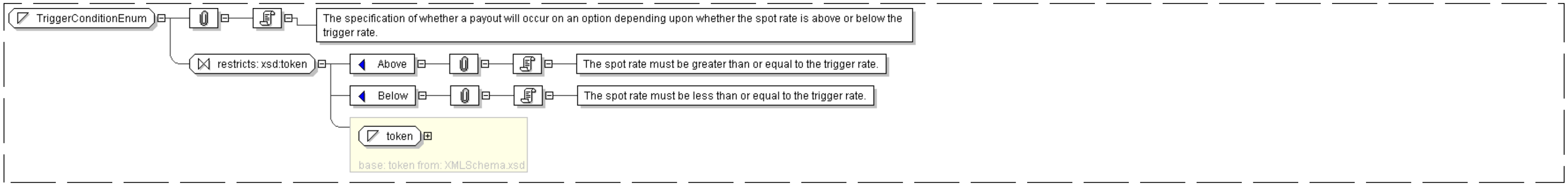
top

Simple Type: TriggerConditionEnum

Super-types:	xsd:token < **TriggerConditionEnum** (by restriction)
Sub-types:	None

Name	TriggerConditionEnum
Content	• Base XSD Type: token • *value* comes from list: {'Above'|'Below'}
Documentation	The specification of whether a payout will occur on an option depending upon whether the spot rate is above or below the trigger rate.

Diagram



Schema Component Representation

```
<xsd:simpleType name="TriggerConditionEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Above"/>
      <xsd:enumeration value="Below"/>
   </xsd:restriction>
</xsd:simpleType>
```

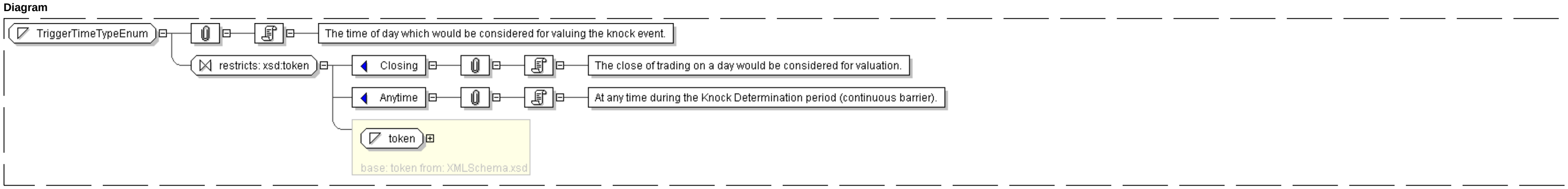
top

Simple Type: TriggerTimeTypeEnum

Super-types:	xsd:token < **TriggerTimeTypeEnum** (by restriction)
Sub-types:	None

Name	TriggerTimeTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'Closing'|'Anytime'}
Documentation	The time of day which would be considered for valuing the knock event.

Diagram



Schema Component Representation

```
<xsd:simpleType name="TriggerTimeTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Closing"/>
      <xsd:enumeration value="Anytime"/>
   </xsd:restriction>
</xsd:simpleType>
```

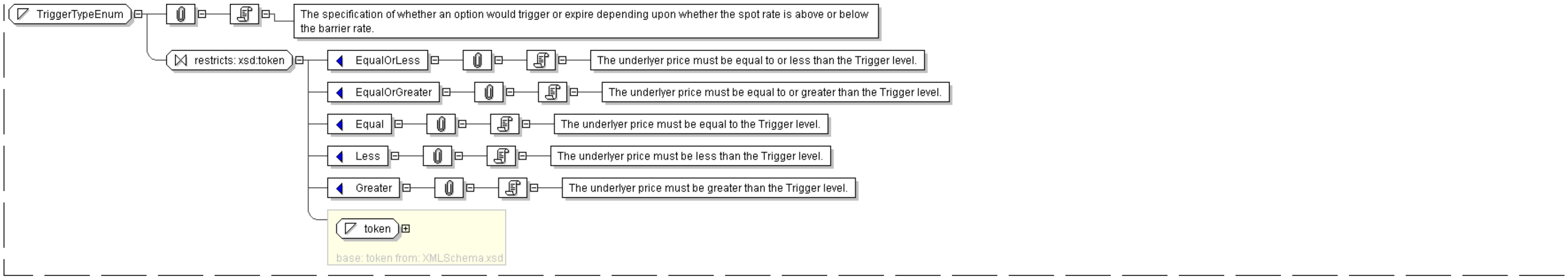
top

Simple Type: TriggerTypeEnum

Super-types:	xsd:token < **TriggerTypeEnum** (by restriction)
Sub-types:	None

Name	TriggerTypeEnum
Content	• Base XSD Type: token • *value* comes from list: {'EqualOrLess'|'EqualOrGreater'|'Equal'|'Less'|'Greater'}
Documentation	The specification of whether an option would trigger or expire depending upon whether the spot rate is above or below the barrier rate.

Diagram



Schema Component Representation

```
<xsd:simpleType name="TriggerTypeEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="EqualOrLess"/>
      <xsd:enumeration value="EqualOrGreater"/>
      <xsd:enumeration value="Equal"/>
      <xsd:enumeration value="Less"/>
      <xsd:enumeration value="Greater"/>
   </xsd:restriction>
</xsd:simpleType>
```

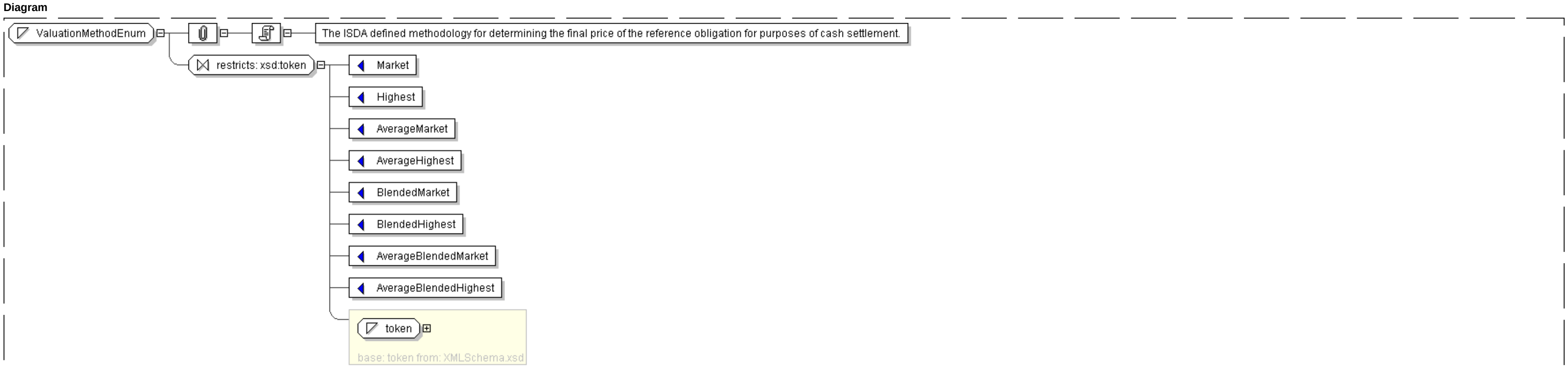
top

Simple Type: ValuationMethodEnum

Super-types:	xsd:token < **ValuationMethodEnum** (by restriction)
Sub-types:	None

Name	ValuationMethodEnum
Content	• Base XSD Type: token • *value* comes from list: {'Market'|'Highest'|'AverageMarket'|'AverageHighest'|'BlendedMarket'|'BlendedHighest'|'AverageBlendedMarket'|'AverageBlendedHighest'}
Documentation	The ISDA defined methodology for determining the final price of the reference obligation for purposes of cash settlement.

Diagram



Schema Component Representation

```
<xsd:simpleType name="ValuationMethodEnum">
   <xsd:restriction base=" xsd:token ">
      <xsd:enumeration value="Market"/>
      <xsd:enumeration value="Highest"/>
      <xsd:enumeration value="AverageMarket"/>
      <xsd:enumeration value="AverageHighest"/>
      <xsd:enumeration value="BlendedMarket"/>
      <xsd:enumeration value="BlendedHighest"/>
      <xsd:enumeration value="AverageBlendedMarket"/>
      <xsd:enumeration value="AverageBlendedHighest"/>
   </xsd:restriction>
</xsd:simpleType>
```

top

Simple Type: WeeklyRollConventionEnum

Super-types:	None
Sub-types:	None

Name	WeeklyRollConventionEnum
Content	• Union of following types: ◦ DayOfWeekEnum ◦ Locally defined type: ▪ Base XSD Type: token ▪ *value* comes from list: {'TBILL'}
Documentation	The specification of a weekly roll day.

Diagram

Schema Component Representation

```
<xsd:simpleType name="WeeklyRollConventionEnum">
   <xsd:union memberTypes=" DayOfWeekEnum ">
      <xsd:simpleType>
         <xsd:restriction base=" xsd:token ">
            <xsd:enumeration value="TBILL"/>
         </xsd:restriction>
      </xsd:simpleType>
   </xsd:union>
</xsd:simpleType>
```

top

Legend

Complex Type: **AusAddress**
Schema Component Type   Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
```

```
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-eq-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-eq-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Declarations

Element: brokerEquityOption

- *This element can be used wherever the following element is referenced:*
  - product

Name	brokerEquityOption
Type	BrokerEquityOption
Nillable	no
Abstract	no
Documentation	A component describing a Broker View of an Equity Option.

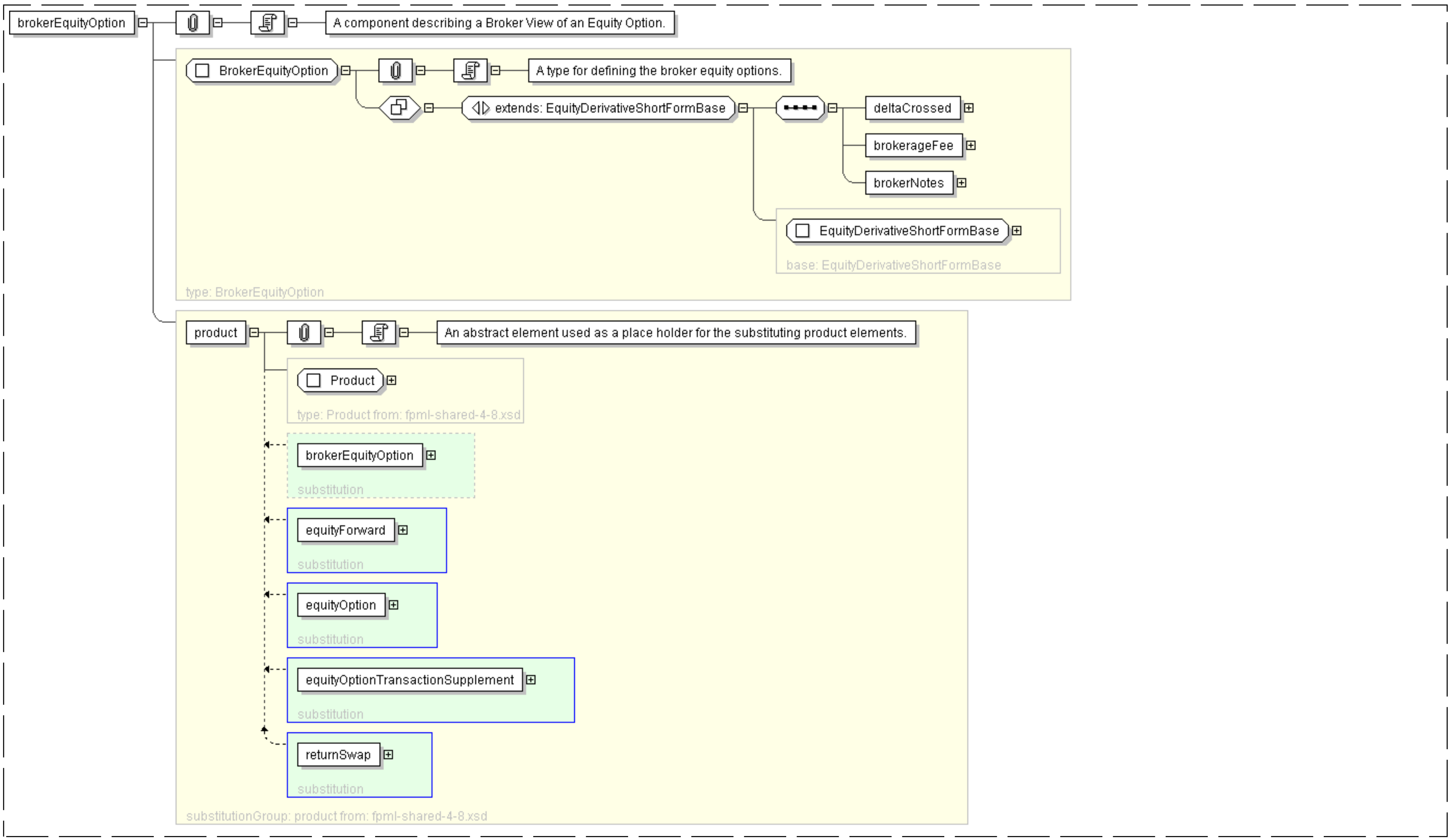
Logical Diagram

XML Instance Representation

```
<brokerEquityOption
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <optionType> OptionTypeEnum </optionType> [1]
    'The type of option transaction.'

    <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
    'Effective date for a forward starting option.'

    <underlyer> Underlyer </underlyer> [1]
    'Specifies the underlying component, which can be either one or many and consists in
    either equity, index or convertible bond component, or a combination of these.'

    <notional> Money </notional> [0..1]
    'The notional amount.'

    <equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]
    'The parameters for defining how the equity option can be exercised, how it is valued and
    how it is settled.'

Start Group: Feature.model [0..1]
        <feature> OptionFeatures </feature> [0..1]
        'Asian, Barrier, Knock and Pass Through features.'

        <fxFeature> FxFeature </fxFeature> [0..1]
        'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model
    <strategyFeature> StrategyFeature </strategyFeature> [0..1]
```

```
'A equity option simple strategy feature.'

    <strike> EquityStrike </strike> [1]
    'Defines whether it is a price or level at which the option has been, or will be, struck.'

    <spotPrice> NonNegativeDecimal </spotPrice> [0..1]
    'The price per share, index or basket observed on the trade or effective date.'

    <numberOfOptions> NonNegativeDecimal </numberOfOptions> [1]
    'The number of options comprised in the option transaction.'

    <equityPremium> EquityPremium </equityPremium> [1]
    'The equity option premium payable by the buyer to the seller.'

    <deltaCrossed> xsd:boolean </deltaCrossed> [1]
    <brokerageFee> Money </brokerageFee> [1]
    <brokerNotes> xsd:string </brokerNotes> [1]
</brokerEquityOption>
```

Diagram



Schema Component Representation

```
<xsd:element name="brokerEquityOption" type=" BrokerEquityOption " substitutionGroup="product"/>
```

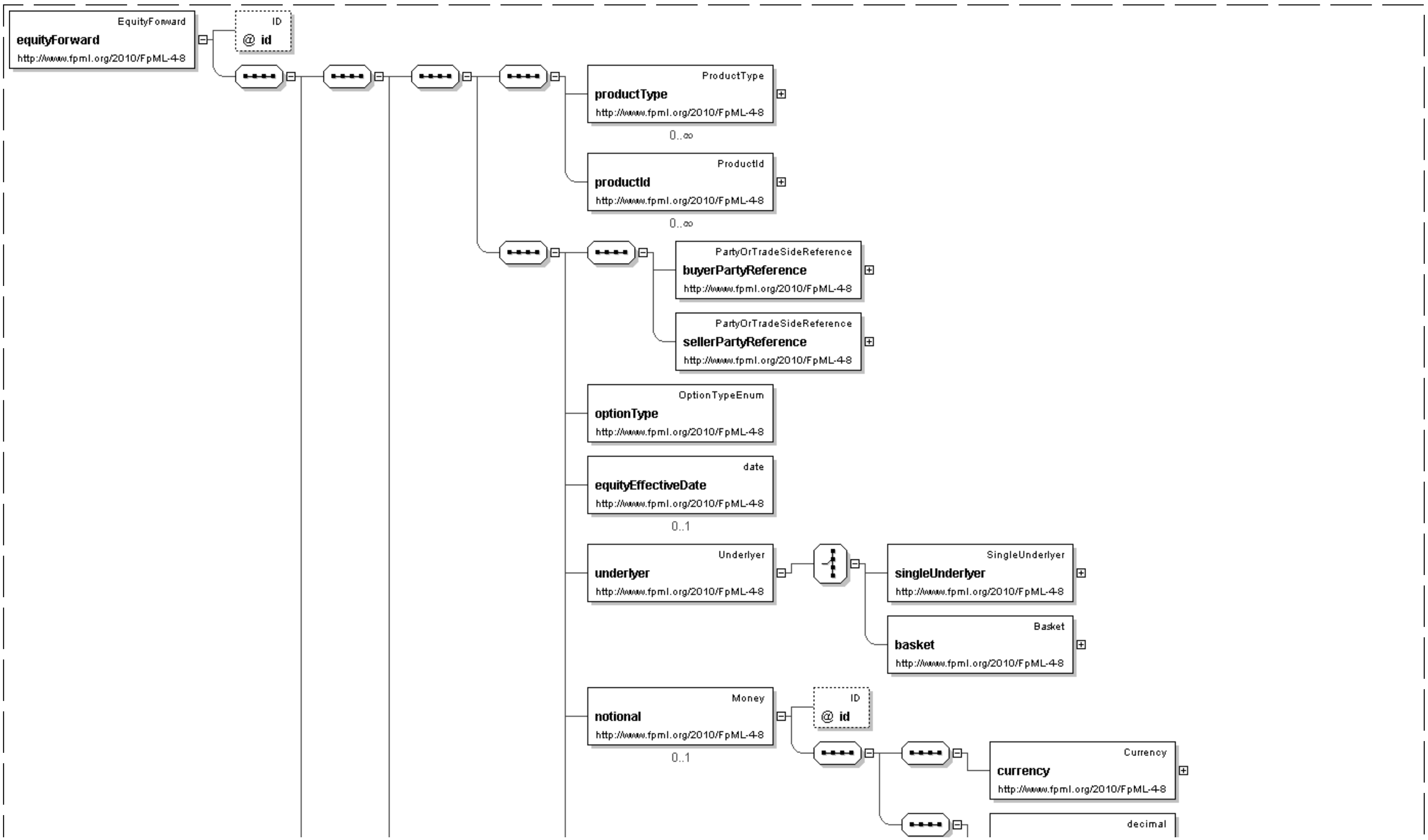
top

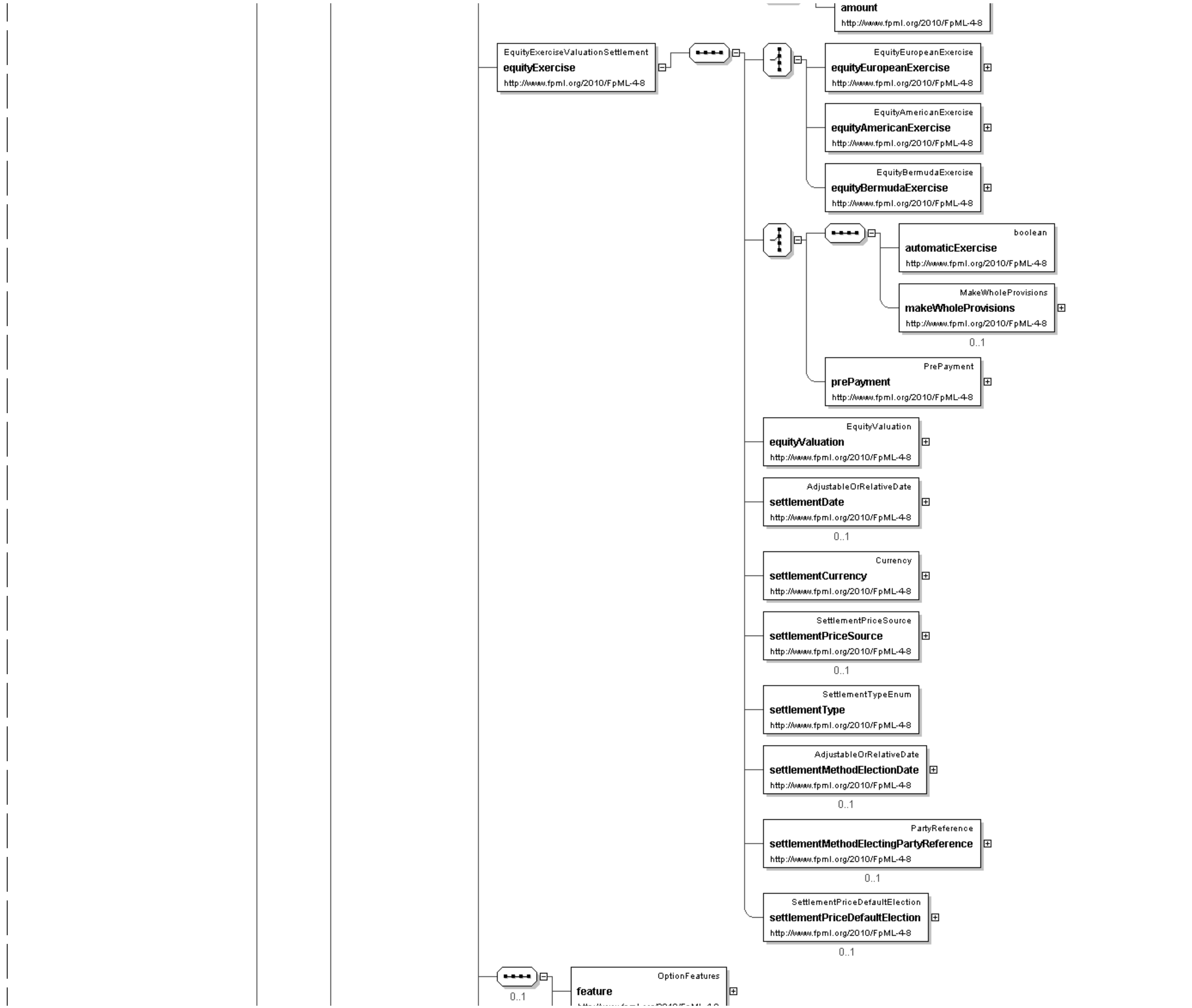
Element: equityForward

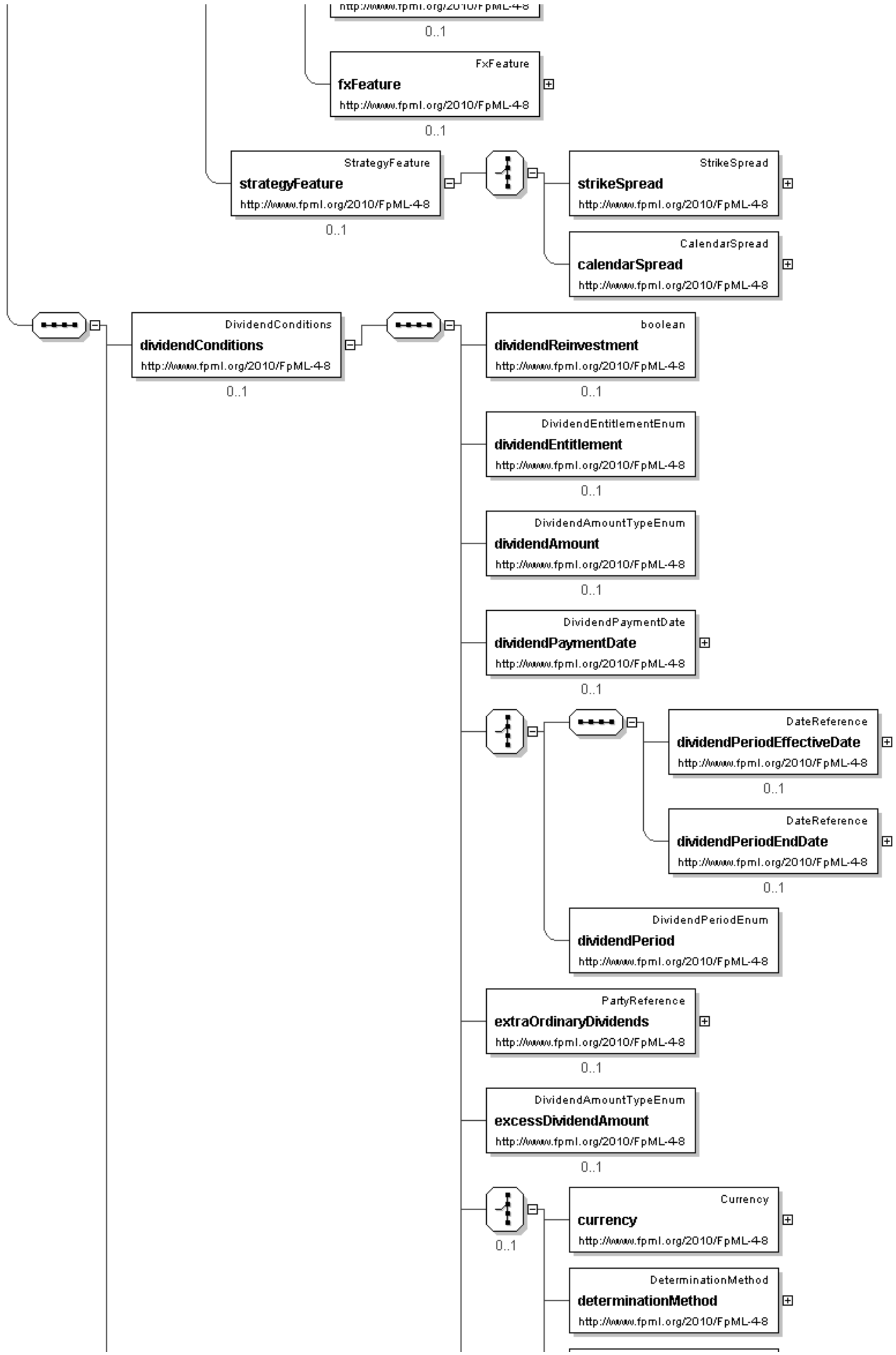
- *This element can be used wherever the following element is referenced:*
  - product

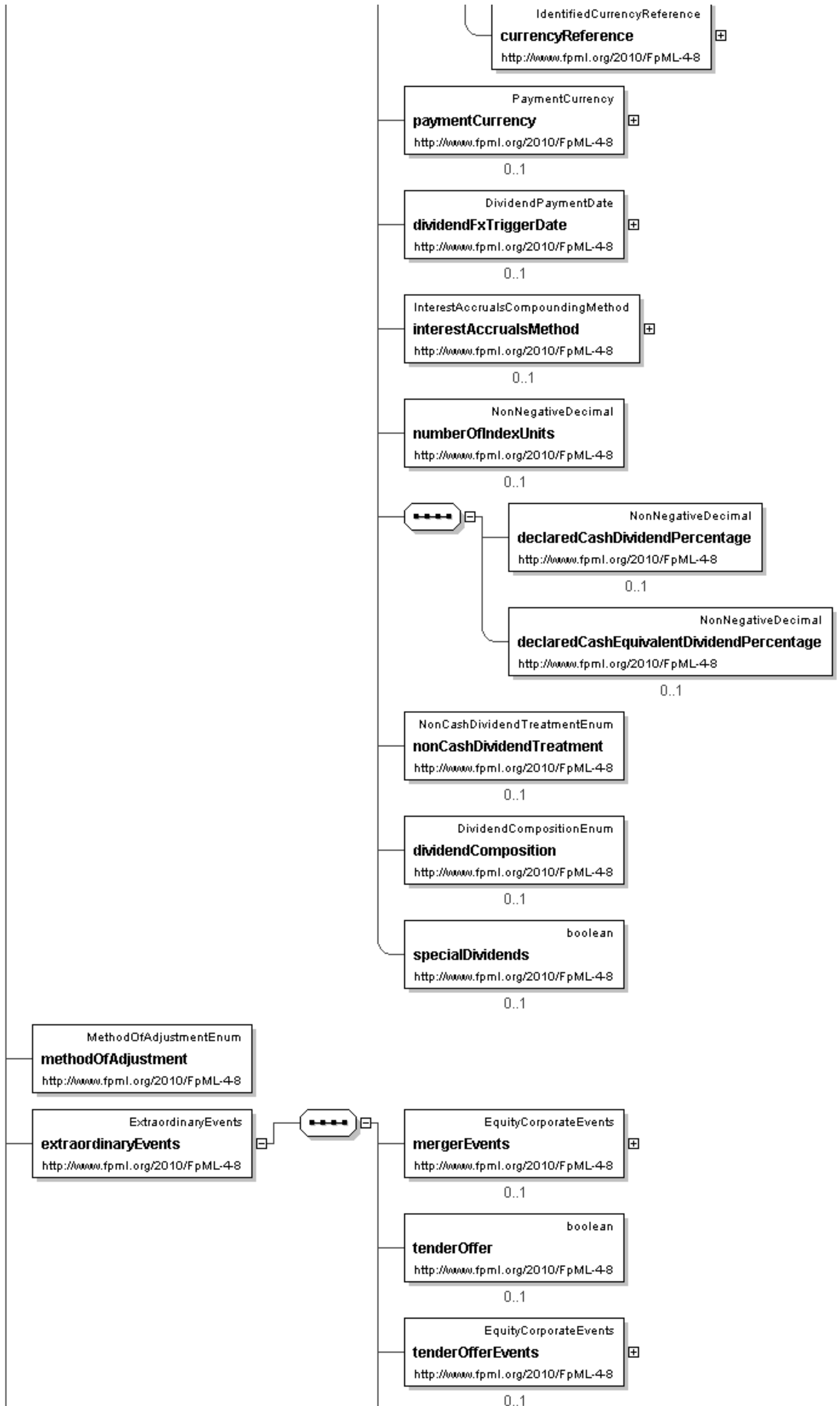
Name	equityForward
Type	EquityForward
Nillable	no
Abstract	no
Documentation	A component describing an Equity Forward product.

Logical Diagram




amount
http://www.fpml.org/2010/FpML-4-8
EquityExerciseValuationSettlement
equityExercise
http://www.fpml.org/2010/FpML-4-8
EquityEuropeanExercise
equityEuropeanExercise
http://www.fpml.org/2010/FpML-4-8
EquityAmericanExercise
equityAmericanExercise
http://www.fpml.org/2010/FpML-4-8
EquityBermudaExercise
equityBermudaExercise
http://www.fpml.org/2010/FpML-4-8
boolean
automaticExercise
http://www.fpml.org/2010/FpML-4-8
MakeWholeProvisions
makeWholeProvisions
http://www.fpml.org/2010/FpML-4-8
0..1
PrePayment
prePayment
http://www.fpml.org/2010/FpML-4-8
EquityValuation
equityValuation
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
settlementDate
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8
SettlementPriceSource
settlementPriceSource
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementTypeEnum
settlementType
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
settlementMethodElectionDate
http://www.fpml.org/2010/FpML-4-8
0..1
PartyReference
settlementMethodElectingPartyReference
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementPriceDefaultElection
settlementPriceDefaultElection
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
OptionFeatures
feature


0..1
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
StrategyFeature
strategyFeature
http://www.fpml.org/2010/FpML-4-8
0..1
StrikeSpread
strikeSpread
http://www.fpml.org/2010/FpML-4-8
CalendarSpread
calendarSpread
http://www.fpml.org/2010/FpML-4-8
DividendConditions
dividendConditions
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
dividendReinvestment
http://www.fpml.org/2010/FpML-4-8
0..1
DividendEntitlementEnum
dividendEntitlement
http://www.fpml.org/2010/FpML-4-8
0..1
DividendAmountTypeEnum
dividendAmount
http://www.fpml.org/2010/FpML-4-8
0..1
DividendPaymentDate
dividendPaymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
DateReference
dividendPeriodEffectiveDate
http://www.fpml.org/2010/FpML-4-8
0..1
DateReference
dividendPeriodEndDate
http://www.fpml.org/2010/FpML-4-8
0..1
DividendPeriodEnum
dividendPeriod
http://www.fpml.org/2010/FpML-4-8
PartyReference
extraOrdinaryDividends
http://www.fpml.org/2010/FpML-4-8
0..1
DividendAmountTypeEnum
excessDividendAmount
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
Currency
currency
http://www.fpml.org/2010/FpML-4-8
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8


IdentifiedCurrencyReference
currencyReference
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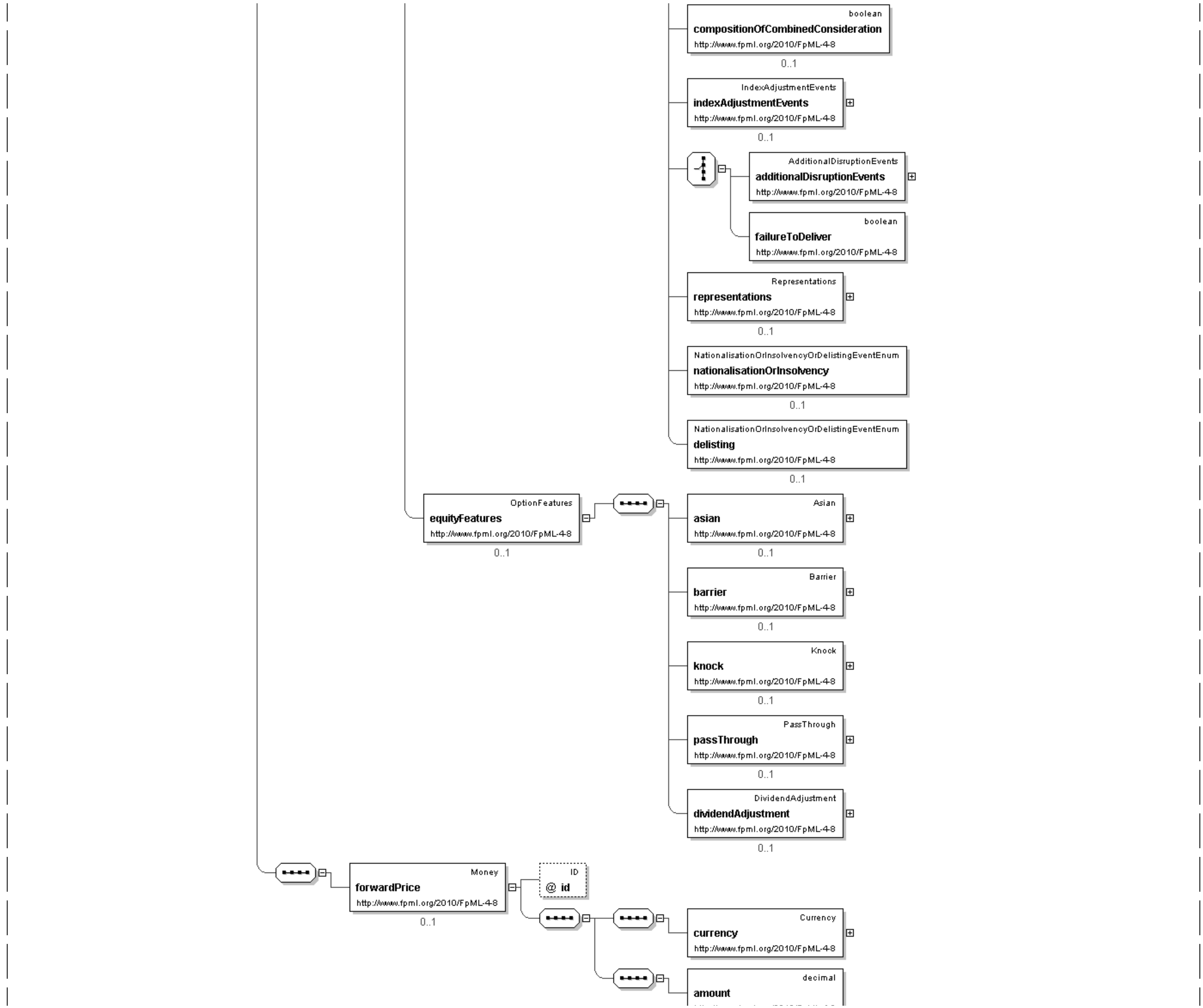
PaymentCurrency
paymentCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
DividendPaymentDate
dividendFxTriggerDate
http://www.fpml.org/2010/FpML-4-8
0..1
InterestAccrualsCompoundingMethod
interestAccrualsMethod
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
numberOfIndexUnits
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
declaredCashDividendPercentage
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
declaredCashEquivalentDividendPercentage
http://www.fpml.org/2010/FpML-4-8
0..1
NonCashDividendTreatmentEnum
nonCashDividendTreatment
http://www.fpml.org/2010/FpML-4-8
0..1
DividendCompositionEnum
dividendComposition
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
specialDividends
http://www.fpml.org/2010/FpML-4-8
0..1
MethodOfAdjustmentEnum
methodOfAdjustment
http://www.fpml.org/2010/FpML-4-8
ExtraordinaryEvents
extraordinaryEvents
http://www.fpml.org/2010/FpML-4-8
EquityCorporateEvents
mergerEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
tenderOffer
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
tenderOfferEvents
http://www.fpml.org/2010/FpML-4-8
0..1


boolean
compositionOfCombinedConsideration
http://www.fpml.org/2010/FpML-4-8
0..1
IndexAdjustmentEvents
indexAdjustmentEvents
http://www.fpml.org/2010/FpML-4-8
0..1
AdditionalDisruptionEvents
additionalDisruptionEvents
http://www.fpml.org/2010/FpML-4-8
boolean
failureToDeliver
http://www.fpml.org/2010/FpML-4-8
Representations
representations
http://www.fpml.org/2010/FpML-4-8
0..1
NationalisationOrInsolvencyOrDelistingEventEnum
nationalisationOrInsolvency
http://www.fpml.org/2010/FpML-4-8
0..1
NationalisationOrInsolvencyOrDelistingEventEnum
delisting
http://www.fpml.org/2010/FpML-4-8
0..1
OptionFeatures
equityFeatures
http://www.fpml.org/2010/FpML-4-8
0..1
Asian
asian
http://www.fpml.org/2010/FpML-4-8
0..1
Barrier
barrier
http://www.fpml.org/2010/FpML-4-8
0..1
Knock
knock
http://www.fpml.org/2010/FpML-4-8
0..1
PassThrough
passThrough
http://www.fpml.org/2010/FpML-4-8
0..1
DividendAdjustment
dividendAdjustment
http://www.fpml.org/2010/FpML-4-8
0..1
Money
forwardPrice
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount

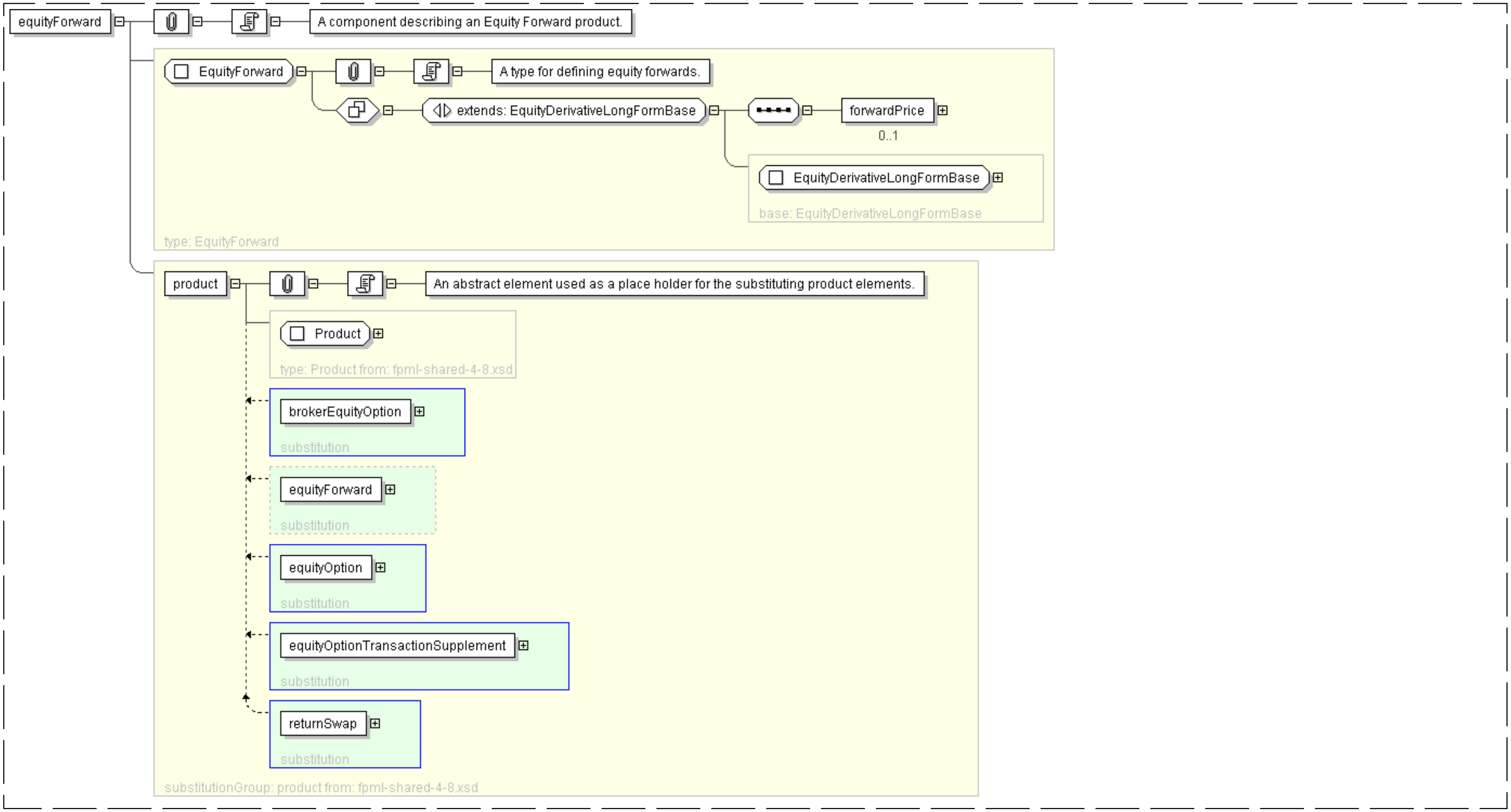
http://www.fpml.org/2010/FpML-4-8

XML Instance Representation

```
<equityForward
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <optionType> OptionTypeEnum </optionType> [1]
    'The type of option transaction.'

    <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
    'Effective date for a forward starting option.'

    <underlyer> Underlyer </underlyer> [1]
    'Specifies the underlying component, which can be either one or many and consists in
    either equity, index or convertible bond component, or a combination of these.'

    <notional> Money </notional> [0..1]
    'The notional amount.'

    <equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]
    'The parameters for defining how the equity option can be exercised, how it is valued and
    how it is settled.'
Start Group: Feature.model [0..1]
        <feature> OptionFeatures </feature> [0..1]
        'Asian, Barrier, Knock and Pass Through features.'

        <fxFeature> FxFeature </fxFeature> [0..1]
        'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model
    <strategyFeature> StrategyFeature </strategyFeature> [0..1]
    'A equity option simple strategy feature.'

    <dividendConditions> DividendConditions </dividendConditions> [0..1]
    <methodOfAdjustment> MethodOfAdjustmentEnum </methodOfAdjustment> [1]
    'Defines how adjustments will be made to the contract should one or more of the
    extraordinary events occur.'

    <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [1]
    'Where the underlying is shares, specifies events affecting the issuer of those shares that
    may require the terms of the transaction to be adjusted.'

    <equityFeatures> OptionFeatures </equityFeatures> [0..1]
    'DEPRECATED This element will be removed in the next FpML major version. Use the \"feature
    \" element for option features such as asian, barrier, knock.'
```

```
    <forwardPrice> Money </forwardPrice> [0..1]
    'The forward price per share, index or basket.'
</equityForward>
```

Diagram



Schema Component Representation

```
<xsd:element name="equityForward" type=" EquityForward " substitutionGroup="product"/>
```

top

Element: equityOption

- *This element can be used wherever the following element is referenced:*
  - product

Name	equityOption
Type	EquityOption
Nillable	no
Abstract	no

Documentation	A component describing an Equity Option product.

Logical Diagram

XML Instance Representation

```
<equityOption
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <optionType> OptionTypeEnum </optionType> [1]
    'The type of option transaction.'

    <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
    'Effective date for a forward starting option.'

    <underlyer> Underlyer </underlyer> [1]
    'Specifies the underlying component, which can be either one or many and consists in
    either equity, index or convertible bond component, or a combination of these.'

    <notional> Money </notional> [0..1]
    'The notional amount.'

    <equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]
    'The parameters for defining how the equity option can be exercised, how it is valued and
    how it is settled.'

Start Group: Feature.model [0..1]
        <feature> OptionFeatures </feature> [0..1]
        'Asian, Barrier, Knock and Pass Through features.'

        <fxFeature> FxFeature </fxFeature> [0..1]
        'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model
    <strategyFeature> StrategyFeature </strategyFeature> [0..1]
    'A equity option simple strategy feature.'

    <dividendConditions> DividendConditions </dividendConditions> [0..1]
    <methodOfAdjustment> MethodOfAdjustmentEnum </methodOfAdjustment> [1]
    'Defines how adjustments will be made to the contract should one or more of the
    extraordinary events occur.'

    <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [1]
    'Where the underlying is shares, specifies events affecting the issuer of those shares that
    may require the terms of the transaction to be adjusted.'

    <equityFeatures> OptionFeatures </equityFeatures> [0..1]
```

'DEPRECATED This element will be removed in the next FpML major version. Use the \"feature \" element for option features such as asian, barrier, knock.'

<strike> EquityStrike </strike> [0..1]

'Defines whether it is a price or level at which the option has been, or will be, struck.'

<spotPrice> NonNegativeDecimal </spotPrice> [0..1]

'The price per share, index or basket observed on the trade or effective date.'

<numberOfOptions> NonNegativeDecimal </numberOfOptions> [0..1]

'The number of options comprised in the option transaction.'

<optionEntitlement> PositiveDecimal </optionEntitlement> [1]

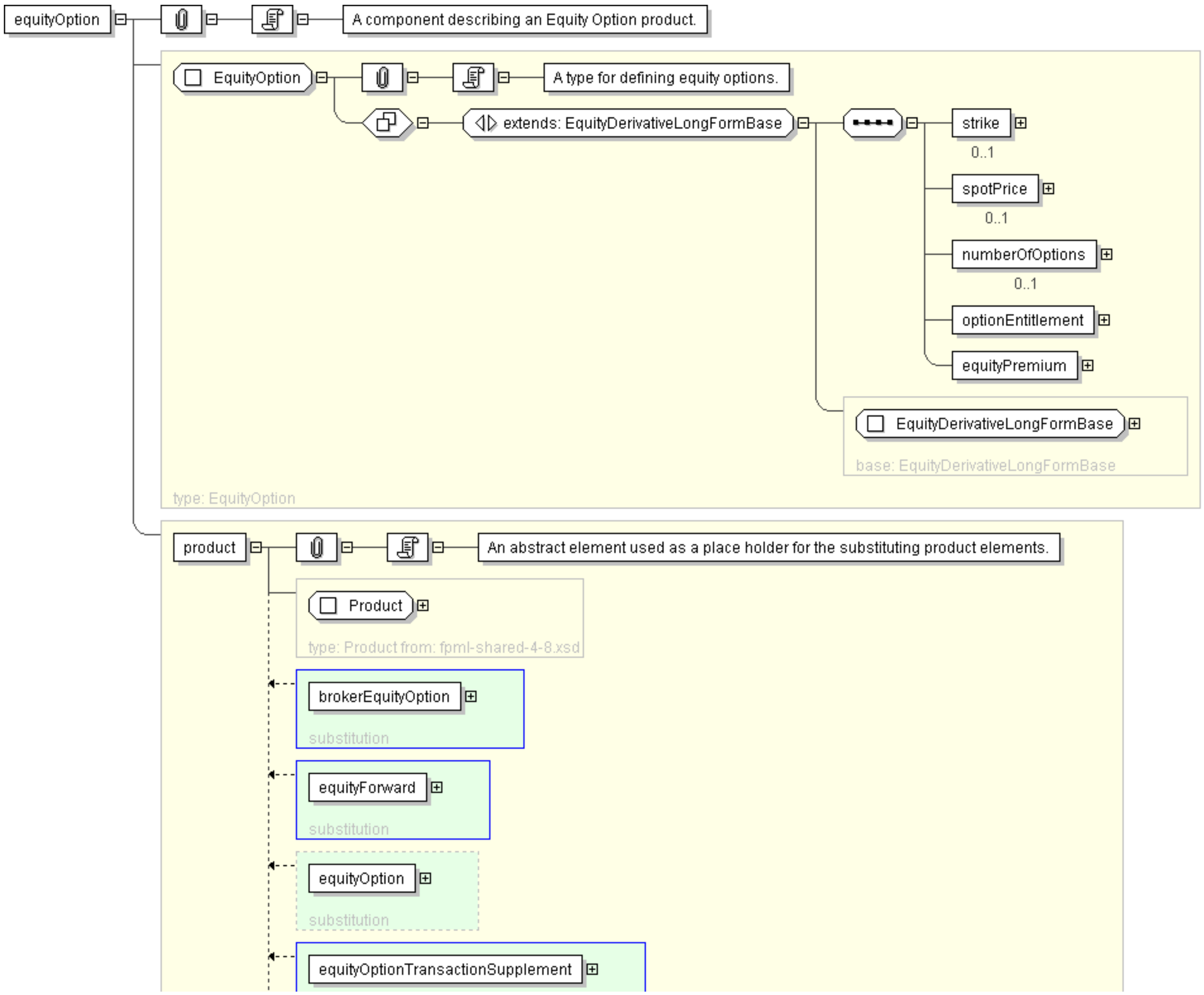
'The number of shares per option comprised in the option transaction.'

<equityPremium> EquityPremium </equityPremium> [1]

'The equity option premium payable by the buyer to the seller.'

</equityOption>

Diagram



Schema Component Representation

```
<xsd:element name="equityOption" type=" EquityOption " substitutionGroup="product"/>
```

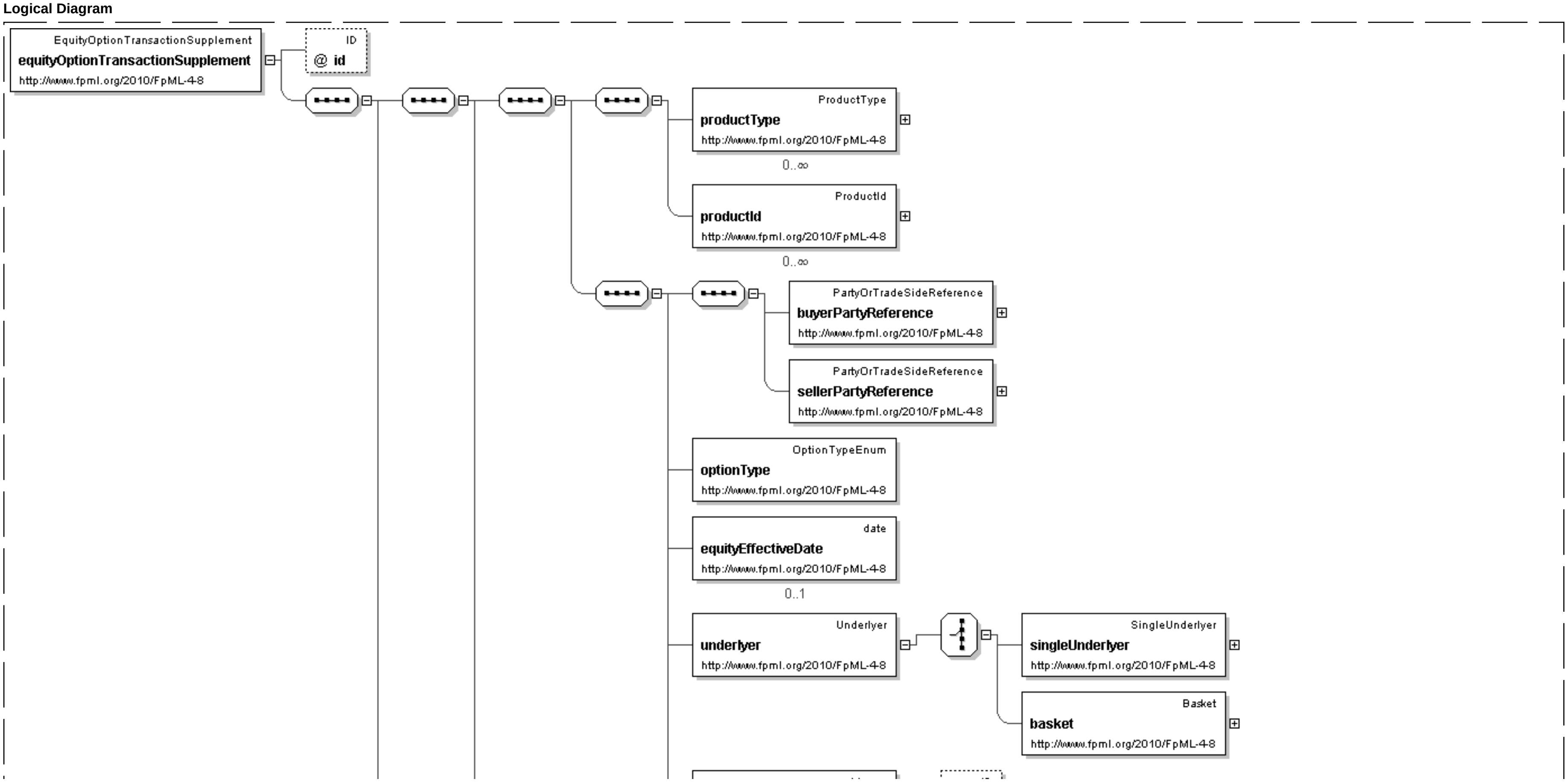
top

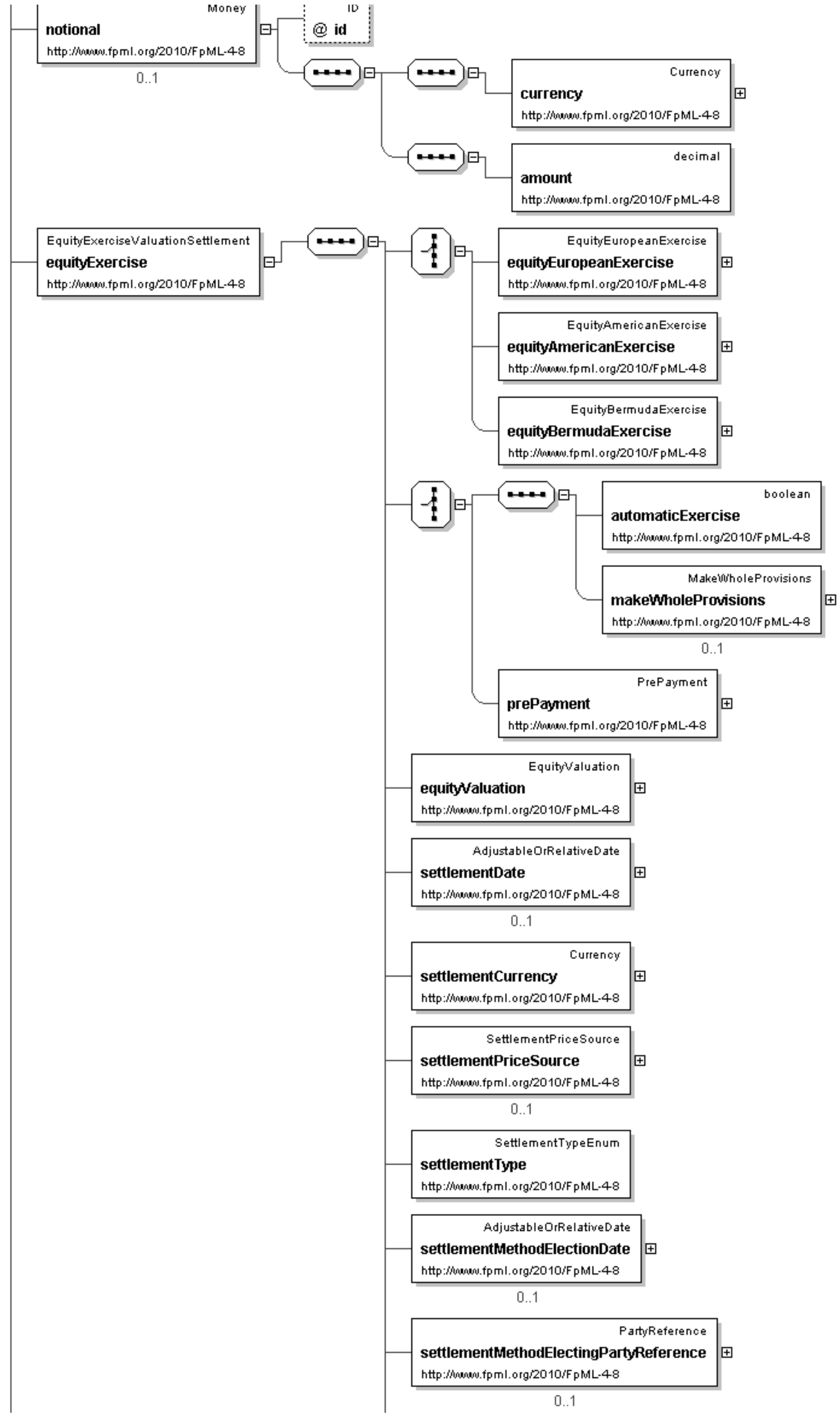
Element: equityOptionTransactionSupplement

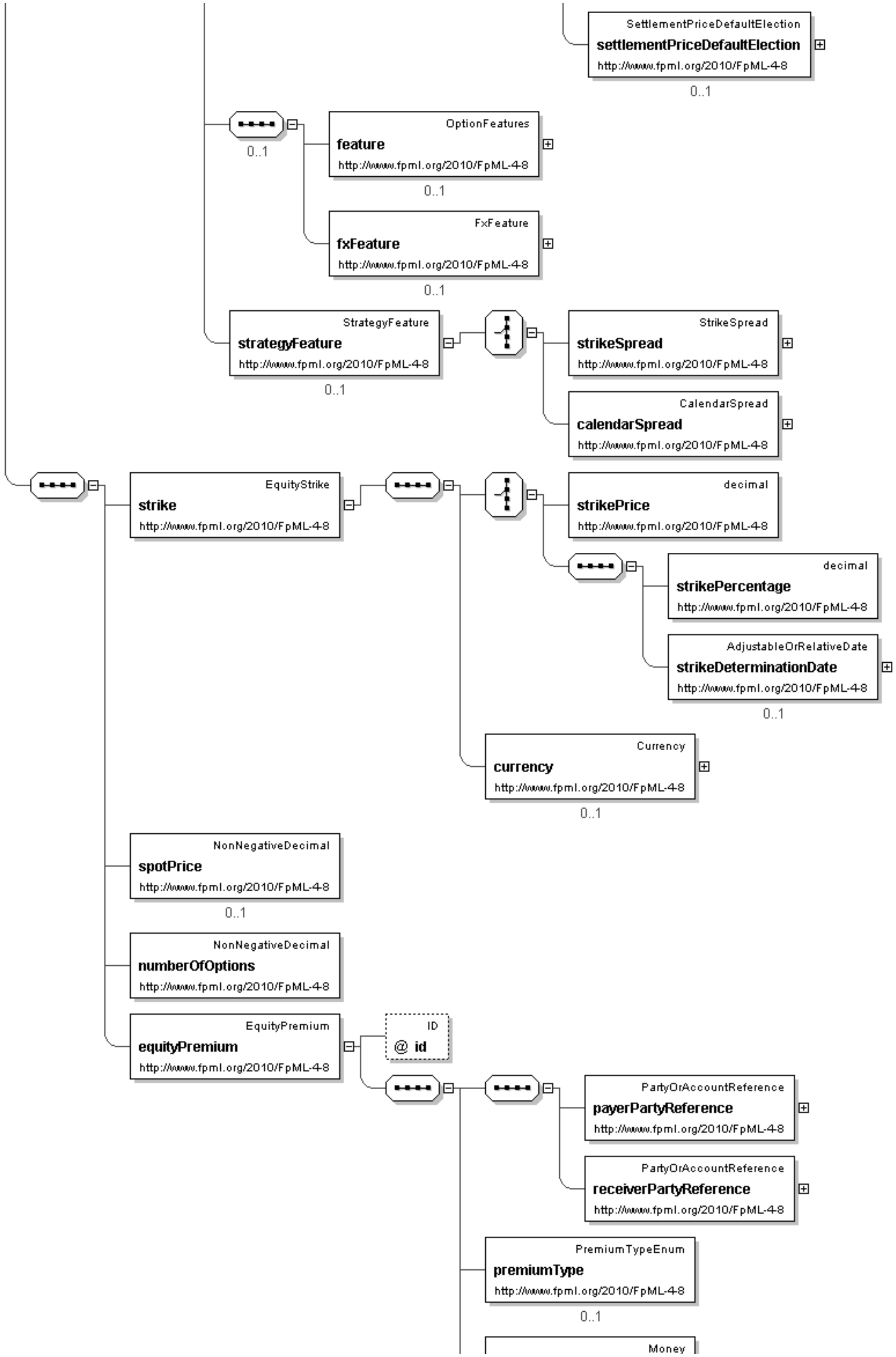
- *This element can be used wherever the following element is referenced:*
  - product

Name	equityOptionTransactionSupplement
Type	EquityOptionTransactionSupplement
Nillable	no
Abstract	no
Documentation	A component describing an Equity Option Transaction Supplement.

Logical Diagram




Money
notional
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
EquityExerciseValuationSettlement
equityExercise
http://www.fpml.org/2010/FpML-4-8
EquityEuropeanExercise
equityEuropeanExercise
http://www.fpml.org/2010/FpML-4-8
EquityAmericanExercise
equityAmericanExercise
http://www.fpml.org/2010/FpML-4-8
EquityBermudaExercise
equityBermudaExercise
http://www.fpml.org/2010/FpML-4-8
boolean
automaticExercise
http://www.fpml.org/2010/FpML-4-8
MakeWholeProvisions
makeWholeProvisions
http://www.fpml.org/2010/FpML-4-8
0..1
PrePayment
prePayment
http://www.fpml.org/2010/FpML-4-8
EquityValuation
equityValuation
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
settlementDate
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8
SettlementPriceSource
settlementPriceSource
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementTypeEnum
settlementType
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
settlementMethodElectionDate
http://www.fpml.org/2010/FpML-4-8
0..1
PartyReference
settlementMethodElectingPartyReference
http://www.fpml.org/2010/FpML-4-8
0..1


SettlementPriceDefaultElection
settlementPriceDefaultElection
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
OptionFeatures
feature
http://www.fpml.org/2010/FpML-4-8
0..1
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
StrategyFeature
strategyFeature
http://www.fpml.org/2010/FpML-4-8
0..1
StrikeSpread
strikeSpread
http://www.fpml.org/2010/FpML-4-8
CalendarSpread
calendarSpread
http://www.fpml.org/2010/FpML-4-8
EquityStrike
strike
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decimal
strikePrice
http://www.fpml.org/2010/FpML-4-8
decimal
strikePercentage
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
strikeDeterminationDate
http://www.fpml.org/2010/FpML-4-8
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Currency
currency
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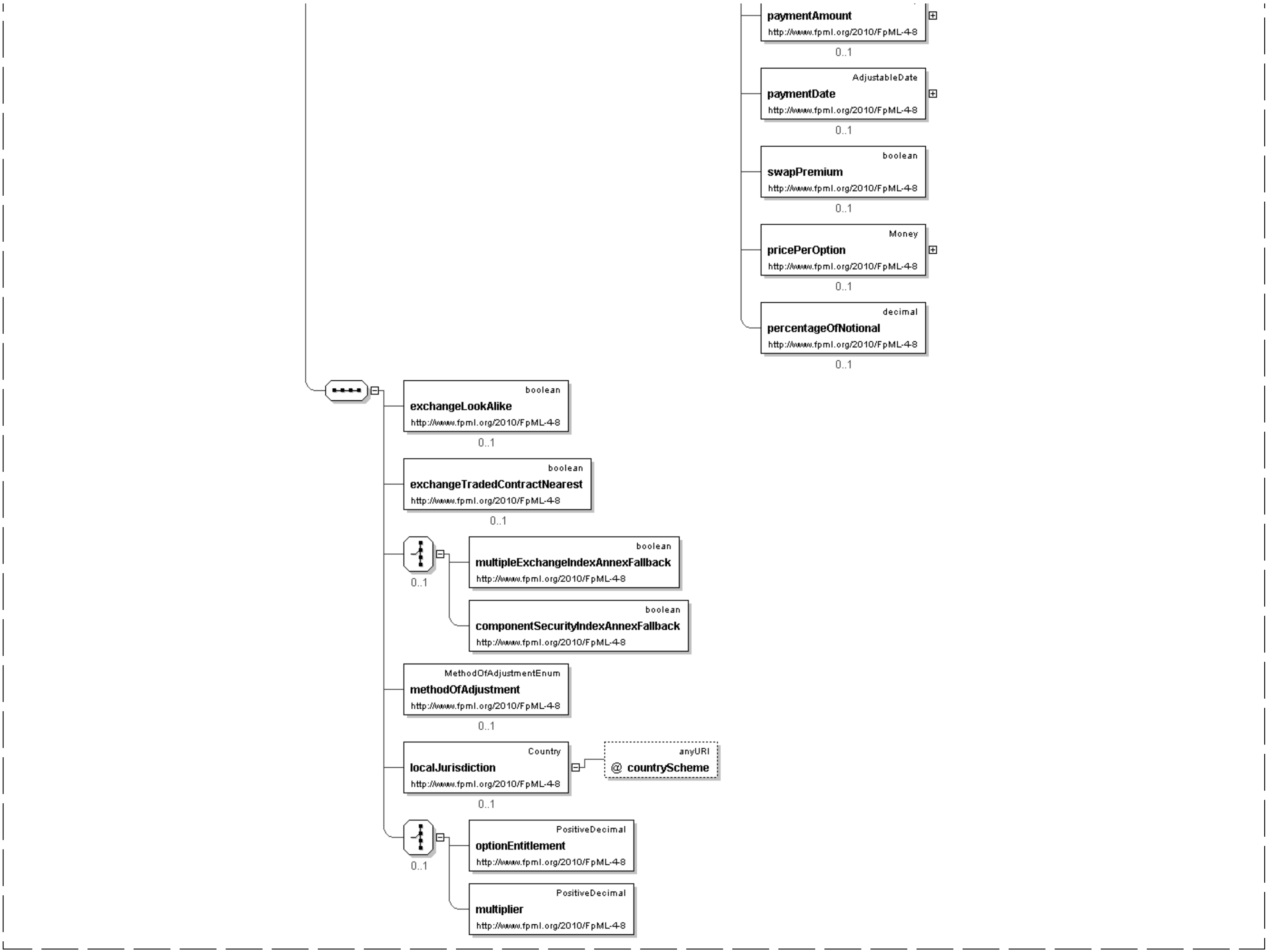
0..1
NonNegativeDecimal
spotPrice
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
numberOfOptions
http://www.fpml.org/2010/FpML-4-8
EquityPremium
equityPremium
http://www.fpml.org/2010/FpML-4-8
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
PremiumTypeEnum
premiumType
http://www.fpml.org/2010/FpML-4-8
0..1
Money



XML Instance Representation

```
<equityOptionTransactionSupplement
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'
```

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction.'

<equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]

'Effective date for a forward starting option.'

<underlyer> Underlyer </underlyer> [1]

'Specifies the underlying component, which can be either one or many and consists in either equity, index or convertible bond component, or a combination of these.'

<notional> Money </notional> [0..1]

'The notional amount.'

<equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]

'The parameters for defining how the equity option can be exercised, how it is valued and how it is settled.'

Start Group: Feature.model [0..1]

<feature> OptionFeatures </feature> [0..1]

'Asian, Barrier, Knock and Pass Through features.'

<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model

<strategyFeature> StrategyFeature </strategyFeature> [0..1]

'A equity option simple strategy feature.'

<strike> EquityStrike </strike> [1]

'Defines whether it is a price or level at which the option has been, or will be, struck.'

<spotPrice> NonNegativeDecimal </spotPrice> [0..1]

'The price per share, index or basket observed on the trade or effective date.'

<numberOfOptions> NonNegativeDecimal </numberOfOptions> [1]

'The number of options comprised in the option transaction.'

<equityPremium> EquityPremium </equityPremium> [1]

'The equity option premium payable by the buyer to the seller.'

<exchangeLookAlike> xsd:boolean </exchangeLookAlike> [0..1]

'For a share option transaction, a flag used to indicate whether the transaction is to be treated as an \'exchange look-alike\'. This designation has significance for how share adjustments (arising from corporate actions) will be determined for the transaction. For an \'exchange look-alike\' transaction the relevant share adjustments will follow that for a corresponding designated contract listed on the related exchange (referred to as Options Exchange Adjustment (ISDA defined term), otherwise the share adjustments will be determined by the calculation agent (referred to as Calculation Agent Adjustment (ISDA defined term)).'

<exchangeTradedContractNearest> xsd:boolean </exchangeTradedContractNearest> [0..1]

'For an index option transaction, a flag used in conjuction with Futures Price Valuation (ISDA defined term) to indicate whether the Nearest Index Contract provision is applicable. The Nearest Index Contract provision is a rule for determining the Exchange-traded Contract (ISDA defined term) without having to explicitly state the actual contract, delivery month and exchange on which it is traded.'

Start Group: IndexAnnexFallback.model [0..1]
Start Choice [1]
<multipleExchangeIndexAnnexFallback> xsd:boolean </multipleExchangeIndexAnnexFallback> [1]

'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange Index Annex is applicable to the transaction. This annex defines additional provisions which are applicable where an index is comprised of component securities that are traded on multiple exchanges.'

<componentSecurityIndexAnnexFallback> xsd:boolean </componentSecurityIndexAnnexFallback> [1]

'For an index option transaction, a flag to indicate whether a relevant Component Security Index Annex is applicable to the transaction.'

End Choice
End Group: IndexAnnexFallback.model
<methodOfAdjustment> MethodOfAdjustmentEnum </methodOfAdjustment> [0..1]
<localJurisdiction> Country </localJurisdiction> [0..1]

'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties, and similar charges imposed by the taxing authority of the Local Jurisdiction If this element is not present Local Jurisdiction is Not Applicable.'

Start Choice [0..1]
<optionEntitlement> PositiveDecimal </optionEntitlement> [1]

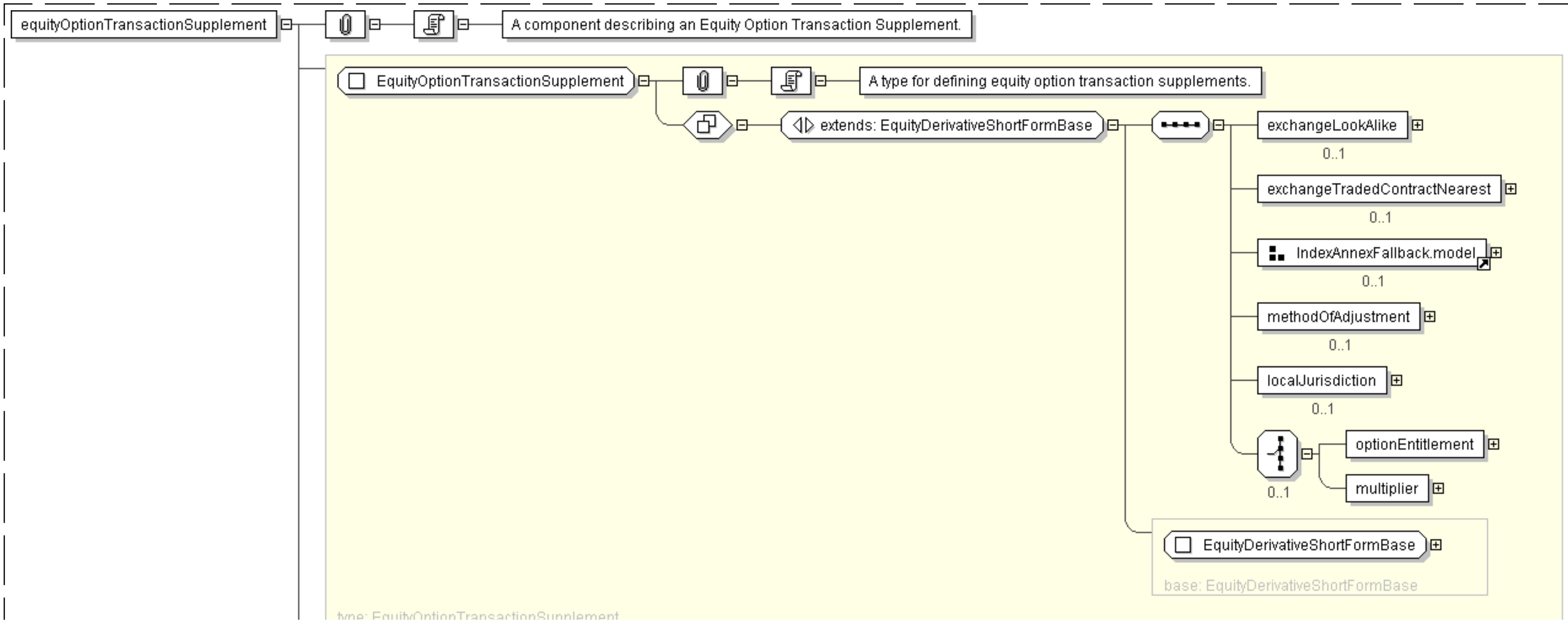
'The number of shares per option comprised in the option transaction supplement.'

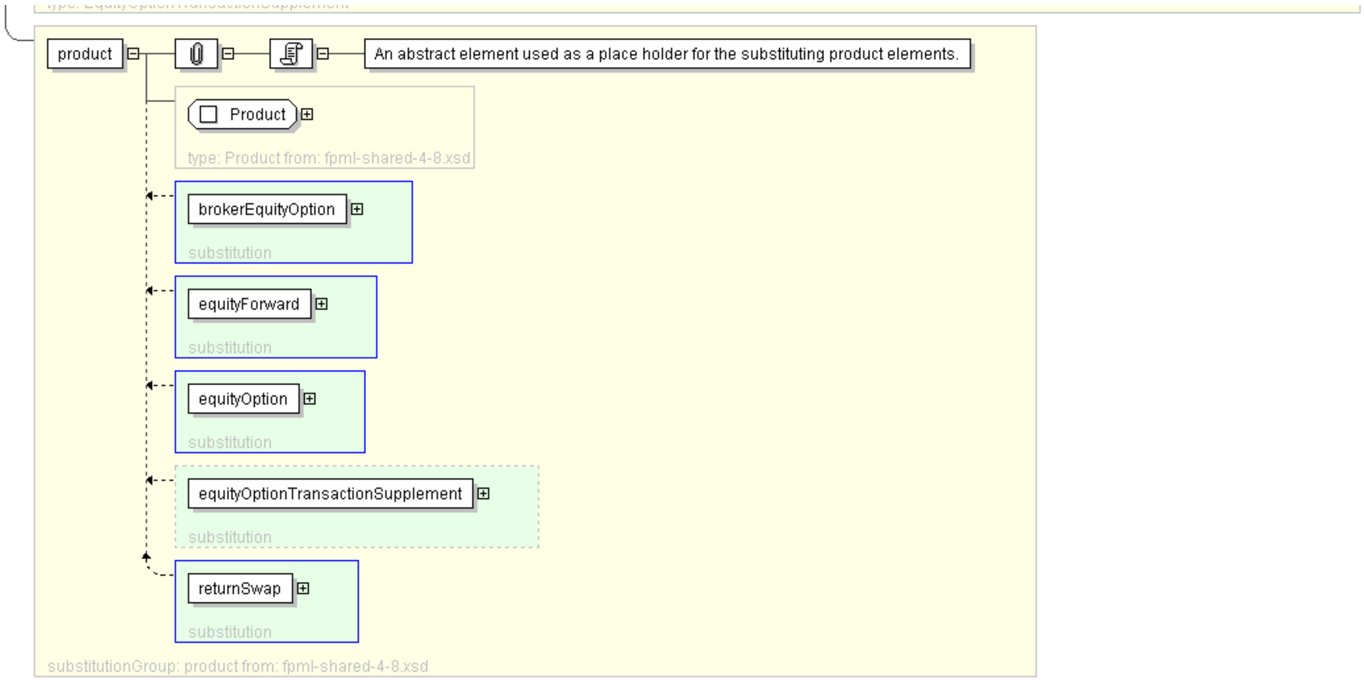
<multiplier> PositiveDecimal </multiplier> [1]

'Specifies the contract multiplier that can be associated with an index option.'

End Choice
</equityOptionTransactionSupplement>

Diagram





Schema Component Representation

```
<xsd:element name="equityOptionTransactionSupplement" type="
EquityOptionTransactionSupplement " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: BrokerEquityOption

Super-types:	Product < EquityDerivativeBase (by extension) < EquityDerivativeShortFormBase (by extension) < **BrokerEquityOption** (by extension)
Sub-types:	None

Name	BrokerEquityOption
Used by (from the same schema document)	Element **brokerEquityOption**
Abstract	no
Documentation	A type for defining the broker equity options.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
```

of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction.'

<equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]

'Effective date for a forward starting option.'

<underlyer> Underlyer </underlyer> [1]

'Specifies the underlying component, which can be either one or many and consists in either equity, index or convertible bond component, or a combination of these.'

<notional> Money </notional> [0..1]

'The notional amount.'

<equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]

'The parameters for defining how the equity option can be exercised, how it is valued and how it is settled.'

Start Group: Feature.model [0..1]

<feature> OptionFeatures </feature> [0..1]

'Asian, Barrier, Knock and Pass Through features.'

<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model

<strategyFeature> StrategyFeature </strategyFeature> [0..1]

'A equity option simple strategy feature.'

<strike> EquityStrike </strike> [1]

'Defines whether it is a price or level at which the option has been, or will be, struck.'

<spotPrice> NonNegativeDecimal </spotPrice> [0..1]

'The price per share, index or basket observed on the trade or effective date.'

<numberOfOptions> NonNegativeDecimal </numberOfOptions> [1]

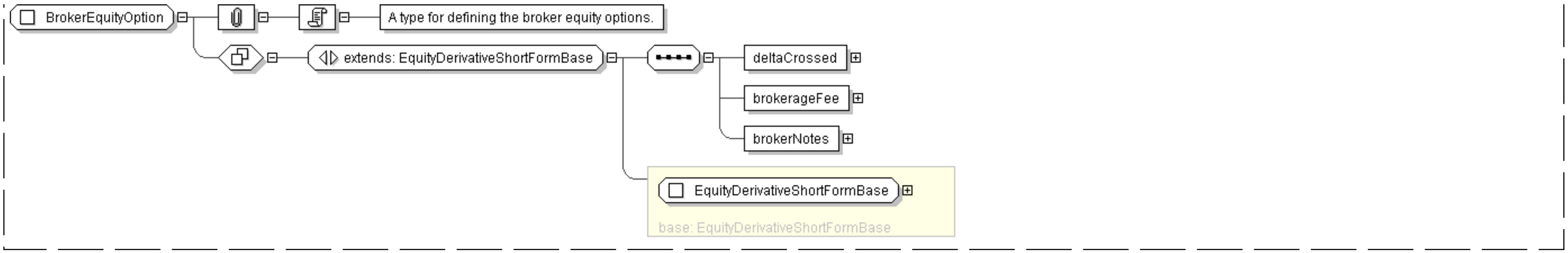
'The number of options comprised in the option transaction.'

<equityPremium> EquityPremium </equityPremium> [1]

'The equity option premium payable by the buyer to the seller.'

<deltaCrossed> xsd:boolean **</deltaCrossed>** [1]
<brokerageFee> Money **</brokerageFee>** [1]
<brokerNotes> xsd:string **</brokerNotes>** [1]
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="BrokerEquityOption">
   <xsd:complexContent>
      <xsd:extension base=" EquityDerivativeShortFormBase ">
         <xsd:sequence>
            <xsd:element name="deltaCrossed" type=" xsd:boolean "/>
            <xsd:element name="brokerageFee" type=" Money "/>
            <xsd:element name="brokerNotes" type=" xsd:string "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityAmericanExercise

Super-types:	SharedAmericanExercise < **EquityAmericanExercise** (by extension)
Sub-types:	None

Name	EquityAmericanExercise
Used by (from the same schema document)	Complex Type **EquityExerciseValuationSettlement**
Abstract	no
Documentation	A type for defining exercise procedures associated with an American style exercise of an equity option. This entity inherits from the type SharedAmericanExercise.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <commencementDate> AdjustableOrRelativeDate </commencementDate> [1]
   'The first day of the exercise period for an American style option.'

   <expirationDate> AdjustableOrRelativeDate </expirationDate> [1]
   'The last day within an exercise period for an American style option. For a European
   style option it is the only day within the exercise period.'

Start Choice [0..1]
'Choice between latest exercise time expressed as literal time, or using a
determination method.'

      <latestExerciseTime> BusinessCenterTime </latestExerciseTime> [1]
      'For a Bermuda or American style option, the latest time on an exercise business day
      (excluding the expiration date) within the exercise period that notice can be given by
      the buyer to the seller or seller\'s agent. Notice of exercise given after this time will
      be deemed to have been given on the next exercise business day.'

      <latestExerciseTimeDetermination> DeterminationMethod </latestExerciseTimeDetermination> [1]
      'Latest exercise time determination method.'

End Choice
   <latestExerciseTimeType> TimeTypeEnum </latestExerciseTimeType> [0..1]
```

'The latest time of day at which the equity option can be exercised, for example the official closing time of the exchange.'

Start Choice [1]

<equityExpirationTimeType> TimeTypeEnum </equityExpirationTimeType> [1]

'The time of day at which the equity option expires, for example the official closing time of the exchange.'

<equityExpirationTime> BusinessCenterTime </equityExpirationTime> [0..1]

'The specific time of day at which the equity option expires.'

<expirationTimeDetermination> DeterminationMethod </expirationTimeDetermination> [1]

'Expiration time determination method.'

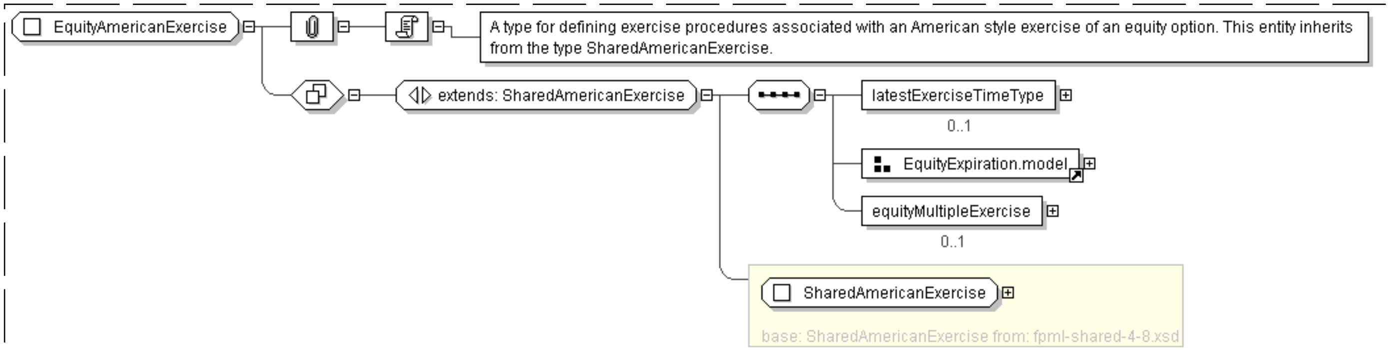
End Choice

<equityMultipleExercise> EquityMultipleExercise </equityMultipleExercise> [0..1]

'The presence of this element indicates that the option may be exercised on different days. It is not applicable to European options.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityAmericanExercise">
   <xsd:complexContent>
      <xsd:extension base=" SharedAmericanExercise ">
         <xsd:sequence>
            <xsd:element name="latestExerciseTimeType" type=" TimeTypeEnum " minOccurs="0"/>
            <xsd:group ref=" EquityExpiration.model "/>
            <xsd:element name="equityMultipleExercise" type=" EquityMultipleExercise " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityBermudaExercise

Super-types:	SharedAmericanExercise < **EquityBermudaExercise** (by extension)
Sub-types:	None

Name	EquityBermudaExercise
Used by (from the same schema document)	Complex Type **EquityExerciseValuationSettlement**
Abstract	no
Documentation	A type for defining exercise procedures associated with a Bermuda style exercise of an equity option. The term Bermuda is adopted in FpML for consistency with the ISDA Definitions.

XML Instance Representation

<...
id=" xsd:ID [0..1]">
<commencementDate> AdjustableOrRelativeDate </commencementDate> [1]

'The first day of the exercise period for an American style option.'

<expirationDate> AdjustableOrRelativeDate </expirationDate> [1]

'The last day within an exercise period for an American style option. For a European style option it is the only day within the exercise period.'

Start Choice [0..1]

'Choice between latest exercise time expressed as literal time, or using a determination method.'

<latestExerciseTime> BusinessCenterTime </latestExerciseTime> [1]

'For a Bermuda or American style option, the latest time on an exercise business day (excluding the expiration date) within the exercise period that notice can be given by the buyer to the seller or seller\'s agent. Notice of exercise given after this time will be deemed to have been given on the next exercise business day.'

<latestExerciseTimeDetermination> DeterminationMethod </latestExerciseTimeDetermination> [1]

'Latest exercise time determination method.'

End Choice
<bermudaExerciseDates> DateList **</bermudaExerciseDates>** [1]

'List of Exercise Dates for a Bermuda option.'

<latestExerciseTimeType> TimeTypeEnum **</latestExerciseTimeType>** [0..1]

'The latest time of day at which the equity option can be exercised, for example the official closing time of the exchange.'

Start Choice [1]
<equityExpirationTimeType> TimeTypeEnum **</equityExpirationTimeType>** [1]

'The time of day at which the equity option expires, for example the official closing time of the exchange.'

<equityExpirationTime> BusinessCenterTime **</equityExpirationTime>** [0..1]

'The specific time of day at which the equity option expires.'

<expirationTimeDetermination> DeterminationMethod **</expirationTimeDetermination>** [1]

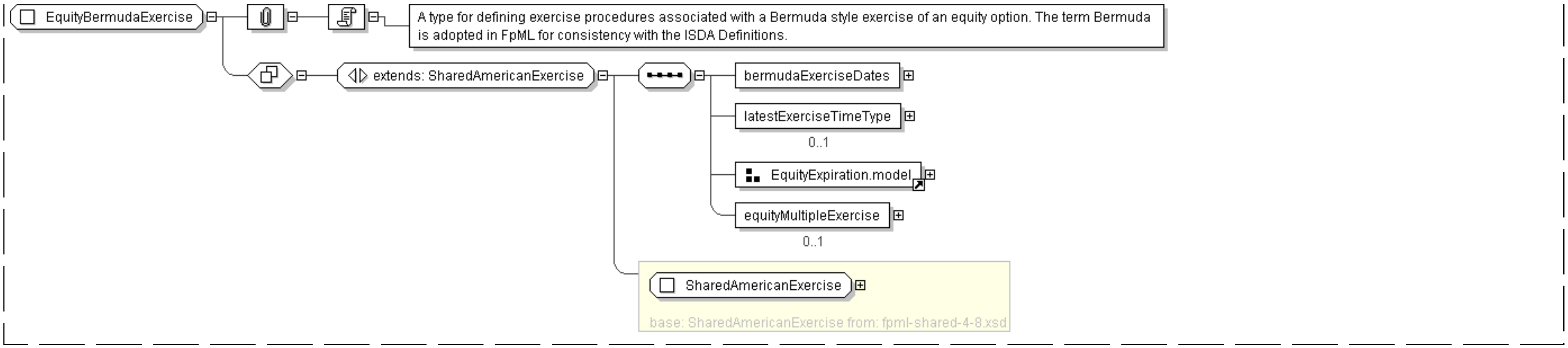
'Expiration time determination method.'

End Choice
<equityMultipleExercise> EquityMultipleExercise **</equityMultipleExercise>** [0..1]

'The presence of this element indicates that the option may be exercised on different days. It is not applicable to European options.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityBermudaExercise">
   <xsd:complexContent>
      <xsd:extension base=" SharedAmericanExercise ">
         <xsd:sequence>
            <xsd:element name="bermudaExerciseDates" type=" DateList "/>
            <xsd:element name="latestExerciseTimeType" type=" TimeTypeEnum " minOccurs="0"/>
            <xsd:group ref=" EquityExpiration.model "/>
            <xsd:element name="equityMultipleExercise" type=" EquityMultipleExercise " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityDerivativeBase

Super-types:	Product < **EquityDerivativeBase** (by extension)
Sub-types:	• EquityDerivativeLongFormBase (by extension) ◦ EquityForward (by extension) ◦ EquityOption (by extension) • EquityDerivativeShortFormBase (by extension) ◦ BrokerEquityOption (by extension) ◦ EquityOptionTransactionSupplement (by extension)

Name	EquityDerivativeBase
Abstract	yes
Documentation	A type for defining the common features of equity derivatives.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'
```

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction.'

<equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]

'Effective date for a forward starting option.'

<underlyer> Underlyer </underlyer> [1]

'Specifies the underlying component, which can be either one or many and consists in either equity, index or convertible bond component, or a combination of these.'

<notional> Money </notional> [0..1]

'The notional amount.'

<equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]

'The parameters for defining how the equity option can be exercised, how it is valued and how it is settled.'

Start Group: Feature.model [0..1]

<feature> OptionFeatures </feature> [0..1]

'Asian, Barrier, Knock and Pass Through features.'

<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

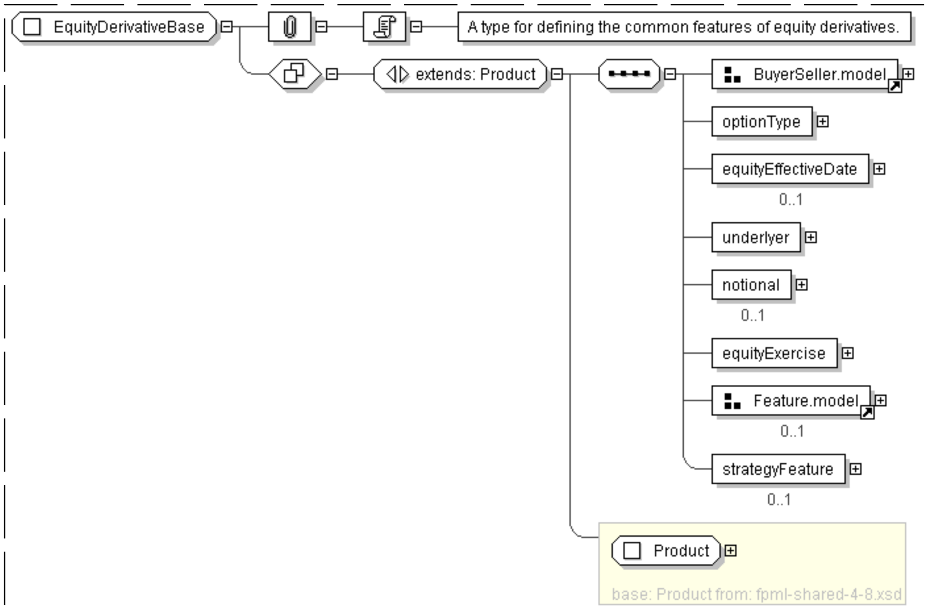
End Group: Feature.model

<strategyFeature> StrategyFeature </strategyFeature> [0..1]

'A equity option simple strategy feature.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityDerivativeBase" abstract="true">
```

```
    <xsd:complexContent>
      <xsd:extension base=" Product ">
        <xsd:sequence>
          <xsd:group ref=" BuyerSeller.model "/>
          <xsd:element name="optionType" type=" OptionTypeEnum "/>
          <xsd:element name="equityEffectiveDate" type=" xsd:date " minOccurs="0"/>
          <xsd:element name="underlyer" type=" Underlyer "/>
          <xsd:element name="notional" type=" Money " minOccurs="0"/>
          <xsd:element name="equityExercise" type=" EquityExerciseValuationSettlement "/>
          <xsd:group ref=" Feature.model " minOccurs="0"/>
          <xsd:element name="strategyFeature" type=" StrategyFeature " minOccurs="0"/>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
```

top

Complex Type: EquityDerivativeLongFormBase

Super-types:	Product < EquityDerivativeBase (by extension) < **EquityDerivativeLongFormBase** (by extension)
Sub-types:	• EquityForward (by extension) • EquityOption (by extension)

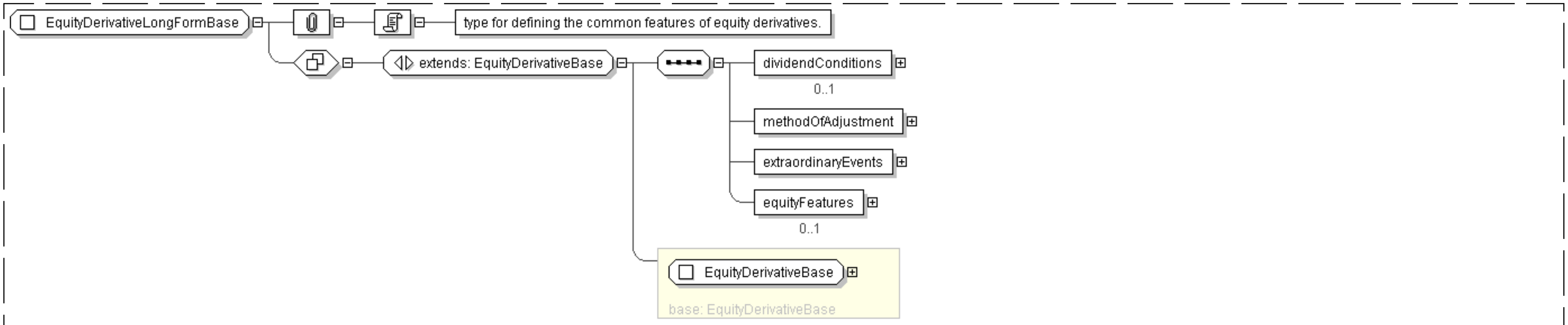
Name	EquityDerivativeLongFormBase
Abstract	yes
Documentation	type for defining the common features of equity derivatives.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <optionType> OptionTypeEnum </optionType> [1]
    'The type of option transaction.'

    <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
    'Effective date for a forward starting option.'

    <underlyer> Underlyer </underlyer> [1]
    'Specifies the underlying component, which can be either one or many and consists in
    either equity, index or convertible bond component, or a combination of these.'

    <notional> Money </notional> [0..1]
    'The notional amount.'

    <equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]
    'The parameters for defining how the equity option can be exercised, how it is valued and
```

```
    how it is settled.'

Start Group: Feature.model [0..1]
      <feature> OptionFeatures </feature> [0..1]
      'Asian, Barrier, Knock and Pass Through features.'

      <fxFeature> FxFeature </fxFeature> [0..1]
      'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model
   <strategyFeature> StrategyFeature </strategyFeature> [0..1]
   'A equity option simple strategy feature.'

   <dividendConditions> DividendConditions </dividendConditions> [0..1]
   <methodOfAdjustment> MethodOfAdjustmentEnum </methodOfAdjustment> [1]
   'Defines how adjustments will be made to the contract should one or more of the
   extraordinary events occur.'

   <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [1]
   'Where the underlying is shares, specifies events affecting the issuer of those shares that
   may require the terms of the transaction to be adjusted.'

   <equityFeatures> OptionFeatures </equityFeatures> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Use the \"feature
   \" element for option features such as asian, barrier, knock.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityDerivativeLongFormBase" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" EquityDerivativeBase ">
         <xsd:sequence>
            <xsd:element name="dividendConditions" type=" DividendConditions " minOccurs="0"/>
            <xsd:element name="methodOfAdjustment" type=" MethodOfAdjustmentEnum "/>
            <xsd:element name="extraordinaryEvents" type=" ExtraordinaryEvents "/>
            <xsd:element name="equityFeatures" type=" OptionFeatures " minOccurs="0"
            deprecated="true" deprecatedReason="Option Features content is accessible in the complex
            type EquityDerivativeBase through the model group Feature.model"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityDerivativeShortFormBase

Super-types:	Product < EquityDerivativeBase (by extension) < **EquityDerivativeShortFormBase** (by extension)
Sub-types:	• BrokerEquityOption (by extension) • EquityOptionTransactionSupplement (by extension)

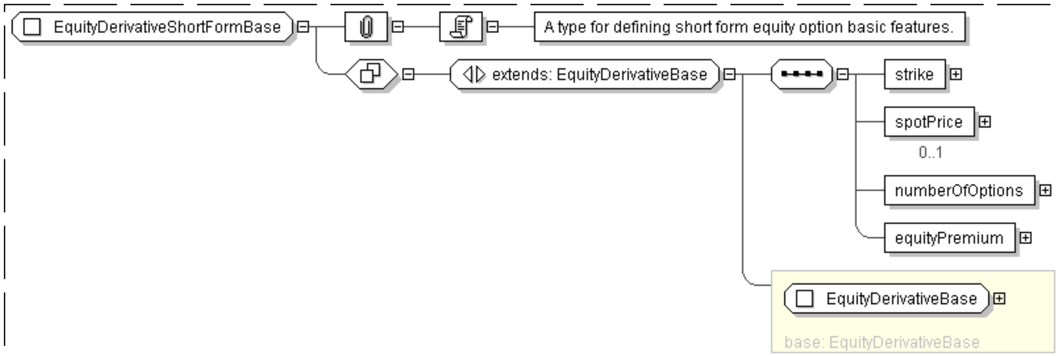
Name	EquityDerivativeShortFormBase
Abstract	yes
Documentation	A type for defining short form equity option basic features.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <optionType> OptionTypeEnum </optionType> [1]
   'The type of option transaction.'

   <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
   'Effective date for a forward starting option.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlying component, which can be either one or many and consists in
   either equity, index or convertible bond component, or a combination of these.'

   <notional> Money </notional> [0..1]
   'The notional amount.'

   <equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]
   'The parameters for defining how the equity option can be exercised, how it is valued and
   how it is settled.'
Start Group: Feature.model [0..1]
      <feature> OptionFeatures </feature> [0..1]
      'Asian, Barrier, Knock and Pass Through features.'

      <fxFeature> FxFeature </fxFeature> [0..1]
      'Quanto, Composite, or Cross Currency FX features.'
End Group: Feature.model
   <strategyFeature> StrategyFeature </strategyFeature> [0..1]
   'A equity option simple strategy feature.'

   <strike> EquityStrike </strike> [1]
   'Defines whether it is a price or level at which the option has been, or will be, struck.'

   <spotPrice> NonNegativeDecimal </spotPrice> [0..1]
   'The price per share, index or basket observed on the trade or effective date.'
```

```
<numberOfOptions> NonNegativeDecimal </numberOfOptions> [1]
'The number of options comprised in the option transaction.'

<equityPremium> EquityPremium </equityPremium> [1]
'The equity option premium payable by the buyer to the seller.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityDerivativeShortFormBase" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" EquityDerivativeBase ">
         <xsd:sequence>
            <xsd:element name="strike" type=" EquityStrike "/>
            <xsd:element name="spotPrice" type=" NonNegativeDecimal " minOccurs="0"/>
            <xsd:element name="numberOfOptions" type=" NonNegativeDecimal "/>
            <xsd:element name="equityPremium" type=" EquityPremium "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityEuropeanExercise

Super-types:	Exercise < **EquityEuropeanExercise** (by extension)
Sub-types:	None

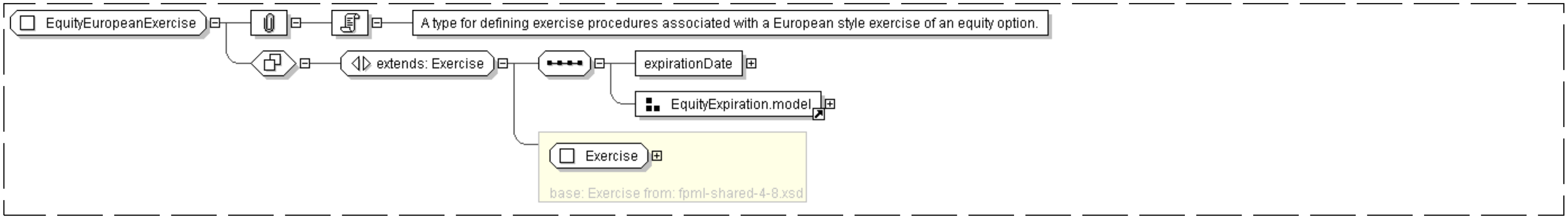
Name	EquityEuropeanExercise
Used by (from the same schema document)	Complex Type **EquityExerciseValuationSettlement**
Abstract	no
Documentation	A type for defining exercise procedures associated with a European style exercise of an equity option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <expirationDate> AdjustableOrRelativeDate </expirationDate> [1]
   'The last day within an exercise period for an American style option. For a European
   style option it is the only day within the exercise period.'

Start Choice [1]
      <equityExpirationTimeType> TimeTypeEnum </equityExpirationTimeType> [1]
      'The time of day at which the equity option expires, for example the official closing time
      of the exchange.'
```

```
        <equityExpirationTime> BusinessCenterTime </equityExpirationTime> [0..1]
        'The specific time of day at which the equity option expires.'

        <expirationTimeDetermination> DeterminationMethod </expirationTimeDetermination> [1]
        'Expiration time determination method.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityEuropeanExercise">
   <xsd:complexContent>
      <xsd:extension base=" Exercise ">
         <xsd:sequence>
            <xsd:element name="expirationDate" type=" AdjustableOrRelativeDate "/>
            <xsd:group ref=" EquityExpiration.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityExerciseValuationSettlement

Super-types:	None
Sub-types:	None

Name	EquityExerciseValuationSettlement
Used by (from the same schema document)	Complex Type **EquityDerivativeBase**
Abstract	no
Documentation	A type for defining exercise procedures for equity options.

XML Instance Representation

```
<...>
Start Choice [1]
        <equityEuropeanExercise> EquityEuropeanExercise </equityEuropeanExercise> [1]
        'The parameters for defining the expiration date and time for a European style equity option.'

        <equityAmericanExercise> EquityAmericanExercise </equityAmericanExercise> [1]
        'The parameters for defining the exercise period for an American style equity option
        together with the rules governing the quantity of the underlying that can be exercised on
        any given exercise date.'

        <equityBermudaExercise> EquityBermudaExercise </equityBermudaExercise> [1]
        'The parameters for defining the exercise period for an Bermuda style equity option
        together with the rules governing the quantity of the underlying that can be exercised on
        any given exercise date.'

End Choice
Start Choice [1]
        <automaticExercise> xsd:boolean </automaticExercise> [1]
```

'If true then each option not previously exercised will be deemed to be exercised at the expiration time on the expiration date without service of notice unless the buyer notifies the seller that it no longer wishes this to occur.'

<makeWholeProvisions> MakeWholeProvisions </makeWholeProvisions> [0..1]

'Provisions covering early exercise of option.'

<prePayment> PrePayment </prePayment> [1]

'Prepayment features for Forward.'

End Choice

<equityValuation> EquityValuation </equityValuation> [1]

'The parameters for defining when valuation of the underlying takes place.'

<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]

'Date on which settlement of option premiums will occur.'

<settlementCurrency> Currency </settlementCurrency> [1]

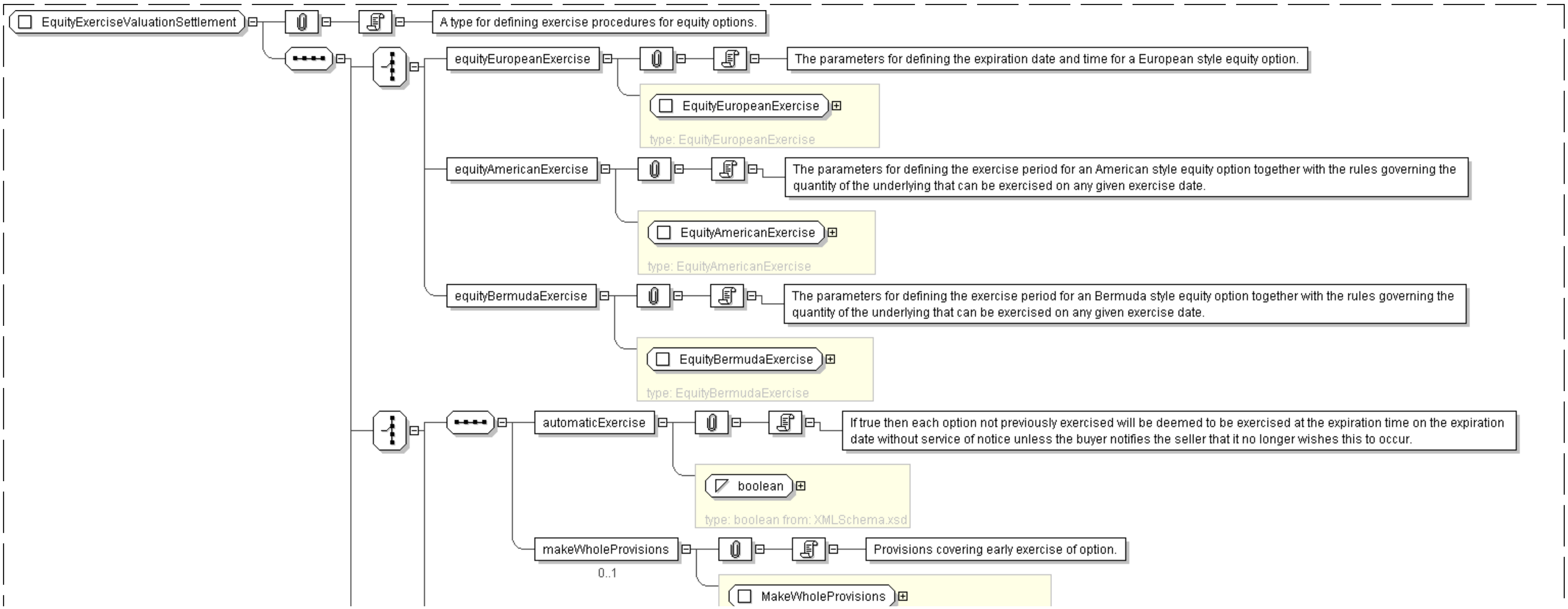
'The currency in which a cash settlement for non-deliverable forward and non-deliverable options.'

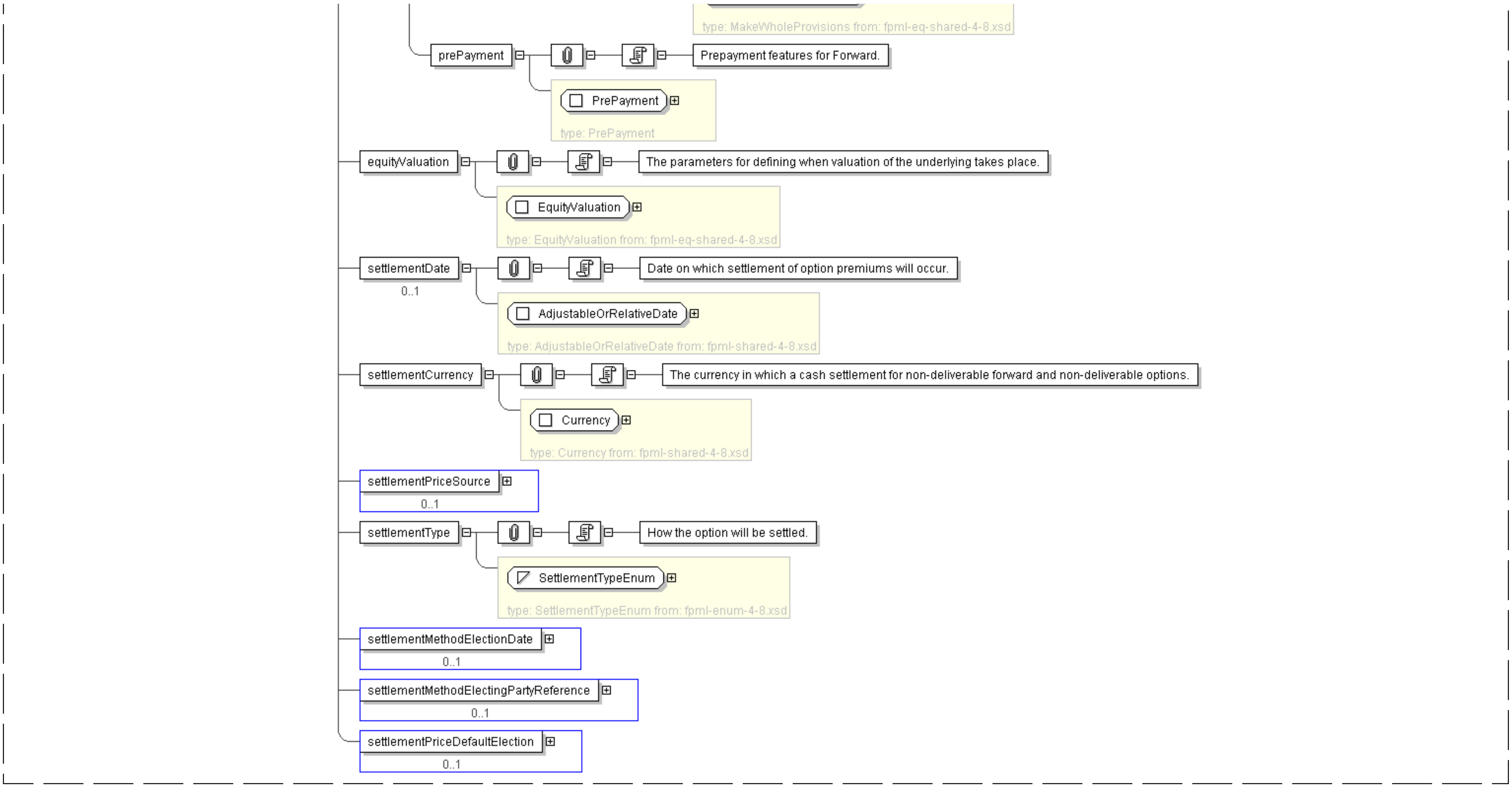
<settlementPriceSource> SettlementPriceSource </settlementPriceSource> [0..1]
<settlementType> SettlementTypeEnum </settlementType> [1]

'How the option will be settled.'

<settlementMethodElectionDate> AdjustableOrRelativeDate </settlementMethodElectionDate> [0..1]
<settlementMethodElectingPartyReference> PartyReference </settlementMethodElectingPartyReference> [0..1]
<settlementPriceDefaultElection> SettlementPriceDefaultElection </settlementPriceDefaultElection> [0..1]
</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="EquityExerciseValuationSettlement">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="equityEuropeanExercise" type=" EquityEuropeanExercise "/>
         <xsd:element name="equityAmericanExercise" type=" EquityAmericanExercise "/>
         <xsd:element name="equityBermudaExercise" type=" EquityBermudaExercise "/>
      </xsd:choice>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="automaticExercise" type=" xsd:boolean "/>
            <xsd:element name="makeWholeProvisions" type=" MakeWholeProvisions " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element name="prePayment" type=" PrePayment "/>
      </xsd:choice>
      <xsd:element name="equityValuation" type=" EquityValuation "/>
      <xsd:element name="settlementDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
      <xsd:element name="settlementCurrency" type=" Currency "/>
      <xsd:element name="settlementPriceSource" type=" SettlementPriceSource " minOccurs="0"/>
      <xsd:element name="settlementType" type=" SettlementTypeEnum "/>
      <xsd:element name="settlementMethodElectionDate" type=" AdjustableOrRelativeDate
```

```
    " minOccurs="0"/>
    <xsd:element name="settlementMethodElectingPartyReference" type=" PartyReference
    " minOccurs="0"/>
    <xsd:element name="settlementPriceDefaultElection" type=" SettlementPriceDefaultElection
    " minOccurs="0"/>
  </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EquityForward

Super-types:	Product < EquityDerivativeBase (by extension) < EquityDerivativeLongFormBase (by extension) < **EquityForward** (by extension)
Sub-types:	None

Name	EquityForward
Used by (from the same schema document)	Element **equityForward**
Abstract	no
Documentation	A type for defining equity forwards.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
  <productType> ProductType </productType> [0..*]
  'A classification of the type of product. FpML defines a simple product categorization using
  a coding scheme.'

  <productId> ProductId </productId> [0..*]
  'A product reference identifier allocated by a party. FpML does not define the domain
  values associated with this element. Note that the domain values for this element are
  not strictly an enumerated list.'

  <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
  'A reference to the party that buys this instrument, ie. pays for this instrument and
  receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
  of FRAs this the fixed rate payer.'

  <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
  'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
  rights defined by this instrument and in return receives a payment for it. See 2000
  ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

  <optionType> OptionTypeEnum </optionType> [1]
  'The type of option transaction.'

  <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
  'Effective date for a forward starting option.'

  <underlyer> Underlyer </underlyer> [1]
  'Specifies the underlying component, which can be either one or many and consists in
  either equity, index or convertible bond component, or a combination of these.'

  <notional> Money </notional> [0..1]
  'The notional amount.'

  <equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]
  'The parameters for defining how the equity option can be exercised, how it is valued and
  how it is settled.'

Start Group: Feature.model [0..1]
    <feature> OptionFeatures </feature> [0..1]
    'Asian, Barrier, Knock and Pass Through features.'

    <fxFeature> FxFeature </fxFeature> [0..1]
    'Quanto, Composite, or Cross Currency FX features.'
```

End Group: Feature.model
<strategyFeature> StrategyFeature </strategyFeature> [0..1]

'A equity option simple strategy feature.'

<dividendConditions> DividendConditions </dividendConditions> [0..1]
<methodOfAdjustment> MethodOfAdjustmentEnum </methodOfAdjustment> [1]

'Defines how adjustments will be made to the contract should one or more of the extraordinary events occur.'

<extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [1]

'Where the underlying is shares, specifies events affecting the issuer of those shares that may require the terms of the transaction to be adjusted.'

<equityFeatures> OptionFeatures </equityFeatures> [0..1]

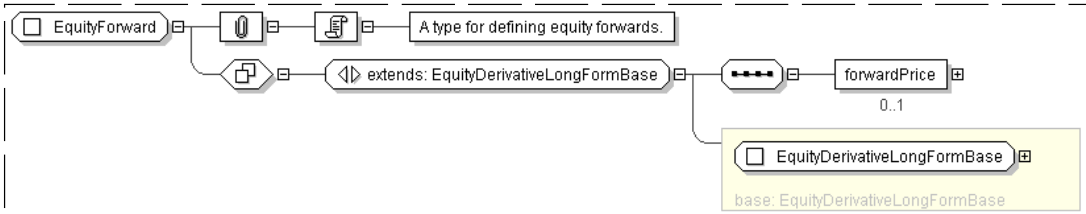
'DEPRECATED This element will be removed in the next FpML major version. Use the \"feature \" element for option features such as asian, barrier, knock.'

<forwardPrice> Money **</forwardPrice>** [0..1]

'The forward price per share, index or basket.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityForward">
   <xsd:complexContent>
      <xsd:extension base=" EquityDerivativeLongFormBase ">
         <xsd:sequence>
            <xsd:element name="forwardPrice" type=" Money " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityMultipleExercise

Super-types:	None
Sub-types:	None

Name	EquityMultipleExercise
Used by (from the same schema document)	Complex Type **EquityAmericanExercise** , Complex Type **EquityBermudaExercise**
Abstract	no
Documentation	A type for defining the multiple exercise provisions of an American or Bermuda style equity option.

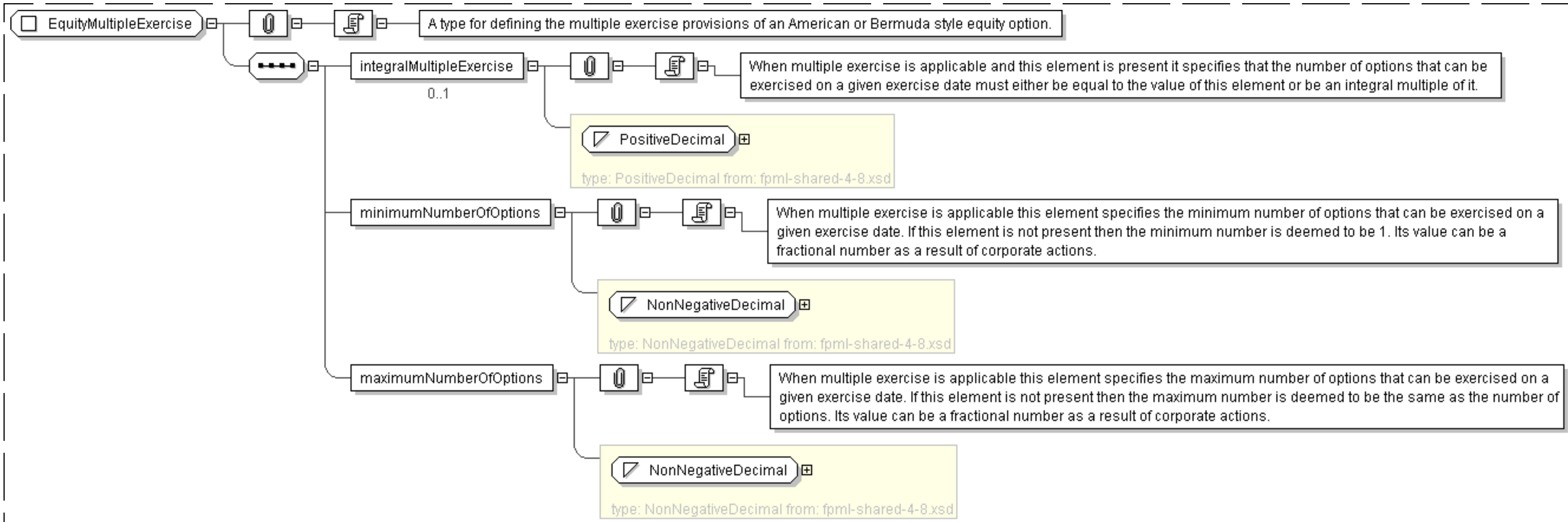
XML Instance Representation

<...>
<integralMultipleExercise> PositiveDecimal </integralMultipleExercise> [0..1]

'When multiple exercise is applicable and this element is present it specifies that the number of options that can be exercised on a given exercise date must either be equal to the value of this element or be an integral multiple of it.'

```
    <minimumNumberOfOptions> NonNegativeDecimal </minimumNumberOfOptions> [1]
    'When multiple exercise is applicable this element specifies the minimum number of options
    that can be exercised on a given exercise date. If this element is not present then the
    minimum number is deemed to be 1. Its value can be a fractional number as a result of
    corporate actions.'

    <maximumNumberOfOptions> NonNegativeDecimal </maximumNumberOfOptions> [1]
    'When multiple exercise is applicable this element specifies the maximum number of options
    that can be exercised on a given exercise date. If this element is not present then the
    maximum number is deemed to be the same as the number of options. Its value can be a
    fractional number as a result of corporate actions.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityMultipleExercise">
   <xsd:sequence>
      <xsd:element name="integralMultipleExercise" type=" PositiveDecimal " minOccurs="0"/>
      <xsd:element name="minimumNumberOfOptions" type=" NonNegativeDecimal "/>
      <xsd:element name="maximumNumberOfOptions" type=" NonNegativeDecimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EquityOption

Super-types:	Product < EquityDerivativeBase (by extension) < EquityDerivativeLongFormBase (by extension) < **EquityOption** (by extension)
Sub-types:	None

Name	EquityOption
Used by (from the same schema document)	Element **equityOption**
Abstract	no
Documentation	A type for defining equity options.

XML Instance Representation

```
<...
```

id=" xsd:ID [0..1]">
<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<optionType> OptionTypeEnum </optionType> [1]

'The type of option transaction.'

<equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]

'Effective date for a forward starting option.'

<underlyer> Underlyer </underlyer> [1]

'Specifies the underlying component, which can be either one or many and consists in either equity, index or convertible bond component, or a combination of these.'

<notional> Money </notional> [0..1]

'The notional amount.'

<equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]

'The parameters for defining how the equity option can be exercised, how it is valued and how it is settled.'

Start Group: Feature.model [0..1]
<feature> OptionFeatures </feature> [0..1]

'Asian, Barrier, Knock and Pass Through features.'

<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model
<strategyFeature> StrategyFeature </strategyFeature> [0..1]

'A equity option simple strategy feature.'

<dividendConditions> DividendConditions </dividendConditions> [0..1]
<methodOfAdjustment> MethodOfAdjustmentEnum </methodOfAdjustment> [1]

'Defines how adjustments will be made to the contract should one or more of the extraordinary events occur.'

<extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [1]

'Where the underlying is shares, specifies events affecting the issuer of those shares that may require the terms of the transaction to be adjusted.'

<equityFeatures> OptionFeatures </equityFeatures> [0..1]

'DEPRECATED This element will be removed in the next FpML major version. Use the \"feature \" element for option features such as asian, barrier, knock.'

<strike> EquityStrike **</strike>** [0..1]

'Defines whether it is a price or level at which the option has been, or will be, struck.'

<spotPrice> NonNegativeDecimal **</spotPrice>** [0..1]

'The price per share, index or basket observed on the trade or effective date.'

<numberOfOptions> NonNegativeDecimal </numberOfOptions> [0..1]

'The number of options comprised in the option transaction.'

<optionEntitlement> PositiveDecimal </optionEntitlement> [1]

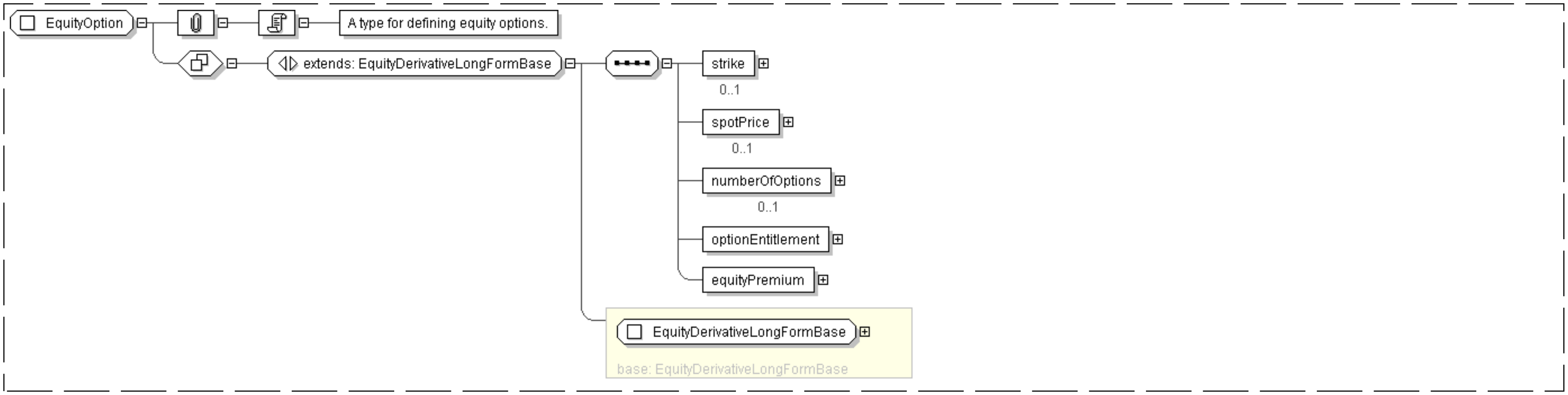
'The number of shares per option comprised in the option transaction.'

<equityPremium> EquityPremium </equityPremium> [1]

'The equity option premium payable by the buyer to the seller.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityOption">
   <xsd:complexContent>
      <xsd:extension base=" EquityDerivativeLongFormBase ">
         <xsd:sequence>
            <xsd:element name="strike" type=" EquityStrike " minOccurs="0"/>
            <xsd:element name="spotPrice" type=" NonNegativeDecimal " minOccurs="0"/>
            <xsd:element name="numberOfOptions" type=" NonNegativeDecimal " minOccurs="0"/>
            <xsd:element name="optionEntitlement" type=" PositiveDecimal "/>
            <xsd:element name="equityPremium" type=" EquityPremium "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityOptionTermination

Super-types:	None
Sub-types:	None

Name	EquityOptionTermination
Abstract	no
Documentation	A type for defining Equity Option Termination.

XML Instance Representation

<...>
<settlementAmountPaymentDate> AdjustableDate </settlementAmountPaymentDate> [1]
<settlementAmount> Money </settlementAmount> [1]
</...>

Diagram

Schema Component Representation

```
<xsd:complexType name="EquityOptionTermination">
   <xsd:sequence>
      <xsd:element name="settlementAmountPaymentDate" type=" AdjustableDate "/>
      <xsd:element name="settlementAmount" type=" Money "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EquityOptionTransactionSupplement

Super-types:	Product < EquityDerivativeBase (by extension) < EquityDerivativeShortFormBase (by extension) < **EquityOptionTransactionSupplement** (by extension)
Sub-types:	None

Name	EquityOptionTransactionSupplement
Used by (from the same schema document)	Element **equityOptionTransactionSupplement**
Abstract	no
Documentation	A type for defining equity option transaction supplements.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <optionType> OptionTypeEnum </optionType> [1]
   'The type of option transaction.'

   <equityEffectiveDate> xsd:date </equityEffectiveDate> [0..1]
   'Effective date for a forward starting option.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlying component, which can be either one or many and consists in
   either equity, index or convertible bond component, or a combination of these.'

   <notional> Money </notional> [0..1]
   'The notional amount.'
```

<equityExercise> EquityExerciseValuationSettlement </equityExercise> [1]

'The parameters for defining how the equity option can be exercised, how it is valued and how it is settled.'

Start Group: Feature.model [0..1]

<feature> OptionFeatures </feature> [0..1]

'Asian, Barrier, Knock and Pass Through features.'

<fxFeature> FxFeature </fxFeature> [0..1]

'Quanto, Composite, or Cross Currency FX features.'

End Group: Feature.model

<strategyFeature> StrategyFeature </strategyFeature> [0..1]

'A equity option simple strategy feature.'

<strike> EquityStrike </strike> [1]

'Defines whether it is a price or level at which the option has been, or will be, struck.'

<spotPrice> NonNegativeDecimal </spotPrice> [0..1]

'The price per share, index or basket observed on the trade or effective date.'

<numberOfOptions> NonNegativeDecimal </numberOfOptions> [1]

'The number of options comprised in the option transaction.'

<equityPremium> EquityPremium </equityPremium> [1]

'The equity option premium payable by the buyer to the seller.'

<exchangeLookAlike> xsd:boolean **</exchangeLookAlike>** [0..1]

'For a share option transaction, a flag used to indicate whether the transaction is to be treated as an \'exchange look-alike\'. This designation has significance for how share adjustments (arising from corporate actions) will be determined for the transaction. For an \'exchange look-alike\' transaction the relevant share adjustments will follow that for a corresponding designated contract listed on the related exchange (referred to as Options Exchange Adjustment (ISDA defined term), otherwise the share adjustments will be determined by the calculation agent (referred to as Calculation Agent Adjustment (ISDA defined term)).'

<exchangeTradedContractNearest> xsd:boolean **</exchangeTradedContractNearest>** [0..1]

'For an index option transaction, a flag used in conjuction with Futures Price Valuation (ISDA defined term) to indicate whether the Nearest Index Contract provision is applicable. The Nearest Index Contract provision is a rule for determining the Exchange-traded Contract (ISDA defined term) without having to explicitly state the actual contract, delivery month and exchange on which it is traded.'

Start Group: IndexAnnexFallback.model [0..1]

Start Choice [1]

<multipleExchangeIndexAnnexFallback> xsd:boolean **</multipleExchangeIndexAnnexFallback>** [1]

'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange Index Annex is applicable to the transaction. This annex defines additional provisions which are applicable where an index is comprised of component securities that are traded on multiple exchanges.'

<componentSecurityIndexAnnexFallback> xsd:boolean **</componentSecurityIndexAnnexFallback>** [1]

'For an index option transaction, a flag to indicate whether a relevant Component Security Index Annex is applicable to the transaction.'

End Choice

End Group: IndexAnnexFallback.model

<methodOfAdjustment> MethodOfAdjustmentEnum **</methodOfAdjustment>** [0..1]

<localJurisdiction> Country **</localJurisdiction>** [0..1]

'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties, and similar charges imposed by the taxing authority of the Local Jurisdiction If this element is not present Local Jurisdiction is Not Applicable.'

Start Choice [0..1]

<optionEntitlement> PositiveDecimal **</optionEntitlement>** [1]

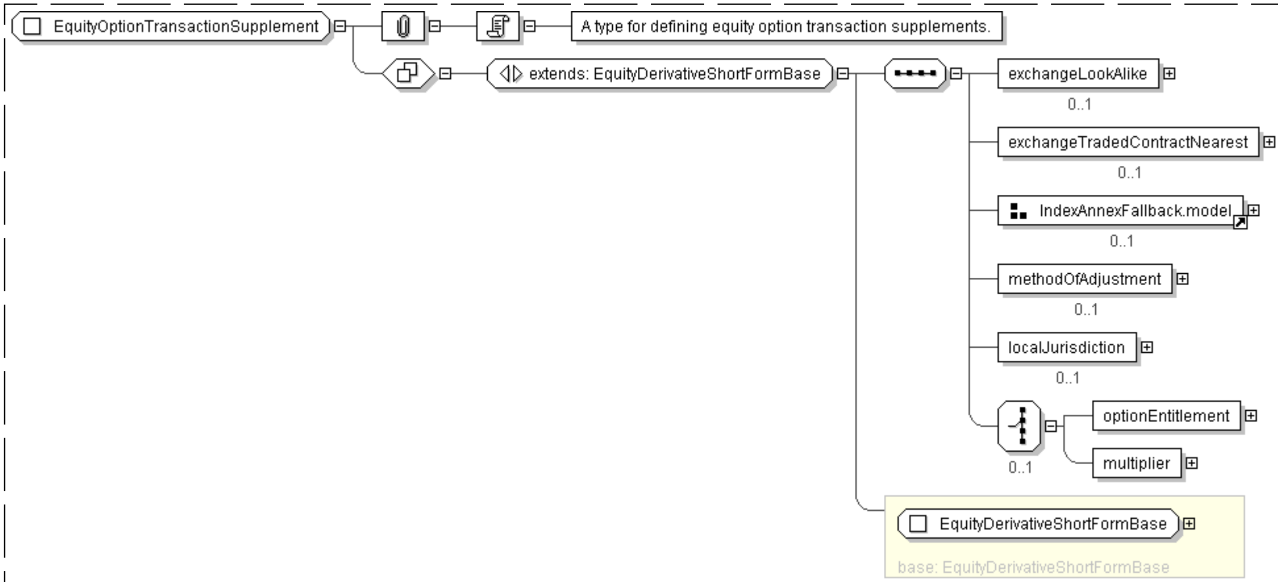
'The number of shares per option comprised in the option transaction supplement.'

<multiplier> PositiveDecimal **</multiplier>** [1]

'Specifies the contract multiplier that can be associated with an index option.'

End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityOptionTransactionSupplement">
   <xsd:complexContent>
      <xsd:extension base=" EquityDerivativeShortFormBase ">
         <xsd:sequence>
            <xsd:element name="exchangeLookAlike" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="exchangeTradedContractNearest" type=" xsd:boolean " minOccurs="0"/>
            <xsd:group ref=" IndexAnnexFallback.model " minOccurs="0"/>
            <xsd:element name="methodOfAdjustment" type=" MethodOfAdjustmentEnum " minOccurs="0"/>
            <xsd:element name="localJurisdiction" type=" Country " minOccurs="0"/>
            <xsd:choice minOccurs="0">
               <xsd:element name="optionEntitlement" type=" PositiveDecimal "/>
               <xsd:element name="multiplier" type=" PositiveDecimal "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PrePayment

Super-types:	PaymentBase < **PrePayment** (by extension)
Sub-types:	None

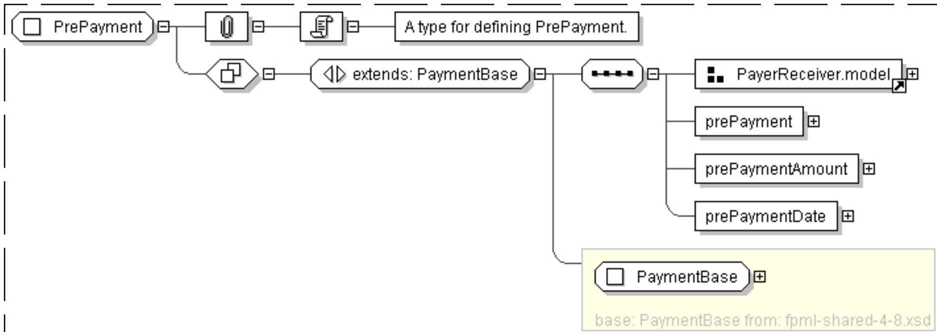
Name	PrePayment
Used by (from the same schema document)	Complex Type **EquityExerciseValuationSettlement**
Abstract	no

Documentation	A type for defining PrePayment.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <prePayment> xsd:boolean </prePayment> [1]
   <prePaymentAmount> Money </prePaymentAmount> [1]
   <prePaymentDate> AdjustableDate </prePaymentDate> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PrePayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="prePayment" type=" xsd:boolean "/>
            <xsd:element name="prePaymentAmount" type=" Money "/>
            <xsd:element name="prePaymentDate" type=" AdjustableDate "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Model Group: EquityExpiration.model

Name	EquityExpiration.model
Used by (from the same schema document)	Complex Type **EquityAmericanExercise** , Complex Type **EquityBermudaExercise** , Complex Type **EquityEuropeanExercise**
Documentation	Choice between expiration expressed as symbolic and optional literal time, or using a determination method.

XML Instance Representation

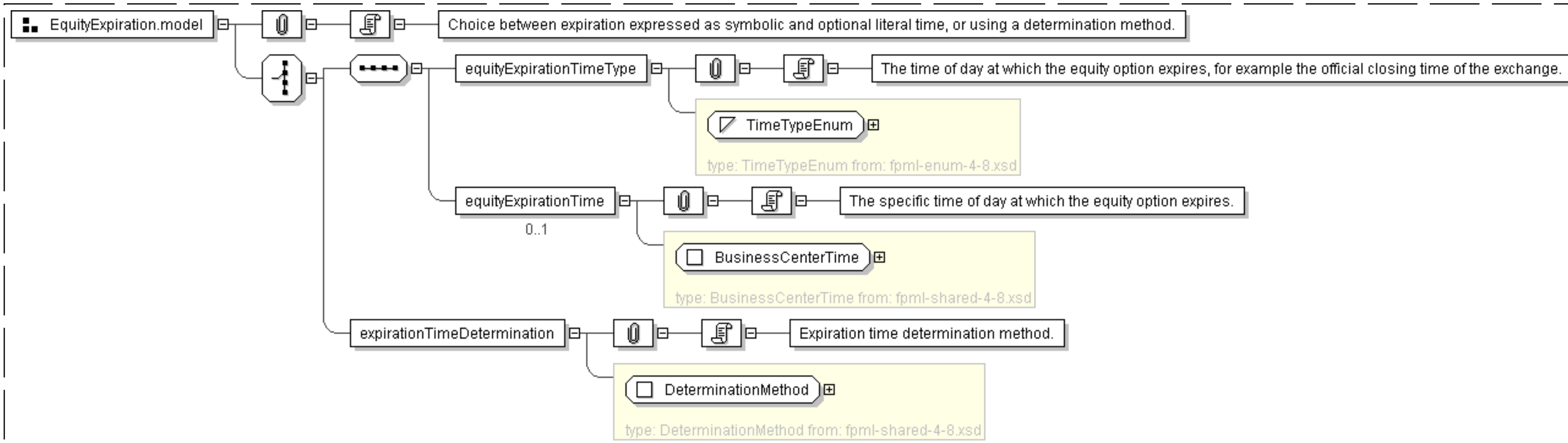
```
Start Choice [1]
   <equityExpirationTimeType> TimeTypeEnum </equityExpirationTimeType> [1]
   'The time of day at which the equity option expires, for example the official closing time
   of the exchange.'

   <equityExpirationTime> BusinessCenterTime </equityExpirationTime> [0..1]
   'The specific time of day at which the equity option expires.'
```

<expirationTimeDetermination> DeterminationMethod </expirationTimeDetermination> [1]

'Expiration time determination method.'

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="EquityExpiration.model">
   <xsd:choice>
      <xsd:sequence>
         <xsd:element name="equityExpirationTimeType" type=" TimeTypeEnum "/>
         <xsd:element name="equityExpirationTime" type=" BusinessCenterTime " minOccurs="0"/>
      </xsd:sequence>
      <xsd:element name="expirationTimeDetermination" type=" DeterminationMethod "/>
   </xsd:choice>
</xsd:group>
```

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Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
```

```
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 7132 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-option-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 7132 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-option-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

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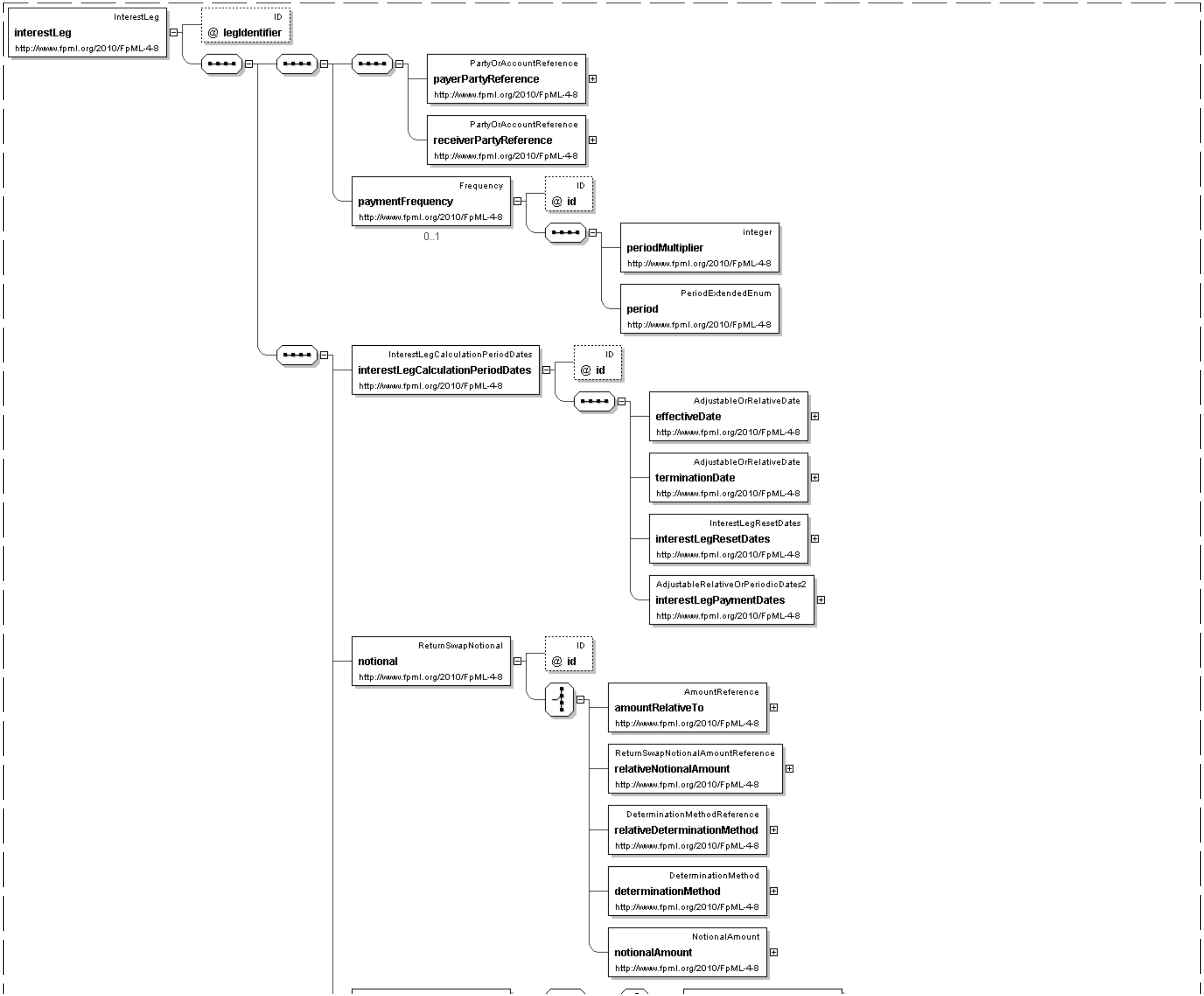
Global Declarations

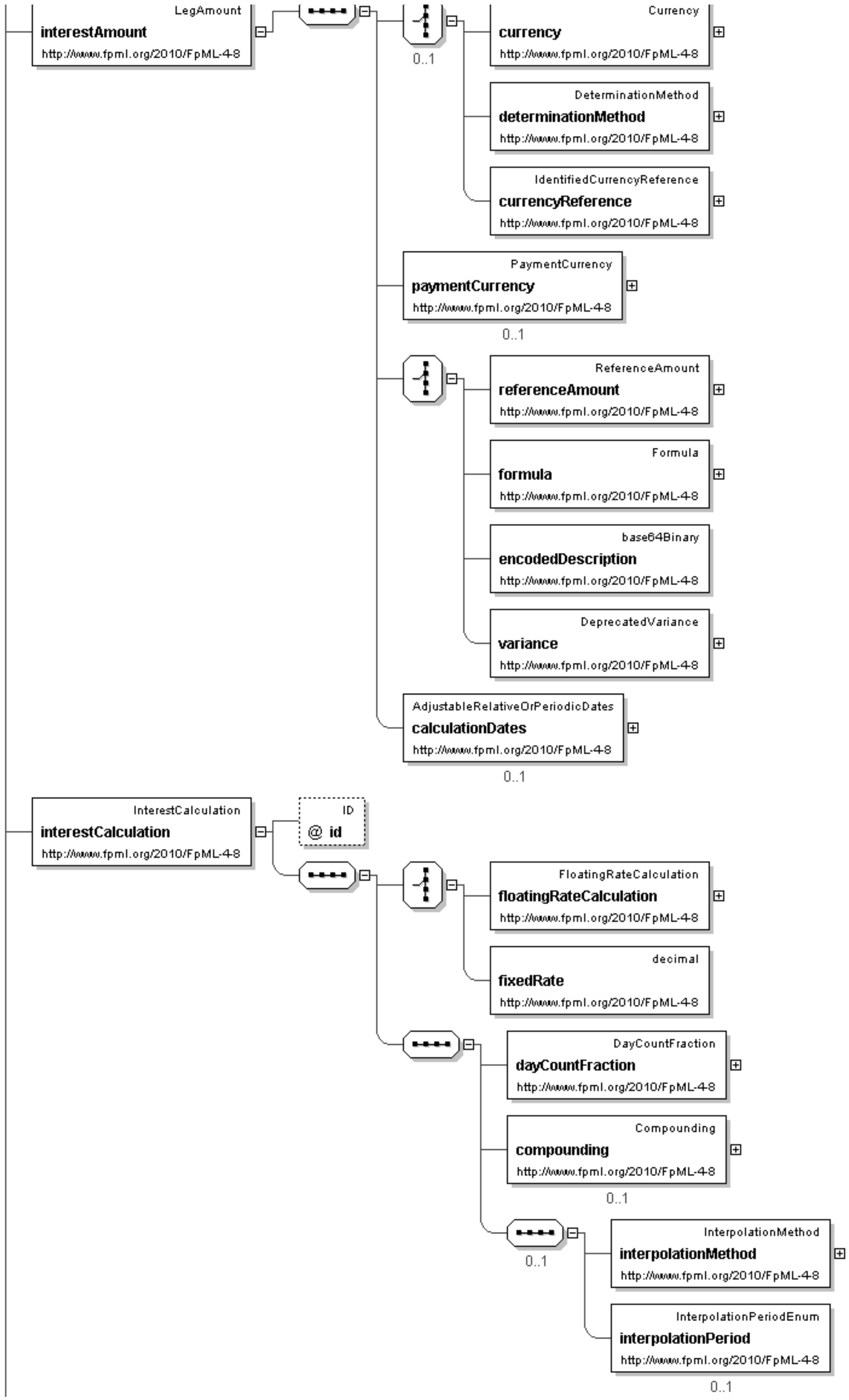
Element: interestLeg

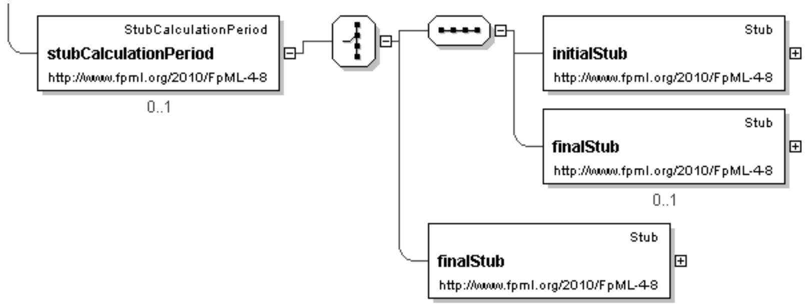
- *This element can be used wherever the following element is referenced:*
  - returnSwapLeg

Name	interestLeg
Type	InterestLeg
Nillable	no
Abstract	no
Documentation	The fixed income amounts of the return type swap.

Logical Diagram



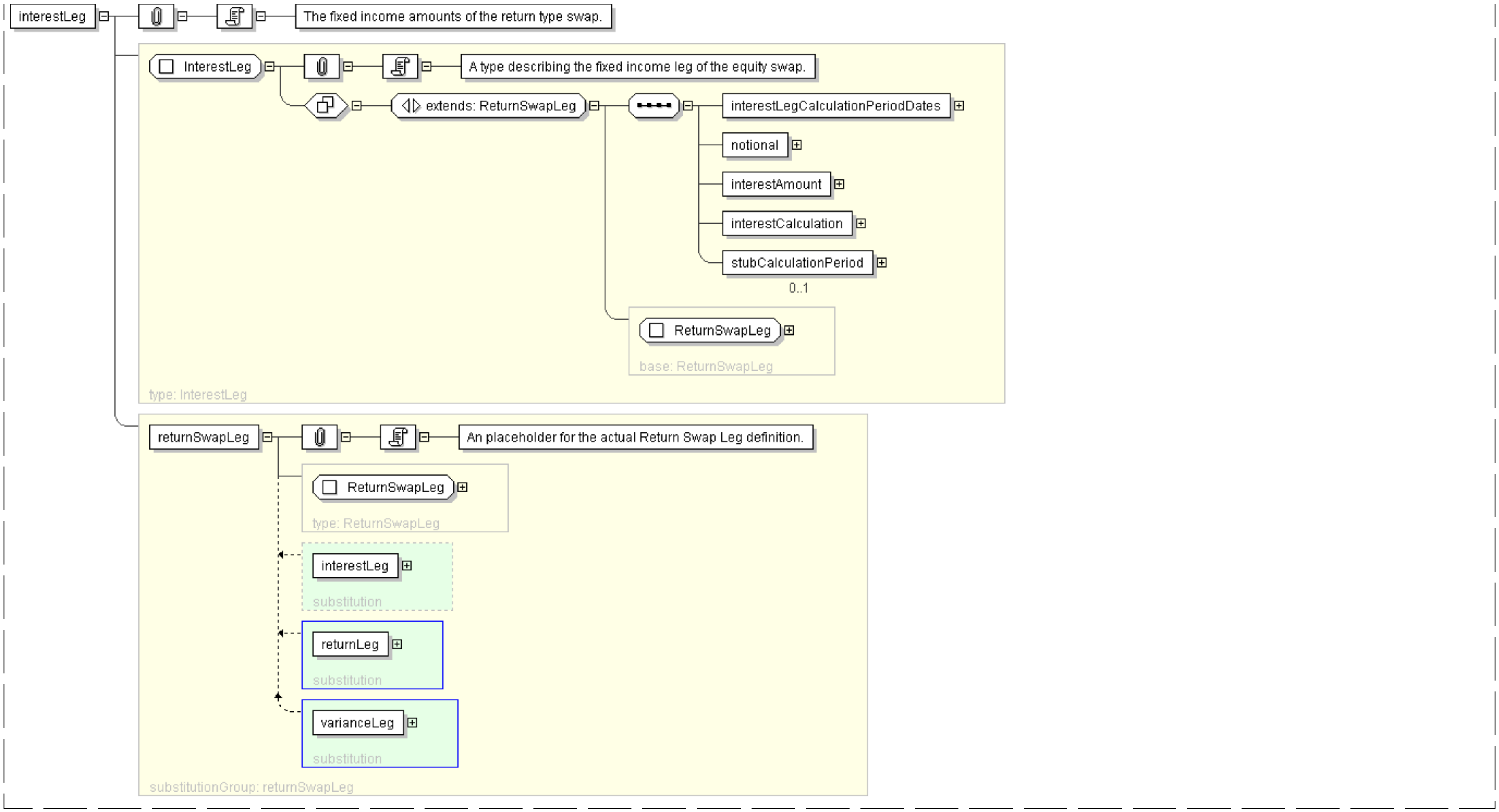

LegAmount
interestAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
currency
http://www.fpml.org/2010/FpML-4-8
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8
IdentifiedCurrencyReference
currencyReference
http://www.fpml.org/2010/FpML-4-8
PaymentCurrency
paymentCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
ReferenceAmount
referenceAmount
http://www.fpml.org/2010/FpML-4-8
Formula
formula
http://www.fpml.org/2010/FpML-4-8
base64Binary
encodedDescription
http://www.fpml.org/2010/FpML-4-8
DeprecatedVariance
variance
http://www.fpml.org/2010/FpML-4-8
AdjustableRelativeOrPeriodicDates
calculationDates
http://www.fpml.org/2010/FpML-4-8
0..1
InterestCalculation
interestCalculation
http://www.fpml.org/2010/FpML-4-8
ID
@ id
FloatingRateCalculation
floatingRateCalculation
http://www.fpml.org/2010/FpML-4-8
decimal
fixedRate
http://www.fpml.org/2010/FpML-4-8
DayCountFraction
dayCountFraction
http://www.fpml.org/2010/FpML-4-8
Compounding
compounding
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
InterpolationMethod
interpolationMethod
http://www.fpml.org/2010/FpML-4-8
InterpolationPeriodEnum
interpolationPeriod
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<interestLeg
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'
">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <interestLegCalculationPeriodDates> InterestLegCalculationPeriodDates
   </interestLegCalculationPeriodDates> [1]
   'Component that holds the various dates used to specify the interest leg of the equity swap.
   It is used to define the InterestPeriodDates identifyer.'

   <notional> ReturnSwapNotional </notional> [1]
   'Specifies the notional of a return type swap. When used in the equity leg, the definition
   will typically combine the actual amount (using the notional component defined by the
   FpML industry group) and the determination method. When used in the interest leg,
   the definition will typically point to the definition of the equity leg.'

   <interestAmount> LegAmount </interestAmount> [1]
   'Specifies, in relation to each Interest Payment Date, the amount to which the Interest
   Payment Date relates. Unless otherwise specified, this term has the meaning defined in the
   ISDA 2000 ISDA Definitions.'

   <interestCalculation> InterestCalculation </interestCalculation> [1]
   'Specifies the calculation method of the interest rate leg of the equity swap. Includes
   the floating or fixed rate calculation definitions, along with the determination of the
   day count fraction.'

   <stubCalculationPeriod> StubCalculationPeriod </stubCalculationPeriod> [0..1]
   'Specifies the stub calculation period.'

</interestLeg>
```

Diagram



Schema Component Representation

```
<xsd:element name="interestLeg" type=" InterestLeg " substitutionGroup="returnSwapLeg"/>
```

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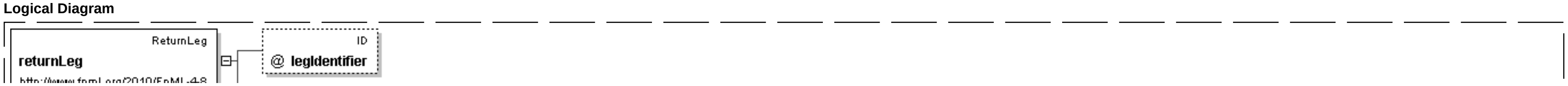
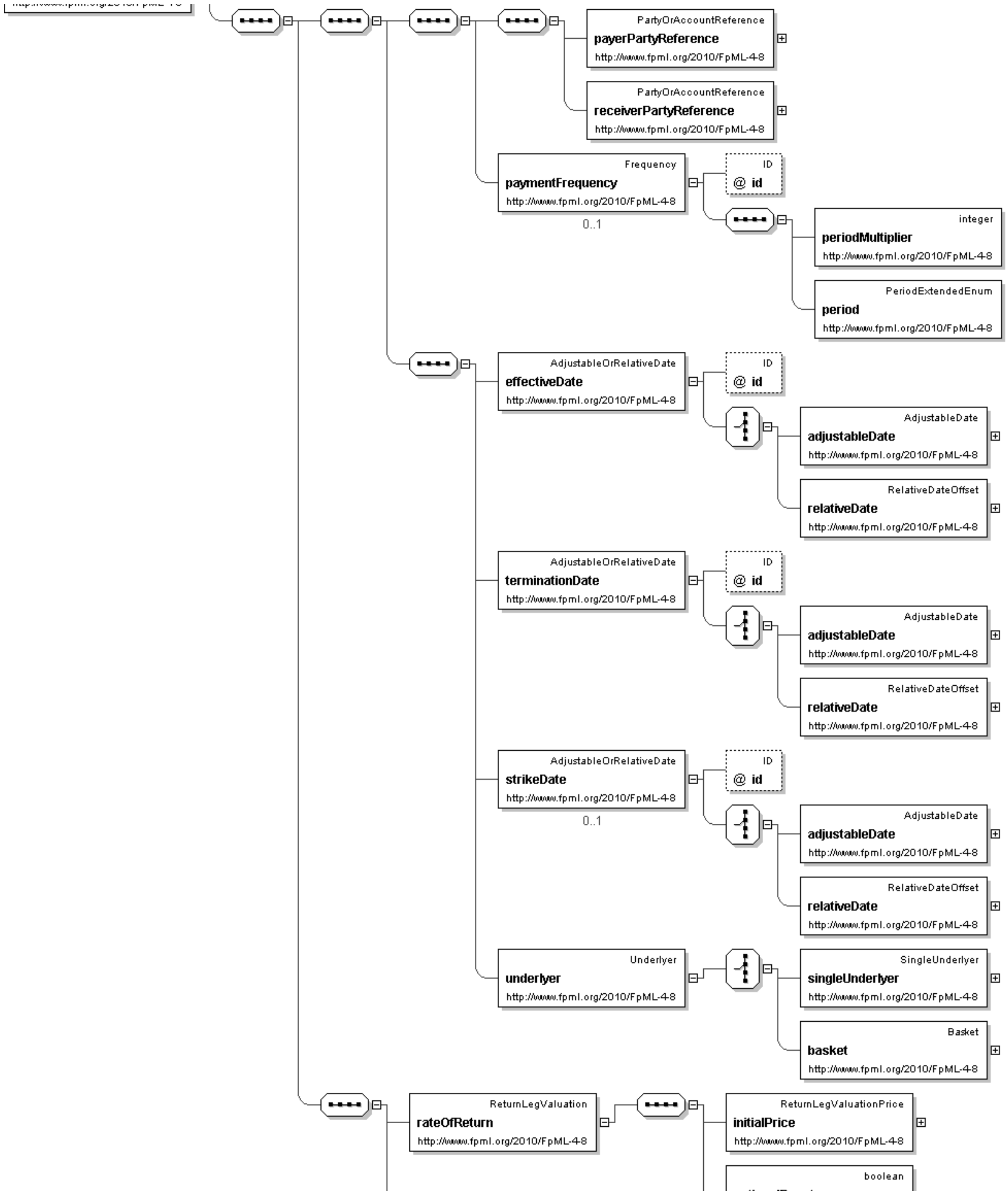
Element: returnLeg

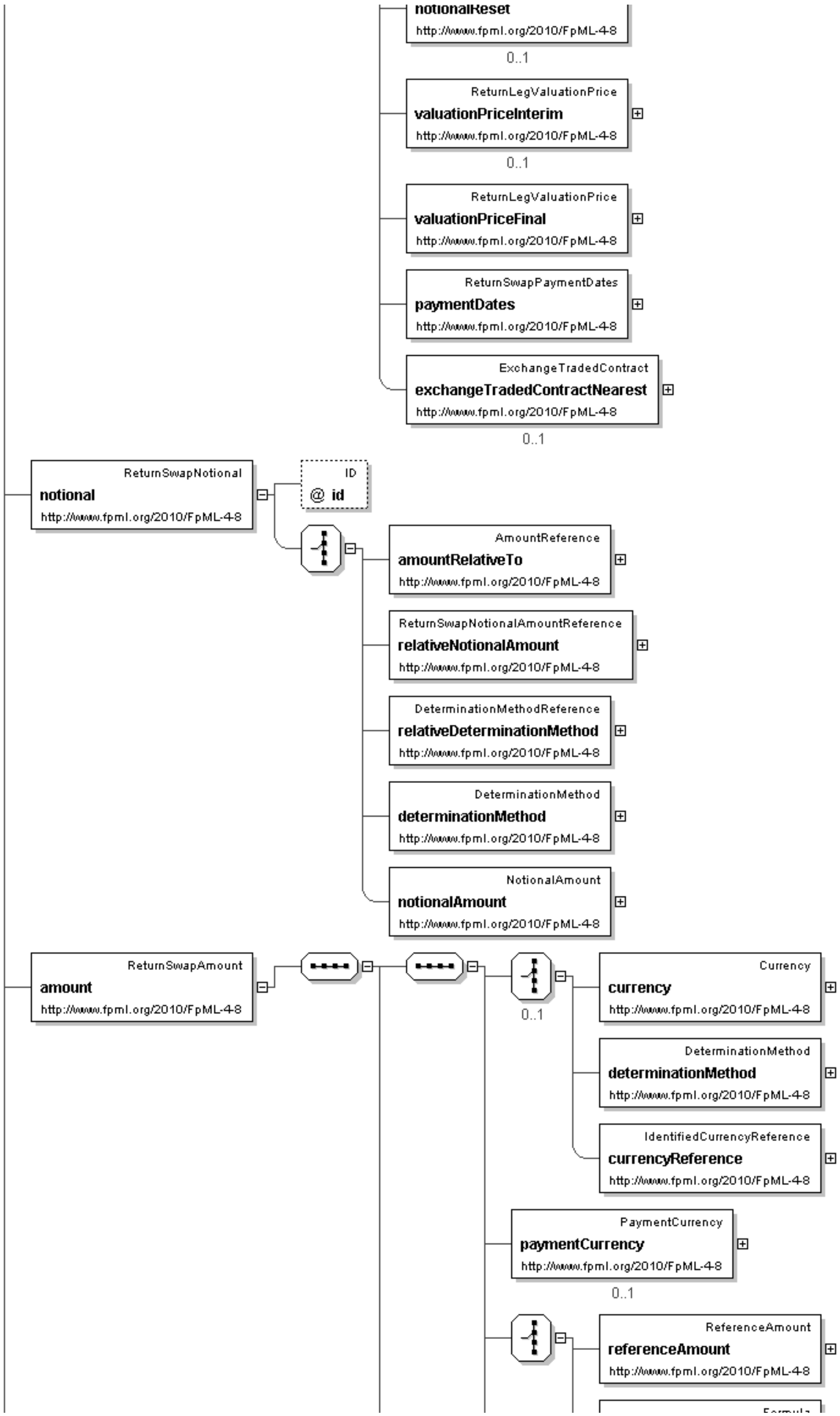
- *This element can be used wherever the following element is referenced:*
  - returnSwapLeg

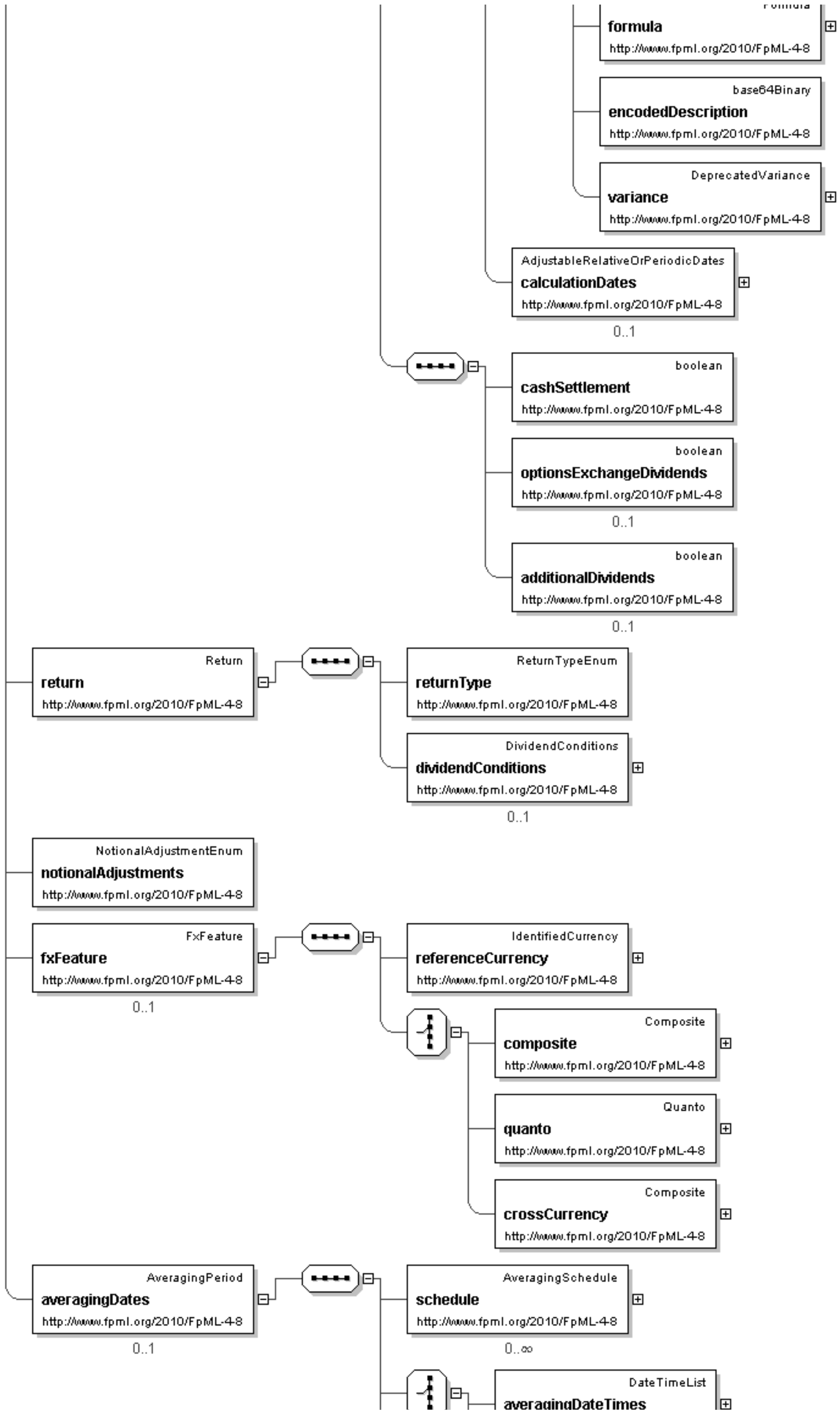
Name	returnLeg
Type	ReturnLeg
Nillable	no
Abstract	no
Documentation	Return amounts of the return type swap.

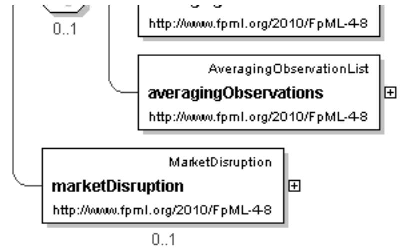
Logical Diagram




PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Frequency
paymentFrequency
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
integer
periodMultiplier
http://www.fpml.org/2010/FpML-4-8
PeriodExtendedEnum
period
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
effectiveDate
http://www.fpml.org/2010/FpML-4-8
ID
@ id
AdjustableDate
adjustableDate
http://www.fpml.org/2010/FpML-4-8
RelativeDateOffset
relativeDate
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
terminationDate
http://www.fpml.org/2010/FpML-4-8
ID
@ id
AdjustableDate
adjustableDate
http://www.fpml.org/2010/FpML-4-8
RelativeDateOffset
relativeDate
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
strikeDate
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
AdjustableDate
adjustableDate
http://www.fpml.org/2010/FpML-4-8
RelativeDateOffset
relativeDate
http://www.fpml.org/2010/FpML-4-8
Underlyer
underlyer
http://www.fpml.org/2010/FpML-4-8
SingleUnderlyer
singleUnderlyer
http://www.fpml.org/2010/FpML-4-8
Basket
basket
http://www.fpml.org/2010/FpML-4-8
ReturnLegValuation
rateOfReturn
http://www.fpml.org/2010/FpML-4-8
ReturnLegValuationPrice
initialPrice
http://www.fpml.org/2010/FpML-4-8
boolean


notionalReset
http://www.fpml.org/2010/FpML-4-8
0..1
ReturnLegValuationPrice
valuationPriceInterim
http://www.fpml.org/2010/FpML-4-8
0..1
ReturnLegValuationPrice
valuationPriceFinal
http://www.fpml.org/2010/FpML-4-8
ReturnSwapPaymentDates
paymentDates
http://www.fpml.org/2010/FpML-4-8
ExchangeTradedContract
exchangeTradedContractNearest
http://www.fpml.org/2010/FpML-4-8
0..1
ReturnSwapNotional
notional
http://www.fpml.org/2010/FpML-4-8
ID
@ id
AmountReference
amountRelativeTo
http://www.fpml.org/2010/FpML-4-8
ReturnSwapNotionalAmountReference
relativeNotionalAmount
http://www.fpml.org/2010/FpML-4-8
DeterminationMethodReference
relativeDeterminationMethod
http://www.fpml.org/2010/FpML-4-8
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8
NotionalAmount
notionalAmount
http://www.fpml.org/2010/FpML-4-8
ReturnSwapAmount
amount
http://www.fpml.org/2010/FpML-4-8
Currency
currency
http://www.fpml.org/2010/FpML-4-8
0..1
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8
IdentifiedCurrencyReference
currencyReference
http://www.fpml.org/2010/FpML-4-8
PaymentCurrency
paymentCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
ReferenceAmount
referenceAmount
http://www.fpml.org/2010/FpML-4-8


Formula
formula
http://www.fpml.org/2010/FpML-4-8
base64Binary
encodedDescription
http://www.fpml.org/2010/FpML-4-8
DeprecatedVariance
variance
http://www.fpml.org/2010/FpML-4-8
AdjustableRelativeOrPeriodicDates
calculationDates
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
cashSettlement
http://www.fpml.org/2010/FpML-4-8
boolean
optionsExchangeDividends
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
additionalDividends
http://www.fpml.org/2010/FpML-4-8
0..1
Return
return
http://www.fpml.org/2010/FpML-4-8
ReturnTypeEnum
returnType
http://www.fpml.org/2010/FpML-4-8
DividendConditions
dividendConditions
http://www.fpml.org/2010/FpML-4-8
0..1
NotionalAdjustmentEnum
notionalAdjustments
http://www.fpml.org/2010/FpML-4-8
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedCurrency
referenceCurrency
http://www.fpml.org/2010/FpML-4-8
Composite
composite
http://www.fpml.org/2010/FpML-4-8
Quanto
quanto
http://www.fpml.org/2010/FpML-4-8
Composite
crossCurrency
http://www.fpml.org/2010/FpML-4-8
AveragingPeriod
averagingDates
http://www.fpml.org/2010/FpML-4-8
0..1
AveragingSchedule
schedule
http://www.fpml.org/2010/FpML-4-8
0..∞
DateTimeList
averagingDateTimes



XML Instance Representation

```
<returnLeg
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <strikeDate> AdjustableOrRelativeDate </strikeDate> [0..1]
   'Specifies the strike date of this leg of the swap, used for forward starting swaps.
   When defined in relation to a date specified somewhere else in the document (through
   the relativeDate component), this element will typically by relative to the trade date of
   the swap.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlying component of the leg, which can be either one or many and consists
   in either equity, index or convertible bond component, or a combination of these.'

   <rateOfReturn> ReturnLegValuation </rateOfReturn> [1]
   'Element named \"valuation\" in versions prior to FpML 4.2 Second Working Draft. Specifies
   the terms of the initial price of the return type swap and of the subsequent valuations of
   the underlyer.'

   <notional> ReturnSwapNotional </notional> [1]
   'Specifies the notional of a return type swap. When used in the equity leg, the definition
   will typically combine the actual amount (using the notional component defined by the
   FpML industry group) and the determination method. When used in the interest leg,
   the definition will typically point to the definition of the equity leg.'

   <amount> ReturnSwapAmount </amount> [1]
   'Element named \"equityAmount\" in versions prior to FpML 4.2 Second Working Draft.
   Specifies, in relation to each Payment Date, the amount to which the Payment Date relates.
   For equity swaps this element is equivalent to the Equity Amount term as defined in the
   ISDA 2002 Equity Derivatives Definitions.'

   <return> Return </return> [1]
```

'Specifies the conditions under which dividend affecting the underlyer will be paid to the receiver of the amounts.'

<notionalAdjustments> NotionalAdjustmentEnum </notionalAdjustments> [1]

'Specifies the conditions that govern the adjustment to the number of units of the equity swap.'

<fxFeature> FxFeature </fxFeature> [0..1]

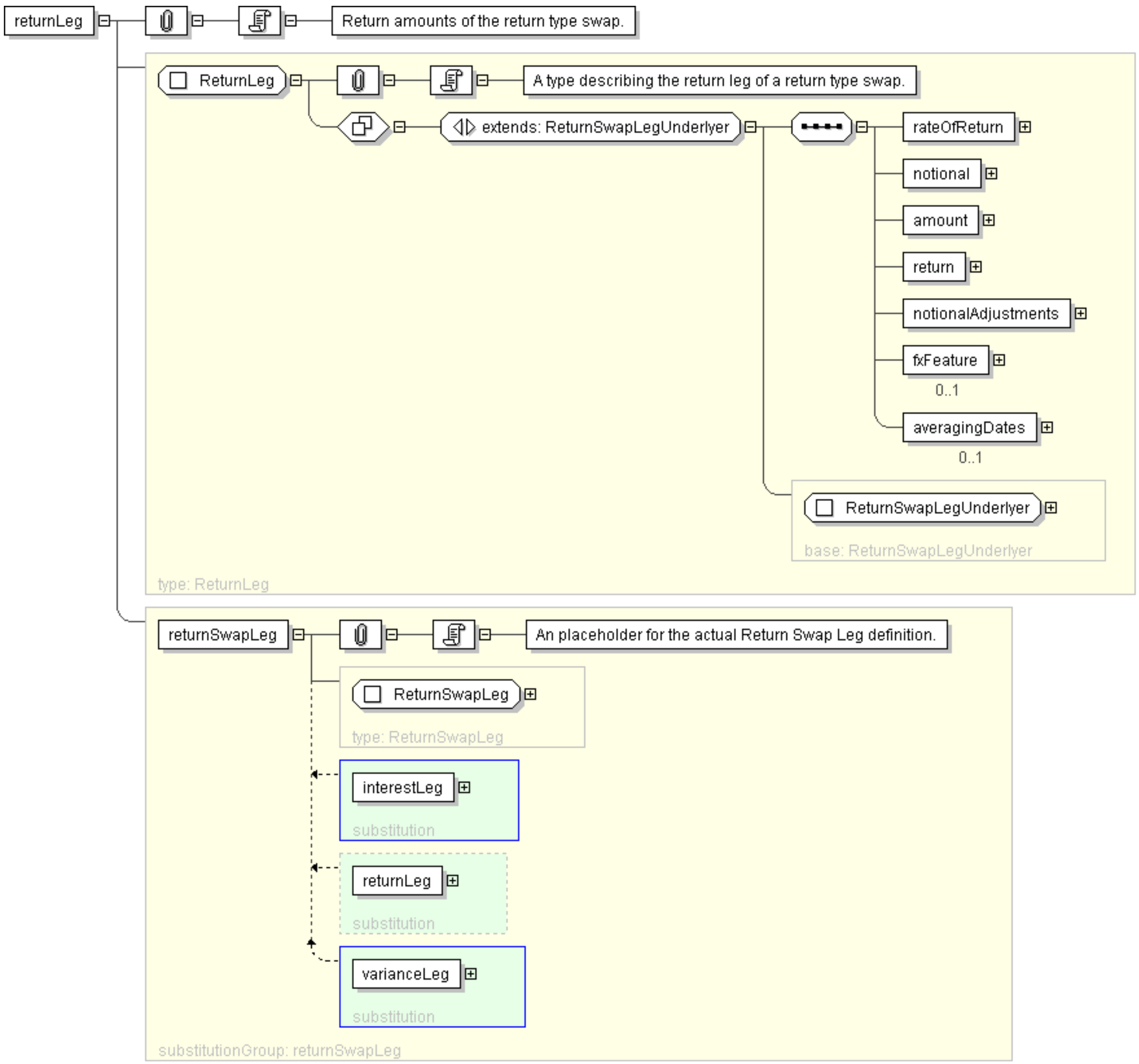
'A quanto or composite FX feature.'

<averagingDates> AveragingPeriod </averagingDates> [0..1]

'Averaging Dates used in the swap.'

</returnLeg>

Diagram



Schema Component Representation

```
<xsd:element name="returnLeg" type=" ReturnLeg " substitutionGroup="returnSwapLeg"/>
```

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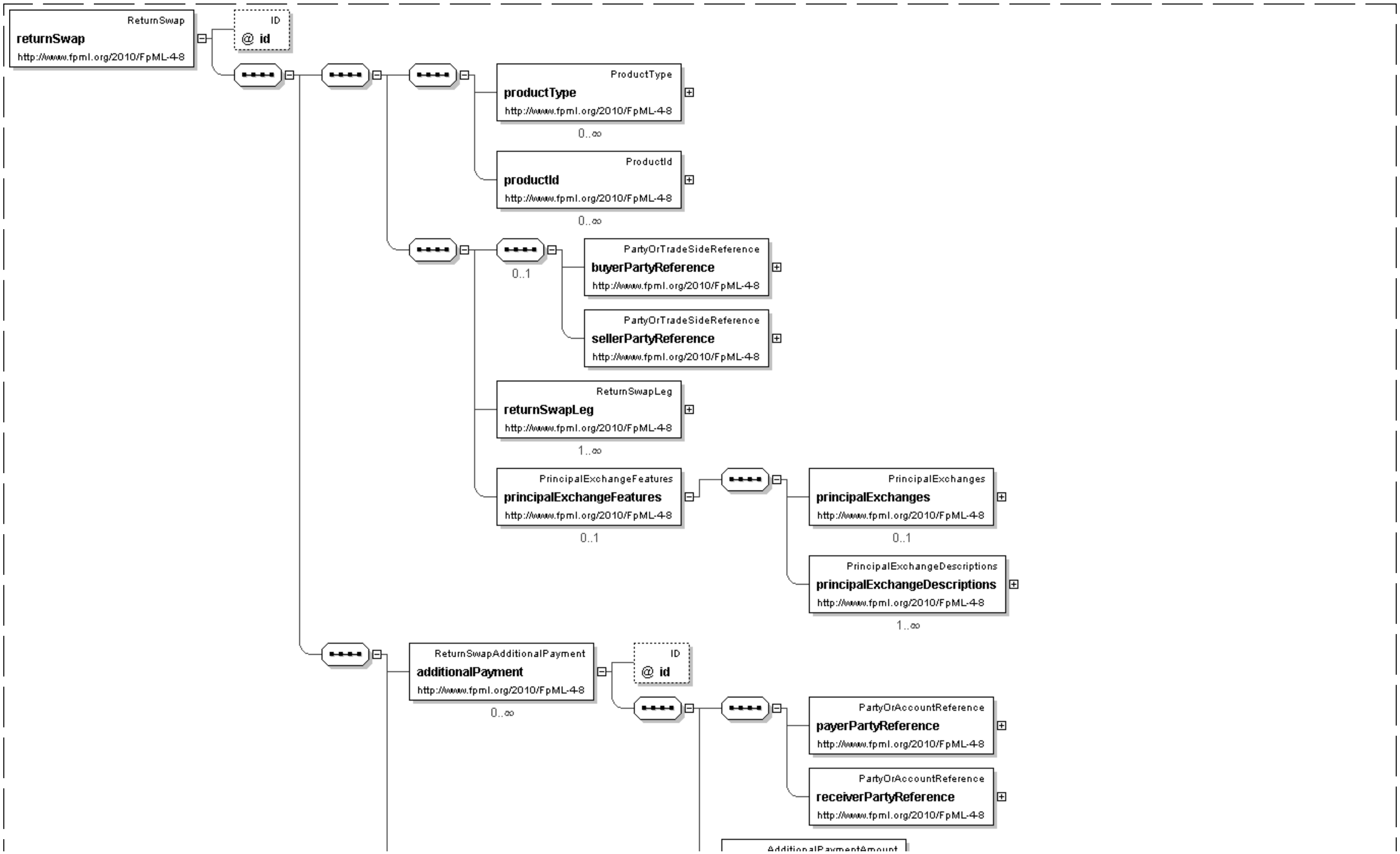
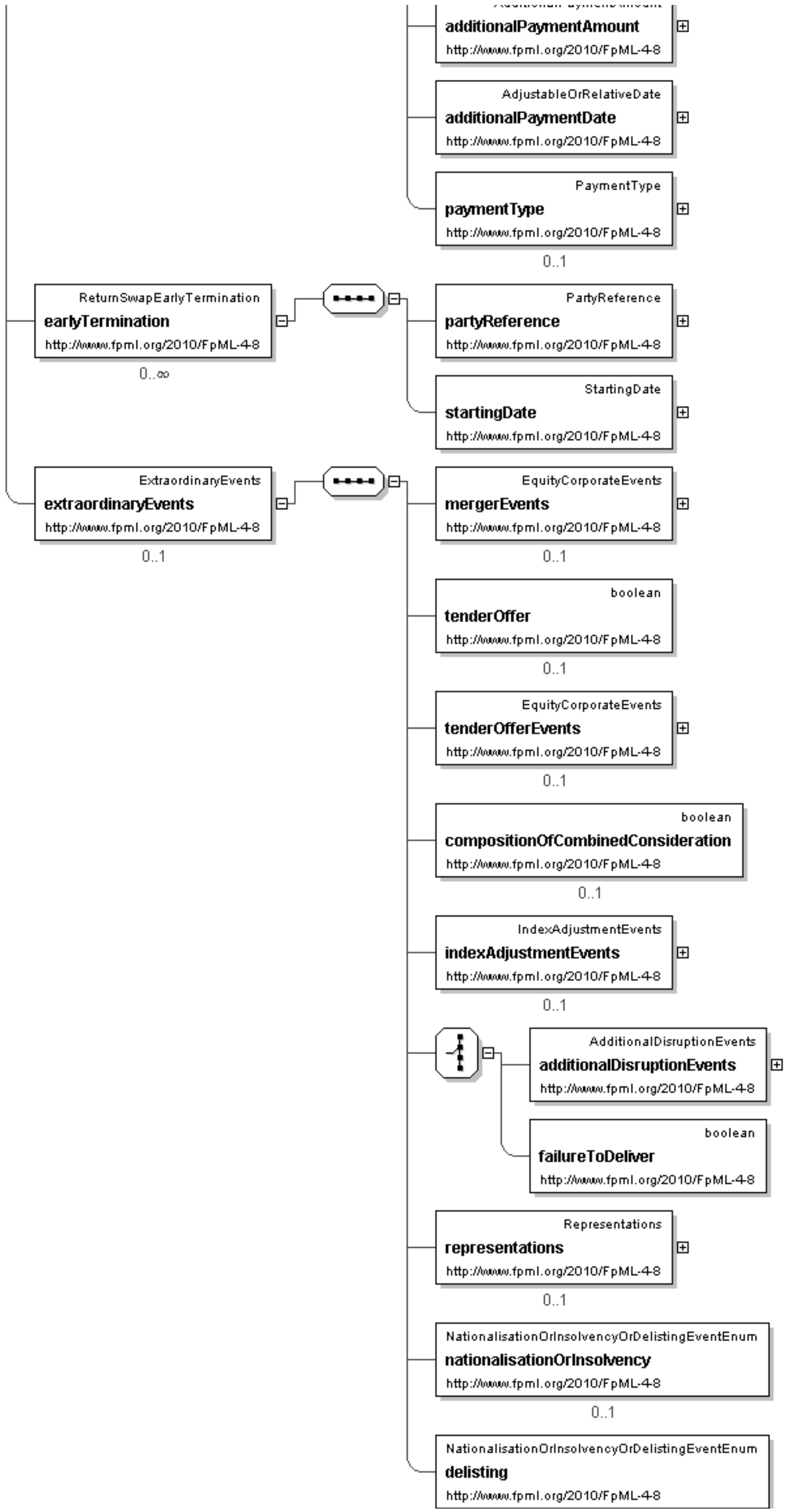
Element: returnSwap

- *This element can be used wherever the following element is referenced:*
  - product

Name	returnSwap
Type	ReturnSwap
Nillable	no
Abstract	no
Documentation	Specifies the structure of a return type swap. It can represent equity swaps, total return swaps, variance swaps.

Logical Diagram



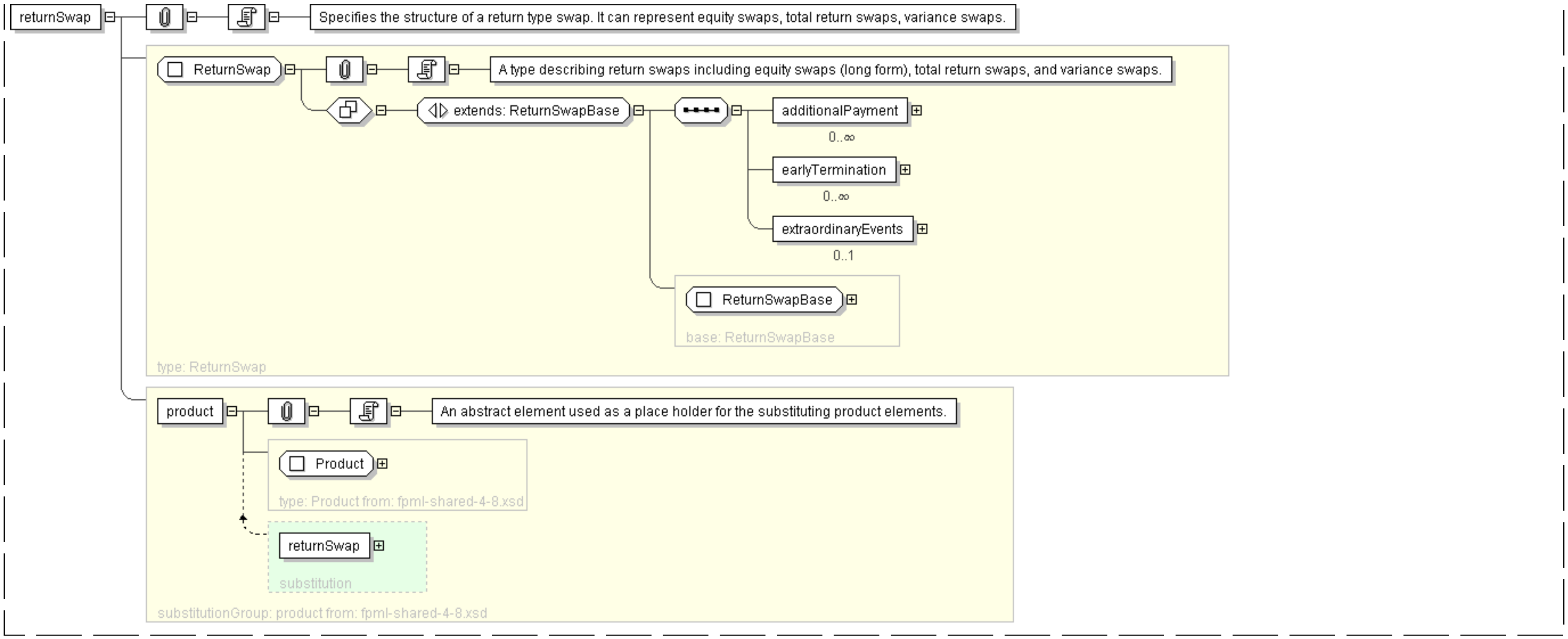

additionalPaymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
additionalPaymentDate
http://www.fpml.org/2010/FpML-4-8
PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1
ReturnSwapEarlyTermination
earlyTermination
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyReference
partyReference
http://www.fpml.org/2010/FpML-4-8
StartingDate
startingDate
http://www.fpml.org/2010/FpML-4-8
ExtraordinaryEvents
extraordinaryEvents
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
mergerEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
tenderOffer
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
tenderOfferEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
compositionOfCombinedConsideration
http://www.fpml.org/2010/FpML-4-8
0..1
IndexAdjustmentEvents
indexAdjustmentEvents
http://www.fpml.org/2010/FpML-4-8
0..1
AdditionalDisruptionEvents
additionalDisruptionEvents
http://www.fpml.org/2010/FpML-4-8
boolean
failureToDeliver
http://www.fpml.org/2010/FpML-4-8
Representations
representations
http://www.fpml.org/2010/FpML-4-8
0..1
NationalisationOrInsolvencyOrDelistingEventEnum
nationalisationOrInsolvency
http://www.fpml.org/2010/FpML-4-8
0..1
NationalisationOrInsolvencyOrDelistingEventEnum
delisting
http://www.fpml.org/2010/FpML-4-8

0..1

XML Instance Representation

```
<returnSwap
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

Start Group: BuyerSeller.model [0..1]
'BuyerSeller.model has been included as an optional child of ReturnSwapBase to support
the situation where an implementor wishes to indicate who has manufactured the Swap
through representing them as the Seller. It may be removed in future major revisions.'

      <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
      'A reference to the party that buys this instrument, ie. pays for this instrument and
      receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
      of FRAs this the fixed rate payer.'

      <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
      'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
      rights defined by this instrument and in return receives a payment for it. See 2000
      ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

End Group: BuyerSeller.model
   <returnSwapLeg> ... </returnSwapLeg> [1..*]
   <principalExchangeFeatures> PrincipalExchangeFeatures </principalExchangeFeatures> [0..1]
   'This is used to document a Fully Funded Return Swap.'

   <additionalPayment> ReturnSwapAdditionalPayment </additionalPayment> [0..*]
   'Specifies additional payment(s) between the principal parties to the trade. This
   component extends some of the features of the additionalPayment component developed by the
   FpML industry group. Appropriate discussions will determine whether it would be appropriate
   to extend the shared component in order to meet the further requirements of equity swaps.'

   <earlyTermination> ReturnSwapEarlyTermination </earlyTermination> [0..*]
   'Specifies, for one or for both the parties to the trade, the date from which it can
   early terminate it.'

   <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]
   'Where the underlying is shares, specifies events affecting the issuer of those shares that
   may require the terms of the transaction to be adjusted.'

</returnSwap>
```

Diagram



Schema Component Representation

```
<xsd:element name="returnSwap" type=" ReturnSwap " substitutionGroup="product"/>
```

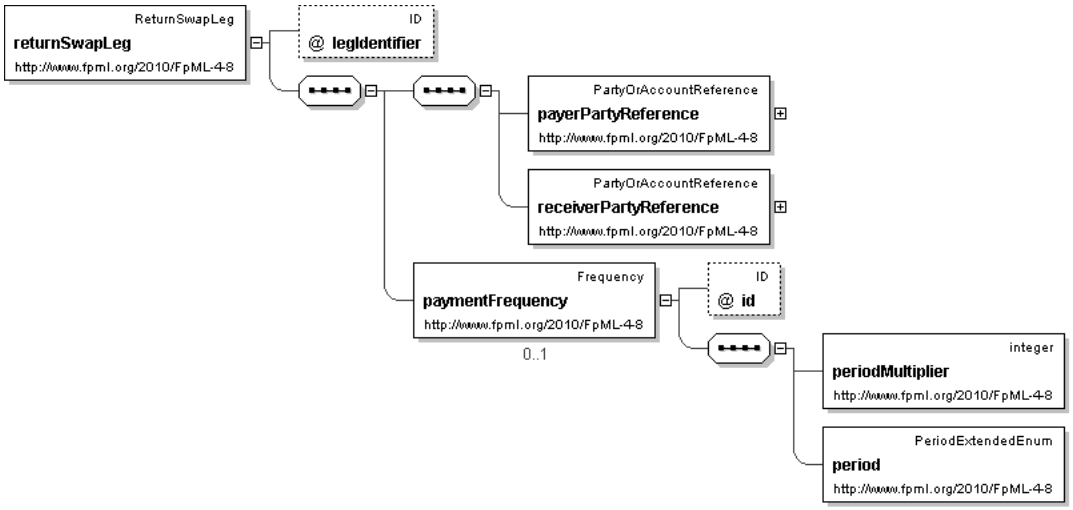
top

Element: returnSwapLeg

- *The following elements can be used wherever this element is referenced:*
  - interestLeg
  - returnLeg
  - varianceLeg

Name	returnSwapLeg
Used by (from the same schema document)	Complex Type **ReturnSwapBase**
Type	ReturnSwapLeg
Nillable	no
Abstract	yes
Documentation	An placeholder for the actual Return Swap Leg definition.

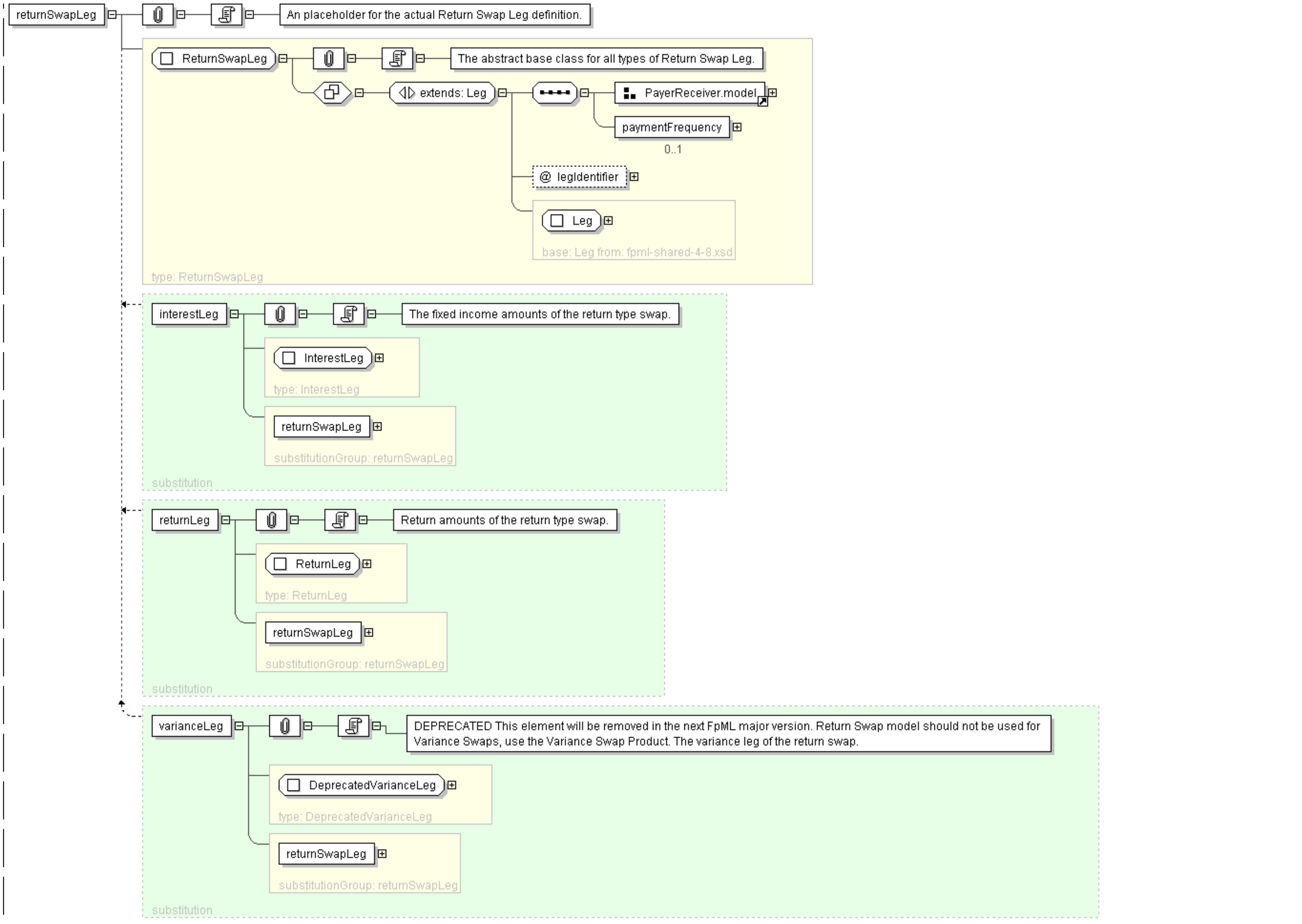
Logical Diagram



XML Instance Representation

```
<returnSwapLeg
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

</returnSwapLeg>
```

Diagram



Schema Component Representation

```
<xsd:element name="returnSwapLeg" type=" ReturnSwapLeg " abstract="true"/>
```

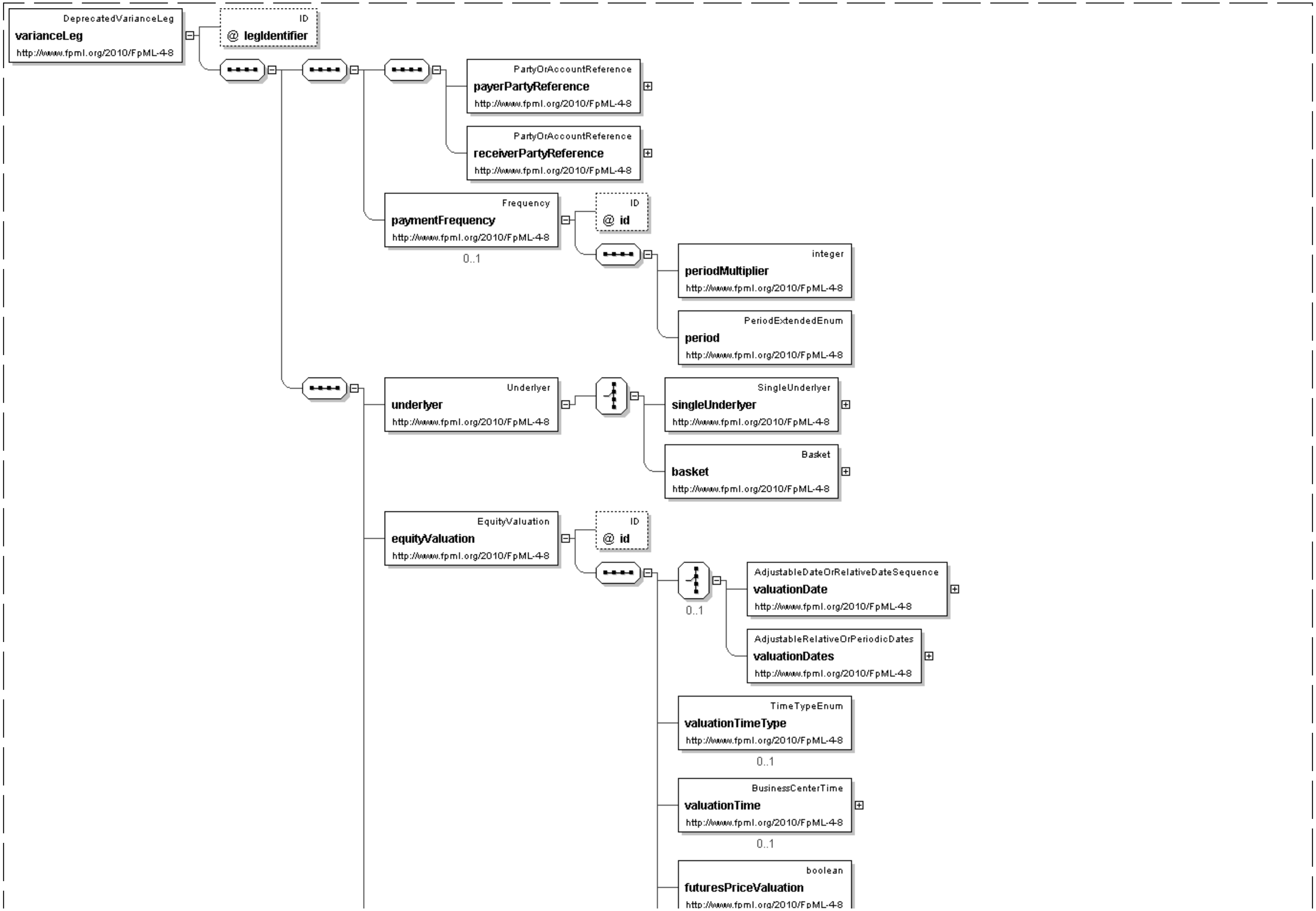
top

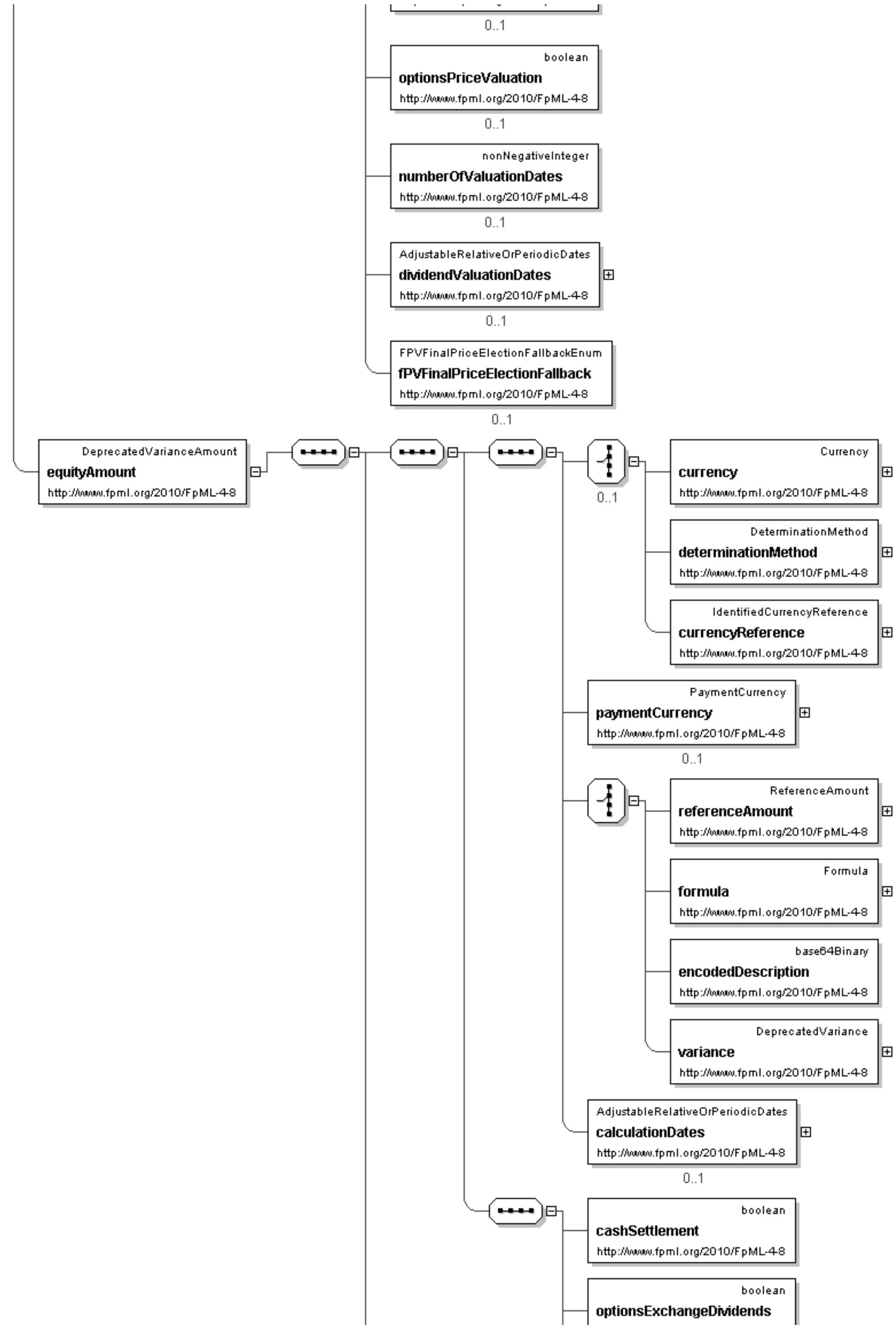
Element: varianceLeg

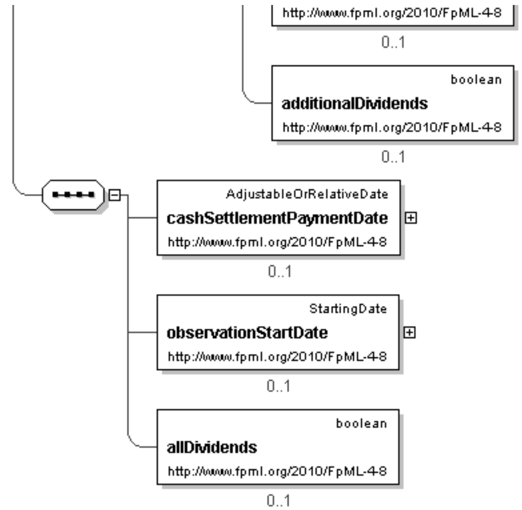
- *This element can be used wherever the following element is referenced:*
  - returnSwapLeg

Name	varianceLeg
Type	DeprecatedVarianceLeg
Nillable	no
Abstract	no
Documentation	DEPRECATED This element will be removed in the next FpML major version. Return Swap model should not be used for Variance Swaps, use the Variance Swap Product. The variance leg of the return swap.

Logical Diagram



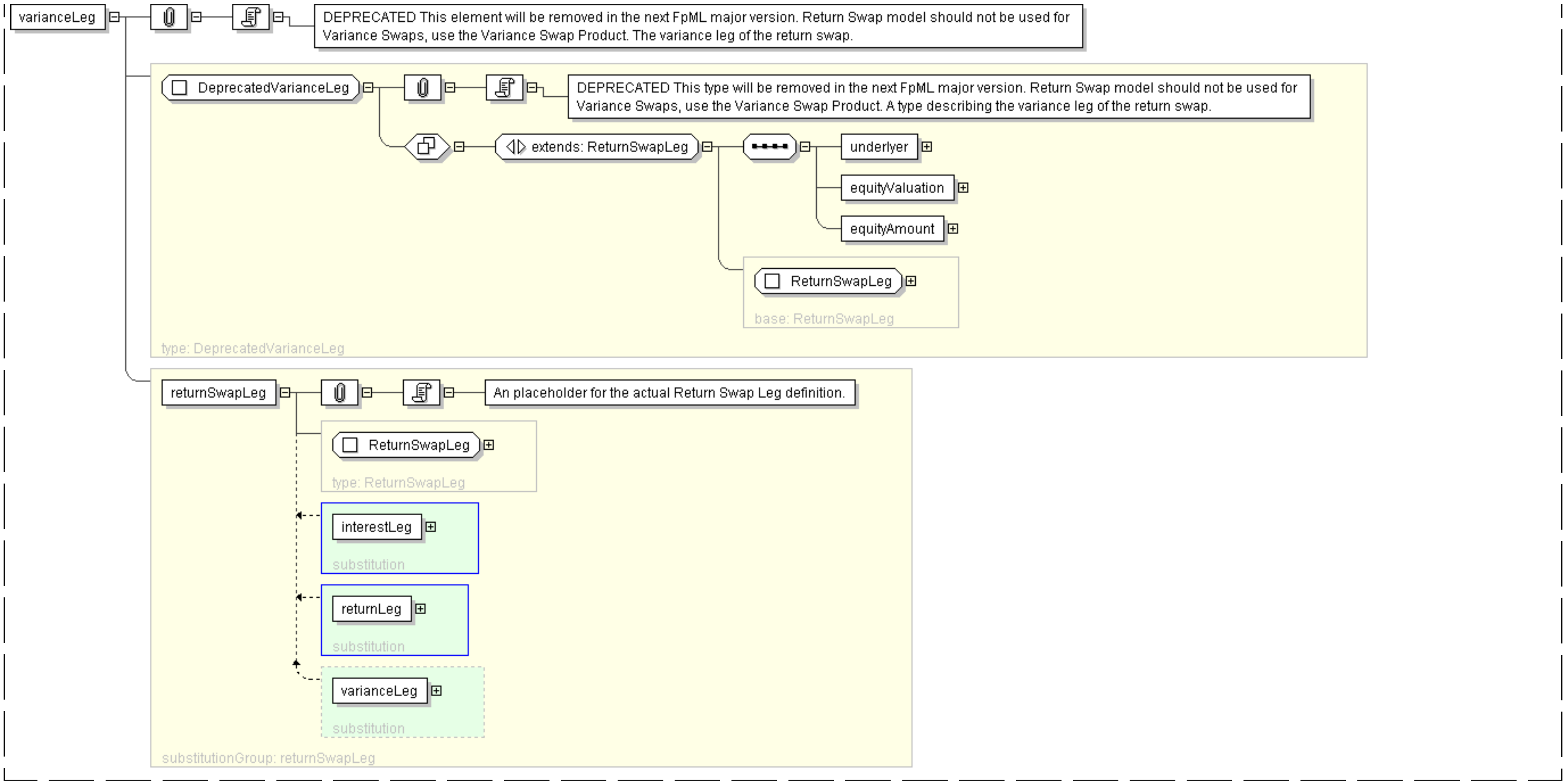

0..1
boolean
optionsPriceValuation
http://www.fpml.org/2010/FpML-4-8
0..1
nonNegativeInteger
numberOfValuationDates
http://www.fpml.org/2010/FpML-4-8
0..1
AdjustableRelativeOrPeriodicDates
dividendValuationDates
http://www.fpml.org/2010/FpML-4-8
0..1
FPVFinalPriceElectionFallbackEnum
fPVFinalPriceElectionFallback
http://www.fpml.org/2010/FpML-4-8
0..1
DeprecatedVarianceAmount
equityAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
currency
http://www.fpml.org/2010/FpML-4-8
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8
IdentifiedCurrencyReference
currencyReference
http://www.fpml.org/2010/FpML-4-8
PaymentCurrency
paymentCurrency
http://www.fpml.org/2010/FpML-4-8
0..1
ReferenceAmount
referenceAmount
http://www.fpml.org/2010/FpML-4-8
Formula
formula
http://www.fpml.org/2010/FpML-4-8
base64Binary
encodedDescription
http://www.fpml.org/2010/FpML-4-8
DeprecatedVariance
variance
http://www.fpml.org/2010/FpML-4-8
AdjustableRelativeOrPeriodicDates
calculationDates
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
cashSettlement
http://www.fpml.org/2010/FpML-4-8
boolean
optionsExchangeDividends



XML Instance Representation

```
<varianceLeg
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'
">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'
   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'
   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'
   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlyer of the leg.'
   <equityValuation> EquityValuation </equityValuation> [1]
   'Valuation of the underlyer.'
   <equityAmount> DeprecatedVarianceAmount </equityAmount> [1]
   'Specifies, in relation to each Equity Payment Date, the amount to which the Equity
   Payment Date relates. Unless otherwise specified, this term has the meaning defined in the
   ISDA 2002 Equity Derivatives Definitions.'
</varianceLeg>
```

Diagram



Schema Component Representation

```
<xsd:element name="varianceLeg" type=" DeprecatedVarianceLeg
" substitutionGroup="returnSwapLeg" deprecated="true" deprecatedReason="Return Swap
model should not be used for Variance Swaps, use the Variance Swap Product"/>
```

top

Global Definitions

Complex Type: AdditionalDisruptionEvents

Super-types:	None
Sub-types:	None

Name	AdditionalDisruptionEvents
Used by (from the same schema document)	Complex Type **ExtraordinaryEvents**
Abstract	no
Documentation	A type for defining ISDA 2002 Equity Derivative Additional Disruption Events.

XML Instance Representation

```
<...>
   <changeInLaw> xsd:boolean </changeInLaw> [0..1]
   'If true, then change in law is applicable.'
```

<failureToDeliver> xsd:boolean </failureToDeliver> [0..1]

'Where the underlying is shares and the transaction is physically settled, then, if true, a failure to deliver the shares on the settlement date will not be an event of default for the purposes of the master agreement.'

<insolvencyFiling> xsd:boolean </insolvencyFiling> [0..1]

'If true, then insolvency filing is applicable.'

<hedgingDisruption> xsd:boolean </hedgingDisruption> [0..1]

'If true, then hedging disruption is applicable.'

<lossOfStockBorrow> xsd:boolean </lossOfStockBorrow> [0..1]

'If true, then loss of stock borrow is applicable.'

<maximumStockLoanRate> RestrictedPercentage </maximumStockLoanRate> [0..1]

'Specifies the maximum stock loan rate for Loss of Stock Borrow.'

<increasedCostOfStockBorrow> xsd:boolean </increasedCostOfStockBorrow> [0..1]

'If true, then increased cost of stock borrow is applicable.'

<initialStockLoanRate> RestrictedPercentage </initialStockLoanRate> [0..1]

'Specifies the initial stock loan rate for Increased Cost of Stock Borrow.'

<increasedCostOfHedging> xsd:boolean </increasedCostOfHedging> [0..1]

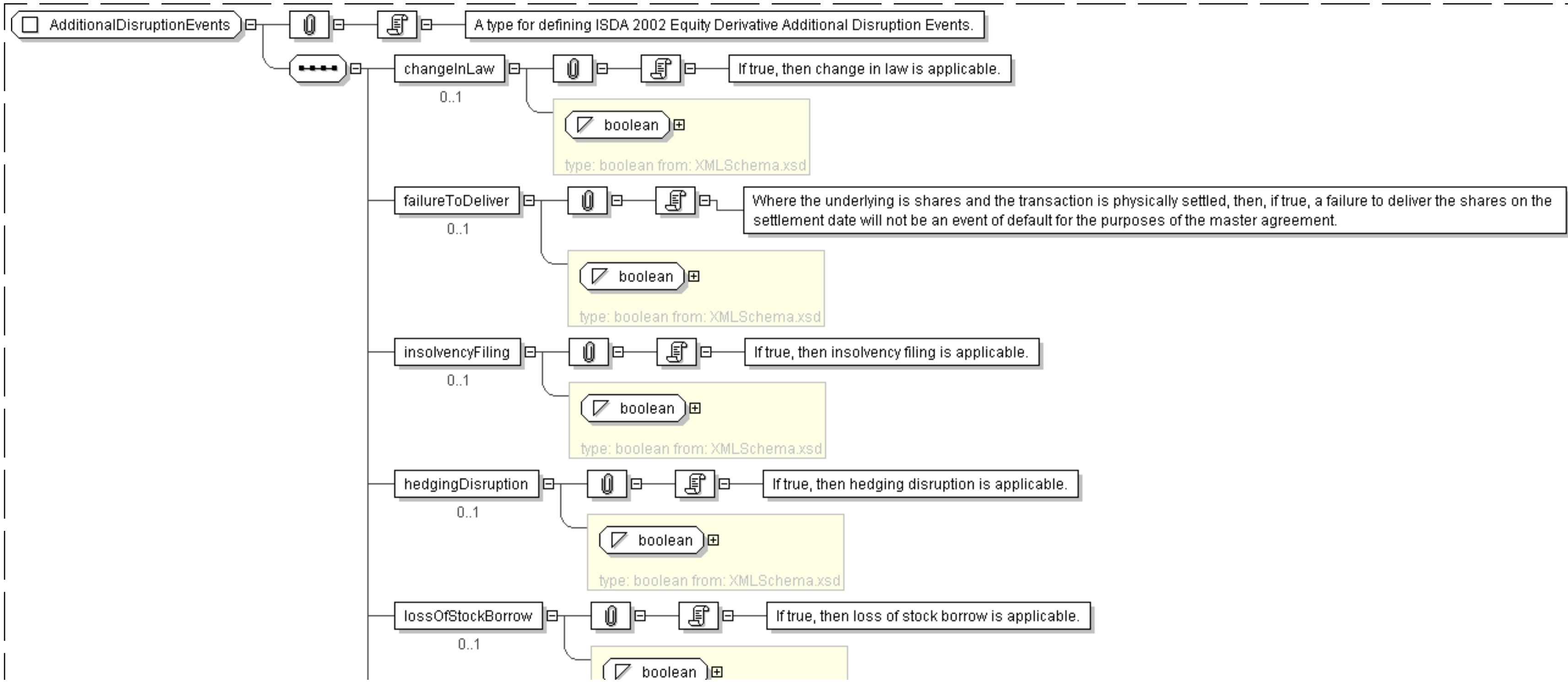
'If true, then increased cost of hedging is applicable.'

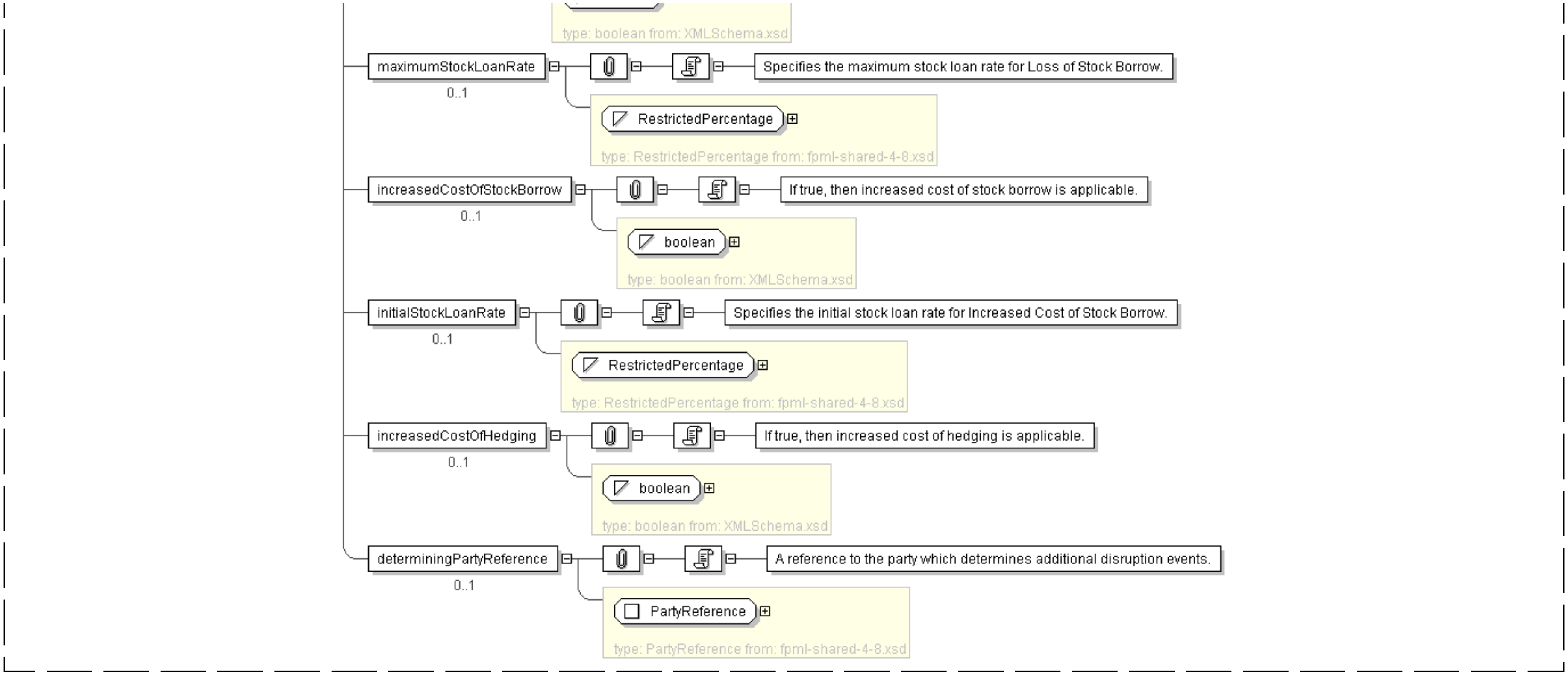
<determiningPartyReference> PartyReference </determiningPartyReference> [0..1]

'A reference to the party which determines additional disruption events.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="AdditionalDisruptionEvents">
   <xsd:sequence>
      <xsd:element name="changeInLaw" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="failureToDeliver" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="insolvencyFiling" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="hedgingDisruption" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="lossOfStockBorrow" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="maximumStockLoanRate" type=" RestrictedPercentage " minOccurs="0"/>
      <xsd:element name="increasedCostOfStockBorrow" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="initialStockLoanRate" type=" RestrictedPercentage " minOccurs="0"/>
      <xsd:element name="increasedCostOfHedging" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="determiningPartyReference" type=" PartyReference " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AdditionalPaymentAmount

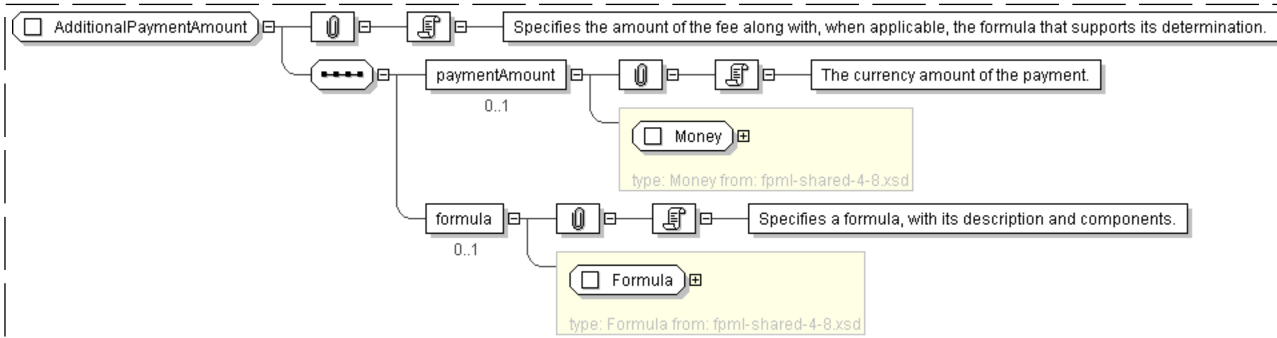
Super-types:	None
Sub-types:	None

Name	AdditionalPaymentAmount
Used by (from the same schema document)	Complex Type **ReturnSwapAdditionalPayment**
Abstract	no
Documentation	Specifies the amount of the fee along with, when applicable, the formula that supports its determination.

XML Instance Representation

```
<...>
   <paymentAmount> Money </paymentAmount> [0..1]
   'The currency amount of the payment.'

   <formula> Formula </formula> [0..1]
   'Specifies a formula, with its description and components.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AdditionalPaymentAmount">
   <xsd:sequence>
      <xsd:element name="paymentAmount" type=" Money " minOccurs="0"/>
      <xsd:element name="formula" type=" Formula " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AdjustableDateOrRelativeDateSequence

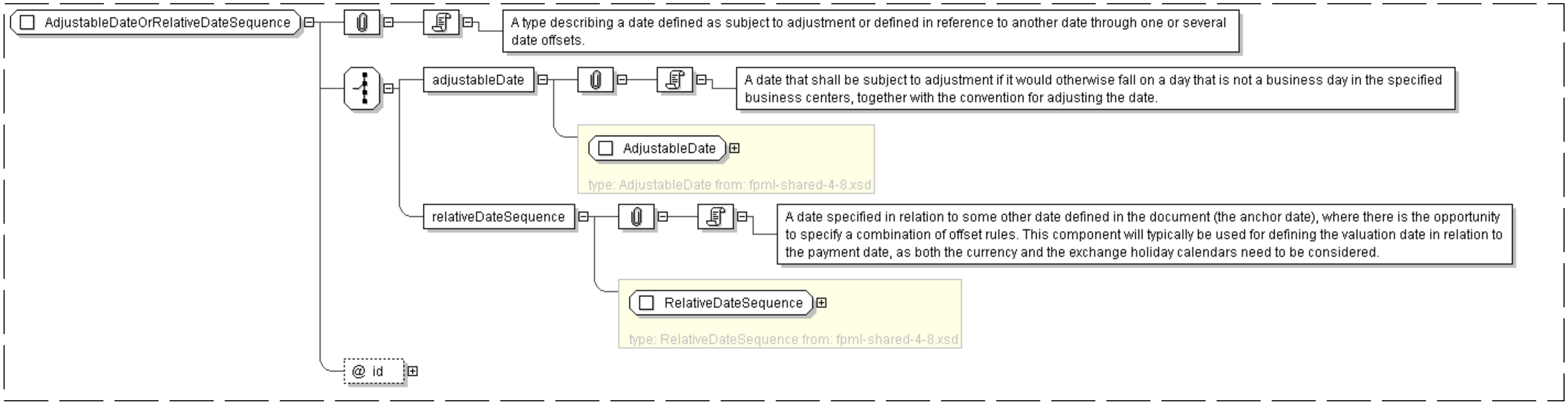
Super-types:	None
Sub-types:	None

Name	AdjustableDateOrRelativeDateSequence
Used by (from the same schema document)	Complex Type **EquityValuation**
Abstract	no
Documentation	A type describing a date defined as subject to adjustment or defined in reference to another date through one or several date offsets.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <adjustableDate> AdjustableDate </adjustableDate> [1]
      'A date that shall be subject to adjustment if it would otherwise fall on a day that is not
      a business day in the specified business centers, together with the convention for
      adjusting the date.'

      <relativeDateSequence> RelativeDateSequence </relativeDateSequence> [1]
      'A date specified in relation to some other date defined in the document (the anchor
      date), where there is the opportunity to specify a combination of offset rules. This
      component will typically be used for defining the valuation date in relation to the
      payment date, as both the currency and the exchange holiday calendars need to be considered.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AdjustableDateOrRelativeDateSequence">
   <xsd:choice>
      <xsd:element name="adjustableDate" type=" AdjustableDate "/>
      <xsd:element name="relativeDateSequence" type=" RelativeDateSequence "/>
   </xsd:choice>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: BoundedCorrelation

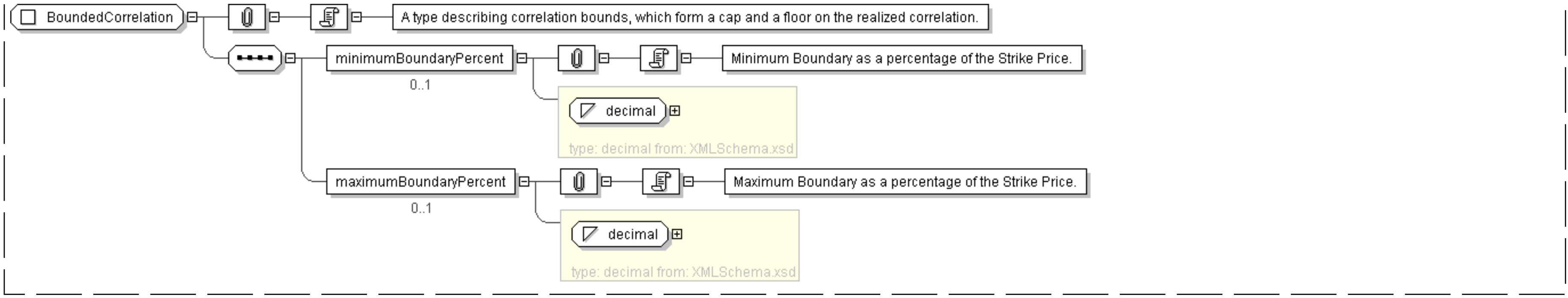
Super-types:	None
Sub-types:	None

Name	BoundedCorrelation
Used by (from the same schema document)	Complex Type **Correlation**
Abstract	no
Documentation	A type describing correlation bounds, which form a cap and a floor on the realized correlation.

XML Instance Representation

```
<...>
   <minimumBoundaryPercent> xsd:decimal </minimumBoundaryPercent> [0..1]
   'Minimum Boundary as a percentage of the Strike Price.'

   <maximumBoundaryPercent> xsd:decimal </maximumBoundaryPercent> [0..1]
   'Maximum Boundary as a percentage of the Strike Price.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BoundedCorrelation">
   <xsd:sequence>
      <xsd:element name="minimumBoundaryPercent" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="maximumBoundaryPercent" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: BoundedVariance

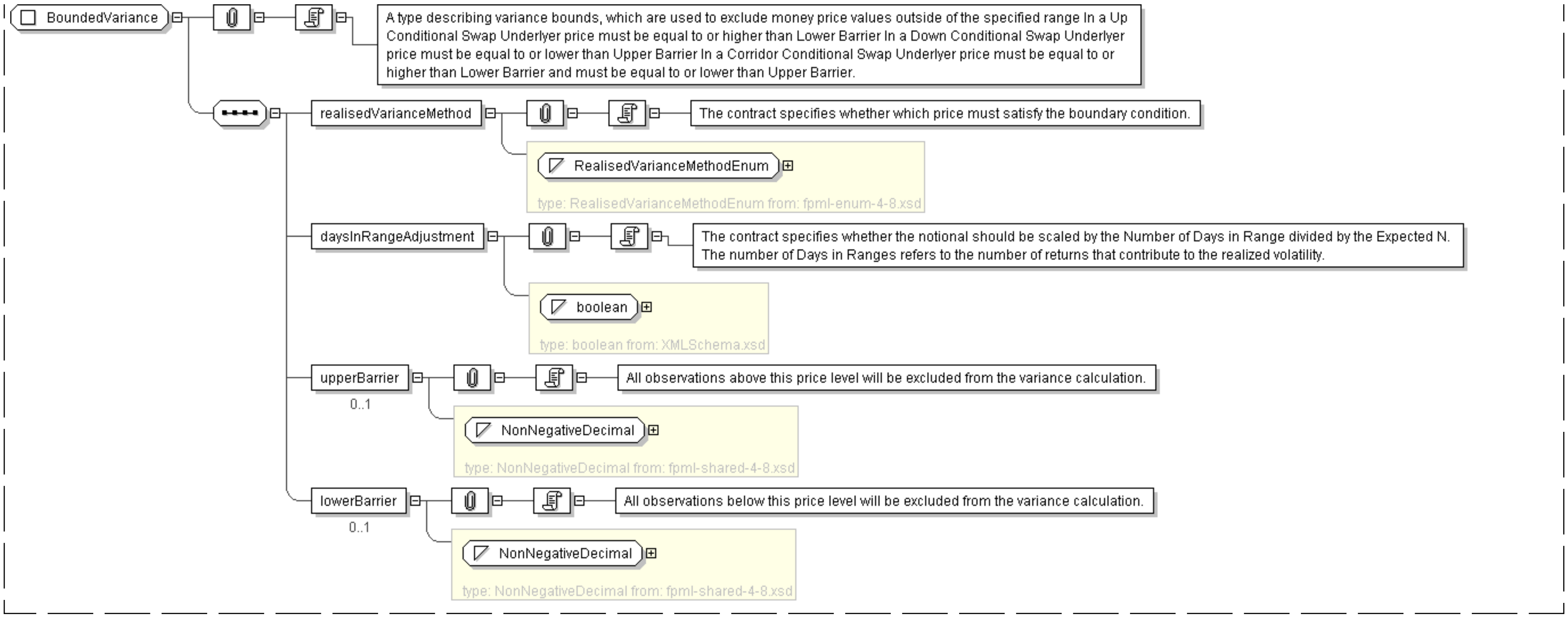
Super-types:	None
Sub-types:	None

Name	BoundedVariance
Used by (from the same schema document)	Complex Type **Variance**
Abstract	no
Documentation	A type describing variance bounds, which are used to exclude money price values outside of the specified range In a Up Conditional Swap Underlyer price must be equal to or higher than Lower Barrier In a Down Conditional Swap Underlyer price must be equal to or lower than Upper Barrier In a Corridor Conditional Swap Underlyer price must be equal to or higher than Lower Barrier and must be equal to or lower than Upper Barrier.

XML Instance Representation

```
<...>
   <realisedVarianceMethod> RealisedVarianceMethodEnum </realisedVarianceMethod> [1]
   'The contract specifies whether which price must satisfy the boundary condition.'

   <daysInRangeAdjustment> xsd:boolean </daysInRangeAdjustment> [1]
   'The contract specifies whether the notional should be scaled by the Number of Days in
   Range divided by the Expected N. The number of Days in Ranges refers to the number of
   returns that contribute to the realized volatility.'

   <upperBarrier> NonNegativeDecimal </upperBarrier> [0..1]
   'All observations above this price level will be excluded from the variance calculation.'

   <lowerBarrier> NonNegativeDecimal </lowerBarrier> [0..1]
   'All observations below this price level will be excluded from the variance calculation.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BoundedVariance">
   <xsd:sequence>
      <xsd:element name="realisedVarianceMethod" type=" RealisedVarianceMethodEnum "/>
      <xsd:element name="daysInRangeAdjustment" type=" xsd:boolean "/>
      <xsd:element name="upperBarrier" type=" NonNegativeDecimal " minOccurs="0"/>
      <xsd:element name="lowerBarrier" type=" NonNegativeDecimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CalculatedAmount

Super-types:	None
Sub-types:	None

Name	CalculatedAmount
Abstract	yes
Documentation	An abstract base class for all calculated money amounts, which are in the currency of the cash multiplier of the calculation.

XML Instance Representation

```
<...>
   <calculationDates> AdjustableRelativeOrPeriodicDates </calculationDates> [0..1]
   'Specifies the date on which a calculation or an observation will be performed for the
   purpose of calculating the amount.'

   <observationStartDate> AdjustableOrRelativeDate </observationStartDate> [0..1]
   'The start of the period over which observations are made which are used in the
   calculation Used when the observation start date differs from the trade date such as
   for forward starting swaps.'
```

<optionsExchangeDividends> xsd:boolean </optionsExchangeDividends> [0..1]

'If present and true, then options exchange dividends are applicable.'

<additionalDividends> xsd:boolean </additionalDividends> [0..1]

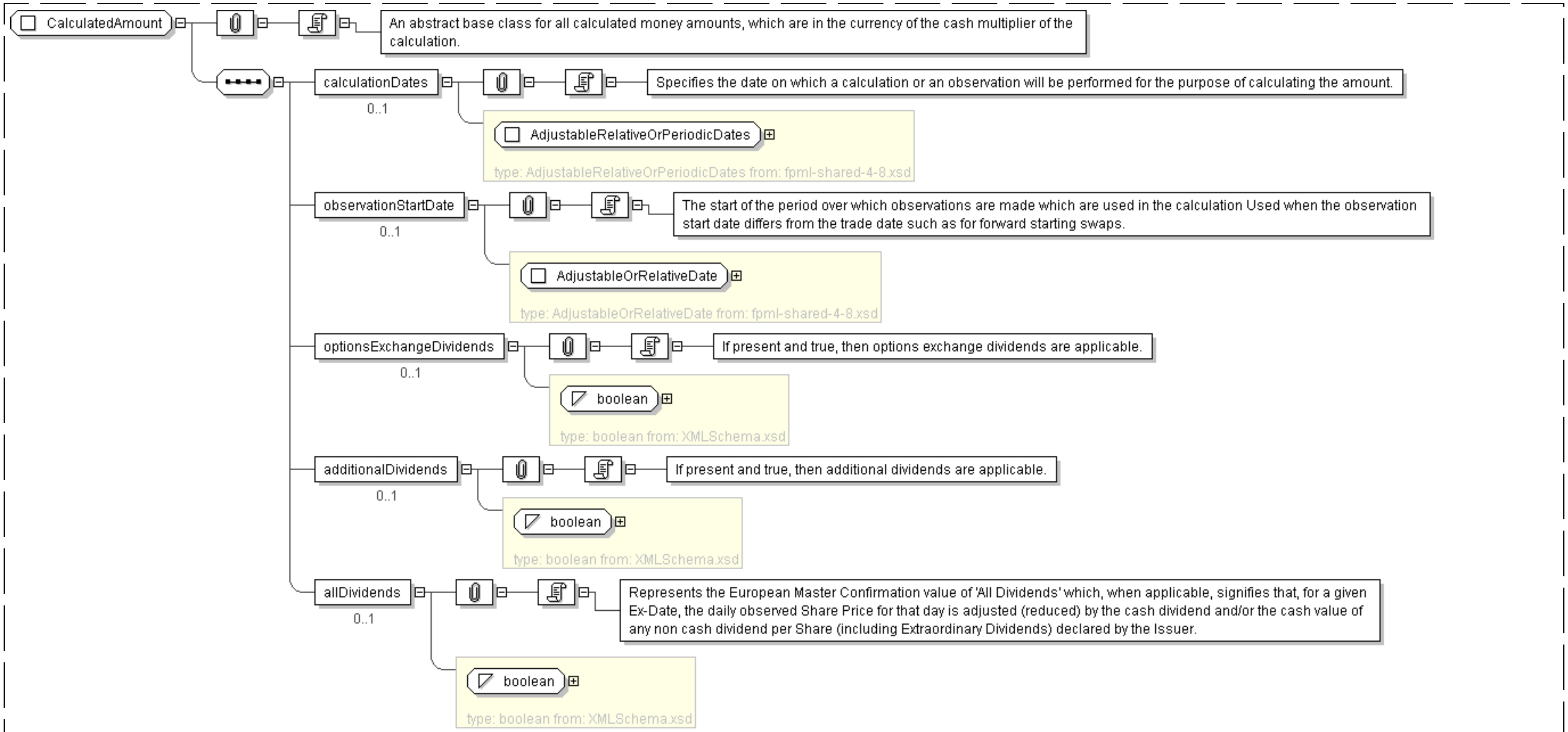
'If present and true, then additional dividends are applicable.'

<allDividends> xsd:boolean </allDividends> [0..1]

'Represents the European Master Confirmation value of \'All Dividends\' which, when applicable, signifies that, for a given Ex-Date, the daily observed Share Price for that day is adjusted (reduced) by the cash dividend and/or the cash value of any non cash dividend per Share (including Extraordinary Dividends) declared by the Issuer.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculatedAmount" abstract="true">
   <xsd:sequence>
      <xsd:element name="calculationDates" type=" AdjustableRelativeOrPeriodicDates " minOccurs="0"/>
      <xsd:element name="observationStartDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
      <xsd:element name="optionsExchangeDividends" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="additionalDividends" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="allDividends" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CalculationFromObservation

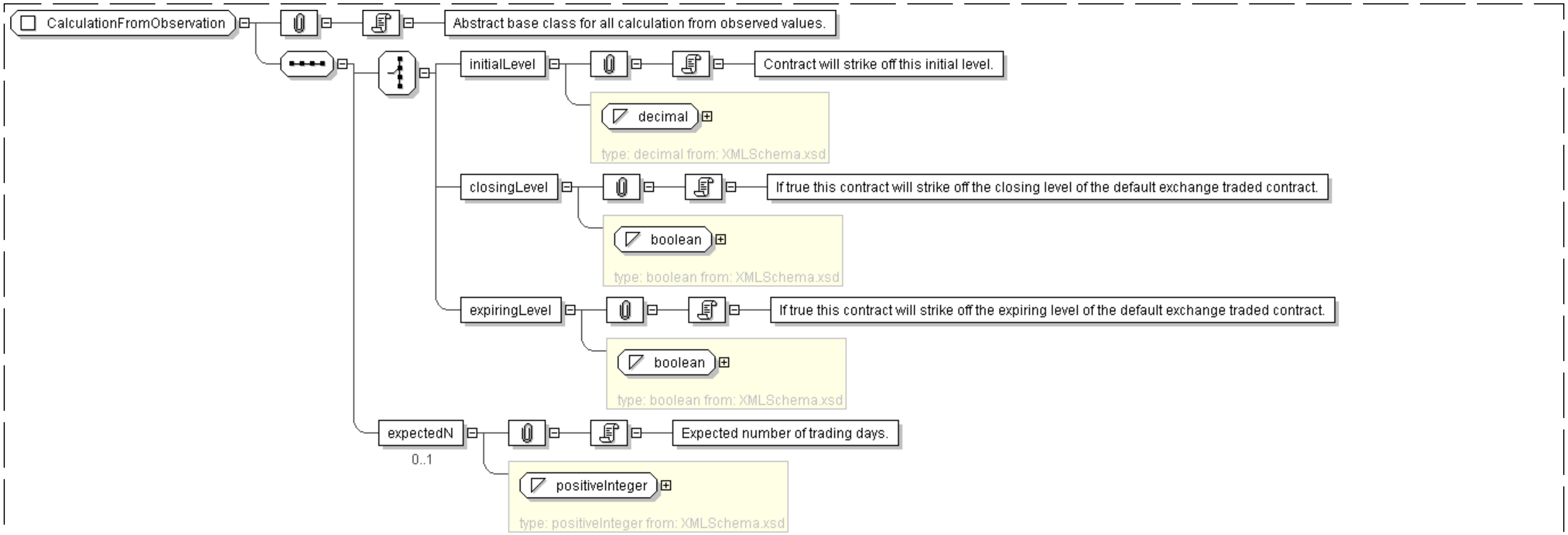
Super-types:	None
Sub-types:	• Correlation (by extension) • Variance (by extension)

Name	CalculationFromObservation
Abstract	yes
Documentation	Abstract base class for all calculation from observed values.

XML Instance Representation

```
<...>
Start Choice [1]
      <initialLevel> xsd:decimal </initialLevel> [1]
      'Contract will strike off this initial level.'

      <closingLevel> xsd:boolean </closingLevel> [1]
      'If true this contract will strike off the closing level of the default exchange
      traded contract.'

      <expiringLevel> xsd:boolean </expiringLevel> [1]
      'If true this contract will strike off the expiring level of the default exchange
      traded contract.'

End Choice
   <expectedN> xsd:positiveInteger </expectedN> [0..1]
   'Expected number of trading days.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationFromObservation" abstract="true">
   <xsd:sequence>
      <xsd:choice>
```

```
        <xsd:element name="initialLevel" type=" xsd:decimal "/>
        <xsd:element name="closingLevel" type=" xsd:boolean "/>
        <xsd:element name="expiringLevel" type=" xsd:boolean "/>
      </xsd:choice>
      <xsd:element name="expectedN" type=" xsd:positiveInteger " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

[top](#top)

Complex Type: Compounding

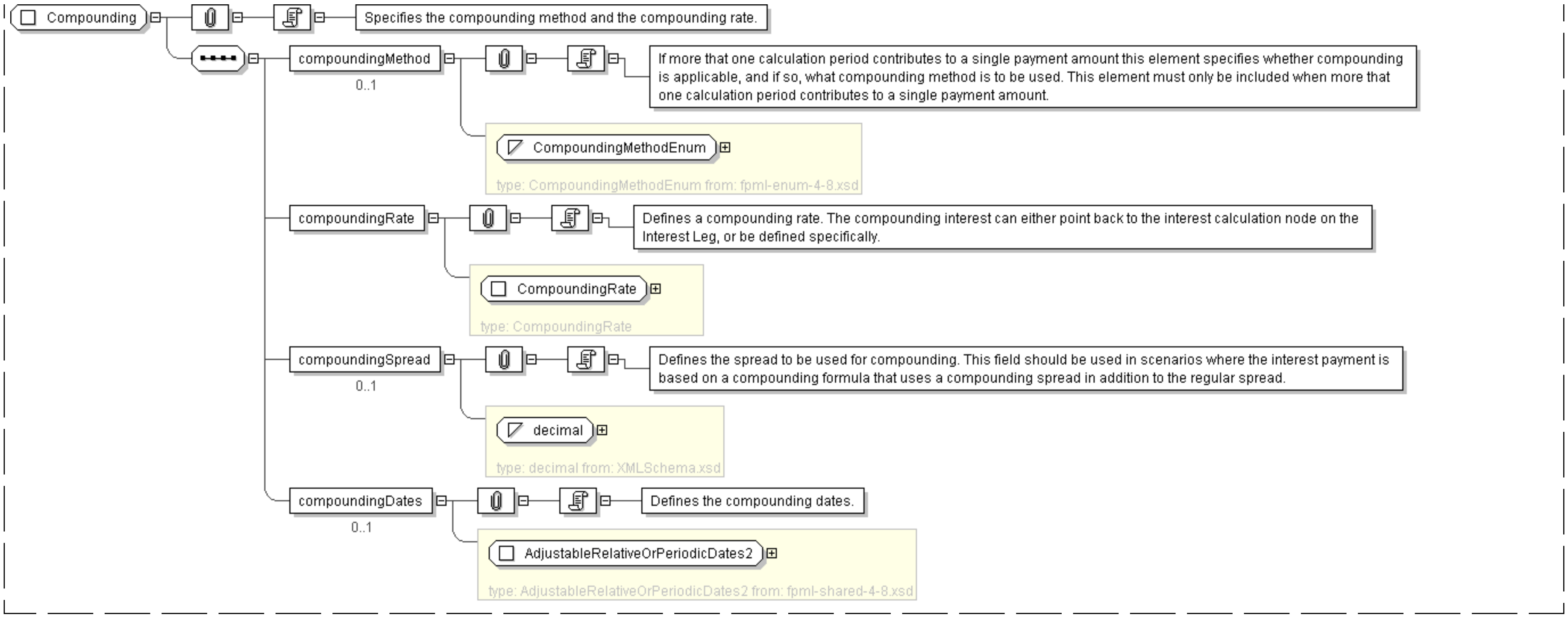
Super-types:	None
Sub-types:	None

Name	Compounding
Used by (from the same schema document)	Complex Type **InterestCalculation**
Abstract	no
Documentation	Specifies the compounding method and the compounding rate.

XML Instance Representation

```
<...>
   <compoundingMethod> CompoundingMethodEnum </compoundingMethod> [0..1]
   'If more that one calculation period contributes to a single payment amount this
   element specifies whether compounding is applicable, and if so, what compounding method is
   to be used. This element must only be included when more that one calculation
   period contributes to a single payment amount.'

   <compoundingRate> CompoundingRate </compoundingRate> [1]
   'Defines a compounding rate. The compounding interest can either point back to the
   interest calculation node on the Interest Leg, or be defined specifically.'

   <compoundingSpread> xsd:decimal </compoundingSpread> [0..1]
   'Defines the spread to be used for compounding. This field should be used in scenarios
   where the interest payment is based on a compounding formula that uses a compounding spread
   in addition to the regular spread.'

   <compoundingDates> AdjustableRelativeOrPeriodicDates2 </compoundingDates> [0..1]
   'Defines the compounding dates.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Compounding">
   <xsd:sequence>
      <xsd:element name="compoundingMethod" type=" CompoundingMethodEnum " minOccurs="0"/>
      <xsd:element name="compoundingRate" type=" CompoundingRate "/>
      <xsd:element name="compoundingSpread" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="compoundingDates" type=" AdjustableRelativeOrPeriodicDates2 " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CompoundingRate

Super-types:	None
Sub-types:	None

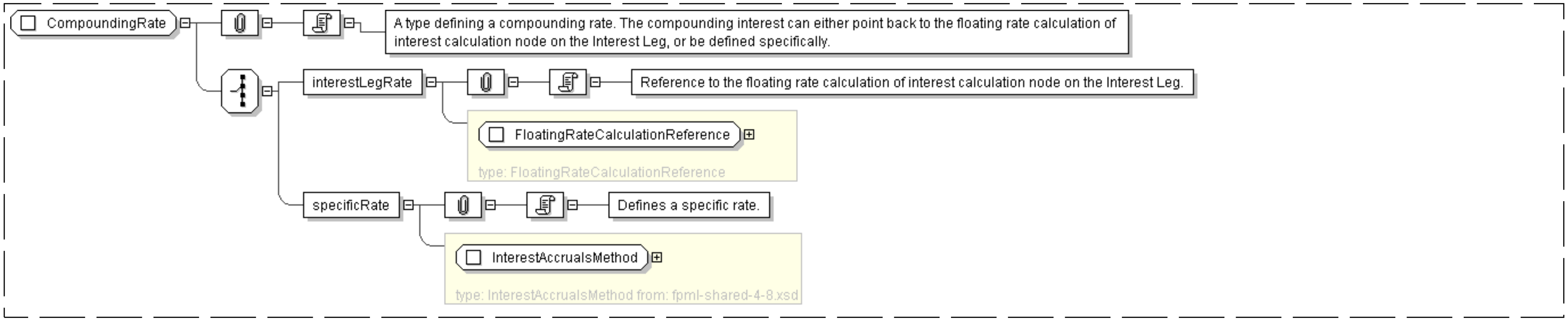
Name	CompoundingRate
Used by (from the same schema document)	Complex Type **Compounding**
Abstract	no
Documentation	A type defining a compounding rate. The compounding interest can either point back to the floating rate calculation of interest calculation node on the Interest Leg, or be defined specifically.

XML Instance Representation

```
<...>
Start Choice [1]
      <interestLegRate> FloatingRateCalculationReference </interestLegRate> [1]
      'Reference to the floating rate calculation of interest calculation node on the Interest Leg.'

      <specificRate> InterestAccrualsMethod </specificRate> [1]
      'Defines a specific rate.'
```

```
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CompoundingRate">
   <xsd:choice>
      <xsd:element name="interestLegRate" type=" FloatingRateCalculationReference "/>
      <xsd:element name="specificRate" type=" InterestAccrualsMethod "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: Correlation

Super-types:	CalculationFromObservation < **Correlation** (by extension)
Sub-types:	None

Name	Correlation
Abstract	no
Documentation	A type describing the correlation amount of a correlation swap.

XML Instance Representation

```
<...>
Start Choice [1]
      <initialLevel> xsd:decimal </initialLevel> [1]
      'Contract will strike off this initial level.'

      <closingLevel> xsd:boolean </closingLevel> [1]
      'If true this contract will strike off the closing level of the default exchange
      traded contract.'

      <expiringLevel> xsd:boolean </expiringLevel> [1]
      'If true this contract will strike off the expiring level of the default exchange
      traded contract.'

End Choice
   <expectedN> xsd:positiveInteger </expectedN> [0..1]
   'Expected number of trading days.'

   <notionalAmount> Money </notionalAmount> [1]
   'Notional amount, which is a cash multiplier.'

   <correlationStrikePrice> CorrelationValue </correlationStrikePrice> [1]
   'Correlation Strike Price.'
```

<boundedCorrelation> BoundedCorrelation </boundedCorrelation> [0..1]

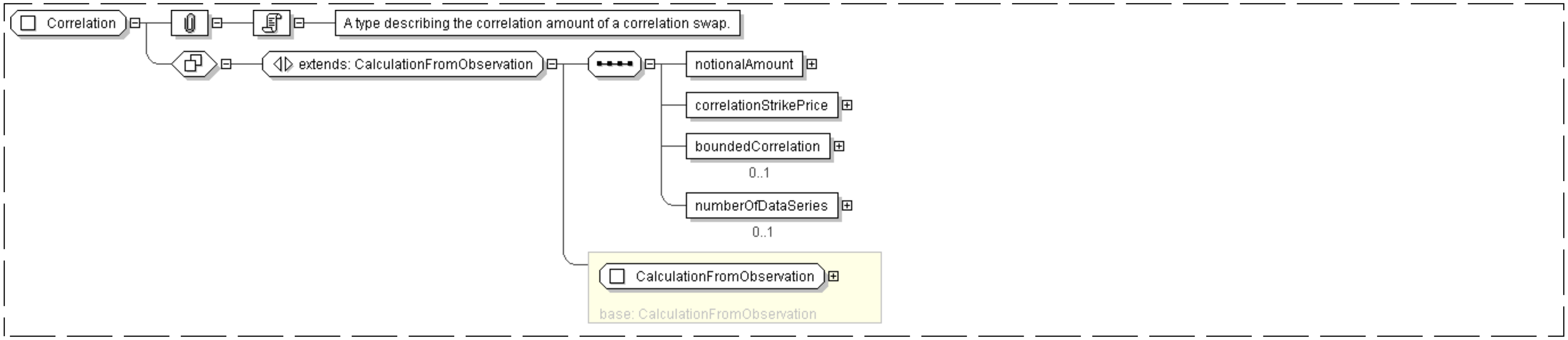
'Bounded Correlation.'

<numberOfDataSeries> xsd:positiveInteger </numberOfDataSeries> [0..1]

'Number of data series, normal market practice is that correlation data sets are drawn from geographic market areas, such as America, Europe and Asia Pacific, each of these geographic areas will have its own data series to avoid contagion.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Correlation">
   <xsd:complexContent>
      <xsd:extension base=" CalculationFromObservation ">
         <xsd:sequence>
            <xsd:element name="notionalAmount" type=" Money "/>
            <xsd:element name="correlationStrikePrice" type=" CorrelationValue "/>
            <xsd:element name="boundedCorrelation" type=" BoundedCorrelation " minOccurs="0"/>
            <xsd:element name="numberOfDataSeries" type=" xsd:positiveInteger " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DeprecatedVariance

Super-types:	None
Sub-types:	None

Name	DeprecatedVariance
Used by (from the same schema document)	Complex Type **LegAmount**
Abstract	no
Documentation	DEPRECATED This type will be removed in the next FpML major version. A type describing the variance amount of a variance swap.

XML Instance Representation

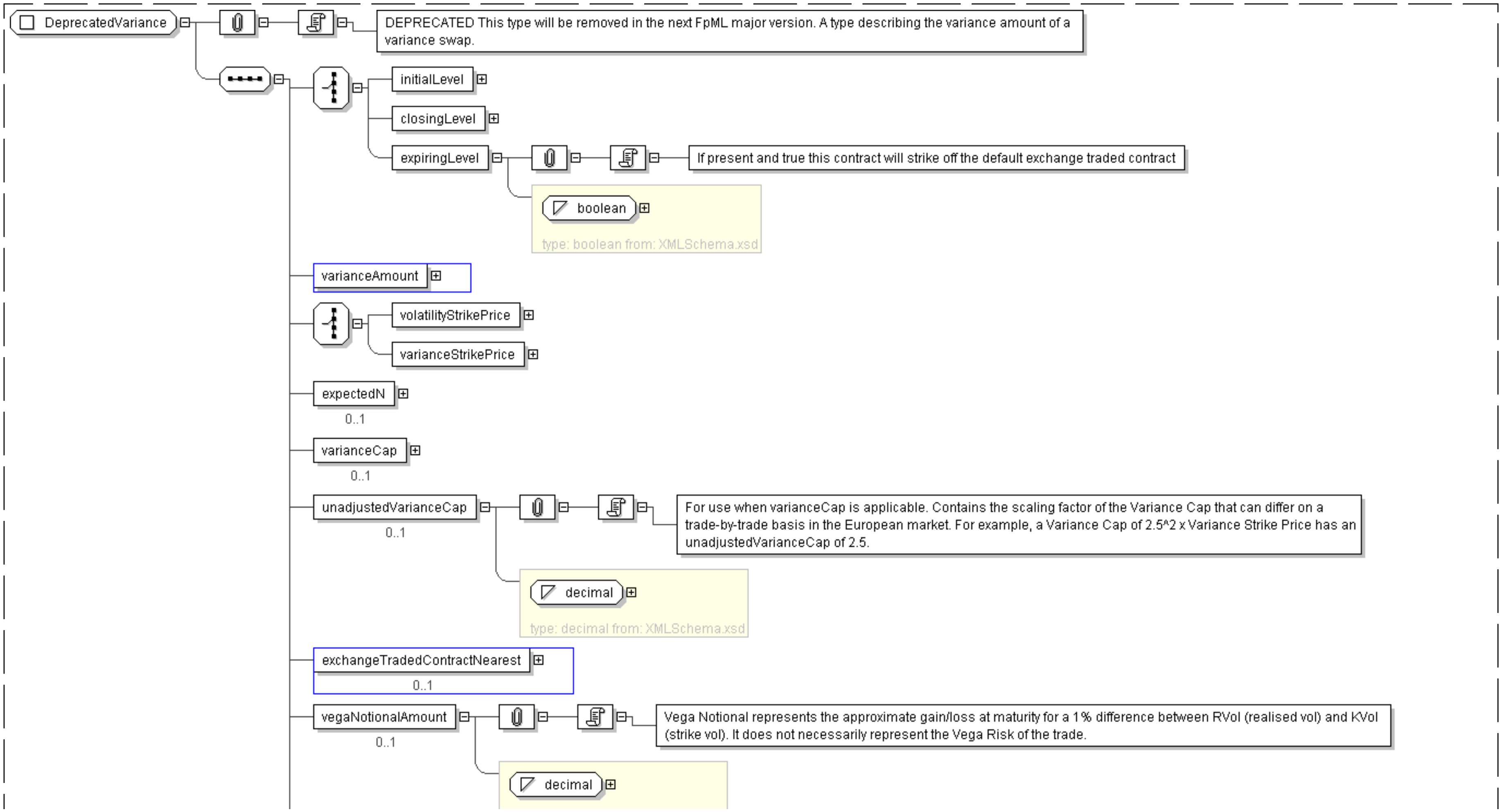
<...>
Start Choice [1]
<initialLevel> xsd:decimal </initialLevel> [1]
<closingLevel> xsd:boolean </closingLevel> [1]
<expiringLevel> xsd:boolean </expiringLevel> [1]

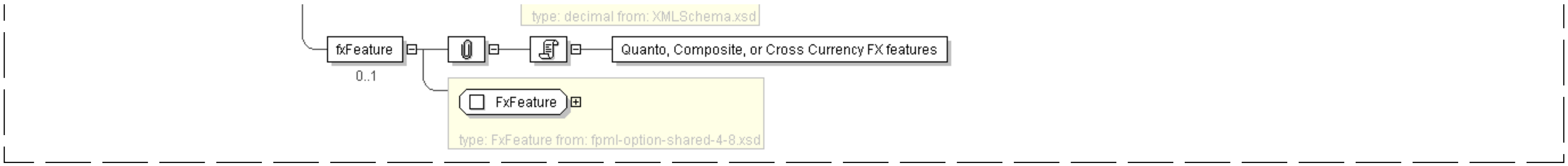
'If present and true this contract will strike off the default exchange traded contract'

End Choice

```
    <varianceAmount> Money </varianceAmount> [1]
Start Choice [1]
      <volatilityStrikePrice> xsd:decimal </volatilityStrikePrice> [1]
      <varianceStrikePrice> xsd:decimal </varianceStrikePrice> [1]
End Choice
    <expectedN> xsd:integer </expectedN> [0..1]
    <varianceCap> xsd:boolean </varianceCap> [0..1]
    <unadjustedVarianceCap> xsd:decimal </unadjustedVarianceCap> [0..1]

    'For use when varianceCap is applicable. Contains the scaling factor of the Variance Cap
    that can differ on a trade-by-trade basis in the European market. For example, a Variance
    Cap of 2.5^2 x Variance Strike Price has an unadjustedVarianceCap of 2.5.'

    <exchangeTradedContractNearest> ExchangeTradedContract </exchangeTradedContractNearest> [0..1]
    <vegaNotionalAmount> xsd:decimal </vegaNotionalAmount> [0..1]

    'Vega Notional represents the approximate gain/loss at maturity for a 1% difference
    between RVol (realised vol) and KVol (strike vol). It does not necessarily represent the
    Vega Risk of the trade.'

    <fxFeature> FxFeature </fxFeature> [0..1]

    'Quanto, Composite, or Cross Currency FX features'

</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="DeprecatedVariance" deprecated="true" deprecatedReason="Use new
Variance complex type">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="initialLevel" type=" xsd:decimal "/>
         <xsd:element name="closingLevel" type=" xsd:boolean "/>
         <xsd:element name="expiringLevel" type=" xsd:boolean "/>
      </xsd:choice>
      <xsd:element name="varianceAmount" type=" Money "/>
      <xsd:choice>
         <xsd:element name="volatilityStrikePrice" type=" xsd:decimal "/>
         <xsd:element name="varianceStrikePrice" type=" xsd:decimal "/>
      </xsd:choice>
      <xsd:element name="expectedN" type=" xsd:integer " minOccurs="0"/>
      <xsd:element name="varianceCap" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="unadjustedVarianceCap" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="exchangeTradedContractNearest" type=" ExchangeTradedContract "
      minOccurs="0"/>
      <xsd:element name="vegaNotionalAmount" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="fxFeature" type=" FxFeature " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DeprecatedVarianceAmount

Super-types:	LegAmount < ReturnSwapAmount (by extension) < **DeprecatedVarianceAmount** (by extension)
Sub-types:	None

Name	DeprecatedVarianceAmount
Used by (from the same schema document)	Complex Type **DeprecatedVarianceLeg**
Abstract	no
Documentation	DEPRECATED This type will be removed in the next FpML major version. Return Swap model should not be used for Variance Swaps, use the Variance Swap Product. Specifies, in relation to each Equity Payment Date, the amount to which the Equity Payment Date relates for Variance Swaps. Unless otherwise specified, this term has the meaning defined in the ISDA 2002 Equity Derivatives Definitions.

XML Instance Representation

```
<...>
Start Group: CurrencyAndDeterminationMethod.model [0..1]
Start Choice [1]
         <currency> Currency </currency> [1]
         'The currency in which an amount is denominated.'

         <determinationMethod> DeterminationMethod </determinationMethod> [1]
         'Specifies the method according to which an amount or a date is determined.'

         <currencyReference> IdentifiedCurrencyReference </currencyReference> [1]
         'Reference to a currency defined elsewhere in the document'

End Choice
End Group: CurrencyAndDeterminationMethod.model
   <paymentCurrency> PaymentCurrency </paymentCurrency> [0..1]
   'DEPRECATED. Currency in which the payment relating to the leg amount (equity amount
   or interest amount) or the dividend will be denominated.'
```

Start Choice [1]

<referenceAmount> ReferenceAmount </referenceAmount> [1]

'Specifies the reference Amount when this term either corresponds to the standard ISDA Definition (either the 2002 Equity Definition for the Equity Amount, or the 2000 Definition for the Interest Amount), or points to a term defined elsewhere in the swap document.'

<formula> Formula </formula> [1]

'Specifies a formula, with its description and components.'

<encodedDescription> xsd:base64Binary </encodedDescription> [1]

'Description of the leg amount when represented through an encoded image.'

<variance> DeprecatedVariance </variance> [1]

'DEPRECATED This element will be removed in the next FpML major version. Return Swap model should not be used for Variance Swaps, use the Variance Swap Product. Specifies Variance for Variance Leg.'

End Choice

<calculationDates> AdjustableRelativeOrPeriodicDates </calculationDates> [0..1]

'Specifies the date on which a calculation or an observation will be performed for the purpose of defining the Equity Amount, and in accordance to the definition terms of this latter.'

<cashSettlement> xsd:boolean </cashSettlement> [1]

'If true, then cash settlement is applicable.'

<optionsExchangeDividends> xsd:boolean </optionsExchangeDividends> [0..1]

'If present and true, then options exchange dividends are applicable.'

<additionalDividends> xsd:boolean </additionalDividends> [0..1]

'If present and true, then additional dividends are applicable.'

<cashSettlementPaymentDate> AdjustableOrRelativeDate </cashSettlementPaymentDate> [0..1]

'Typically specified as a number of days following the valuation date, such as one settlement cycle following the valuation date. Number of days can vary in the European market.'

<observationStartDate> StartingDate </observationStartDate> [0..1]

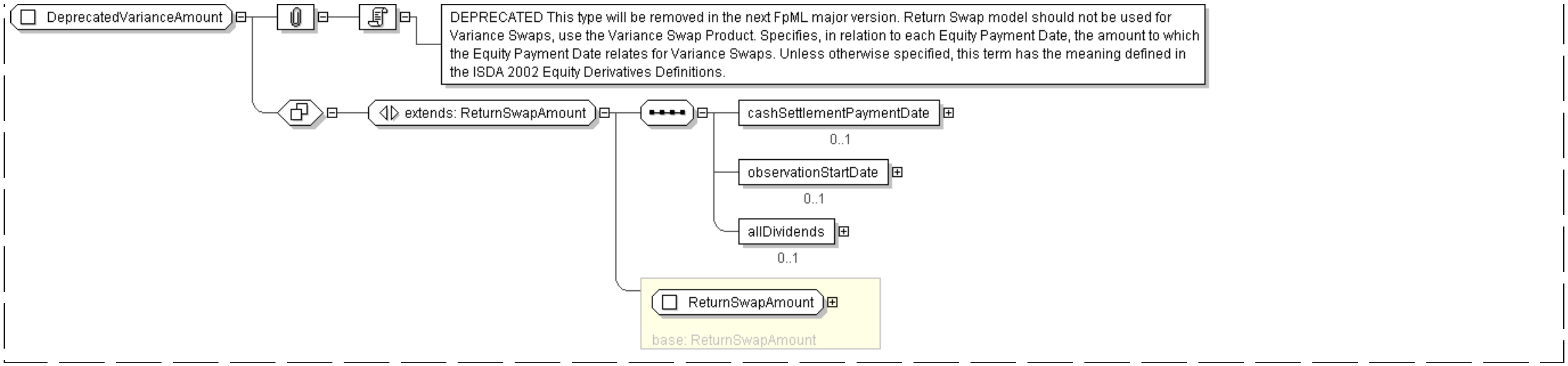
'The start of the period over which observations are made to determine the variance. Used when the date differs from the trade date such as for forward starting variance swaps.'

<allDividends> xsd:boolean </allDividends> [0..1]

'Represents the European Master Confirmation value of \"All Dividends\" which, when applicable, signifies that, for a given Ex-Date, the daily observed Share Price for that day is adjusted (reduced) by the cash dividend and/or the cash value of any non cash dividend per Share (including Extraordinary Dividends) declared by the Issuer.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedVarianceAmount" deprecated="true"
deprecatedReason="Return Swap model should not be used for Variance Swaps, use the
Variance Swap Product">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapAmount ">
         <xsd:sequence>
            <xsd:element name="cashSettlementPaymentDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
            <xsd:element name="observationStartDate" type=" StartingDate " minOccurs="0"/>
            <xsd:element name="allDividends" type=" xsd:boolean " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DeprecatedVarianceLeg

Super-types:	Leg < ReturnSwapLeg (by extension) < **DeprecatedVarianceLeg** (by extension)
Sub-types:	None

Name	DeprecatedVarianceLeg
Used by (from the same schema document)	Element **varianceLeg**
Abstract	no
Documentation	DEPRECATED This type will be removed in the next FpML major version. Return Swap model should not be used for Variance Swaps, use the Variance Swap Product. A type describing the variance leg of the return swap.

XML Instance Representation

```
<...
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <underlyer> Underlyer </underlyer> [1]
```

'Specifies the underlyer of the leg.'

<equityValuation> EquityValuation </equityValuation> [1]

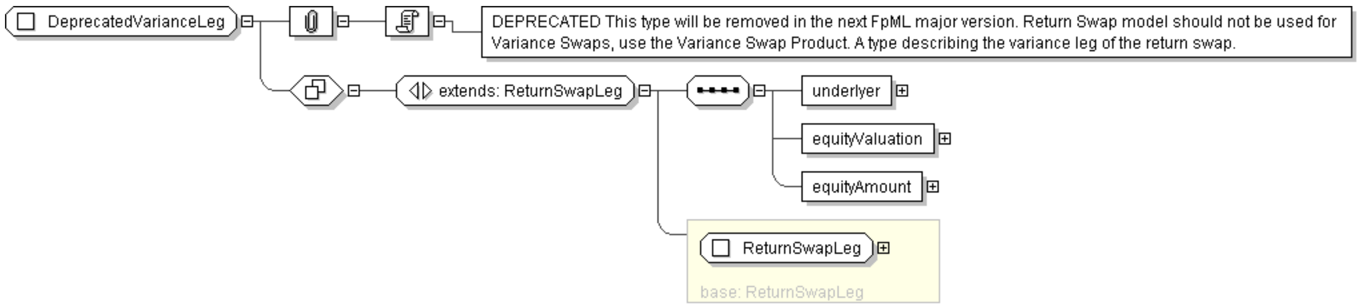
'Valuation of the underlyer.'

<equityAmount> DeprecatedVarianceAmount </equityAmount> [1]

'Specifies, in relation to each Equity Payment Date, the amount to which the Equity Payment Date relates. Unless otherwise specified, this term has the meaning defined in the ISDA 2002 Equity Derivatives Definitions.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedVarianceLeg" deprecated="true" deprecatedReason="Return
Swap model should not be used for Variance Swaps, use the Variance Swap Product">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapLeg ">
         <xsd:sequence>
            <xsd:element name="underlyer" type=" Underlyer "/>
            <xsd:element name="equityValuation" type=" EquityValuation "/>
            <xsd:element name="equityAmount" type=" DeprecatedVarianceAmount "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DirectionalLeg

Super-types:	Leg < **DirectionalLeg** (by extension)
Sub-types:	• DirectionalLegUnderlyer (by extension) ◦ DirectionalLegUnderlyerValuation (by extension)

Name	DirectionalLeg
Abstract	yes
Documentation	An abstract base class for all directional leg types with effective date, termination date, where a payer makes a stream of payments of greater than zero value to a receiver.

XML Instance Representation

<...
id=" xsd:ID [0..1]">

<legIdentifier> LegIdentifier </legIdentifier> [0..*]

'Version aware identification of this leg.'

<payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]

'A reference to the party responsible for making the payments defined by this structure.'

<receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]

'A reference to the party that receives the payments corresponding to this structure.'

<effectiveDate> AdjustableOrRelativeDate </effectiveDate> [0..1]

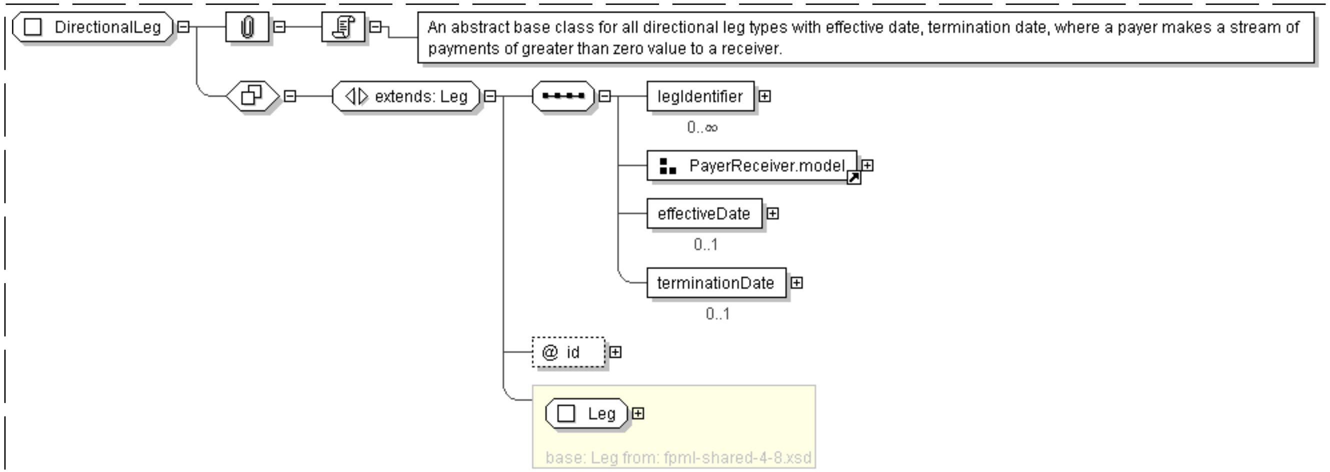
'Specifies the effective date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the effective date of the other leg of the swap.'

<terminationDate> AdjustableOrRelativeDate </terminationDate> [0..1]

'Specifies the termination date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the termination date of the other leg of the swap.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DirectionalLeg" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:element name="legIdentifier" type=" LegIdentifier " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="effectiveDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
            <xsd:element name="terminationDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DirectionalLegUnderlyer

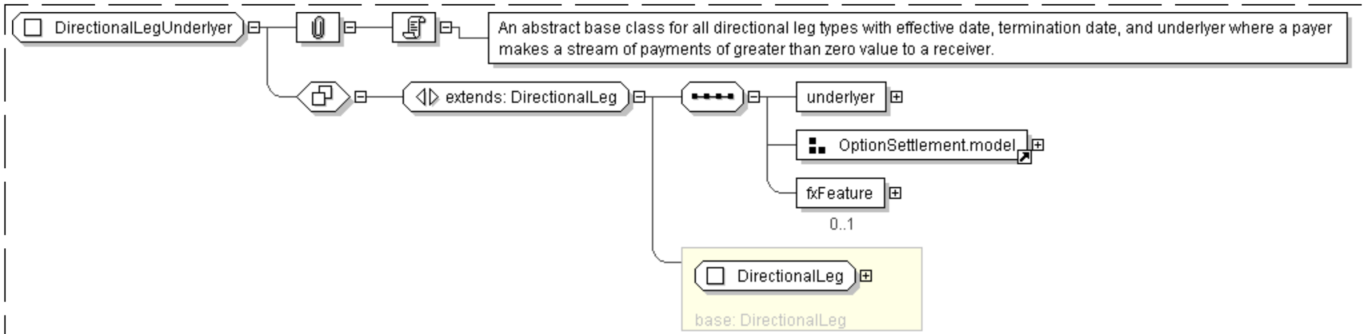
Super-types:	Leg < DirectionalLeg (by extension) < **DirectionalLegUnderlyer** (by extension)
Sub-types:	• DirectionalLegUnderlyerValuation (by extension)

Name	DirectionalLegUnderlyer
Abstract	yes
Documentation	An abstract base class for all directional leg types with effective date, termination date, and underlyer where a payer makes a stream of payments of greater than zero value to a receiver.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <legIdentifier> LegIdentifier </legIdentifier> [0..*]
   'Version aware identification of this leg.'

   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [0..1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [0..1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlyer of the leg.'

   <settlementType> SettlementTypeEnum </settlementType> [0..1]
   <settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
         <settlementAmount> Money </settlementAmount> [1]
         'Settlement Amount'

         <settlementCurrency> Currency </settlementCurrency> [1]
         'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
   <fxFeature> FxFeature </fxFeature> [0..1]
   'Quanto, Composite, or Cross Currency FX features.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DirectionalLegUnderlyer" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" DirectionalLeg ">
         <xsd:sequence>
            <xsd:element name="underlyer" type=" Underlyer "/>
```

```
            <xsd:group ref=" OptionSettlement.model "/>
            <xsd:element name="fxFeature" type=" FxFeature " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DirectionalLegUnderlyerValuation

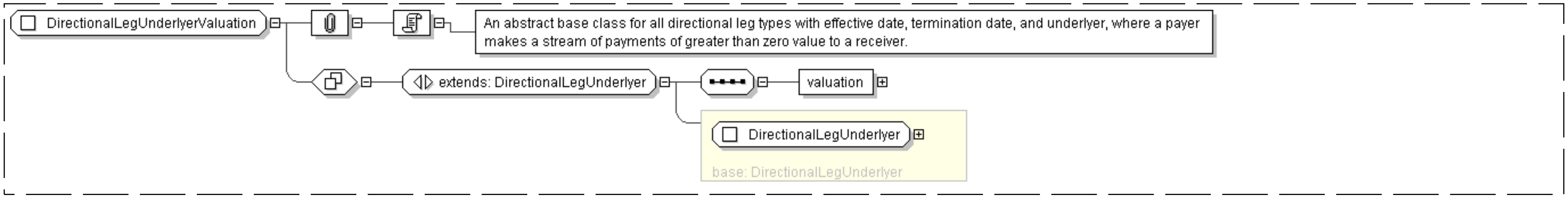
Super-types:	Leg < DirectionalLeg (by extension) < DirectionalLegUnderlyer (by extension) < **DirectionalLegUnderlyerValuation** (by extension)
Sub-types:	None

Name	DirectionalLegUnderlyerValuation
Abstract	yes
Documentation	An abstract base class for all directional leg types with effective date, termination date, and underlyer, where a payer makes a stream of payments of greater than zero value to a receiver.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <legIdentifier> LegIdentifier </legIdentifier> [0..*]
   'Version aware identification of this leg.'

   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [0..1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [0..1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlyer of the leg.'

   <settlementType> SettlementTypeEnum </settlementType> [0..1]
   <settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
         <settlementAmount> Money </settlementAmount> [1]
         'Settlement Amount'

         <settlementCurrency> Currency </settlementCurrency> [1]
         'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
   <fxFeature> FxFeature </fxFeature> [0..1]
   'Quanto, Composite, or Cross Currency FX features.'

   <valuation> EquityValuation </valuation> [1]
   'Valuation of the underlyer.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DirectionalLegUnderlyerValuation" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" DirectionalLegUnderlyer ">
         <xsd:sequence>
            <xsd:element name="valuation" type=" EquityValuation "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DividendAdjustment

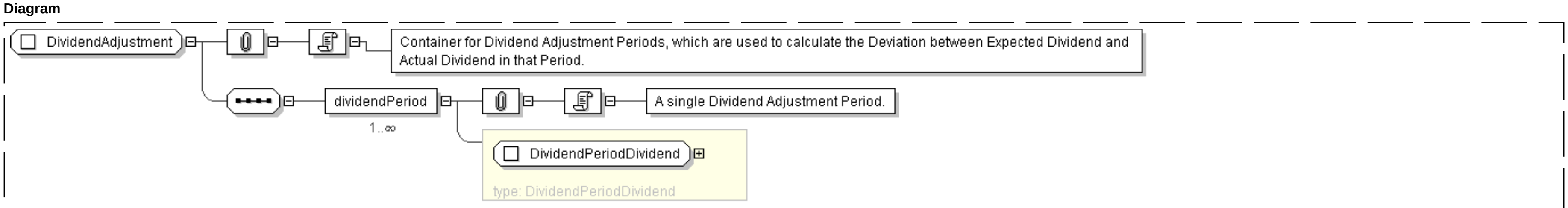
Super-types:	None
Sub-types:	None

Name	DividendAdjustment
Used by (from the same schema document)	Complex Type **OptionFeatures**
Abstract	no
Documentation	Container for Dividend Adjustment Periods, which are used to calculate the Deviation between Expected Dividend and Actual Dividend in that Period.

XML Instance Representation

```
<...>
   <dividendPeriod> DividendPeriodDividend </dividendPeriod> [1..*]
   'A single Dividend Adjustment Period.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendAdjustment">
   <xsd:sequence>
      <xsd:element name="dividendPeriod" type=" DividendPeriodDividend " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DividendConditions

Super-types:	None
Sub-types:	None

Name	DividendConditions
Used by (from the same schema document)	Complex Type **Return**
Abstract	no
Documentation	A type describing the conditions governing the payment of dividends to the receiver of the equity return. With the exception of the dividend payout ratio, which is defined for each of the underlying components.

XML Instance Representation

```
<...>
   <dividendReinvestment> xsd:boolean </dividendReinvestment> [0..1]
   'Boolean element that defines whether the dividend will be reinvested or not.'

   <dividendEntitlement> DividendEntitlementEnum </dividendEntitlement> [0..1]
   'Defines the date on which the receiver on the equity return is entitled to the dividend.'

   <dividendAmount> DividendAmountTypeEnum </dividendAmount> [0..1]
   <dividendPaymentDate> DividendPaymentDate </dividendPaymentDate> [0..1]
   'Specifies when the dividend will be paid to the receiver of the equity return. Has the
   meaning as defined in the ISDA 2002 Equity Derivatives Definitions. Is not applicable in
   the case of a dividend reinvestment election.'

Start Choice [1]
      <dividendPeriodEffectiveDate> DateReference </dividendPeriodEffectiveDate> [0..1]
      'Dividend period has the meaning as defined in the ISDA 2002 Equity Derivatives
      Definitions. This element specifies the date on which the dividend period will commence.'

      <dividendPeriodEndDate> DateReference </dividendPeriodEndDate> [0..1]
      'Dividend period has the meaning as defined in the ISDA 2002 Equity Derivatives
      Definitions. This element specifies the date on which the dividend period will end. It
      includes a boolean attribute for defining whether this end date is included or excluded
      from the dividend period.'

      <dividendPeriod> DividendPeriodEnum </dividendPeriod> [1]
      'Defines the First Period or the Second Period, as defined in the 2002 ISDA Equity
      Derivatives Definitions.'

End Choice
   <extraOrdinaryDividends> PartyReference </extraOrdinaryDividends> [0..1]
   'Reference to the party which determines if dividends are extraordinary in relation to
   normal levels.'

   <excessDividendAmount> DividendAmountTypeEnum </excessDividendAmount> [0..1]
   'Determination of Gross Cash Dividend per Share.'

Start Group: CurrencyAndDeterminationMethod.model [0..1]
Start Choice [1]
         <currency> Currency </currency> [1]
         'The currency in which an amount is denominated.'

         <determinationMethod> DeterminationMethod </determinationMethod> [1]
         'Specifies the method according to which an amount or a date is determined.'

         <currencyReference> IdentifiedCurrencyReference </currencyReference> [1]
         'Reference to a currency defined elsewhere in the document'

End Choice
End Group: CurrencyAndDeterminationMethod.model
   <paymentCurrency> PaymentCurrency </paymentCurrency> [0..1]
   'DEPRECATED. Currency in which the payment relating to the leg amount (equity amount
   or interest amount) or the dividend will be denominated.'
```

<dividendFxTriggerDate> DividendPaymentDate </dividendFxTriggerDate> [0..1]

'Specifies the date on which the FX rate will be considered in the case of a Composite FX swap.'

<interestAccrualsMethod> InterestAccrualsCompoundingMethod </interestAccrualsMethod> [0..1]

'Defines the way in which interests are accrued: the applicable rate (fixed or floating reference) and the compounding method.','FpML entity'

<numberOfIndexUnits> NonNegativeDecimal </numberOfIndexUnits> [0..1]

'Defines the Number Of Index Units applicable to a Dividend.'

<declaredCashDividendPercentage> NonNegativeDecimal </declaredCashDividendPercentage> [0..1]

'Declared Cash Dividend Percentage.'

<declaredCashEquivalentDividendPercentage> NonNegativeDecimal </declaredCashEquivalentDividendPercentage> [0..1]

'Declared Cash Equivalent Dividend Percentage.'

<nonCashDividendTreatment> NonCashDividendTreatmentEnum </nonCashDividendTreatment> [0..1]

'Defines treatment of Non-Cash Dividends.'

<dividendComposition> DividendCompositionEnum </dividendComposition> [0..1]

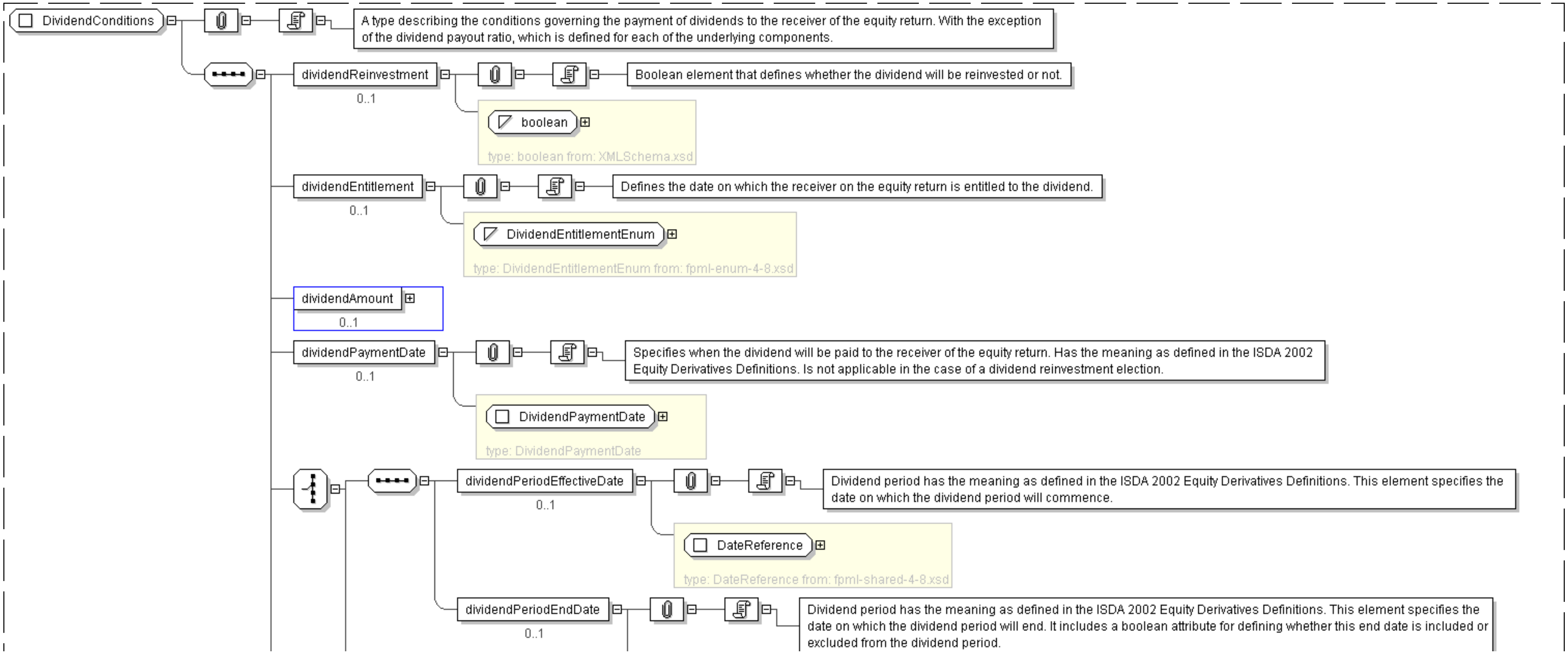
'Defines how the composition of Dividends is to be determined.'

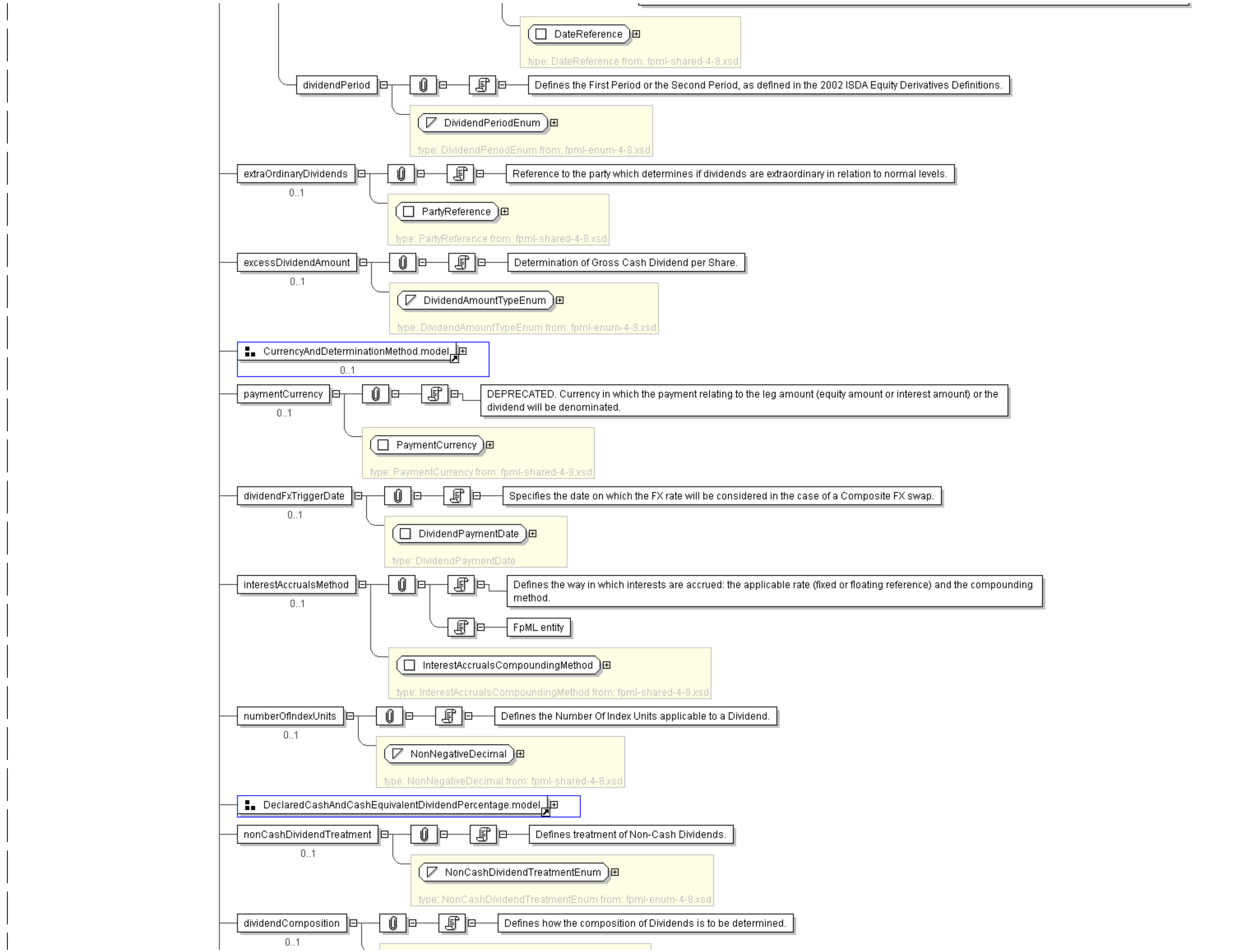
<specialDividends> xsd:boolean </specialDividends> [0..1]

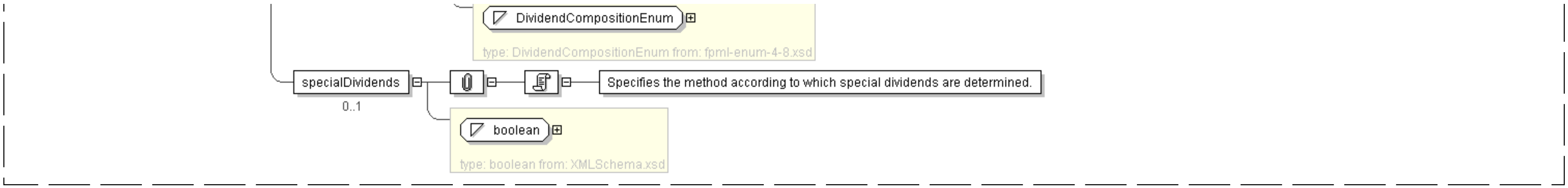
'Specifies the method according to which special dividends are determined.'

</...>

Diagram




DateReference
type: DateReference from: fpml-shared-4-8.xsd
dividendPeriod
Defines the First Period or the Second Period, as defined in the 2002 ISDA Equity Derivatives Definitions.
DividendPeriodEnum
type: DividendPeriodEnum from: fpml-enum-4-8.xsd
extraOrdinaryDividends
0..1
Reference to the party which determines if dividends are extraordinary in relation to normal levels.
PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
excessDividendAmount
0..1
Determination of Gross Cash Dividend per Share.
DividendAmountTypeEnum
type: DividendAmountTypeEnum from: fpml-enum-4-8.xsd
CurrencyAndDeterminationMethod.model
0..1
paymentCurrency
0..1
DEPRECATED. Currency in which the payment relating to the leg amount (equity amount or interest amount) or the dividend will be denominated.
PaymentCurrency
type: PaymentCurrency from: fpml-shared-4-8.xsd
dividendFxTriggerDate
0..1
Specifies the date on which the FX rate will be considered in the case of a Composite FX swap.
DividendPaymentDate
type: DividendPaymentDate
interestAccrualsMethod
0..1
Defines the way in which interests are accrued: the applicable rate (fixed or floating reference) and the compounding method.
FpML entity
InterestAccrualsCompoundingMethod
type: InterestAccrualsCompoundingMethod from: fpml-shared-4-8.xsd
numberOfIndexUnits
0..1
Defines the Number Of Index Units applicable to a Dividend.
NonNegativeDecimal
type: NonNegativeDecimal from: fpml-shared-4-8.xsd
DeclaredCashAndCashEquivalentDividendPercentage.model
nonCashDividendTreatment
0..1
Defines treatment of Non-Cash Dividends.
NonCashDividendTreatmentEnum
type: NonCashDividendTreatmentEnum from: fpml-enum-4-8.xsd
dividendComposition
0..1
Defines how the composition of Dividends is to be determined.



Schema Component Representation

```
<xsd:complexType name="DividendConditions">
   <xsd:sequence>
      <xsd:element name="dividendReinvestment" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="dividendEntitlement" type=" DividendEntitlementEnum " minOccurs="0"/>
      <xsd:element name="dividendAmount" type=" DividendAmountTypeEnum " minOccurs="0"/>
      <xsd:element name="dividendPaymentDate" type=" DividendPaymentDate " minOccurs="0"/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="dividendPeriodEffectiveDate" type=" DateReference " minOccurs="0"/>
            <xsd:element name="dividendPeriodEndDate" type=" DateReference " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element name="dividendPeriod" type=" DividendPeriodEnum "/>
      </xsd:choice>
      <xsd:element name="extraOrdinaryDividends" type=" PartyReference " minOccurs="0"/>
      <xsd:element name="excessDividendAmount" type=" DividendAmountTypeEnum " minOccurs="0"/>
      <xsd:group ref=" CurrencyAndDeterminationMethod.model " minOccurs="0"/>
      <xsd:element name="paymentCurrency" type=" PaymentCurrency " minOccurs="0"
      deprecated="true" deprecatedReason="The model is wrong since it has an intradocument
      reference that is not clear. Current PaymentCurrency model and elements using this type
      are deprecated. Instead, ReturnSwapCurrency.model above, the choice between
      currency, determinationMethod, and currencyReference (of type CurrencyReference) ,should
      be used."/>
      <xsd:element name="dividendFxTriggerDate" type=" DividendPaymentDate " minOccurs="0"/>
      <xsd:element name="interestAccrualsMethod" type=" InterestAccrualsCompoundingMethod
      " minOccurs="0"/>
      <xsd:element name="numberOfIndexUnits" type=" NonNegativeDecimal " minOccurs="0"/>
      <xsd:group ref=" DeclaredCashAndCashEquivalentDividendPercentage.model "/>
      <xsd:element name="nonCashDividendTreatment" type=" NonCashDividendTreatmentEnum
      " minOccurs="0"/>
      <xsd:element name="dividendComposition" type=" DividendCompositionEnum " minOccurs="0"/>
      <xsd:element name="specialDividends" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DividendPaymentDate

Super-types:	None
Sub-types:	None

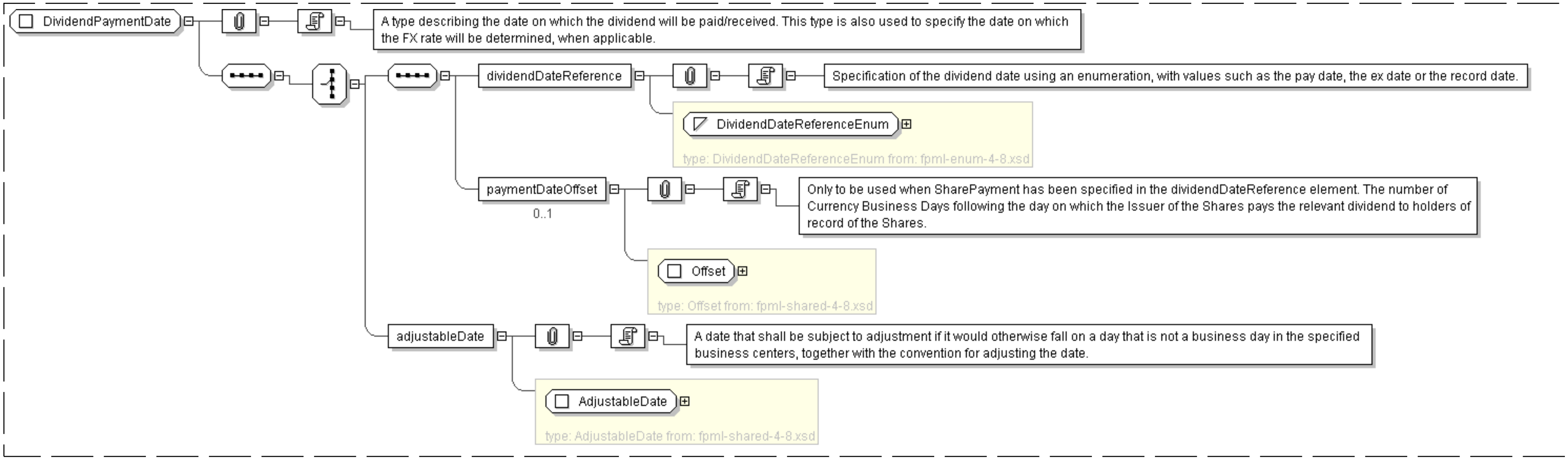
Name	DividendPaymentDate
Used by (from the same schema document)	Complex Type **DividendConditions** , Complex Type **DividendConditions**
Abstract	no
Documentation	A type describing the date on which the dividend will be paid/received. This type is also used to specify the date on which the FX rate will be determined, when applicable.

XML Instance Representation

```
<...>
Start Choice [1]
      <dividendDateReference> DividendDateReferenceEnum </dividendDateReference> [1]
      'Specification of the dividend date using an enumeration, with values such as the pay date,
      the ex date or the record date.'
```

```
<paymentDateOffset> Offset </paymentDateOffset> [0..1]
'Only to be used when SharePayment has been specified in the dividendDateReference element.
The number of Currency Business Days following the day on which the Issuer of the Shares
pays the relevant dividend to holders of record of the Shares.'

<adjustableDate> AdjustableDate </adjustableDate> [1]
'A date that shall be subject to adjustment if it would otherwise fall on a day that is not
a business day in the specified business centers, together with the convention for
adjusting the date.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendPaymentDate">
   <xsd:sequence>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="dividendDateReference" type=" DividendDateReferenceEnum "/>
            <xsd:element name="paymentDateOffset" type=" Offset " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element name="adjustableDate" type=" AdjustableDate "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DividendPeriod

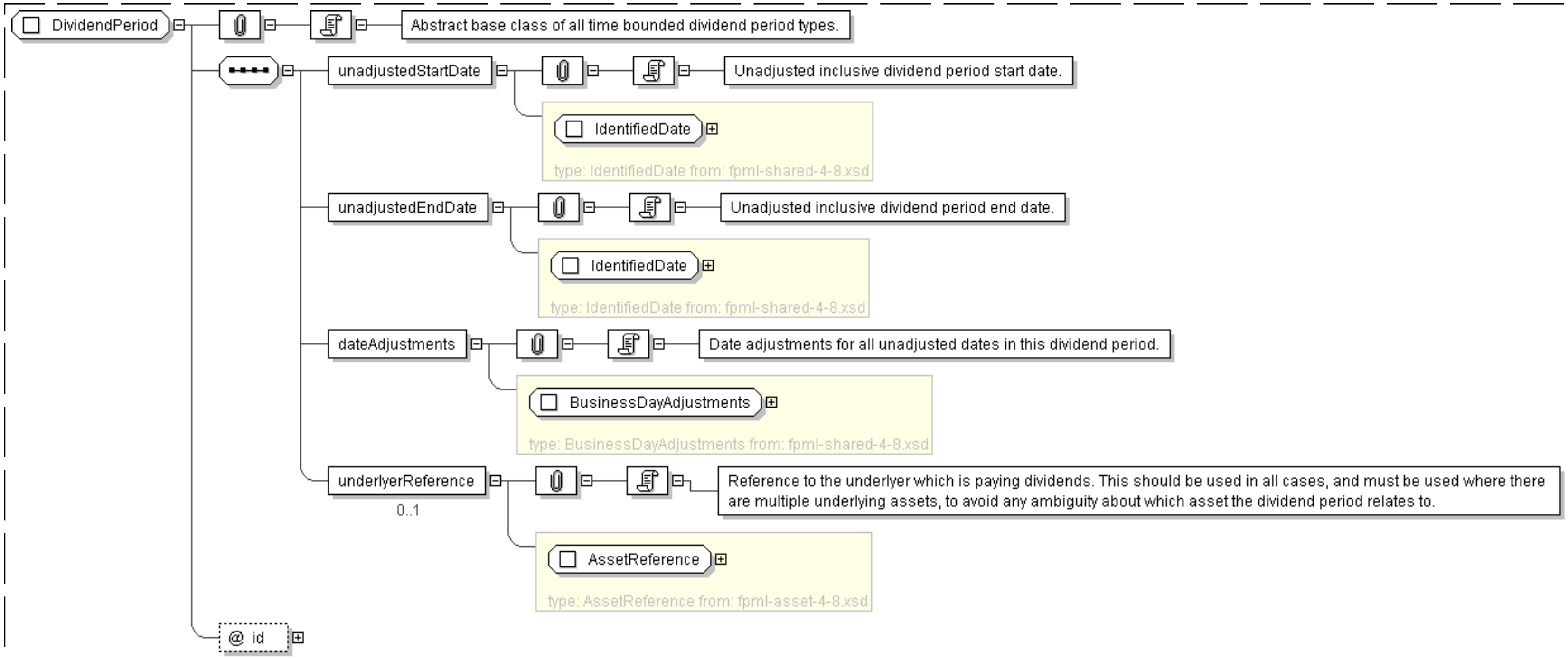
Super-types:	None
Sub-types:	• DividendPeriodDividend (by extension)

Name	DividendPeriod
Abstract	yes
Documentation	Abstract base class of all time bounded dividend period types.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <unadjustedStartDate> IdentifiedDate </unadjustedStartDate> [1]
   'Unadjusted inclusive dividend period start date.'

   <unadjustedEndDate> IdentifiedDate </unadjustedEndDate> [1]
   'Unadjusted inclusive dividend period end date.'

   <dateAdjustments> BusinessDayAdjustments </dateAdjustments> [1]
   'Date adjustments for all unadjusted dates in this dividend period.'

   <underlyerReference> AssetReference </underlyerReference> [0..1]
   'Reference to the underlyer which is paying dividends. This should be used in all cases,
   and must be used where there are multiple underlying assets, to avoid any ambiguity about
   which asset the dividend period relates to.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendPeriod" abstract="true">
   <xsd:sequence>
      <xsd:element name="unadjustedStartDate" type=" IdentifiedDate "/>
      <xsd:element name="unadjustedEndDate" type=" IdentifiedDate "/>
      <xsd:element name="dateAdjustments" type=" BusinessDayAdjustments "/>
      <xsd:element name="underlyerReference" type=" AssetReference " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: DividendPeriodDividend

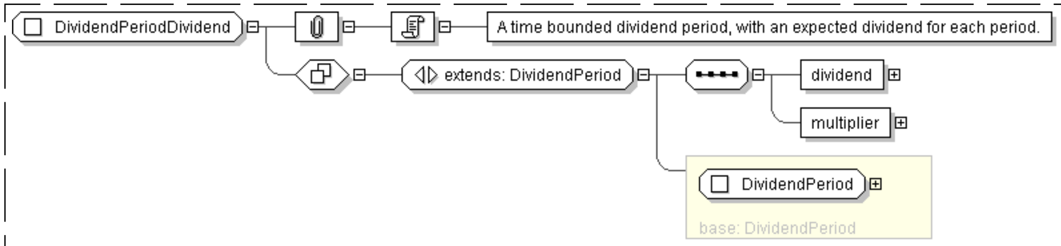
Super-types:	DividendPeriod < **DividendPeriodDividend** (by extension)
Sub-types:	None

Name	DividendPeriodDividend
Used by (from the same schema document)	Complex Type **DividendAdjustment**
Abstract	no
Documentation	A time bounded dividend period, with an expected dividend for each period.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <unadjustedStartDate> IdentifiedDate </unadjustedStartDate> [1]
   'Unadjusted inclusive dividend period start date.'

   <unadjustedEndDate> IdentifiedDate </unadjustedEndDate> [1]
   'Unadjusted inclusive dividend period end date.'

   <dateAdjustments> BusinessDayAdjustments </dateAdjustments> [1]
   'Date adjustments for all unadjusted dates in this dividend period.'

   <underlyerReference> AssetReference </underlyerReference> [0..1]
   'Reference to the underlyer which is paying dividends. This should be used in all cases,
   and must be used where there are multiple underlying assets, to avoid any ambiguity about
   which asset the dividend period relates to.'

   <dividend> Money </dividend> [1]
   'Expected dividend in this period.'

   <multiplier> PositiveDecimal </multiplier> [1]
   'Multiplier is a percentage value which is used to produce Deviation by multiplying
   the difference between Expected Dividend and Actual Dividend Deviation = Multiplier *
   (Expected Dividend – Actual Dividend).'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DividendPeriodDividend">
   <xsd:complexContent>
      <xsd:extension base=" DividendPeriod ">
         <xsd:sequence>
            <xsd:element name="dividend" type=" Money "/>
            <xsd:element name="multiplier" type=" PositiveDecimal "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityCorporateEvents

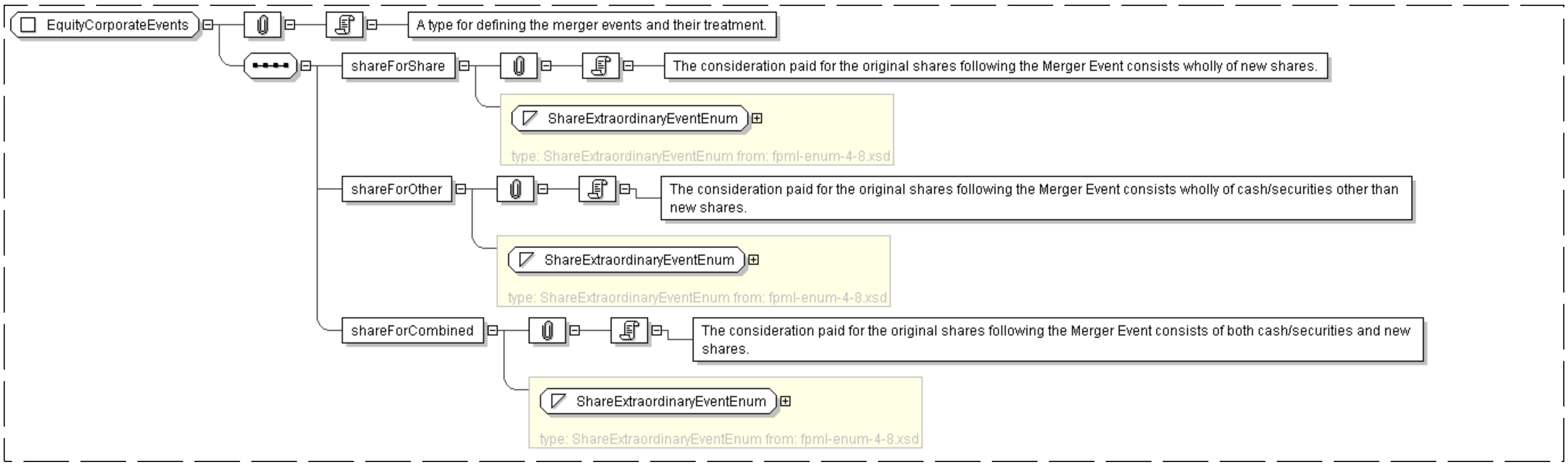
Super-types:	None
Sub-types:	None

Name	EquityCorporateEvents
Used by (from the same schema document)	Complex Type **ExtraordinaryEvents** , Complex Type **ExtraordinaryEvents**
Abstract	no
Documentation	A type for defining the merger events and their treatment.

XML Instance Representation

```
<...>
   <shareForShare> ShareExtraordinaryEventEnum </shareForShare> [1]
   'The consideration paid for the original shares following the Merger Event consists wholly
   of new shares.'

   <shareForOther> ShareExtraordinaryEventEnum </shareForOther> [1]
   'The consideration paid for the original shares following the Merger Event consists wholly
   of cash/securities other than new shares.'

   <shareForCombined> ShareExtraordinaryEventEnum </shareForCombined> [1]
   'The consideration paid for the original shares following the Merger Event consists of
   both cash/securities and new shares.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityCorporateEvents">
   <xsd:sequence>
      <xsd:element name="shareForShare" type=" ShareExtraordinaryEventEnum "/>
      <xsd:element name="shareForOther" type=" ShareExtraordinaryEventEnum "/>
      <xsd:element name="shareForCombined" type=" ShareExtraordinaryEventEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EquityPremium

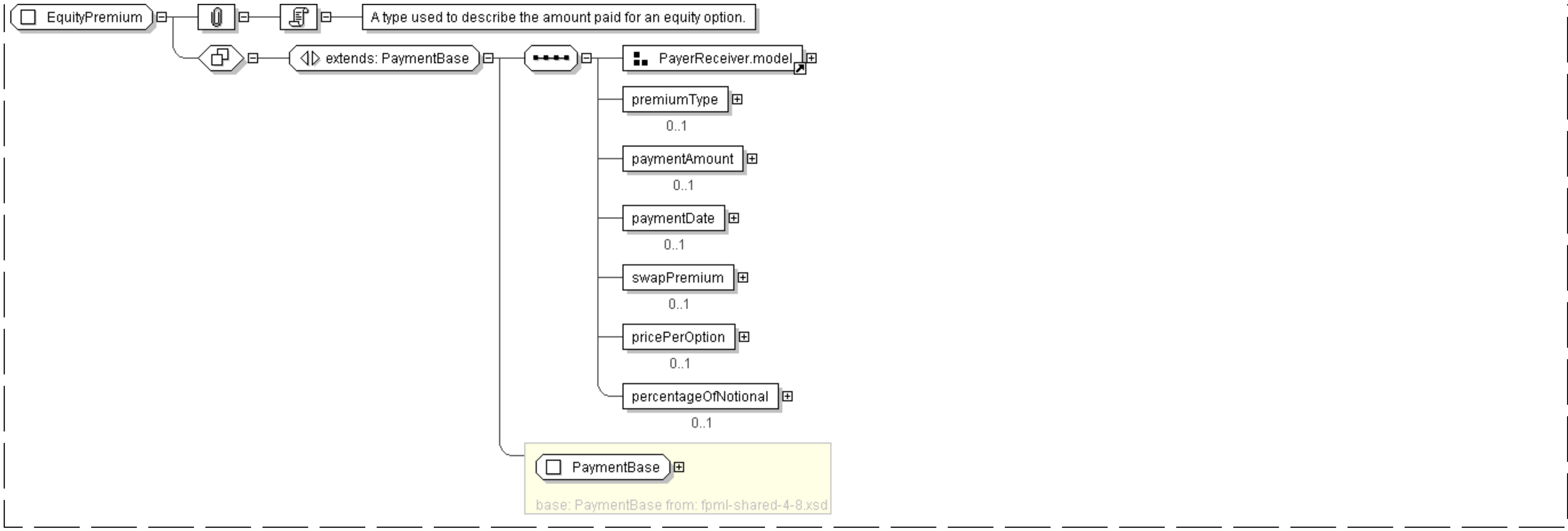
Super-types:	PaymentBase < **EquityPremium** (by extension)
Sub-types:	None

Name	EquityPremium
Abstract	no
Documentation	A type used to describe the amount paid for an equity option.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
    'A reference to the party responsible for making the payments defined by this structure.'

    <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
    'A reference to the party that receives the payments corresponding to this structure.'

    <premiumType> PremiumTypeEnum </premiumType> [0..1]
    'Forward start Premium type'

    <paymentAmount> Money </paymentAmount> [0..1]
    'The currency amount of the payment.'

    <paymentDate> AdjustableDate </paymentDate> [0..1]
    'The payment date. This date is subject to adjustment in accordance with any
    applicable business day convention.'

    <swapPremium> xsd:boolean </swapPremium> [0..1]
    'Specifies whether or not the premium is to be paid in the style of payments under an
    interest rate swap contract.'

    <pricePerOption> Money </pricePerOption> [0..1]
    'The amount of premium to be paid expressed as a function of the number of options.'

    <percentageOfNotional> xsd:decimal </percentageOfNotional> [0..1]
    'The amount of premium to be paid expressed as a percentage of the notional value of
    the transaction. A percentage of 5% would be expressed as 0.05.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityPremium">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="premiumType" type=" PremiumTypeEnum " minOccurs="0"/>
            <xsd:element name="paymentAmount" type=" Money " minOccurs="0"/>
            <xsd:element name="paymentDate" type=" AdjustableDate " minOccurs="0"/>
            <xsd:element name="swapPremium" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="pricePerOption" type=" Money " minOccurs="0"/>
            <xsd:element name="percentageOfNotional" type=" xsd:decimal " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: EquityStrike

Super-types:	None
Sub-types:	None

Name	EquityStrike
Abstract	no
Documentation	A type for defining the strike price for an equity option. The strike price is either: (i) in respect of an index option transaction, the level of the relevant index specified or otherwise determined in the transaction; or (ii) in respect of a share option transaction, the price per share specified or otherwise determined in the transaction. This can be expressed either as a percentage of notional amount or as an absolute value.

XML Instance Representation

```
<...>
Start Choice [1]
      <strikePrice> xsd:decimal </strikePrice> [1]
      'The price or level at which the option has been struck.'

      <strikePercentage> xsd:decimal </strikePercentage> [1]
```

'The price or level expressed as a percentage of the forward starting spot price.'

<strikeDeterminationDate> AdjustableOrRelativeDate </strikeDeterminationDate> [0..1]

'The date on which the strike is determined, where this is not the effective date of a forward starting option.'

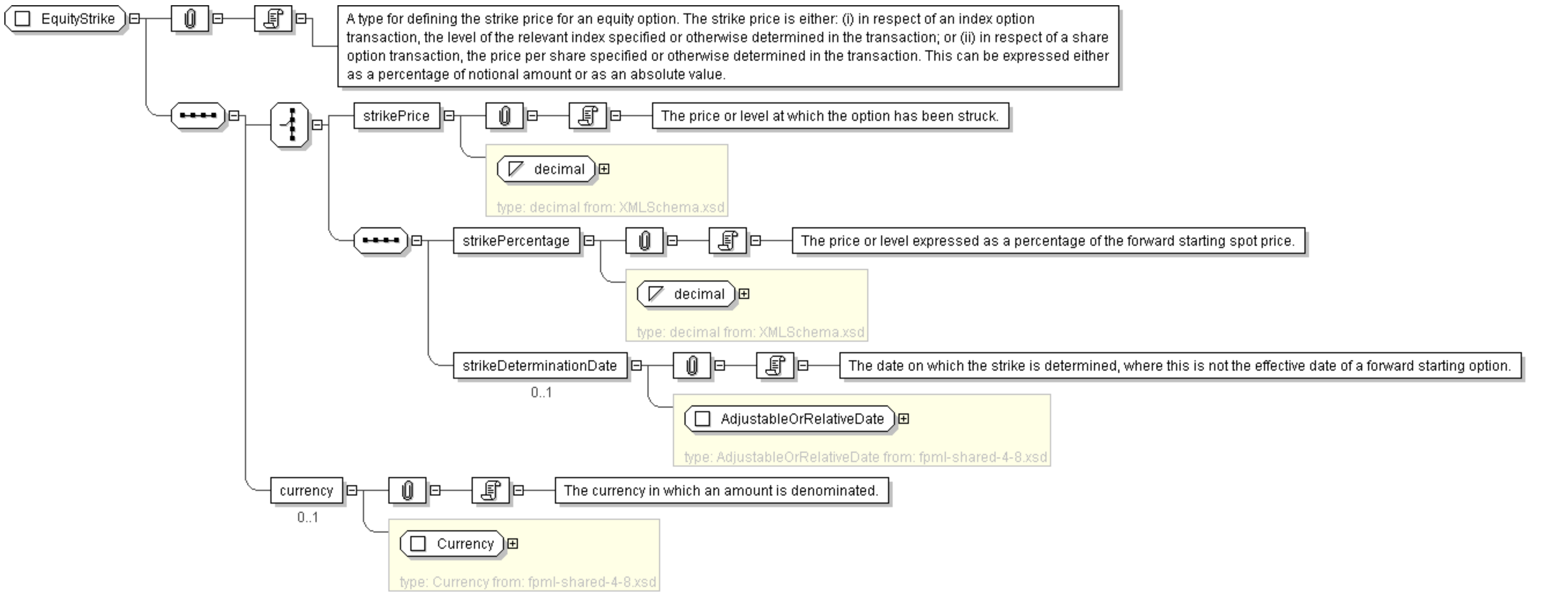
End Choice

<currency> Currency </currency> [0..1]

'The currency in which an amount is denominated.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityStrike">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="strikePrice" type=" xsd:decimal "/>
         <xsd:sequence>
            <xsd:element name="strikePercentage" type=" xsd:decimal "/>
            <xsd:element name="strikeDeterminationDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
         </xsd:sequence>
      </xsd:choice>
      <xsd:element name="currency" type=" Currency " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EquityValuation

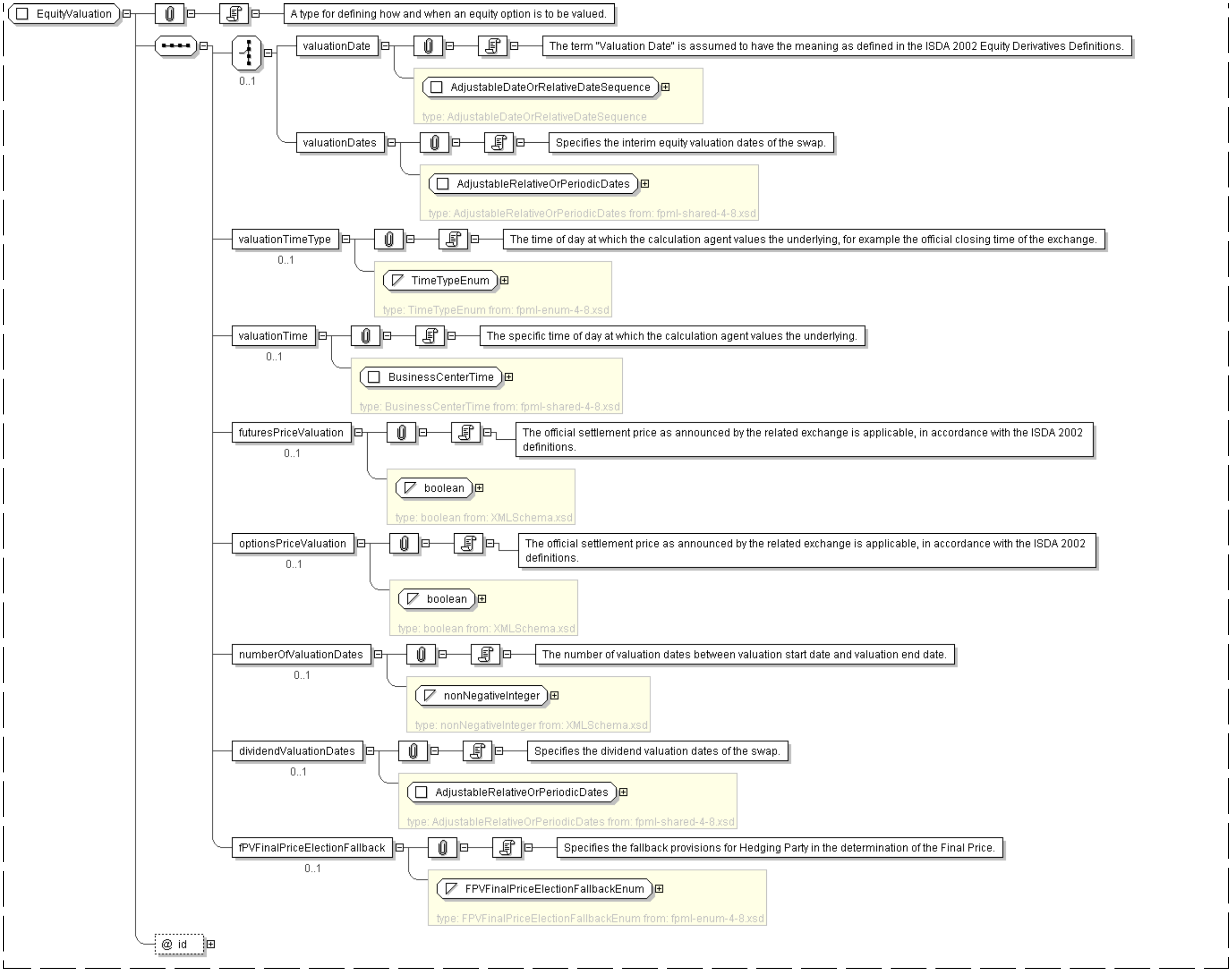
Super-types:	None
Sub-types:	None

Name	EquityValuation
Used by (from the same schema document)	Complex Type **DeprecatedVarianceLeg** , Complex Type **DirectionalLegUnderlyerValuation** , Complex Type **ReturnLegValuationPrice**
Abstract	no
Documentation	A type for defining how and when an equity option is to be valued.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [0..1]
        <valuationDate> AdjustableDateOrRelativeDateSequence </valuationDate> [1]
        'The term \"Valuation Date\" is assumed to have the meaning as defined in the ISDA 2002
        Equity Derivatives Definitions.'

        <valuationDates> AdjustableRelativeOrPeriodicDates </valuationDates> [1]
        'Specifies the interim equity valuation dates of the swap.'

End Choice
    <valuationTimeType> TimeTypeEnum </valuationTimeType> [0..1]
    'The time of day at which the calculation agent values the underlying, for example the
    official closing time of the exchange.'

    <valuationTime> BusinessCenterTime </valuationTime> [0..1]
    'The specific time of day at which the calculation agent values the underlying.'

    <futuresPriceValuation> xsd:boolean </futuresPriceValuation> [0..1]
    'The official settlement price as announced by the related exchange is applicable,
    in accordance with the ISDA 2002 definitions.'

    <optionsPriceValuation> xsd:boolean </optionsPriceValuation> [0..1]
    'The official settlement price as announced by the related exchange is applicable,
    in accordance with the ISDA 2002 definitions.'

    <numberOfValuationDates> xsd:nonNegativeInteger </numberOfValuationDates> [0..1]
    'The number of valuation dates between valuation start date and valuation end date.'

    <dividendValuationDates> AdjustableRelativeOrPeriodicDates </dividendValuationDates> [0..1]
    'Specifies the dividend valuation dates of the swap.'

    <fPVFinalPriceElectionFallback> FPVFinalPriceElectionFallbackEnum
    </fPVFinalPriceElectionFallback> [0..1]
    'Specifies the fallback provisions for Hedging Party in the determination of the Final Price.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquityValuation">
   <xsd:sequence>
```

```
        <xsd:choice minOccurs="0">
            <xsd:element name="valuationDate" type=" AdjustableDateOrRelativeDateSequence "/>
            <xsd:element name="valuationDates" type=" AdjustableRelativeOrPeriodicDates "/>
        </xsd:choice>
        <xsd:element name="valuationTimeType" type=" TimeTypeEnum " minOccurs="0"/>
        <xsd:element name="valuationTime" type=" BusinessCenterTime " minOccurs="0"/>
        <xsd:element name="futuresPriceValuation" type=" xsd:boolean " minOccurs="0"/>
        <xsd:element name="optionsPriceValuation" type=" xsd:boolean " minOccurs="0"/>
        <xsd:element name="numberOfValuationDates" type=" xsd:nonNegativeInteger " minOccurs="0"/>
        <xsd:element name="dividendValuationDates" type=" AdjustableRelativeOrPeriodicDates
        " minOccurs="0"/>
        <xsd:element name="fPVFinalPriceElectionFallback" type=" FPVFinalPriceElectionFallbackEnum
        " minOccurs="0"/>
    </xsd:sequence>
    <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ExtraordinaryEvents

Super-types:	None
Sub-types:	None

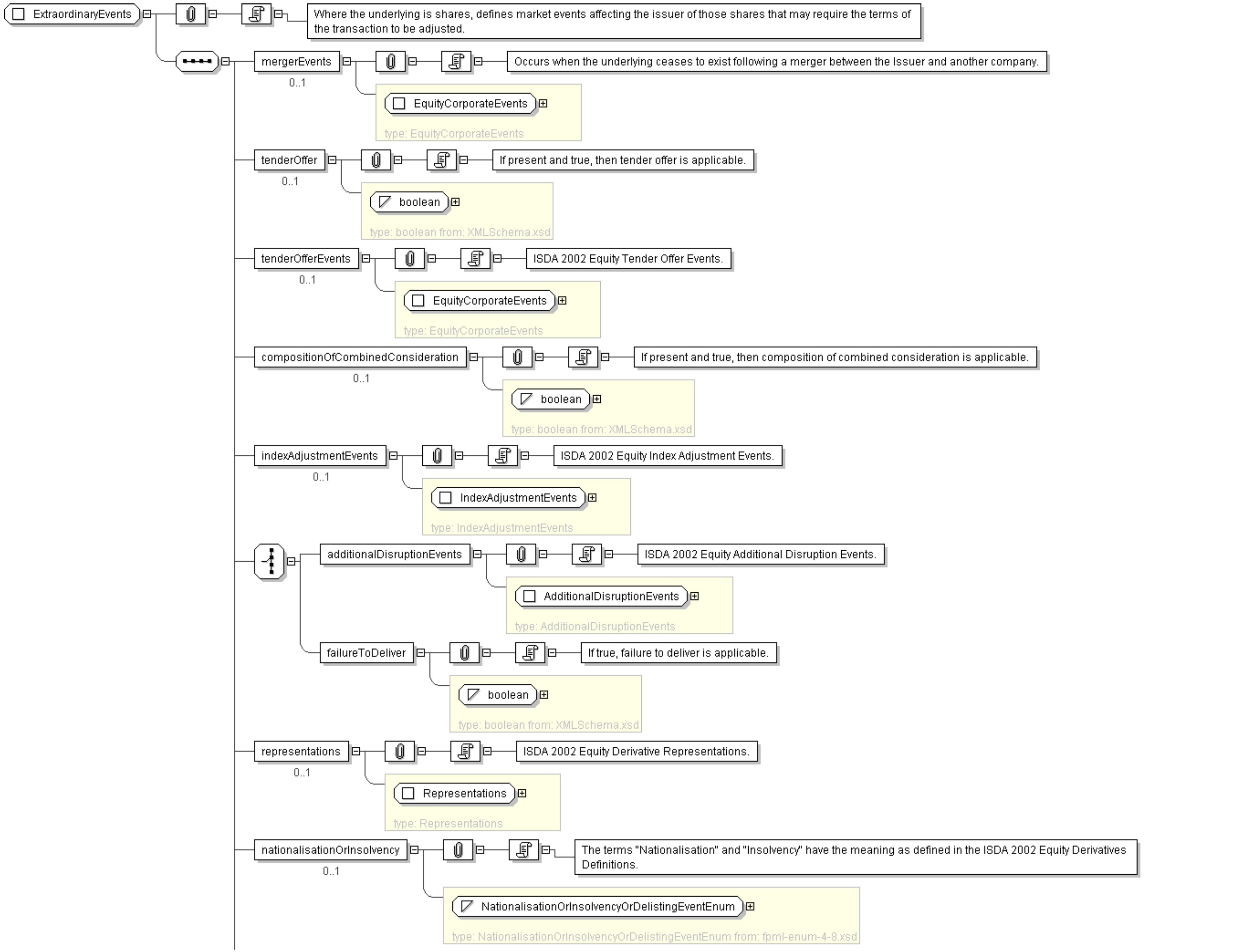
Name	ExtraordinaryEvents
Used by (from the same schema document)	Complex Type **NettedSwapBase** , Complex Type **ReturnSwap**
Abstract	no
Documentation	Where the underlying is shares, defines market events affecting the issuer of those shares that may require the terms of the transaction to be adjusted.

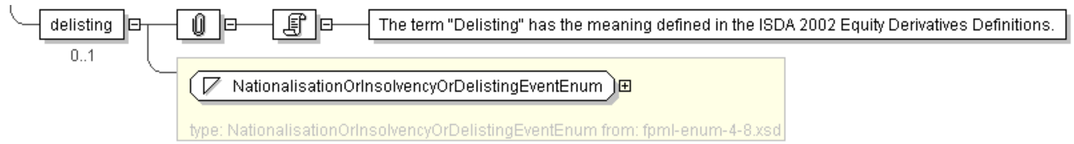
XML Instance Representation

```
<...>
    <mergerEvents> EquityCorporateEvents </mergerEvents> [0..1]
    'Occurs when the underlying ceases to exist following a merger between the Issuer and
    another company.'

    <tenderOffer> xsd:boolean </tenderOffer> [0..1]
    'If present and true, then tender offer is applicable.'

    <tenderOfferEvents> EquityCorporateEvents </tenderOfferEvents> [0..1]
    'ISDA 2002 Equity Tender Offer Events.'

    <compositionOfCombinedConsideration> xsd:boolean </compositionOfCombinedConsideration> [0..1]
    'If present and true, then composition of combined consideration is applicable.'

    <indexAdjustmentEvents> IndexAdjustmentEvents </indexAdjustmentEvents> [0..1]
    'ISDA 2002 Equity Index Adjustment Events.'

Start Choice [1]
        <additionalDisruptionEvents> AdditionalDisruptionEvents </additionalDisruptionEvents> [1]
        'ISDA 2002 Equity Additional Disruption Events.'

        <failureToDeliver> xsd:boolean </failureToDeliver> [1]
        'If true, failure to deliver is applicable.'

End Choice
    <representations> Representations </representations> [0..1]
    'ISDA 2002 Equity Derivative Representations.'

    <nationalisationOrInsolvency> NationalisationOrInsolvencyOrDelistingEventEnum
    </nationalisationOrInsolvency> [0..1]
    'The terms \"Nationalisation\" and \"Insolvency\" have the meaning as defined in the ISDA
    2002 Equity Derivatives Definitions.'

    <delisting> NationalisationOrInsolvencyOrDelistingEventEnum </delisting> [0..1]
```

```
    'The term \"Delisting\" has the meaning defined in the ISDA 2002 Equity
    Derivatives Definitions.'

</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="ExtraordinaryEvents">
   <xsd:sequence>
      <xsd:element name="mergerEvents" type=" EquityCorporateEvents " minOccurs="0"/>
      <xsd:element name="tenderOffer" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="tenderOfferEvents" type=" EquityCorporateEvents " minOccurs="0"/>
      <xsd:element name="compositionOfCombinedConsideration" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="indexAdjustmentEvents" type=" IndexAdjustmentEvents " minOccurs="0"/>
      <xsd:choice>
         <xsd:element name="additionalDisruptionEvents" type=" AdditionalDisruptionEvents "/>
         <xsd:element name="failureToDeliver" type=" xsd:boolean "/>
      </xsd:choice>
      <xsd:element name="representations" type=" Representations " minOccurs="0"/>
      <xsd:element name="nationalisationOrInsolvency"
      type=" NationalisationOrInsolvencyOrDelistingEventEnum " minOccurs="0"/>
      <xsd:element name="delisting" type=" NationalisationOrInsolvencyOrDelistingEventEnum
      " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FloatingRateCalculationReference

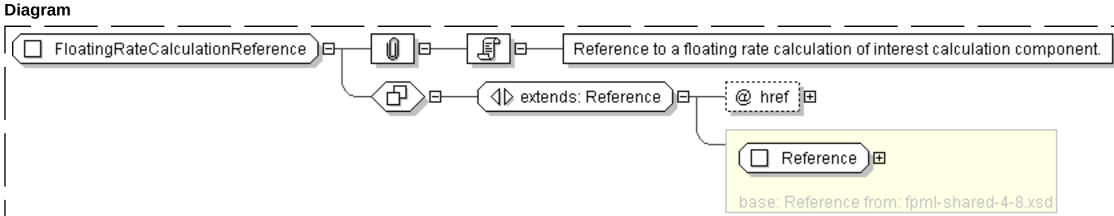
Super-types:	Reference < **FloatingRateCalculationReference** (by extension)
Sub-types:	None

Name	FloatingRateCalculationReference
Used by (from the same schema document)	Complex Type **CompoundingRate**
Abstract	no
Documentation	Reference to a floating rate calculation of interest calculation component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FloatingRateCalculationReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="floatingRateCalculation"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: IndexAdjustmentEvents

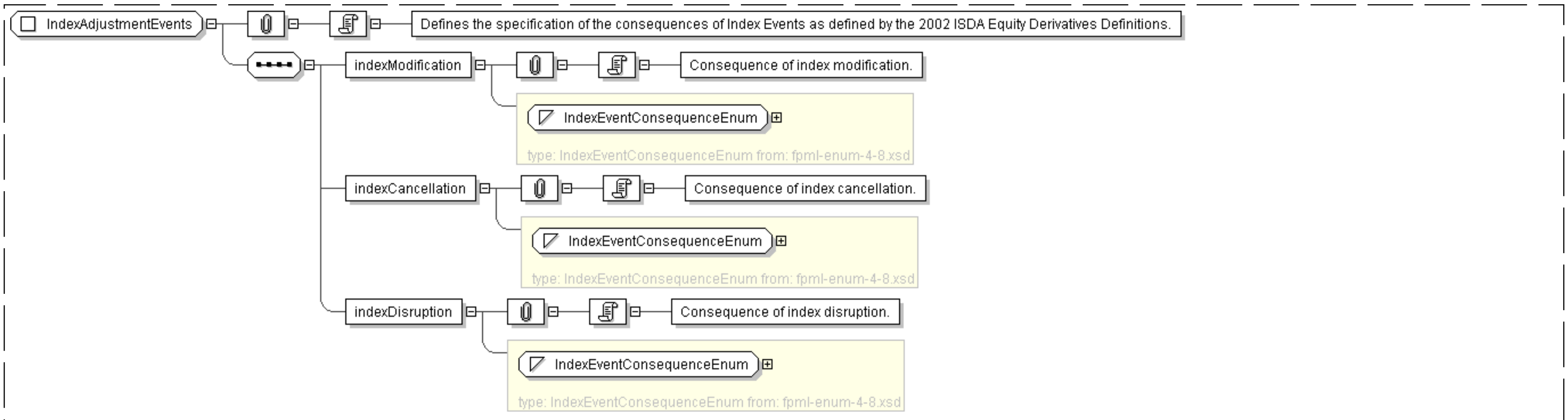
Super-types:	None
Sub-types:	None

Name	IndexAdjustmentEvents
Used by (from the same schema document)	Complex Type **ExtraordinaryEvents**
Abstract	no
Documentation	Defines the specification of the consequences of Index Events as defined by the 2002 ISDA Equity Derivatives Definitions.

XML Instance Representation

```
<...>
  <indexModification> IndexEventConsequenceEnum </indexModification> [1]
  'Consequence of index modification.'

  <indexCancellation> IndexEventConsequenceEnum </indexCancellation> [1]
  'Consequence of index cancellation.'

  <indexDisruption> IndexEventConsequenceEnum </indexDisruption> [1]
  'Consequence of index disruption.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="IndexAdjustmentEvents">
   <xsd:sequence>
      <xsd:element name="indexModification" type=" IndexEventConsequenceEnum "/>
      <xsd:element name="indexCancellation" type=" IndexEventConsequenceEnum "/>
      <xsd:element name="indexDisruption" type=" IndexEventConsequenceEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: InterestCalculation

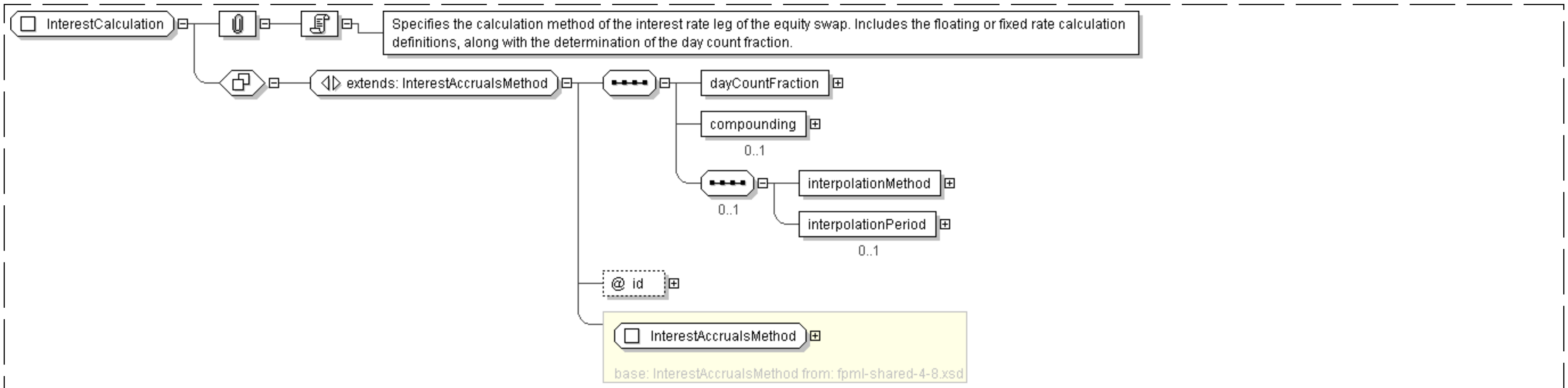
Super-types:	InterestAccrualsMethod < **InterestCalculation** (by extension)
Sub-types:	None

Name	InterestCalculation
Used by (from the same schema document)	Complex Type **InterestLeg**
Abstract	no
Documentation	Specifies the calculation method of the interest rate leg of the equity swap. Includes the floating or fixed rate calculation definitions, along with the determination of the day count fraction.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <floatingRateCalculation> FloatingRateCalculation </floatingRateCalculation> [1]
      'The floating rate calculation definitions'

      <fixedRate> xsd:decimal </fixedRate> [1]
      'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate
      of 5% would be represented as 0.05.'

End Choice
   <dayCountFraction> DayCountFraction </dayCountFraction> [1]
   'The day count fraction.'

   <compounding> Compounding </compounding> [0..1]
   'Defines compounding rates on the Interest Leg.'

Start Sequence [0..1]
      <interpolationMethod> InterpolationMethod </interpolationMethod> [1]
      'Specifies the type of interpolation used.'

      <interpolationPeriod> InterpolationPeriodEnum </interpolationPeriod> [0..1]
      'Defines applicable periods for interpolation.'

End Sequence
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestCalculation">
   <xsd:complexContent>
      <xsd:extension base=" InterestAccrualsMethod ">
         <xsd:sequence>
```

```
            <xsd:element name="dayCountFraction" type=" DayCountFraction "/>
            <xsd:element name="compounding" type=" Compounding " minOccurs="0"/>
            <xsd:sequence minOccurs="0">
               <xsd:element name="interpolationMethod" type=" InterpolationMethod "/>
               <xsd:element name="interpolationPeriod" type=" InterpolationPeriodEnum " minOccurs="0"/>
            </xsd:sequence>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestLeg

Super-types:	Leg < ReturnSwapLeg (by extension) < **InterestLeg** (by extension)
Sub-types:	None

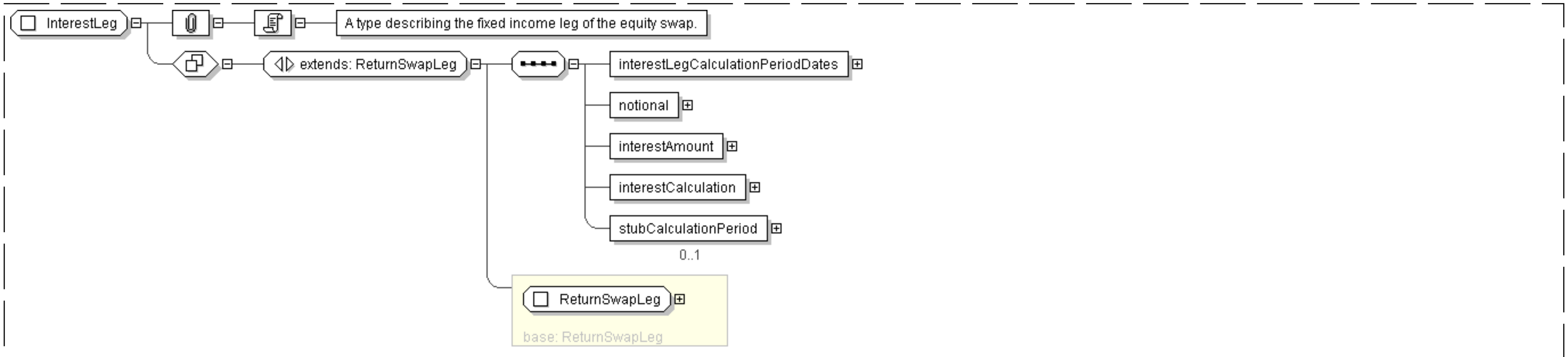
Name	InterestLeg
Used by (from the same schema document)	Element **interestLeg**
Abstract	no
Documentation	A type describing the fixed income leg of the equity swap.

XML Instance Representation

```
<...
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <interestLegCalculationPeriodDates> InterestLegCalculationPeriodDates
   </interestLegCalculationPeriodDates> [1]
   'Component that holds the various dates used to specify the interest leg of the equity swap.
   It is used to define the InterestPeriodDates identifyer.'

   <notional> ReturnSwapNotional </notional> [1]
   'Specifies the notional of a return type swap. When used in the equity leg, the definition
   will typically combine the actual amount (using the notional component defined by the
   FpML industry group) and the determination method. When used in the interest leg,
   the definition will typically point to the definition of the equity leg.'

   <interestAmount> LegAmount </interestAmount> [1]
   'Specifies, in relation to each Interest Payment Date, the amount to which the Interest
   Payment Date relates. Unless otherwise specified, this term has the meaning defined in the
   ISDA 2000 ISDA Definitions.'

   <interestCalculation> InterestCalculation </interestCalculation> [1]
   'Specifies the calculation method of the interest rate leg of the equity swap. Includes
   the floating or fixed rate calculation definitions, along with the determination of the
   day count fraction.'

   <stubCalculationPeriod> StubCalculationPeriod </stubCalculationPeriod> [0..1]
   'Specifies the stub calculation period.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestLeg">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapLeg ">
         <xsd:sequence>
            <xsd:element name="interestLegCalculationPeriodDates" type="
            InterestLegCalculationPeriodDates "/>
            <xsd:element name="notional" type=" ReturnSwapNotional "/>
            <xsd:element name="interestAmount" type=" LegAmount "/>
            <xsd:element name="interestCalculation" type=" InterestCalculation "/>
            <xsd:element name="stubCalculationPeriod" type=" StubCalculationPeriod " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestLegCalculationPeriodDates

Super-types:	None
Sub-types:	None

Name	InterestLegCalculationPeriodDates
Used by (from the same schema document)	Complex Type **InterestLeg**
Abstract	no
Documentation	Component that holds the various dates used to specify the interest leg of the equity swap. It is used to define the InterestPeriodDates identifyer.

XML Instance Representation

```
<...
id=" xsd:ID [1]">
   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of the equity swap. This global element is valid within
   the equity swaps namespace. Within the FpML namespace, another effectiveDate global element
   has been defined, that is different in the sense that it does not propose the choice
   of refering to another date in the document.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
   'Specifies the termination date of the equity swap. This global element is valid within
   the equity swaps namespace. Within the FpML namespace, another terminationDate global
   element has been defined, that is different in the sense that it does not propose the choice
   of refering to another date in the document.'
```

<interestLegResetDates> InterestLegResetDates </interestLegResetDates> [1]

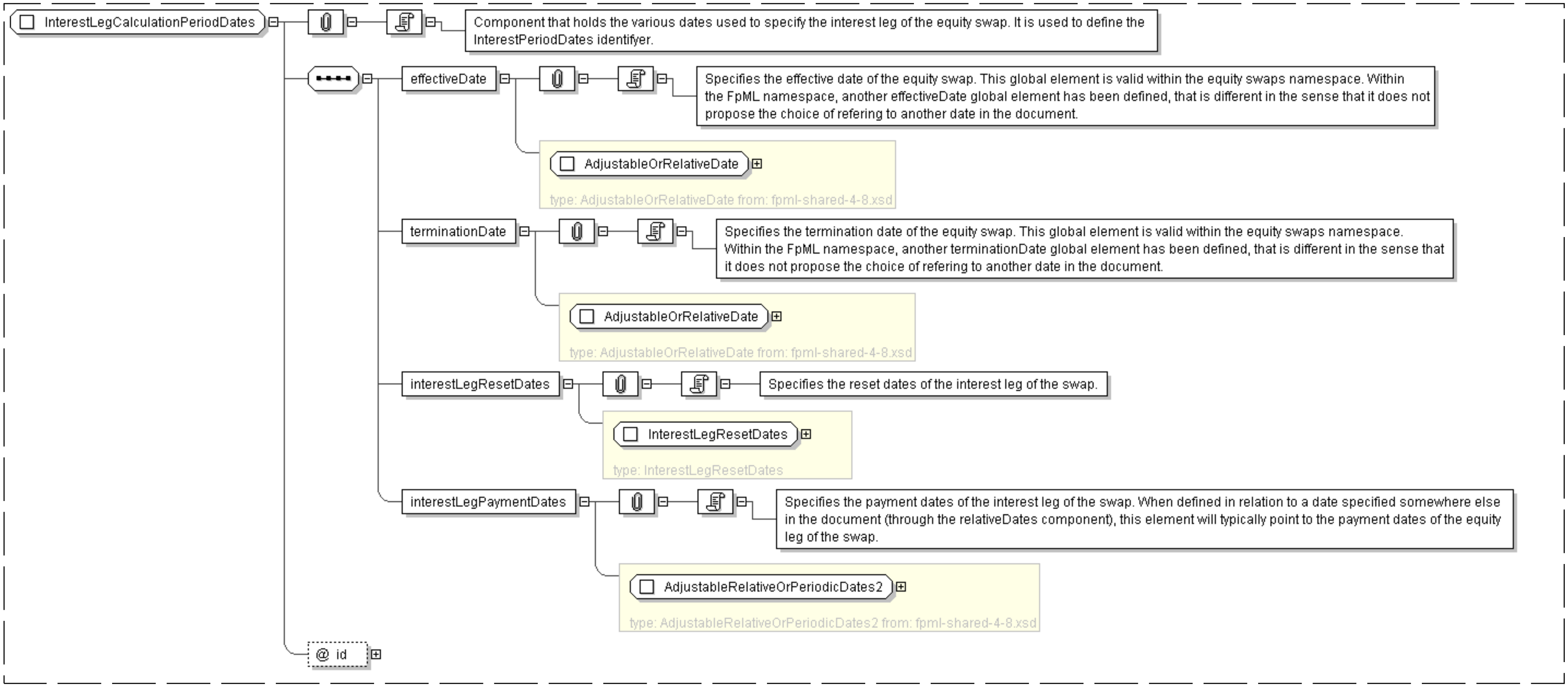
'Specifies the reset dates of the interest leg of the swap.'

<interestLegPaymentDates> AdjustableRelativeOrPeriodicDates2 </interestLegPaymentDates> [1]

'Specifies the payment dates of the interest leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDates component), this element will typically point to the payment dates of the equity leg of the swap.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestLegCalculationPeriodDates">
   <xsd:sequence>
      <xsd:element name="effectiveDate" type=" AdjustableOrRelativeDate "/>
      <xsd:element name="terminationDate" type=" AdjustableOrRelativeDate "/>
      <xsd:element name="interestLegResetDates" type=" InterestLegResetDates "/>
      <xsd:element name="interestLegPaymentDates" type=" AdjustableRelativeOrPeriodicDates2 "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="required"/>
</xsd:complexType>
```

top

Complex Type: InterestLegCalculationPeriodDatesReference

Super-types:	Reference < **InterestLegCalculationPeriodDatesReference** (by extension)

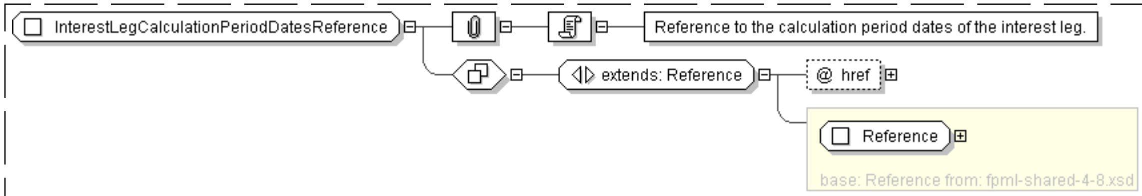
Sub-types:	None

Name	InterestLegCalculationPeriodDatesReference
Used by (from the same schema document)	Complex Type **InterestLegResetDates**
Abstract	no
Documentation	Reference to the calculation period dates of the interest leg.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestLegCalculationPeriodDatesReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="InterestLegCalculationPeriodDates"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestLegResetDates

Super-types:	None
Sub-types:	None

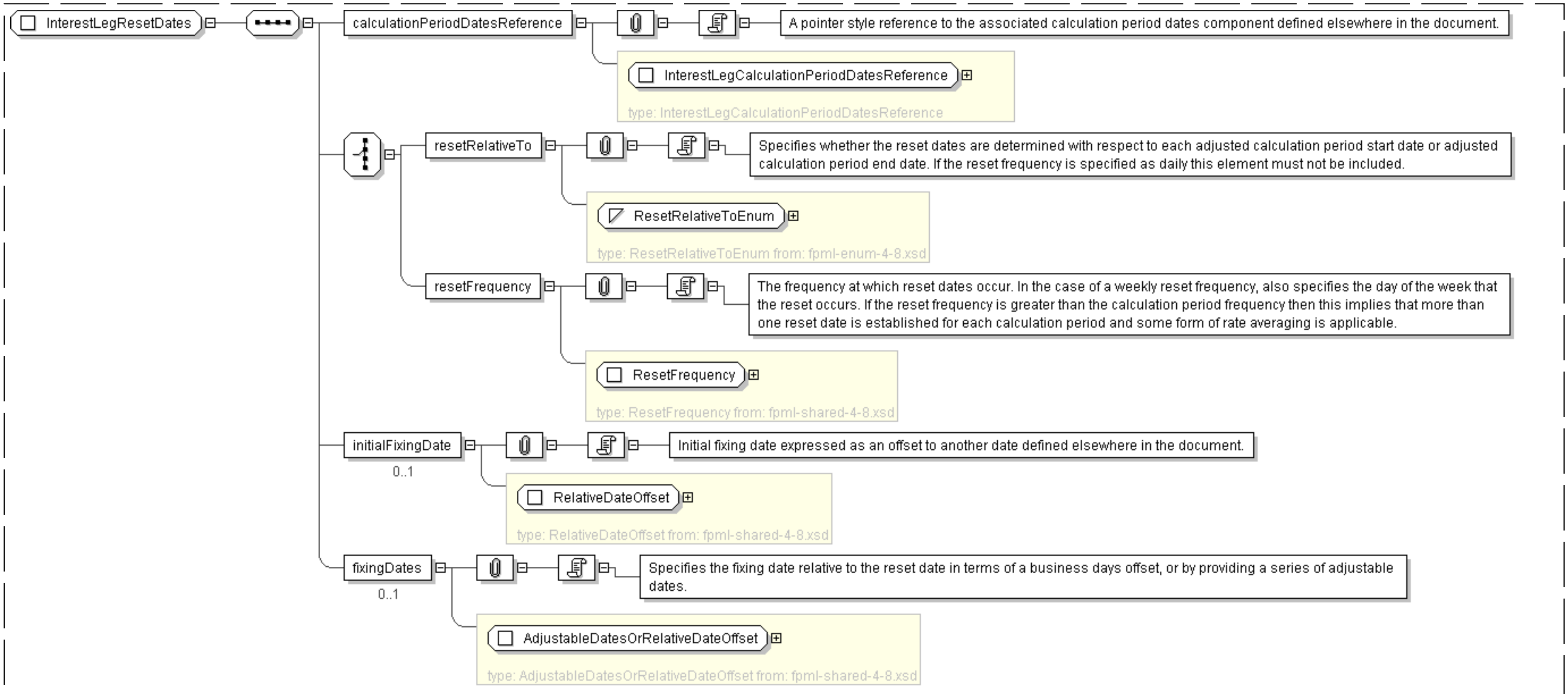
Name	InterestLegResetDates
Used by (from the same schema document)	Complex Type **InterestLegCalculationPeriodDates**
Abstract	no

XML Instance Representation

```
<...>
   <calculationPeriodDatesReference> InterestLegCalculationPeriodDatesReference
   </calculationPeriodDatesReference> [1]
   'A pointer style reference to the associated calculation period dates component
   defined elsewhere in the document.'

Start Choice [1]
      <resetRelativeTo> ResetRelativeToEnum </resetRelativeTo> [1]
      'Specifies whether the reset dates are determined with respect to each adjusted
      calculation period start date or adjusted calculation period end date. If the reset
      frequency is specified as daily this element must not be included.'

      <resetFrequency> ResetFrequency </resetFrequency> [1]
      'The frequency at which reset dates occur. In the case of a weekly reset frequency,
      also specifies the day of the week that the reset occurs. If the reset frequency is
      greater than the calculation period frequency then this implies that more than one reset
      date is established for each calculation period and some form of rate averaging is applicable.'

End Choice
   <initialFixingDate> RelativeDateOffset </initialFixingDate> [0..1]
```

```
  'Initial fixing date expressed as an offset to another date defined elsewhere in the document.'

  <fixingDates> AdjustableDatesOrRelativeDateOffset </fixingDates> [0..1]
  'Specifies the fixing date relative to the reset date in terms of a business days offset, or
  by providing a series of adjustable dates.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestLegResetDates">
   <xsd:sequence>
      <xsd:element name="calculationPeriodDatesReference"
      type=" InterestLegCalculationPeriodDatesReference "/>
      <xsd:choice>
         <xsd:element name="resetRelativeTo" type=" ResetRelativeToEnum "/>
         <xsd:element name="resetFrequency" type=" ResetFrequency "/>
      </xsd:choice>
      <xsd:element name="initialFixingDate" type=" RelativeDateOffset " minOccurs="0"/>
      <xsd:element name="fixingDates" type=" AdjustableDatesOrRelativeDateOffset " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LegAmount

Super-types:	None

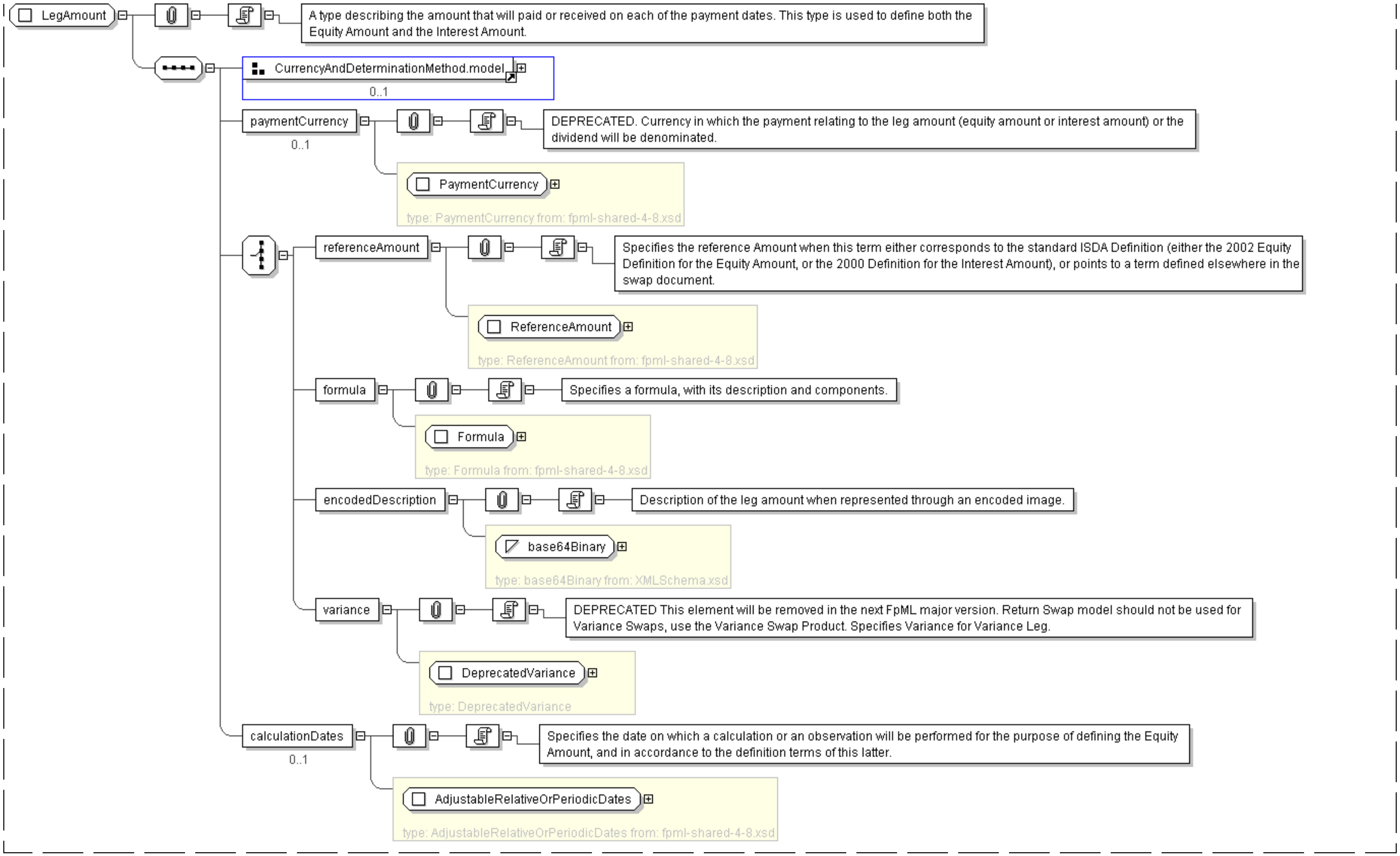
Sub-types:	• ReturnSwapAmount (by extension) ◦ DeprecatedVarianceAmount (by extension)

Name	LegAmount
Used by (from the same schema document)	Complex Type **InterestLeg**
Abstract	no
Documentation	A type describing the amount that will paid or received on each of the payment dates. This type is used to define both the Equity Amount and the Interest Amount.

XML Instance Representation

```
<...>
Start Group: CurrencyAndDeterminationMethod.model [0..1]
Start Choice [1]
      <currency> Currency </currency> [1]
      'The currency in which an amount is denominated.'

      <determinationMethod> DeterminationMethod </determinationMethod> [1]
      'Specifies the method according to which an amount or a date is determined.'

      <currencyReference> IdentifiedCurrencyReference </currencyReference> [1]
      'Reference to a currency defined elsewhere in the document'

End Choice
End Group: CurrencyAndDeterminationMethod.model
   <paymentCurrency> PaymentCurrency </paymentCurrency> [0..1]
   'DEPRECATED. Currency in which the payment relating to the leg amount (equity amount
   or interest amount) or the dividend will be denominated.'

Start Choice [1]
     <referenceAmount> ReferenceAmount </referenceAmount> [1]
     'Specifies the reference Amount when this term either corresponds to the standard
     ISDA Definition (either the 2002 Equity Definition for the Equity Amount, or the
     2000 Definition for the Interest Amount), or points to a term defined elsewhere in the
     swap document.'

     <formula> Formula </formula> [1]
     'Specifies a formula, with its description and components.'

     <encodedDescription> xsd:base64Binary </encodedDescription> [1]
     'Description of the leg amount when represented through an encoded image.'

     <variance> DeprecatedVariance </variance> [1]
     'DEPRECATED This element will be removed in the next FpML major version. Return Swap
     model should not be used for Variance Swaps, use the Variance Swap Product. Specifies
     Variance for Variance Leg.'

End Choice
   <calculationDates> AdjustableRelativeOrPeriodicDates </calculationDates> [0..1]
   'Specifies the date on which a calculation or an observation will be performed for the
   purpose of defining the Equity Amount, and in accordance to the definition terms of
   this latter.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LegAmount">
   <xsd:sequence>
      <xsd:group ref=" CurrencyAndDeterminationMethod.model " minOccurs="0"/>
      <xsd:element name="paymentCurrency" type=" PaymentCurrency " minOccurs="0"
      deprecated="true" deprecatedReason="The model is wrong since it has an intradocument
      reference that is not clear. Current PaymentCurrency model and elements using this type
      are deprecated. Instead, the choice above between currency, determinationMethod,
      and currencyReference (of type CurrencyReference) should be used."/>
      <xsd:choice>
         <xsd:element name="referenceAmount" type=" ReferenceAmount "/>
         <xsd:element name="formula" type=" Formula "/>
         <xsd:element name="encodedDescription" type=" xsd:base64Binary "/>
         <xsd:element name="variance" type=" DeprecatedVariance "
         deprecated="true" deprecatedReason="Return Swap model should not be used for Variance
         Swaps, use the Variance Swap Product"/>
      </xsd:choice>
      <xsd:element name="calculationDates" type=" AdjustableRelativeOrPeriodicDates " minOccurs="0"/>
```

```
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LegId

Super-types:	Token60 < **LegId** (by extension)
Sub-types:	None

Name	LegId
Used by (from the same schema document)	Complex Type **LegIdentifier**
Abstract	no
Documentation	Leg identity.

XML Instance Representation

```
<...
legIdScheme=" xsd:anyURI [1]">
Token60
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="LegId">
   <xsd:simpleContent>
      <xsd:extension base=" Token60 ">
         <xsd:attribute name="legIdScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: LegIdentifier

Super-types:	None
Sub-types:	None

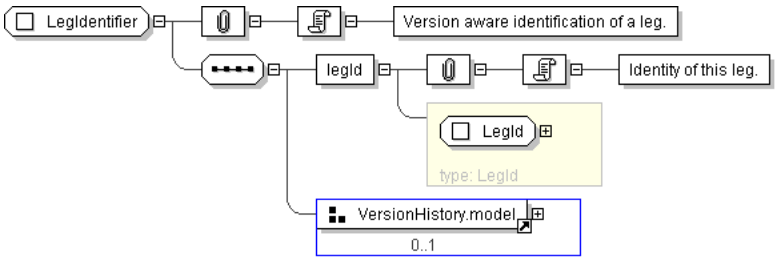
Name	LegIdentifier
Used by (from the same schema document)	Complex Type **DirectionalLeg**
Abstract	no
Documentation	Version aware identification of a leg.

XML Instance Representation

```
<...>
   <legId> LegId </legId> [1]
   'Identity of this leg.'

Start Group: VersionHistory.model [0..1]
      <version> xsd:nonNegativeInteger </version> [1]
      'The version number'
```

```
    <effectiveDate> IdentifiedDate </effectiveDate> [0..1]
    'Optionally it is possible to specify a version effective date when a versionId is supplied.'

End Group: VersionHistory.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LegIdentifier">
   <xsd:sequence>
      <xsd:element name="legId" type=" LegId "/>
      <xsd:group ref=" VersionHistory.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: MakeWholeProvisions

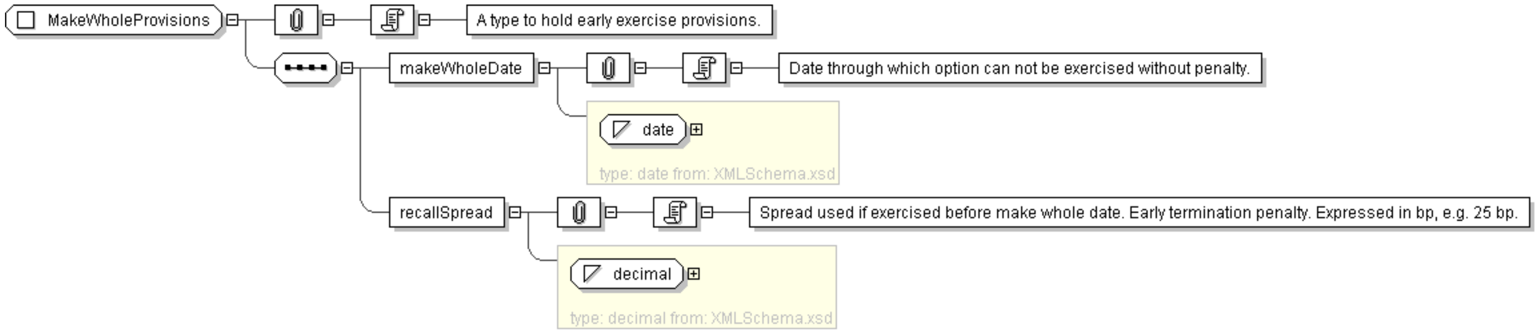
Super-types:	None
Sub-types:	None

Name	MakeWholeProvisions
Abstract	no
Documentation	A type to hold early exercise provisions.

XML Instance Representation

```
<...>
   <makeWholeDate> xsd:date </makeWholeDate> [1]
   'Date through which option can not be exercised without penalty.'

   <recallSpread> xsd:decimal </recallSpread> [1]
   'Spread used if exercised before make whole date. Early termination penalty. Expressed in bp,
   e.g. 25 bp.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MakeWholeProvisions">
   <xsd:sequence>
      <xsd:element name="makeWholeDate" type=" xsd:date "/>
      <xsd:element name="recallSpread" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: NettedSwapBase

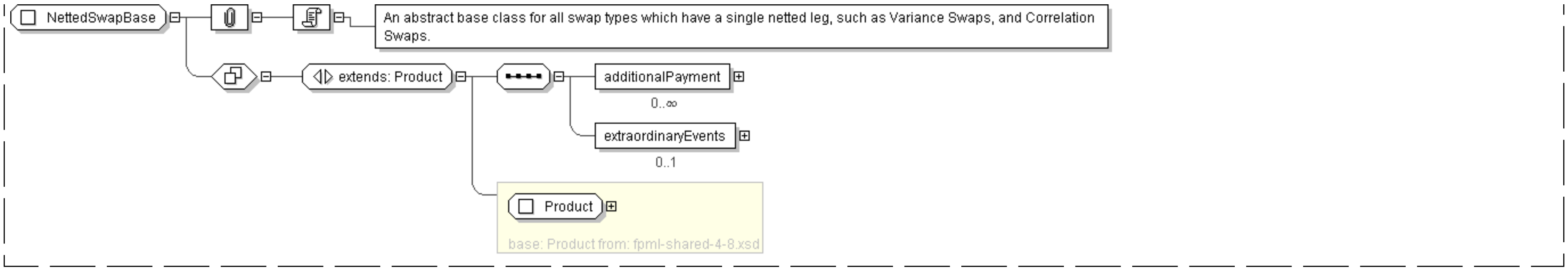
Super-types:	Product < **NettedSwapBase** (by extension)
Sub-types:	None

Name	NettedSwapBase
Abstract	yes
Documentation	An abstract base class for all swap types which have a single netted leg, such as Variance Swaps, and Correlation Swaps.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <additionalPayment> ClassifiedPayment </additionalPayment> [0..*]
   'Specifies additional payment(s) between the principal parties to the netted swap.'

   <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]
   'Where the underlying is shares, specifies events affecting the issuer of those shares that
   may require the terms of the transaction to be adjusted.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NettedSwapBase" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="additionalPayment" type=" ClassifiedPayment "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="extraordinaryEvents" type=" ExtraordinaryEvents " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OptionFeatures

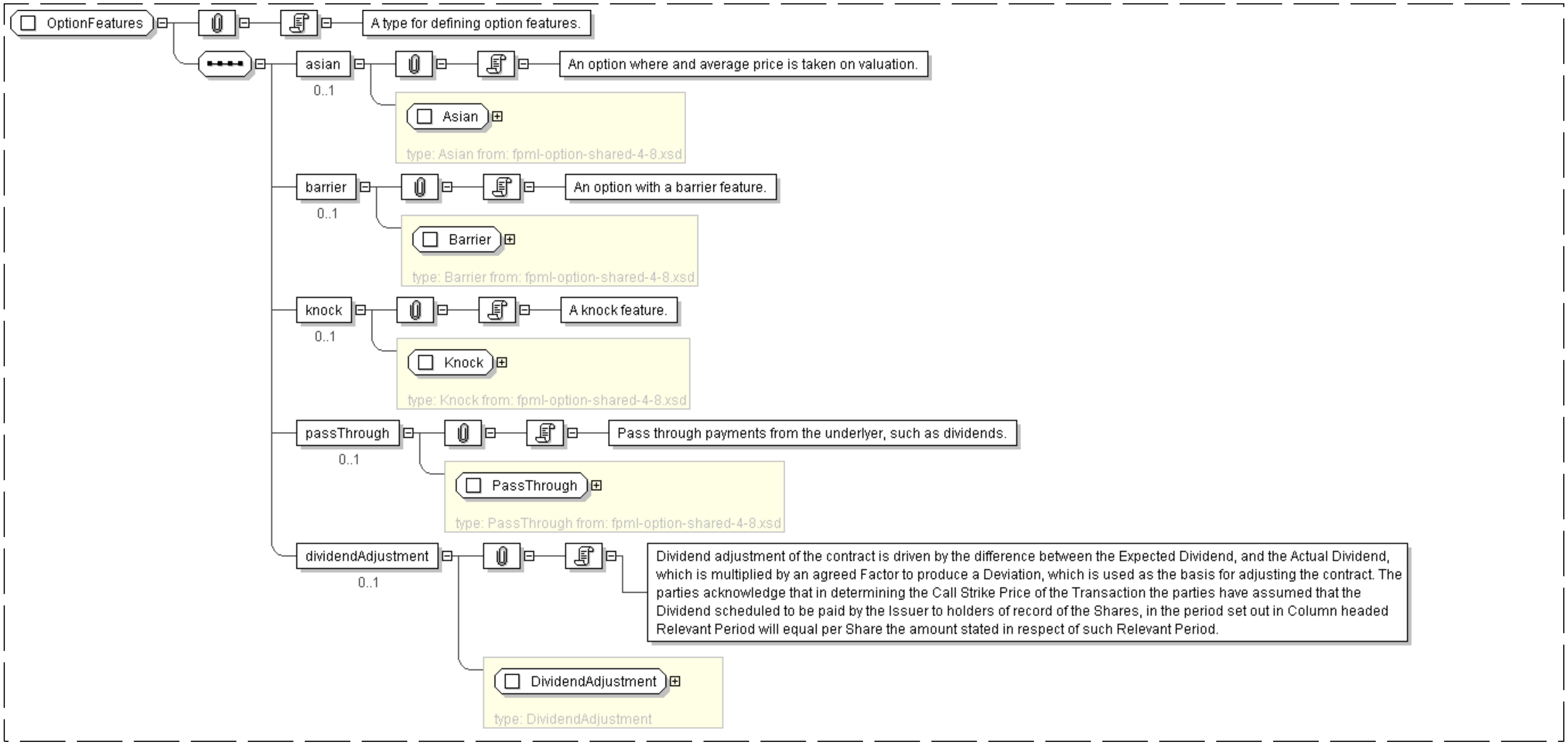
Super-types:	None
Sub-types:	None

Name	OptionFeatures
Used by (from the same schema document)	Model Group **Feature.model**
Abstract	no
Documentation	A type for defining option features.

XML Instance Representation

```
<...>
   <asian> Asian </asian> [0..1]
   'An option where and average price is taken on valuation.'

   <barrier> Barrier </barrier> [0..1]
   'An option with a barrier feature.'

   <knock> Knock </knock> [0..1]
   'A knock feature.'

   <passThrough> PassThrough </passThrough> [0..1]
   'Pass through payments from the underlyer, such as dividends.'

   <dividendAdjustment> DividendAdjustment </dividendAdjustment> [0..1]
   'Dividend adjustment of the contract is driven by the difference between the Expected
   Dividend, and the Actual Dividend, which is multiplied by an agreed Factor to produce
   a Deviation, which is used as the basis for adjusting the contract. The parties
   acknowledge that in determining the Call Strike Price of the Transaction the parties
   have assumed that the Dividend scheduled to be paid by the Issuer to holders of record of
   the Shares, in the period set out in Column headed Relevant Period will equal per Share
   the amount stated in respect of such Relevant Period.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionFeatures">
   <xsd:sequence>
      <xsd:element name="asian" type=" Asian " minOccurs="0"/>
      <xsd:element name="barrier" type=" Barrier " minOccurs="0"/>
      <xsd:element name="knock" type=" Knock " minOccurs="0"/>
      <xsd:element name="passThrough" type=" PassThrough " minOccurs="0"/>
      <xsd:element name="dividendAdjustment" type=" DividendAdjustment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PrincipalExchangeAmount

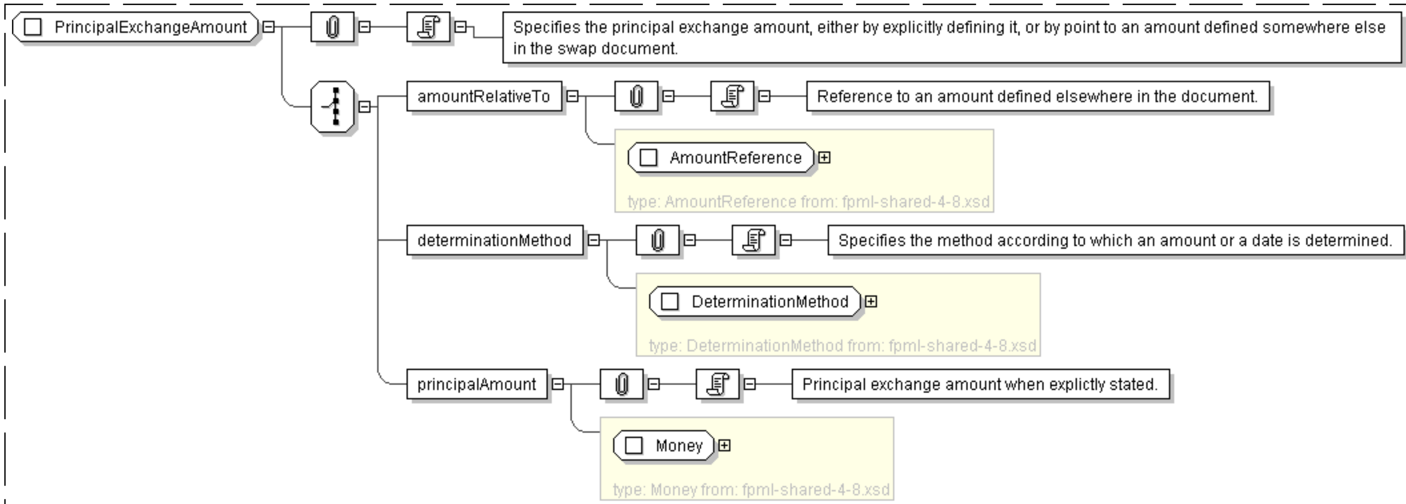
Super-types:	None
Sub-types:	None

Name	PrincipalExchangeAmount
Used by (from the same schema document)	Complex Type **PrincipalExchangeDescriptions**
Abstract	no
Documentation	Specifies the principal exchange amount, either by explicitly defining it, or by point to an amount defined somewhere else in the swap document.

XML Instance Representation

```
<...>
Start Choice [1]
      <amountRelativeTo> AmountReference </amountRelativeTo> [1]
      'Reference to an amount defined elsewhere in the document.'

      <determinationMethod> DeterminationMethod </determinationMethod> [1]
      'Specifies the method according to which an amount or a date is determined.'

      <principalAmount> Money </principalAmount> [1]
      'Principal exchange amount when explictly stated.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PrincipalExchangeAmount">
   <xsd:choice>
      <xsd:element name="amountRelativeTo" type=" AmountReference "/>
      <xsd:element name="determinationMethod" type=" DeterminationMethod "/>
      <xsd:element name="principalAmount" type=" Money "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: PrincipalExchangeDescriptions

Super-types:	None
Sub-types:	None

Name	PrincipalExchangeDescriptions
Used by (from the same schema document)	Complex Type **PrincipalExchangeFeatures**
Abstract	no
Documentation	Specifies each of the characteristics of the principal exchange cashflows, in terms of paying/receiving counterparties, amounts and dates.

XML Instance Representation

```
<...>
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'
```

<receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]

'A reference to the party that receives the payments corresponding to this structure.'

<principalExchangeAmount> PrincipalExchangeAmount </principalExchangeAmount> [1]

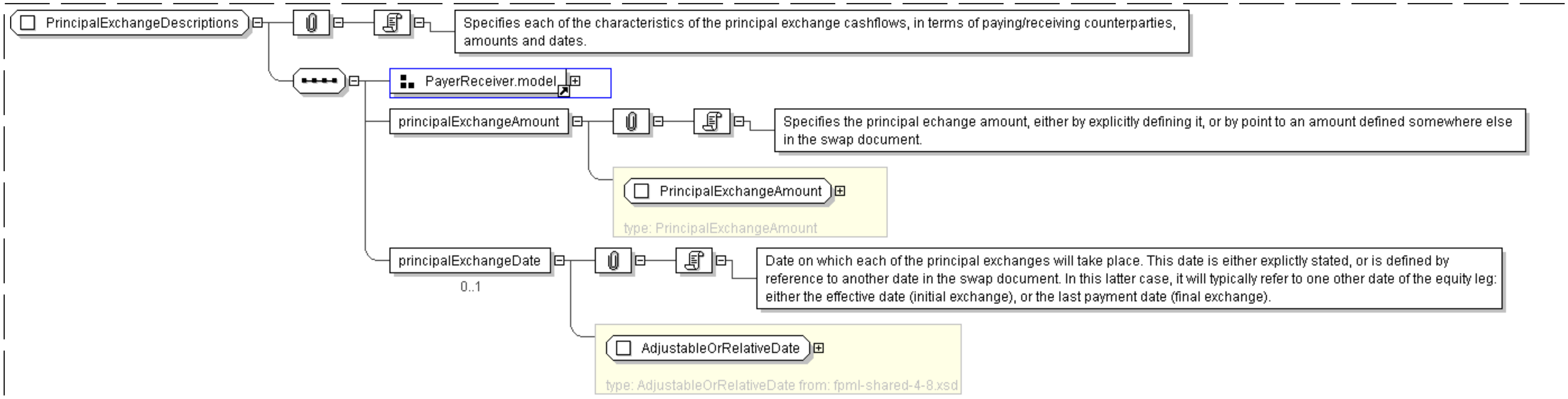
'Specifies the principal echange amount, either by explicitly defining it, or by point to an amount defined somewhere else in the swap document.'

<principalExchangeDate> AdjustableOrRelativeDate </principalExchangeDate> [0..1]

'Date on which each of the principal exchanges will take place. This date is either explictly stated, or is defined by reference to another date in the swap document. In this latter case, it will typically refer to one other date of the equity leg: either the effective date (initial exchange), or the last payment date (final exchange).'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PrincipalExchangeDescriptions">
   <xsd:sequence>
      <xsd:group ref=" PayerReceiver.model "/>
      <xsd:element name="principalExchangeAmount" type=" PrincipalExchangeAmount "/>
      <xsd:element name="principalExchangeDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PrincipalExchangeFeatures

Super-types:	None
Sub-types:	None

Name	PrincipalExchangeFeatures
Used by (from the same schema document)	Complex Type **ReturnSwapBase**
Abstract	no
Documentation	A type describing the principal exchange features of the equity swap.

XML Instance Representation

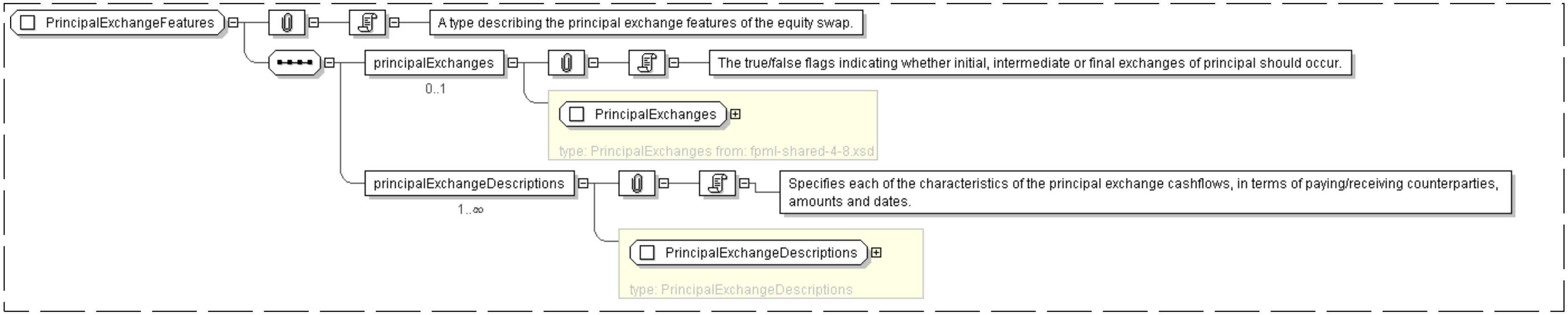
<...>

<principalExchanges> PrincipalExchanges </principalExchanges> [0..1]

'The true/false flags indicating whether initial, intermediate or final exchanges of

```
principal should occur.'

<principalExchangeDescriptions> PrincipalExchangeDescriptions </
principalExchangeDescriptions> [1..*]
'Specifies each of the characteristics of the principal exchange cashflows, in terms of
paying/receiving counterparties, amounts and dates.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PrincipalExchangeFeatures">
   <xsd:sequence>
      <xsd:element name="principalExchanges" type=" PrincipalExchanges " minOccurs="0"/>
      <xsd:element name="principalExchangeDescriptions" type=" PrincipalExchangeDescriptions
      " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Representations

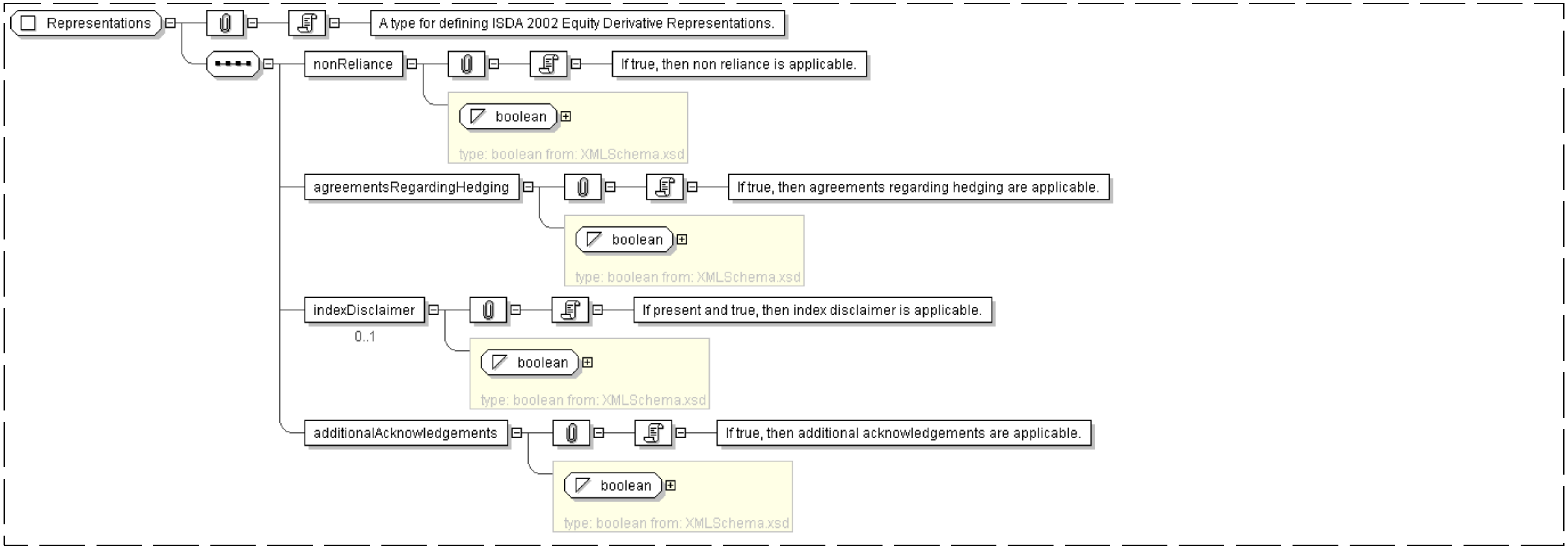
Super-types:	None
Sub-types:	None

Name	Representations
Used by (from the same schema document)	Complex Type **ExtraordinaryEvents**
Abstract	no
Documentation	A type for defining ISDA 2002 Equity Derivative Representations.

XML Instance Representation

```
<...>
   <nonReliance> xsd:boolean </nonReliance> [1]
   'If true, then non reliance is applicable.'

   <agreementsRegardingHedging> xsd:boolean </agreementsRegardingHedging> [1]
   'If true, then agreements regarding hedging are applicable.'

   <indexDisclaimer> xsd:boolean </indexDisclaimer> [0..1]
   'If present and true, then index disclaimer is applicable.'

   <additionalAcknowledgements> xsd:boolean </additionalAcknowledgements> [1]
   'If true, then additional acknowledgements are applicable.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Representations">
   <xsd:sequence>
      <xsd:element name="nonReliance" type=" xsd:boolean "/>
      <xsd:element name="agreementsRegardingHedging" type=" xsd:boolean "/>
      <xsd:element name="indexDisclaimer" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="additionalAcknowledgements" type=" xsd:boolean "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Return

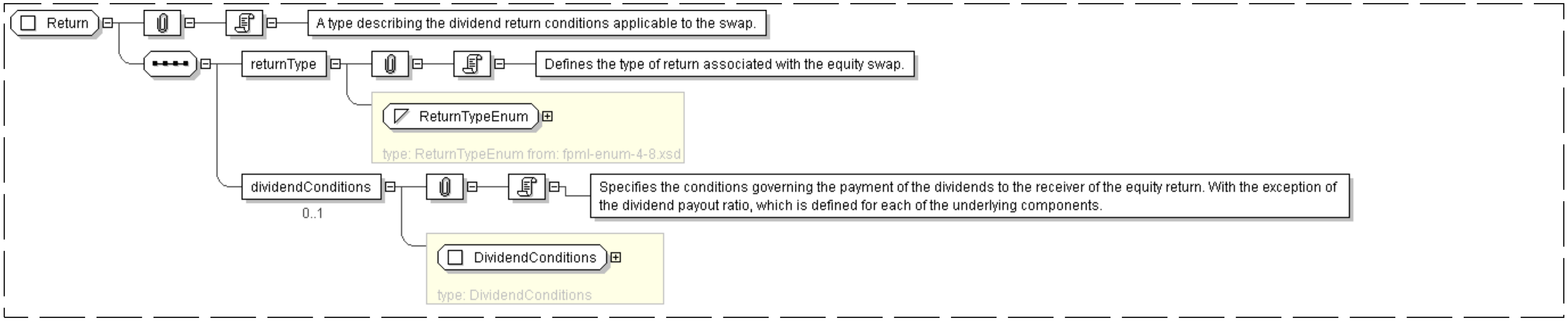
Super-types:	None
Sub-types:	None

Name	Return
Used by (from the same schema document)	Complex Type **ReturnLeg**
Abstract	no
Documentation	A type describing the dividend return conditions applicable to the swap.

XML Instance Representation

```
<...>
   <returnType> ReturnTypeEnum </returnType> [1]
   'Defines the type of return associated with the equity swap.'

   <dividendConditions> DividendConditions </dividendConditions> [0..1]
   'Specifies the conditions governing the payment of the dividends to the receiver of the
   equity return. With the exception of the dividend payout ratio, which is defined for each
   of the underlying components.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Return">
   <xsd:sequence>
      <xsd:element name="returnType" type=" ReturnTypeEnum "/>
      <xsd:element name="dividendConditions" type=" DividendConditions " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReturnLeg

Super-types:	Leg < ReturnSwapLeg (by extension) < ReturnSwapLegUnderlyer (by extension) < **ReturnLeg** (by extension)
Sub-types:	None

Name	ReturnLeg
Used by (from the same schema document)	Element **returnLeg**
Abstract	no
Documentation	A type describing the return leg of a return type swap.

XML Instance Representation

```
<...
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
   'Specifies the termination date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'
```

<strikeDate> AdjustableOrRelativeDate </strikeDate> [0..1]

'Specifies the strike date of this leg of the swap, used for forward starting swaps. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically by relative to the trade date of the swap.'

<underlyer> Underlyer </underlyer> [1]

'Specifies the underlying component of the leg, which can be either one or many and consists in either equity, index or convertible bond component, or a combination of these.'

<rateOfReturn> ReturnLegValuation **</rateOfReturn>** [1]

'Element named \"valuation\" in versions prior to FpML 4.2 Second Working Draft. Specifies the terms of the initial price of the return type swap and of the subsequent valuations of the underlyer.'

<notional> ReturnSwapNotional **</notional>** [1]

'Specifies the notional of a return type swap. When used in the equity leg, the definition will typically combine the actual amount (using the notional component defined by the FpML industry group) and the determination method. When used in the interest leg, the definition will typically point to the definition of the equity leg.'

<amount> ReturnSwapAmount **</amount>** [1]

'Element named \"equityAmount\" in versions prior to FpML 4.2 Second Working Draft. Specifies, in relation to each Payment Date, the amount to which the Payment Date relates. For equity swaps this element is equivalent to the Equity Amount term as defined in the ISDA 2002 Equity Derivatives Definitions.'

<return> Return **</return>** [1]

'Specifies the conditions under which dividend affecting the underlyer will be paid to the receiver of the amounts.'

<notionalAdjustments> NotionalAdjustmentEnum **</notionalAdjustments>** [1]

'Specifies the conditions that govern the adjustment to the number of units of the equity swap.'

<fxFeature> FxFeature **</fxFeature>** [0..1]

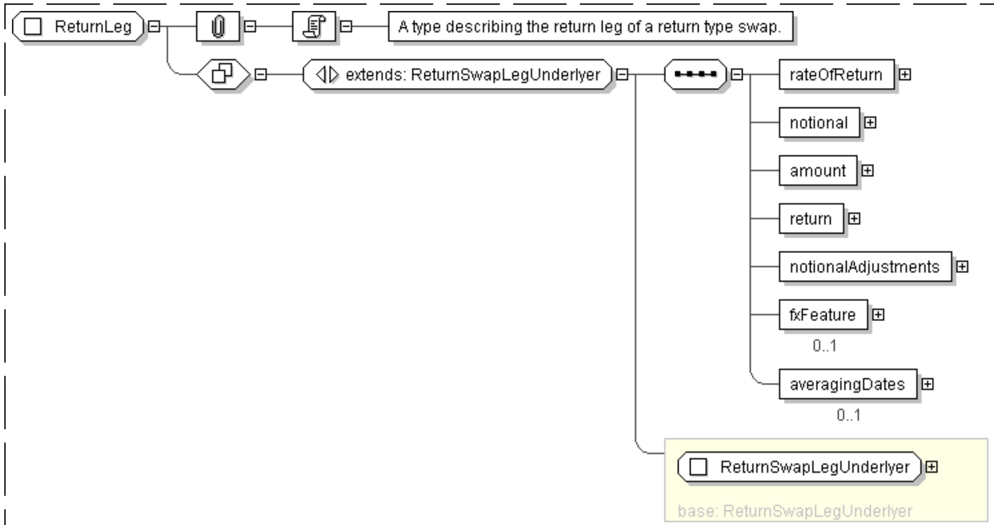
'A quanto or composite FX feature.'

<averagingDates> AveragingPeriod **</averagingDates>** [0..1]

'Averaging Dates used in the swap.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnLeg">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapLegUnderlyer ">
         <xsd:sequence>
            <xsd:element name="rateOfReturn" type=" ReturnLegValuation "/>
            <xsd:element name="notional" type=" ReturnSwapNotional "/>
            <xsd:element name="amount" type=" ReturnSwapAmount "/>
            <xsd:element name="return" type=" Return "/>
            <xsd:element name="notionalAdjustments" type=" NotionalAdjustmentEnum "/>
            <xsd:element name="fxFeature" type=" FxFeature " minOccurs="0"/>
            <xsd:element name="averagingDates" type=" AveragingPeriod " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnLegValuation

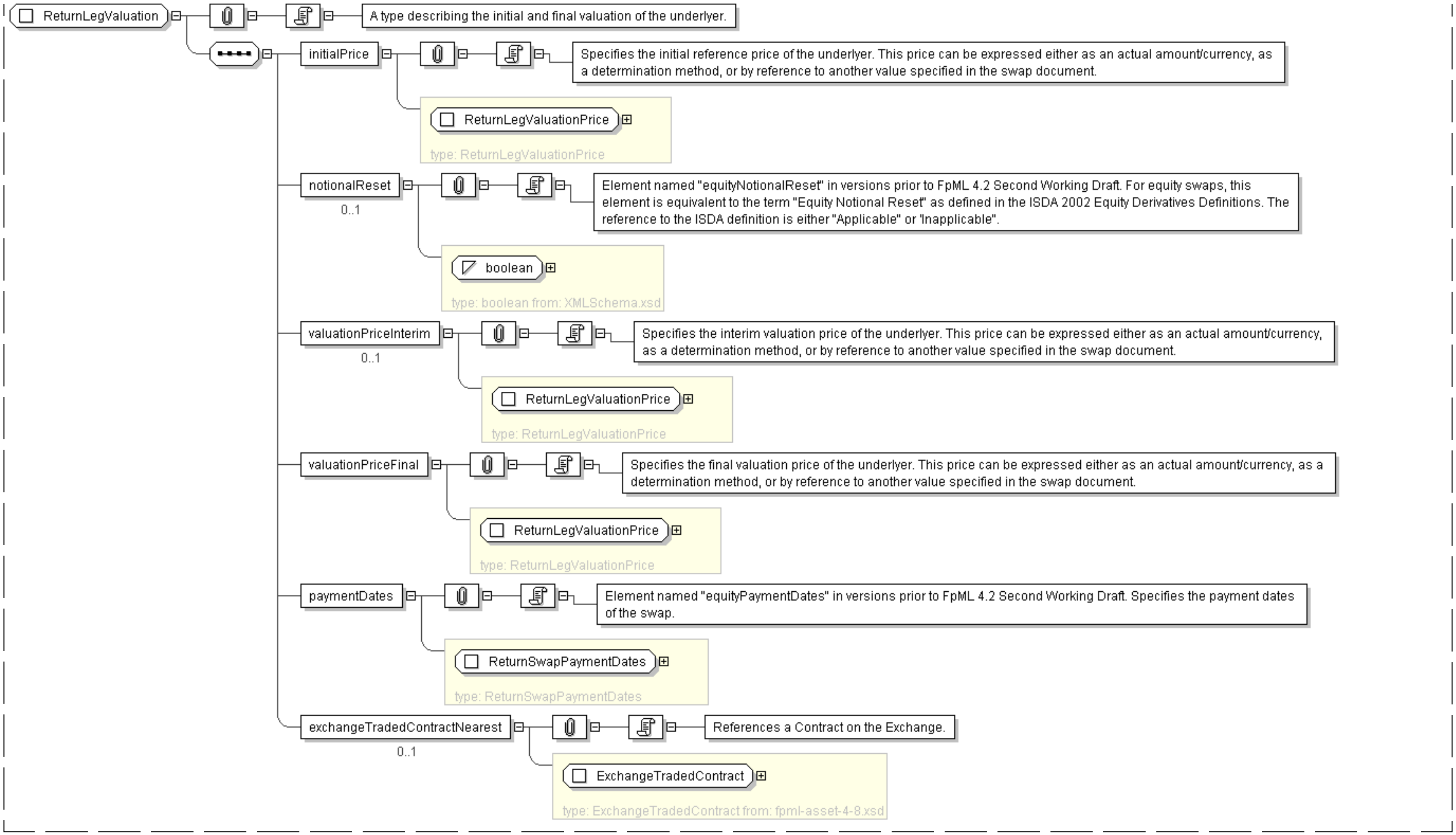
Super-types:	None
Sub-types:	None

Name	ReturnLegValuation
Used by (from the same schema document)	Complex Type **ReturnLeg**
Abstract	no
Documentation	A type describing the initial and final valuation of the underlyer.

XML Instance Representation

```
<...>
   <initialPrice> ReturnLegValuationPrice </initialPrice> [1]
   'Specifies the initial reference price of the underlyer. This price can be expressed either
   as an actual amount/currency, as a determination method, or by reference to another
   value specified in the swap document.'

   <notionalReset> xsd:boolean </notionalReset> [0..1]
   'Element named \"equityNotionalReset\" in versions prior to FpML 4.2 Second Working Draft.
   For equity swaps, this element is equivalent to the term \"Equity Notional Reset\" as
   defined in the ISDA 2002 Equity Derivatives Definitions. The reference to the ISDA
   definition is either \"Applicable\" or \'Inapplicable\".'

   <valuationPriceInterim> ReturnLegValuationPrice </valuationPriceInterim> [0..1]
   'Specifies the interim valuation price of the underlyer. This price can be expressed either
   as an actual amount/currency, as a determination method, or by reference to another
   value specified in the swap document.'

   <valuationPriceFinal> ReturnLegValuationPrice </valuationPriceFinal> [1]
   'Specifies the final valuation price of the underlyer. This price can be expressed either as
   an actual amount/currency, as a determination method, or by reference to another
   value specified in the swap document.'

   <paymentDates> ReturnSwapPaymentDates </paymentDates> [1]
   'Element named \"equityPaymentDates\" in versions prior to FpML 4.2 Second Working
   Draft. Specifies the payment dates of the swap.'

   <exchangeTradedContractNearest> ExchangeTradedContract </exchangeTradedContractNearest> [0..1]
   'References a Contract on the Exchange.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnLegValuation">
   <xsd:sequence>
      <xsd:element name="initialPrice" type=" ReturnLegValuationPrice "/>
      <xsd:element name="notionalReset" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="valuationPriceInterim" type=" ReturnLegValuationPrice " minOccurs="0"/>
      <xsd:element name="valuationPriceFinal" type=" ReturnLegValuationPrice "/>
      <xsd:element name="paymentDates" type=" ReturnSwapPaymentDates "/>
      <xsd:element name="exchangeTradedContractNearest" type=" ExchangeTradedContract "
      minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReturnLegValuationPrice

Super-types:	Price < **ReturnLegValuationPrice** (by extension)

Sub-types:	None

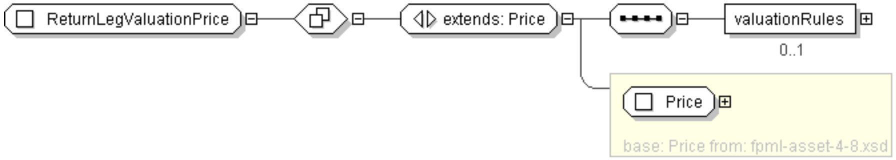
Name	ReturnLegValuationPrice
Used by (from the same schema document)	Complex Type **ReturnLegValuation** , Complex Type **ReturnLegValuation** , Complex Type **ReturnLegValuation**
Abstract	no

XML Instance Representation

```
<...>
   <commission> Commission </commission> [0..1]
   'This optional component specifies the commission to be charged for executing the
   hedge transactions.'
Start Choice [1]
      <determinationMethod> DeterminationMethod </determinationMethod> [1]
      'Specifies the method according to which an amount or a date is determined.'
Start Group: EquityPrice.model [0..1]
         <grossPrice> ActualPrice </grossPrice> [0..1]
         'Specifies the price of the underlyer, before commissions.'
         <netPrice> ActualPrice </netPrice> [1]
         'Specifies the price of the underlyer, net of commissions.'
         <accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]
         'Specifies the accrued interest that are part of the dirty price in the case of a fixed
         income security or a convertible bond. Expressed in percentage of the notional.'
         <fxConversion> FxConversion </fxConversion> [0..1]
         'Specifies the currency conversion rate that applies to an amount. This rate can either
         be defined elsewhere in the document (case of a quanto swap), or explicitly described
         through this component.'
End Group: EquityPrice.model
      <amountRelativeTo> AmountReference </amountRelativeTo> [1]
      'The href attribute value will be a pointer style reference to the element or
      component elsewhere in the document where the anchor amount is defined.'
      <grossPrice> ActualPrice </grossPrice> [0..1]
      'Specifies the price of the underlyer, before commissions.'
      <netPrice> ActualPrice </netPrice> [1]
      'Specifies the price of the underlyer, net of commissions.'
      <accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]
      'Specifies the accrued interest that are part of the dirty price in the case of a fixed
      income security or a convertible bond. Expressed in percentage of the notional.'
      <fxConversion> FxConversion </fxConversion> [0..1]
      'Specifies the currency conversion rate that applies to an amount. This rate can either
      be defined elsewhere in the document (case of a quanto swap), or explicitly described
      through this component.'
End Choice
   <cleanNetPrice> xsd:decimal </cleanNetPrice> [0..1]
   'The net price excluding accrued interest. The \"Dirty Price\" for bonds is put in
   the \"netPrice\" element, which includes accrued interest. Thus netPrice - cleanNetPrice
   = accruedInterest. The currency and price expression for this field are the same as those
   for the (dirty) netPrice.'
   <quotationCharacteristics> QuotationCharacteristics </quotationCharacteristics> [0..1]
   'Allows information about how the price was quoted to be provided.'
   <valuationRules> EquityValuation </valuationRules> [0..1]
   'Element named \"equityValuation\" in versions prior to FpML 4.2 Second Working Draft.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnLegValuationPrice">
   <xsd:complexContent>
      <xsd:extension base=" Price ">
         <xsd:sequence>
            <xsd:element name="valuationRules" type=" EquityValuation " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwap

Super-types:	Product < ReturnSwapBase (by extension) < **ReturnSwap** (by extension)
Sub-types:	None

Name	ReturnSwap
Used by (from the same schema document)	Element **returnSwap**
Abstract	no
Documentation	A type describing return swaps including equity swaps (long form), total return swaps, and variance swaps.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

Start Group: BuyerSeller.model [0..1]
'BuyerSeller.model has been included as an optional child of ReturnSwapBase to support
the situation where an implementor wishes to indicate who has manufactured the Swap
through representing them as the Seller. It may be removed in future major revisions.'

      <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
      'A reference to the party that buys this instrument, ie. pays for this instrument and
      receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
      of FRAs this the fixed rate payer.'

      <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
      'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
      rights defined by this instrument and in return receives a payment for it. See 2000
      ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'
End Group: BuyerSeller.model
   <returnSwapLeg> ... </returnSwapLeg> [1..*]
```

<principalExchangeFeatures> PrincipalExchangeFeatures </principalExchangeFeatures> [0..1]

'This is used to document a Fully Funded Return Swap.'

<additionalPayment> ReturnSwapAdditionalPayment **</additionalPayment>** [0..*]

'Specifies additional payment(s) between the principal parties to the trade. This component extends some of the features of the additionalPayment component developed by the FpML industry group. Appropriate discussions will determine whether it would be appropriate to extend the shared component in order to meet the further requirements of equity swaps.'

<earlyTermination> ReturnSwapEarlyTermination **</earlyTermination>** [0..*]

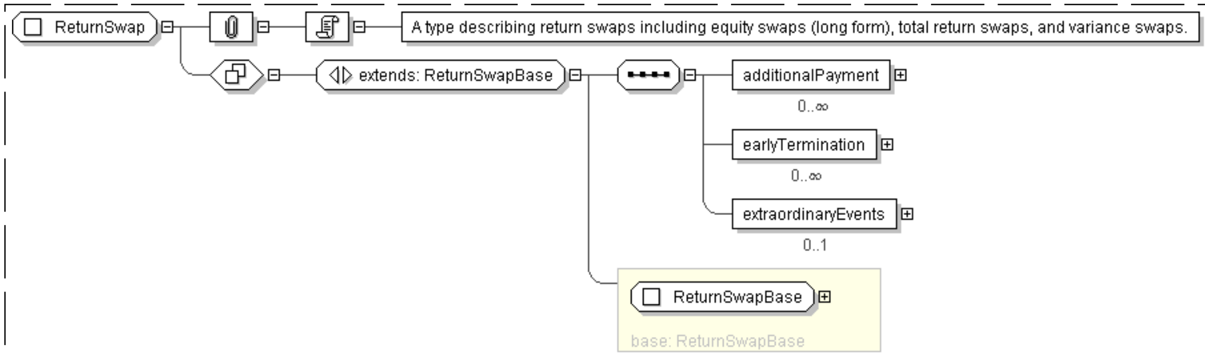
'Specifies, for one or for both the parties to the trade, the date from which it can early terminate it.'

<extraordinaryEvents> ExtraordinaryEvents **</extraordinaryEvents>** [0..1]

'Where the underlying is shares, specifies events affecting the issuer of those shares that may require the terms of the transaction to be adjusted.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwap">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapBase ">
         <xsd:sequence>
            <xsd:element name="additionalPayment" type=" ReturnSwapAdditionalPayment "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="earlyTermination" type=" ReturnSwapEarlyTermination "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="extraordinaryEvents" type=" ExtraordinaryEvents " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwapAdditionalPayment

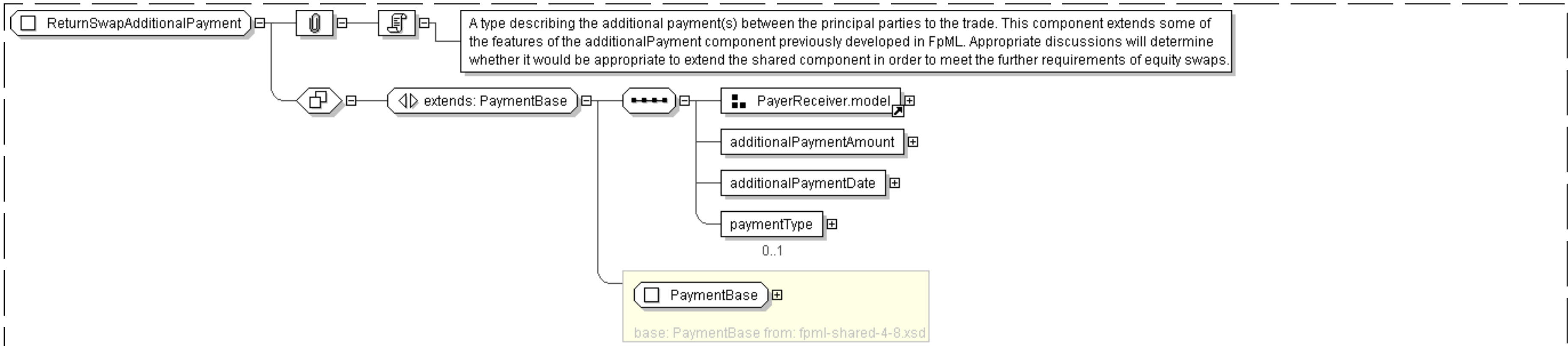
Super-types:	PaymentBase < **ReturnSwapAdditionalPayment** (by extension)
Sub-types:	None

Name	ReturnSwapAdditionalPayment
Used by (from the same schema document)	Complex Type **ReturnSwap**
Abstract	no
Documentation	A type describing the additional payment(s) between the principal parties to the trade. This component extends some of the features of the additionalPayment component previously developed in FpML. Appropriate discussions will determine whether it would be appropriate to extend the shared component in order to meet the further requirements of equity swaps.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <additionalPaymentAmount> AdditionalPaymentAmount </additionalPaymentAmount> [1]
   'Specifies the amount of the fee along with, when applicable, the formula that supports
   its determination.'

   <additionalPaymentDate> AdjustableOrRelativeDate </additionalPaymentDate> [1]
   'Specifies the value date of the fee payment/receipt.'

   <paymentType> PaymentType </paymentType> [0..1]
   'Classification of the payment.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapAdditionalPayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="additionalPaymentAmount" type=" AdditionalPaymentAmount "/>
            <xsd:element name="additionalPaymentDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="paymentType" type=" PaymentType " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwapAmount

Super-types:	LegAmount < **ReturnSwapAmount** (by extension)
Sub-types:	• DeprecatedVarianceAmount (by extension)

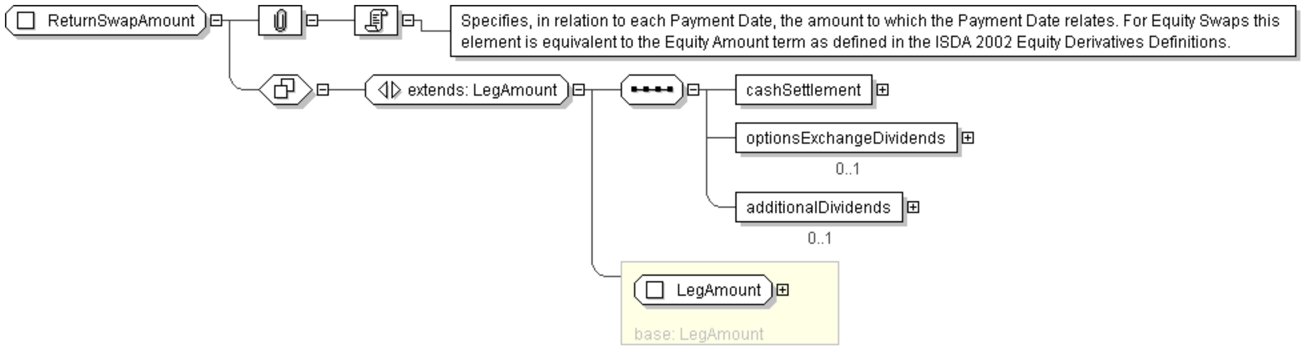
Name	ReturnSwapAmount

Used by (from the same schema document)	Complex Type **ReturnLeg**
Abstract	no
Documentation	Specifies, in relation to each Payment Date, the amount to which the Payment Date relates. For Equity Swaps this element is equivalent to the Equity Amount term as defined in the ISDA 2002 Equity Derivatives Definitions.

XML Instance Representation

```
<...>
Start Group: CurrencyAndDeterminationMethod.model [0..1]
Start Choice [1]
        <currency> Currency </currency> [1]
        'The currency in which an amount is denominated.'

        <determinationMethod> DeterminationMethod </determinationMethod> [1]
        'Specifies the method according to which an amount or a date is determined.'

        <currencyReference> IdentifiedCurrencyReference </currencyReference> [1]
        'Reference to a currency defined elsewhere in the document'

End Choice
End Group: CurrencyAndDeterminationMethod.model
   <paymentCurrency> PaymentCurrency </paymentCurrency> [0..1]
   'DEPRECATED. Currency in which the payment relating to the leg amount (equity amount
   or interest amount) or the dividend will be denominated.'

Start Choice [1]
      <referenceAmount> ReferenceAmount </referenceAmount> [1]
      'Specifies the reference Amount when this term either corresponds to the standard
      ISDA Definition (either the 2002 Equity Definition for the Equity Amount, or the
      2000 Definition for the Interest Amount), or points to a term defined elsewhere in the
      swap document.'

      <formula> Formula </formula> [1]
      'Specifies a formula, with its description and components.'

      <encodedDescription> xsd:base64Binary </encodedDescription> [1]
      'Description of the leg amount when represented through an encoded image.'

      <variance> DeprecatedVariance </variance> [1]
      'DEPRECATED This element will be removed in the next FpML major version. Return Swap
      model should not be used for Variance Swaps, use the Variance Swap Product. Specifies
      Variance for Variance Leg.'

End Choice
   <calculationDates> AdjustableRelativeOrPeriodicDates </calculationDates> [0..1]
   'Specifies the date on which a calculation or an observation will be performed for the
   purpose of defining the Equity Amount, and in accordance to the definition terms of
   this latter.'

   <cashSettlement> xsd:boolean </cashSettlement> [1]
   'If true, then cash settlement is applicable.'

   <optionsExchangeDividends> xsd:boolean </optionsExchangeDividends> [0..1]
   'If present and true, then options exchange dividends are applicable.'

   <additionalDividends> xsd:boolean </additionalDividends> [0..1]
   'If present and true, then additional dividends are applicable.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapAmount">
   <xsd:complexContent>
      <xsd:extension base=" LegAmount ">
         <xsd:sequence>
            <xsd:element name="cashSettlement" type=" xsd:boolean "/>
            <xsd:element name="optionsExchangeDividends" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="additionalDividends" type=" xsd:boolean " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwapBase

Super-types:	Product < **ReturnSwapBase** (by extension)
Sub-types:	• ReturnSwap (by extension)

Name	ReturnSwapBase
Abstract	yes
Documentation	A type describing the components that are common for return type swaps, including short and long form equity swaps representations.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

Start Group: BuyerSeller.model [0..1]
'BuyerSeller.model has been included as an optional child of ReturnSwapBase to support
the situation where an implementor wishes to indicate who has manufactured the Swap
through representing them as the Seller. It may be removed in future major revisions.'

      <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
      'A reference to the party that buys this instrument, ie. pays for this instrument and
      receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
      of FRAs this the fixed rate payer.'

      <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
```

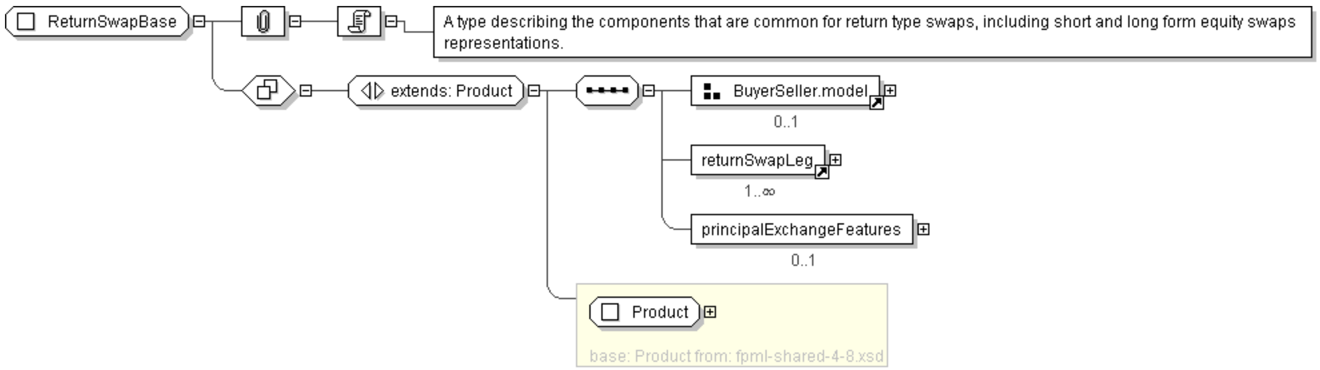
'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

End Group: BuyerSeller.model
<returnSwapLeg> ... </returnSwapLeg> [1..*]
<principalExchangeFeatures> PrincipalExchangeFeatures </principalExchangeFeatures> [0..1]

'This is used to document a Fully Funded Return Swap.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapBase" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model " minOccurs="0"/>
            <xsd:element ref=" returnSwapLeg " maxOccurs="unbounded"/>
            <xsd:element name="principalExchangeFeatures" type=" PrincipalExchangeFeatures " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwapEarlyTermination

Super-types:	None
Sub-types:	None

Name	ReturnSwapEarlyTermination
Used by (from the same schema document)	Complex Type **ReturnSwap**
Abstract	no
Documentation	A type describing the date from which each of the party may be allowed to terminate the trade.

XML Instance Representation

<...>
<partyReference> PartyReference </partyReference> [1]

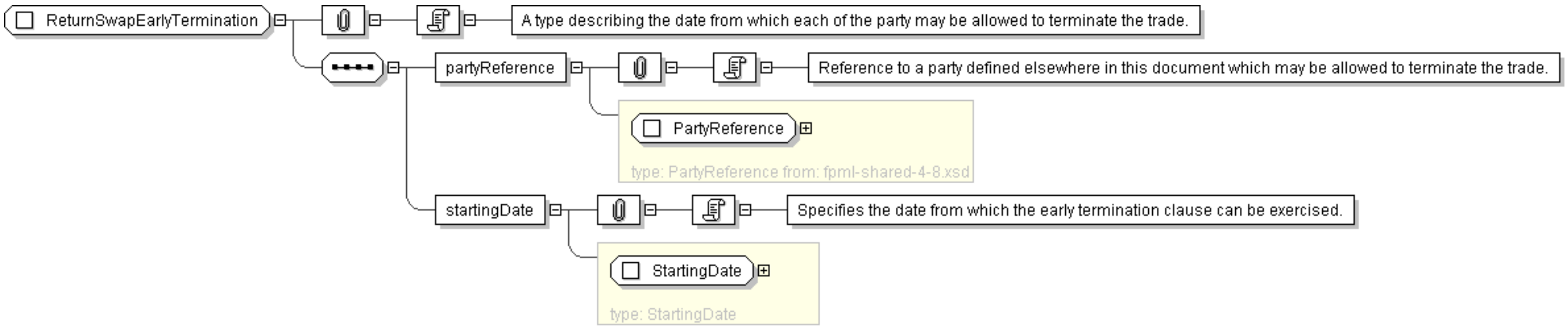
'Reference to a party defined elsewhere in this document which may be allowed to terminate the trade.'

<startingDate> StartingDate </startingDate> [1]

'Specifies the date from which the early termination clause can be exercised.'

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapEarlyTermination">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
      <xsd:element name="startingDate" type=" StartingDate "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReturnSwapLeg

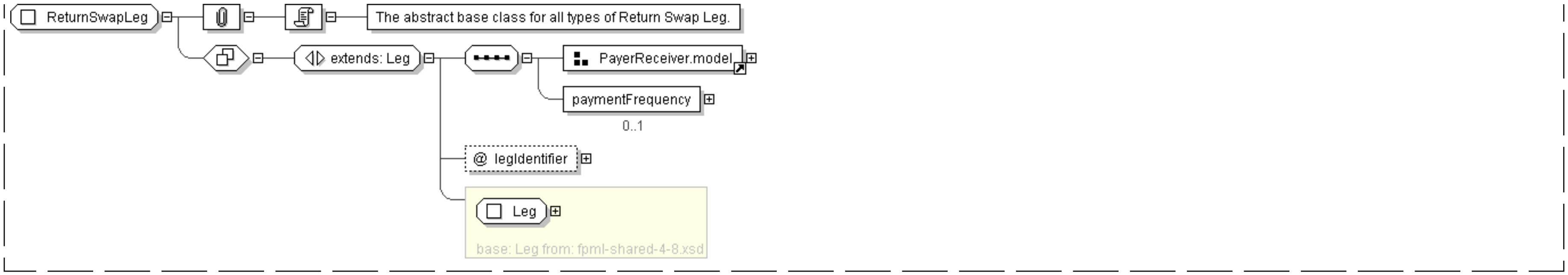
Super-types:	Leg < **ReturnSwapLeg** (by extension)
Sub-types:	• DeprecatedVarianceLeg (by extension) • InterestLeg (by extension) • ReturnSwapLegUnderlyer (by extension) ◦ ReturnLeg (by extension)

Name	ReturnSwapLeg
Used by (from the same schema document)	Element **returnSwapLeg**
Abstract	yes
Documentation	The abstract base class for all types of Return Swap Leg.

XML Instance Representation

```
<...
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapLeg" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="paymentFrequency" type=" Frequency " minOccurs="0"
            deprecated="true" deprecatedReason="Payment Frequency is controlled by the implementations
            of this abstract base class"/>
         </xsd:sequence>
         <xsd:attribute name="legIdentifier" type=" xsd:ID " deprecated="true"
         deprecatedReason="All attributes of type=xsd:ID should have name=id following
         FpML Architecture"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwapLegUnderlyer

Super-types:	Leg < ReturnSwapLeg (by extension) < **ReturnSwapLegUnderlyer** (by extension)
Sub-types:	• ReturnLeg (by extension)

Name	ReturnSwapLegUnderlyer
Abstract	yes
Documentation	A base class for all return leg types with an underlyer.

XML Instance Representation

```
<...
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of this leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
```

'Specifies the termination date of this leg of the swap. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically point to the termination date of the other leg of the swap.'

<strikeDate> AdjustableOrRelativeDate **</strikeDate>** [0..1]

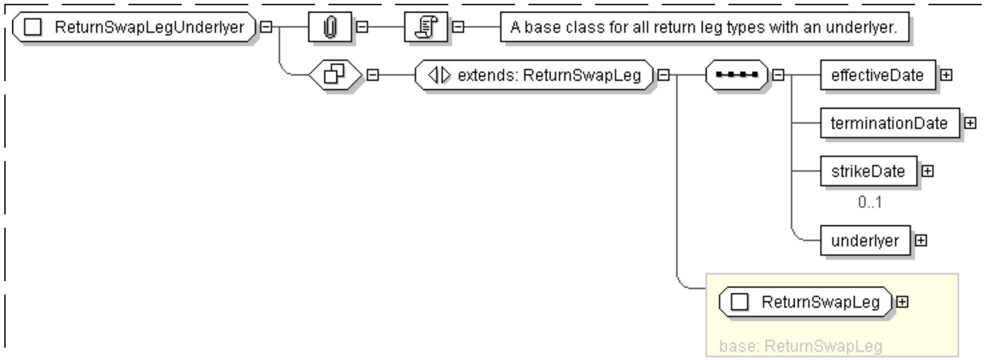
'Specifies the strike date of this leg of the swap, used for forward starting swaps. When defined in relation to a date specified somewhere else in the document (through the relativeDate component), this element will typically by relative to the trade date of the swap.'

<underlyer> Underlyer **</underlyer>** [1]

'Specifies the underlying component of the leg, which can be either one or many and consists in either equity, index or convertible bond component, or a combination of these.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapLegUnderlyer" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapLeg ">
         <xsd:sequence>
            <xsd:element name="effectiveDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="terminationDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="strikeDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
            <xsd:element name="underlyer" type=" Underlyer "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ReturnSwapNotional

Super-types:	None
Sub-types:	None

Name	ReturnSwapNotional
Used by (from the same schema document)	Complex Type **InterestLeg** , Complex Type **ReturnLeg**
Abstract	no
Documentation	Specifies the notional of return type swap. When used in the equity leg, the definition will typically combine the actual amount (using the notional component defined by the FpML industry group) and the determination method. When used in the interest leg, the definition will typically point to the definition of the equity leg.

XML Instance Representation

<...
id=" xsd:ID [0..1]">

Start Choice [1]
<amountRelativeTo> AmountReference </amountRelativeTo> [1]

'DEPRECATED This element will be removed in the next FpML major version. A reference to the return swap notional defined elsewhere in this document.'

<relativeNotionalAmount> ReturnSwapNotionalAmountReference </relativeNotionalAmount> [1]

'A reference to the return swap notional amount defined elsewhere in this document.'

<relativeDeterminationMethod> DeterminationMethodReference </relativeDeterminationMethod> [1]

'A reference to the return swap notional determination method defined elsewhere in this document.'

<determinationMethod> DeterminationMethod </determinationMethod> [1]

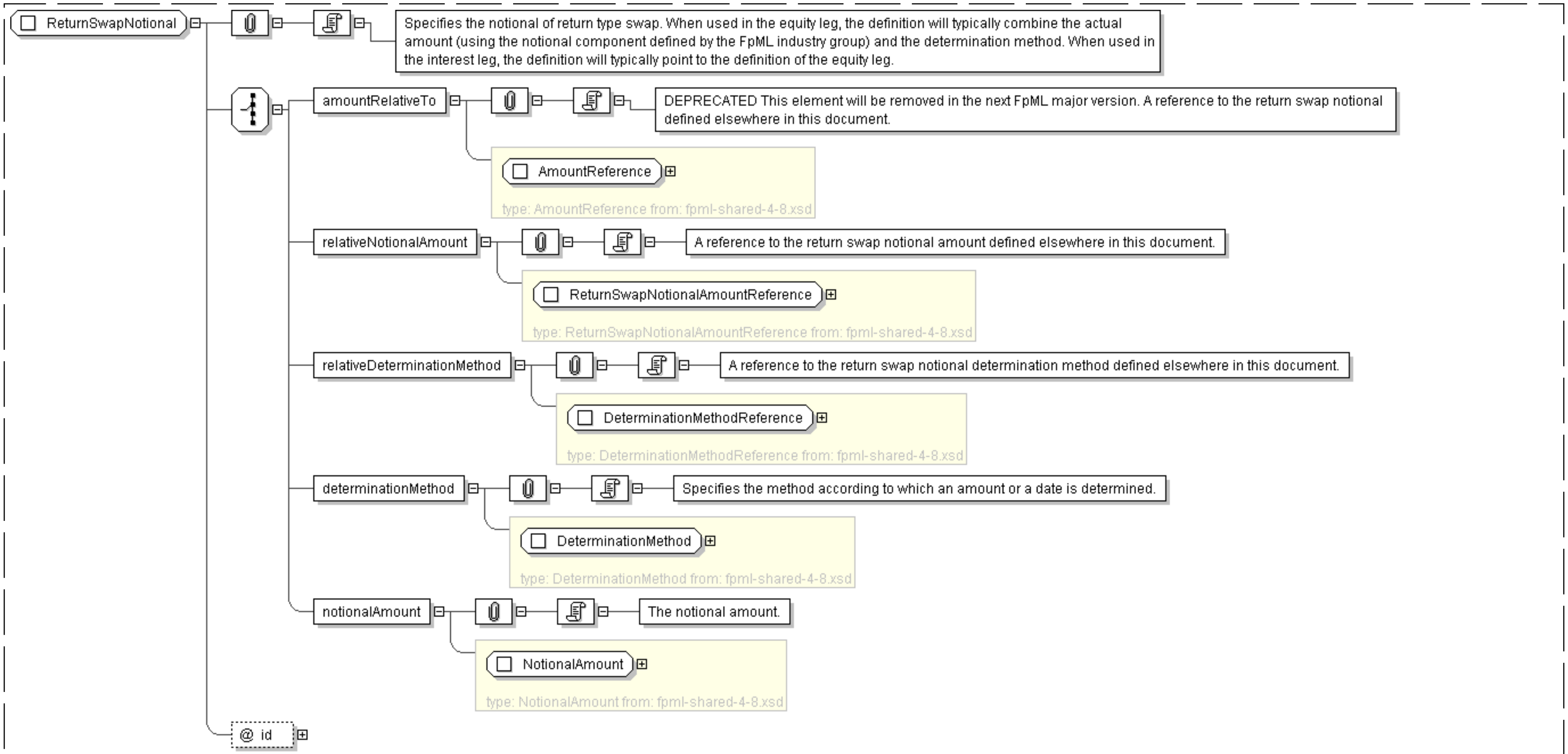
'Specifies the method according to which an amount or a date is determined.'

<notionalAmount> NotionalAmount </notionalAmount> [1]

'The notional amount.'

End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapNotional">
   <xsd:choice>
      <xsd:element name="amountRelativeTo" type=" AmountReference "
```

```
      deprecated="true" deprecatedReason="amountRelativeTo should not be used to the return
      swap notional, use the relativeNotionalAmount or relativeDeterminationMethod."/>
      <xsd:element name="relativeNotionalAmount" type=" ReturnSwapNotionalAmountReference "/>
      <xsd:element name="relativeDeterminationMethod" type=" DeterminationMethodReference "/>
      <xsd:element name="determinationMethod" type=" DeterminationMethod "/>
      <xsd:element name="notionalAmount" type=" NotionalAmount "/>
   </xsd:choice>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ReturnSwapPaymentDates

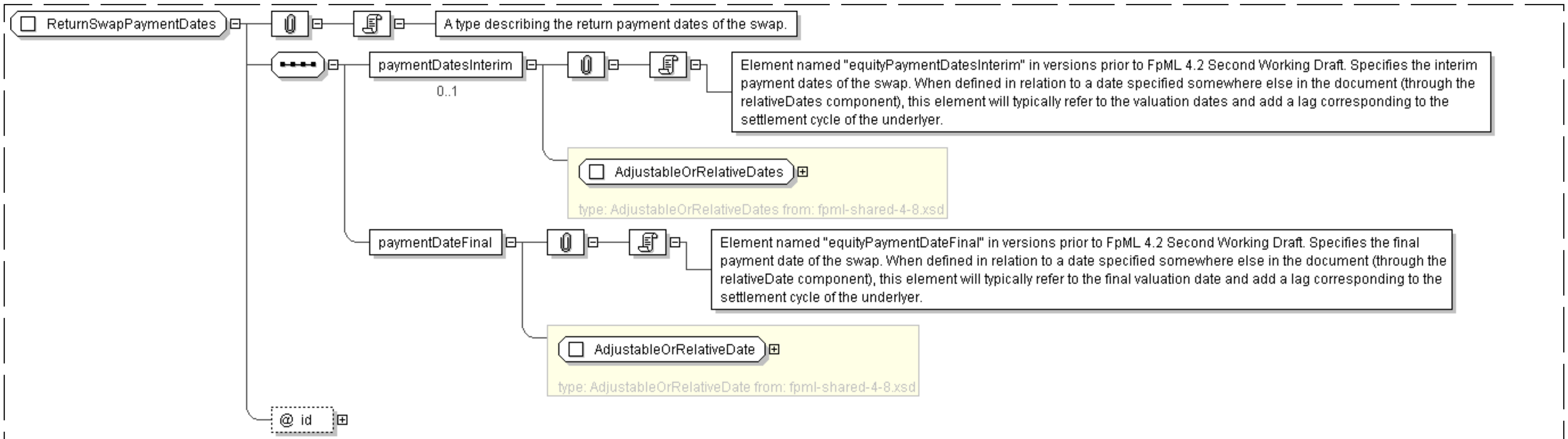
Super-types:	None
Sub-types:	None

Name	ReturnSwapPaymentDates
Used by (from the same schema document)	Complex Type **ReturnLegValuation**
Abstract	no
Documentation	A type describing the return payment dates of the swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <paymentDatesInterim> AdjustableOrRelativeDates </paymentDatesInterim> [0..1]
   'Element named \"equityPaymentDatesInterim\" in versions prior to FpML 4.2 Second
   Working Draft. Specifies the interim payment dates of the swap. When defined in relation to
   a date specified somewhere else in the document (through the relativeDates component),
   this element will typically refer to the valuation dates and add a lag corresponding to
   the settlement cycle of the underlyer.'

   <paymentDateFinal> AdjustableOrRelativeDate </paymentDateFinal> [1]
   'Element named \"equityPaymentDateFinal\" in versions prior to FpML 4.2 Second Working
   Draft. Specifies the final payment date of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically refer to the final valuation date and add a lag corresponding
   to the settlement cycle of the underlyer.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReturnSwapPaymentDates">
   <xsd:sequence>
      <xsd:element name="paymentDatesInterim" type=" AdjustableOrRelativeDates " minOccurs="0"/>
      <xsd:element name="paymentDateFinal" type=" AdjustableOrRelativeDate "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: StartingDate

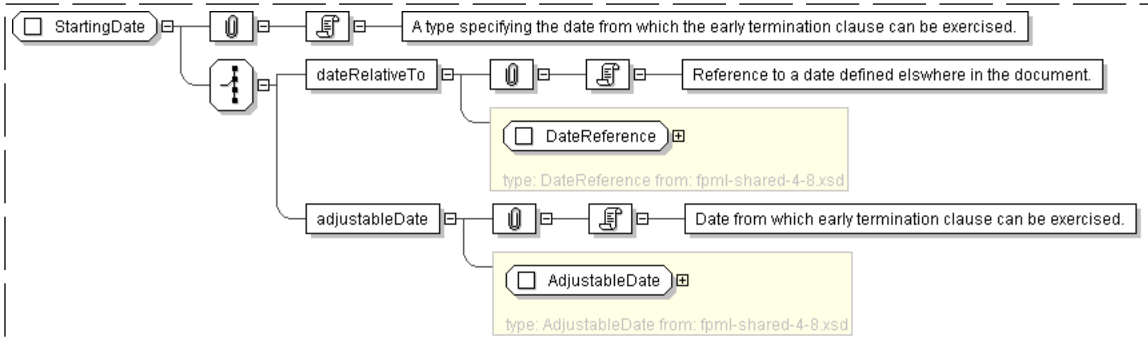
Super-types:	None
Sub-types:	None

Name	StartingDate
Used by (from the same schema document)	Complex Type **DeprecatedVarianceAmount** , Complex Type **ReturnSwapEarlyTermination**
Abstract	no
Documentation	A type specifying the date from which the early termination clause can be exercised.

XML Instance Representation

```
<...>
Start Choice [1]
      <dateRelativeTo> DateReference </dateRelativeTo> [1]
      'Reference to a date defined elswhere in the document.'

      <adjustableDate> AdjustableDate </adjustableDate> [1]
      'Date from which early termination clause can be exercised.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="StartingDate">
   <xsd:choice>
      <xsd:element name="dateRelativeTo" type=" DateReference "/>
      <xsd:element name="adjustableDate" type=" AdjustableDate "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: StubCalculationPeriod

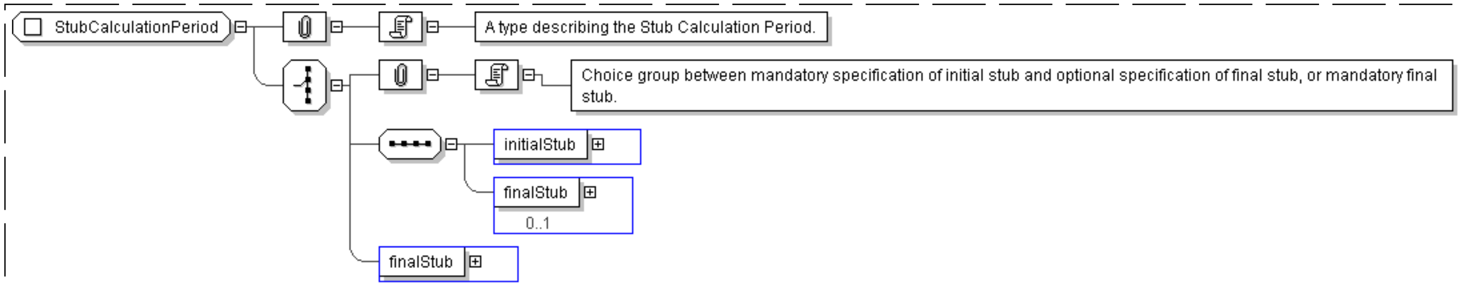
Super-types:	None
Sub-types:	None

Name	StubCalculationPeriod
Used by (from the same schema document)	Complex Type **InterestLeg**
Abstract	no
Documentation	A type describing the Stub Calculation Period.

XML Instance Representation

```
<...>
Start Choice [1]
'Choice group between mandatory specification of initial stub and optional specification
of final stub, or mandatory final stub.'

      <initialStub> Stub </initialStub> [1]
      <finalStub> Stub </finalStub> [0..1]
      <finalStub> Stub </finalStub> [1]
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="StubCalculationPeriod">
   <xsd:choice>
      <xsd:sequence>
         <xsd:element name="initialStub" type=" Stub "/>
         <xsd:element name="finalStub" type=" Stub " minOccurs="0"/>
      </xsd:sequence>
      <xsd:element name="finalStub" type=" Stub "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: Variance

Super-types:	CalculationFromObservation < **Variance** (by extension)
Sub-types:	None

Name	Variance
Abstract	no
Documentation	A type describing the variance amount of a variance swap.

XML Instance Representation

```
<...>
Start Choice [1]
      <initialLevel> xsd:decimal </initialLevel> [1]
      'Contract will strike off this initial level.'
```

<closingLevel> xsd:boolean </closingLevel> [1]

'If true this contract will strike off the closing level of the default exchange traded contract.'

<expiringLevel> xsd:boolean </expiringLevel> [1]

'If true this contract will strike off the expiring level of the default exchange traded contract.'

End Choice

<expectedN> xsd:positiveInteger </expectedN> [0..1]

'Expected number of trading days.'

<varianceAmount> Money </varianceAmount> [1]

'Variance amount, which is a cash multiplier.'

Start Choice [1]

'Choice between expressing the strike as volatility or variance.'

<volatilityStrikePrice> NonNegativeDecimal </volatilityStrikePrice> [1]
<varianceStrikePrice> NonNegativeDecimal </varianceStrikePrice> [1]

End Choice

<varianceCap> xsd:boolean </varianceCap> [0..1]

'If present and true, then variance cap is applicable.'

<unadjustedVarianceCap> PositiveDecimal </unadjustedVarianceCap> [0..1]

'For use when varianceCap is applicable. Contains the scaling factor of the Variance Cap that can differ on a trade-by-trade basis in the European market. For example, a Variance Cap of 2.5^2 x Variance Strike Price has an unadjustedVarianceCap of 2.5.'

<boundedVariance> BoundedVariance </boundedVariance> [0..1]

'Conditions which bound variance. The contract specifies one or more boundary levels. These levels are expressed as prices for confirmation purposes Underlyer price must be equal to or higher than Lower Barrier is known as Up Conditional Swap Underlyer price must be equal to or lower than Upper Barrier is known as Down Conditional Swap Underlyer price must be equal to or higher than Lower Barrier and must be equal to or lower than Upper Barrier is known as Barrier Conditional Swap.'

<exchangeTradedContractNearest> ExchangeTradedContract </exchangeTradedContractNearest> [0..1]

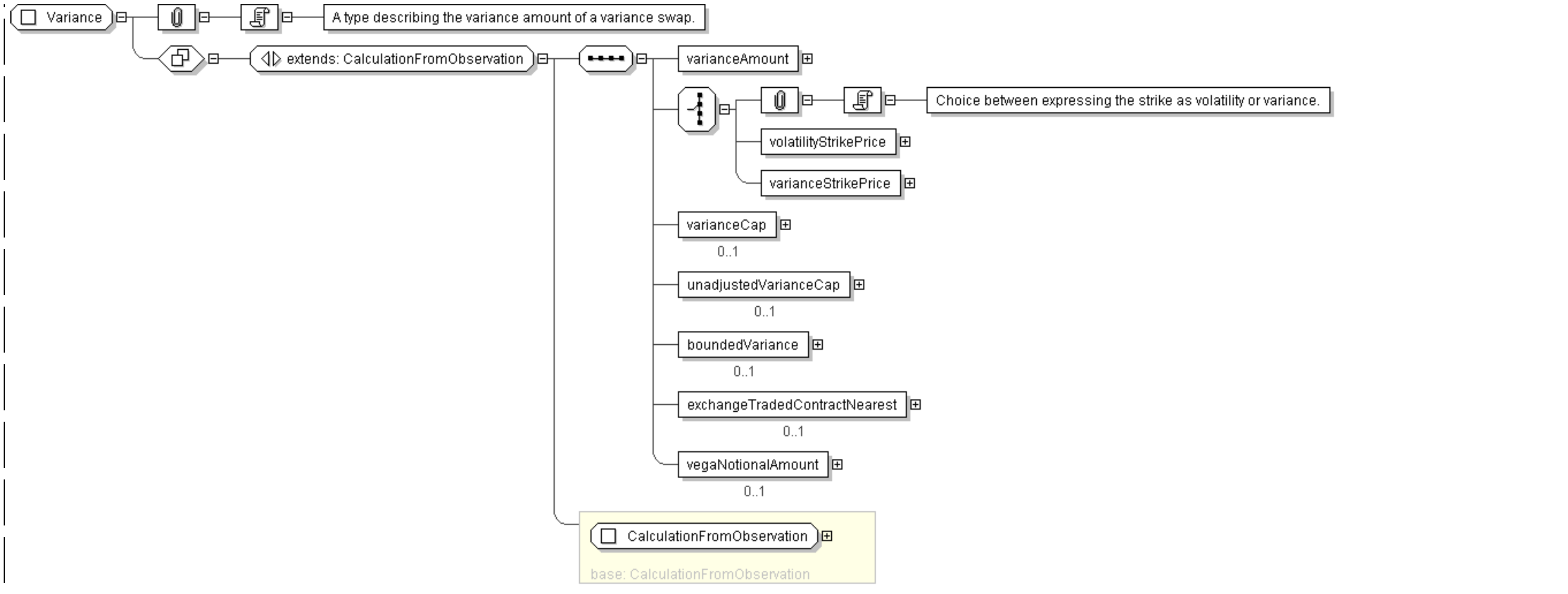
'Specification of the exchange traded contract nearest.'

<vegaNotionalAmount> xsd:decimal </vegaNotionalAmount> [0..1]

'Vega Notional represents the approximate gain/loss at maturity for a 1% difference between RVol (realised vol) and KVol (strike vol). It does not necessarily represent the Vega Risk of the trade.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Variance">
   <xsd:complexContent>
      <xsd:extension base=" CalculationFromObservation ">
         <xsd:sequence>
            <xsd:element name="varianceAmount" type=" Money "/>
            <xsd:choice>
               <xsd:element name="volatilityStrikePrice" type=" NonNegativeDecimal "/>
               <xsd:element name="varianceStrikePrice" type=" NonNegativeDecimal "/>
            </xsd:choice>
            <xsd:element name="varianceCap" type=" xsd:boolean " minOccurs="0"/>
            <xsd:element name="unadjustedVarianceCap" type=" PositiveDecimal " minOccurs="0"/>
            <xsd:element name="boundedVariance" type=" BoundedVariance " minOccurs="0"/>
            <xsd:element name="exchangeTradedContractNearest" type=" ExchangeTradedContract "
            minOccurs="0"/>
            <xsd:element name="vegaNotionalAmount" type=" xsd:decimal " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Model Group: CurrencyAndDeterminationMethod.model

Name	CurrencyAndDeterminationMethod.model
Used by (from the same schema document)	Complex Type **DividendConditions** , Complex Type **LegAmount**
Documentation	A group containing return swap amount currency definition methods

XML Instance Representation

```
Start Choice [1]
   <currency> Currency </currency> [1]
   'The currency in which an amount is denominated.'
```

<determinationMethod> DeterminationMethod </determinationMethod> [1]

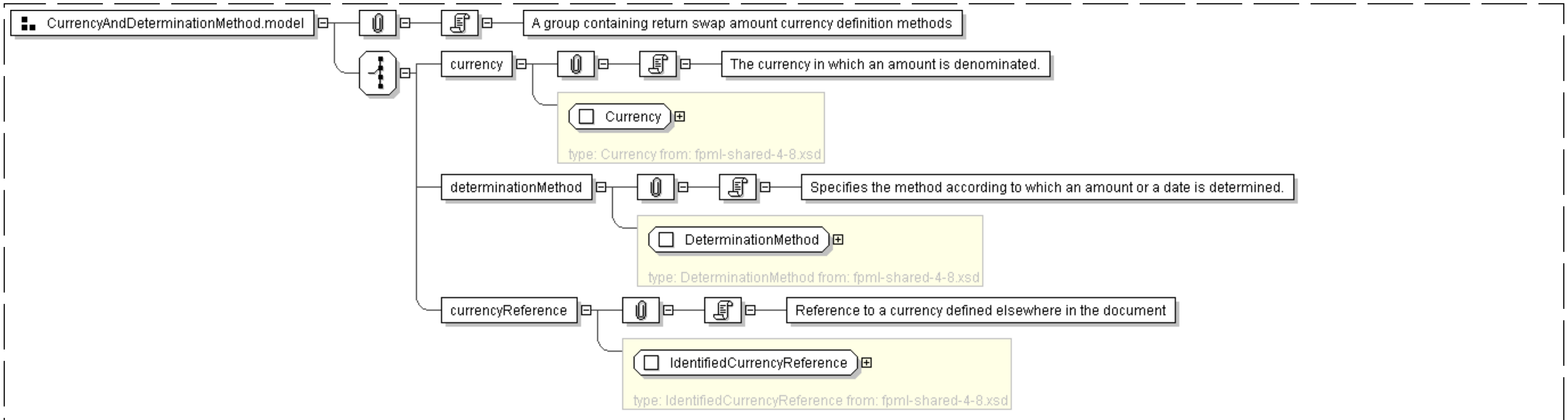
'Specifies the method according to which an amount or a date is determined.'

<currencyReference> IdentifiedCurrencyReference </currencyReference> [1]

'Reference to a currency defined elsewhere in the document'

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="CurrencyAndDeterminationMethod.model">
   <xsd:choice>
      <xsd:element name="currency" type=" Currency "/>
      <xsd:element name="determinationMethod" type=" DeterminationMethod "/>
      <xsd:element name="currencyReference" type=" IdentifiedCurrencyReference "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: DeclaredCashAndCashEquivalentDividendPercentage.model

Name	DeclaredCashAndCashEquivalentDividendPercentage.model
Used by (from the same schema document)	Complex Type **DividendConditions**

XML Instance Representation

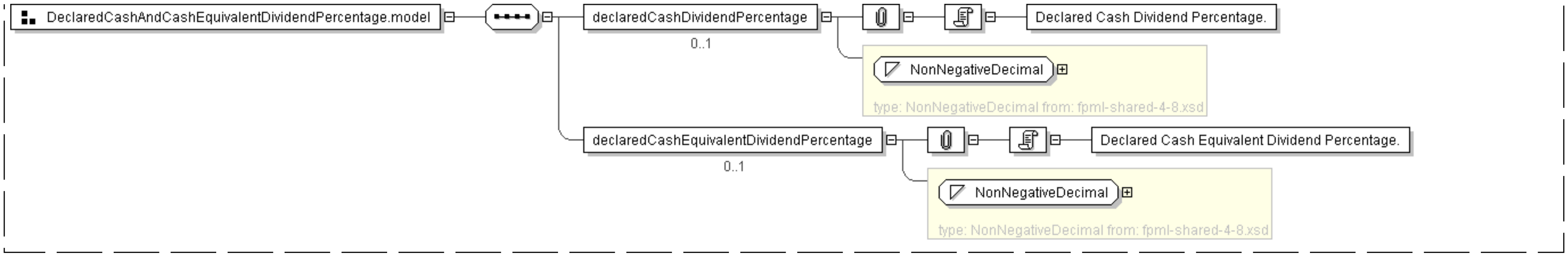
<declaredCashDividendPercentage> NonNegativeDecimal </declaredCashDividendPercentage> [0..1]

'Declared Cash Dividend Percentage.'

<declaredCashEquivalentDividendPercentage> NonNegativeDecimal
</declaredCashEquivalentDividendPercentage> [0..1]

'Declared Cash Equivalent Dividend Percentage.'

Diagram



Schema Component Representation

```
<xsd:group name="DeclaredCashAndCashEquivalentDividendPercentage.model">
   <xsd:sequence>
      <xsd:element name="declaredCashDividendPercentage" type=" NonNegativeDecimal " minOccurs="0"/>
      <xsd:element name="declaredCashEquivalentDividendPercentage" type=" NonNegativeDecimal
      " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

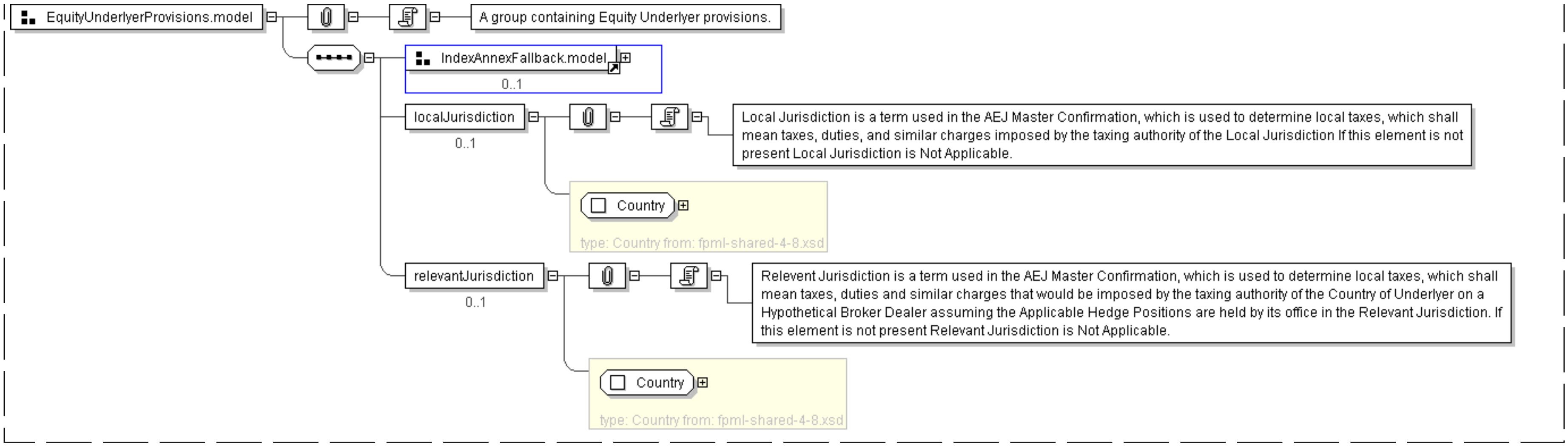
Model Group: EquityUnderlyerProvisions.model

Name	EquityUnderlyerProvisions.model
Documentation	A group containing Equity Underlyer provisions.

XML Instance Representation

```
Start Group: IndexAnnexFallback.model [0..1]
Start Choice [1]
      <multipleExchangeIndexAnnexFallback> xsd:boolean </multipleExchangeIndexAnnexFallback> [1]
      'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange
      Index Annex is applicable to the transaction. This annex defines additional provisions
      which are applicable where an index is comprised of component securities that are traded
      on multiple exchanges.'

      <componentSecurityIndexAnnexFallback> xsd:boolean </componentSecurityIndexAnnexFallback> [1]
      'For an index option transaction, a flag to indicate whether a relevant Component
      Security Index Annex is applicable to the transaction.'
End Choice
End Group: IndexAnnexFallback.model
<localJurisdiction> Country </localJurisdiction> [0..1]
'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to
determine local taxes, which shall mean taxes, duties, and similar charges imposed by
the taxing authority of the Local Jurisdiction If this element is not present
Local Jurisdiction is Not Applicable.'

<relevantJurisdiction> Country </relevantJurisdiction> [0..1]
'Relevent Jurisdiction is a term used in the AEJ Master Confirmation, which is used
to determine local taxes, which shall mean taxes, duties and similar charges that would
be imposed by the taxing authority of the Country of Underlyer on a Hypothetical Broker
Dealer assuming the Applicable Hedge Positions are held by its office in the
Relevant Jurisdiction. If this element is not present Relevant Jurisdiction is Not Applicable.'
```

Diagram



Schema Component Representation

```
<xsd:group name="EquityUnderlyerProvisions.model">
   <xsd:sequence>
      <xsd:group ref=" IndexAnnexFallback.model " minOccurs="0"/>
      <xsd:element name="localJurisdiction" type=" Country " minOccurs="0"/>
      <xsd:element name="relevantJurisdiction" type=" Country " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

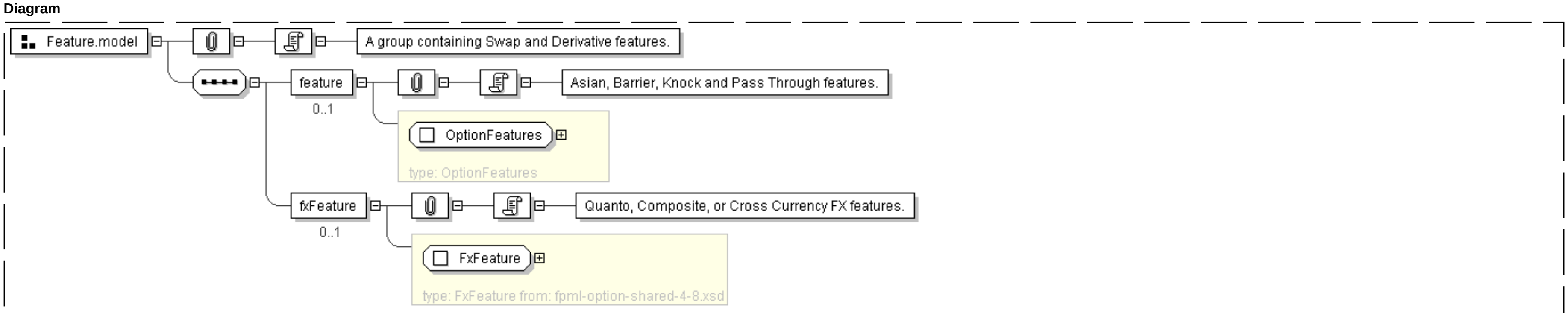
Model Group: Feature.model

Name	Feature.model
Documentation	A group containing Swap and Derivative features.

XML Instance Representation

```
<feature> OptionFeatures </feature> [0..1]
'Asian, Barrier, Knock and Pass Through features.'

<fxFeature> FxFeature </fxFeature> [0..1]
'Quanto, Composite, or Cross Currency FX features.'
```

Diagram



Schema Component Representation

```
<xsd:group name="Feature.model">
   <xsd:sequence>
      <xsd:element name="feature" type=" OptionFeatures " minOccurs="0"/>
      <xsd:element name="fxFeature" type=" FxFeature " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

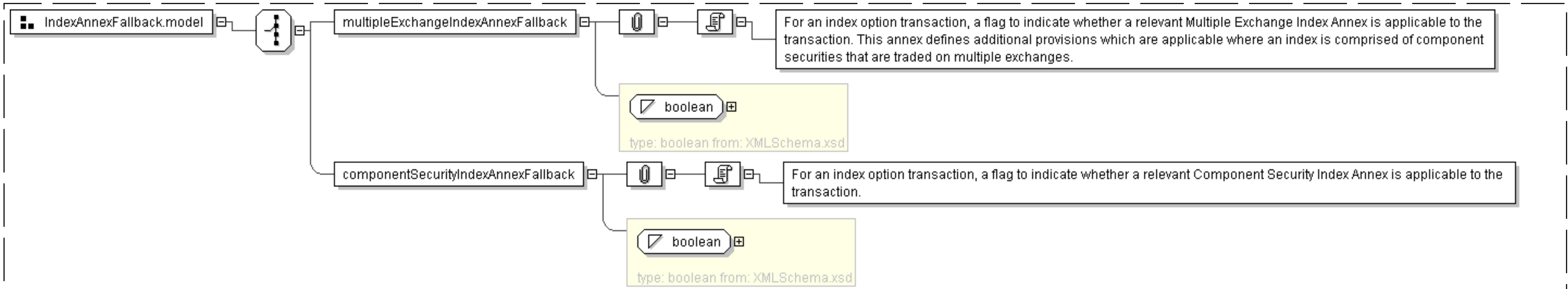
Model Group: IndexAnnexFallback.model

Name	IndexAnnexFallback.model
Used by (from the same schema document)	Model Group **EquityUnderlyerProvisions.model**

XML Instance Representation

```
Start Choice [1]
   <multipleExchangeIndexAnnexFallback> xsd:boolean </multipleExchangeIndexAnnexFallback> [1]
   'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange
   Index Annex is applicable to the transaction. This annex defines additional provisions
   which are applicable where an index is comprised of component securities that are traded
   on multiple exchanges.'

   <componentSecurityIndexAnnexFallback> xsd:boolean </componentSecurityIndexAnnexFallback> [1]
   'For an index option transaction, a flag to indicate whether a relevant Component
   Security Index Annex is applicable to the transaction.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="IndexAnnexFallback.model">
   <xsd:choice>
      <xsd:element name="multipleExchangeIndexAnnexFallback" type=" xsd:boolean "/>
      <xsd:element name="componentSecurityIndexAnnexFallback" type=" xsd:boolean "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: MutualOrOptionalEarlyTermination.model

Name	MutualOrOptionalEarlyTermination.model

XML Instance Representation

Start Choice [1]
<mutualEarlyTermination> xsd:boolean </mutualEarlyTermination> [0..1]

'Used for specifying whether the Mutual Early Termination Right that is detailed in the Master Confirmation will apply.'

<optionalEarlyTermination> xsd:boolean </optionalEarlyTermination> [1]

'A Boolean element used for specifying whether the Optional Early Termination clause detailed in the agreement will apply.'

<breakFundingRecovery> xsd:boolean </breakFundingRecovery> [0..1]

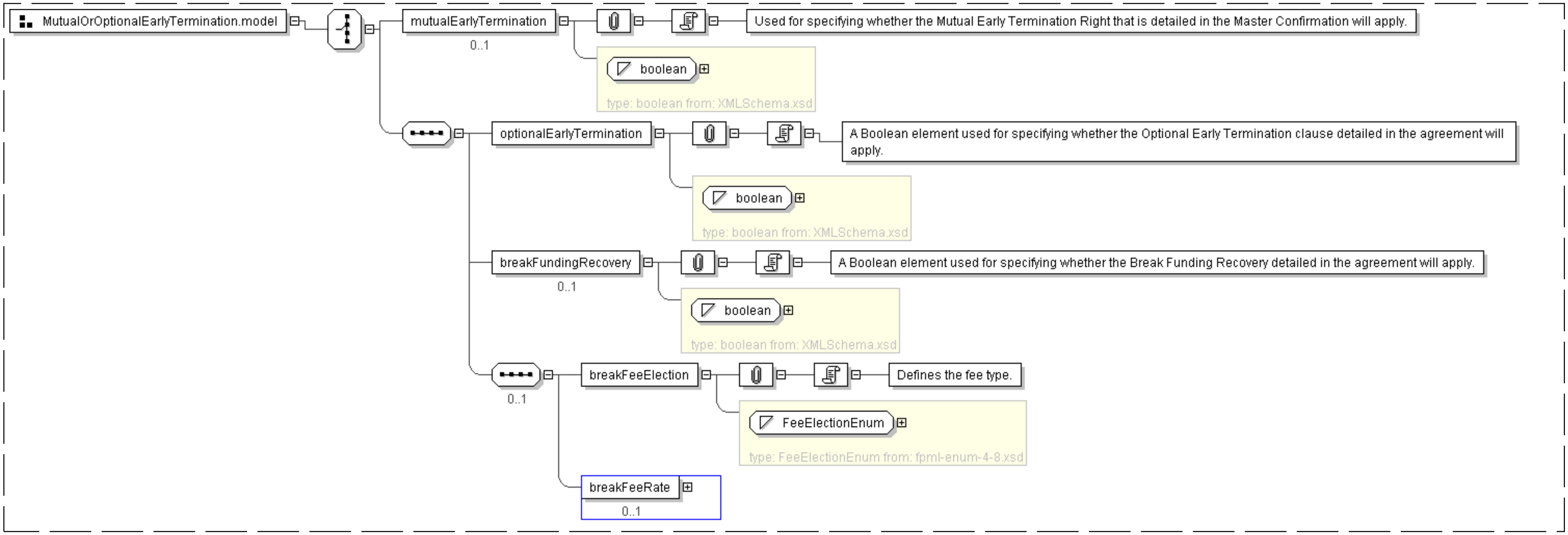
'A Boolean element used for specifying whether the Break Funding Recovery detailed in the agreement will apply.'

Start Sequence [0..1]
<breakFeeElection> FeeElectionEnum </breakFeeElection> [1]

'Defines the fee type.'

<breakFeeRate> NonNegativeDecimal </breakFeeRate> [0..1]
End Sequence
End Choice

Diagram



Schema Component Representation

```
<xsd:group name="MutualOrOptionalEarlyTermination.model">
   <xsd:choice>
      <xsd:element name="mutualEarlyTermination" type=" xsd:boolean " minOccurs="0"/>
      <xsd:sequence>
         <xsd:element name="optionalEarlyTermination" type=" xsd:boolean "/>
         <xsd:element name="breakFundingRecovery" type=" xsd:boolean " minOccurs="0"/>
         <xsd:sequence minOccurs="0">
            <xsd:element name="breakFeeElection" type=" FeeElectionEnum "/>
            <xsd:element name="breakFeeRate" type=" NonNegativeDecimal " minOccurs="0"/>
         </xsd:sequence>
      </xsd:sequence>
   </xsd:choice>
</xsd:group>
```

top

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace

xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

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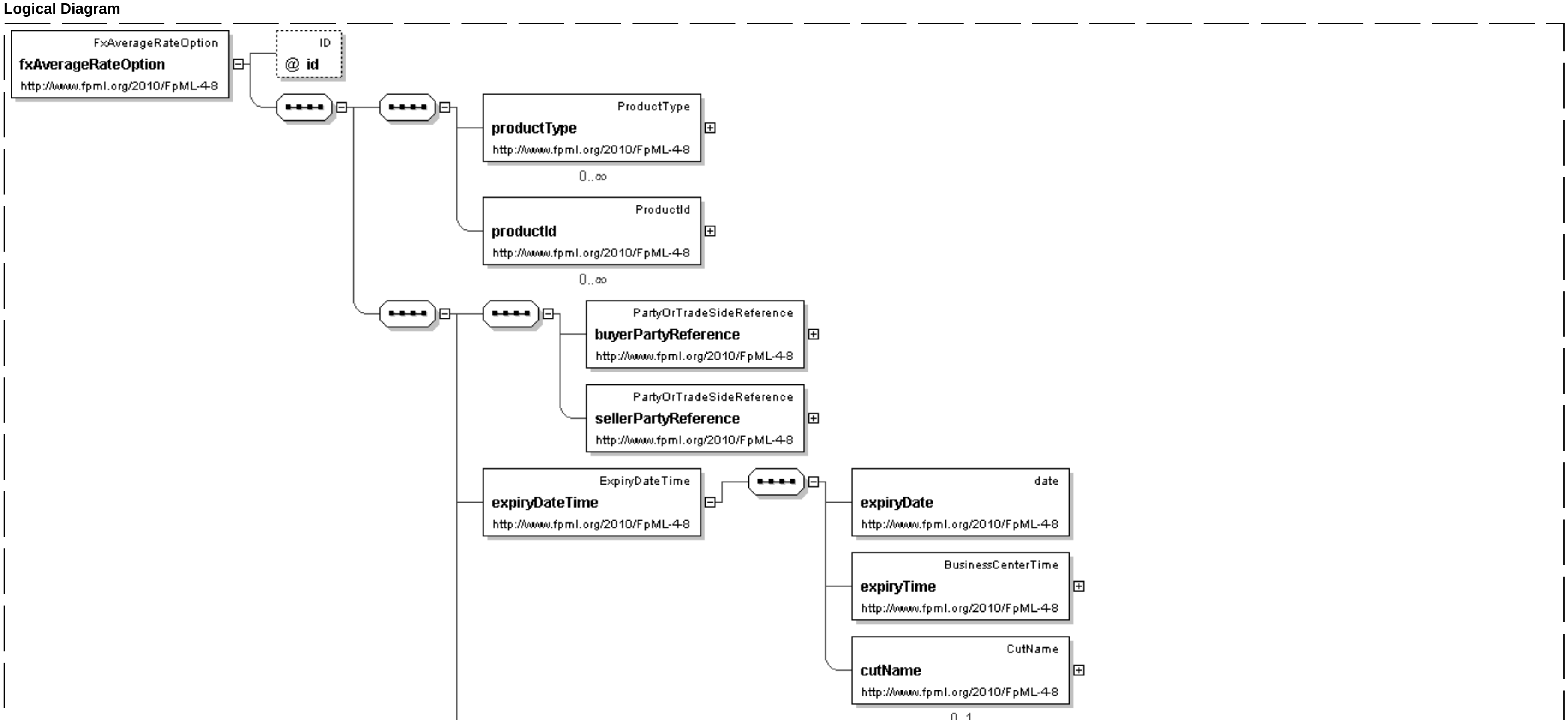
Global Declarations

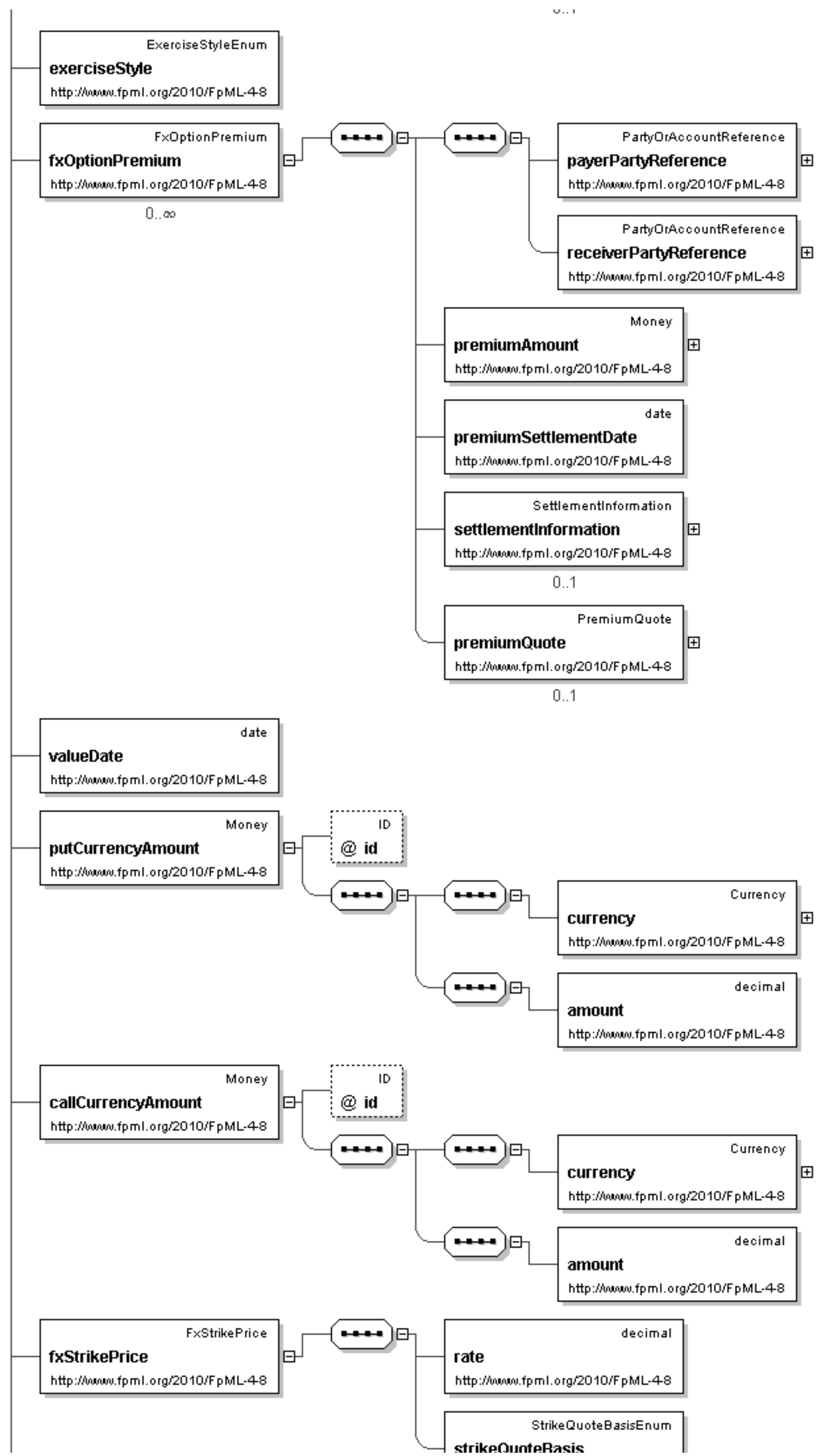
Element: fxAverageRateOption

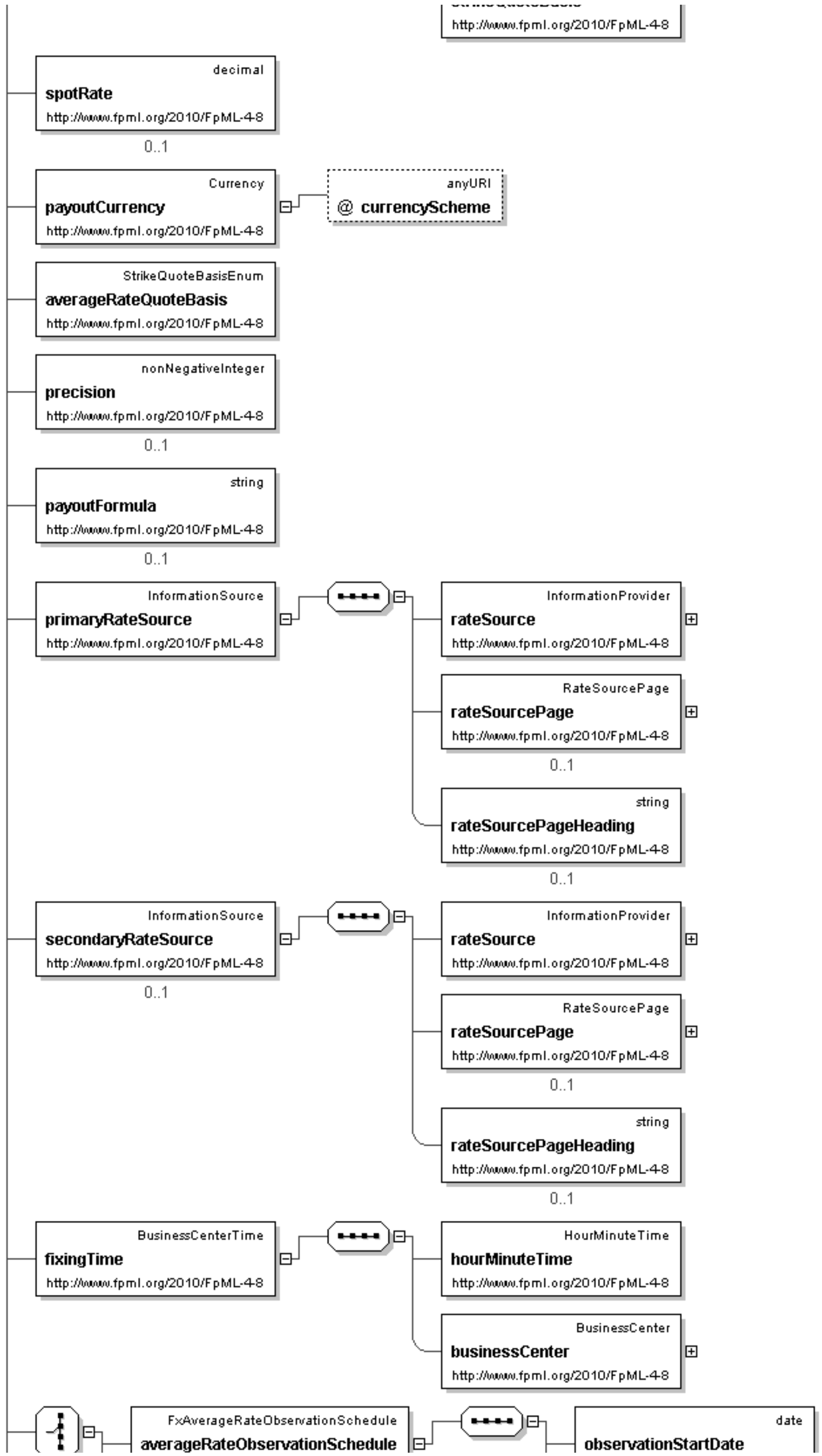
- *This element can be used wherever the following element is referenced:*
  - product

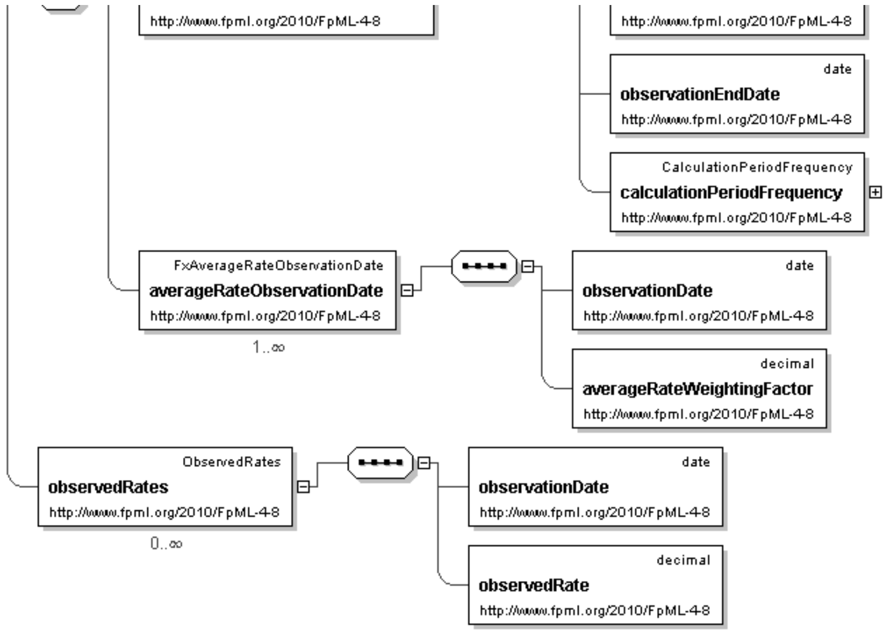
Name	fxAverageRateOption
Type	FxAverageRateOption
Nillable	no
Abstract	no
Documentation	A component describing an FX Average Rate Option product.

Logical Diagram




ExerciseStyleEnum
exerciseStyle
http://www.fpml.org/2010/FpML-4-8
FxOptionPremium
fxOptionPremium
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
premiumAmount
http://www.fpml.org/2010/FpML-4-8
date
premiumSettlementDate
http://www.fpml.org/2010/FpML-4-8
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
PremiumQuote
premiumQuote
http://www.fpml.org/2010/FpML-4-8
0..1
date
valueDate
http://www.fpml.org/2010/FpML-4-8
Money
putCurrencyAmount
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
Money
callCurrencyAmount
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
FxStrikePrice
fxStrikePrice
http://www.fpml.org/2010/FpML-4-8
decimal
rate
http://www.fpml.org/2010/FpML-4-8
StrikeQuoteBasisEnum
strikeQuoteBasis


http://www.fpml.org/2010/FpML-4-8
decimal
spotRate
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
payoutCurrency
http://www.fpml.org/2010/FpML-4-8
anyURI
@ currencyScheme
StrikeQuoteBasisEnum
averageRateQuoteBasis
http://www.fpml.org/2010/FpML-4-8
nonNegativeInteger
precision
http://www.fpml.org/2010/FpML-4-8
0..1
string
payoutFormula
http://www.fpml.org/2010/FpML-4-8
0..1
InformationSource
primaryRateSource
http://www.fpml.org/2010/FpML-4-8
InformationProvider
rateSource
http://www.fpml.org/2010/FpML-4-8
RateSourcePage
rateSourcePage
http://www.fpml.org/2010/FpML-4-8
0..1
string
rateSourcePageHeading
http://www.fpml.org/2010/FpML-4-8
0..1
InformationSource
secondaryRateSource
http://www.fpml.org/2010/FpML-4-8
0..1
InformationProvider
rateSource
http://www.fpml.org/2010/FpML-4-8
RateSourcePage
rateSourcePage
http://www.fpml.org/2010/FpML-4-8
0..1
string
rateSourcePageHeading
http://www.fpml.org/2010/FpML-4-8
0..1
BusinessCenterTime
fixingTime
http://www.fpml.org/2010/FpML-4-8
HourMinuteTime
hourMinuteTime
http://www.fpml.org/2010/FpML-4-8
BusinessCenter
businessCenter
http://www.fpml.org/2010/FpML-4-8
FxAverageRateObservationSchedule
averageRateObservationSchedule
date
observationStartDate



XML Instance Representation

```
<fxAverageRateOption
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
   'The date and time in a location of the option expiry. In the case of american options this
   is the latest possible expiry date and time.'

   <exerciseStyle> ExerciseStyleEnum </exerciseStyle> [1]
   'The manner in which the option can be exercised.'

   <fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]
   'Premium amount or premium installment amount for an option.'

   <valueDate> xsd:date </valueDate> [1]
   'The date on which both currencies traded will settle.'
```

<putCurrencyAmount> Money </putCurrencyAmount> [1]

'The currency amount that the option gives the right to sell.'

<callCurrencyAmount> Money </callCurrencyAmount> [1]

'The currency amount that the option gives the right to buy.'

<fxStrikePrice> FxStrikePrice </fxStrikePrice> [1]

'TBA'

<spotRate> xsd:decimal </spotRate> [0..1]

'An optional element used for FX forwards and certain types of FX OTC options. For deals consumated in the FX Forwards Market, this represents the current market rate for a particular currency pair. For barrier and digital/binary options, it can be useful to include the spot rate at the time the option was executed to make it easier to know whether the option needs to move \"up\" or \"down\" to be triggered.'

<payoutCurrency> Currency </payoutCurrency> [1]

'The ISO code of the currency in which a payout (if any) is to be made when a trigger is hit on a digital or barrier option.'

<averageRateQuoteBasis> StrikeQuoteBasisEnum </averageRateQuoteBasis> [1]

'The method by which the average rate that is being observed is quoted.'

<precision> xsd:nonNegativeInteger </precision> [0..1]

'Specifies the rounding precision in terms of a number of decimal places. Note how a percentage rate rounding of 5 decimal places is expressed as a rounding precision of 7 in the FpML document since the percentage is expressed as a decimal, e.g. 9.876543% (or 0.09876543) being rounded to the nearest 5 decimal places is 9.87654% (or 0.0987654).'

<payoutFormula> xsd:string </payoutFormula> [0..1]

'The description of the mathematical computation for how the payout is computed.'

<primaryRateSource> InformationSource </primaryRateSource> [1]

'The primary source for where the rate observation will occur. Will typically be either a page or a reference bank published rate.'

<secondaryRateSource> InformationSource </secondaryRateSource> [0..1]

'An alternative, or secondary, source for where the rate observation will occur. Will typically be either a page or a reference bank published rate.'

<fixingTime> BusinessCenterTime </fixingTime> [1]

'The time at which the spot currency exchange rate will be observed. It is specified as a time in a specific business center, e.g. 11:00am London time.'

Start Choice [1]

<averageRateObservationSchedule> FxAverageRateObservationSchedule </averageRateObservationSchedule> [1]

'Parametric schedule of rate observations.'

<averageRateObservationDate> FxAverageRateObservationDate </averageRateObservationDate> [1..*]

'One of more specific rate observation dates.'

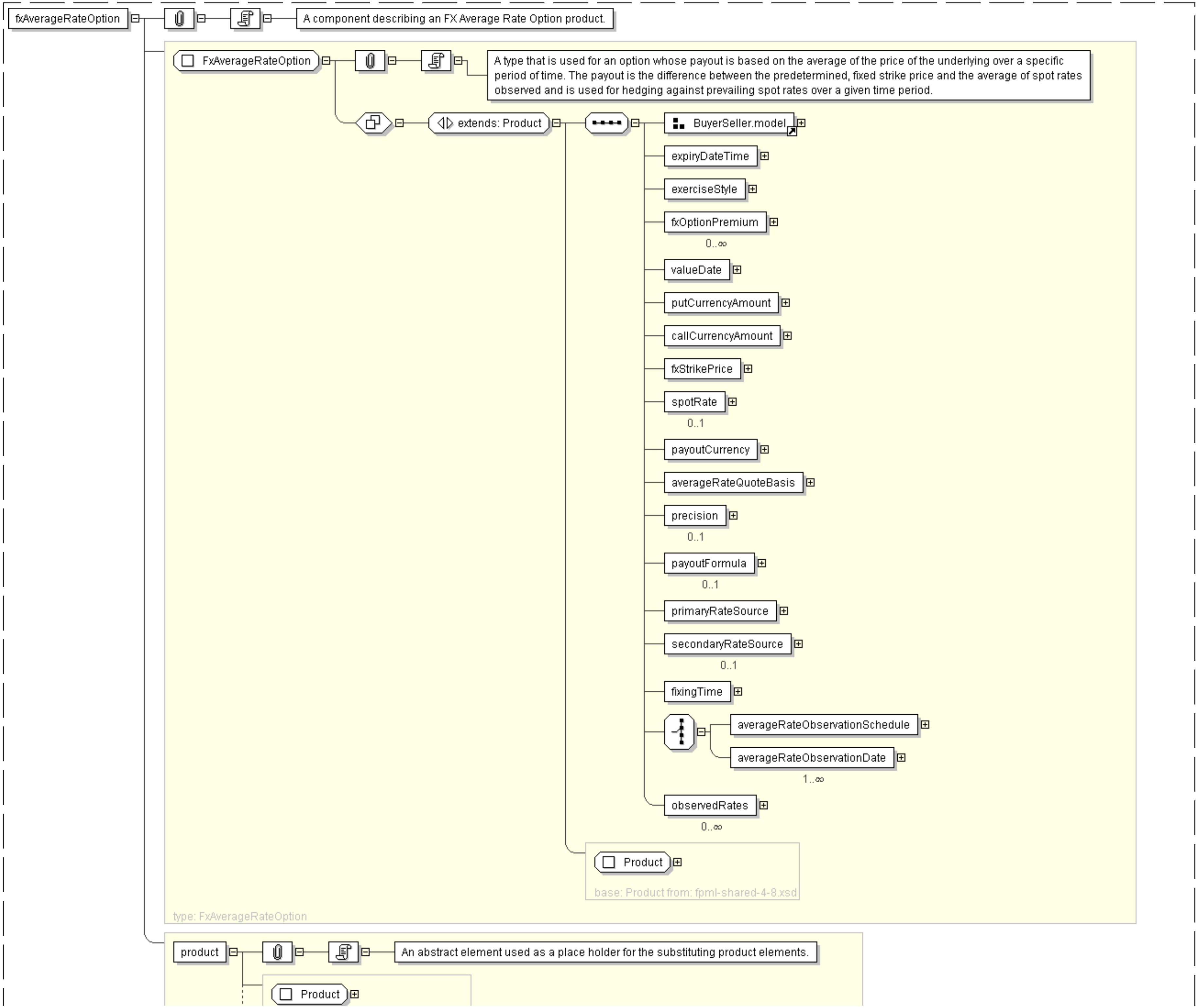
End Choice

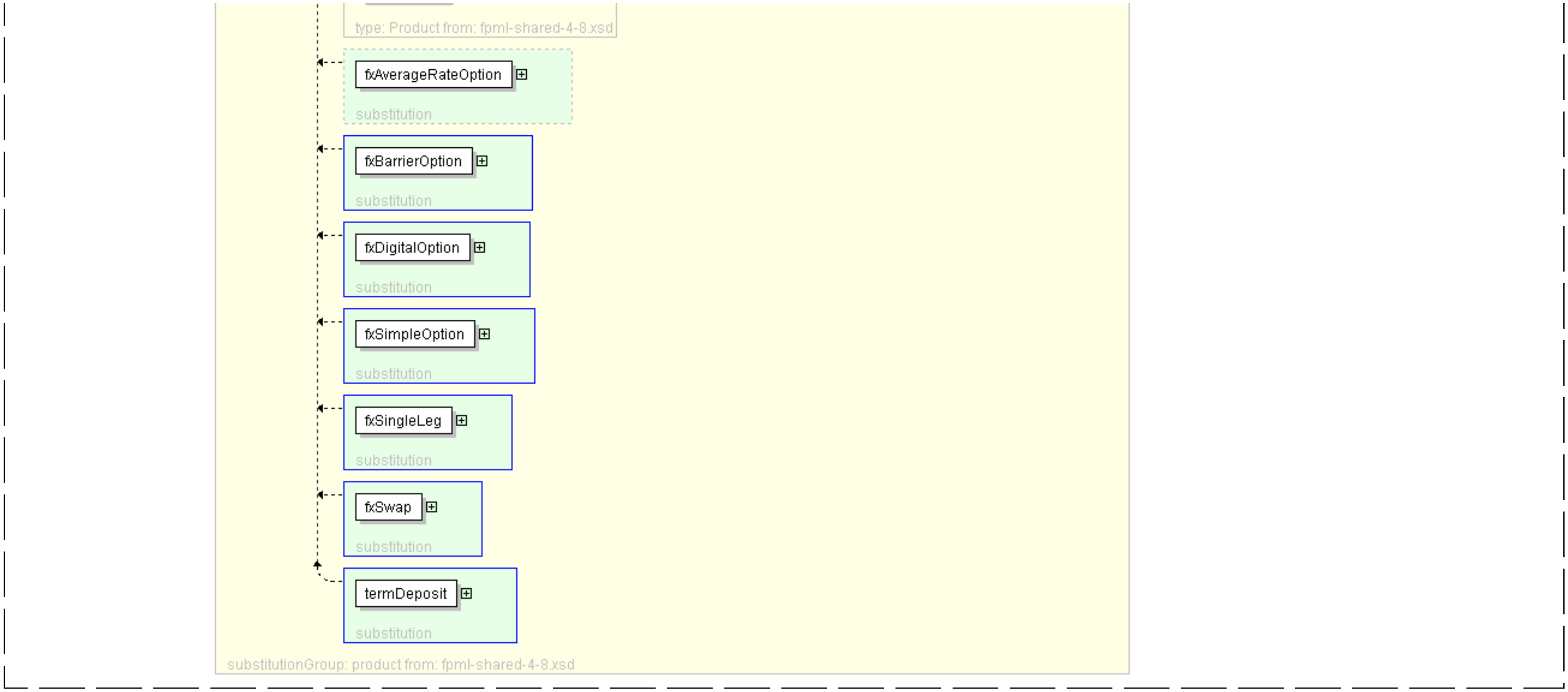
<observedRates> ObservedRates </observedRates> [0..*]

'Describes prior rate observations within average rate options. Periodically, an average rate option agreement will be struck whereby some rates have already been observed in the past but will become part of computation of the average rate of the option. This structure provides for these previously observed rates to be included in the description of the trade.'

</fxAverageRateOption>

Diagram


fxAverageRateOption
A component describing an FX Average Rate Option product.
FxAverageRateOption
A type that is used for an option whose payout is based on the average of the price of the underlying over a specific period of time. The payout is the difference between the predetermined, fixed strike price and the average of spot rates observed and is used for hedging against prevailing spot rates over a given time period.
extends: Product
BuyerSeller.model
expiryDateTime
exerciseStyle
fxOptionPremium
0..∞
valueDate
putCurrencyAmount
callCurrencyAmount
fxStrikePrice
spotRate
0..1
payoutCurrency
averageRateQuoteBasis
precision
0..1
payoutFormula
0..1
primaryRateSource
secondaryRateSource
0..1
fixingTime
averageRateObservationSchedule
averageRateObservationDate
1..∞
observedRates
0..∞
Product
base: Product from: fpml-shared-4-8.xsd
type: FxAverageRateOption
product
An abstract element used as a place holder for the substituting product elements.
Product



Schema Component Representation

```
<xsd:element name="fxAverageRateOption" type=" FxAverageRateOption
" substitutionGroup="product"/>
```

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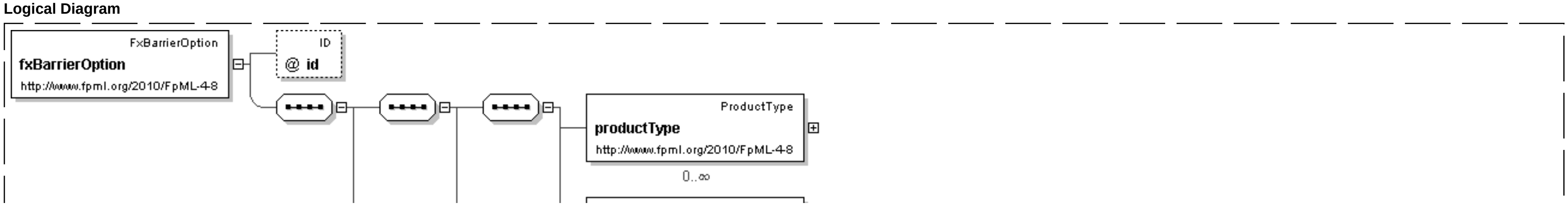
Element: fxBarrierOption

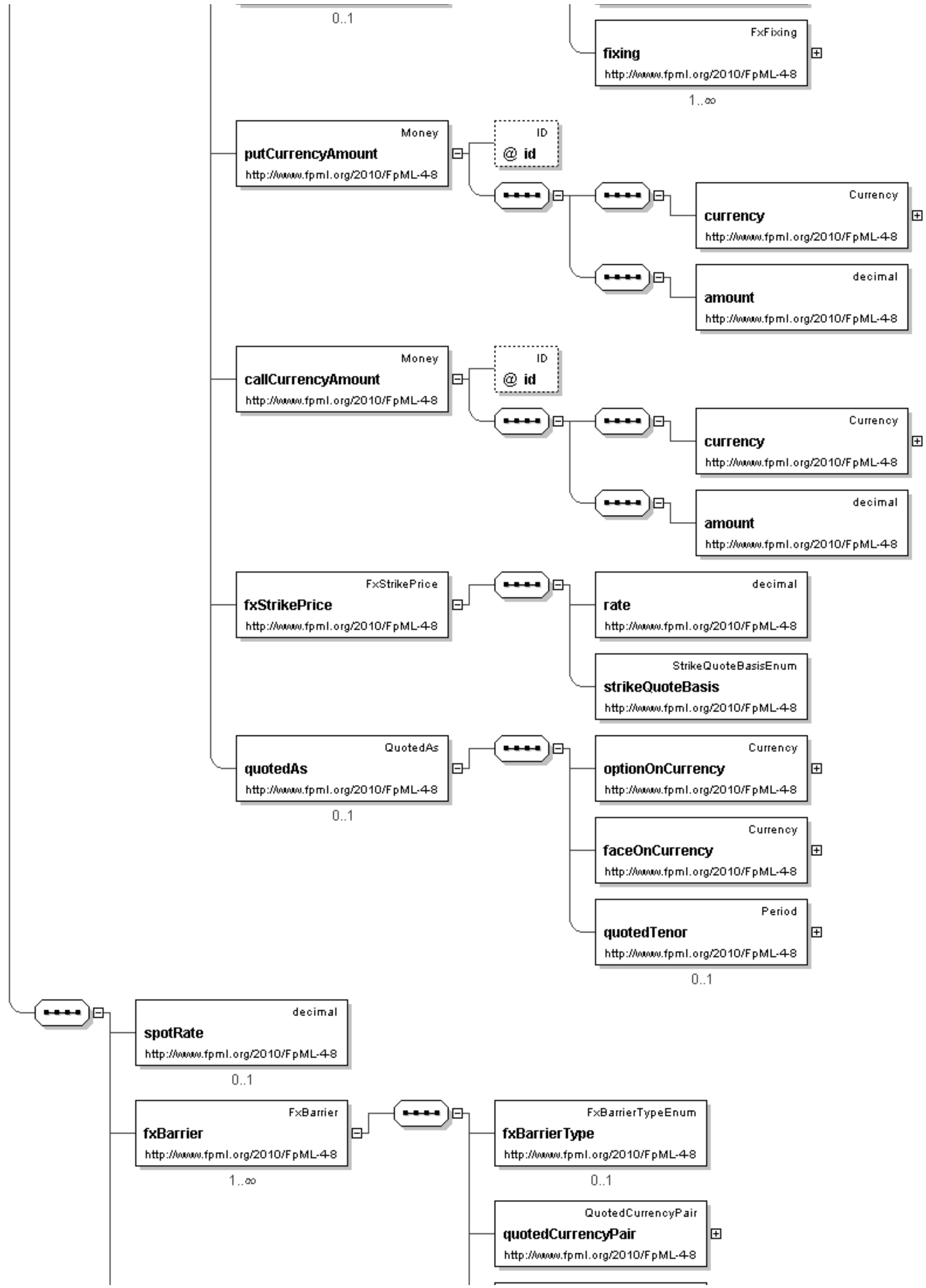
- *This element can be used wherever the following element is referenced:*
  - product

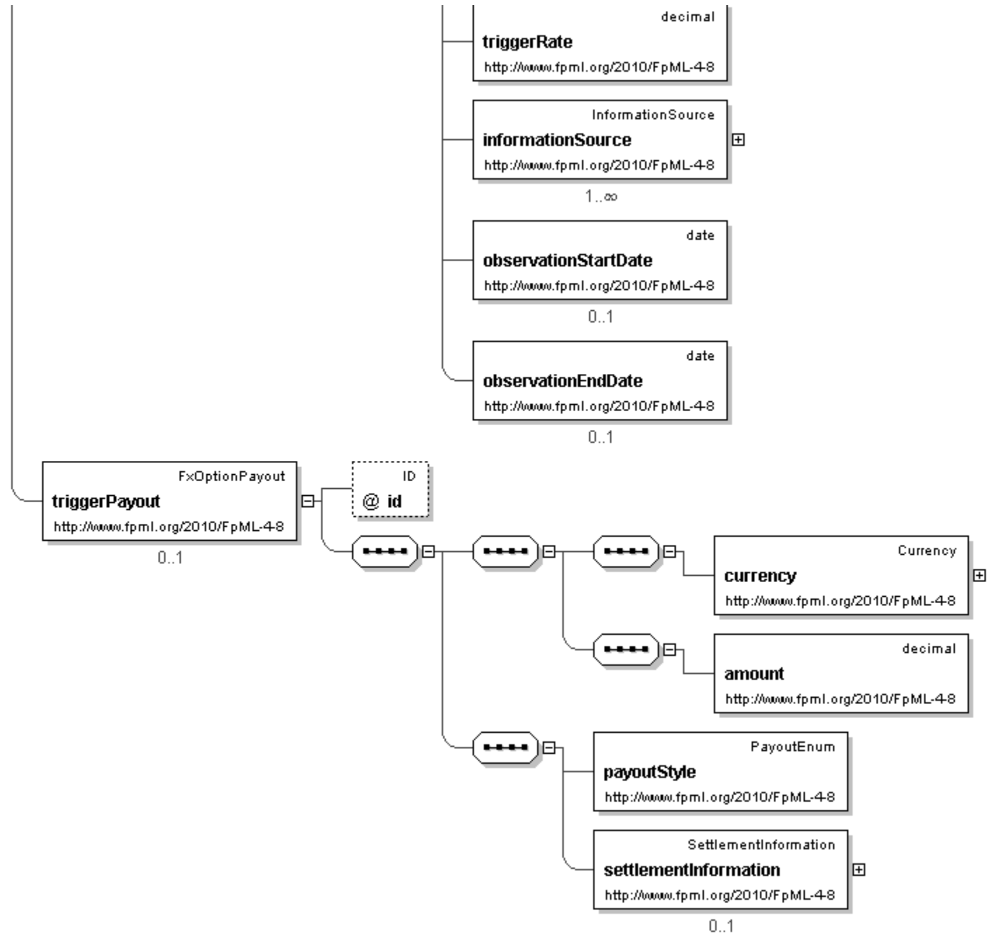
Name	fxBarrierOption
Type	FxBarrierOption
Nillable	no
Abstract	no
Documentation	A component describing a FX Barrier Option product.

Logical Diagram




ProductId
productId
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrTradeSideReference
buyerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrTradeSideReference
sellerPartyReference
http://www.fpml.org/2010/FpML-4-8
ExpiryDateTime
expiryDateTime
http://www.fpml.org/2010/FpML-4-8
date
expiryDate
http://www.fpml.org/2010/FpML-4-8
BusinessCenterTime
expiryTime
http://www.fpml.org/2010/FpML-4-8
CutName
cutName
http://www.fpml.org/2010/FpML-4-8
0..1
ExerciseStyleEnum
exerciseStyle
http://www.fpml.org/2010/FpML-4-8
FxOptionPremium
fxOptionPremium
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
premiumAmount
http://www.fpml.org/2010/FpML-4-8
date
premiumSettlementDate
http://www.fpml.org/2010/FpML-4-8
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
PremiumQuote
premiumQuote
http://www.fpml.org/2010/FpML-4-8
0..1
date
valueDate
http://www.fpml.org/2010/FpML-4-8
FxCashSettlement
cashSettlementTerms
http://www.fpml.org/2010/FpML-4-8
Currency
settlementCurrency
http://www.fpml.org/2010/FpML-4-8


0..1
FxFixing
fixing
http://www.fpml.org/2010/FpML-4-8
1..∞
Money
putCurrencyAmount
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
Money
callCurrencyAmount
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
FxStrikePrice
fxStrikePrice
http://www.fpml.org/2010/FpML-4-8
decimal
rate
http://www.fpml.org/2010/FpML-4-8
StrikeQuoteBasisEnum
strikeQuoteBasis
http://www.fpml.org/2010/FpML-4-8
QuotedAs
quotedAs
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
optionOnCurrency
http://www.fpml.org/2010/FpML-4-8
Currency
faceOnCurrency
http://www.fpml.org/2010/FpML-4-8
Period
quotedTenor
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
spotRate
http://www.fpml.org/2010/FpML-4-8
0..1
FxBarrier
fxBarrier
http://www.fpml.org/2010/FpML-4-8
1..∞
FxBarrierTypeEnum
fxBarrierType
http://www.fpml.org/2010/FpML-4-8
0..1
QuotedCurrencyPair
quotedCurrencyPair
http://www.fpml.org/2010/FpML-4-8



XML Instance Representation

```
<fxBarrierOption
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
```

'The date and time in a location of the option expiry. In the case of american options this is the latest possible expiry date and time.'

<exerciseStyle> ExerciseStyleEnum </exerciseStyle> [1]

'The manner in which the option can be exercised.'

<fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]

'Premium amount or premium installment amount for an option.'

<valueDate> xsd:date </valueDate> [1]

'The date on which both currencies traded will settle.'

<cashSettlementTerms> FxCashSettlement </cashSettlementTerms> [0..1]

'This optional element is only used if an option has been specified at execution time to be settled into a single cash payment. This would be used for a non-deliverable option.'

<putCurrencyAmount> Money </putCurrencyAmount> [1]

'The currency amount that the option gives the right to sell.'

<callCurrencyAmount> Money </callCurrencyAmount> [1]

'The currency amount that the option gives the right to buy.'

<fxStrikePrice> FxStrikePrice </fxStrikePrice> [1]

'TBA'

<quotedAs> QuotedAs </quotedAs> [0..1]

'Describes how the option was quoted.'

<spotRate> xsd:decimal </spotRate> [0..1]

'An optional element used for FX forwards and certain types of FX OTC options. For deals consumated in the FX Forwards Market, this represents the current market rate for a particular currency pair. For barrier and digital/binary options, it can be useful to include the spot rate at the time the option was executed to make it easier to know whether the option needs to move \"up\" or \"down\" to be triggered.'

<fxBarrier> FxBarrier </fxBarrier> [1..*]

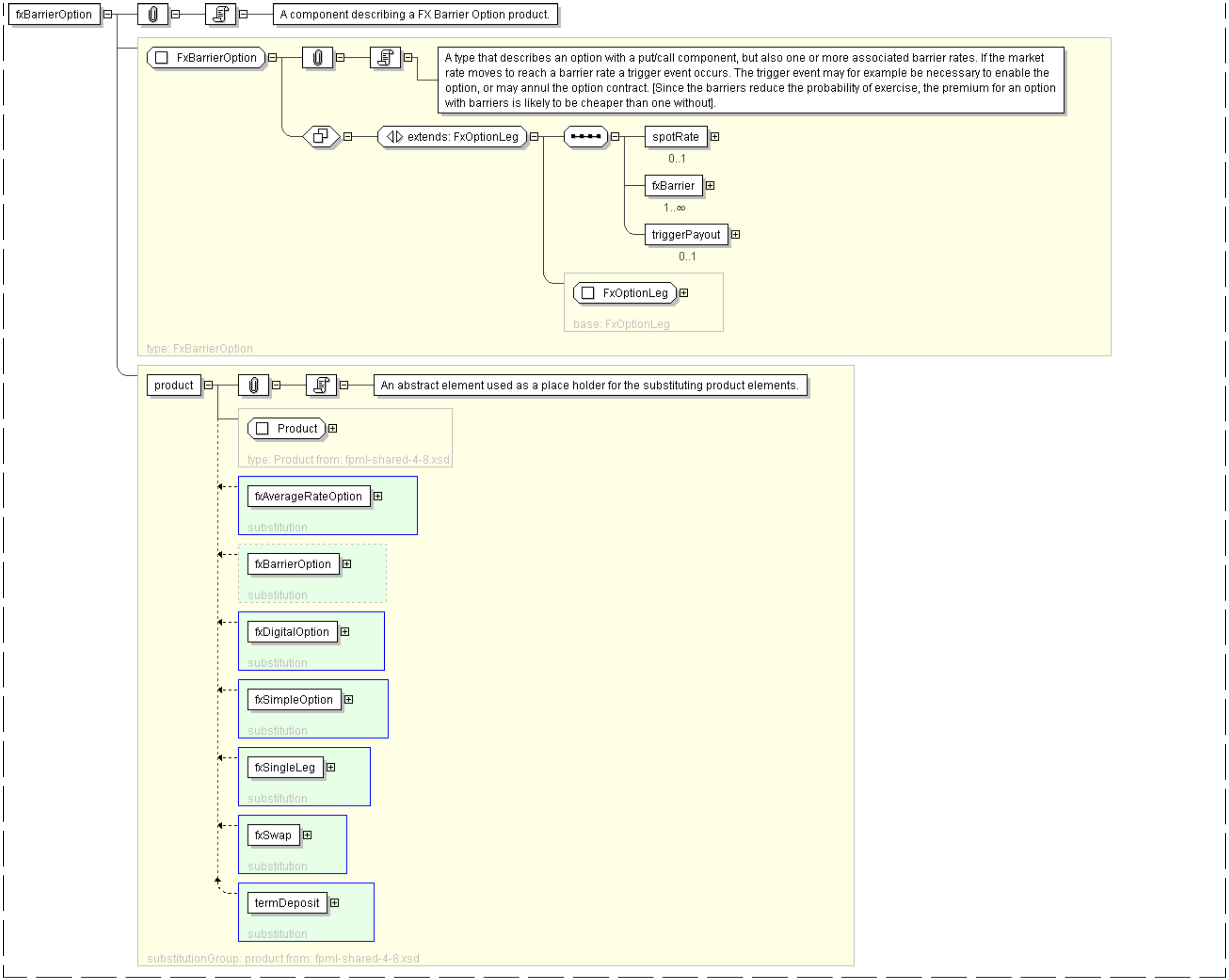
'Information about a barrier rate in a Barrier Option - specifying the exact criteria for a trigger event to occur.'

<triggerPayout> FxOptionPayout </triggerPayout> [0..1]

'The amount of currency which becomes payable if and when a trigger event occurs.'

</fxBarrierOption>

Diagram



Schema Component Representation

```
<xsd:element name="fxBarrierOption" type=" FxBarrierOption " substitutionGroup="product"/>
```

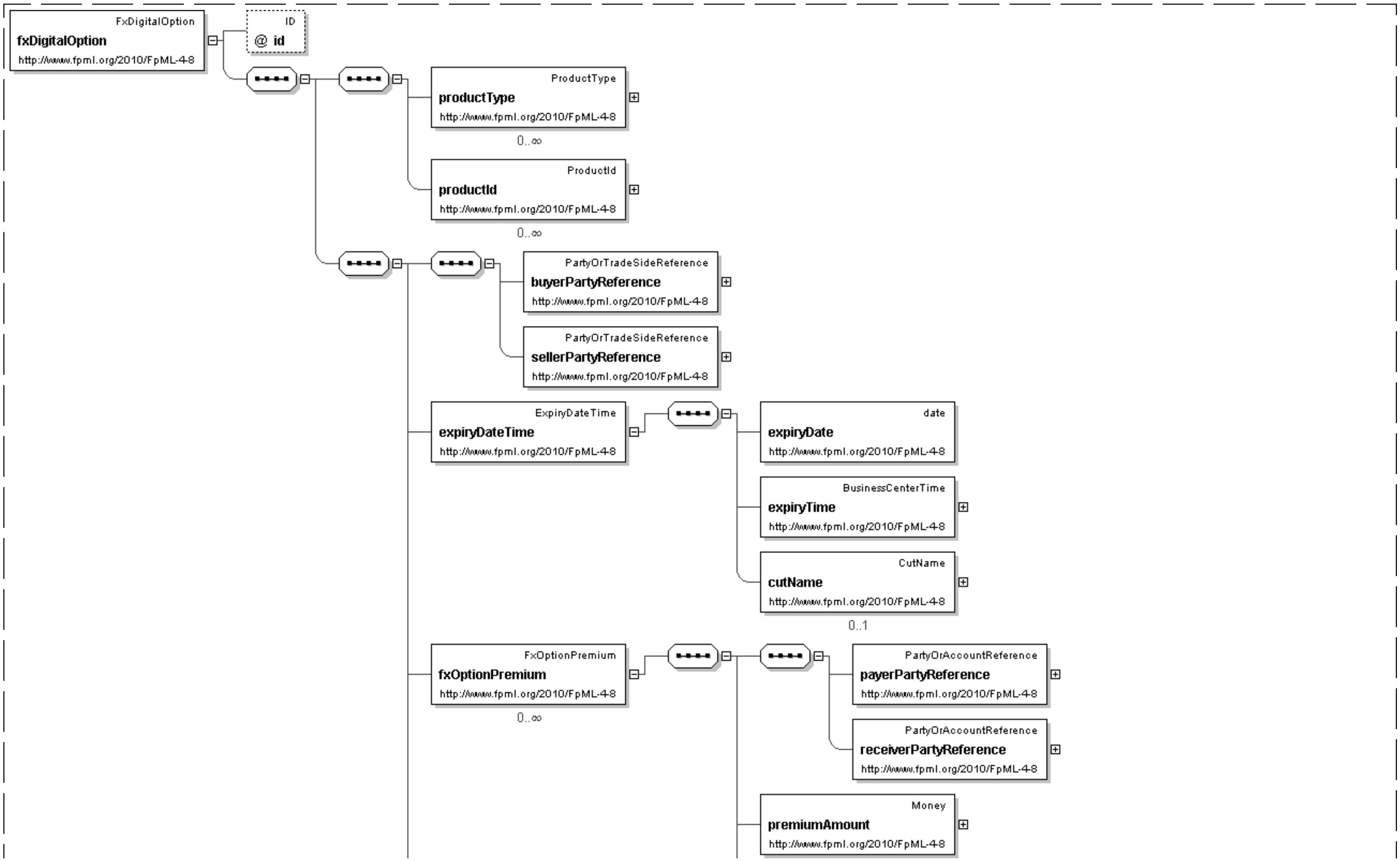
top

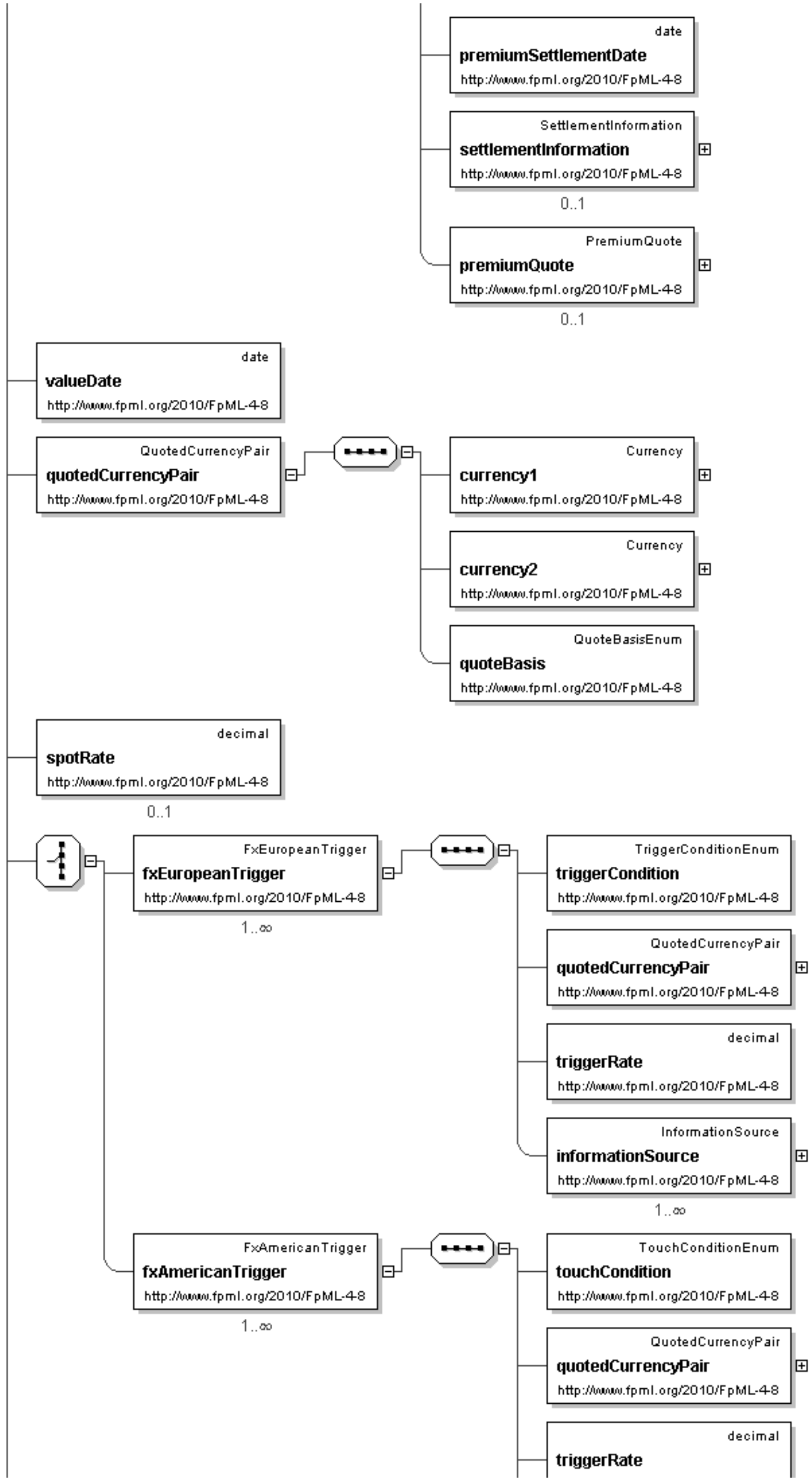
Element: fxDigitalOption

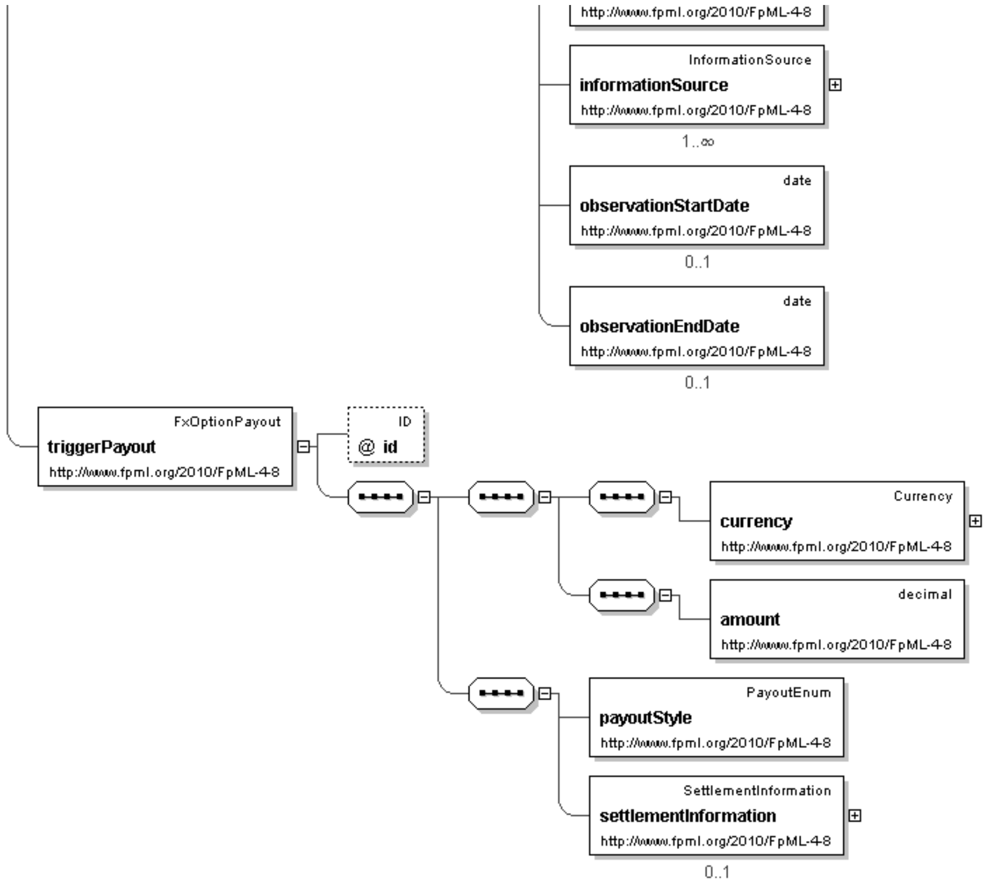
- *This element can be used wherever the following element is referenced:*
  - product

Name	fxDigitalOption
Type	FxDigitalOption
Nillable	no
Abstract	no
Documentation	A component describing a FX Digital Option product.

Logical Diagram




date
premiumSettlementDate
http://www.fpml.org/2010/FpML-4-8
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
PremiumQuote
premiumQuote
http://www.fpml.org/2010/FpML-4-8
0..1
date
valueDate
http://www.fpml.org/2010/FpML-4-8
QuotedCurrencyPair
quotedCurrencyPair
http://www.fpml.org/2010/FpML-4-8
Currency
currency1
http://www.fpml.org/2010/FpML-4-8
Currency
currency2
http://www.fpml.org/2010/FpML-4-8
QuoteBasisEnum
quoteBasis
http://www.fpml.org/2010/FpML-4-8
decimal
spotRate
http://www.fpml.org/2010/FpML-4-8
0..1
FxEuropeanTrigger
fxEuropeanTrigger
http://www.fpml.org/2010/FpML-4-8
1..∞
TriggerConditionEnum
triggerCondition
http://www.fpml.org/2010/FpML-4-8
QuotedCurrencyPair
quotedCurrencyPair
http://www.fpml.org/2010/FpML-4-8
decimal
triggerRate
http://www.fpml.org/2010/FpML-4-8
InformationSource
informationSource
http://www.fpml.org/2010/FpML-4-8
1..∞
FxAmericanTrigger
fxAmericanTrigger
http://www.fpml.org/2010/FpML-4-8
1..∞
TouchConditionEnum
touchCondition
http://www.fpml.org/2010/FpML-4-8
QuotedCurrencyPair
quotedCurrencyPair
http://www.fpml.org/2010/FpML-4-8
decimal
triggerRate



XML Instance Representation

<fxDigitalOption
id=" xsd:ID [0..1]">

<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<expiryDateTime> ExpiryDateTime </expiryDateTime> [1]

'The date and time in a location of the option expiry. In the case of american options this is the latest possible expiry date and time.'

<fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]

'Premium amount or premium installment amount for an option.'

<valueDate> xsd:date </valueDate> [1]

'The date on which both currencies traded will settle.'

<quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]

'Defines the two currencies for an FX trade and the quotation relationship between the two currencies.'

<spotRate> xsd:decimal </spotRate> [0..1]

'An optional element used for FX forwards and certain types of FX OTC options. For deals consumated in the FX Forwards Market, this represents the current market rate for a particular currency pair. For barrier and digital/binary options, it can be useful to include the spot rate at the time the option was executed to make it easier to know whether the option needs to move \"up\" or \"down\" to be triggered.'

Start Choice [1]

<fxEuropeanTrigger> FxEuropeanTrigger </fxEuropeanTrigger> [1..*]

'A European trigger occurs if the trigger criteria are met, but these are valid (and an observation is made) only at the maturity of the option.'

<fxAmericanTrigger> FxAmericanTrigger </fxAmericanTrigger> [1..*]

'An American trigger occurs if the trigger criteria are met at any time from the initiation to the maturity of the option.'

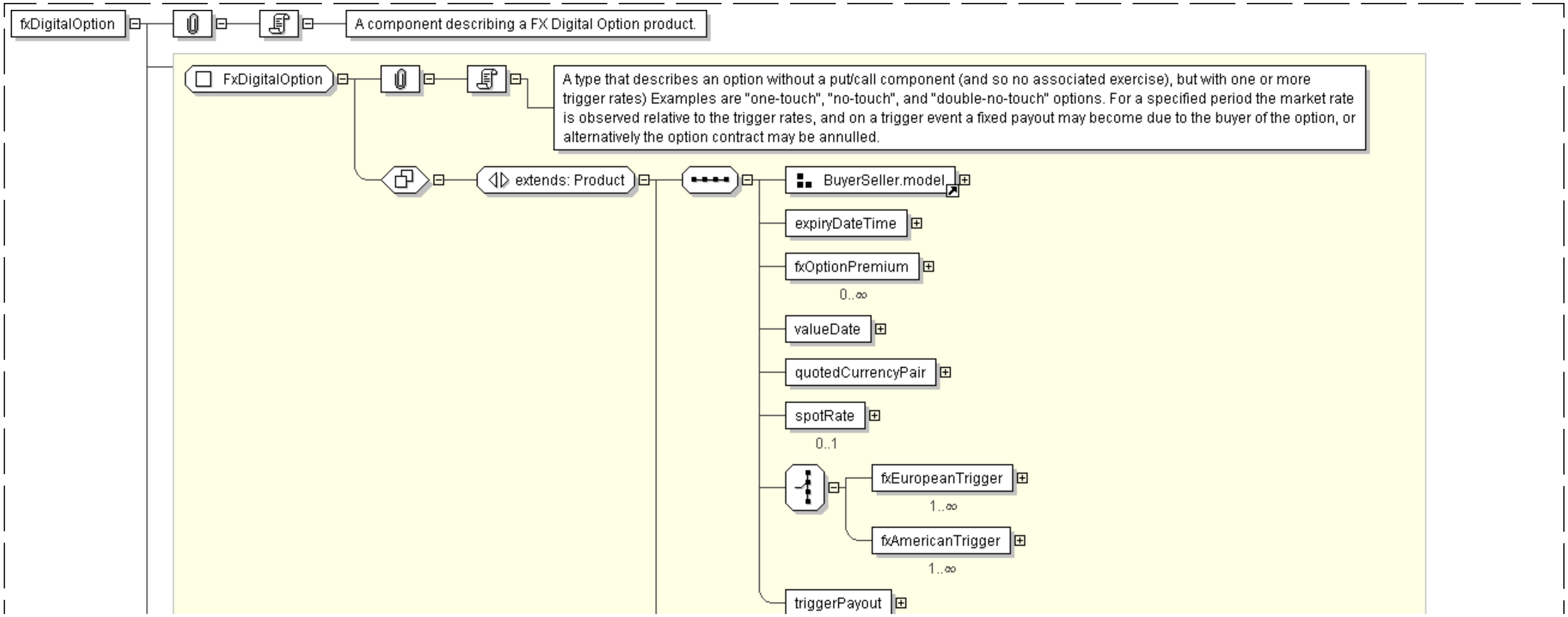
End Choice

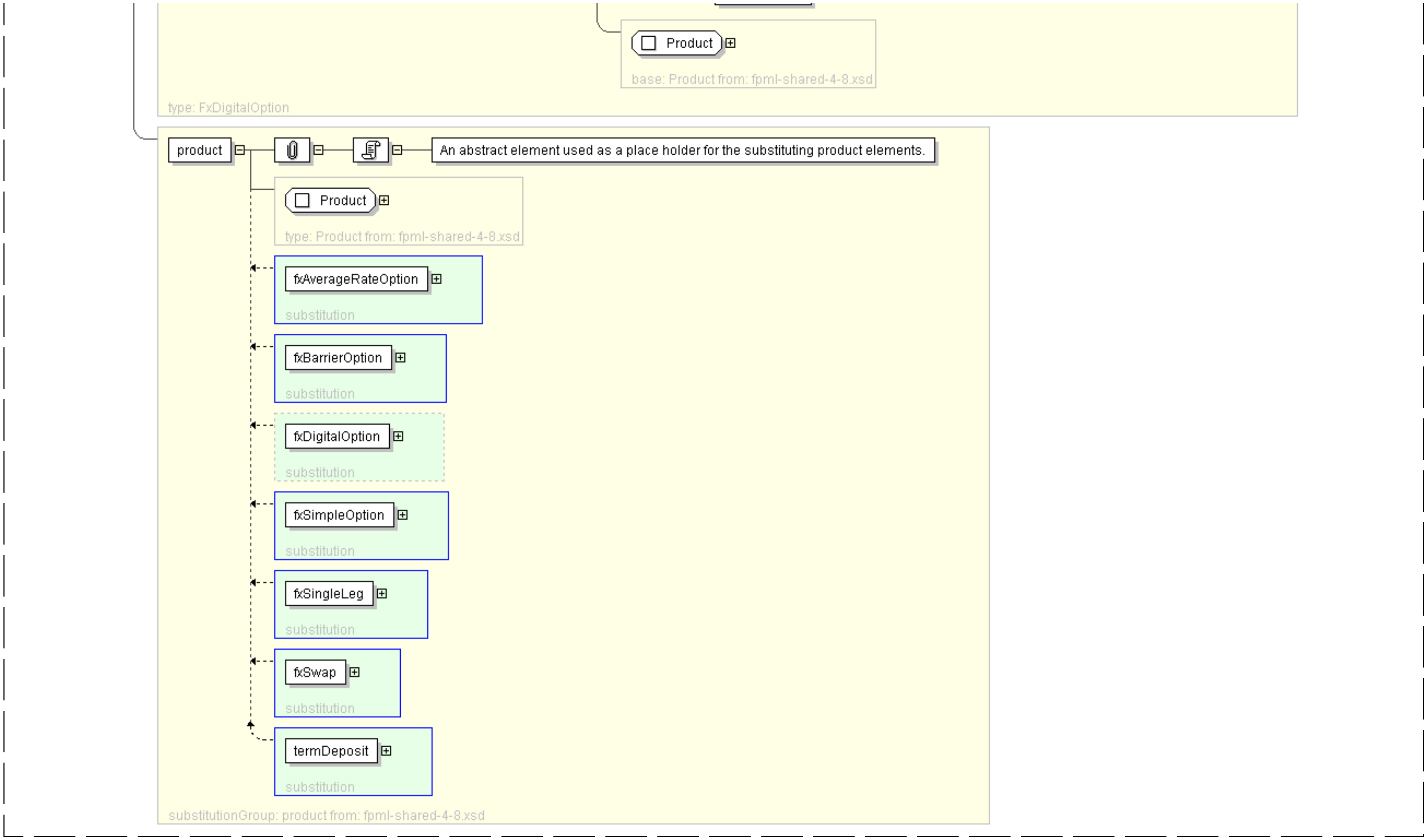
<triggerPayout> FxOptionPayout </triggerPayout> [1]

'The amount of currency which becomes payable if and when a trigger event occurs.'

</fxDigitalOption>

Diagram





Schema Component Representation

```
<xsd:element name="fxDigitalOption" type=" FxDigitalOption " substitutionGroup="product"/>
```

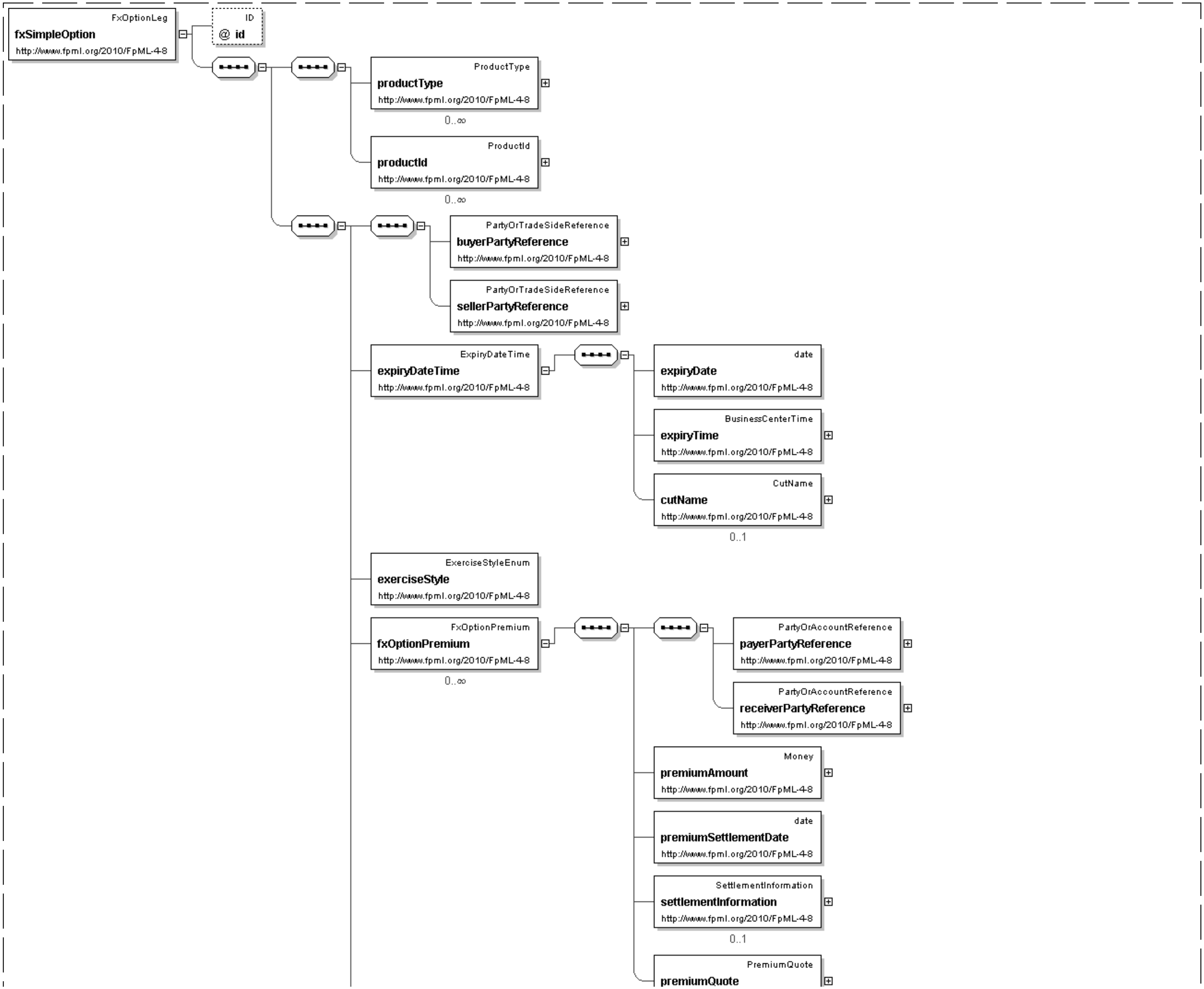
top

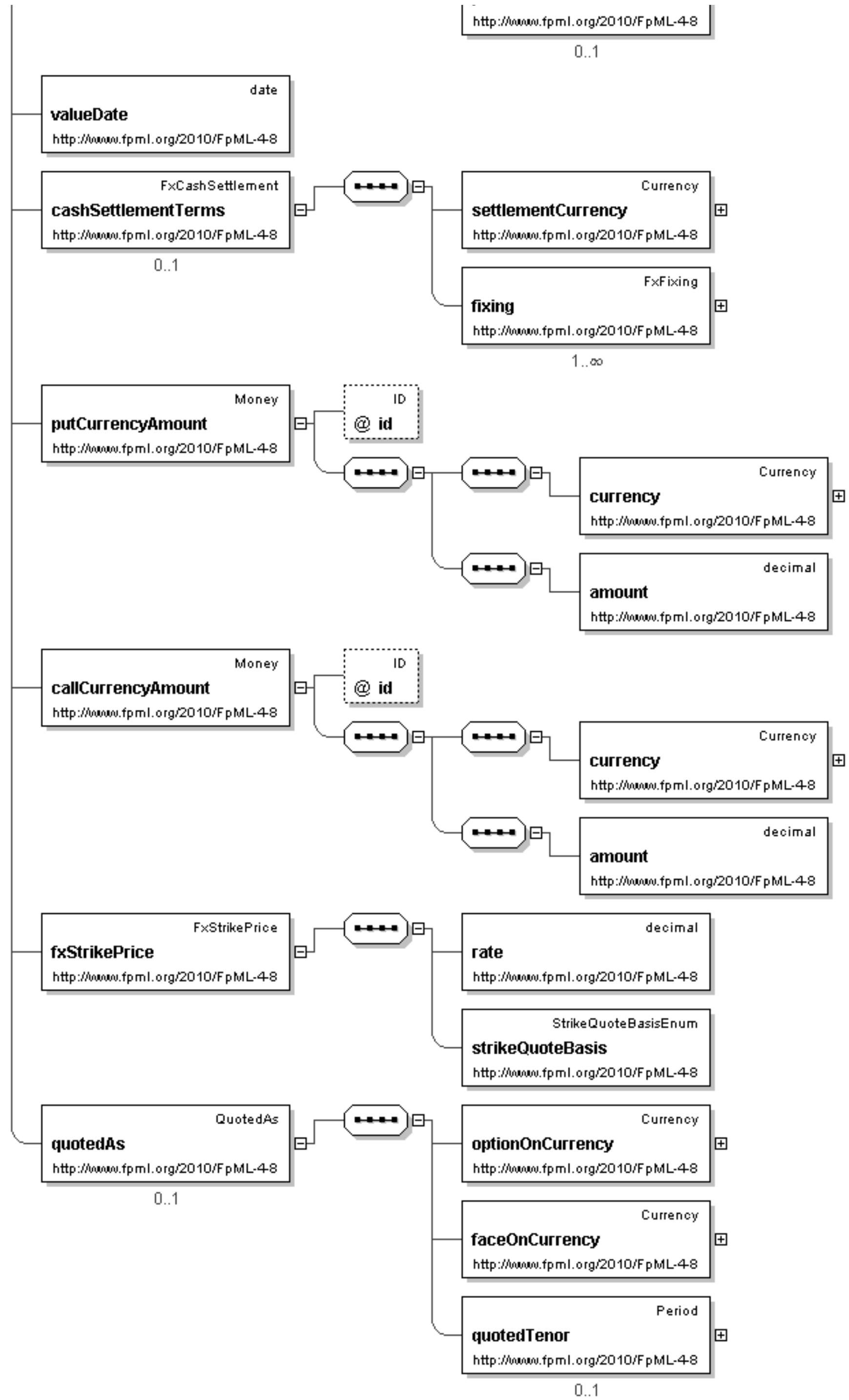
Element: fxSimpleOption

- *This element can be used wherever the following element is referenced:*
  - product

Name	fxSimpleOption
Type	FxOptionLeg
Nillable	no
Abstract	no
Documentation	A component describing a FX Simple Option product

Logical Diagram



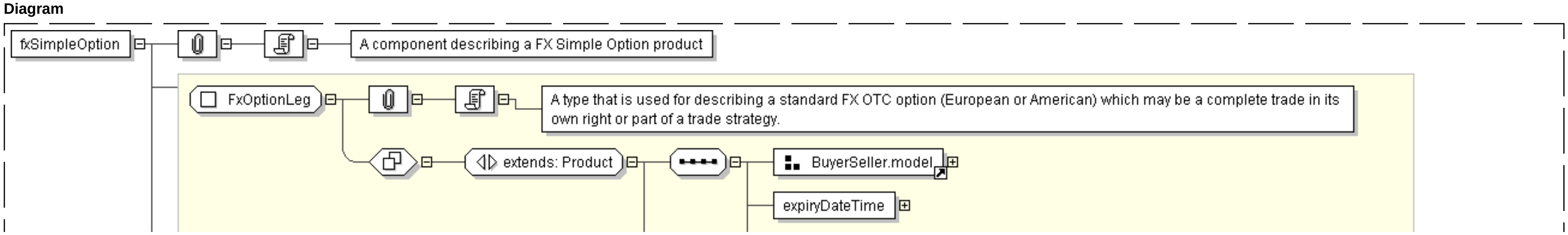


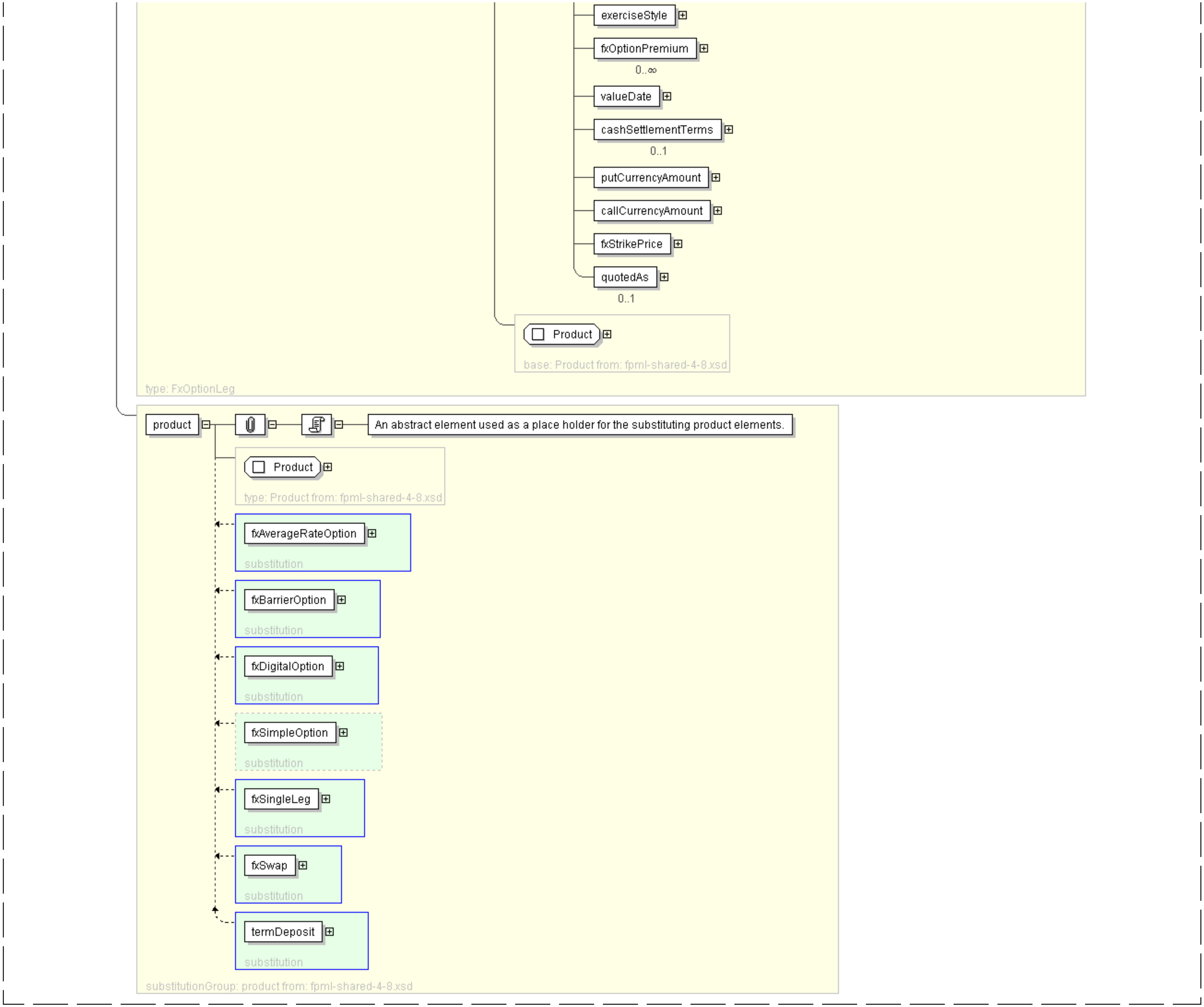
XML Instance Representation

```
<fxSimpleOption
```

```
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
    'The date and time in a location of the option expiry. In the case of american options this
    is the latest possible expiry date and time.'

    <exerciseStyle> ExerciseStyleEnum </exerciseStyle> [1]
    'The manner in which the option can be exercised.'

    <fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]
    'Premium amount or premium installment amount for an option.'

    <valueDate> xsd:date </valueDate> [1]
    'The date on which both currencies traded will settle.'

    <cashSettlementTerms> FxCashSettlement </cashSettlementTerms> [0..1]
    'This optional element is only used if an option has been specified at execution time to
    be settled into a single cash payment. This would be used for a non-deliverable option.'

    <putCurrencyAmount> Money </putCurrencyAmount> [1]
    'The currency amount that the option gives the right to sell.'

    <callCurrencyAmount> Money </callCurrencyAmount> [1]
    'The currency amount that the option gives the right to buy.'

    <fxStrikePrice> FxStrikePrice </fxStrikePrice> [1]
    'TBA'

    <quotedAs> QuotedAs </quotedAs> [0..1]
    'Describes how the option was quoted.'

</fxSimpleOption>
```

Diagram




exerciseStyle
fxOptionPremium
0..∞
valueDate
cashSettlementTerms
0..1
putCurrencyAmount
callCurrencyAmount
fxStrikePrice
quotedAs
0..1
Product
base: Product from: fpml-shared-4-8.xsd
type: FxOptionLeg
product
An abstract element used as a place holder for the substituting product elements.
Product
type: Product from: fpml-shared-4-8.xsd
fxAverageRateOption
substitution
fxBarrierOption
substitution
fxDigitalOption
substitution
fxSimpleOption
substitution
fxSingleLeg
substitution
fxSwap
substitution
termDeposit
substitution
substitutionGroup: product from: fpml-shared-4-8.xsd

Schema Component Representation

```
<xsd:element name="fxSimpleOption" type=" FxOptionLeg " substitutionGroup="product"/>
```

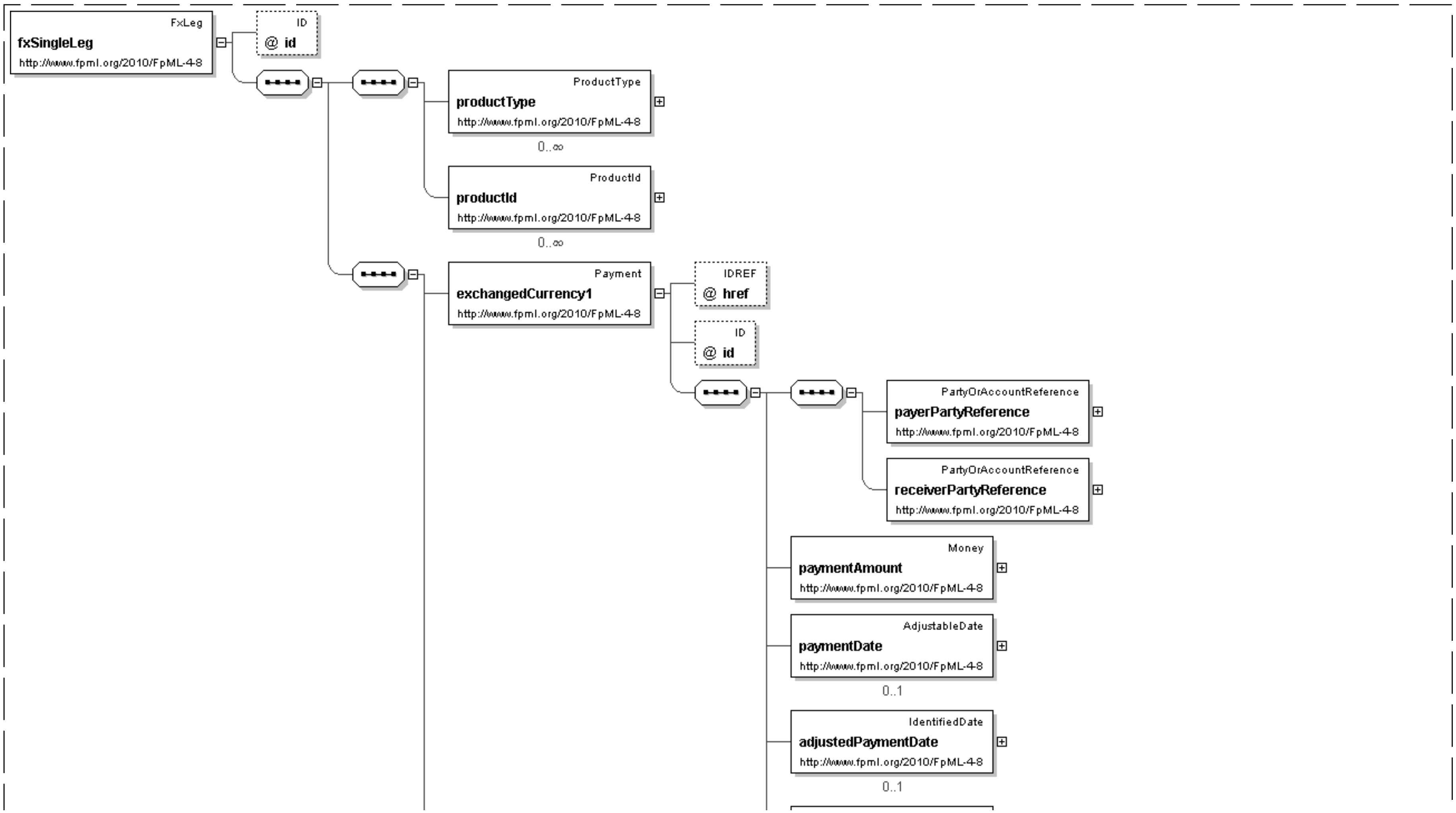
top

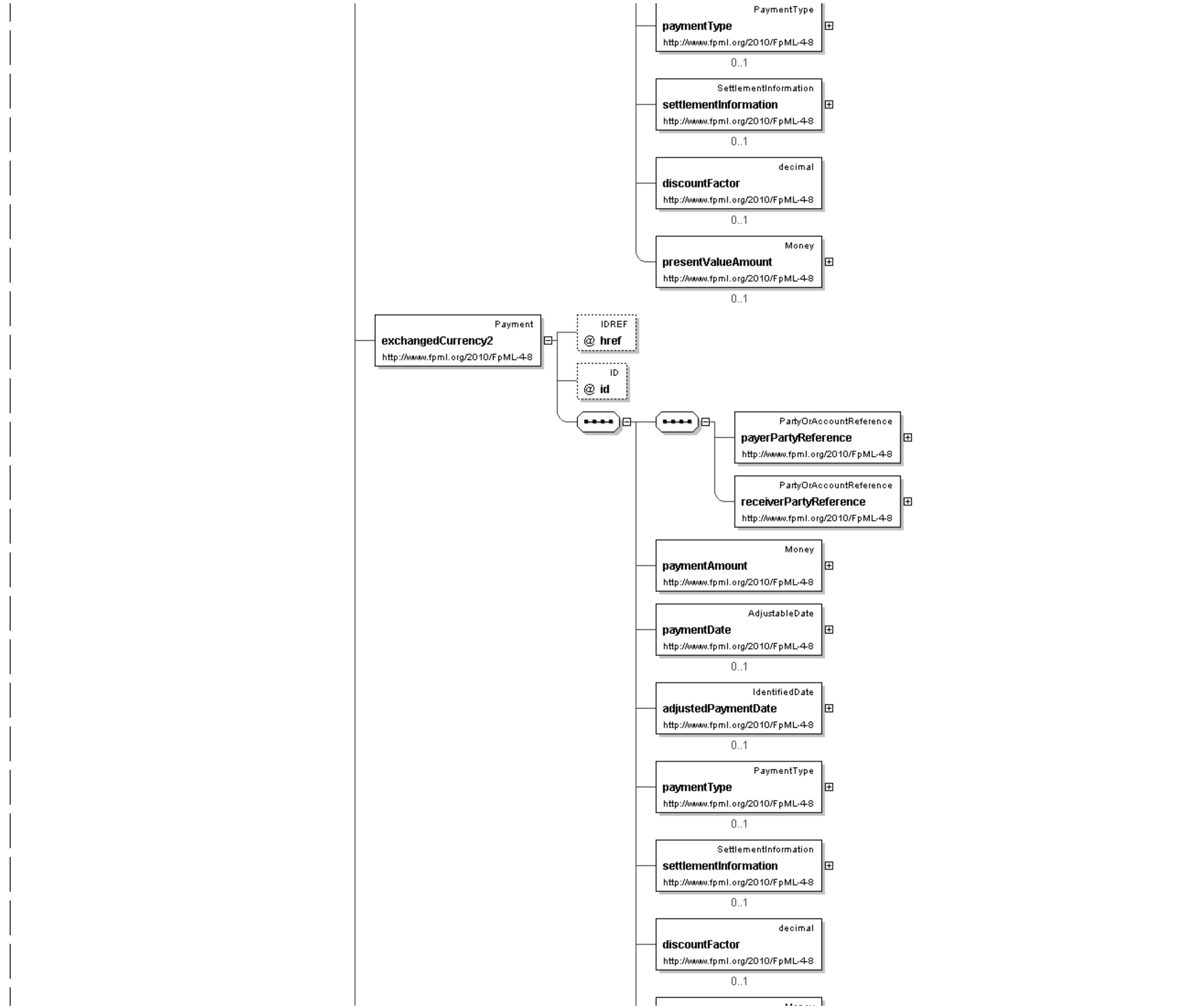
Element: fxSingleLeg

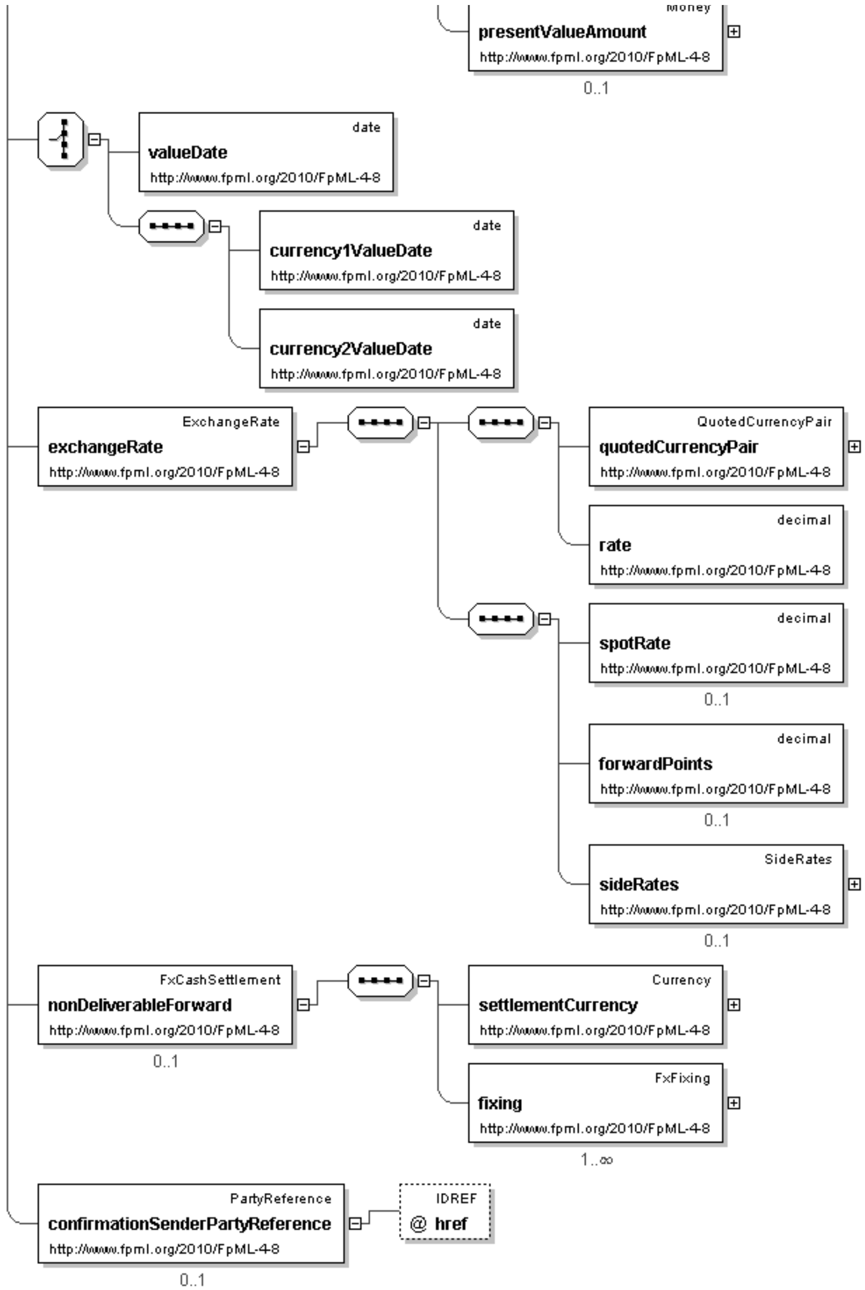
- *This element can be used wherever the following element is referenced:*
  - product

Name	fxSingleLeg
Used by (from the same schema document)	Complex Type **FxSwap**
Type	FxLeg
Nillable	no
Abstract	no
Documentation	A single-legged FX transaction definition (e.g., spot or forward).

Logical Diagram




PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1
Money
presentValueAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Payment
exchangedCurrency2
http://www.fpml.org/2010/FpML-4-8
IDREF
@ href
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
paymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableDate
paymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
adjustedPaymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<fxSingleLeg
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
```

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<exchangedCurrency1> Payment </exchangedCurrency1> [1]

'This is the first of the two currency flows that define a single leg of a standard foreign exchange transaction.'

<exchangedCurrency2> Payment </exchangedCurrency2> [1]

'This is the second of the two currency flows that define a single leg of a standard foreign exchange transaction.'

Start Choice [1]

<valueDate> xsd:date </valueDate> [1]

'The date on which both currencies traded will settle.'

<currency1ValueDate> xsd:date </currency1ValueDate> [1]

'The date on which the currency1 amount will be settled. To be used in a split value date scenario.'

<currency2ValueDate> xsd:date </currency2ValueDate> [1]

'The date on which the currency2 amount will be settled. To be used in a split value date scenario.'

End Choice

<exchangeRate> ExchangeRate </exchangeRate> [1]

'The rate of exchange between the two currencies.'

<nonDeliverableForward> FxCashSettlement </nonDeliverableForward> [0..1]

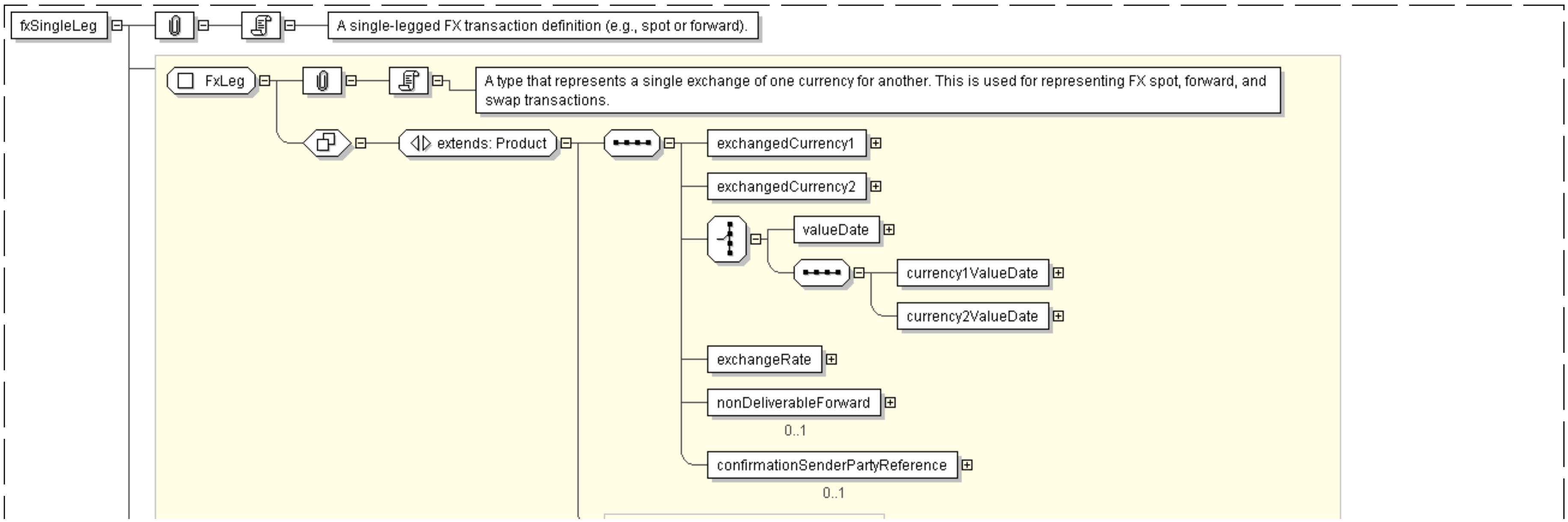
'Used to describe a particular type of FX forward transaction that is settled in a single currency.'

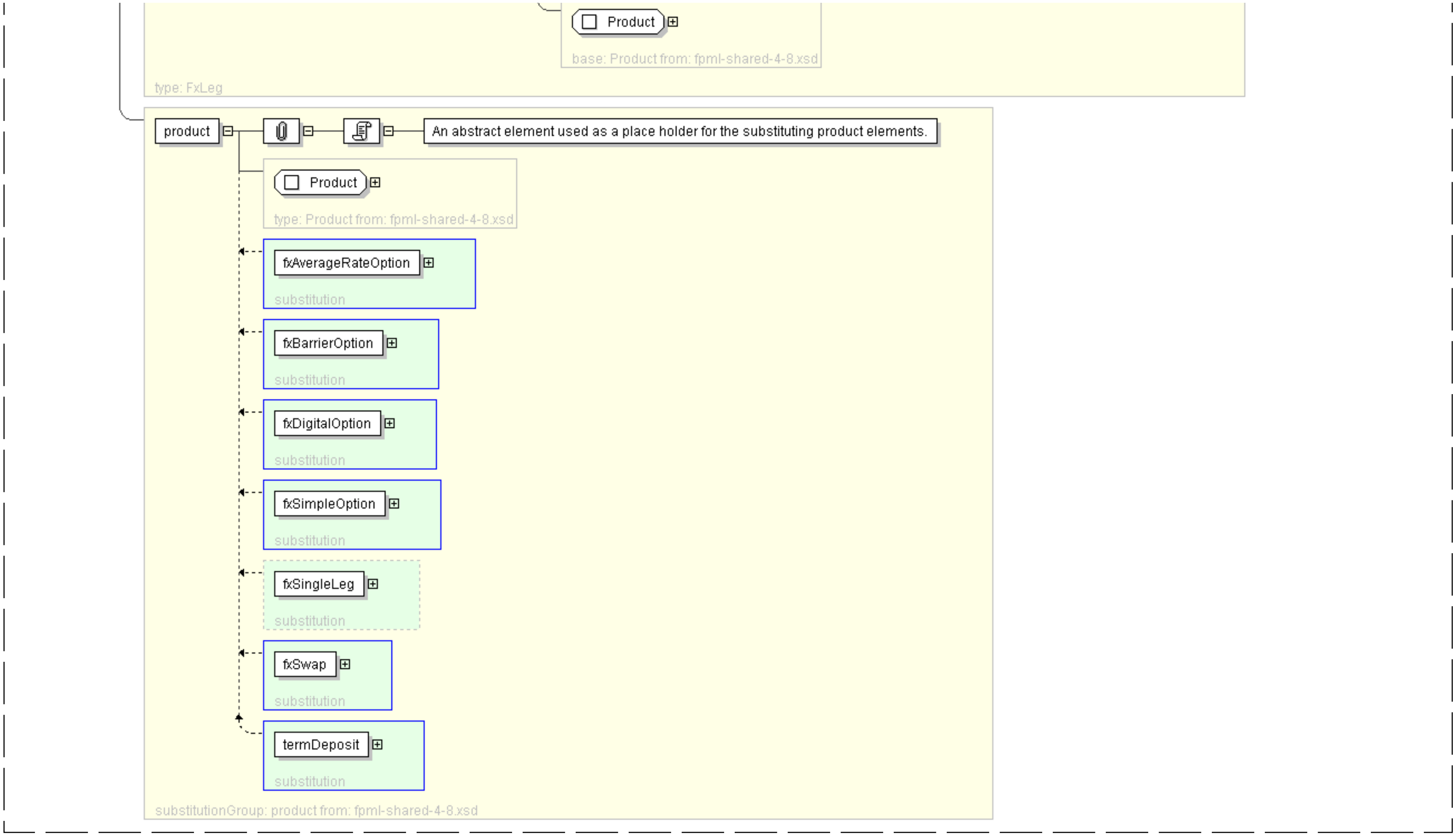
<confirmationSenderPartyReference> PartyReference </confirmationSenderPartyReference> [0..1]

'A reference to the party that is sending the current document as a confirmation of the trade.'

</fxSingleLeg>

Diagram





Schema Component Representation

```
<xsd:element name="fxSingleLeg" type=" FxLeg " substitutionGroup="product"/>
```

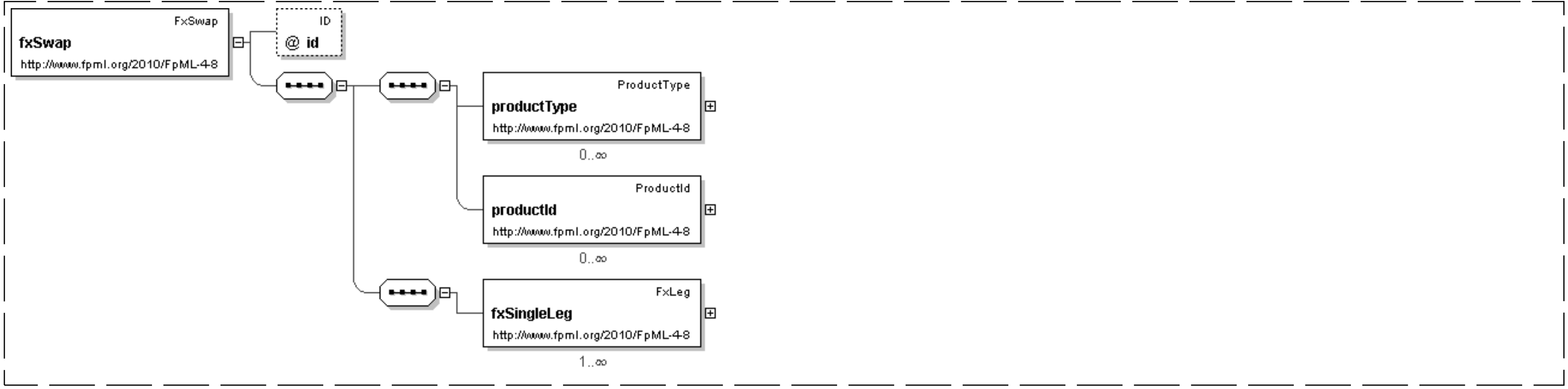
top

Element: fxSwap

- *This element can be used wherever the following element is referenced:*
  - product

Name	fxSwap
Type	FxSwap
Nillable	no
Abstract	no
Documentation	A component describing a FX Swap product.

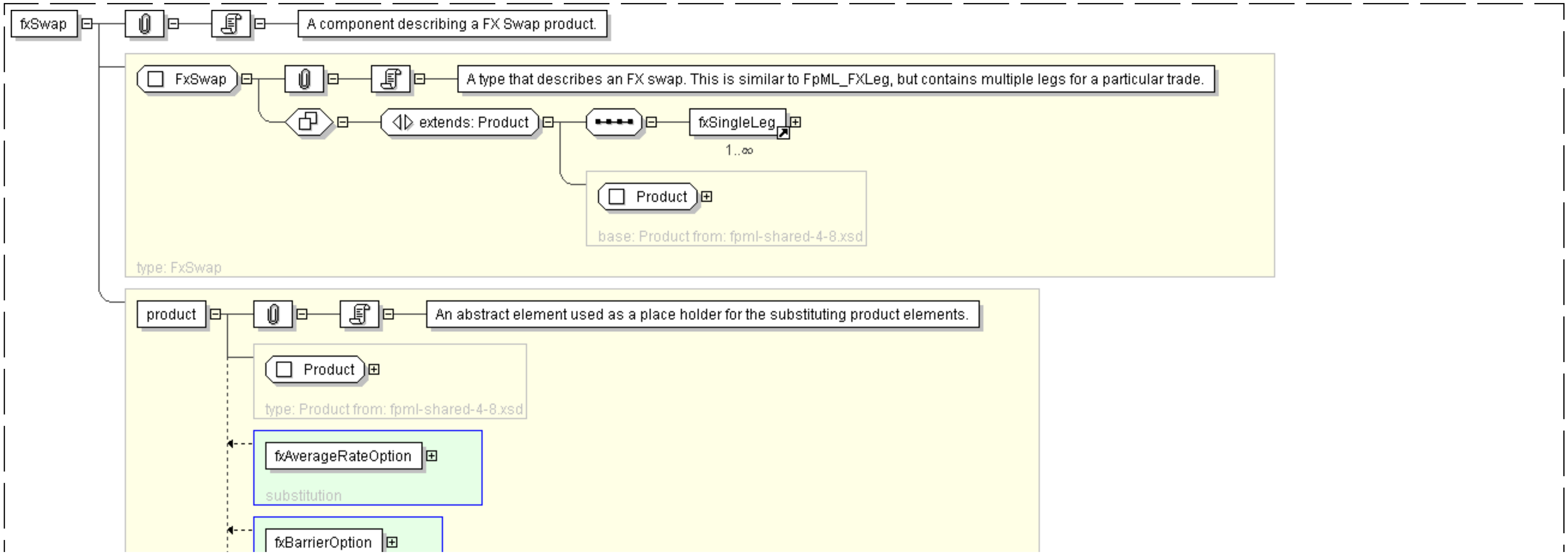
Logical Diagram



XML Instance Representation

```
<fxSwap
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <fxSingleLeg> ... </fxSingleLeg> [1..*]
</fxSwap>
```

Diagram



Schema Component Representation

```
<xsd:element name="fxSwap" type=" FxSwap " substitutionGroup="product"/>
```

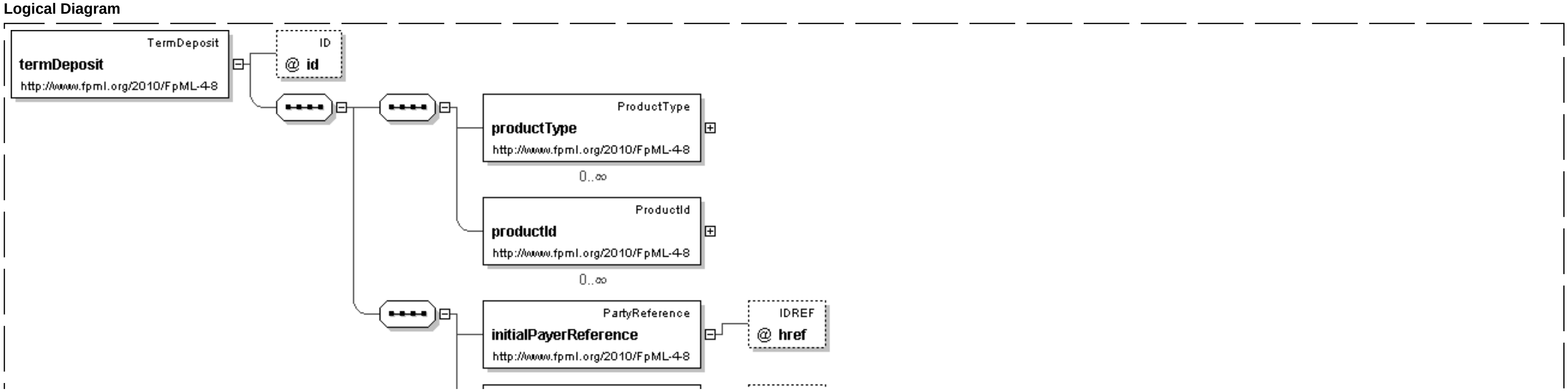
[top](#)

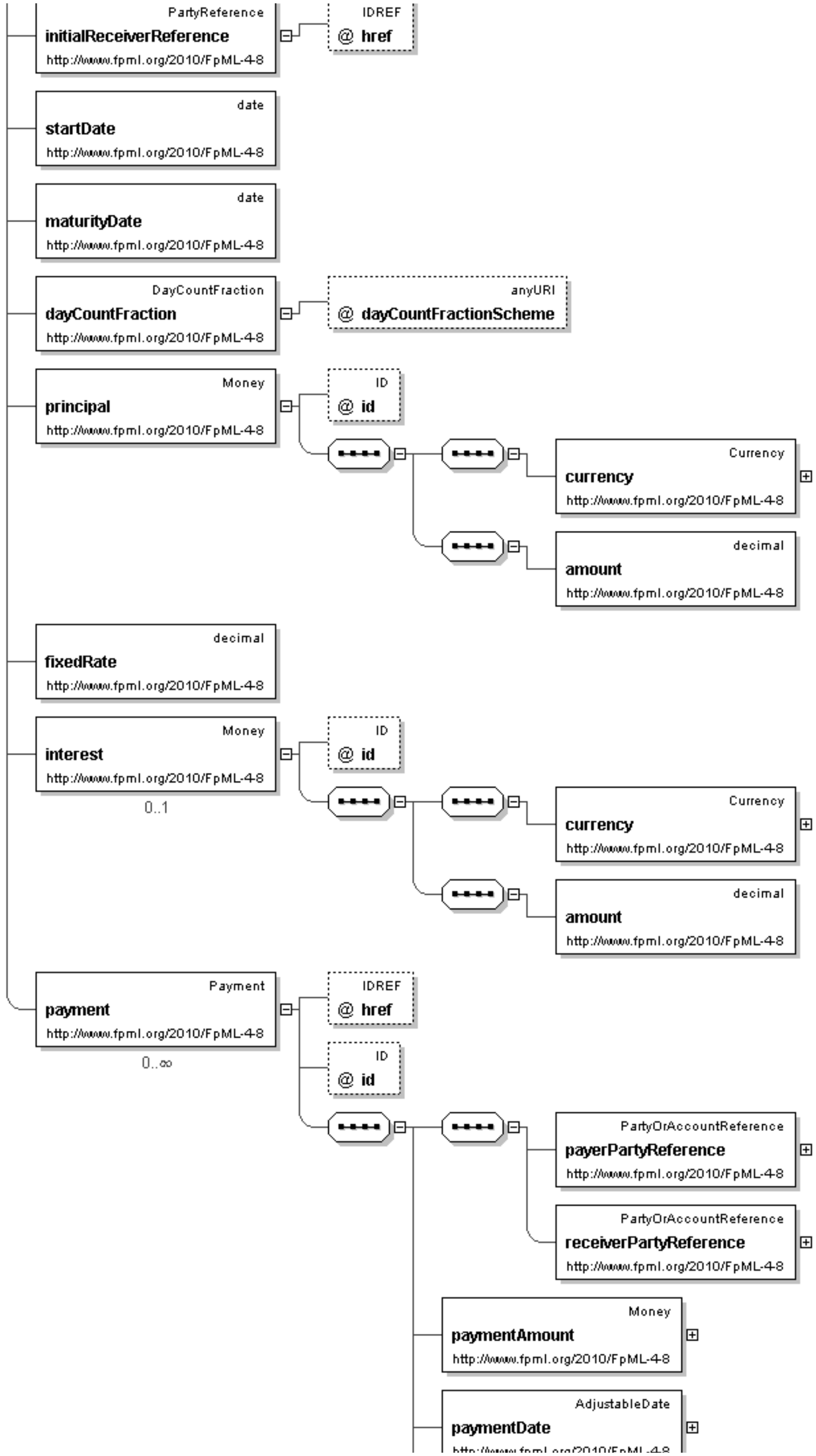
Element: termDeposit

- *This element can be used wherever the following element is referenced:*
  - product

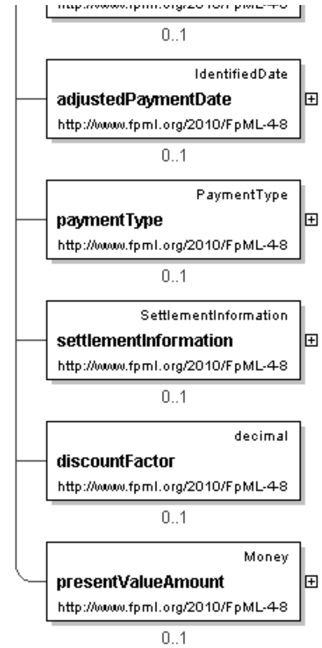
Name	termDeposit
Type	TermDeposit
Nillable	no
Abstract	no
Documentation	A term deposit product definition.

Logical Diagram





PartyReference
initialReceiverReference
http://www.fpml.org/2010/FpML-4-8
IDREF
@ href
date
startDate
http://www.fpml.org/2010/FpML-4-8
date
maturityDate
http://www.fpml.org/2010/FpML-4-8
DayCountFraction
dayCountFraction
http://www.fpml.org/2010/FpML-4-8
anyURI
@ dayCountFractionScheme
Money
principal
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
decimal
fixedRate
http://www.fpml.org/2010/FpML-4-8
Money
interest
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
Payment
payment
http://www.fpml.org/2010/FpML-4-8
0..∞
IDREF
@ href
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
paymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableDate
paymentDate



XML Instance Representation

<termDeposit
id=" xsd:ID [0..1]">

<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<initialPayerReference> PartyReference </initialPayerReference> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. The party referenced is the payer of the initial principal of the deposit on the start date.'

<initialReceiverReference> PartyReference </initialReceiverReference> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. The party is the receiver of the initial principal of the deposit on the start date.'

<startDate> xsd:date </startDate> [1]

'The averaging period start date.'

<maturityDate> xsd:date </maturityDate> [1]

'The end date of the calculation period. This date should already be adjusted for any applicable business day convention.'

<dayCountFraction> DayCountFraction </dayCountFraction> [1]

'The day count fraction.'

<principal> Money </principal> [1]

'The principal amount of the trade.'

<fixedRate> xsd:decimal </fixedRate> [1]

'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate of 5% would be represented as 0.05.'

<interest> Money </interest> [0..1]

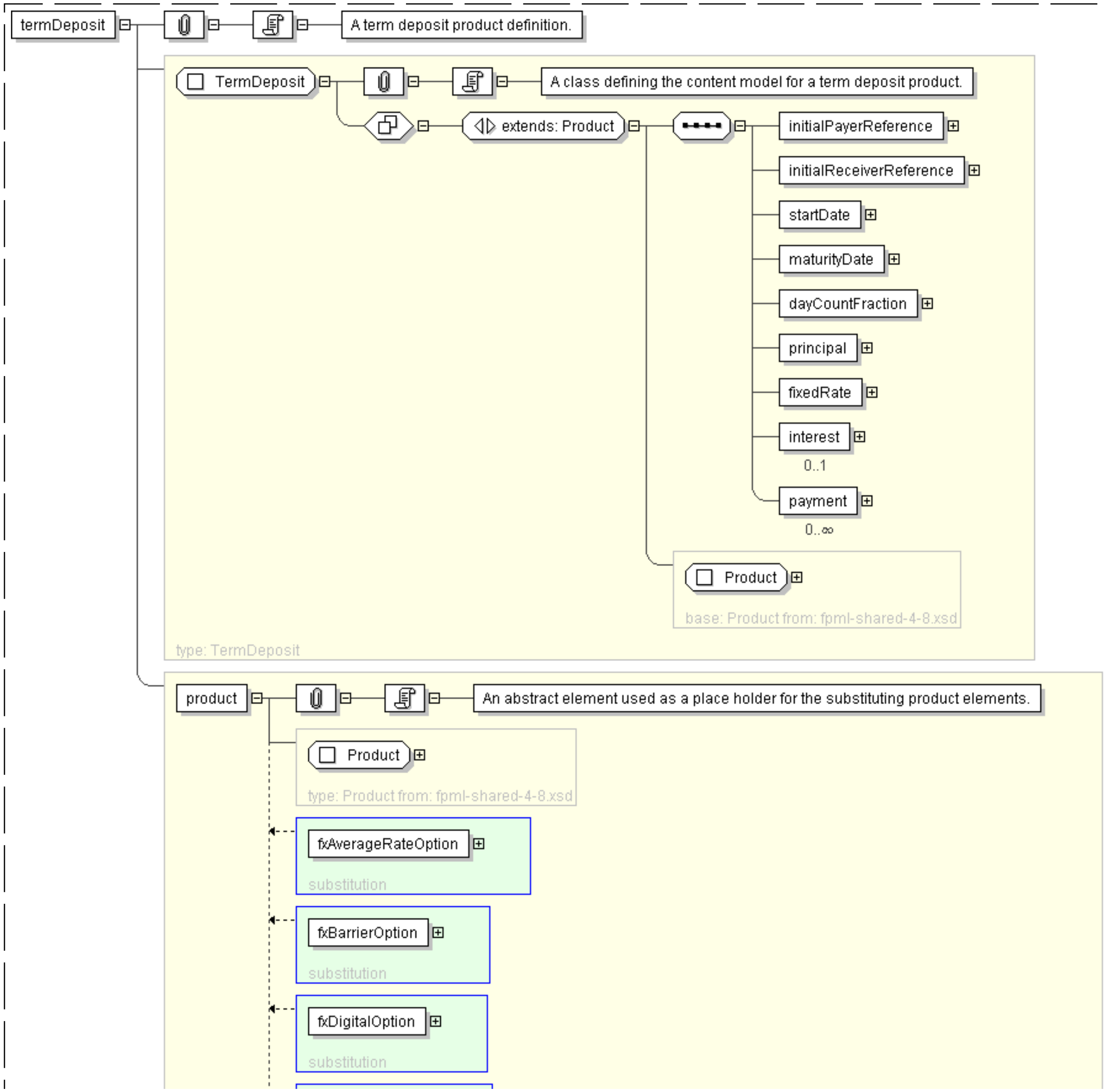
'The total interest of at maturity of the trade.'

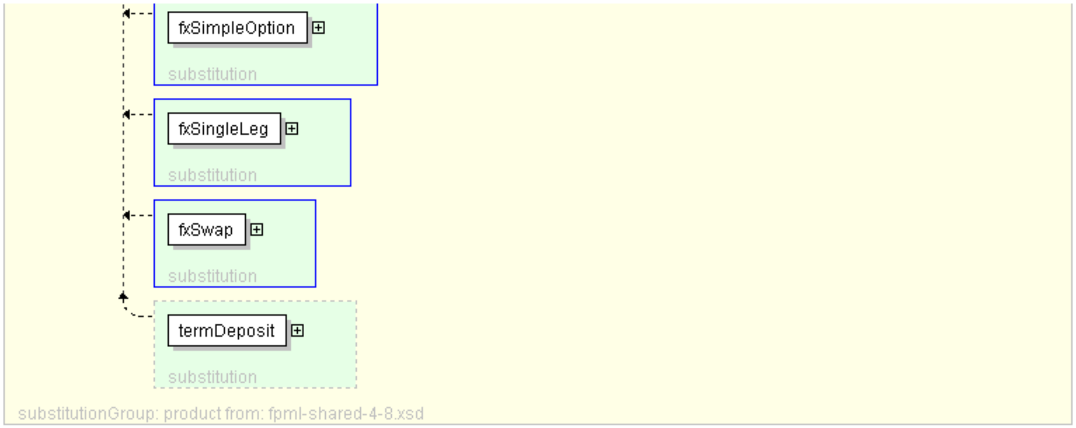
<payment> Payment </payment> [0..*]

'A known payment between two parties.'

</termDeposit>

Diagram





Schema Component Representation

```
<xsd:element name="termDeposit" type=" TermDeposit " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: CutName

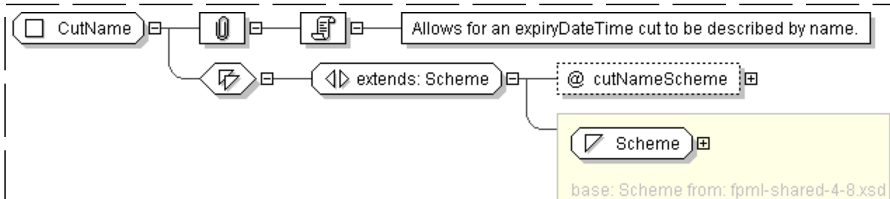
Super-types:	Scheme < **CutName** (by extension)
Sub-types:	None

Name	CutName
Used by (from the same schema document)	Complex Type **ExpiryDateTime**
Abstract	no
Documentation	Allows for an expiryDateTime cut to be described by name.

XML Instance Representation

```
<...
cutNameScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CutName">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="cutNameScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/cut-name"/>
      </xsd:extension>
```

```
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ExchangeRate

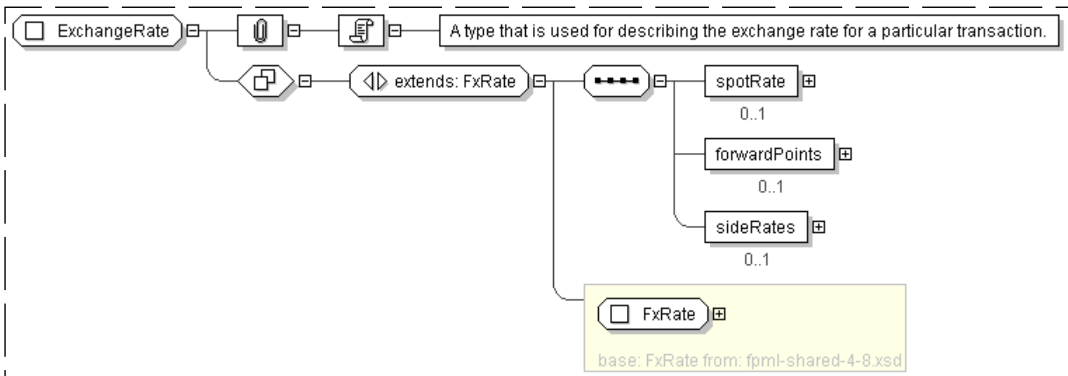
Super-types:	FxRate < **ExchangeRate** (by extension)
Sub-types:	None

Name	ExchangeRate
Used by (from the same schema document)	Complex Type **FxLeg**
Abstract	no
Documentation	A type that is used for describing the exchange rate for a particular transaction.

XML Instance Representation

```
<...>
  <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
  'Defines the two currencies for an FX trade and the quotation relationship between the
  two currencies.'

  <rate> xsd:decimal </rate> [1]
  'The rate of exchange between the two currencies of the leg of a deal. Must be specified with
  a quote basis.'

  <spotRate> xsd:decimal </spotRate> [0..1]
  'An optional element used for FX forwards and certain types of FX OTC options. For
  deals consumated in the FX Forwards Market, this represents the current market rate for
  a particular currency pair. For barrier and digital/binary options, it can be useful to
  include the spot rate at the time the option was executed to make it easier to know whether
  the option needs to move \"up\" or \"down\" to be triggered.'

  <forwardPoints> xsd:decimal </forwardPoints> [0..1]
  'An optional element used for deals consumated in the FX Forwards market. Forward
  points represent the interest rate differential between the two currencies traded and
  are quoted as a preminum or a discount. Forward points are added to, or subtracted from,
  the spot rate to create the rate of the forward trade.'

  <sideRates> SideRates </sideRates> [0..1]
  'An optional element that allow for definition of rates against base currency for non-
  base currency FX contracts.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExchangeRate">
   <xsd:complexContent>
      <xsd:extension base=" FxRate ">
         <xsd:sequence>
            <xsd:element name="spotRate" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="forwardPoints" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="sideRates" type=" SideRates " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ExpiryDateTime

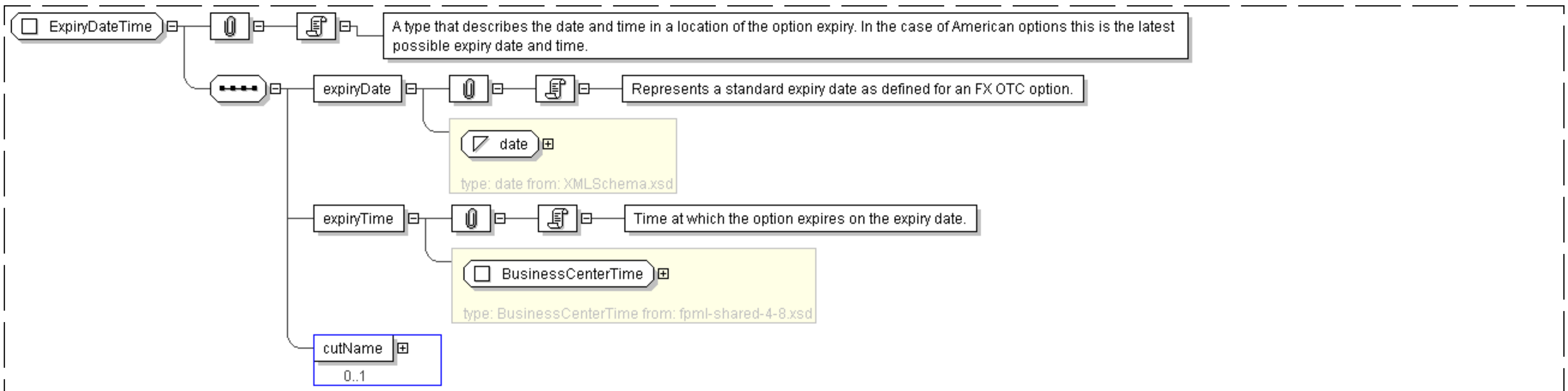
Super-types:	None
Sub-types:	None

Name	ExpiryDateTime
Used by (from the same schema document)	Complex Type **FxAverageRateOption** , Complex Type **FxDigitalOption** , Complex Type **FxOptionLeg**
Abstract	no
Documentation	A type that describes the date and time in a location of the option expiry. In the case of American options this is the latest possible expiry date and time.

XML Instance Representation

```
<...>
   <expiryDate> xsd:date </expiryDate> [1]
   'Represents a standard expiry date as defined for an FX OTC option.'

   <expiryTime> BusinessCenterTime </expiryTime> [1]
   'Time at which the option expires on the expiry date.'

   <cutName> CutName </cutName> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExpiryDateTime">
   <xsd:sequence>
```

```
        <xsd:element name="expiryDate" type=" xsd:date "/>
        <xsd:element name="expiryTime" type=" BusinessCenterTime "/>
        <xsd:element name="cutName" type=" CutName " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxAmericanTrigger

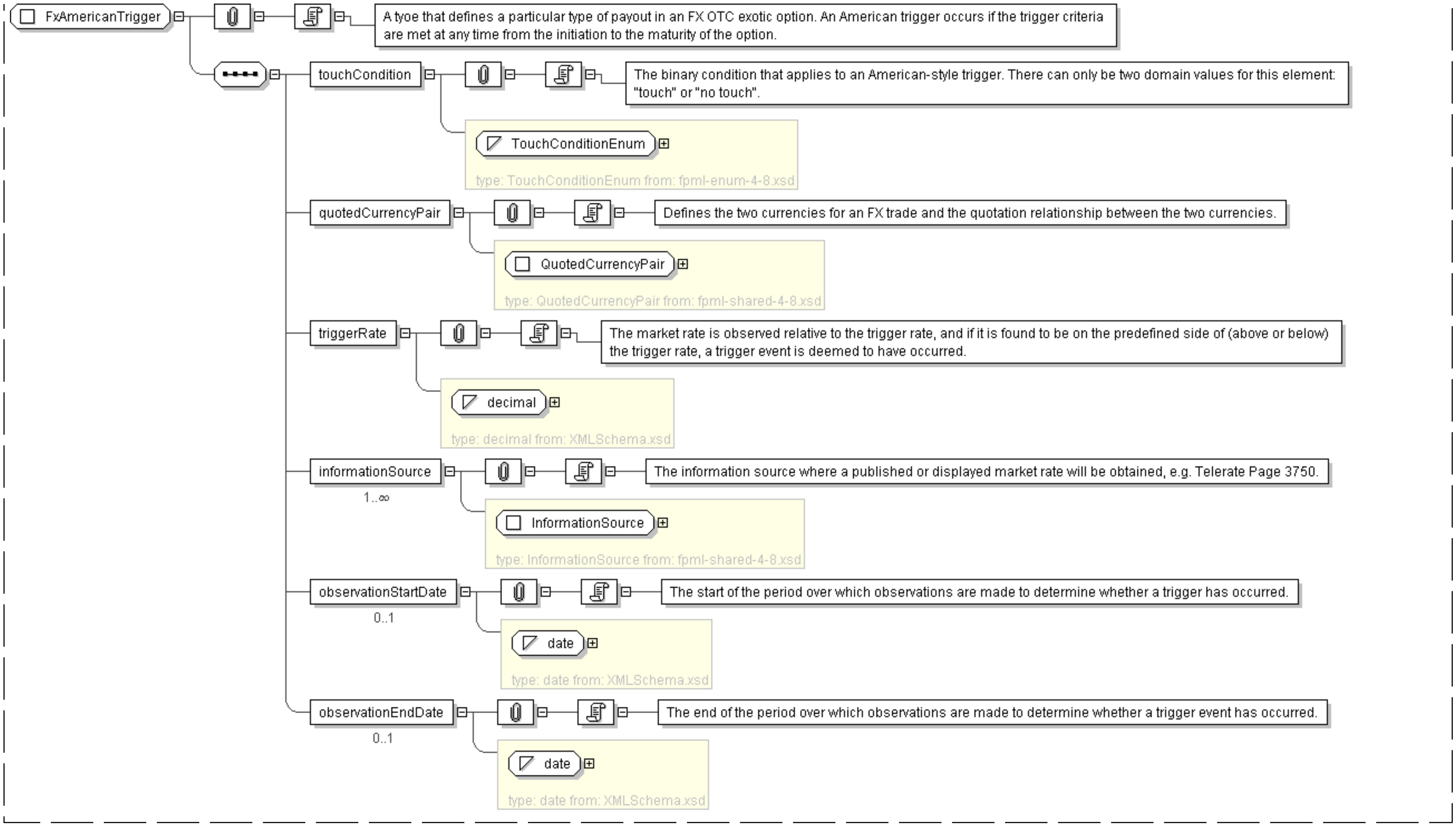
Super-types:	None
Sub-types:	None

Name	FxAmericanTrigger
Used by (from the same schema document)	Complex Type **FxDigitalOption**
Abstract	no
Documentation	A tyoe that defines a particular type of payout in an FX OTC exotic option. An American trigger occurs if the trigger criteria are met at any time from the initiation to the maturity of the option.

XML Instance Representation

```
<...>
   <touchCondition> TouchConditionEnum </touchCondition> [1]
   'The binary condition that applies to an American-style trigger. There can only be two
   domain values for this element: \"touch\" or \"no touch\".'

   <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
   'Defines the two currencies for an FX trade and the quotation relationship between the
   two currencies.'

   <triggerRate> xsd:decimal </triggerRate> [1]
   'The market rate is observed relative to the trigger rate, and if it is found to be on
   the predefined side of (above or below) the trigger rate, a trigger event is deemed to
   have occurred.'

   <informationSource> InformationSource </informationSource> [1..*]
   'The information source where a published or displayed market rate will be obtained, e.
   g. Telerate Page 3750.'

   <observationStartDate> xsd:date </observationStartDate> [0..1]
   'The start of the period over which observations are made to determine whether a trigger
   has occurred.'

   <observationEndDate> xsd:date </observationEndDate> [0..1]
   'The end of the period over which observations are made to determine whether a trigger
   event has occurred.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxAmericanTrigger">
   <xsd:sequence>
      <xsd:element name="touchCondition" type=" TouchConditionEnum "/>
      <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
      <xsd:element name="triggerRate" type=" xsd:decimal "/>
      <xsd:element name="informationSource" type=" InformationSource " maxOccurs="unbounded"/>
      <xsd:element name="observationStartDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="observationEndDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxAverageRateObservationDate

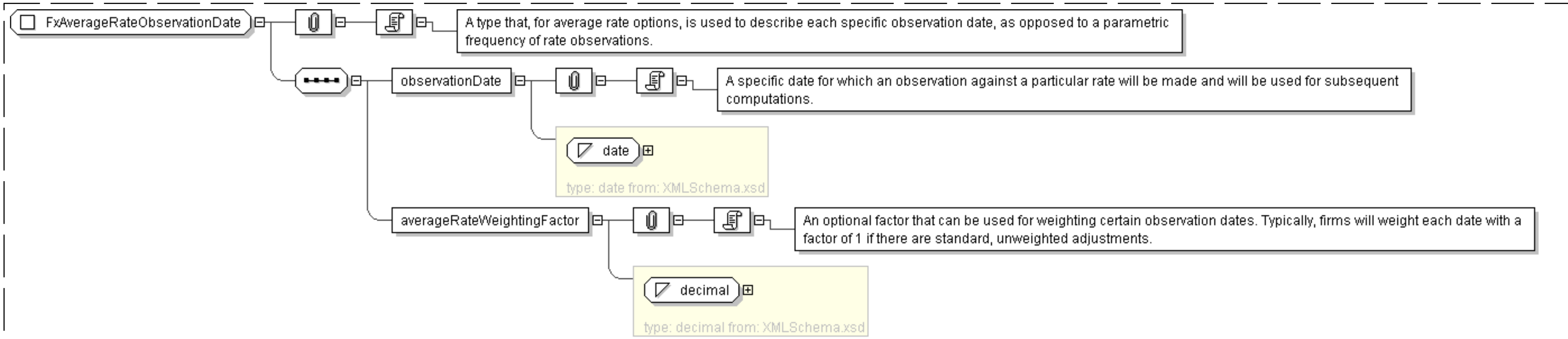
Super-types:	None
Sub-types:	None

Name	FxAverageRateObservationDate
Used by (from the same schema document)	Complex Type **FxAverageRateOption**
Abstract	no
Documentation	A type that, for average rate options, is used to describe each specific observation date, as opposed to a parametric frequency of rate observations.

XML Instance Representation

```
<...>
   <observationDate> xsd:date </observationDate> [1]
   'A specific date for which an observation against a particular rate will be made and will
   be used for subsequent computations.'

   <averageRateWeightingFactor> xsd:decimal </averageRateWeightingFactor> [1]
   'An optional factor that can be used for weighting certain observation dates. Typically,
   firms will weight each date with a factor of 1 if there are standard, unweighted adjustments.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxAverageRateObservationDate">
   <xsd:sequence>
      <xsd:element name="observationDate" type=" xsd:date "/>
      <xsd:element name="averageRateWeightingFactor" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxAverageRateObservationSchedule

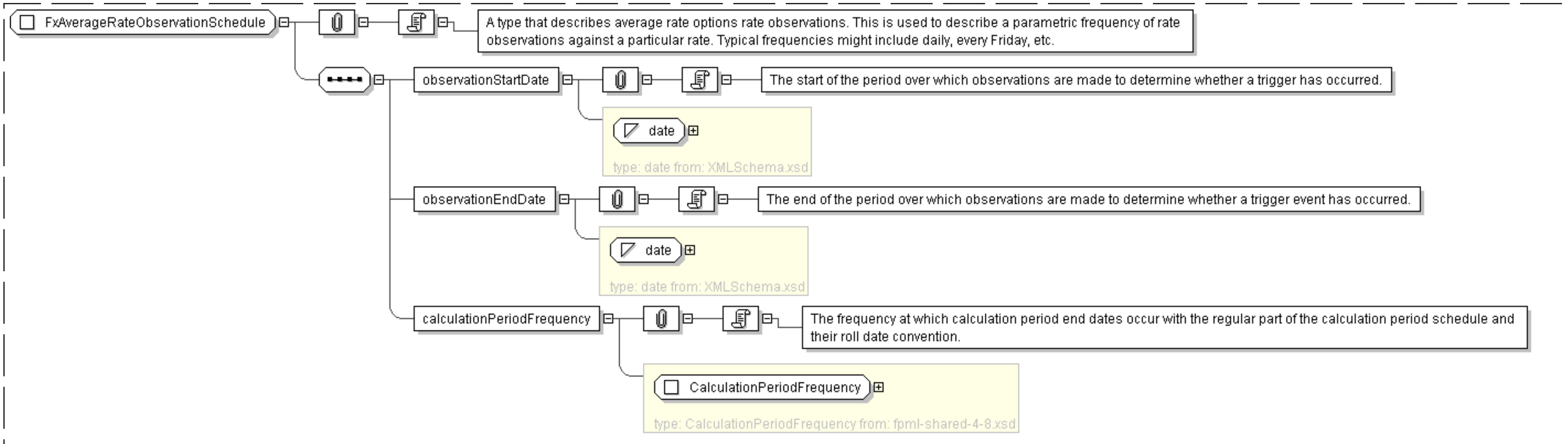
Super-types:	None
Sub-types:	None

Name	FxAverageRateObservationSchedule
Used by (from the same schema document)	Complex Type **FxAverageRateOption**
Abstract	no
Documentation	A type that describes average rate options rate observations. This is used to describe a parametric frequency of rate observations against a particular rate. Typical frequencies might include daily, every Friday, etc.

XML Instance Representation

```
<...>
   <observationStartDate> xsd:date </observationStartDate> [1]
   'The start of the period over which observations are made to determine whether a trigger
   has occurred.'

   <observationEndDate> xsd:date </observationEndDate> [1]
   'The end of the period over which observations are made to determine whether a trigger
   event has occurred.'

   <calculationPeriodFrequency> CalculationPeriodFrequency </calculationPeriodFrequency> [1]
   'The frequency at which calculation period end dates occur with the regular part of
   the calculation period schedule and their roll date convention.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxAverageRateObservationSchedule">
   <xsd:sequence>
      <xsd:element name="observationStartDate" type=" xsd:date "/>
      <xsd:element name="observationEndDate" type=" xsd:date "/>
      <xsd:element name="calculationPeriodFrequency" type=" CalculationPeriodFrequency "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxAverageRateOption

Super-types:	Product < **FxAverageRateOption** (by extension)
Sub-types:	None

Name	FxAverageRateOption
Used by (from the same schema document)	Element **fxAverageRateOption**
Abstract	no

Documentation	A type that is used for an option whose payout is based on the average of the price of the underlying over a specific period of time. The payout is the difference between the predetermined, fixed strike price and the average of spot rates observed and is used for hedging against prevailing spot rates over a given time period.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
   'The date and time in a location of the option expiry. In the case of american options this
   is the latest possible expiry date and time.'

   <exerciseStyle> ExerciseStyleEnum </exerciseStyle> [1]
   'The manner in which the option can be exercised.'

   <fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]
   'Premium amount or premium installment amount for an option.'

   <valueDate> xsd:date </valueDate> [1]
   'The date on which both currencies traded will settle.'

   <putCurrencyAmount> Money </putCurrencyAmount> [1]
   'The currency amount that the option gives the right to sell.'

   <callCurrencyAmount> Money </callCurrencyAmount> [1]
   'The currency amount that the option gives the right to buy.'

   <fxStrikePrice> FxStrikePrice </fxStrikePrice> [1]
   'TBA'

   <spotRate> xsd:decimal </spotRate> [0..1]
   'An optional element used for FX forwards and certain types of FX OTC options. For
   deals consumated in the FX Forwards Market, this represents the current market rate for
   a particular currency pair. For barrier and digital/binary options, it can be useful to
   include the spot rate at the time the option was executed to make it easier to know whether
   the option needs to move \"up\" or \"down\" to be triggered.'

   <payoutCurrency> Currency </payoutCurrency> [1]
   'The ISO code of the currency in which a payout (if any) is to be made when a trigger is hit
   on a digital or barrier option.'

   <averageRateQuoteBasis> StrikeQuoteBasisEnum </averageRateQuoteBasis> [1]
   'The method by which the average rate that is being observed is quoted.'
```

<precision> xsd:nonNegativeInteger **</precision>** [0..1]

'Specifies the rounding precision in terms of a number of decimal places. Note how a percentage rate rounding of 5 decimal places is expressed as a rounding precision of 7 in the FpML document since the percentage is expressed as a decimal, e.g. 9.876543% (or 0.09876543) being rounded to the nearest 5 decimal places is 9.87654% (or 0.0987654).'

<payoutFormula> xsd:string **</payoutFormula>** [0..1]

'The description of the mathematical computation for how the payout is computed.'

<primaryRateSource> InformationSource **</primaryRateSource>** [1]

'The primary source for where the rate observation will occur. Will typically be either a page or a reference bank published rate.'

<secondaryRateSource> InformationSource **</secondaryRateSource>** [0..1]

'An alternative, or secondary, source for where the rate observation will occur. Will typically be either a page or a reference bank published rate.'

<fixingTime> BusinessCenterTime **</fixingTime>** [1]

'The time at which the spot currency exchange rate will be observed. It is specified as a time in a specific business center, e.g. 11:00am London time.'

Start Choice [1]

<averageRateObservationSchedule> FxAverageRateObservationSchedule **</averageRateObservationSchedule>** [1]

'Parametric schedule of rate observations.'

<averageRateObservationDate> FxAverageRateObservationDate **</averageRateObservationDate>** [1..*]

'One of more specific rate observation dates.'

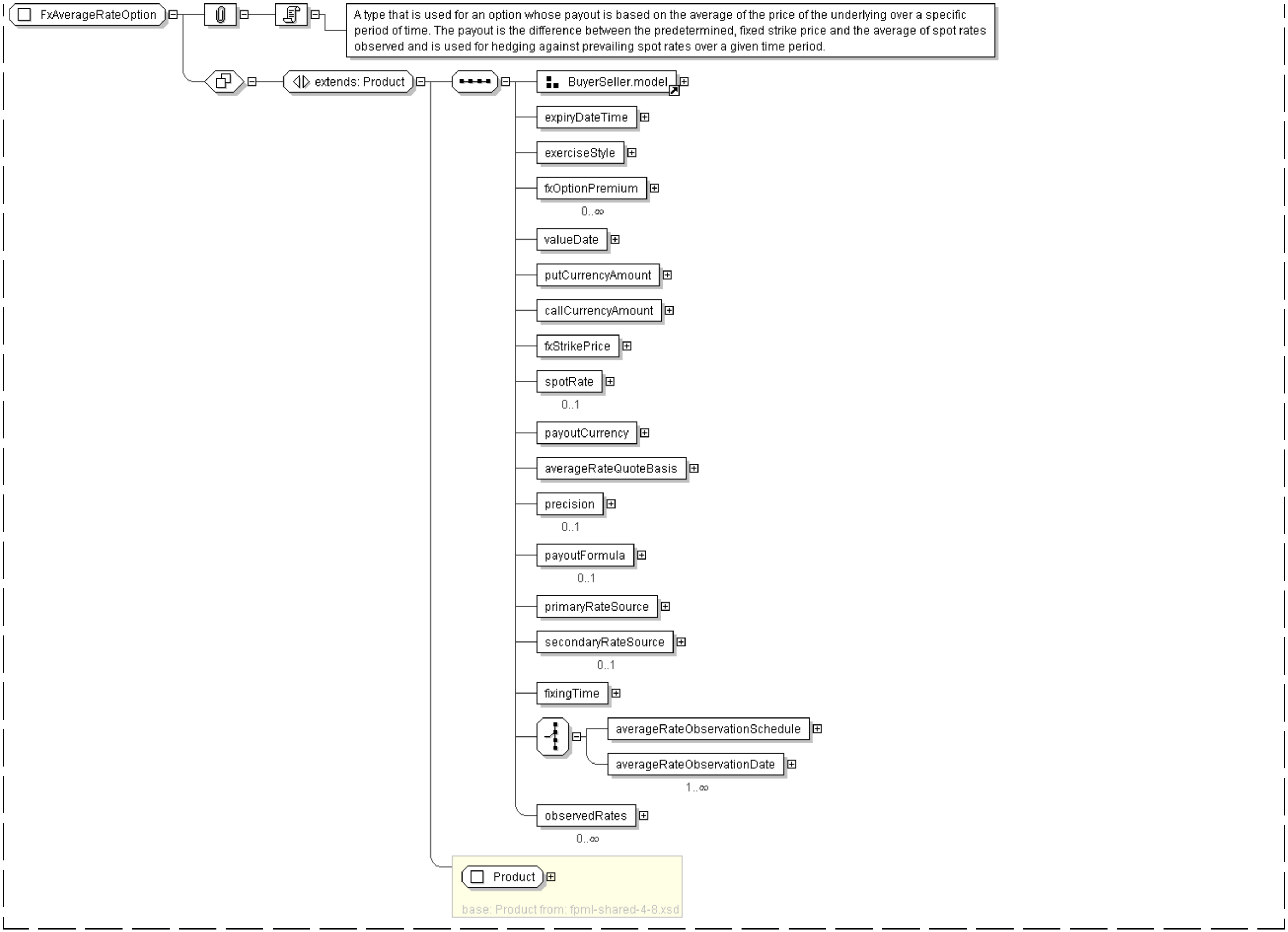
End Choice

<observedRates> ObservedRates **</observedRates>** [0..*]

'Describes prior rate observations within average rate options. Periodically, an average rate option agreement will be struck whereby some rates have already been observed in the past but will become part of computation of the average rate of the option. This structure provides for these previously observed rates to be included in the description of the trade.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxAverageRateOption">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="expiryDateTime" type=" ExpiryDateTime "/>
            <xsd:element name="exerciseStyle" type=" ExerciseStyleEnum "/>
```

```
            <xsd:element name="fxOptionPremium" type=" FxOptionPremium "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="valueDate" type=" xsd:date "/>
            <xsd:element name="putCurrencyAmount" type=" Money "/>
            <xsd:element name="callCurrencyAmount" type=" Money "/>
            <xsd:element name="fxStrikePrice" type=" FxStrikePrice "/>
            <xsd:element name="spotRate" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="payoutCurrency" type=" Currency "/>
            <xsd:element name="averageRateQuoteBasis" type=" StrikeQuoteBasisEnum "/>
            <xsd:element name="precision" type=" xsd:nonNegativeInteger " minOccurs="0"/>
            <xsd:element name="payoutFormula" type=" xsd:string " minOccurs="0"/>
            <xsd:element name="primaryRateSource" type=" InformationSource "/>
            <xsd:element name="secondaryRateSource" type=" InformationSource " minOccurs="0"/>
            <xsd:element name="fixingTime" type=" BusinessCenterTime "/>
            <xsd:choice>
               <xsd:element name="averageRateObservationSchedule" type=" FxAverageRateObservationSchedule "/>
               <xsd:element name="averageRateObservationDate" type=" FxAverageRateObservationDate
               " maxOccurs="unbounded"/>
            </xsd:choice>
            <xsd:element name="observedRates" type=" ObservedRates " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxBarrier

Super-types:	None
Sub-types:	None

Name	FxBarrier
Used by (from the same schema document)	Complex Type **FxBarrierOption**
Abstract	no
Documentation	A type that is used within the FX barrier option definition to define one or more barrier levels that determine whether the option will be knocked-in or knocked-out.

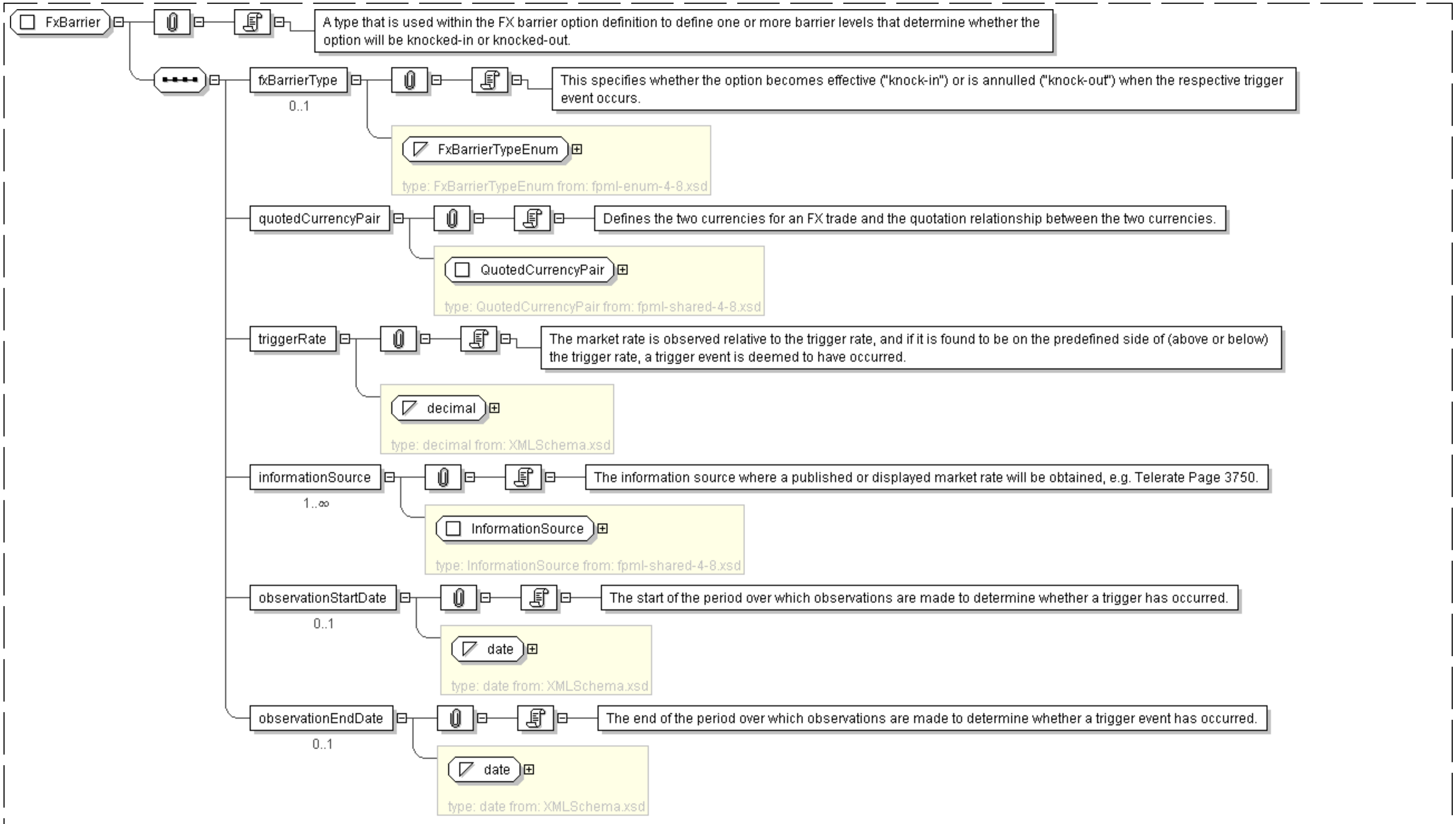
XML Instance Representation

```
<...>
   <fxBarrierType> FxBarrierTypeEnum </fxBarrierType> [0..1]
   'This specifies whether the option becomes effective (\"knock-in\") or is annulled (\"knock-
   out\") when the respective trigger event occurs.'

   <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
   'Defines the two currencies for an FX trade and the quotation relationship between the
   two currencies.'

   <triggerRate> xsd:decimal </triggerRate> [1]
   'The market rate is observed relative to the trigger rate, and if it is found to be on
   the predefined side of (above or below) the trigger rate, a trigger event is deemed to
   have occurred.'

   <informationSource> InformationSource </informationSource> [1..*]
   'The information source where a published or displayed market rate will be obtained, e.
   g. Telerate Page 3750.'

   <observationStartDate> xsd:date </observationStartDate> [0..1]
   'The start of the period over which observations are made to determine whether a trigger
   has occurred.'

   <observationEndDate> xsd:date </observationEndDate> [0..1]
```

'The end of the period over which observations are made to determine whether a trigger event has occurred.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxBarrier">
   <xsd:sequence>
      <xsd:element name="fxBarrierType" type=" FxBarrierTypeEnum " minOccurs="0"/>
      <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
      <xsd:element name="triggerRate" type=" xsd:decimal "/>
      <xsd:element name="informationSource" type=" InformationSource " maxOccurs="unbounded"/>
      <xsd:element name="observationStartDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="observationEndDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxBarrierOption

Super-types:	Product < FxOptionLeg (by extension) < **FxBarrierOption** (by extension)
Sub-types:	None

Name	FxBarrierOption
Used by (from the same schema document)	Element **fxBarrierOption**
Abstract	no
Documentation	A type that describes an option with a put/call component, but also one or more associated barrier rates. If the market rate moves to reach a barrier rate a trigger event occurs. The trigger event may for example be necessary to enable the option, or may annul the option contract. [Since the barriers reduce the probability of exercise, the premium for an option with barriers is likely to be cheaper than one without].

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
    'The date and time in a location of the option expiry. In the case of american options this
    is the latest possible expiry date and time.'

    <exerciseStyle> ExerciseStyleEnum </exerciseStyle> [1]
    'The manner in which the option can be exercised.'

    <fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]
    'Premium amount or premium installment amount for an option.'

    <valueDate> xsd:date </valueDate> [1]
    'The date on which both currencies traded will settle.'

    <cashSettlementTerms> FxCashSettlement </cashSettlementTerms> [0..1]
    'This optional element is only used if an option has been specified at execution time to
    be settled into a single cash payment. This would be used for a non-deliverable option.'

    <putCurrencyAmount> Money </putCurrencyAmount> [1]
    'The currency amount that the option gives the right to sell.'

    <callCurrencyAmount> Money </callCurrencyAmount> [1]
    'The currency amount that the option gives the right to buy.'

    <fxStrikePrice> FxStrikePrice </fxStrikePrice> [1]
    'TBA'
```

<quotedAs> QuotedAs </quotedAs> [0..1]

'Describes how the option was quoted.'

<spotRate> xsd:decimal **</spotRate>** [0..1]

'An optional element used for FX forwards and certain types of FX OTC options. For deals consumated in the FX Forwards Market, this represents the current market rate for a particular currency pair. For barrier and digital/binary options, it can be useful to include the spot rate at the time the option was executed to make it easier to know whether the option needs to move \"up\" or \"down\" to be triggered.'

<fxBarrier> FxBarrier **</fxBarrier>** [1..*]

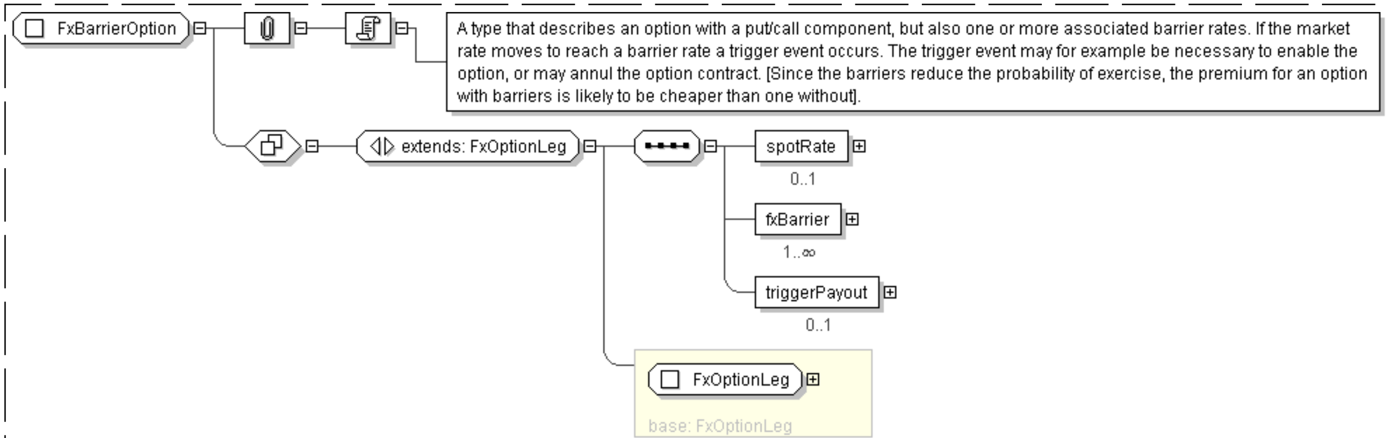
'Information about a barrier rate in a Barrier Option - specifying the exact criteria for a trigger event to occur.'

<triggerPayout> FxOptionPayout **</triggerPayout>** [0..1]

'The amount of currency which becomes payable if and when a trigger event occurs.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxBarrierOption">
   <xsd:complexContent>
      <xsd:extension base=" FxOptionLeg ">
         <xsd:sequence>
            <xsd:element name="spotRate" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="fxBarrier" type=" FxBarrier " maxOccurs="unbounded"/>
            <xsd:element name="triggerPayout" type=" FxOptionPayout " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxDigitalOption

Super-types:	Product < **FxDigitalOption** (by extension)
Sub-types:	None

Name	FxDigitalOption

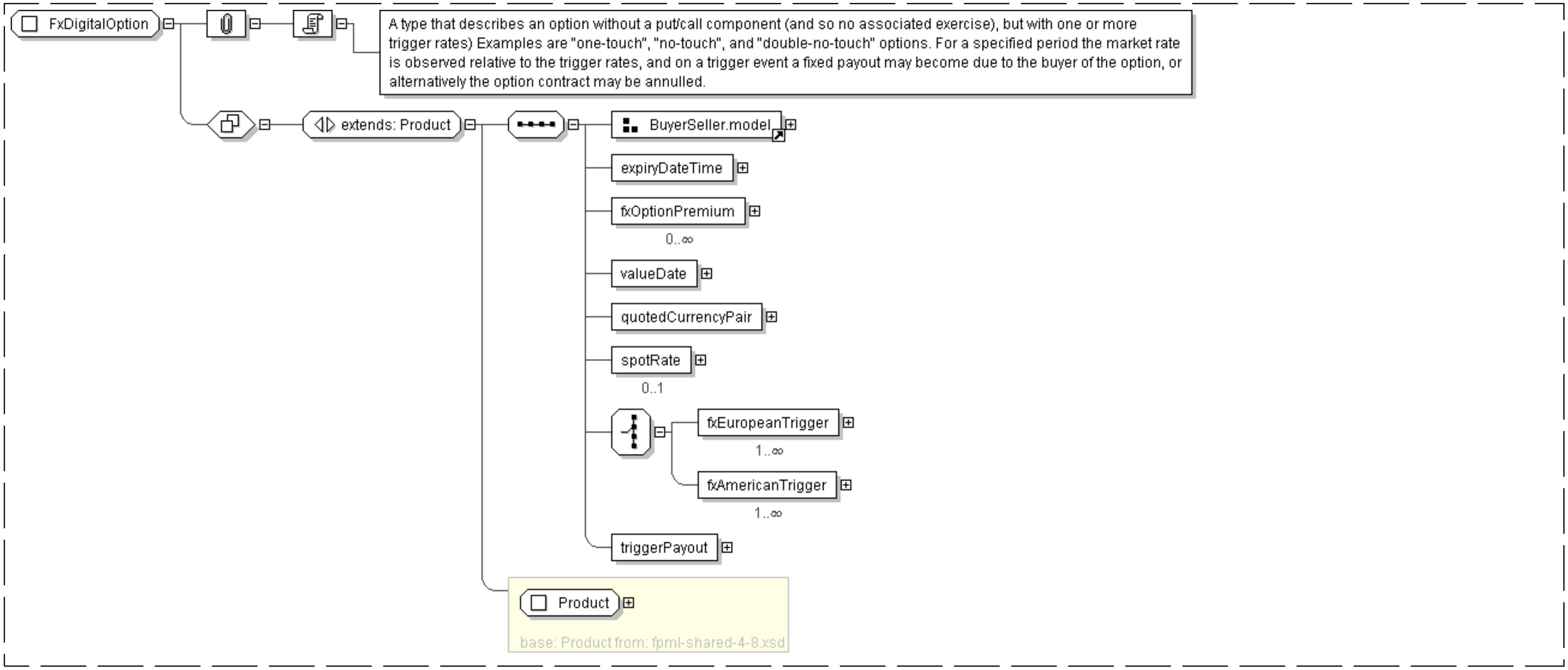
Used by (from the same schema document)	Element **fxDigitalOption**
Abstract	no
Documentation	A type that describes an option without a put/call component (and so no associated exercise), but with one or more trigger rates) Examples are "one-touch", "no-touch", and "double-no-touch" options. For a specified period the market rate is observed relative to the trigger rates, and on a trigger event a fixed payout may become due to the buyer of the option, or alternatively the option contract may be annulled.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
   'The date and time in a location of the option expiry. In the case of american options this
   is the latest possible expiry date and time.'

   <fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]
   'Premium amount or premium installment amount for an option.'

   <valueDate> xsd:date </valueDate> [1]
   'The date on which both currencies traded will settle.'

   <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
   'Defines the two currencies for an FX trade and the quotation relationship between the
   two currencies.'

   <spotRate> xsd:decimal </spotRate> [0..1]
   'An optional element used for FX forwards and certain types of FX OTC options. For
   deals consumated in the FX Forwards Market, this represents the current market rate for
   a particular currency pair. For barrier and digital/binary options, it can be useful to
   include the spot rate at the time the option was executed to make it easier to know whether
   the option needs to move \"up\" or \"down\" to be triggered.'

Start Choice [1]
      <fxEuropeanTrigger> FxEuropeanTrigger </fxEuropeanTrigger> [1..*]
      'A European trigger occurs if the trigger criteria are met, but these are valid (and
      an observation is made) only at the maturity of the option.'

      <fxAmericanTrigger> FxAmericanTrigger </fxAmericanTrigger> [1..*]
      'An American trigger occurs if the trigger criteria are met at any time from the initiation
      to the maturity of the option.'

End Choice
   <triggerPayout> FxOptionPayout </triggerPayout> [1]
   'The amount of currency which becomes payable if and when a trigger event occurs.'
```

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxDigitalOption">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="expiryDateTime" type=" ExpiryDateTime "/>
            <xsd:element name="fxOptionPremium" type=" FxOptionPremium "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="valueDate" type=" xsd:date "/>
            <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
            <xsd:element name="spotRate" type=" xsd:decimal " minOccurs="0"/>
            <xsd:choice>
               <xsd:element name="fxEuropeanTrigger" type=" FxEuropeanTrigger " maxOccurs="unbounded"/>
               <xsd:element name="fxAmericanTrigger" type=" FxAmericanTrigger " maxOccurs="unbounded"/>
            </xsd:choice>
            <xsd:element name="triggerPayout" type=" FxOptionPayout "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxEuropeanTrigger

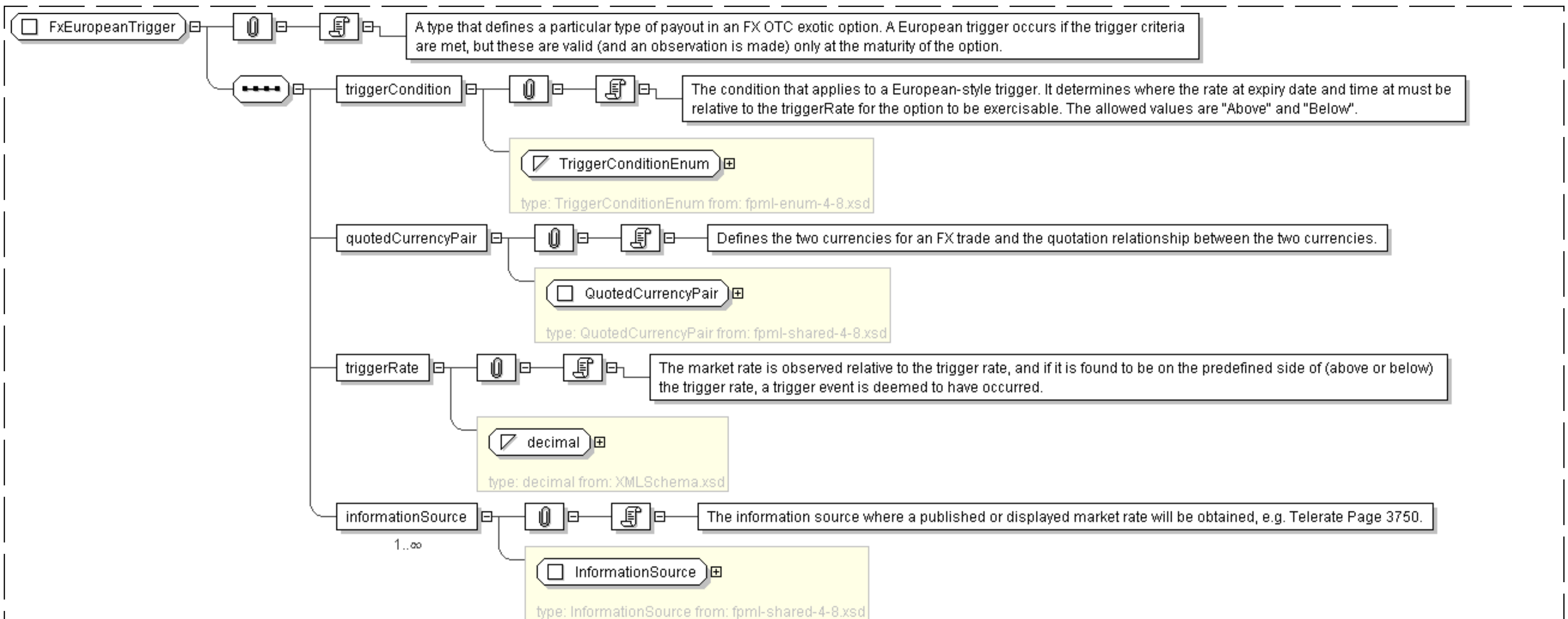
Super-types:	None
Sub-types:	None

Name	FxEuropeanTrigger
Used by (from the same schema document)	Complex Type **FxDigitalOption**
Abstract	no
Documentation	A type that defines a particular type of payout in an FX OTC exotic option. A European trigger occurs if the trigger criteria are met, but these are valid (and an observation is made) only at the maturity of the option.

XML Instance Representation

```
<...>
   <triggerCondition> TriggerConditionEnum </triggerCondition> [1]
   'The condition that applies to a European-style trigger. It determines where the rate at
   expiry date and time at must be relative to the triggerRate for the option to be
   exercisable. The allowed values are \"Above\" and \"Below\".'

   <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
   'Defines the two currencies for an FX trade and the quotation relationship between the
   two currencies.'

   <triggerRate> xsd:decimal </triggerRate> [1]
   'The market rate is observed relative to the trigger rate, and if it is found to be on
   the predefined side of (above or below) the trigger rate, a trigger event is deemed to
   have occurred.'

   <informationSource> InformationSource </informationSource> [1..*]
   'The information source where a published or displayed market rate will be obtained, e.
   g. Telerate Page 3750.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxEuropeanTrigger">
   <xsd:sequence>
      <xsd:element name="triggerCondition" type=" TriggerConditionEnum "/>
      <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
      <xsd:element name="triggerRate" type=" xsd:decimal "/>
      <xsd:element name="informationSource" type=" InformationSource " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxLeg

Super-types:	Product < **FxLeg** (by extension)
Sub-types:	None

Name	FxLeg
Used by (from the same schema document)	Element **fxSingleLeg**
Abstract	no
Documentation	A type that represents a single exchange of one currency for another. This is used for representing FX spot, forward, and swap transactions.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <exchangedCurrency1> Payment </exchangedCurrency1> [1]
   'This is the first of the two currency flows that define a single leg of a standard
   foreign exchange transaction.'

   <exchangedCurrency2> Payment </exchangedCurrency2> [1]
   'This is the second of the two currency flows that define a single leg of a standard
   foreign exchange transaction.'

Start Choice [1]
      <valueDate> xsd:date </valueDate> [1]
      'The date on which both currencies traded will settle.'

      <currency1ValueDate> xsd:date </currency1ValueDate> [1]
      'The date on which the currency1 amount will be settled. To be used in a split value
      date scenario.'

      <currency2ValueDate> xsd:date </currency2ValueDate> [1]
      'The date on which the currency2 amount will be settled. To be used in a split value
      date scenario.'

End Choice
   <exchangeRate> ExchangeRate </exchangeRate> [1]
   'The rate of exchange between the two currencies.'

   <nonDeliverableForward> FxCashSettlement </nonDeliverableForward> [0..1]
```

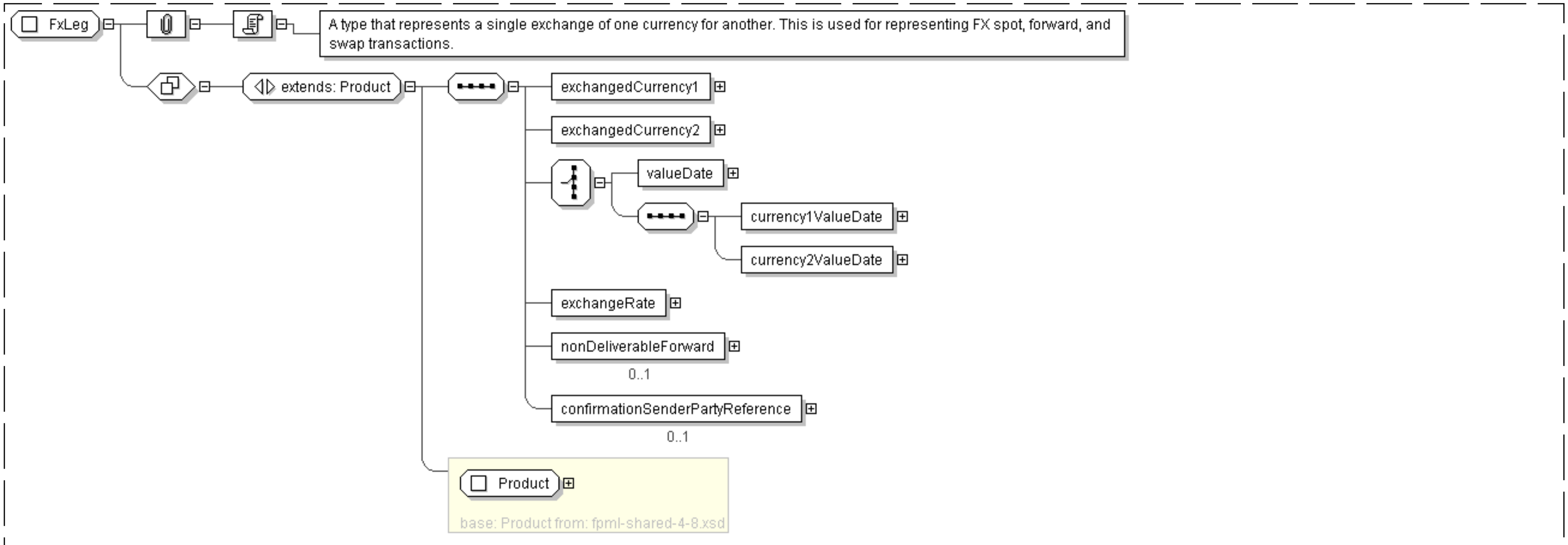
'Used to describe a particular type of FX forward transaction that is settled in a single currency.'

<confirmationSenderPartyReference> PartyReference </confirmationSenderPartyReference> [0..1]

'A reference to the party that is sending the current document as a confirmation of the trade.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxLeg">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="exchangedCurrency1" type=" Payment "/>
            <xsd:element name="exchangedCurrency2" type=" Payment "/>
            <xsd:choice>
               <xsd:element name="valueDate" type=" xsd:date "/>
               <xsd:sequence>
                  <xsd:element name="currency1ValueDate" type=" xsd:date "/>
                  <xsd:element name="currency2ValueDate" type=" xsd:date "/>
               </xsd:sequence>
            </xsd:choice>
            <xsd:element name="exchangeRate" type=" ExchangeRate "/>
            <xsd:element name="nonDeliverableForward" type=" FxCashSettlement " minOccurs="0"/>
            <xsd:element name="confirmationSenderPartyReference" type=" PartyReference " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxOptionLeg

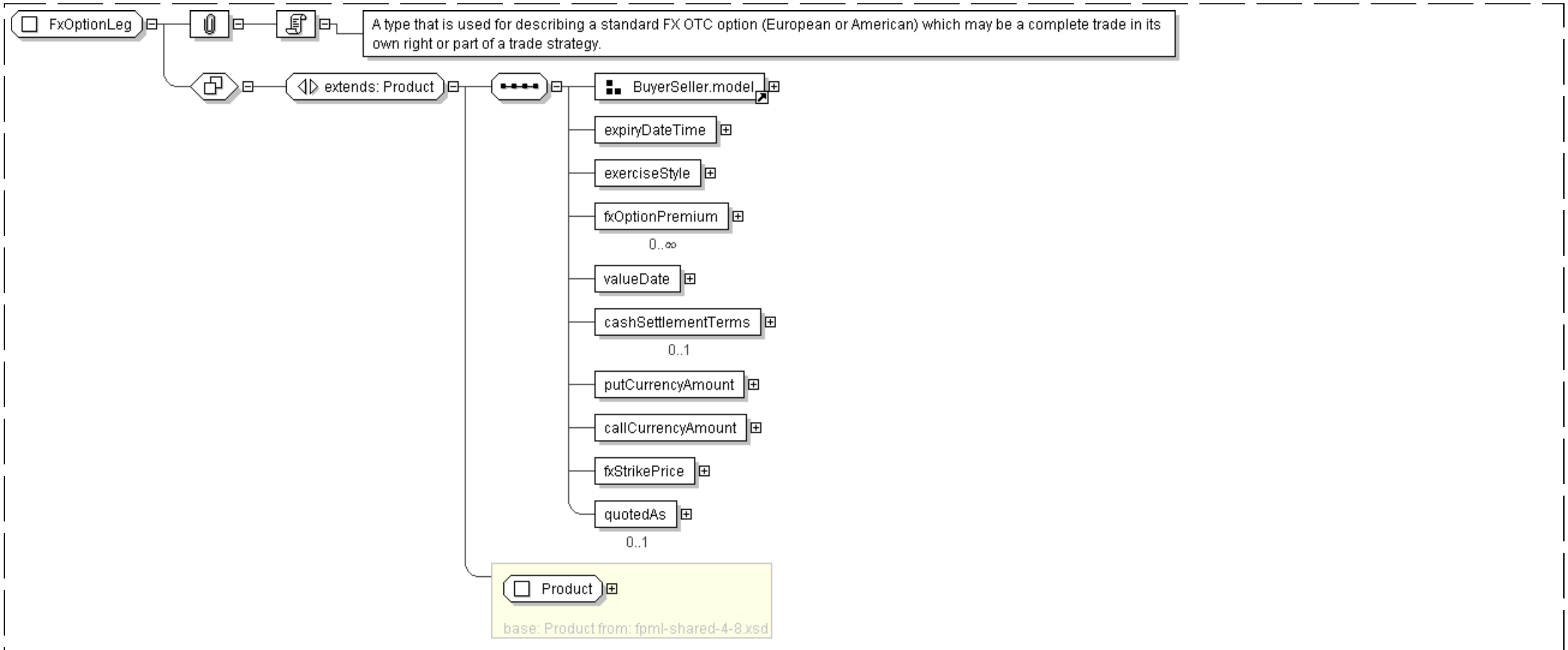
Super-types:	Product < **FxOptionLeg** (by extension)
Sub-types:	• FxBarrierOption (by extension)

Name	FxOptionLeg
Used by (from the same schema document)	Element **fxSimpleOption**
Abstract	no
Documentation	A type that is used for describing a standard FX OTC option (European or American) which may be a complete trade in its own right or part of a trade strategy.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <expiryDateTime> ExpiryDateTime </expiryDateTime> [1]
   'The date and time in a location of the option expiry. In the case of american options this
   is the latest possible expiry date and time.'

   <exerciseStyle> ExerciseStyleEnum </exerciseStyle> [1]
   'The manner in which the option can be exercised.'

   <fxOptionPremium> FxOptionPremium </fxOptionPremium> [0..*]
   'Premium amount or premium installment amount for an option.'

   <valueDate> xsd:date </valueDate> [1]
   'The date on which both currencies traded will settle.'

   <cashSettlementTerms> FxCashSettlement </cashSettlementTerms> [0..1]
   'This optional element is only used if an option has been specified at execution time to
   be settled into a single cash payment. This would be used for a non-deliverable option.'

   <putCurrencyAmount> Money </putCurrencyAmount> [1]
   'The currency amount that the option gives the right to sell.'

   <callCurrencyAmount> Money </callCurrencyAmount> [1]
   'The currency amount that the option gives the right to buy.'

   <fxStrikePrice> FxStrikePrice </fxStrikePrice> [1]
   'TBA'

   <quotedAs> QuotedAs </quotedAs> [0..1]
   'Describes how the option was quoted.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxOptionLeg">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="expiryDateTime" type=" ExpiryDateTime "/>
            <xsd:element name="exerciseStyle" type=" ExerciseStyleEnum "/>
            <xsd:element name="fxOptionPremium" type=" FxOptionPremium "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="valueDate" type=" xsd:date "/>
            <xsd:element name="cashSettlementTerms" type=" FxCashSettlement " minOccurs="0"/>
            <xsd:element name="putCurrencyAmount" type=" Money "/>
            <xsd:element name="callCurrencyAmount" type=" Money "/>
            <xsd:element name="fxStrikePrice" type=" FxStrikePrice "/>
            <xsd:element name="quotedAs" type=" QuotedAs " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxOptionPayout

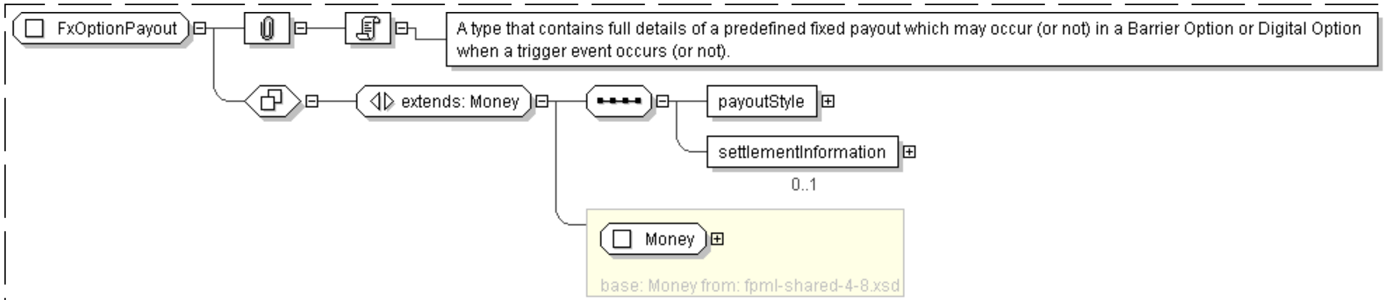
Super-types:	Money < **FxOptionPayout** (by extension)
Sub-types:	None

Name	FxOptionPayout
Used by (from the same schema document)	Complex Type **FxBarrierOption** , Complex Type **FxDigitalOption**
Abstract	no
Documentation	A type that contains full details of a predefined fixed payout which may occur (or not) in a Barrier Option or Digital Option when a trigger event occurs (or not).

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <currency> Currency </currency> [1]
   'The currency in which an amount is denominated.'

   <amount> xsd:decimal </amount> [1]
   'The monetary quantity in currency units.'

   <payoutStyle> PayoutEnum </payoutStyle> [1]
   'The trigger event and payout may be asynchonous. A payout may become due on the trigger
   event, or the payout may (by agreeement at initiation) be deferred (for example) to
   the maturity date.'

   <settlementInformation> SettlementInformation </settlementInformation> [0..1]
   'The information required to settle a currency payment that results from a trade.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxOptionPayout">
   <xsd:complexContent>
      <xsd:extension base=" Money ">
         <xsd:sequence>
            <xsd:element name="payoutStyle" type=" PayoutEnum "/>
            <xsd:element name="settlementInformation" type=" SettlementInformation " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxOptionPremium

Super-types:	None
Sub-types:	None

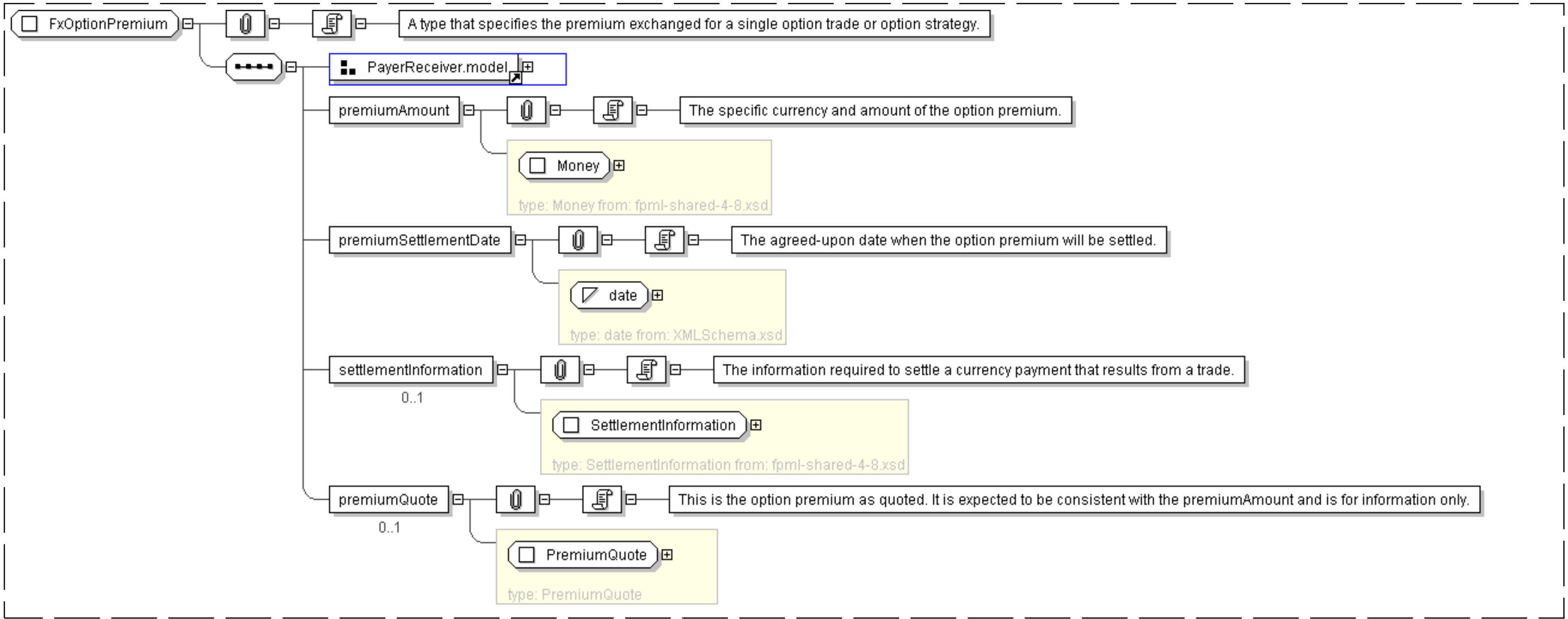
Name	FxOptionPremium
Used by (from the same schema document)	Complex Type **FxAverageRateOption** , Complex Type **FxDigitalOption** , Complex Type **FxOptionLeg**

Abstract	no
Documentation	A type that specifies the premium exchanged for a single option trade or option strategy.

XML Instance Representation

```
<...>
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <premiumAmount> Money </premiumAmount> [1]
   'The specific currency and amount of the option premium.'

   <premiumSettlementDate> xsd:date </premiumSettlementDate> [1]
   'The agreed-upon date when the option premium will be settled.'

   <settlementInformation> SettlementInformation </settlementInformation> [0..1]
   'The information required to settle a currency payment that results from a trade.'

   <premiumQuote> PremiumQuote </premiumQuote> [0..1]
   'This is the option premium as quoted. It is expected to be consistent with the
   premiumAmount and is for information only.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxOptionPremium">
   <xsd:sequence>
```

```
        <xsd:group ref=" PayerReceiver.model "/>
        <xsd:element name="premiumAmount" type=" Money "/>
        <xsd:element name="premiumSettlementDate" type=" xsd:date "/>
        <xsd:element name="settlementInformation" type=" SettlementInformation " minOccurs="0"/>
        <xsd:element name="premiumQuote" type=" PremiumQuote " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxStrikePrice

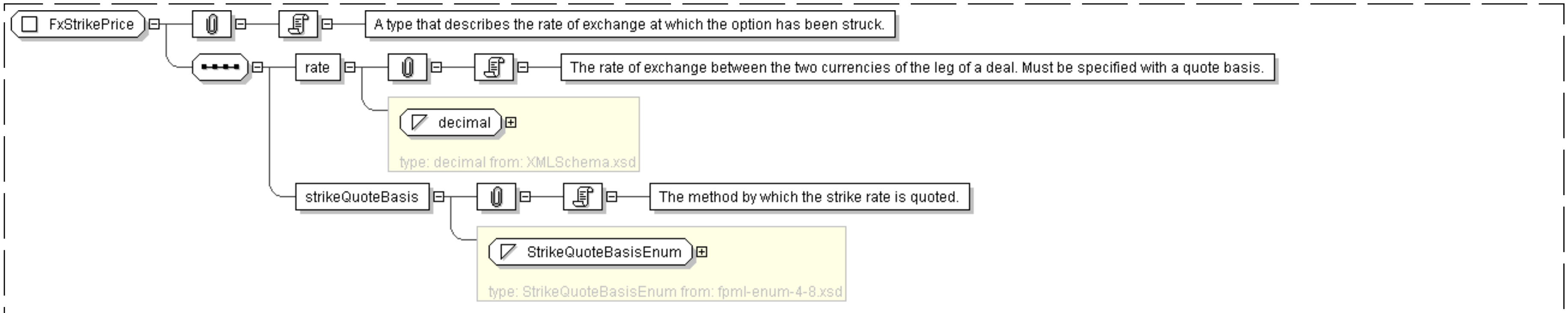
Super-types:	None
Sub-types:	None

Name	FxStrikePrice
Used by (from the same schema document)	Complex Type **FxAverageRateOption** , Complex Type **FxOptionLeg**
Abstract	no
Documentation	A type that describes the rate of exchange at which the option has been struck.

XML Instance Representation

```
<...>
    <rate> xsd:decimal </rate> [1]
    'The rate of exchange between the two currencies of the leg of a deal. Must be specified with
    a quote basis.'

    <strikeQuoteBasis> StrikeQuoteBasisEnum </strikeQuoteBasis> [1]
    'The method by which the strike rate is quoted.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxStrikePrice">
    <xsd:sequence>
        <xsd:element name="rate" type=" xsd:decimal "/>
        <xsd:element name="strikeQuoteBasis" type=" StrikeQuoteBasisEnum "/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxSwap

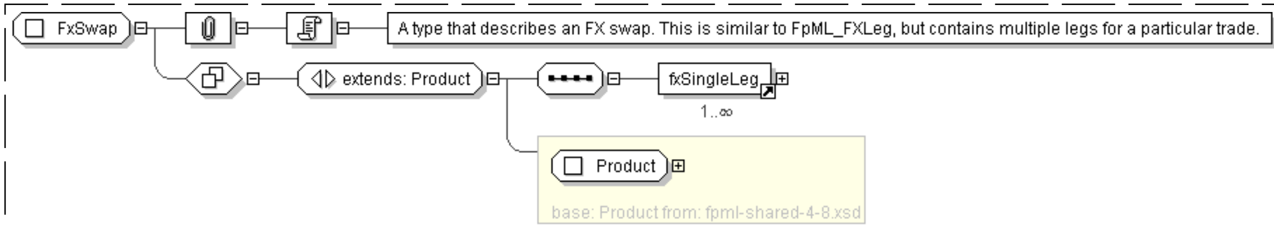
Super-types:	Product < **FxSwap** (by extension)
Sub-types:	None

Name	FxSwap
Used by (from the same schema document)	Element **fxSwap**
Abstract	no
Documentation	A type that describes an FX swap. This is similar to FpML_FXLeg, but contains multiple legs for a particular trade.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <fxSingleLeg> ... </fxSingleLeg> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxSwap">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element ref=" fxSingleLeg " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ObservedRates

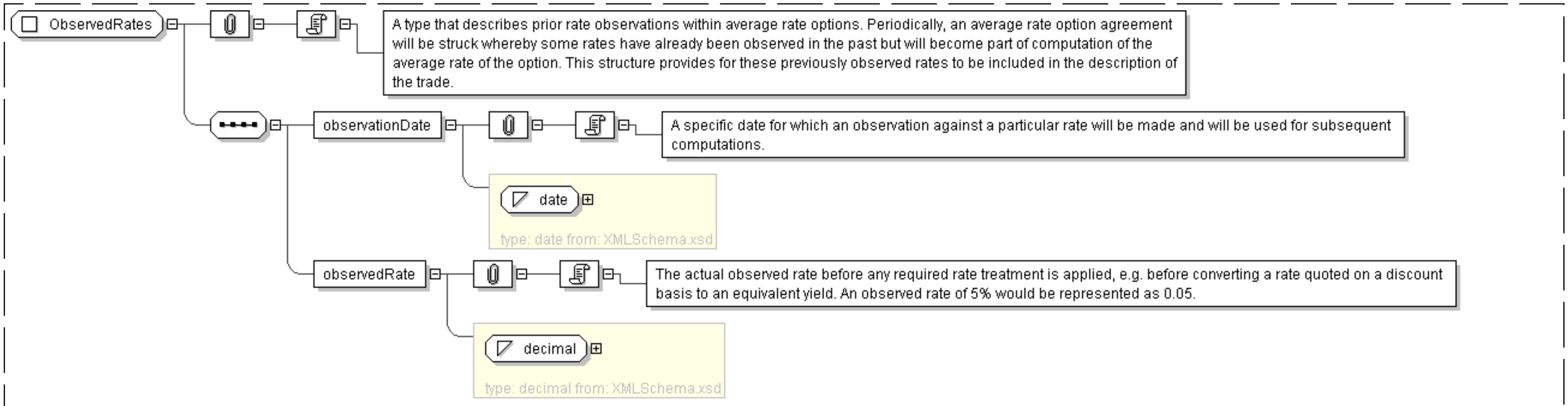
Super-types:	None
Sub-types:	None

Name	ObservedRates
Used by (from the same schema document)	Complex Type **FxAverageRateOption**
Abstract	no
Documentation	A type that describes prior rate observations within average rate options. Periodically, an average rate option agreement will be struck whereby some rates have already been observed in the past but will become part of computation of the average rate of the option. This structure provides for these previously observed rates to be included in the description of the trade.

XML Instance Representation

```
<...>
   <observationDate> xsd:date </observationDate> [1]
   'A specific date for which an observation against a particular rate will be made and will
   be used for subsequent computations.'

   <observedRate> xsd:decimal </observedRate> [1]
   'The actual observed rate before any required rate treatment is applied, e.g. before
   converting a rate quoted on a discount basis to an equivalent yield. An observed rate of
   5% would be represented as 0.05.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ObservedRates">
   <xsd:sequence>
      <xsd:element name="observationDate" type=" xsd:date "/>
      <xsd:element name="observedRate" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PremiumQuote

Super-types:	None
Sub-types:	None

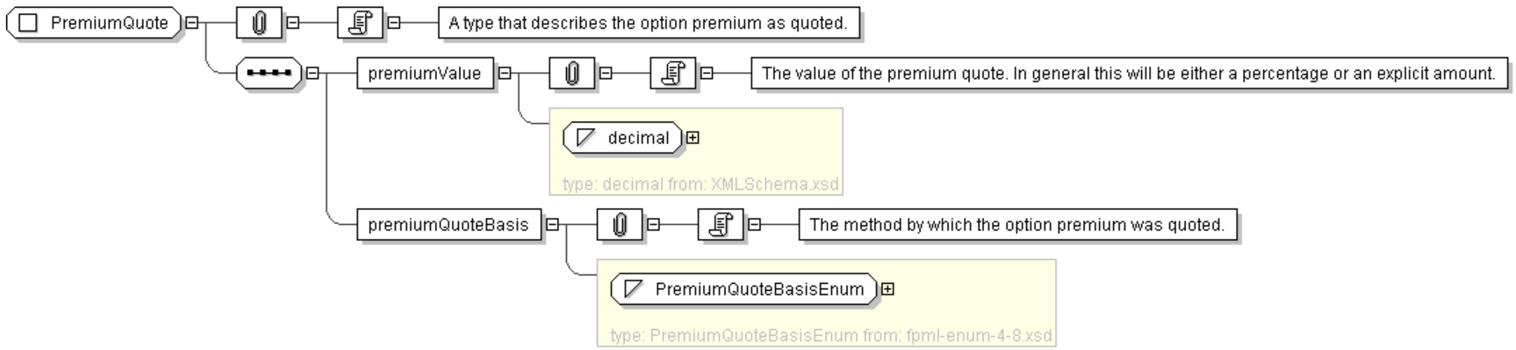
Name	PremiumQuote
Used by (from the same schema document)	Complex Type **FxOptionPremium**
Abstract	no
Documentation	A type that describes the option premium as quoted.

XML Instance Representation

```
<...>
   <premiumValue> xsd:decimal </premiumValue> [1]
   'The value of the premium quote. In general this will be either a percentage or an
   explicit amount.'
```

```
<premiumQuoteBasis> PremiumQuoteBasisEnum </premiumQuoteBasis> [1]
'The method by which the option premium was quoted.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PremiumQuote">
   <xsd:sequence>
      <xsd:element name="premiumValue" type=" xsd:decimal "/>
      <xsd:element name="premiumQuoteBasis" type=" PremiumQuoteBasisEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: QuotedAs

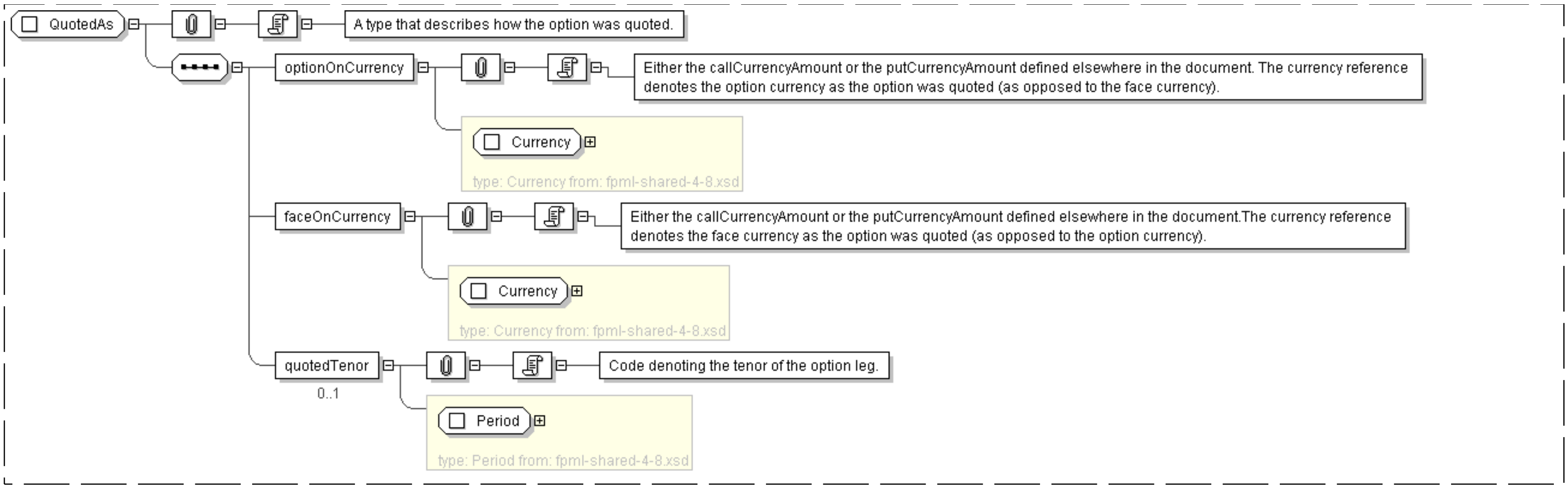
Super-types:	None
Sub-types:	None

Name	QuotedAs
Used by (from the same schema document)	Complex Type **FxOptionLeg**
Abstract	no
Documentation	A type that describes how the option was quoted.

XML Instance Representation

```
<...>
   <optionOnCurrency> Currency </optionOnCurrency> [1]
   'Either the callCurrencyAmount or the putCurrencyAmount defined elsewhere in the document.
   The currency reference denotes the option currency as the option was quoted (as opposed to
   the face currency).'

   <faceOnCurrency> Currency </faceOnCurrency> [1]
   'Either the callCurrencyAmount or the putCurrencyAmount defined elsewhere in the document.
   The currency reference denotes the face currency as the option was quoted (as opposed to
   the option currency).'

   <quotedTenor> Period </quotedTenor> [0..1]
   'Code denoting the tenor of the option leg.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotedAs">
   <xsd:sequence>
      <xsd:element name="optionOnCurrency" type=" Currency "/>
      <xsd:element name="faceOnCurrency" type=" Currency "/>
      <xsd:element name="quotedTenor" type=" Period " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SideRate

Super-types:	None
Sub-types:	None

Name	SideRate
Used by (from the same schema document)	Complex Type **SideRates** , Complex Type **SideRates**
Abstract	no
Documentation	A type that is used for describing a particular rate against base currency. Exists within SideRates.

XML Instance Representation

```
<...>
   <currency> Currency </currency> [1]
   'The currency in which an amount is denominated.'

   <sideRateBasis> SideRateBasisEnum </sideRateBasis> [1]
   'The method by which the exchange rate against base currency is quoted.'

   <rate> xsd:decimal </rate> [1]
   'The rate of exchange between the two currencies of the leg of a deal. Must be specified with
   a quote basis.'

   <spotRate> xsd:decimal </spotRate> [0..1]
   'An optional element used for FX forwards and certain types of FX OTC options. For
   deals consumated in the FX Forwards Market, this represents the current market rate for
```

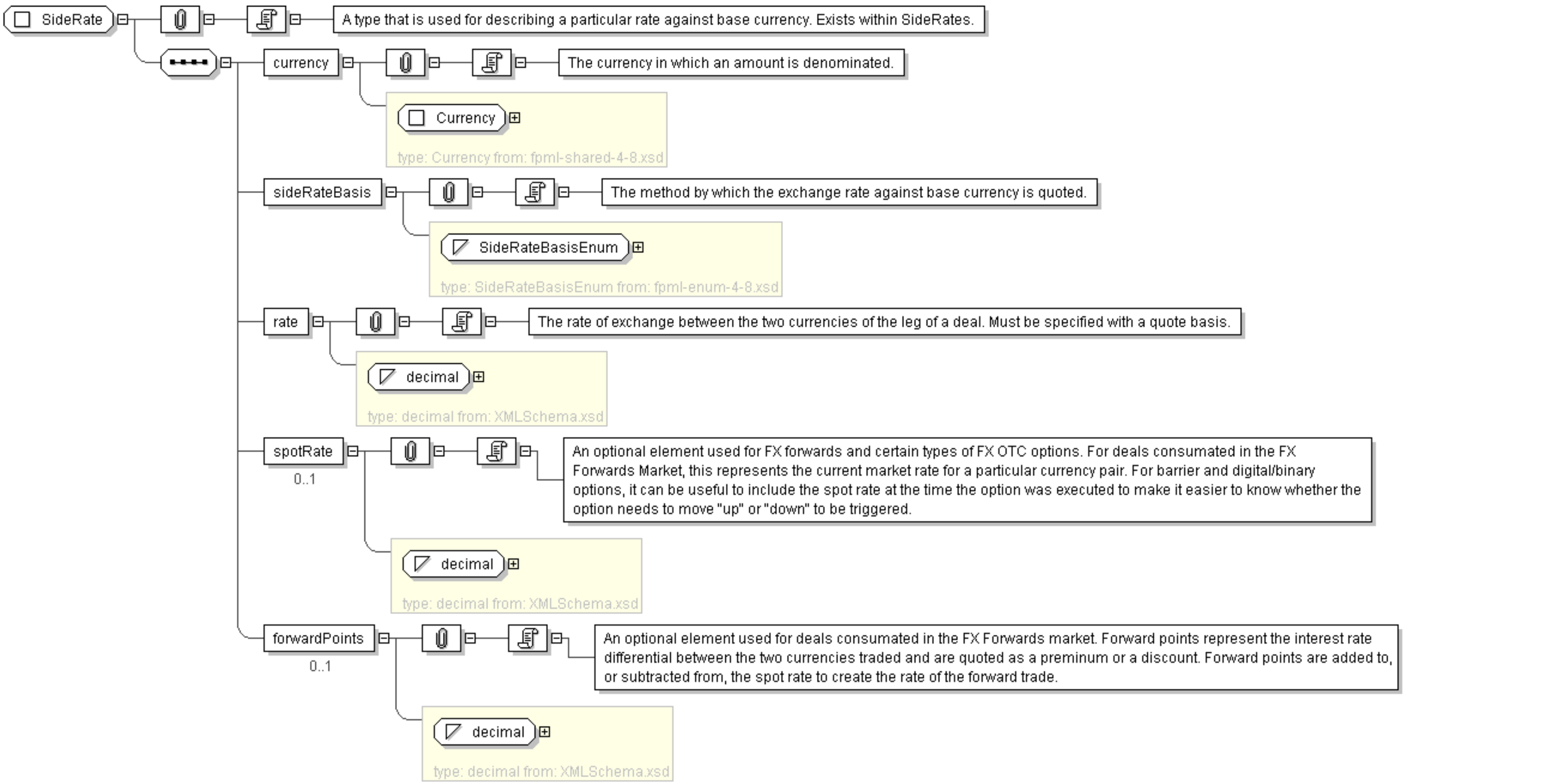
a particular currency pair. For barrier and digital/binary options, it can be useful to include the spot rate at the time the option was executed to make it easier to know whether the option needs to move \"up\" or \"down\" to be triggered.'

<forwardPoints> xsd:decimal </forwardPoints> [0..1]

'An optional element used for deals consumated in the FX Forwards market. Forward points represent the interest rate differential between the two currencies traded and are quoted as a preminum or a discount. Forward points are added to, or subtracted from, the spot rate to create the rate of the forward trade.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="SideRate">
   <xsd:sequence>
      <xsd:element name="currency" type=" Currency "/>
      <xsd:element name="sideRateBasis" type=" SideRateBasisEnum "/>
      <xsd:element name="rate" type=" xsd:decimal "/>
      <xsd:element name="spotRate" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="forwardPoints" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SideRates

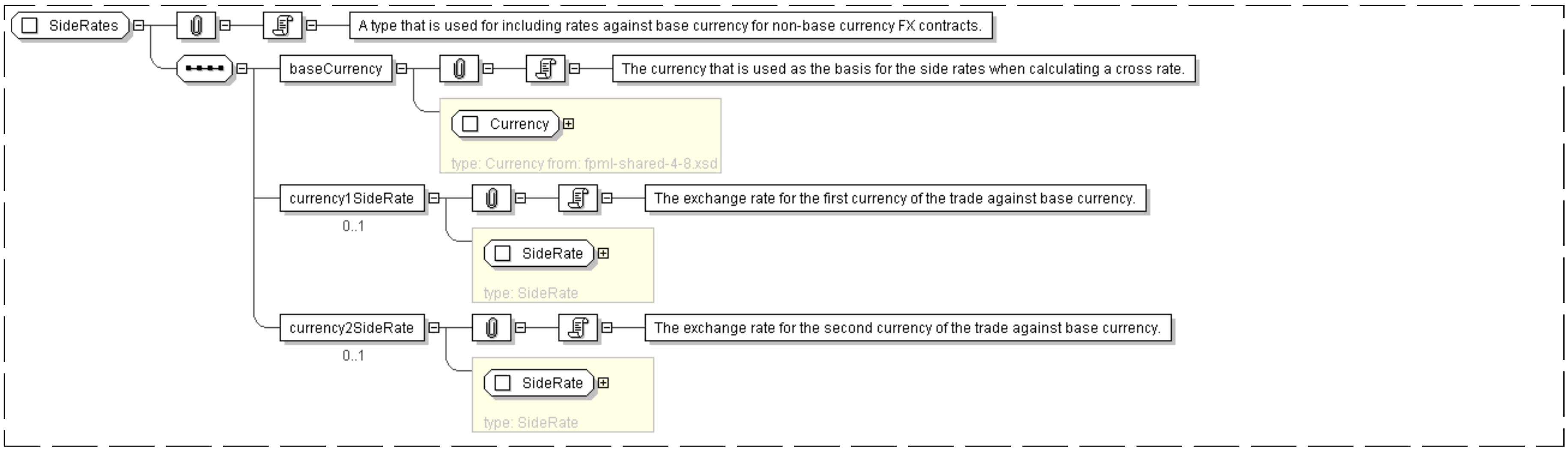
Super-types:	None
Sub-types:	None

Name	SideRates
Used by (from the same schema document)	Complex Type **ExchangeRate**
Abstract	no
Documentation	A type that is used for including rates against base currency for non-base currency FX contracts.

XML Instance Representation

```
<...>
   <baseCurrency> Currency </baseCurrency> [1]
   'The currency that is used as the basis for the side rates when calculating a cross rate.'

   <currency1SideRate> SideRate </currency1SideRate> [0..1]
   'The exchange rate for the first currency of the trade against base currency.'

   <currency2SideRate> SideRate </currency2SideRate> [0..1]
   'The exchange rate for the second currency of the trade against base currency.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SideRates">
   <xsd:sequence>
      <xsd:element name="baseCurrency" type=" Currency "/>
      <xsd:element name="currency1SideRate" type=" SideRate " minOccurs="0"/>
      <xsd:element name="currency2SideRate" type=" SideRate " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TermDeposit

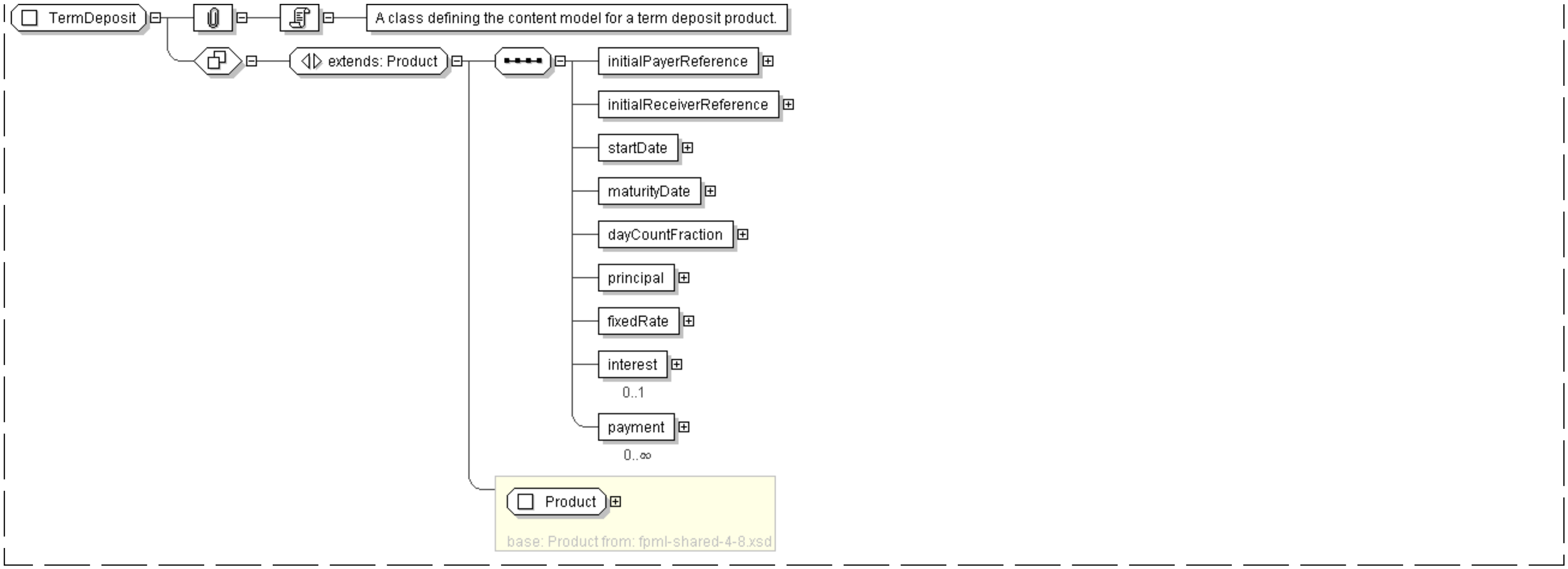
Super-types:	Product < **TermDeposit** (by extension)
Sub-types:	None

Name	TermDeposit
Used by (from the same schema document)	Element **termDeposit**
Abstract	no
Documentation	A class defining the content model for a term deposit product.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <initialPayerReference> PartyReference </initialPayerReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party referenced is the payer of the initial principal of the deposit on the start date.'

   <initialReceiverReference> PartyReference </initialReceiverReference> [1]
   'A pointer style reference to a party identifier defined elsewhere in the document. The
   party is the receiver of the initial principal of the deposit on the start date.'

   <startDate> xsd:date </startDate> [1]
   'The averaging period start date.'

   <maturityDate> xsd:date </maturityDate> [1]
   'The end date of the calculation period. This date should already be adjusted for
   any applicable business day convention.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [1]
   'The day count fraction.'

   <principal> Money </principal> [1]
   'The principal amount of the trade.'

   <fixedRate> xsd:decimal </fixedRate> [1]
   'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate
   of 5% would be represented as 0.05.'

   <interest> Money </interest> [0..1]
   'The total interest of at maturity of the trade.'

   <payment> Payment </payment> [0..*]
   'A known payment between two parties.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TermDeposit">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="initialPayerReference" type=" PartyReference "/>
            <xsd:element name="initialReceiverReference" type=" PartyReference "/>
            <xsd:element name="startDate" type=" xsd:date "/>
            <xsd:element name="maturityDate" type=" xsd:date "/>
            <xsd:element name="dayCountFraction" type=" DayCountFraction "/>
            <xsd:element name="principal" type=" Money "/>
            <xsd:element name="fixedRate" type=" xsd:decimal "/>
            <xsd:element name="interest" type=" Money " minOccurs="0"/>
            <xsd:element name="payment" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**
Schema Component Type   Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress

Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-asset-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-asset-4-8.xsd"/>
   ...
</xsd:schema>
```

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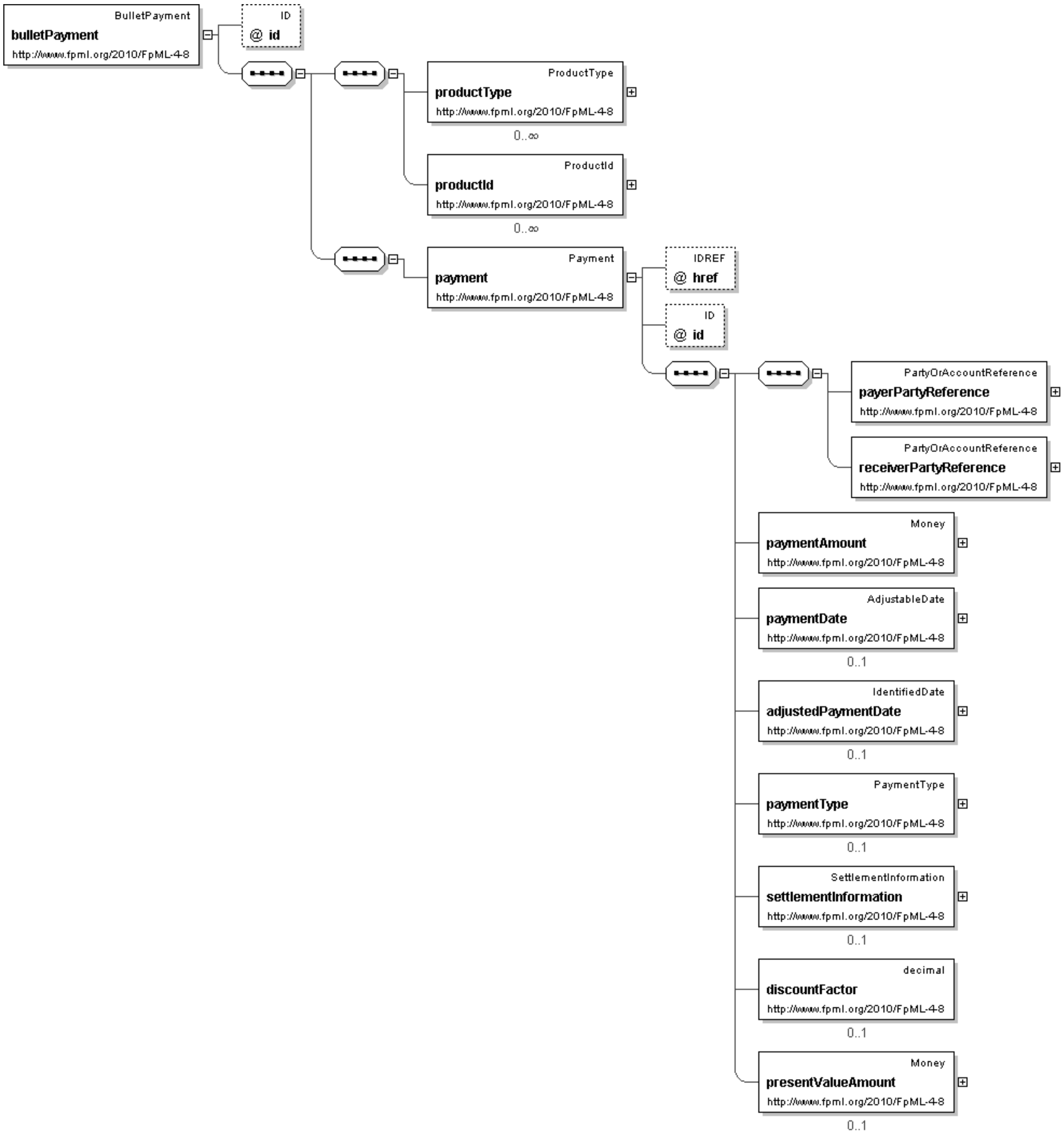
Global Declarations

Element: bulletPayment

- *This element can be used wherever the following element is referenced:*
  - product

Name	bulletPayment
Type	BulletPayment
Nillable	no
Abstract	no
Documentation	A product to represent a single known payment.

Logical Diagram



XML Instance Representation

```
<bulletPayment
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
```

a coding scheme.'

<productId> ProductId </productId> [0..*]

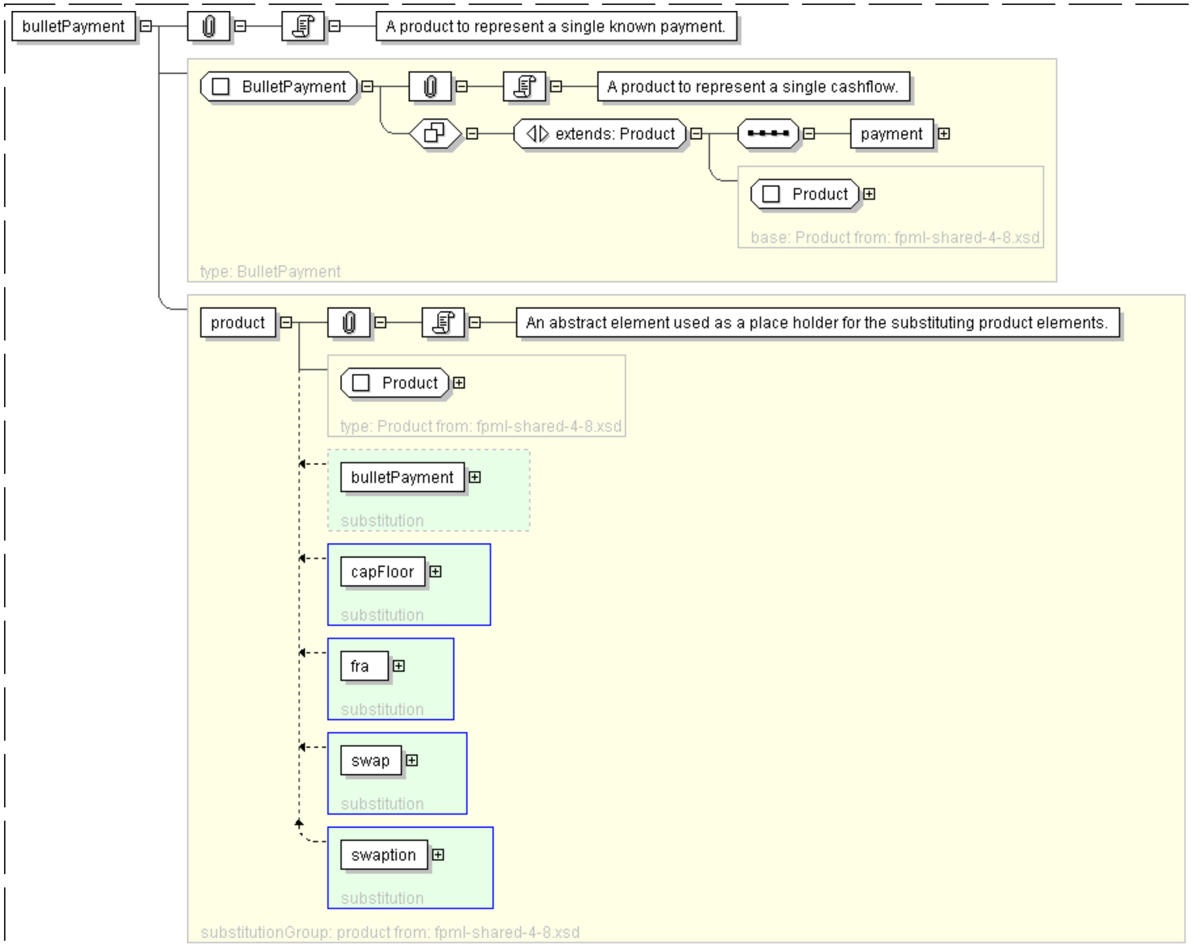
'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<payment> Payment </payment> [1]

'A known payment between two parties.'

</bulletPayment>

Diagram



Schema Component Representation

```
<xsd:element name="bulletPayment" type=" BulletPayment " substitutionGroup="product"/>
```

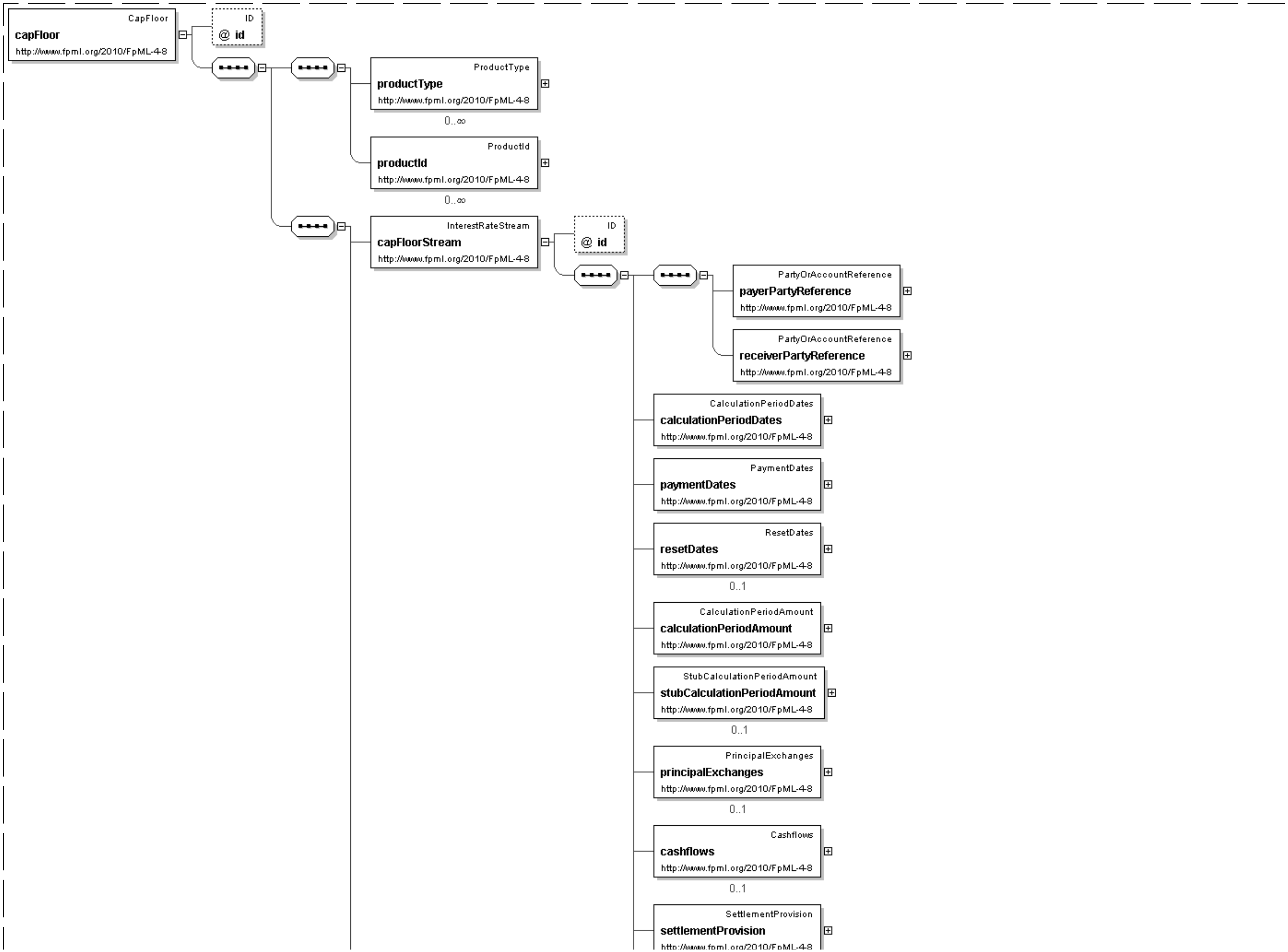
top

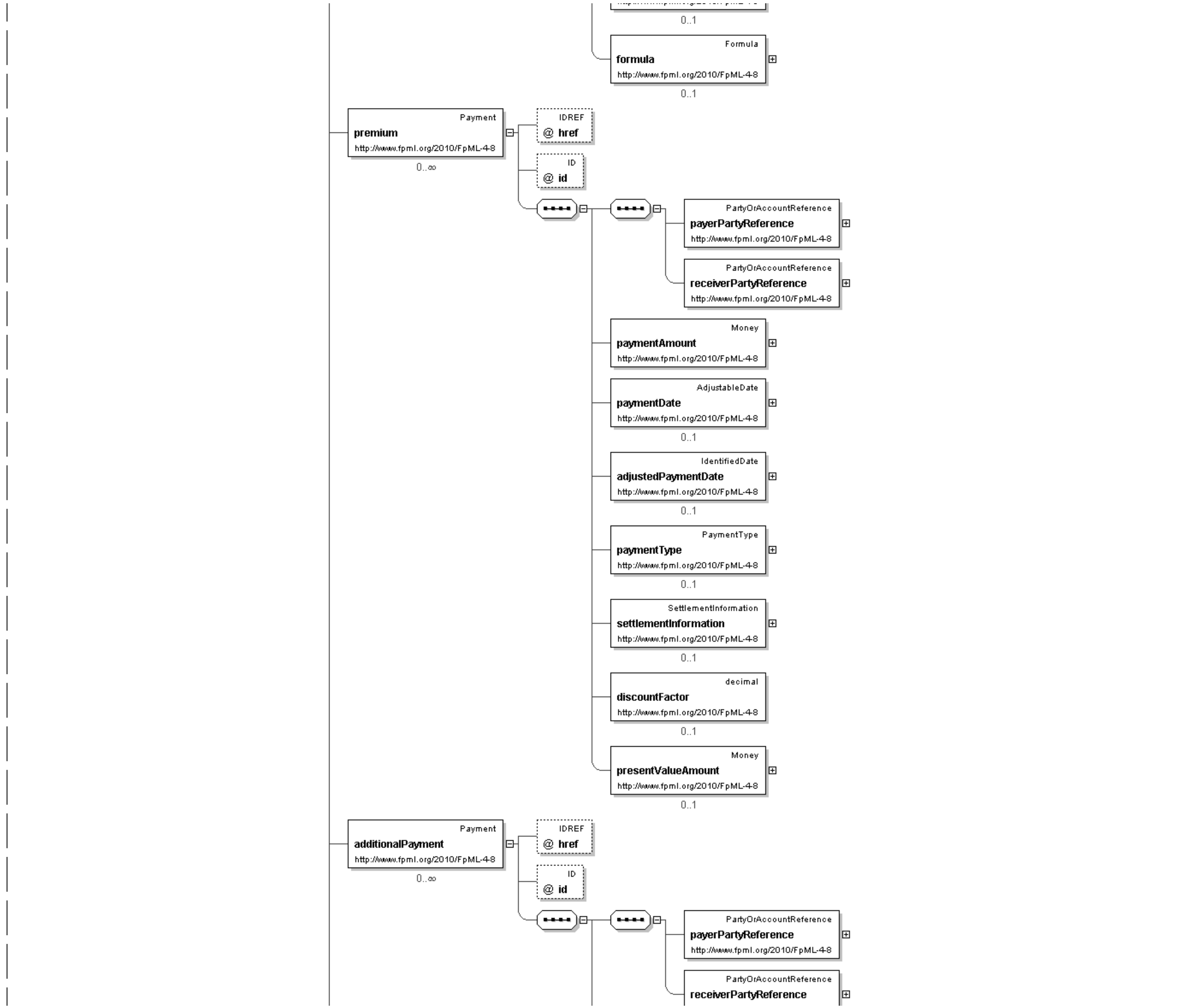
Element: capFloor

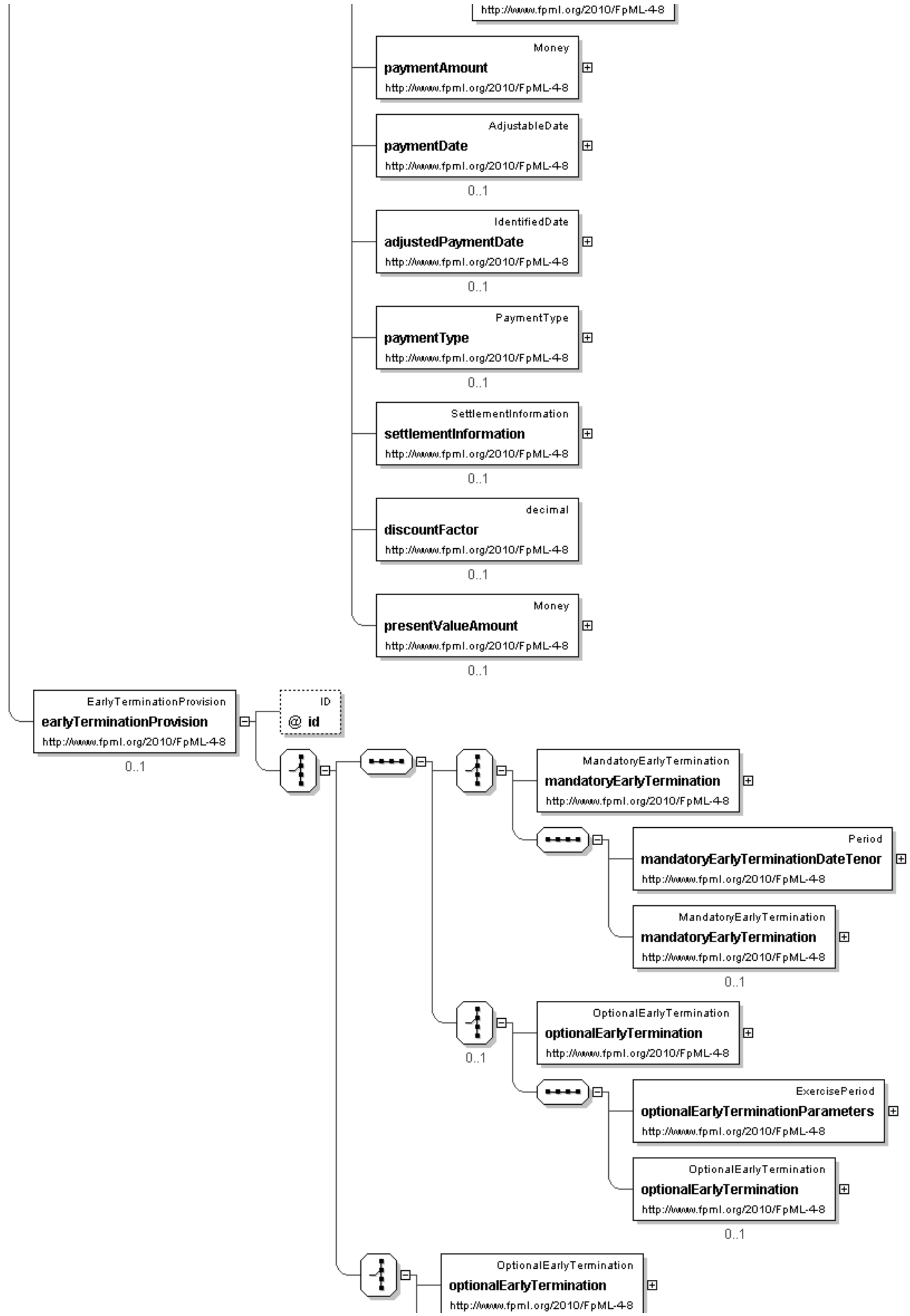
- *This element can be used wherever the following element is referenced:*
  - product

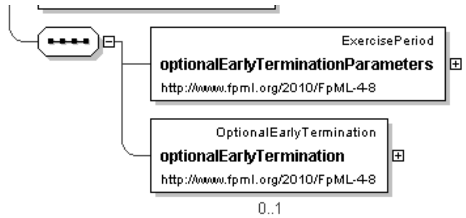
Name	capFloor
Type	CapFloor
Nillable	no
Abstract	no
Documentation	A cap, floor or cap floor structures product definition.

Logical Diagram




0..1
Formula
formula
http://www.fpml.org/2010/FpML-4-8
0..1
Payment
premium
http://www.fpml.org/2010/FpML-4-8
0..∞
IDREF
@ href
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
paymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableDate
paymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
adjustedPaymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1
Money
presentValueAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Payment
additionalPayment
http://www.fpml.org/2010/FpML-4-8
0..∞
IDREF
@ href
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference

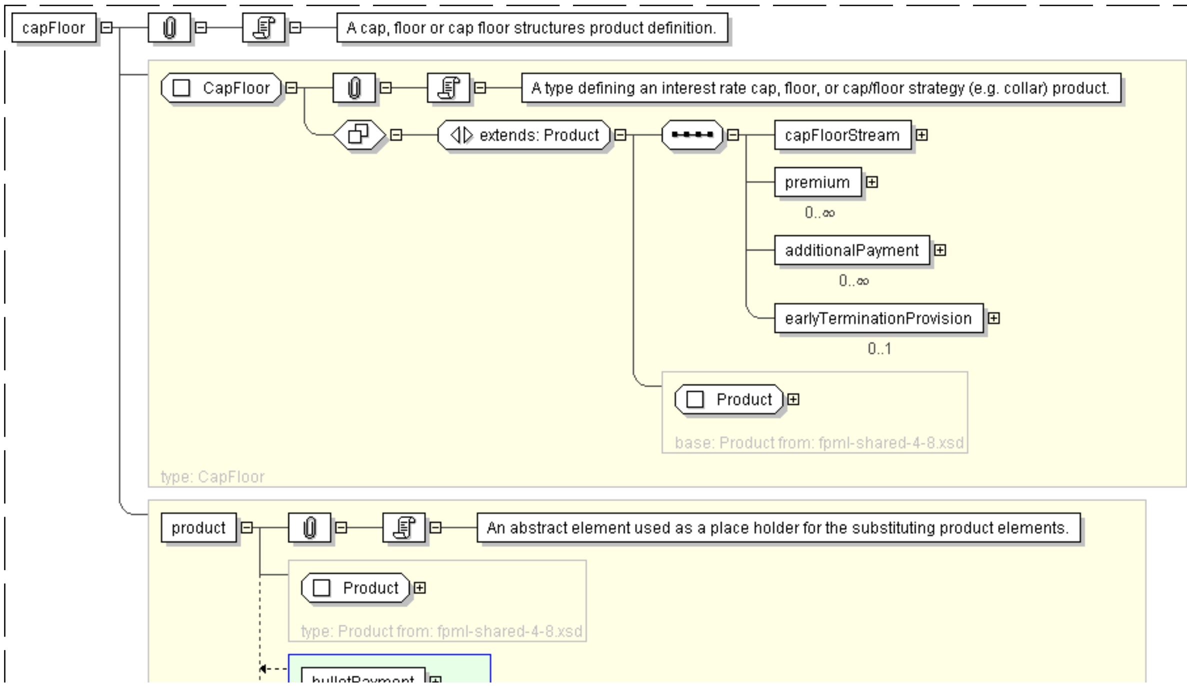

http://www.fpml.org/2010/FpML-4-8
Money
paymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableDate
paymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
adjustedPaymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementInformation
settlementInformation
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1
Money
presentValueAmount
http://www.fpml.org/2010/FpML-4-8
0..1
EarlyTerminationProvision
earlyTerminationProvision
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
MandatoryEarlyTermination
mandatoryEarlyTermination
http://www.fpml.org/2010/FpML-4-8
Period
mandatoryEarlyTerminationDateTenor
http://www.fpml.org/2010/FpML-4-8
MandatoryEarlyTermination
mandatoryEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
ExercisePeriod
optionalEarlyTerminationParameters
http://www.fpml.org/2010/FpML-4-8
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8

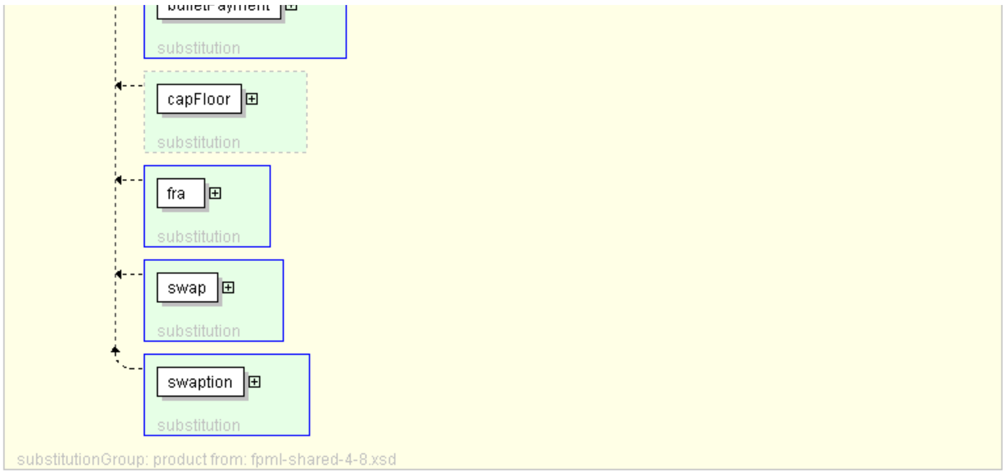


XML Instance Representation

```
<capFloor
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <capFloorStream> InterestRateStream </capFloorStream> [1]
   <premium> Payment </premium> [0..*]
   'The option premium amount payable by buyer to seller on the specified payment date.'

   <additionalPayment> Payment </additionalPayment> [0..*]
   'Additional payments between the principal parties.'

   <earlyTerminationProvision> EarlyTerminationProvision </earlyTerminationProvision> [0..1]
   'Parameters specifying provisions relating to the optional and mandatory early terminarion of
   a CapFloor transaction.'

</capFloor>
```

Diagram





Schema Component Representation

```
<xsd:element name="capFloor" type=" CapFloor " substitutionGroup="product"/>
```

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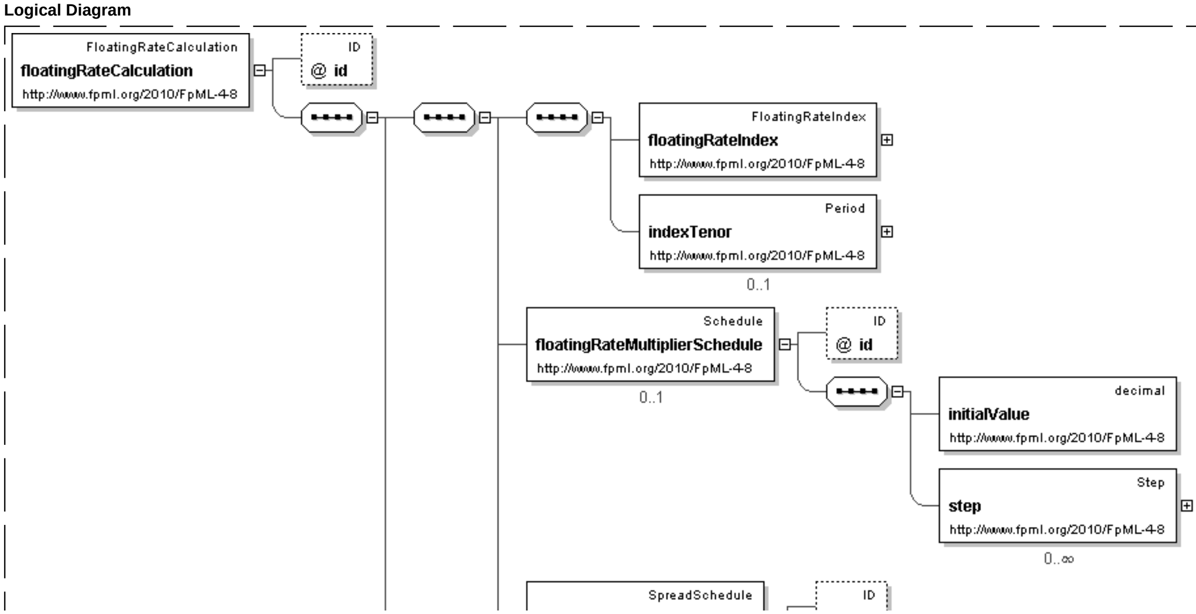
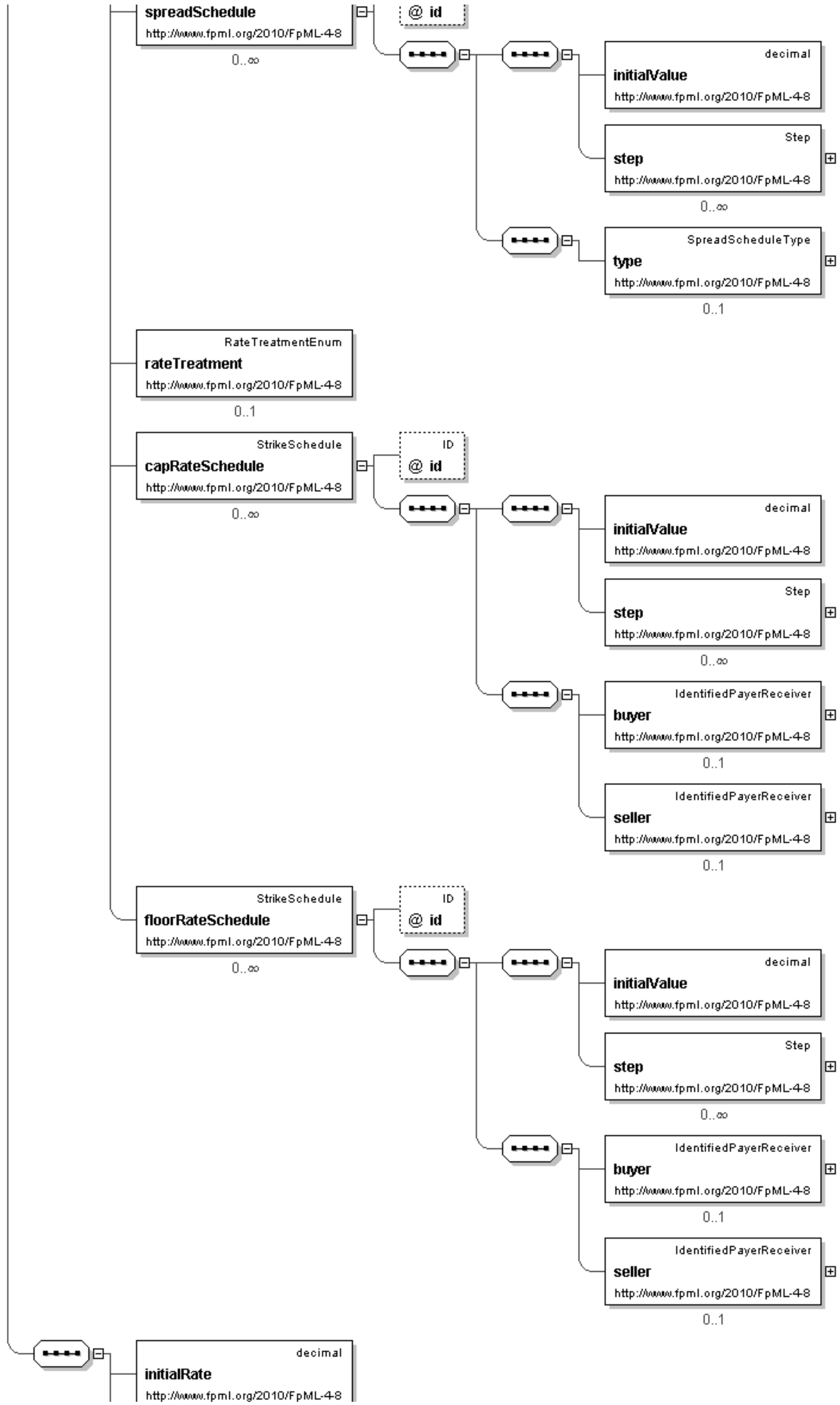
Element: floatingRateCalculation

- *This element can be used wherever the following element is referenced:*
  - rateCalculation

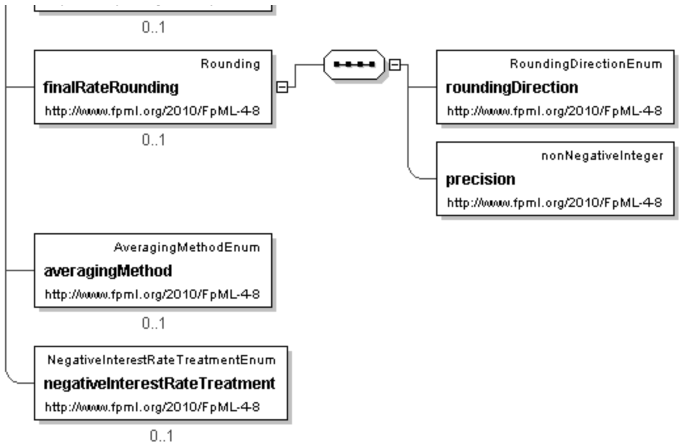
Name	floatingRateCalculation
Type	FloatingRateCalculation
Nillable	no
Abstract	no
Documentation	A floating rate calculation definition.

Logical Diagram





spreadSchedule
http://www.fpml.org/2010/FpML-4-8
0..∞
@ id
decimal
initialValue
http://www.fpml.org/2010/FpML-4-8
Step
step
http://www.fpml.org/2010/FpML-4-8
0..∞
SpreadScheduleType
type
http://www.fpml.org/2010/FpML-4-8
0..1
RateTreatmentEnum
rateTreatment
http://www.fpml.org/2010/FpML-4-8
0..1
StrikeSchedule
capRateSchedule
http://www.fpml.org/2010/FpML-4-8
0..∞
ID
@ id
decimal
initialValue
http://www.fpml.org/2010/FpML-4-8
Step
step
http://www.fpml.org/2010/FpML-4-8
0..∞
IdentifiedPayerReceiver
buyer
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedPayerReceiver
seller
http://www.fpml.org/2010/FpML-4-8
0..1
StrikeSchedule
floorRateSchedule
http://www.fpml.org/2010/FpML-4-8
0..∞
ID
@ id
decimal
initialValue
http://www.fpml.org/2010/FpML-4-8
Step
step
http://www.fpml.org/2010/FpML-4-8
0..∞
IdentifiedPayerReceiver
buyer
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedPayerReceiver
seller
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
initialRate
http://www.fpml.org/2010/FpML-4-8



XML Instance Representation

```
<floatingRateCalculation
id=" xsd:ID [0..1]">
    <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
    <indexTenor> Period </indexTenor> [0..1]
    'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'

    <floatingRateMultiplierSchedule> Schedule </floatingRateMultiplierSchedule> [0..1]
    'A rate multiplier or multiplier schedule to apply to the floating rate. A multiplier
    schedule is expressed as explicit multipliers and dates. In the case of a schedule, the
    step dates may be subject to adjustment in accordance with any adjustments specified in
    the calculationPeriodDatesAdjustments. The multiplier can be a positive or negative
    decimal. This element should only be included if the multiplier is not equal to 1 (one) for
    the term of the stream.'

    <spreadSchedule> SpreadSchedule </spreadSchedule> [0..*]
    'The ISDA Spread or a Spread schedule expressed as explicit spreads and dates. In the case of
    a schedule, the step dates may be subject to adjustment in accordance with any
    adjustments specified in calculationPeriodDatesAdjustments. The spread is a per annum
    rate, expressed as a decimal. For purposes of determining a calculation period amount,
    if positive the spread will be added to the floating rate and if negative the spread will
    be subtracted from the floating rate. A positive 10 basis point (0.1%) spread would
    be represented as 0.001.'

    <rateTreatment> RateTreatmentEnum </rateTreatment> [0..1]
    'The specification of any rate conversion which needs to be applied to the observed rate
    before being used in any calculations. The two common conversions are for securities quoted
    on a bank discount basis which will need to be converted to either a Money Market Yield or
    Bond Equivalent Yield. See the Annex to the 2000 ISDA Definitions, Section 7.3. Certain
    General Definitions Relating to Floating Rate Options, paragraphs (g) and (h) for
    definitions of these terms.'

    <capRateSchedule> StrikeSchedule </capRateSchedule> [0..*]
    'The cap rate or cap rate schedule, if any, which applies to the floating rate. The cap
    rate (strike) is only required where the floating rate on a swap stream is capped at a
    certain level. A cap rate schedule is expressed as explicit cap rates and dates and the
    step dates may be subject to adjustment in accordance with any adjustments specified
    in calculationPeriodDatesAdjustments. The cap rate is assumed to be exclusive of any spread
    and is a per annum rate, expressed as a decimal. A cap rate of 5% would be represented as 0.05.'

    <floorRateSchedule> StrikeSchedule </floorRateSchedule> [0..*]
    'The floor rate or floor rate schedule, if any, which applies to the floating rate. The
    floor rate (strike) is only required where the floating rate on a swap stream is floored at
    a certain strike level. A floor rate schedule is expressed as explicit floor rates and
    dates and the step dates may be subject to adjustment in accordance with any
    adjustments specified in calculationPeriodDatesAdjustments. The floor rate is assumed to
    be exclusive of any spread and is a per annum rate, expressed as a decimal. A floor rate of
    5% would be represented as 0.05.'
```

<initialRate> xsd:decimal </initialRate> [0..1]

'The initial floating rate reset agreed between the principal parties involved in the trade. This is assumed to be the first required reset rate for the first regular calculation period. It should only be included when the rate is not equal to the rate published on the source implied by the floating rate index. An initial rate of 5% would be represented as 0.05.'

<finalRateRounding> Rounding </finalRateRounding> [0..1]

'The rounding convention to apply to the final rate used in determination of a calculation period amount.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]

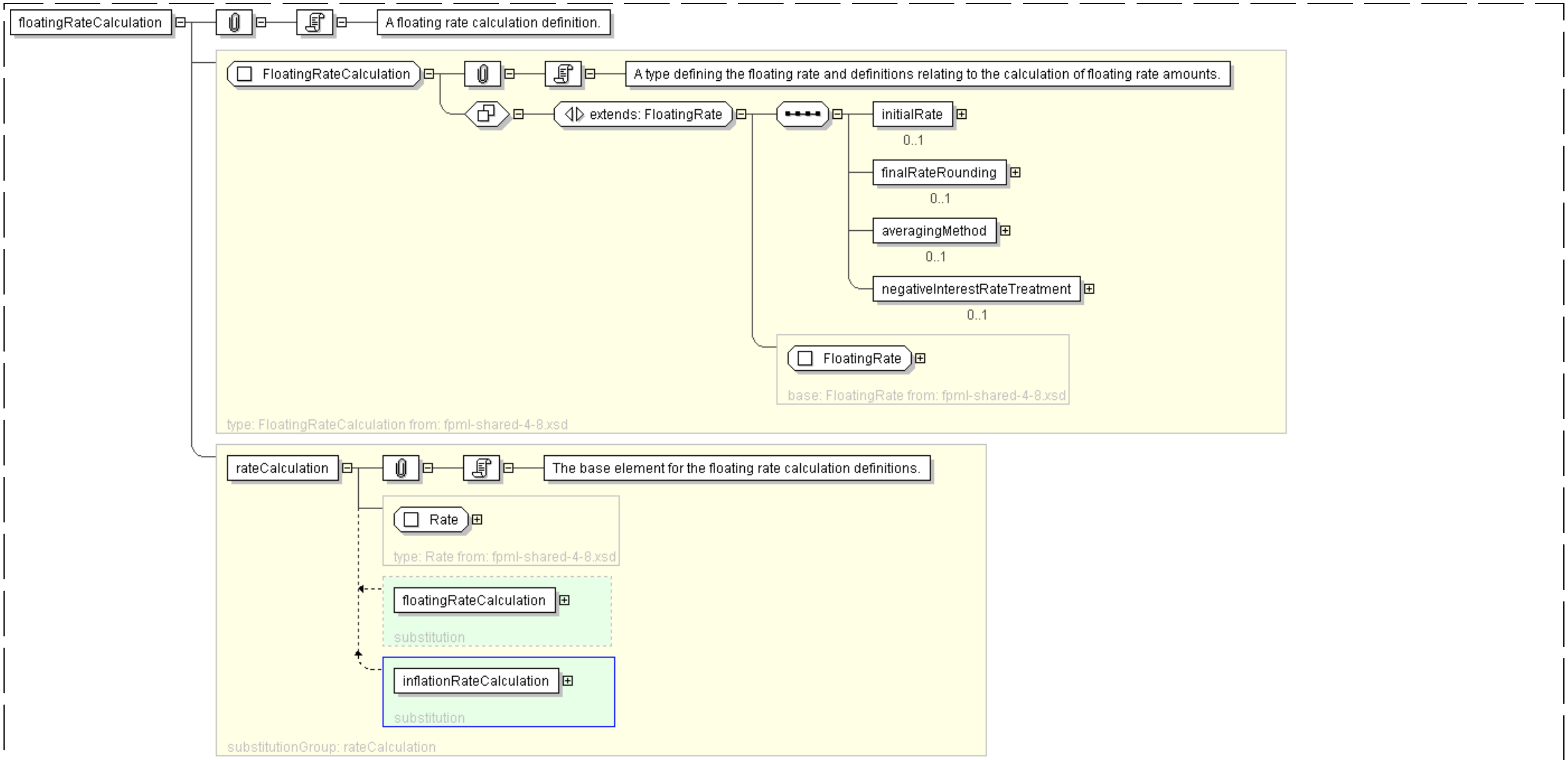
'If averaging is applicable, this component specifies whether a weighted or unweighted average method of calculation is to be used. The component must only be included when averaging applies.'

<negativeInterestRateTreatment> NegativeInterestRateTreatmentEnum </negativeInterestRateTreatment> [0..1]

'The specification of any provisions for calculating payment obligations when a floating rate is negative (either due to a quoted negative floating rate or by operation of a spread that is subtracted from the floating rate).'

</floatingRateCalculation>

Diagram



Schema Component Representation

```
<xsd:element name="floatingRateCalculation" type=" FloatingRateCalculation
```

```
" substitutionGroup="rateCalculation"/>
```

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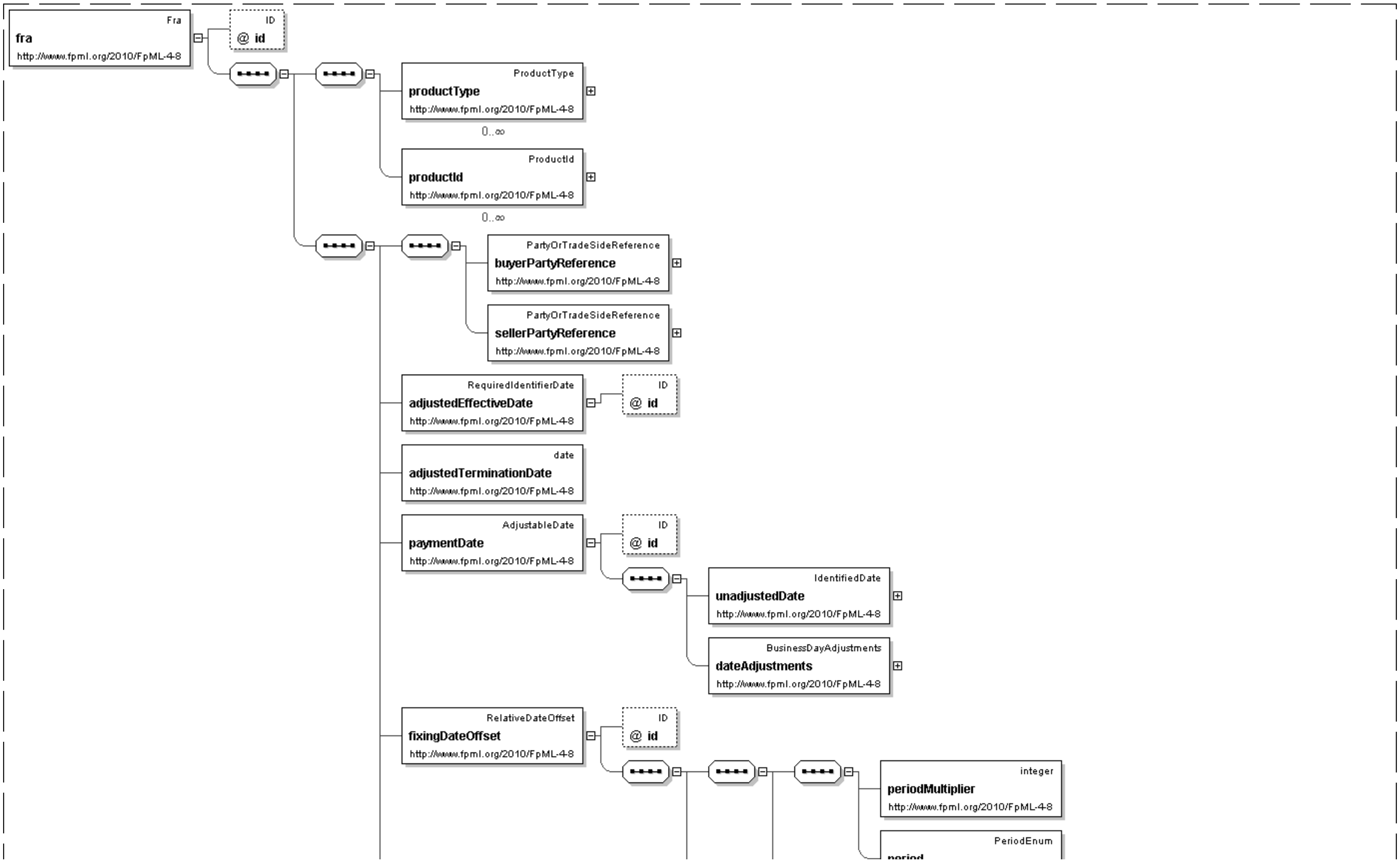
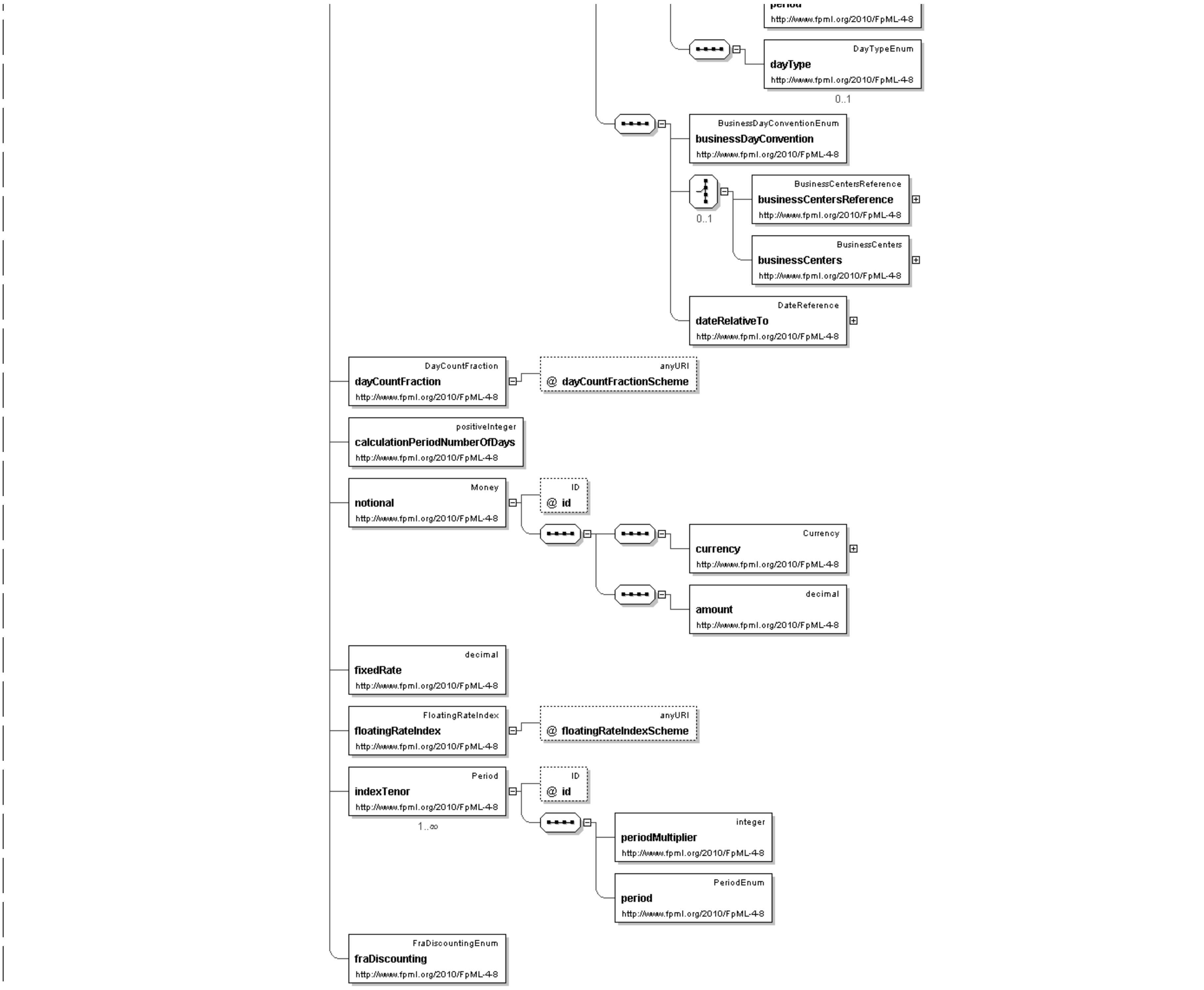
Element: fra

- *This element can be used wherever the following element is referenced:*
  - product

Name	fra
Type	Fra
Nillable	no
Abstract	no
Documentation	A forward rate agreement product definition.

Logical Diagram

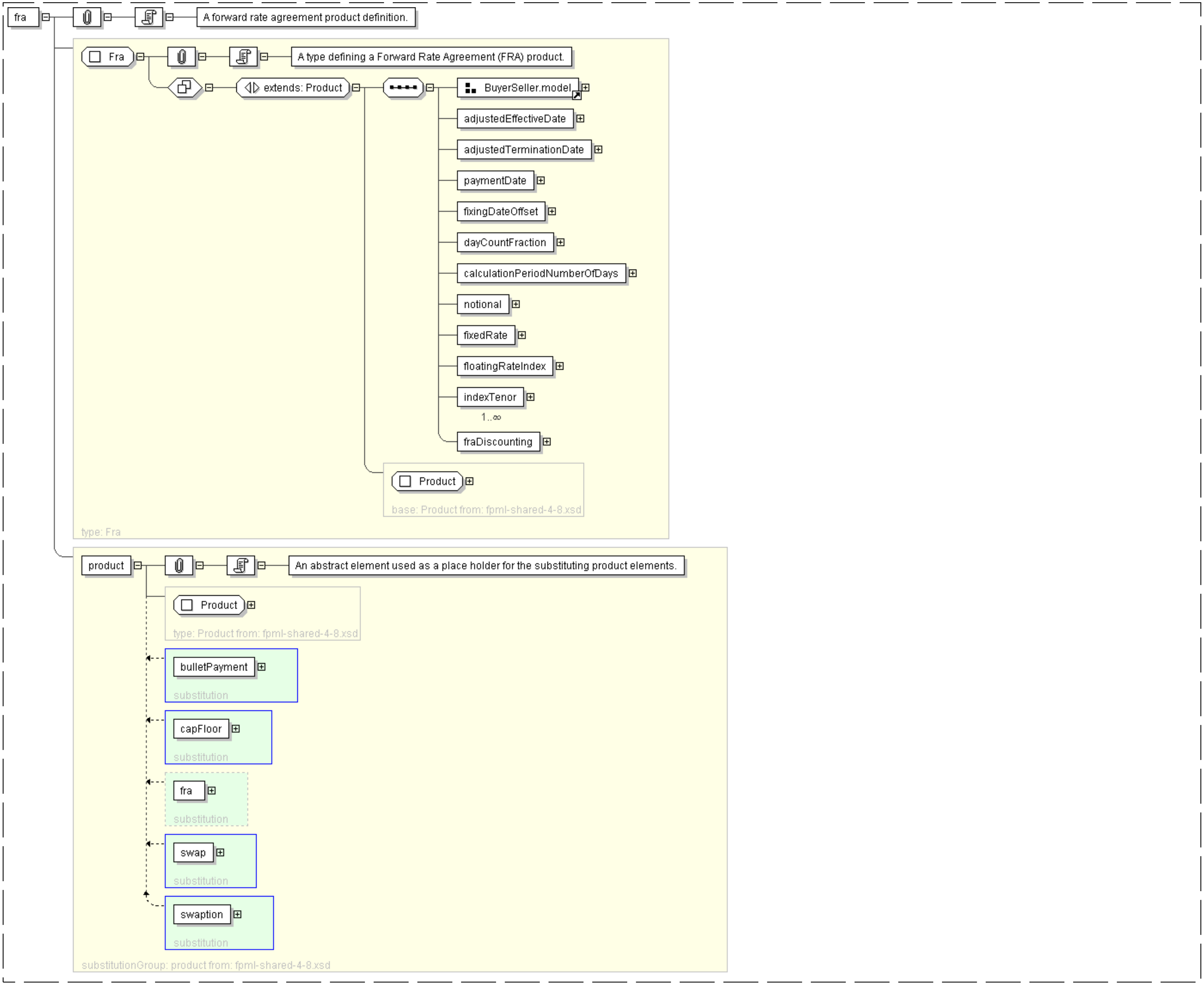



http://www.fpml.org/2010/FpML-4-8
DayTypeEnum
dayType
http://www.fpml.org/2010/FpML-4-8
0..1
BusinessDayConventionEnum
businessDayConvention
http://www.fpml.org/2010/FpML-4-8
BusinessCentersReference
businessCentersReference
http://www.fpml.org/2010/FpML-4-8
0..1
BusinessCenters
businessCenters
http://www.fpml.org/2010/FpML-4-8
DateReference
dateRelativeTo
http://www.fpml.org/2010/FpML-4-8
DayCountFraction
dayCountFraction
http://www.fpml.org/2010/FpML-4-8
anyURI
@ dayCountFractionScheme
positiveInteger
calculationPeriodNumberOfDays
http://www.fpml.org/2010/FpML-4-8
Money
notional
http://www.fpml.org/2010/FpML-4-8
ID
@ id
Currency
currency
http://www.fpml.org/2010/FpML-4-8
decimal
amount
http://www.fpml.org/2010/FpML-4-8
decimal
fixedRate
http://www.fpml.org/2010/FpML-4-8
FloatingRateIndex
floatingRateIndex
http://www.fpml.org/2010/FpML-4-8
anyURI
@ floatingRateIndexScheme
Period
indexTenor
http://www.fpml.org/2010/FpML-4-8
1..∞
ID
@ id
integer
periodMultiplier
http://www.fpml.org/2010/FpML-4-8
PeriodEnum
period
http://www.fpml.org/2010/FpML-4-8
FraDiscountingEnum
fraDiscounting
http://www.fpml.org/2010/FpML-4-8

XML Instance Representation

```
<fra
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <adjustedEffectiveDate> RequiredIdentifierDate </adjustedEffectiveDate> [1]
    'The start date of the calculation period. This date should already be adjusted for
    any applicable business day convention. This is also the date when the observed rate
    is applied, the reset date.'

    <adjustedTerminationDate> xsd:date </adjustedTerminationDate> [1]
    'The end date of the calculation period. This date should already be adjusted for
    any applicable business day convention.'

    <paymentDate> AdjustableDate </paymentDate> [1]
    'The payment date. This date is subject to adjustment in accordance with any
    applicable business day convention.'

    <fixingDateOffset> RelativeDateOffset </fixingDateOffset> [1]
    'Specifies the fixing date relative to the reset date in terms of a business days offset and
    an associated set of financial business centers. Normally these offset calculation rules
    will be those specified in the ISDA definition for the relevant floating rate index (ISDA
    \'s Floating Rate Option). However, non-standard offset calculation rules may apply for a
    trade if mutually agreed by the principal parties to the transaction. The href attribute on
    the dateRelativeTo element should reference the id attribute on the
    adjustedEffectiveDate element.'

    <dayCountFraction> DayCountFraction </dayCountFraction> [1]
    'The day count fraction.'

    <calculationPeriodNumberOfDays> xsd:positiveInteger </calculationPeriodNumberOfDays> [1]
    'The number of days from the adjusted effective date to the adjusted termination
    date calculated in accordance with the applicable day count fraction.'

    <notional> Money </notional> [1]
    'The notional amount.'

    <fixedRate> xsd:decimal </fixedRate> [1]
    'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate
    of 5% would be represented as 0.05.'

    <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
    <indexTenor> Period </indexTenor> [1..*]
    'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'

    <fraDiscounting> FraDiscountingEnum </fraDiscounting> [1]
    'Specifies whether discounting applies and, if so, what type.'

</fra>
```

Diagram


fra
A forward rate agreement product definition.
Fra
A type defining a Forward Rate Agreement (FRA) product.
extends: Product
BuyerSeller.model
adjustedEffectiveDate
adjustedTerminationDate
paymentDate
fixingDateOffset
dayCountFraction
calculationPeriodNumberOfDays
notional
fixedRate
floatingRateIndex
indexTenor
1..∞
fraDiscounting
Product
base: Product from: fpml-shared-4-8.xsd
type: Fra
product
An abstract element used as a place holder for the substituting product elements.
Product
type: Product from: fpml-shared-4-8.xsd
bulletPayment
substitution
capFloor
substitution
fra
substitution
swap
substitution
swaption
substitution
substitutionGroup: product from: fpml-shared-4-8.xsd

Schema Component Representation

```
<xsd:element name="fra" type=" Fra " substitutionGroup="product"/>
```

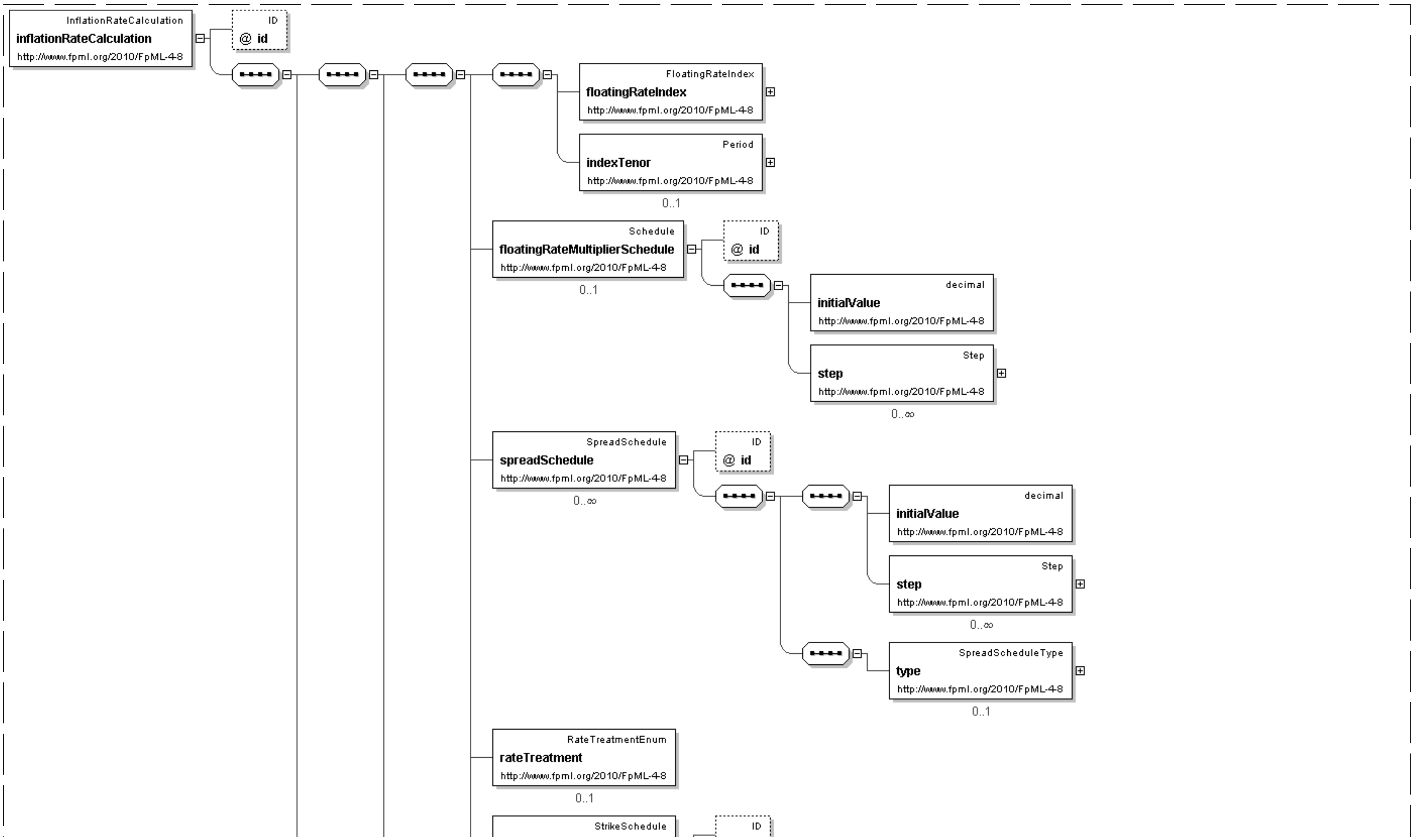
top

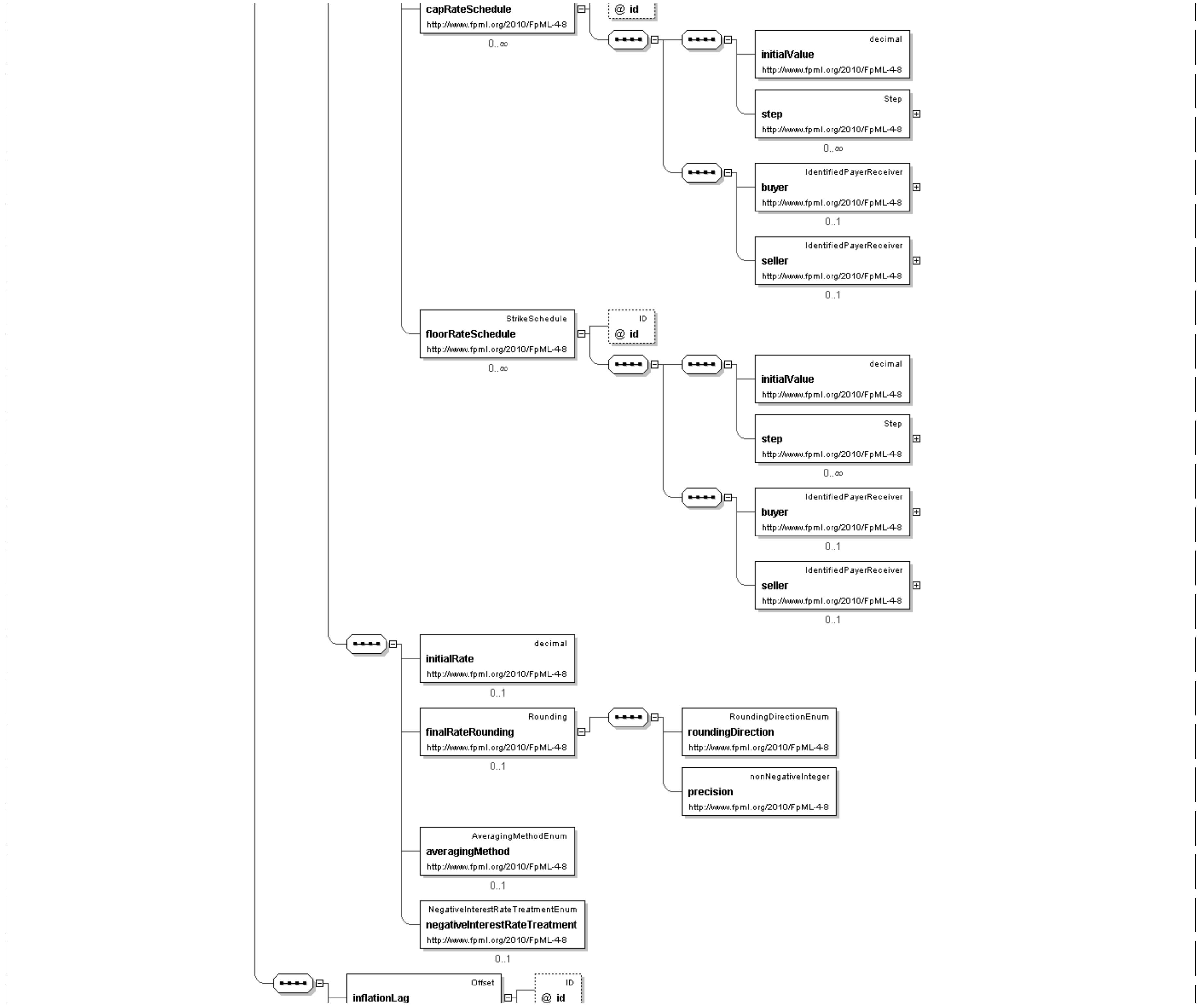
Element: inflationRateCalculation

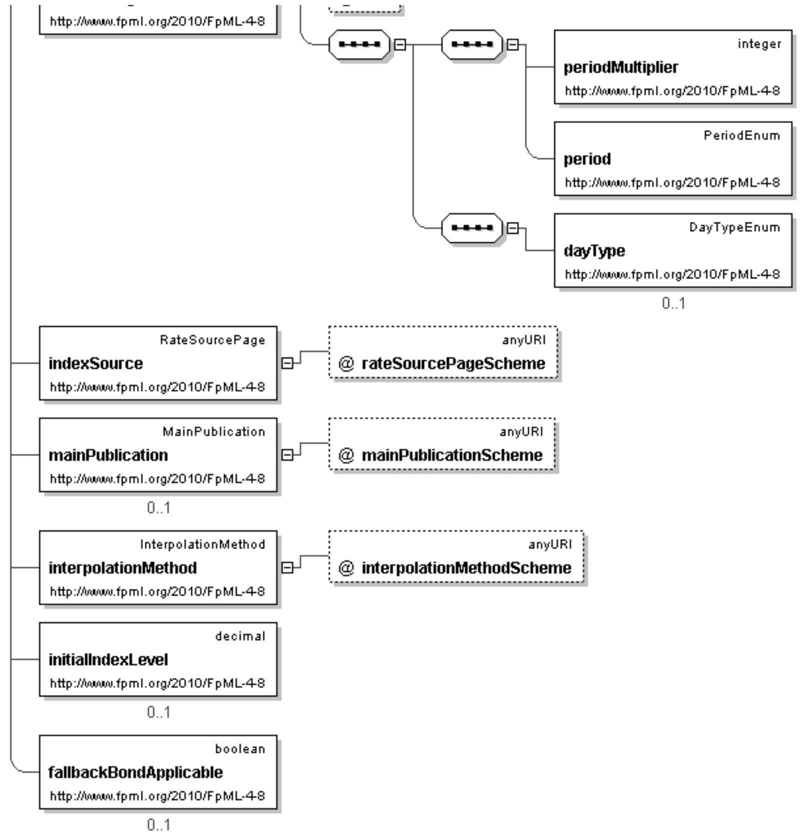
- *This element can be used wherever the following element is referenced:*
  - rateCalculation

Name	inflationRateCalculation
Type	InflationRateCalculation
Nillable	no
Abstract	no
Documentation	An inflation rate calculation definition.

Logical Diagram




capRateSchedule
http://www.fpml.org/2010/FpML-4-8
0..∞
@ id
decimal
initialValue
http://www.fpml.org/2010/FpML-4-8
Step
step
http://www.fpml.org/2010/FpML-4-8
0..∞
IdentifiedPayerReceiver
buyer
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedPayerReceiver
seller
http://www.fpml.org/2010/FpML-4-8
0..1
StrikeSchedule
floorRateSchedule
http://www.fpml.org/2010/FpML-4-8
0..∞
ID
@ id
decimal
initialValue
http://www.fpml.org/2010/FpML-4-8
Step
step
http://www.fpml.org/2010/FpML-4-8
0..∞
IdentifiedPayerReceiver
buyer
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedPayerReceiver
seller
http://www.fpml.org/2010/FpML-4-8
0..1
decimal
initialRate
http://www.fpml.org/2010/FpML-4-8
0..1
Rounding
finalRateRounding
http://www.fpml.org/2010/FpML-4-8
0..1
RoundingDirectionEnum
roundingDirection
http://www.fpml.org/2010/FpML-4-8
nonNegativeInteger
precision
http://www.fpml.org/2010/FpML-4-8
AveragingMethodEnum
averagingMethod
http://www.fpml.org/2010/FpML-4-8
0..1
NegativeInterestRateTreatmentEnum
negativeInterestRateTreatment
http://www.fpml.org/2010/FpML-4-8
0..1
Offset
inflationLag
ID
@ id



XML Instance Representation

```
<inflationRateCalculation
id=" xsd:ID [0..1]">
    <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
    <indexTenor> Period </indexTenor> [0..1]
    'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'

    <floatingRateMultiplierSchedule> Schedule </floatingRateMultiplierSchedule> [0..1]
    'A rate multiplier or multiplier schedule to apply to the floating rate. A multiplier
    schedule is expressed as explicit multipliers and dates. In the case of a schedule, the
    step dates may be subject to adjustment in accordance with any adjustments specified in
    the calculationPeriodDatesAdjustments. The multiplier can be a positive or negative
    decimal. This element should only be included if the multiplier is not equal to 1 (one) for
    the term of the stream.'

    <spreadSchedule> SpreadSchedule </spreadSchedule> [0..*]
    'The ISDA Spread or a Spread schedule expressed as explicit spreads and dates. In the case of
    a schedule, the step dates may be subject to adjustment in accordance with any
    adjustments specified in calculationPeriodDatesAdjustments. The spread is a per annum
    rate, expressed as a decimal. For purposes of determining a calculation period amount,
    if positive the spread will be added to the floating rate and if negative the spread will
    be subtracted from the floating rate. A positive 10 basis point (0.1%) spread would
    be represented as 0.001.'

    <rateTreatment> RateTreatmentEnum </rateTreatment> [0..1]
    'The specification of any rate conversion which needs to be applied to the observed rate
    before being used in any calculations. The two common conversions are for securities quoted
    on a bank discount basis which will need to be converted to either a Money Market Yield or
    Bond Equivalent Yield. See the Annex to the 2000 ISDA Definitions, Section 7.3. Certain
    General Definitions Relating to Floating Rate Options, paragraphs (g) and (h) for
    definitions of these terms.'
```

<capRateSchedule> StrikeSchedule </capRateSchedule> [0..*]

'The cap rate or cap rate schedule, if any, which applies to the floating rate. The cap rate (strike) is only required where the floating rate on a swap stream is capped at a certain level. A cap rate schedule is expressed as explicit cap rates and dates and the step dates may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments. The cap rate is assumed to be exclusive of any spread and is a per annum rate, expressed as a decimal. A cap rate of 5% would be represented as 0.05.'

<floorRateSchedule> StrikeSchedule </floorRateSchedule> [0..*]

'The floor rate or floor rate schedule, if any, which applies to the floating rate. The floor rate (strike) is only required where the floating rate on a swap stream is floored at a certain strike level. A floor rate schedule is expressed as explicit floor rates and dates and the step dates may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments. The floor rate is assumed to be exclusive of any spread and is a per annum rate, expressed as a decimal. A floor rate of 5% would be represented as 0.05.'

<initialRate> xsd:decimal </initialRate> [0..1]

'The initial floating rate reset agreed between the principal parties involved in the trade. This is assumed to be the first required reset rate for the first regular calculation period. It should only be included when the rate is not equal to the rate published on the source implied by the floating rate index. An initial rate of 5% would be represented as 0.05.'

<finalRateRounding> Rounding </finalRateRounding> [0..1]

'The rounding convention to apply to the final rate used in determination of a calculation period amount.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]

'If averaging is applicable, this component specifies whether a weighted or unweighted average method of calculation is to be used. The component must only be included when averaging applies.'

<negativeInterestRateTreatment> NegativeInterestRateTreatmentEnum </negativeInterestRateTreatment> [0..1]

'The specification of any provisions for calculating payment obligations when a floating rate is negative (either due to a quoted negative floating rate or by operation of a spread that is subtracted from the floating rate).'

<inflationLag> Offset </inflationLag> [1]

'an offsetting period from the payment date which determines the reference period for which the inflation index is onserved.'

<indexSource> RateSourcePage </indexSource> [1]

'The reference source such as Reuters or Bloomberg.'

<mainPublication> MainPublication </mainPublication> [0..1]

'The current main publication source such as relevant web site or a government body.'

<interpolationMethod> InterpolationMethod </interpolationMethod> [1]

'The method used when calculating the Inflation Index Level from multiple points - the most common is Linear.'

<initialIndexLevel> xsd:decimal </initialIndexLevel> [0..1]

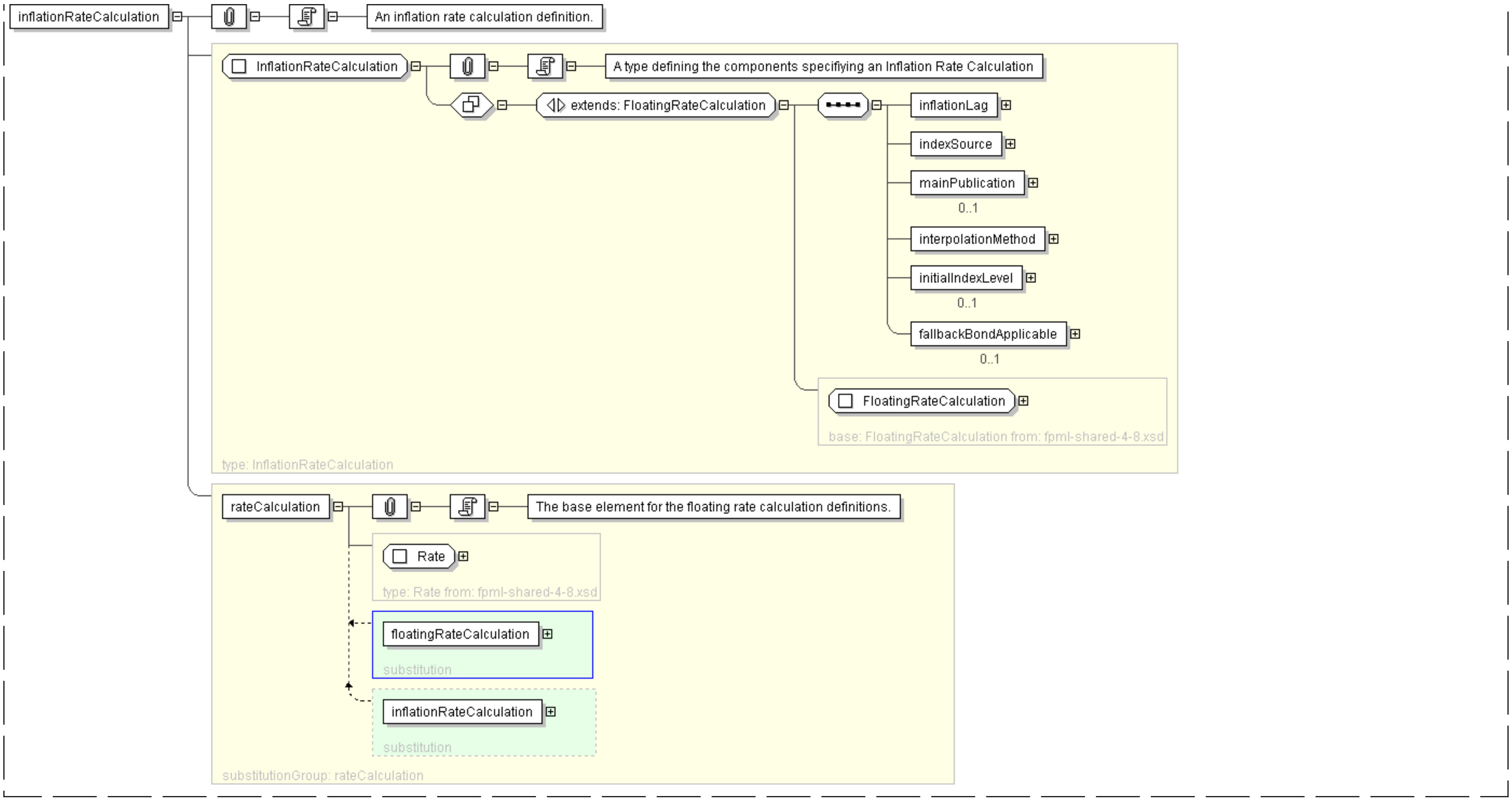
'initial known index level for the first calculation period.'

<fallbackBondApplicable> xsd:boolean </fallbackBondApplicable> [0..1]

'The applicability of a fallback bond as defined in the 2006 ISDA Inflation Derivatives Definitions, sections 1.3 and 1.8. Omission of this element imples a value of true.'

</inflationRateCalculation>

Diagram



Schema Component Representation

```
<xsd:element name="inflationRateCalculation" type=" InflationRateCalculation
" substitutionGroup="rateCalculation"/>
```

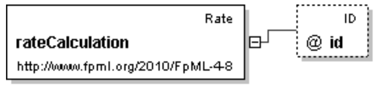
top

Element: rateCalculation

- *The following elements can be used wherever this element is referenced:*
  - floatingRateCalculation
  - inflationRateCalculation

Name	rateCalculation
Used by (from the same schema document)	Complex Type **Calculation**
Type	Rate
Nillable	no
Abstract	yes
Documentation	The base element for the floating rate calculation definitions.

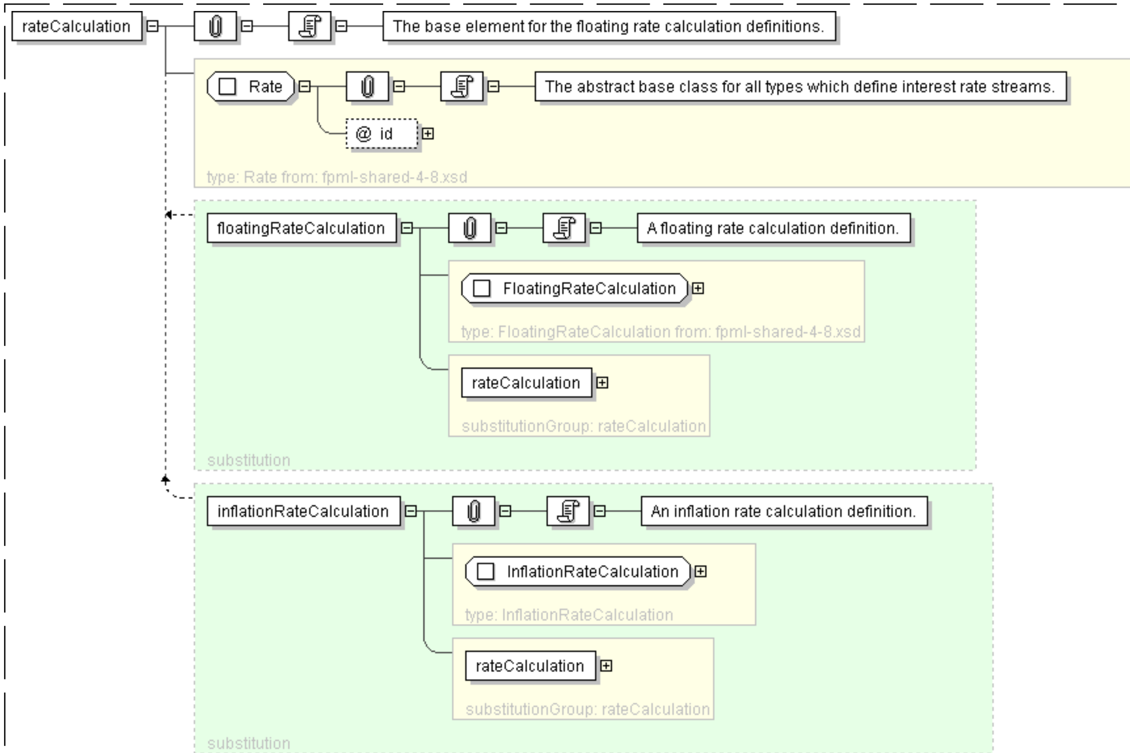
Logical Diagram



XML Instance Representation

```
<rateCalculation
id=" xsd:ID [0..1]"/>
```

Diagram



Schema Component Representation

```
<xsd:element name="rateCalculation" type=" Rate " abstract="true"/>
```

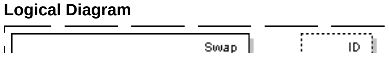
top

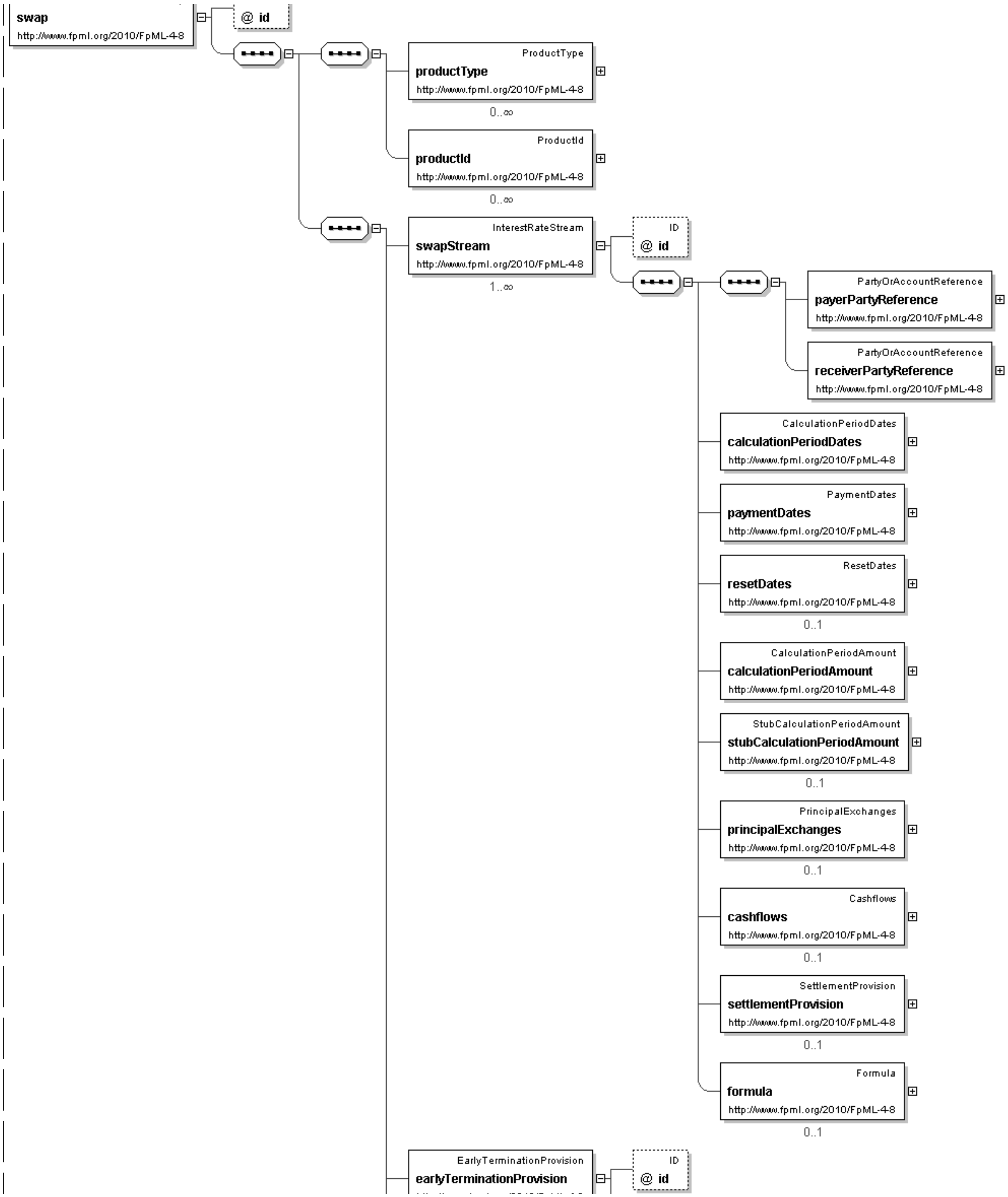
Element: swap

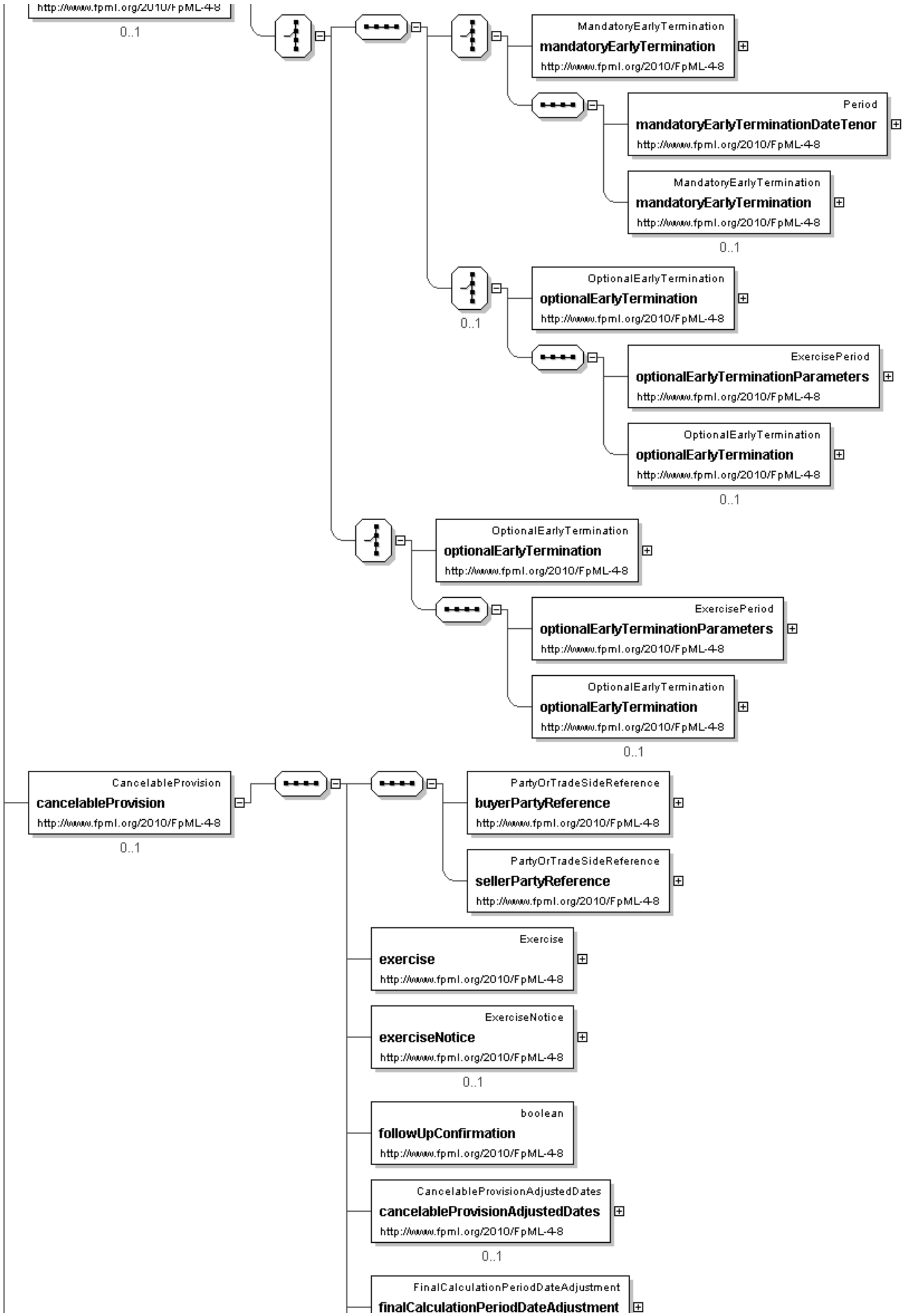
- *This element can be used wherever the following element is referenced:*
    - product

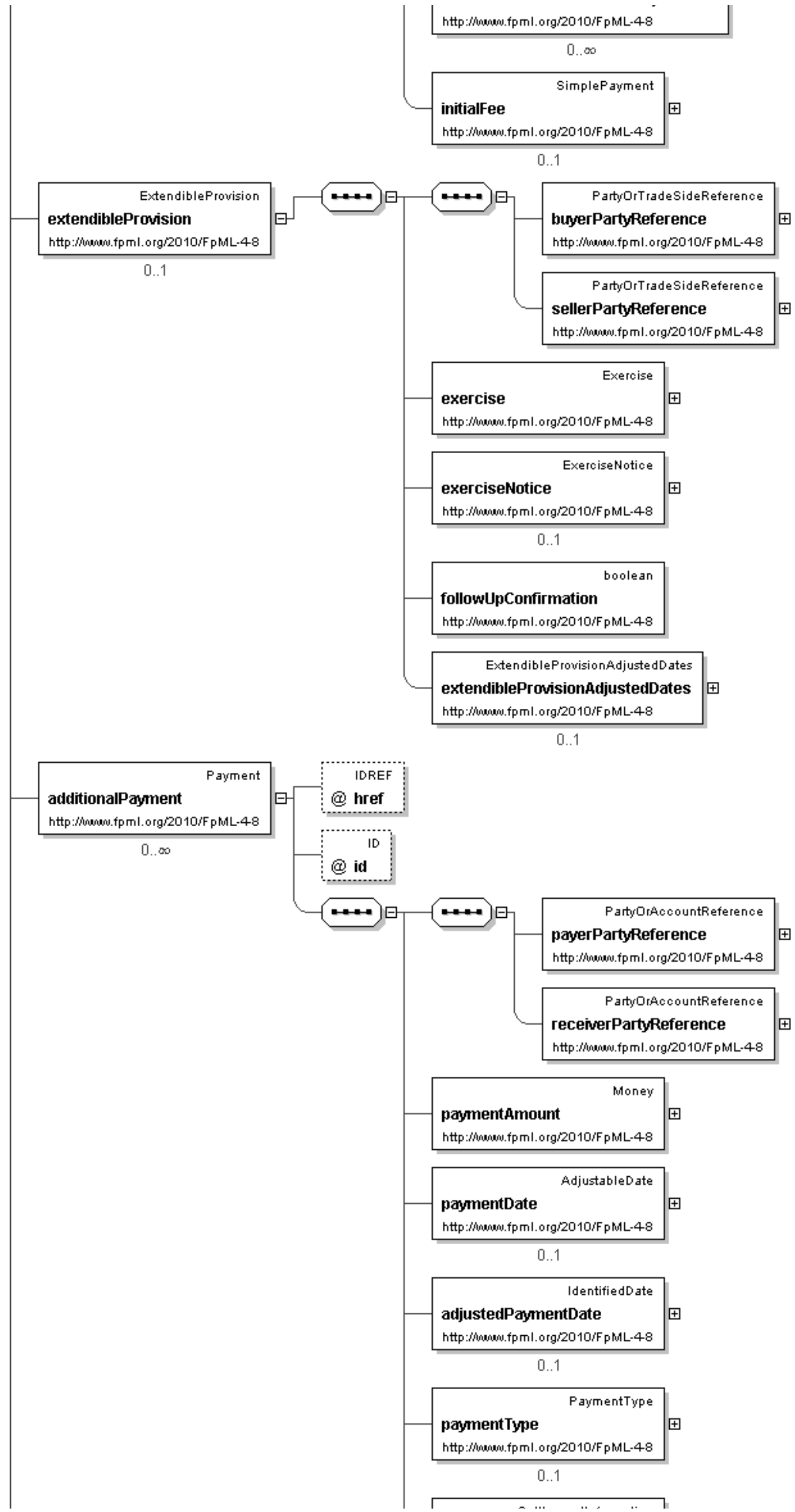
Name	swap
Used by (from the same schema document)	Complex Type **Swaption**
Type	Swap
Nillable	no
Abstract	no
Documentation	A swap product definition.

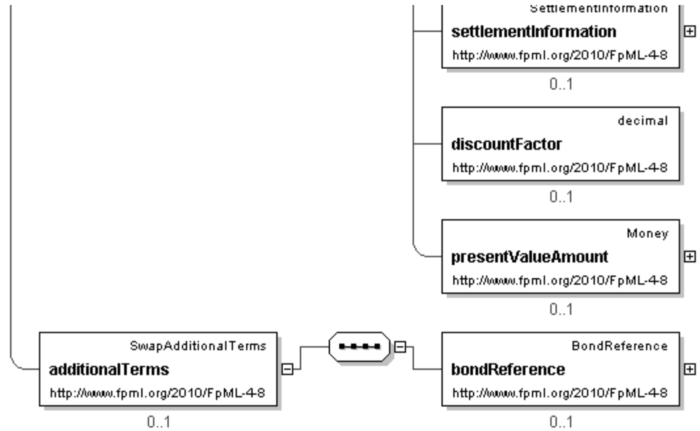
Logical Diagram




swap
http://www.fpml.org/2010/FpML-4-8
@ id
ProductType
productType
http://www.fpml.org/2010/FpML-4-8
0..∞
ProductId
productId
http://www.fpml.org/2010/FpML-4-8
0..∞
InterestRateStream
swapStream
http://www.fpml.org/2010/FpML-4-8
1..∞
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
CalculationPeriodDates
calculationPeriodDates
http://www.fpml.org/2010/FpML-4-8
PaymentDates
paymentDates
http://www.fpml.org/2010/FpML-4-8
ResetDates
resetDates
http://www.fpml.org/2010/FpML-4-8
0..1
CalculationPeriodAmount
calculationPeriodAmount
http://www.fpml.org/2010/FpML-4-8
StubCalculationPeriodAmount
stubCalculationPeriodAmount
http://www.fpml.org/2010/FpML-4-8
0..1
PrincipalExchanges
principalExchanges
http://www.fpml.org/2010/FpML-4-8
0..1
Cashflows
cashflows
http://www.fpml.org/2010/FpML-4-8
0..1
SettlementProvision
settlementProvision
http://www.fpml.org/2010/FpML-4-8
0..1
Formula
formula
http://www.fpml.org/2010/FpML-4-8
0..1
EarlyTerminationProvision
earlyTerminationProvision
ID
@ id


http://www.fpml.org/2010/FpML-4-8
0..1
MandatoryEarlyTermination
mandatoryEarlyTermination
http://www.fpml.org/2010/FpML-4-8
Period
mandatoryEarlyTerminationDateTenor
http://www.fpml.org/2010/FpML-4-8
MandatoryEarlyTermination
mandatoryEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
ExercisePeriod
optionalEarlyTerminationParameters
http://www.fpml.org/2010/FpML-4-8
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
ExercisePeriod
optionalEarlyTerminationParameters
http://www.fpml.org/2010/FpML-4-8
OptionalEarlyTermination
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
CancelableProvision
cancelableProvision
http://www.fpml.org/2010/FpML-4-8
0..1
PartyOrTradeSideReference
buyerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrTradeSideReference
sellerPartyReference
http://www.fpml.org/2010/FpML-4-8
Exercise
exercise
http://www.fpml.org/2010/FpML-4-8
ExerciseNotice
exerciseNotice
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
followUpConfirmation
http://www.fpml.org/2010/FpML-4-8
CancelableProvisionAdjustedDates
cancelableProvisionAdjustedDates
http://www.fpml.org/2010/FpML-4-8
0..1
FinalCalculationPeriodDateAdjustment
finalCalculationPeriodDateAdjustment

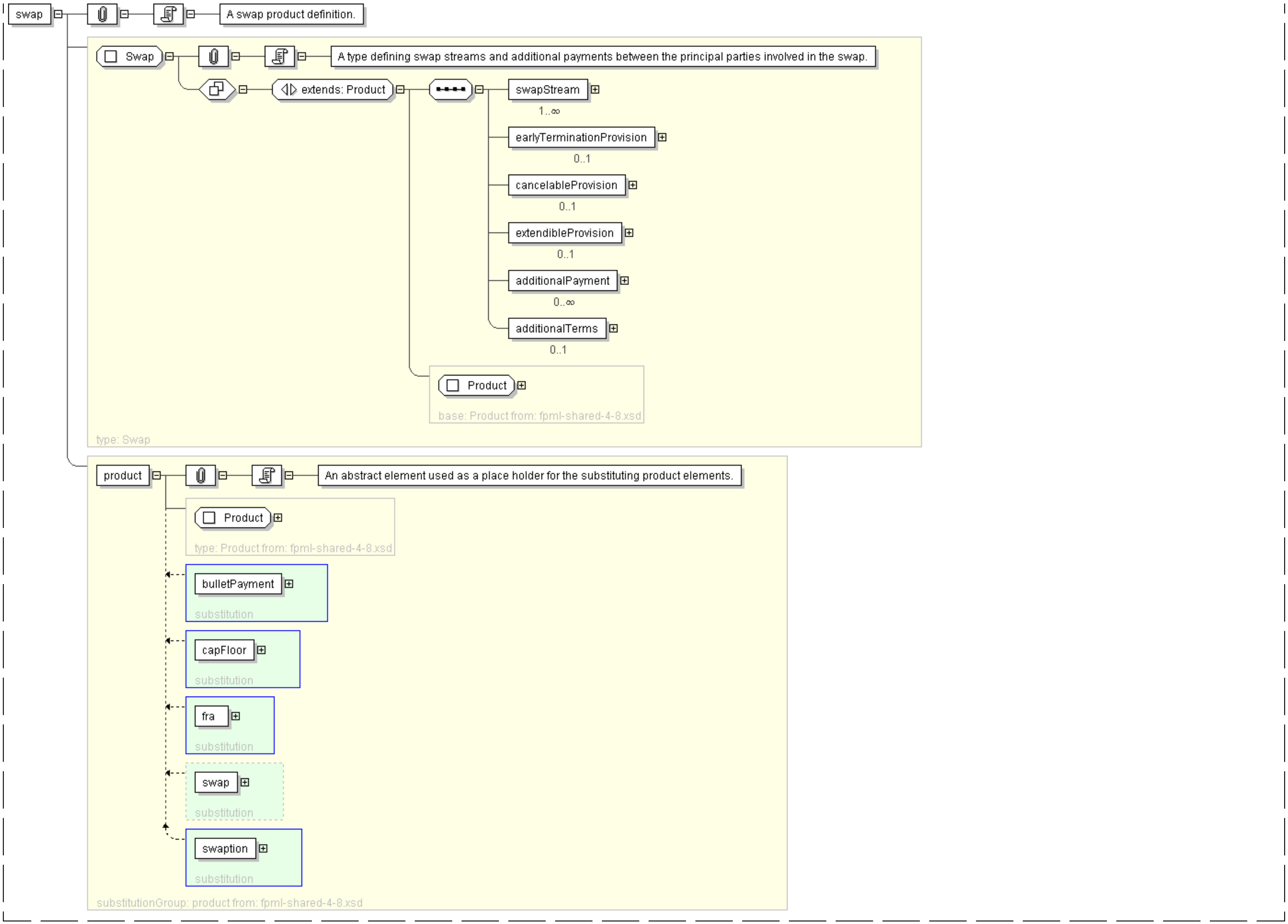

http://www.fpml.org/2010/FpML-4-8
0..∞
SimplePayment
initialFee
http://www.fpml.org/2010/FpML-4-8
0..1
ExtendibleProvision
extendibleProvision
http://www.fpml.org/2010/FpML-4-8
0..1
PartyOrTradeSideReference
buyerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrTradeSideReference
sellerPartyReference
http://www.fpml.org/2010/FpML-4-8
Exercise
exercise
http://www.fpml.org/2010/FpML-4-8
ExerciseNotice
exerciseNotice
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
followUpConfirmation
http://www.fpml.org/2010/FpML-4-8
ExtendibleProvisionAdjustedDates
extendibleProvisionAdjustedDates
http://www.fpml.org/2010/FpML-4-8
0..1
Payment
additionalPayment
http://www.fpml.org/2010/FpML-4-8
0..∞
IDREF
@ href
ID
@ id
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
Money
paymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableDate
paymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
adjustedPaymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<swap
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <swapStream> InterestRateStream </swapStream> [1..*]
    'The swap streams.'

    <earlyTerminationProvision> EarlyTerminationProvision </earlyTerminationProvision> [0..1]
    'Parameters specifying provisions relating to the optional and mandatory early terminarion of
    a swap transaction.'

    <cancelableProvision> CancelableProvision </cancelableProvision> [0..1]
    'A provision that allows the specification of an embedded option within a swap giving the
    buyer of the option the right to terminate the swap, in whole or in part, on the
    early termination date.'

    <extendibleProvision> ExtendibleProvision </extendibleProvision> [0..1]
    'A provision that allows the specification of an embedded option with a swap giving the
    buyer of the option the right to extend the swap, in whole or in part, to the
    extended termination date.'

    <additionalPayment> Payment </additionalPayment> [0..*]
    'Additional payments between the principal parties.'

    <additionalTerms> SwapAdditionalTerms </additionalTerms> [0..1]
    'Contains any additional terms to the swap contract.'

</swap>
```

Diagram



Schema Component Representation

```
<xsd:element name="swap" type=" Swap " substitutionGroup="product"/>
```

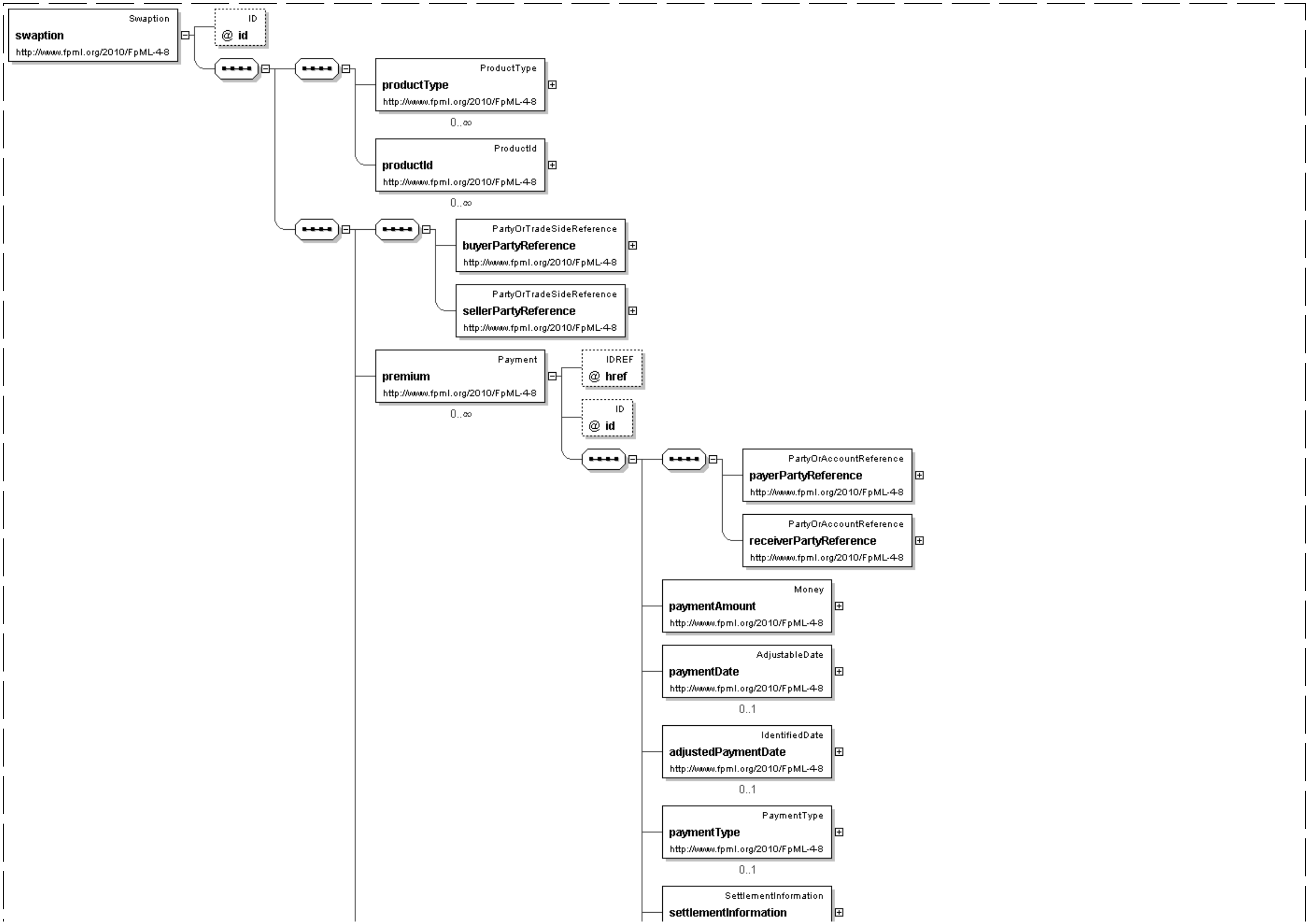
top

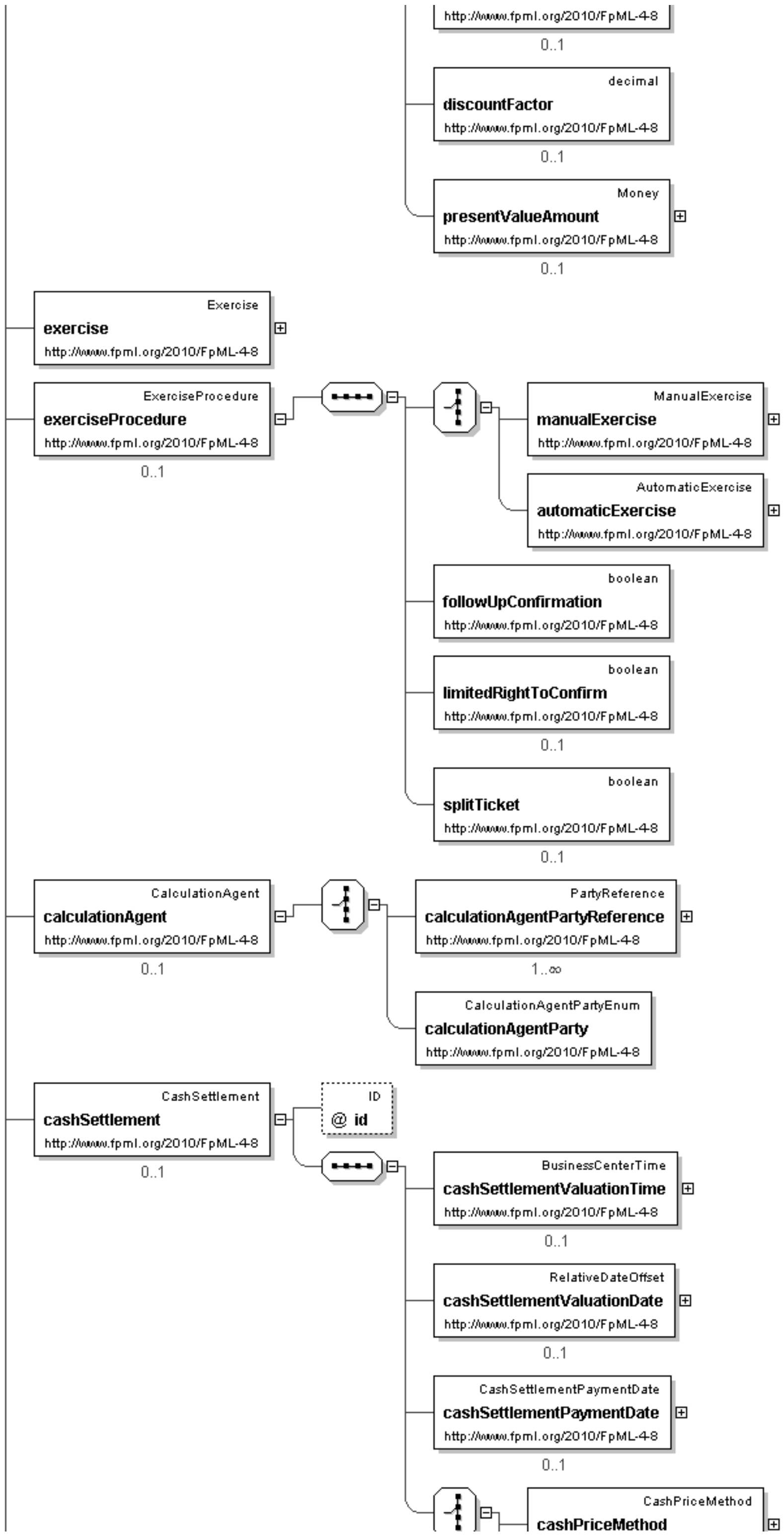
Element: swaption

- *This element can be used wherever the following element is referenced:*
  - product

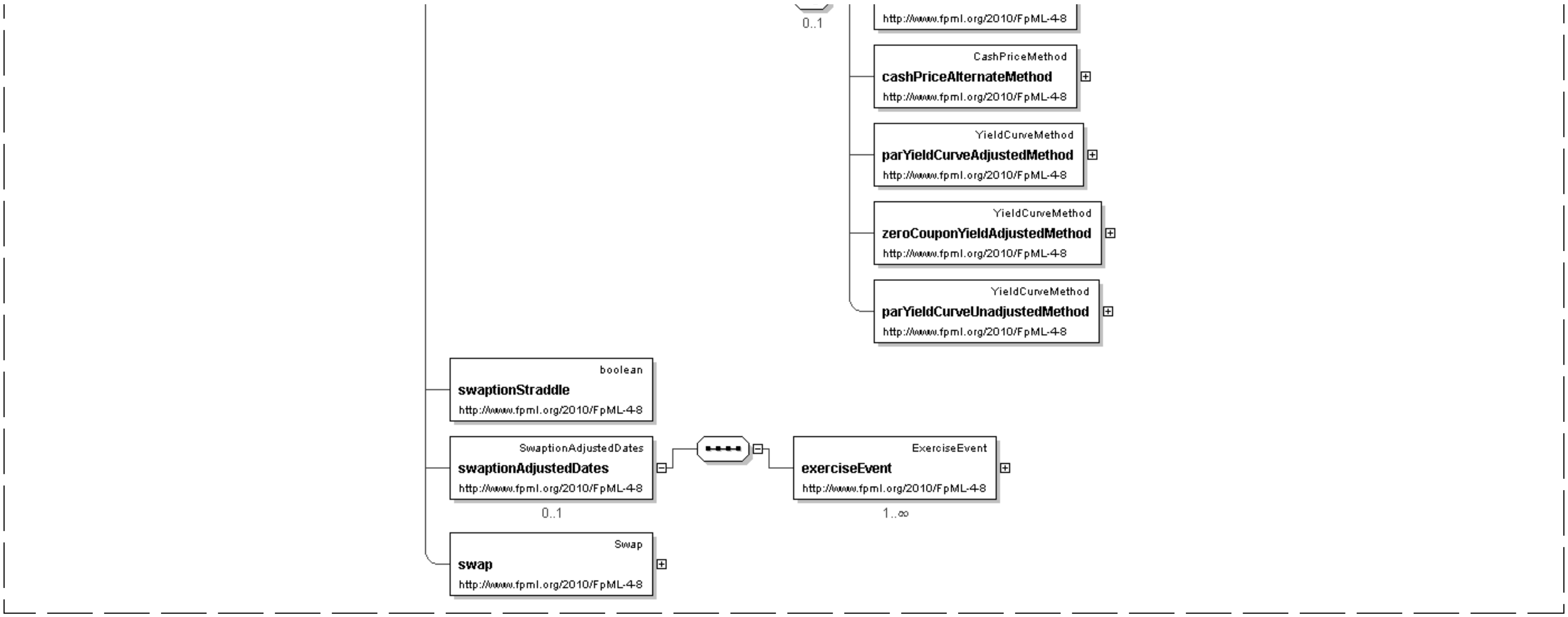
Name	swaption
Type	Swaption
Nillable	no
Abstract	no
Documentation	A swaption product definition.

Logical Diagram





http://www.fpml.org/2010/FpML-4-8
0..1
decimal
discountFactor
http://www.fpml.org/2010/FpML-4-8
0..1
Money
presentValueAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Exercise
exercise
http://www.fpml.org/2010/FpML-4-8
ExerciseProcedure
exerciseProcedure
http://www.fpml.org/2010/FpML-4-8
0..1
ManualExercise
manualExercise
http://www.fpml.org/2010/FpML-4-8
AutomaticExercise
automaticExercise
http://www.fpml.org/2010/FpML-4-8
boolean
followUpConfirmation
http://www.fpml.org/2010/FpML-4-8
boolean
limitedRightToConfirm
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
splitTicket
http://www.fpml.org/2010/FpML-4-8
0..1
CalculationAgent
calculationAgent
http://www.fpml.org/2010/FpML-4-8
0..1
PartyReference
calculationAgentPartyReference
http://www.fpml.org/2010/FpML-4-8
1..∞
CalculationAgentPartyEnum
calculationAgentParty
http://www.fpml.org/2010/FpML-4-8
CashSettlement
cashSettlement
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
BusinessCenterTime
cashSettlementValuationTime
http://www.fpml.org/2010/FpML-4-8
0..1
RelativeDateOffset
cashSettlementValuationDate
http://www.fpml.org/2010/FpML-4-8
0..1
CashSettlementPaymentDate
cashSettlementPaymentDate
http://www.fpml.org/2010/FpML-4-8
0..1
CashPriceMethod
cashPriceMethod



XML Instance Representation

<swaption
id=" xsd:ID [0..1]">

<productType> ProductType </productType> [0..*]

'A classification of the type of product. FpML defines a simple product categorization using a coding scheme.'

<productId> ProductId </productId> [0..*]

'A product reference identifier allocated by a party. FpML does not define the domain values associated with this element. Note that the domain values for this element are not strictly an enumerated list.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

<premium> Payment </premium> [0..*]

'The option premium amount payable by buyer to seller on the specified payment date.'

<exercise> ... </exercise> [1]

<exerciseProcedure> ExerciseProcedure </exerciseProcedure> [0..1]

'A set of parameters defining procedures associated with the exercise.'

<calculationAgent> CalculationAgent </calculationAgent> [0..1]

'The ISDA Calculation Agent responsible for performing duties associated with an optional early termination.'

<cashSettlement> CashSettlement </cashSettlement> [0..1]

'If specified, this means that cash settlement is applicable to the transaction and defines

the parameters associated with the cash settlement prodcedure. If not specified, then physical settlement is applicable.'

<swaptionStraddle> xsd:boolean </swaptionStraddle> [1]

'Whether the option is a swaption or a swaption straddle.'

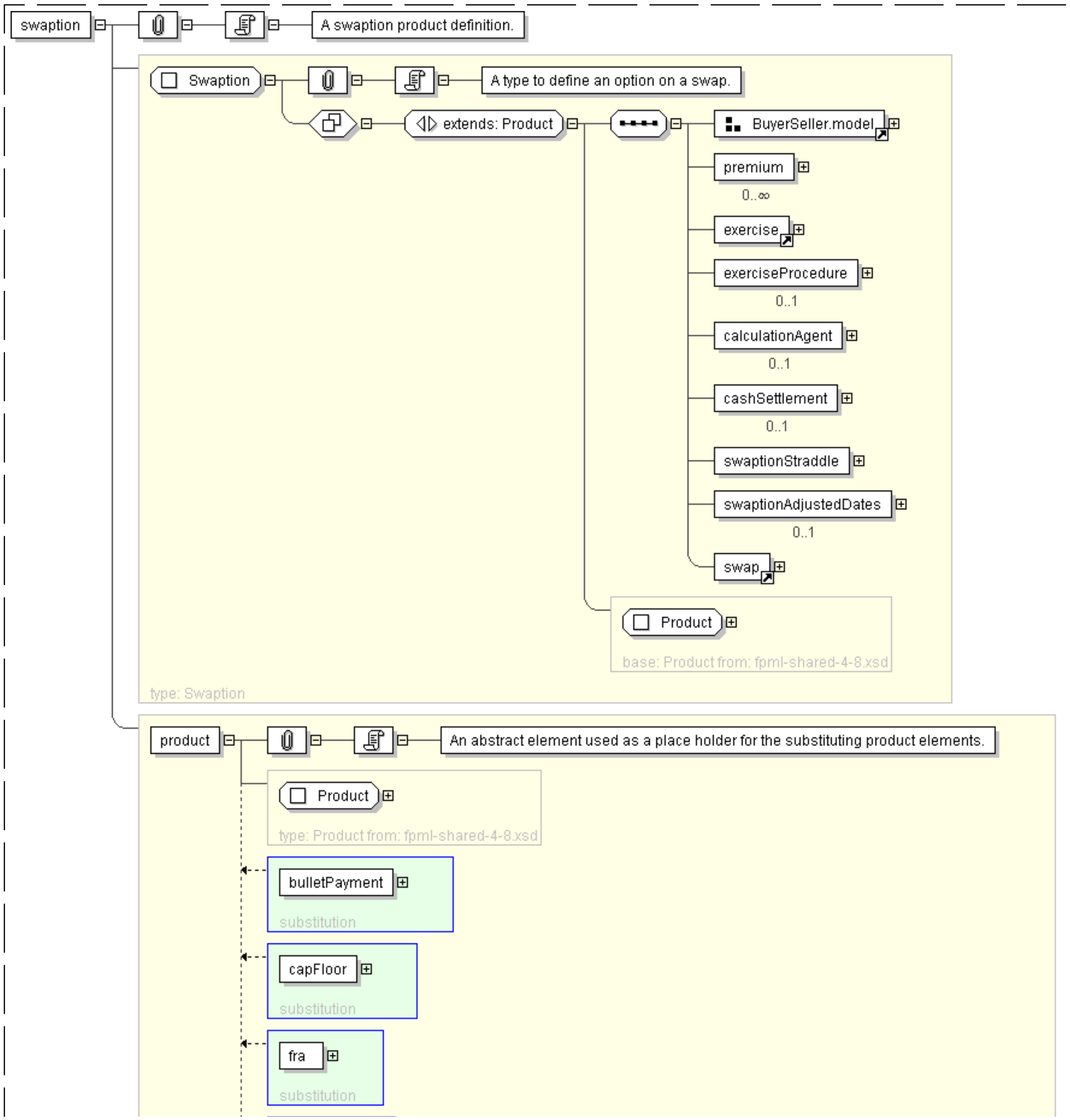
<swaptionAdjustedDates> SwaptionAdjustedDates </swaptionAdjustedDates> [0..1]

'The adjusted dates associated with swaption exercise. These dates have been adjusted for any applicable business day convention.'

<swap> ... </swap> [1]

</swaption>

Diagram



Schema Component Representation

```
<xsd:element name="swaption" type=" Swaption " substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: BondReference

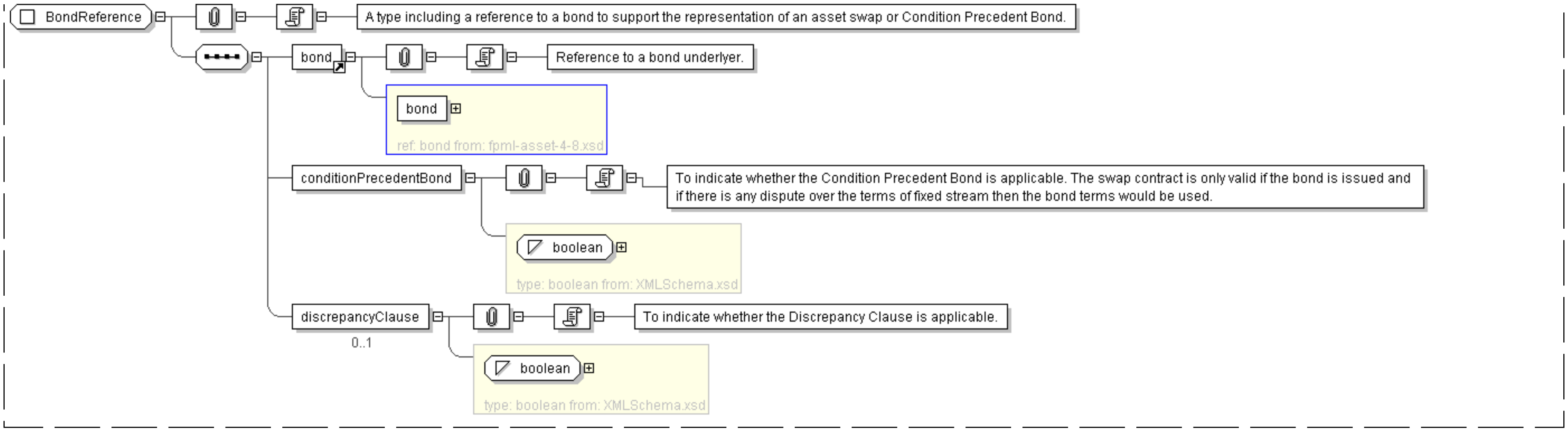
Super-types:	None
Sub-types:	None

Name	BondReference
Used by (from the same schema document)	Complex Type **SwapAdditionalTerms**
Abstract	no
Documentation	A type including a reference to a bond to support the representation of an asset swap or Condition Precedent Bond.

XML Instance Representation

```
<...>
   <bond> ... </bond> [1]
   'Reference to a bond underlyer.'

   <conditionPrecedentBond> xsd:boolean </conditionPrecedentBond> [1]
   'To indicate whether the Condition Precedent Bond is applicable. The swap contract is
   only valid if the bond is issued and if there is any dispute over the terms of fixed
   stream then the bond terms would be used.'

   <discrepancyClause> xsd:boolean </discrepancyClause> [0..1]
   'To indicate whether the Discrepancy Clause is applicable.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BondReference">
   <xsd:sequence>
      <xsd:element ref=" bond "/>
      <xsd:element name="conditionPrecedentBond" type=" xsd:boolean "/>
      <xsd:element name="discrepancyClause" type=" xsd:boolean " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: BulletPayment

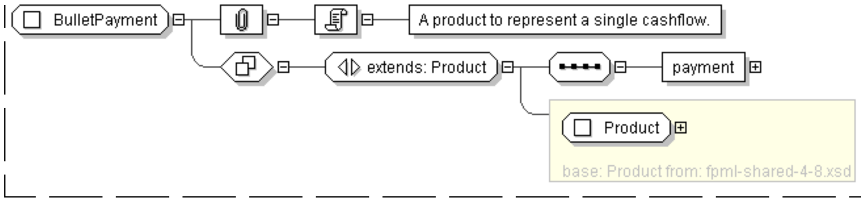
Super-types:	Product < **BulletPayment** (by extension)
Sub-types:	None

Name	BulletPayment
Used by (from the same schema document)	Element **bulletPayment**
Abstract	no
Documentation	A product to represent a single cashflow.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <payment> Payment </payment> [1]
   'A known payment between two parties.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BulletPayment">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="payment" type=" Payment "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Calculation

Super-types:	None
Sub-types:	None

Name	Calculation
Used by (from the same schema document)	Complex Type **CalculationPeriodAmount**
Abstract	no
Documentation	A type definining the parameters used in the calculation of fixed or floating calculation period amounts.

XML Instance Representation

```
<...>
Start Choice [1]
      <notionalSchedule> Notional </notionalSchedule> [1]
      'The notional amount or notional amount schedule.'

      <fxLinkedNotionalSchedule> FxLinkedNotionalSchedule </fxLinkedNotionalSchedule> [1]
      'A notional amount schedule where each notional that applied to a calculation period
      is calculated with reference to a notional amount or notional amount schedule in a
      different currency by means of a spot currency exchange rate which is normally observed at
      the beginning of each period.'

End Choice
Start Choice [1]
      <fixedRateSchedule> Schedule </fixedRateSchedule> [1]
      'The fixed rate or fixed rate schedule expressed as explicit fixed rates and dates. In the
      case of a schedule, the step dates may be subject to adjustment in accordance with
      any adjustments specified in calculationPeriodDatesAdjustments.'

      <futureValueNotional> FutureValueAmount </futureValueNotional> [0..1]
      'The future value notional is normally only required for BRL CDI Swaps. The value is
      calculated as follows: Future Value Notional = Notional Amount * (1 + Fixed Rate) ^ (Fixed
      Rate Day Count Fraction). The currency should always match that expressed in the
      notional schedule. The value date should match the adjusted termination date.'

      <rateCalculation> ... </rateCalculation> [1]
      'This element is the head of a substitution group. It is substituted by
      the floatingRateCalculation element for standard Floating Rate legs, or
      the inflationRateCalculation element for inflation swaps.'

End Choice
   <dayCountFraction> DayCountFraction </dayCountFraction> [1]
   'The day count fraction.'
```

<discounting> Discounting </discounting> [0..1]

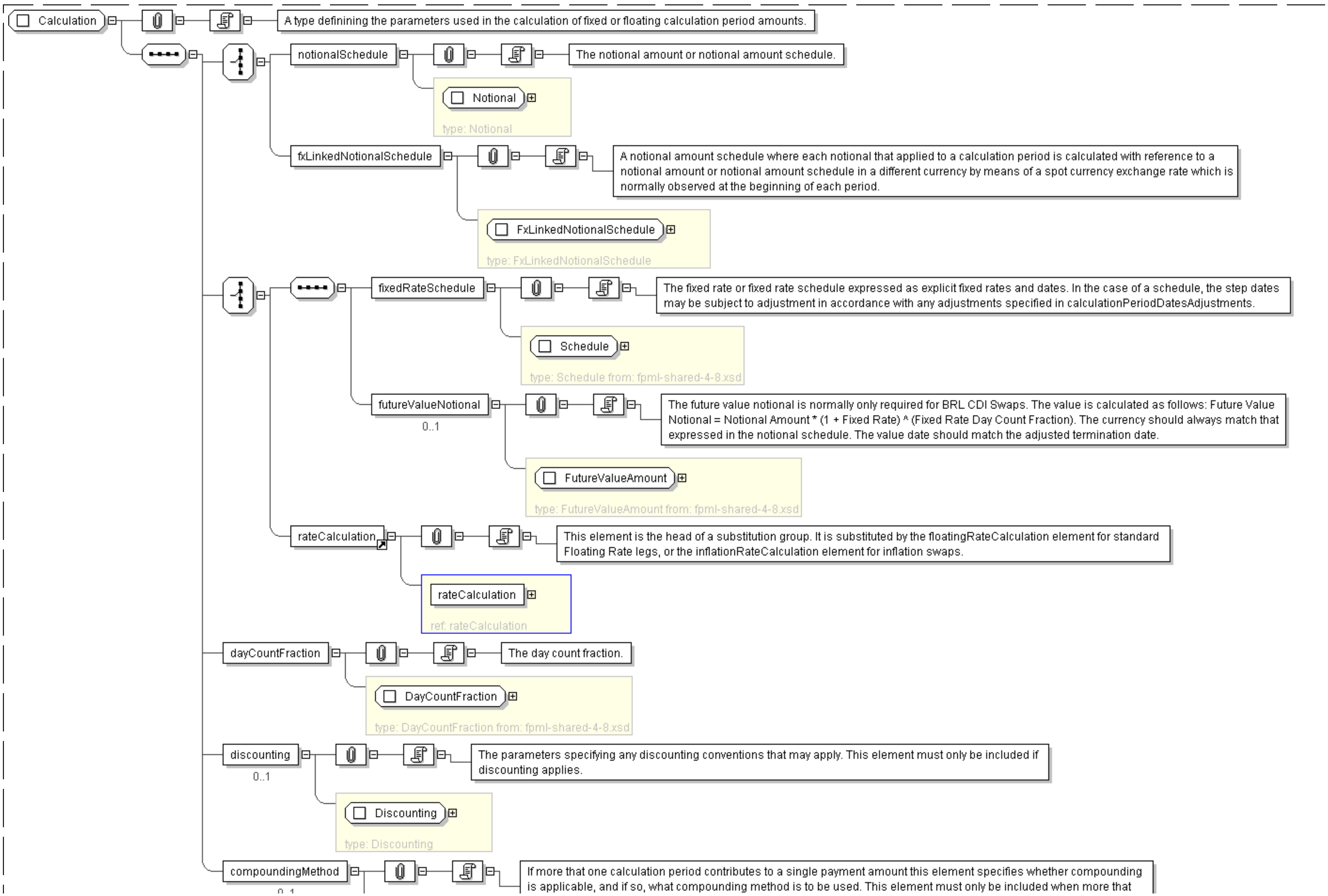
'The parameters specifying any discounting conventions that may apply. This element must only be included if discounting applies.'

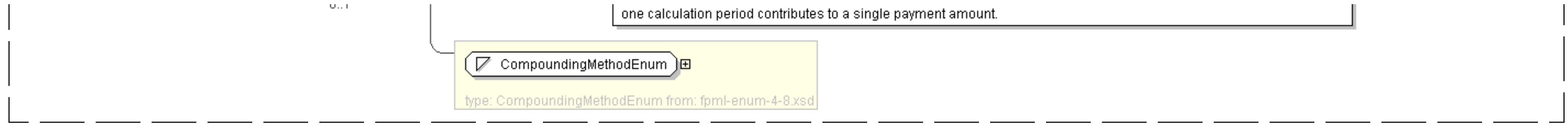
<compoundingMethod> CompoundingMethodEnum </compoundingMethod> [0..1]

'If more that one calculation period contributes to a single payment amount this element specifies whether compounding is applicable, and if so, what compounding method is to be used. This element must only be included when more that one calculation period contributes to a single payment amount.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="Calculation">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="notionalSchedule" type=" Notional "/>
         <xsd:element name="fxLinkedNotionalSchedule" type=" FxLinkedNotionalSchedule "/>
      </xsd:choice>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="fixedRateSchedule" type=" Schedule "/>
            <xsd:element name="futureValueNotional" type=" FutureValueAmount " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element ref=" rateCalculation "/>
      </xsd:choice>
      <xsd:element name="dayCountFraction" type=" DayCountFraction "/>
      <xsd:element name="discounting" type=" Discounting " minOccurs="0"/>
      <xsd:element name="compoundingMethod" type=" CompoundingMethodEnum " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CalculationPeriod

Super-types:	None
Sub-types:	None

Name	CalculationPeriod
Used by (from the same schema document)	Complex Type **PaymentCalculationPeriod**
Abstract	no
Documentation	A type defining the parameters used in the calculation of a fixed or floating rate calculation period amount. This type forms part of cashflows representation of a swap stream.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <unadjustedStartDate> xsd:date </unadjustedStartDate> [0..1]
   <unadjustedEndDate> xsd:date </unadjustedEndDate> [0..1]
   <adjustedStartDate> xsd:date </adjustedStartDate> [0..1]
   'The calculation period start date, adjusted according to any relevant business day convention.'

   <adjustedEndDate> xsd:date </adjustedEndDate> [0..1]
   'The calculation period end date, adjusted according to any relevant business day convention.'

   <calculationPeriodNumberOfDays> xsd:positiveInteger </calculationPeriodNumberOfDays> [0..1]
   'The number of days from the adjusted effective / start date to the adjusted termination /
   end date calculated in accordance with the applicable day count fraction.'

Start Choice [1]
      <notionalAmount> xsd:decimal </notionalAmount> [1]
      'The amount that a cashflow will accrue interest on.'

      <fxLinkedNotionalAmount> FxLinkedNotionalAmount </fxLinkedNotionalAmount> [1]
      'The amount that a cashflow will accrue interest on. This is the calculated amount of the
      fx linked - ie the other currency notional amount multiplied by the appropriate fx spot rate.'

End Choice
Start Choice [1]
```

<floatingRateDefinition> FloatingRateDefinition </floatingRateDefinition> [1]

'The floating rate reset information for the calculation period.'

<fixedRate> xsd:decimal </fixedRate> [1]

'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate of 5% would be represented as 0.05.'

End Choice

<dayCountYearFraction> xsd:decimal </dayCountYearFraction> [0..1]

'The year fraction value of the calculation period, result of applying the ISDA rules for day count fraction defined in the ISDA Annex.'

<forecastAmount> Money </forecastAmount> [0..1]

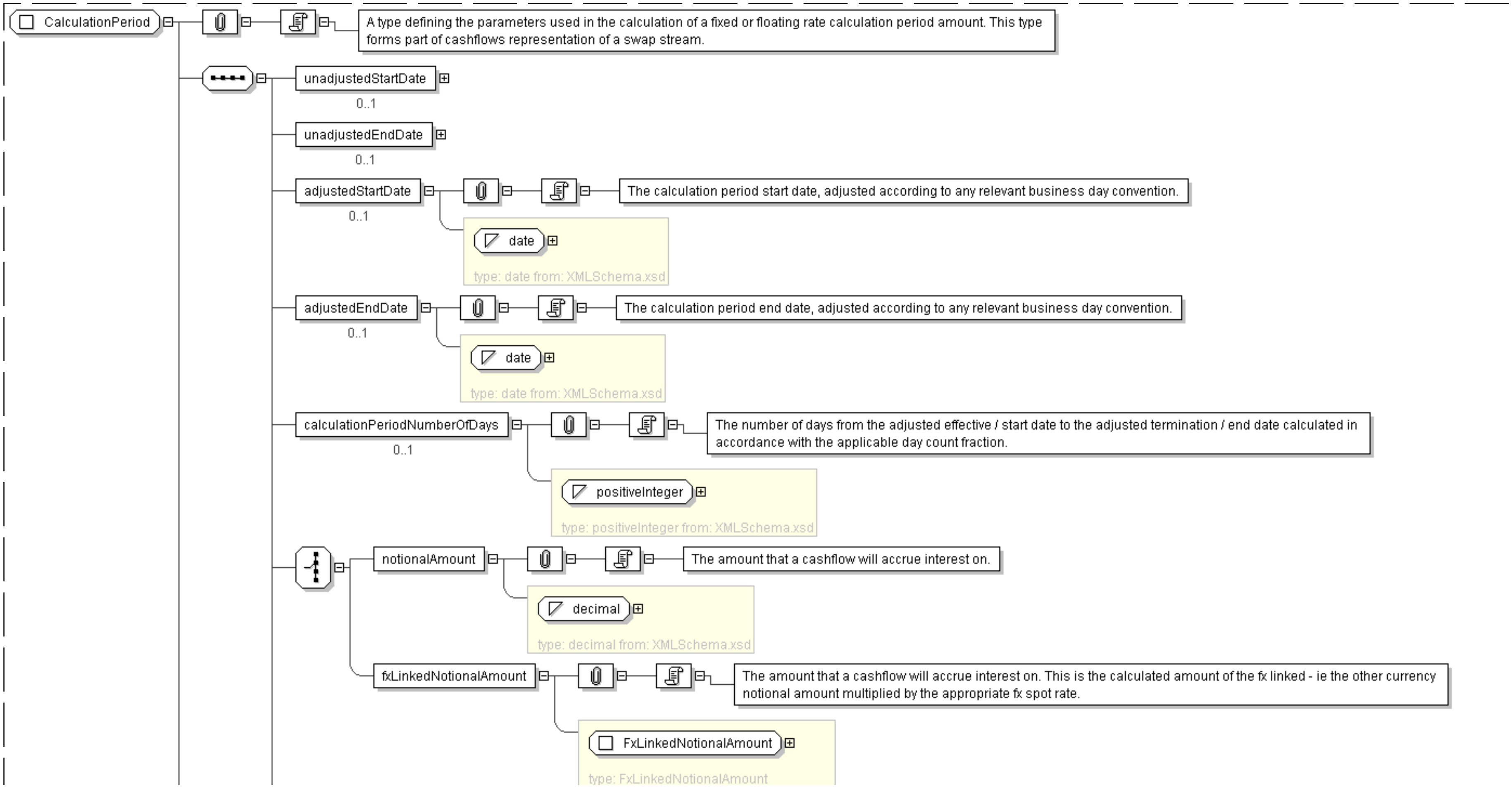
'The amount representing the forecast of the accrued value of the calculation period. An intermediate value used to generate the forecastPaymentAmount in the PaymentCalculationPeriod.'

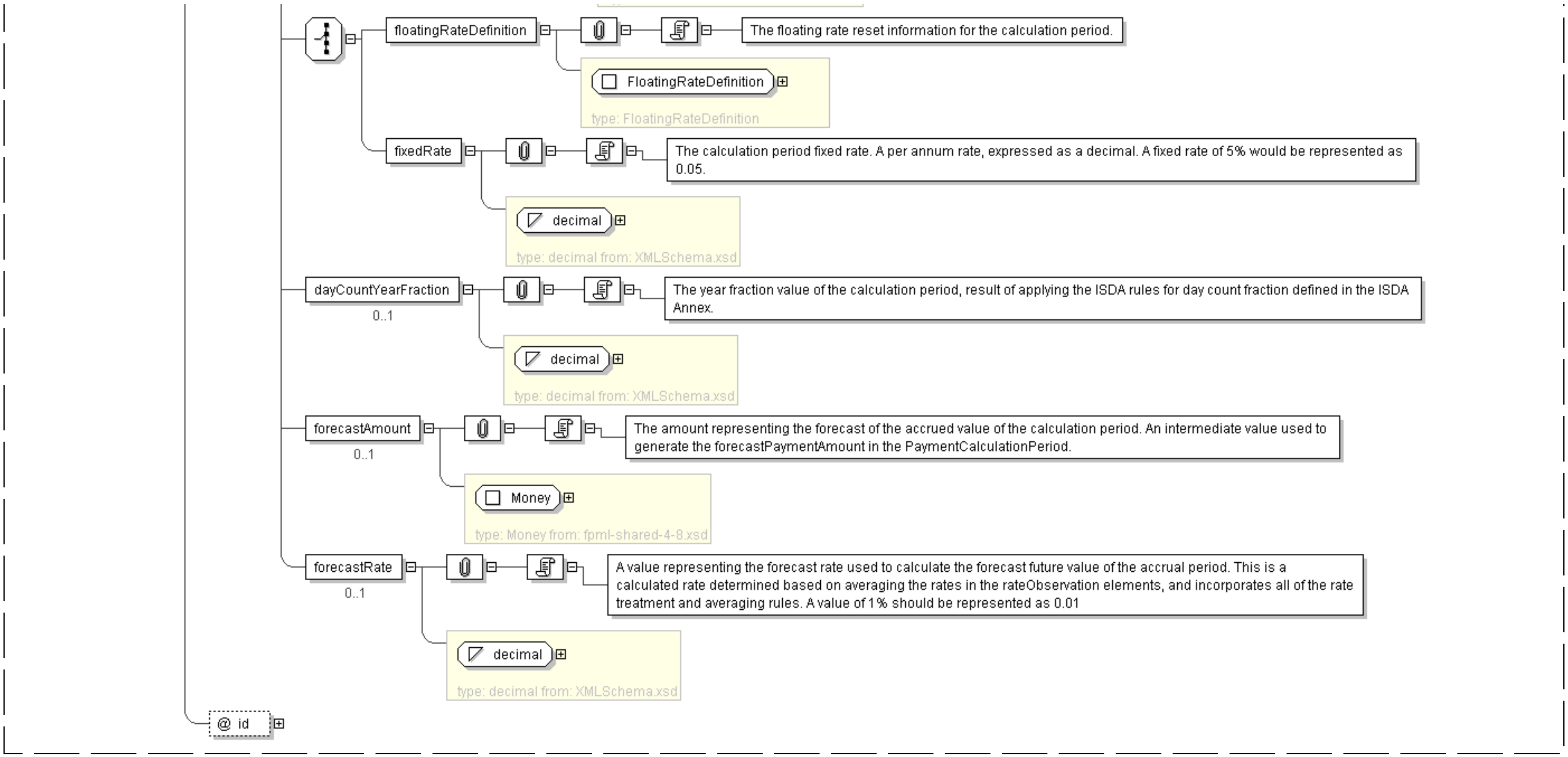
<forecastRate> xsd:decimal </forecastRate> [0..1]

'A value representing the forecast rate used to calculate the forecast future value of the accrual period. This is a calculated rate determined based on averaging the rates in the rateObservation elements, and incorporates all of the rate treatment and averaging rules. A value of 1% should be represented as 0.01'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="CalculationPeriod">
   <xsd:sequence>
      <xsd:element name="unadjustedStartDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="unadjustedEndDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedStartDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedEndDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="calculationPeriodNumberOfDays" type=" xsd:positiveInteger " minOccurs="0"/>
      <xsd:choice>
         <xsd:element name="notionalAmount" type=" xsd:decimal "/>
         <xsd:element name="fxLinkedNotionalAmount" type=" FxLinkedNotionalAmount "/>
      </xsd:choice>
      <xsd:choice>
         <xsd:element name="floatingRateDefinition" type=" FloatingRateDefinition "/>
         <xsd:element name="fixedRate" type=" xsd:decimal "/>
      </xsd:choice>
      <xsd:element name="dayCountYearFraction" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="forecastAmount" type=" Money " minOccurs="0"/>
      <xsd:element name="forecastRate" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CalculationPeriodAmount

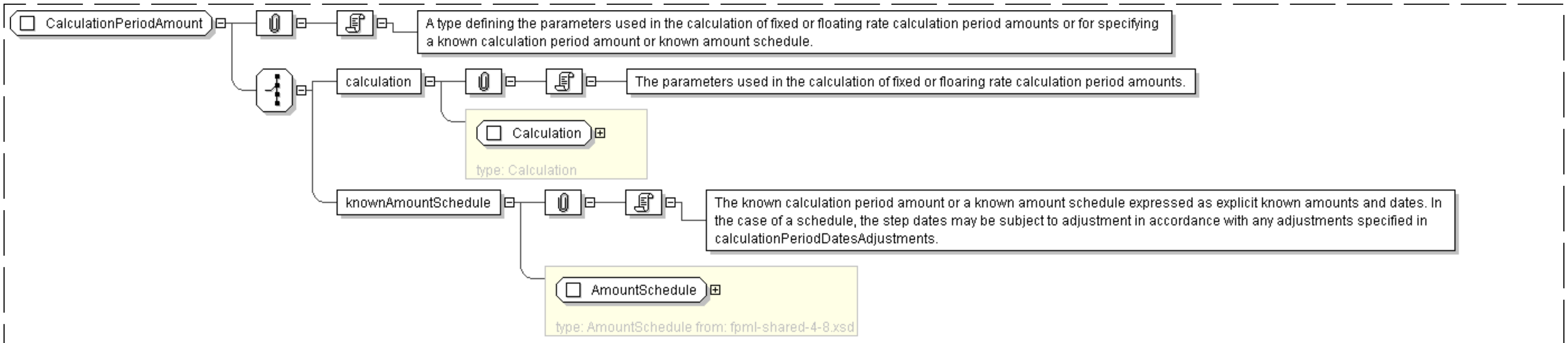
Super-types:	None
Sub-types:	None

Name	CalculationPeriodAmount
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no
Documentation	A type defining the parameters used in the calculation of fixed or floating rate calculation period amounts or for specifying a known calculation period amount or known amount schedule.

XML Instance Representation

```
<...>
Start Choice [1]
      <calculation> Calculation </calculation> [1]
      'The parameters used in the calculation of fixed or floaring rate calculation period amounts.'

      <knownAmountSchedule> AmountSchedule </knownAmountSchedule> [1]
      'The known calculation period amount or a known amount schedule expressed as explicit
      known amounts and dates. In the case of a schedule, the step dates may be subject to
      adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationPeriodAmount">
   <xsd:choice>
      <xsd:element name="calculation" type=" Calculation "/>
      <xsd:element name="knownAmountSchedule" type=" AmountSchedule "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: CalculationPeriodDates

Super-types:	None
Sub-types:	None

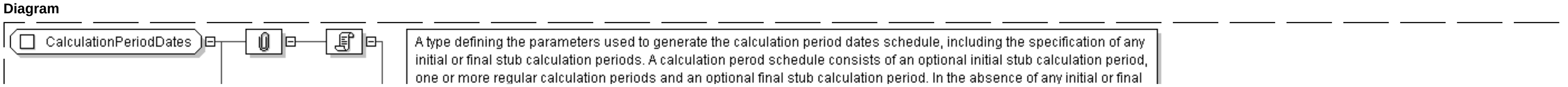
Name	CalculationPeriodDates
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no

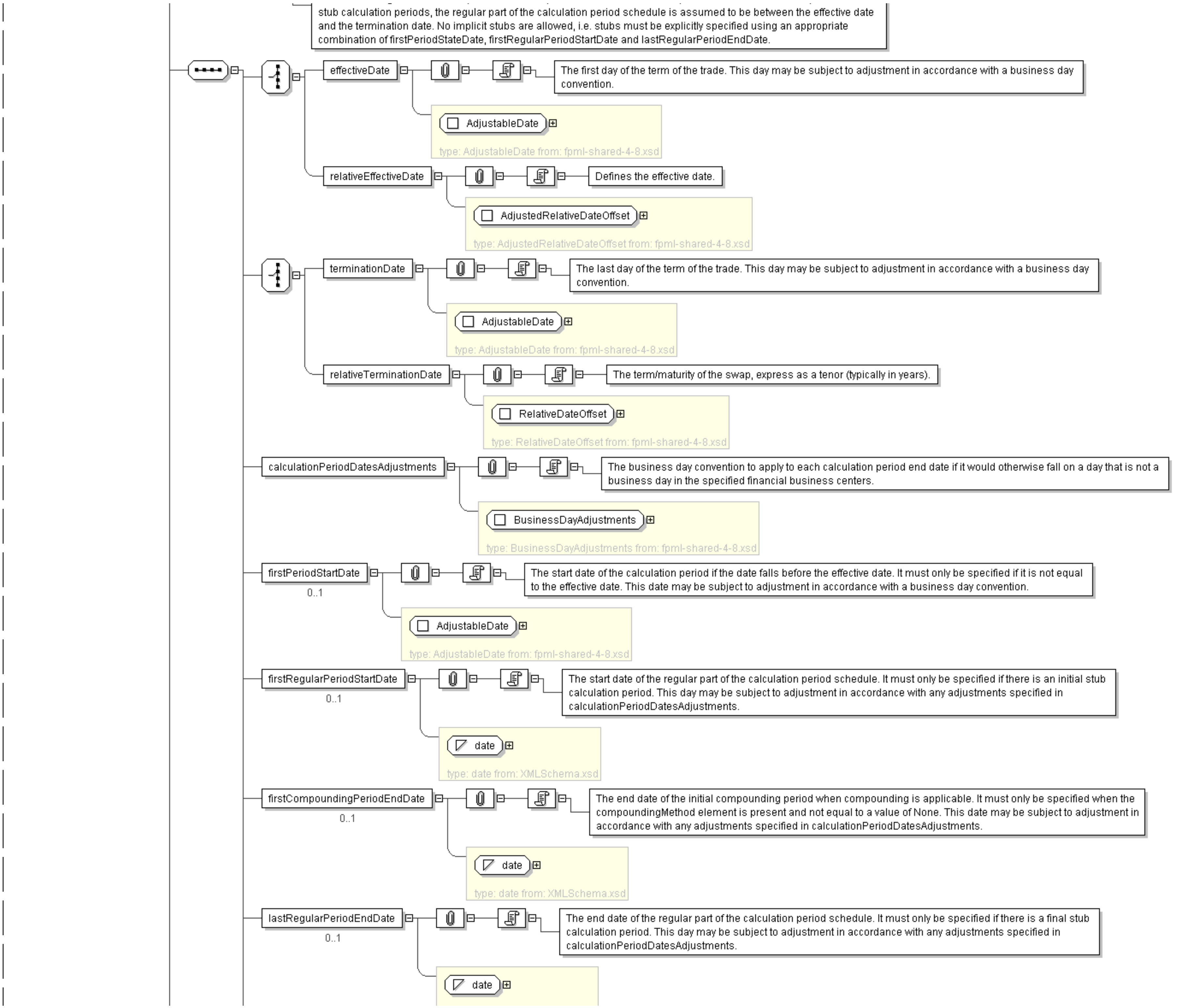
Documentation	A type defining the parameters used to generate the calculation period dates schedule, including the specification of any initial or final stub calculation periods. A calculation perod schedule consists of an optional initial stub calculation period, one or more regular calculation periods and an optional final stub calculation period. In the absence of any initial or final stub calculation periods, the regular part of the calculation period schedule is assumed to be between the effective date and the termination date. No implicit stubs are allowed, i.e. stubs must be explicitly specified using an appropriate combination of firstPeriodStateDate, firstRegularPeriodStartDate and lastRegularPeriodEndDate.

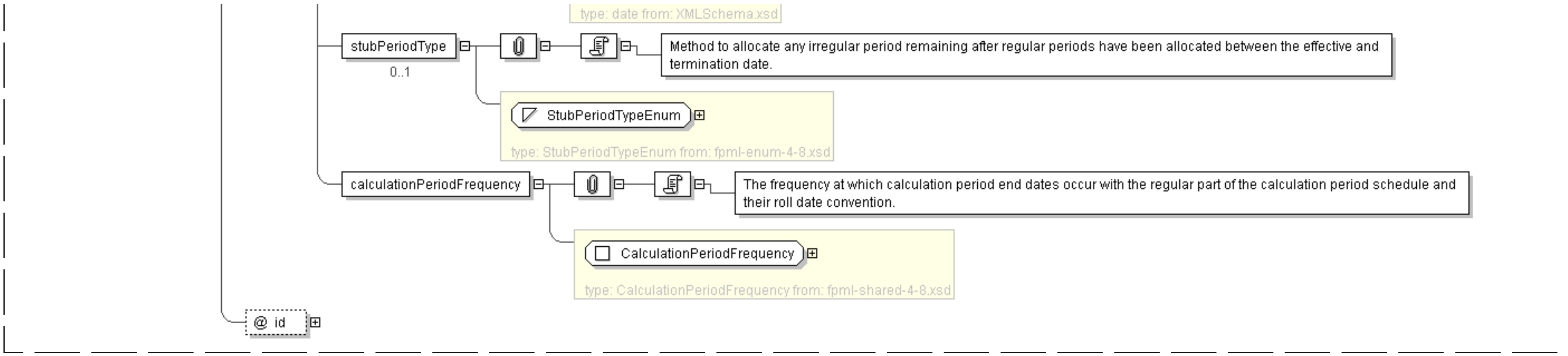
XML Instance Representation

```
<...
id=" xsd:ID [1]">
Start Choice [1]
      <effectiveDate> AdjustableDate </effectiveDate> [1]
      'The first day of the term of the trade. This day may be subject to adjustment in
      accordance with a business day convention.'

      <relativeEffectiveDate> AdjustedRelativeDateOffset </relativeEffectiveDate> [1]
      'Defines the effective date.'

End Choice
Start Choice [1]
      <terminationDate> AdjustableDate </terminationDate> [1]
      'The last day of the term of the trade. This day may be subject to adjustment in
      accordance with a business day convention.'

      <relativeTerminationDate> RelativeDateOffset </relativeTerminationDate> [1]
      'The term/maturity of the swap, express as a tenor (typically in years).'

End Choice
   <calculationPeriodDatesAdjustments> BusinessDayAdjustments </
   calculationPeriodDatesAdjustments> [1]
   'The business day convention to apply to each calculation period end date if it would
   otherwise fall on a day that is not a business day in the specified financial business centers.'

   <firstPeriodStartDate> AdjustableDate </firstPeriodStartDate> [0..1]
   'The start date of the calculation period if the date falls before the effective date. It
   must only be specified if it is not equal to the effective date. This date may be subject
   to adjustment in accordance with a business day convention.'

   <firstRegularPeriodStartDate> xsd:date </firstRegularPeriodStartDate> [0..1]
   'The start date of the regular part of the calculation period schedule. It must only
   be specified if there is an initial stub calculation period. This day may be subject
   to adjustment in accordance with any adjustments specified
   in calculationPeriodDatesAdjustments.'

   <firstCompoundingPeriodEndDate> xsd:date </firstCompoundingPeriodEndDate> [0..1]
   'The end date of the initial compounding period when compounding is applicable. It must only
   be specified when the compoundingMethod element is present and not equal to a value of
   None. This date may be subject to adjustment in accordance with any adjustments specified
   in calculationPeriodDatesAdjustments.'

   <lastRegularPeriodEndDate> xsd:date </lastRegularPeriodEndDate> [0..1]
   'The end date of the regular part of the calculation period schedule. It must only be
   specified if there is a final stub calculation period. This day may be subject to adjustment
   in accordance with any adjustments specified in calculationPeriodDatesAdjustments.'

   <stubPeriodType> StubPeriodTypeEnum </stubPeriodType> [0..1]
   'Method to allocate any irregular period remaining after regular periods have been
   allocated between the effective and termination date.'

   <calculationPeriodFrequency> CalculationPeriodFrequency </calculationPeriodFrequency> [1]
   'The frequency at which calculation period end dates occur with the regular part of
   the calculation period schedule and their roll date convention.'

</...>
```

Diagram




stub calculation periods, the regular part of the calculation period schedule is assumed to be between the effective date and the termination date. No implicit stubs are allowed, i.e. stubs must be explicitly specified using an appropriate combination of firstPeriodStateDate, firstRegularPeriodStartDate and lastRegularPeriodEndDate.
effectiveDate
The first day of the term of the trade. This day may be subject to adjustment in accordance with a business day convention.
AdjustableDate
type: AdjustableDate from: fpml-shared-4-8.xsd
relativeEffectiveDate
Defines the effective date.
AdjustedRelativeDateOffset
type: AdjustedRelativeDateOffset from: fpml-shared-4-8.xsd
terminationDate
The last day of the term of the trade. This day may be subject to adjustment in accordance with a business day convention.
AdjustableDate
type: AdjustableDate from: fpml-shared-4-8.xsd
relativeTerminationDate
The term/maturity of the swap, express as a tenor (typically in years).
RelativeDateOffset
type: RelativeDateOffset from: fpml-shared-4-8.xsd
calculationPeriodDatesAdjustments
The business day convention to apply to each calculation period end date if it would otherwise fall on a day that is not a business day in the specified financial business centers.
BusinessDayAdjustments
type: BusinessDayAdjustments from: fpml-shared-4-8.xsd
firstPeriodStartDate
0..1
The start date of the calculation period if the date falls before the effective date. It must only be specified if it is not equal to the effective date. This date may be subject to adjustment in accordance with a business day convention.
AdjustableDate
type: AdjustableDate from: fpml-shared-4-8.xsd
firstRegularPeriodStartDate
0..1
The start date of the regular part of the calculation period schedule. It must only be specified if there is an initial stub calculation period. This day may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments.
date
type: date from: XMLSchema.xsd
firstCompoundingPeriodEndDate
0..1
The end date of the initial compounding period when compounding is applicable. It must only be specified when the compoundingMethod element is present and not equal to a value of None. This date may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments.
date
type: date from: XMLSchema.xsd
lastRegularPeriodEndDate
0..1
The end date of the regular part of the calculation period schedule. It must only be specified if there is a final stub calculation period. This day may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments.
date



Schema Component Representation

```
<xsd:complexType name="CalculationPeriodDates">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="effectiveDate" type=" AdjustableDate "/>
         <xsd:element name="relativeEffectiveDate" type=" AdjustedRelativeDateOffset "/>
      </xsd:choice>
      <xsd:choice>
         <xsd:element name="terminationDate" type=" AdjustableDate "/>
         <xsd:element name="relativeTerminationDate" type=" RelativeDateOffset "/>
      </xsd:choice>
      <xsd:element name="calculationPeriodDatesAdjustments" type=" BusinessDayAdjustments "/>
      <xsd:element name="firstPeriodStartDate" type=" AdjustableDate " minOccurs="0"/>
      <xsd:element name="firstRegularPeriodStartDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="firstCompoundingPeriodEndDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="lastRegularPeriodEndDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="stubPeriodType" type=" StubPeriodTypeEnum " minOccurs="0"/>
      <xsd:element name="calculationPeriodFrequency" type=" CalculationPeriodFrequency "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="required"/>
</xsd:complexType>
```

top

Complex Type: CalculationPeriodDatesReference

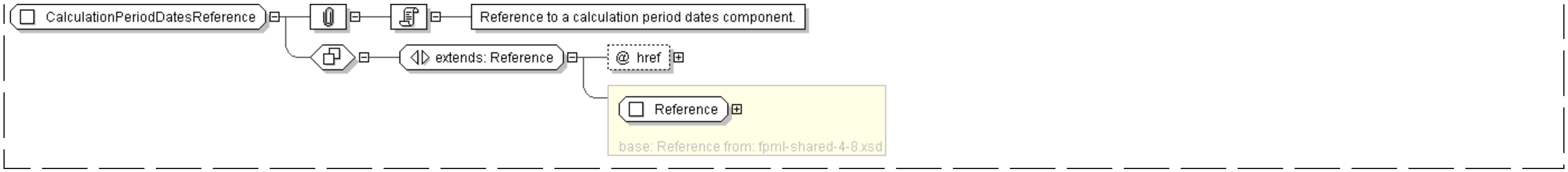
Super-types:	Reference < **CalculationPeriodDatesReference** (by extension)
Sub-types:	None

Name	CalculationPeriodDatesReference
Used by (from the same schema document)	Complex Type **DateRelativeToCalculationPeriodDates** , Complex Type **NotionalStepRule** , Complex Type **PaymentDates** , Complex Type **ResetDates** , Complex Type **StubCalculationPeriodAmount**
Abstract	no
Documentation	Reference to a calculation period dates component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationPeriodDatesReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required"
         reference="CalculationPeriodDates"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CancelableProvision

Super-types:	None
Sub-types:	None

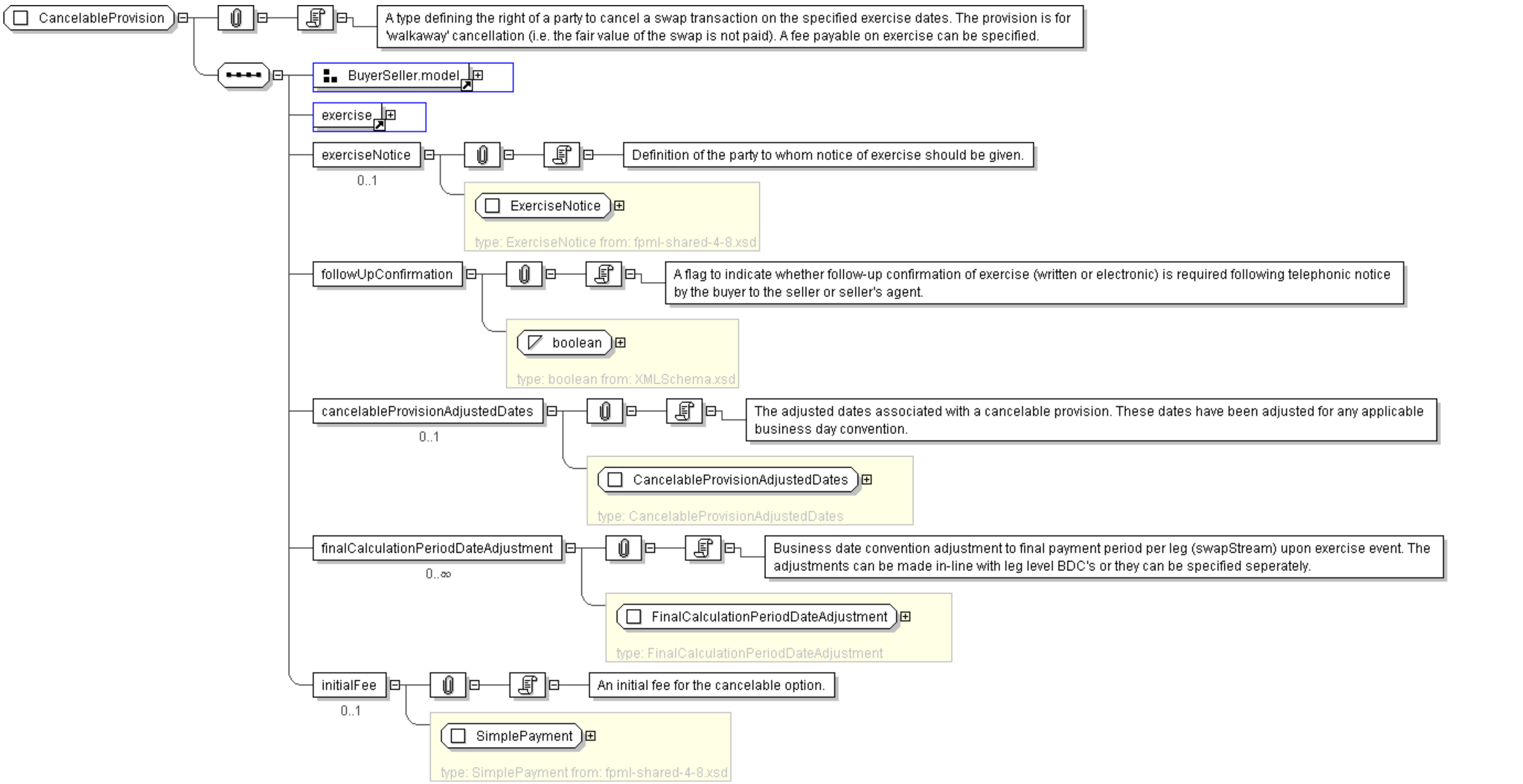
Name	CancelableProvision
Used by (from the same schema document)	Complex Type **Swap**
Abstract	no
Documentation	A type defining the right of a party to cancel a swap transaction on the specified exercise dates. The provision is for 'walkaway' cancellation (i.e. the fair value of the swap is not paid). A fee payable on exercise can be specified.

XML Instance Representation

```
<...>
   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <exercise> ... </exercise> [1]
   <exerciseNotice> ExerciseNotice </exerciseNotice> [0..1]
   'Definition of the party to whom notice of exercise should be given.'

   <followUpConfirmation> xsd:boolean </followUpConfirmation> [1]
   'A flag to indicate whether follow-up confirmation of exercise (written or electronic)
   is required following telephonic notice by the buyer to the seller or seller\'s agent.'

   <cancelableProvisionAdjustedDates> CancelableProvisionAdjustedDates
   </cancelableProvisionAdjustedDates> [0..1]
   'The adjusted dates associated with a cancelable provision. These dates have been adjusted
   for any applicable business day convention.'

   <finalCalculationPeriodDateAdjustment> FinalCalculationPeriodDateAdjustment
   </finalCalculationPeriodDateAdjustment> [0..*]
   'Business date convention adjustment to final payment period per leg (swapStream) upon
   exercise event. The adjustments can be made in-line with leg level BDC\'s or they can
   be specified seperately.'

   <initialFee> SimplePayment </initialFee> [0..1]
   'An initial fee for the cancelable option.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CancelableProvision">
   <xsd:sequence>
      <xsd:group ref=" BuyerSeller.model "/>
      <xsd:element ref=" exercise "/>
      <xsd:element name="exerciseNotice" type=" ExerciseNotice " minOccurs="0"/>
      <xsd:element name="followUpConfirmation" type=" xsd:boolean "/>
      <xsd:element name="cancelableProvisionAdjustedDates" type=" CancelableProvisionAdjustedDates
      " minOccurs="0"/>
      <xsd:element name="finalCalculationPeriodDateAdjustment"
      type=" FinalCalculationPeriodDateAdjustment " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="initialFee" type=" SimplePayment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CancelableProvisionAdjustedDates

Super-types:	None

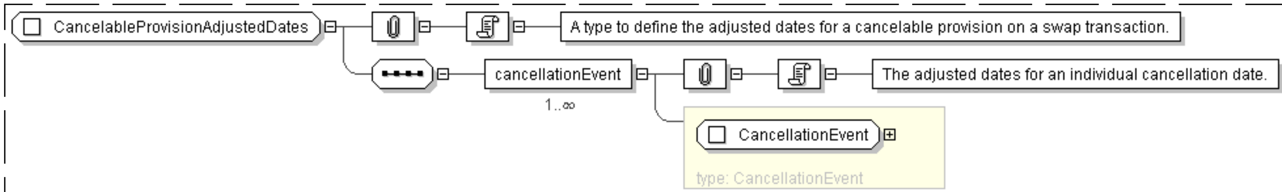
Sub-types:	None

Name	CancelableProvisionAdjustedDates
Used by (from the same schema document)	Complex Type **CancelableProvision**
Abstract	no
Documentation	A type to define the adjusted dates for a cancelable provision on a swap transaction.

XML Instance Representation

```
<...>
   <cancellationEvent> CancellationEvent </cancellationEvent> [1..*]
   'The adjusted dates for an individual cancellation date.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CancelableProvisionAdjustedDates">
   <xsd:sequence>
      <xsd:element name="cancellationEvent" type=" CancellationEvent " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CancellationEvent

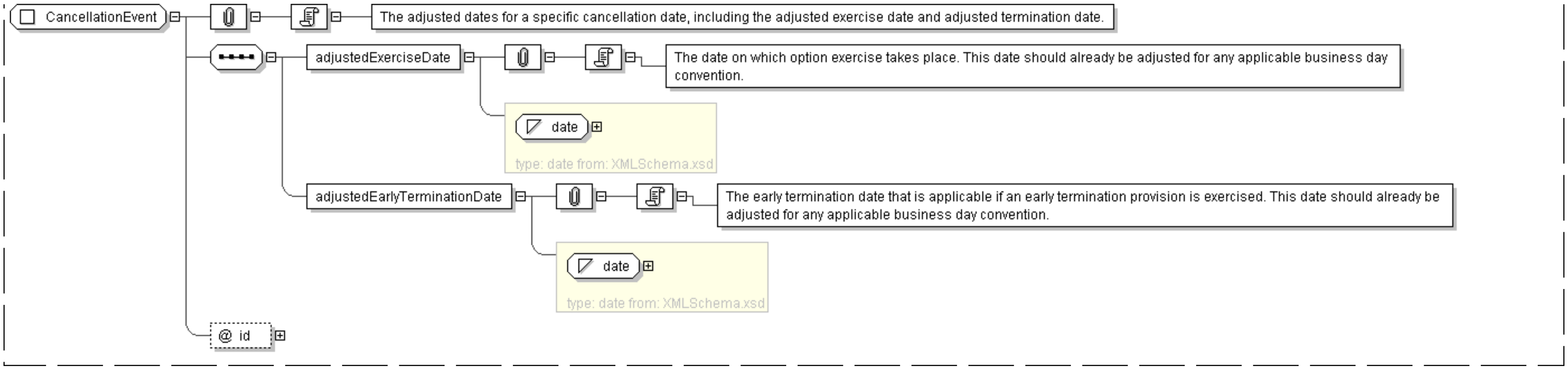
Super-types:	None
Sub-types:	None

Name	CancellationEvent
Used by (from the same schema document)	Complex Type **CancelableProvisionAdjustedDates**
Abstract	no
Documentation	The adjusted dates for a specific cancellation date, including the adjusted exercise date and adjusted termination date.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <adjustedExerciseDate> xsd:date </adjustedExerciseDate> [1]
   'The date on which option exercise takes place. This date should already be adjusted for
   any applicable business day convention.'

   <adjustedEarlyTerminationDate> xsd:date </adjustedEarlyTerminationDate> [1]
   'The early termination date that is applicable if an early termination provision is
   exercised. This date should already be adjusted for any applicable business day convention.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CancellationEvent">
   <xsd:sequence>
      <xsd:element name="adjustedExerciseDate" type=" xsd:date "/>
      <xsd:element name="adjustedEarlyTerminationDate" type=" xsd:date "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CapFloor

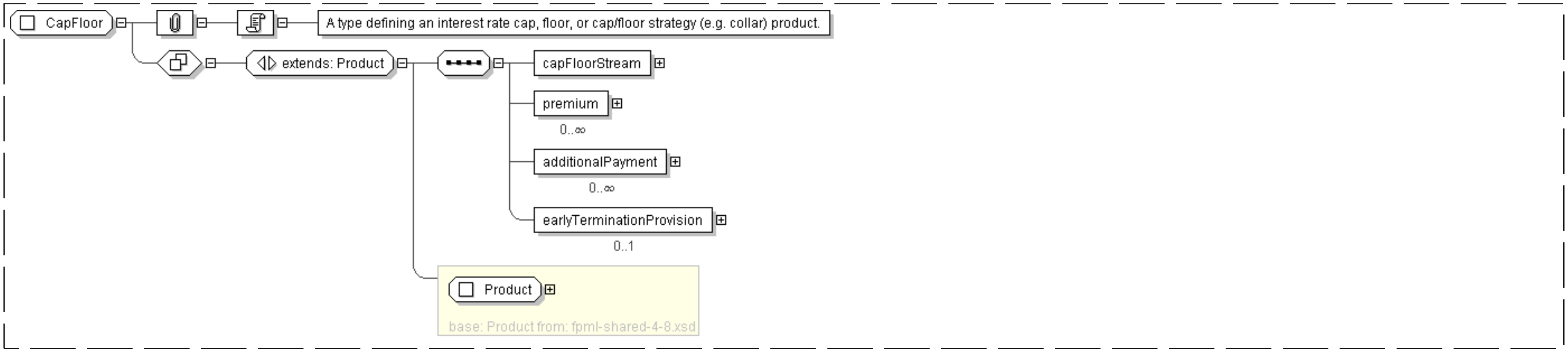
Super-types:	Product < **CapFloor** (by extension)
Sub-types:	None

Name	CapFloor
Used by (from the same schema document)	Element **capFloor**
Abstract	no
Documentation	A type defining an interest rate cap, floor, or cap/floor strategy (e.g. collar) product.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <capFloorStream> InterestRateStream </capFloorStream> [1]
   <premium> Payment </premium> [0..*]
   'The option premium amount payable by buyer to seller on the specified payment date.'

   <additionalPayment> Payment </additionalPayment> [0..*]
   'Additional payments between the principal parties.'

   <earlyTerminationProvision> EarlyTerminationProvision </earlyTerminationProvision> [0..1]
   'Parameters specifying provisions relating to the optional and mandatory early terminarion of
   a CapFloor transaction.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CapFloor">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="capFloorStream" type=" InterestRateStream "/>
            <xsd:element name="premium" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="additionalPayment" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="earlyTerminationProvision" type=" EarlyTerminationProvision " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CashPriceMethod

Super-types:	None
Sub-types:	None

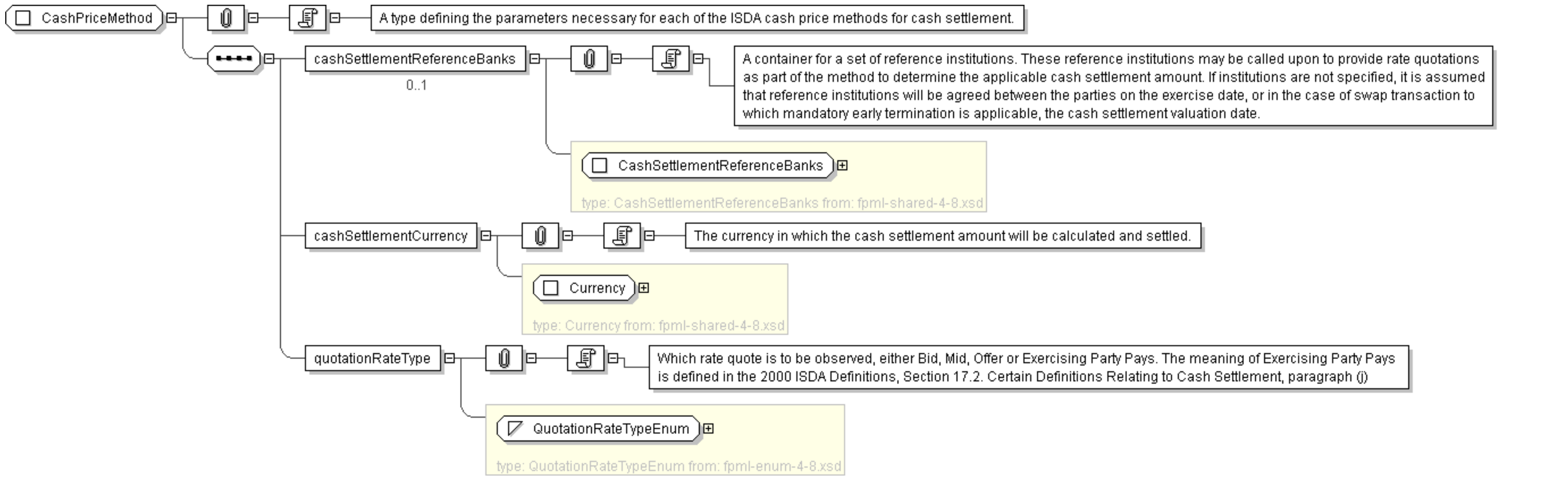
Name	CashPriceMethod
Used by (from the same schema document)	Complex Type **CashSettlement** , Complex Type **CashSettlement**
Abstract	no
Documentation	A type defining the parameters necessary for each of the ISDA cash price methods for cash settlement.

XML Instance Representation

```
<...>
   <cashSettlementReferenceBanks> CashSettlementReferenceBanks </
   cashSettlementReferenceBanks> [0..1]
   'A container for a set of reference institutions. These reference institutions may be
   called upon to provide rate quotations as part of the method to determine the applicable
   cash settlement amount. If institutions are not specified, it is assumed that
   reference institutions will be agreed between the parties on the exercise date, or in the
   case of swap transaction to which mandatory early termination is applicable, the
   cash settlement valuation date.'

   <cashSettlementCurrency> Currency </cashSettlementCurrency> [1]
   'The currency in which the cash settlement amount will be calculated and settled.'

   <quotationRateType> QuotationRateTypeEnum </quotationRateType> [1]
   'Which rate quote is to be observed, either Bid, Mid, Offer or Exercising Party Pays.
   The meaning of Exercising Party Pays is defined in the 2000 ISDA Definitions, Section
   17.2. Certain Definitions Relating to Cash Settlement, paragraph (j)'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashPriceMethod">
   <xsd:sequence>
      <xsd:element name="cashSettlementReferenceBanks" type=" CashSettlementReferenceBanks
      " minOccurs="0"/>
      <xsd:element name="cashSettlementCurrency" type=" Currency "/>
      <xsd:element name="quotationRateType" type=" QuotationRateTypeEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CashSettlement

Super-types:	None
Sub-types:	None

Name	CashSettlement
Used by (from the same schema document)	Complex Type **MandatoryEarlyTermination** , Complex Type **OptionalEarlyTermination** , Complex Type **Swaption**
Abstract	no
Documentation	A type to define the cash settlement terms for a product where cash settlement is applicable.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <cashSettlementValuationTime> BusinessCenterTime </cashSettlementValuationTime> [0..1]
   'The time of the cash settlement valuation date when the cash settlement amount will
   be determined according to the cash settlement method if the parties have not otherwise
   been able to agree the cash settlement amount.'

   <cashSettlementValuationDate> RelativeDateOffset </cashSettlementValuationDate> [0..1]
   'The date on which the cash settlement amount will be determined according to the
   cash settlement method if the parties have not otherwise been able to agree the cash
   settlement amount.'

   <cashSettlementPaymentDate> CashSettlementPaymentDate </cashSettlementPaymentDate> [0..1]
```

'The date on which the cash settlement amount will be paid, subject to adjustment in accordance with any applicable business day convention. This component would not be present for a mandatory early termination provision where the cash settlement payment date is the mandatory early termination date.'

Start Choice [0..1]

<cashPriceMethod> CashPriceMethod </cashPriceMethod> [1]

'An ISDA defined cash settlement method used for the determination of the applicable cash settlement amount. The method is defined in the 2000 ISDA Definitions, Section 17.3. Cash Settlement Methods, paragraph (a).'

<cashPriceAlternateMethod> CashPriceMethod </cashPriceAlternateMethod> [1]

'An ISDA defined cash settlement method used for the determination of the applicable cash settlement amount. The method is defined in the 2000 ISDA Definitions, Section 17.3. Cash Settlement Methods, paragraph (b).'

<parYieldCurveAdjustedMethod> YieldCurveMethod </parYieldCurveAdjustedMethod> [1]

'An ISDA defined cash settlement method used for the determination of the applicable cash settlement amount. The method is defined in the 2000 ISDA Definitions, Section 17.3. Cash Settlement Methods, paragraph (c).'

<zeroCouponYieldAdjustedMethod> YieldCurveMethod </zeroCouponYieldAdjustedMethod> [1]

'An ISDA defined cash settlement method used for the determination of the applicable cash settlement amount. The method is defined in the 2000 ISDA Definitions, Section 17.3. Cash Settlement Methods, paragraph (d).'

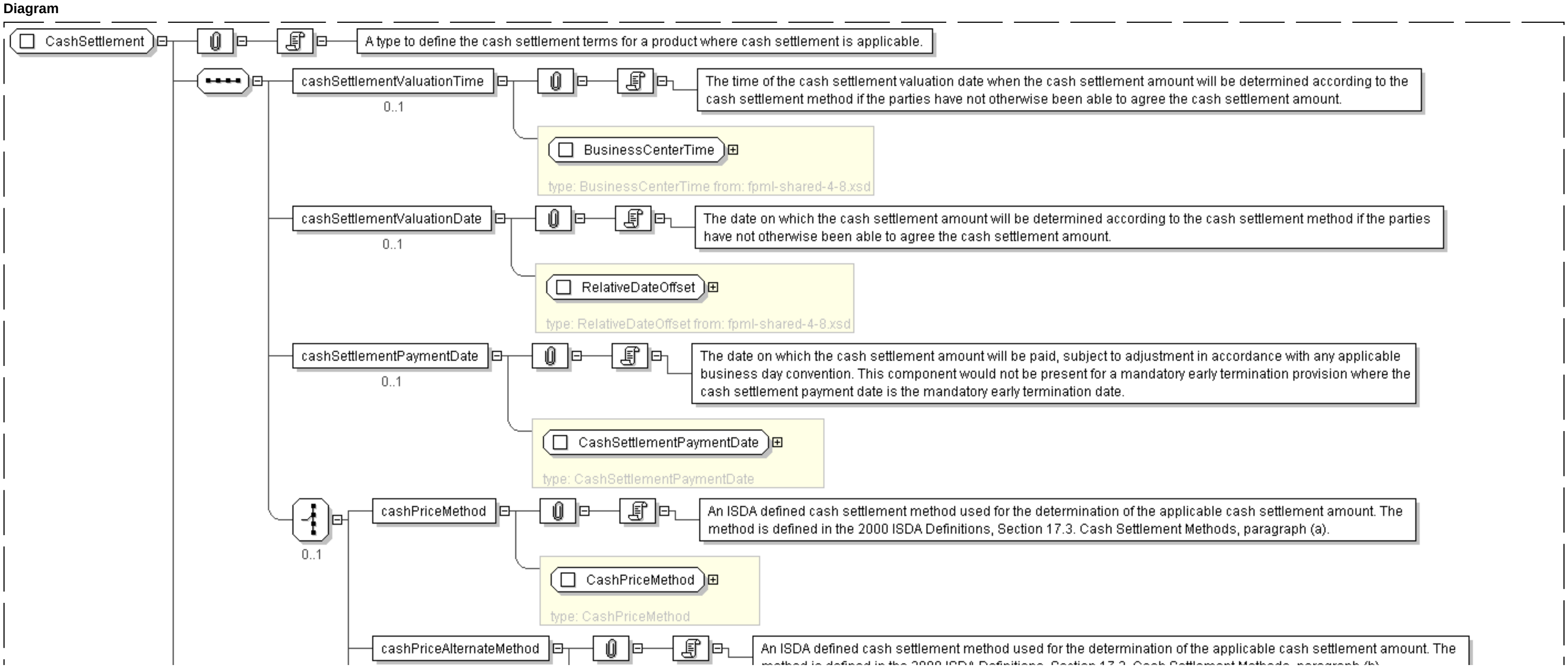
<parYieldCurveUnadjustedMethod> YieldCurveMethod </parYieldCurveUnadjustedMethod> [1]

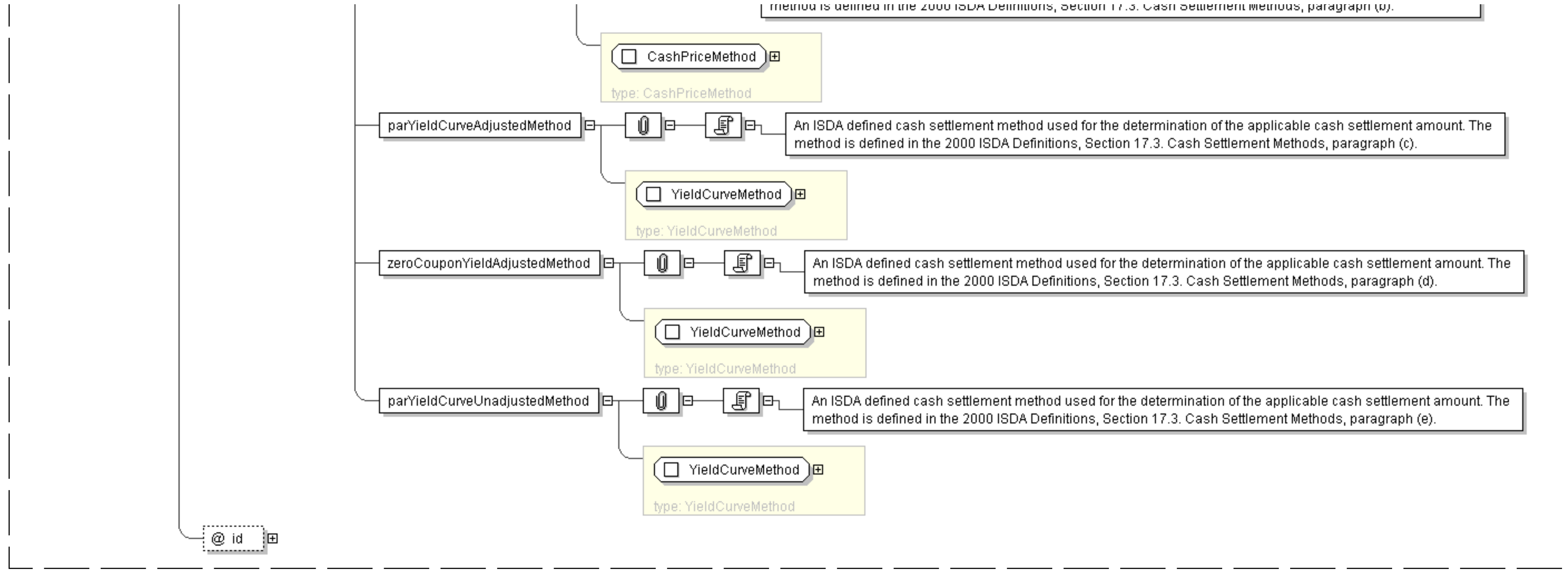
'An ISDA defined cash settlement method used for the determination of the applicable cash settlement amount. The method is defined in the 2000 ISDA Definitions, Section 17.3. Cash Settlement Methods, paragraph (e).'

End Choice

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="CashSettlement">
   <xsd:sequence>
      <xsd:element name="cashSettlementValuationTime" type=" BusinessCenterTime " minOccurs="0"/>
      <xsd:element name="cashSettlementValuationDate" type=" RelativeDateOffset " minOccurs="0"/>
      <xsd:element name="cashSettlementPaymentDate" type=" CashSettlementPaymentDate " minOccurs="0"/>
      <xsd:choice minOccurs="0">
         <xsd:element name="cashPriceMethod" type=" CashPriceMethod "/>
         <xsd:element name="cashPriceAlternateMethod" type=" CashPriceMethod "/>
         <xsd:element name="parYieldCurveAdjustedMethod" type=" YieldCurveMethod "/>
         <xsd:element name="zeroCouponYieldAdjustedMethod" type=" YieldCurveMethod "/>
         <xsd:element name="parYieldCurveUnadjustedMethod" type=" YieldCurveMethod "/>
      </xsd:choice>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CashSettlementPaymentDate

Super-types:	None
Sub-types:	None

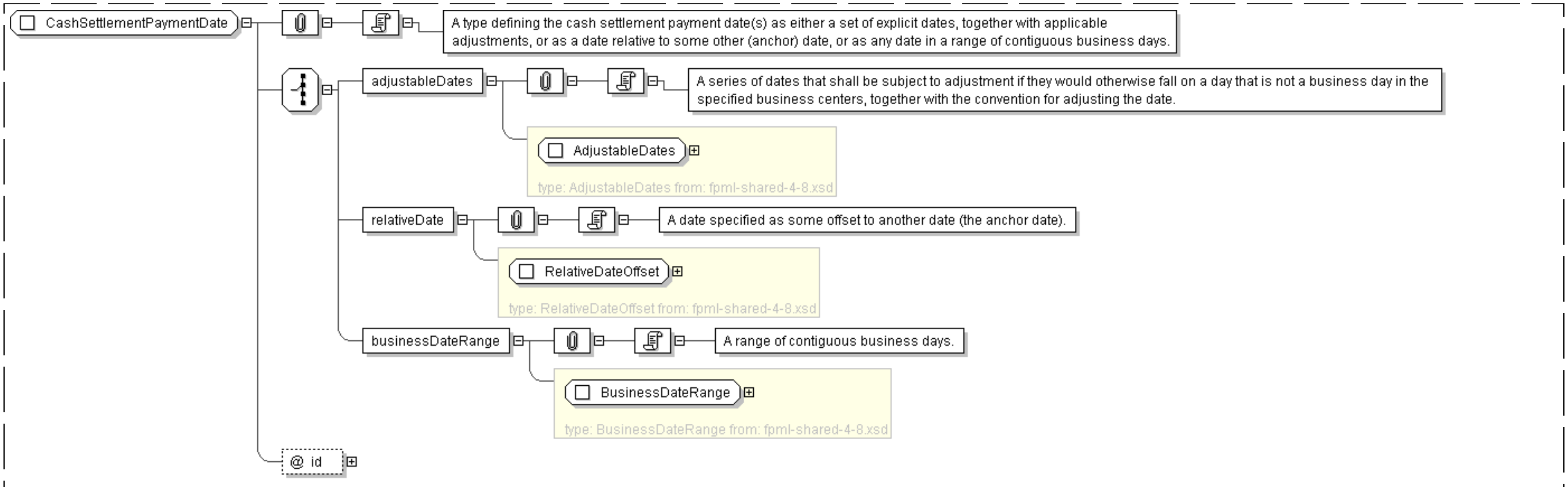
Name	CashSettlementPaymentDate
Used by (from the same schema document)	Complex Type **CashSettlement**
Abstract	no
Documentation	A type defining the cash settlement payment date(s) as either a set of explicit dates, together with applicable adjustments, or as a date relative to some other (anchor) date, or as any date in a range of contiguous business days.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <adjustableDates> AdjustableDates </adjustableDates> [1]
```

```
        'A series of dates that shall be subject to adjustment if they would otherwise fall on a
        day that is not a business day in the specified business centers, together with the
        convention for adjusting the date.'

        <relativeDate> RelativeDateOffset </relativeDate> [1]
        'A date specified as some offset to another date (the anchor date).'

        <businessDateRange> BusinessDateRange </businessDateRange> [1]
        'A range of contiguous business days.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashSettlementPaymentDate">
   <xsd:choice>
      <xsd:element name="adjustableDates" type=" AdjustableDates "/>
      <xsd:element name="relativeDate" type=" RelativeDateOffset "/>
      <xsd:element name="businessDateRange" type=" BusinessDateRange "/>
   </xsd:choice>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: Cashflows

Super-types:	None
Sub-types:	None

Name	Cashflows
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no
Documentation	A type defining the cashflow representation of a swap trade.

XML Instance Representation

```
<...>
   <cashflowsMatchParameters> xsd:boolean </cashflowsMatchParameters> [1]
```

'A true/false flag to indicate whether the cashflows match the parametric definition of the stream, i.e. whether the cashflows could be regenerated from the parameters without loss of information.'

<principalExchange> PrincipalExchange </principalExchange> [0..*]

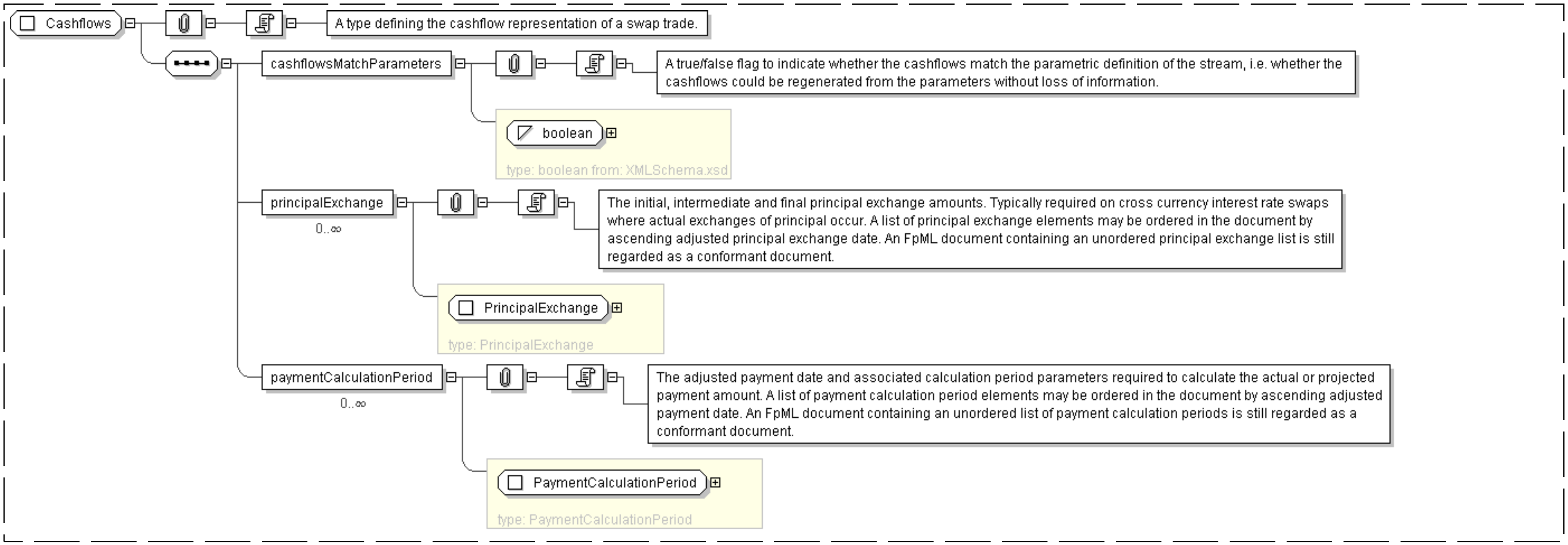
'The initial, intermediate and final principal exchange amounts. Typically required on cross currency interest rate swaps where actual exchanges of principal occur. A list of principal exchange elements may be ordered in the document by ascending adjusted principal exchange date. An FpML document containing an unordered principal exchange list is still regarded as a conformant document.'

<paymentCalculationPeriod> PaymentCalculationPeriod </paymentCalculationPeriod> [0..*]

'The adjusted payment date and associated calculation period parameters required to calculate the actual or projected payment amount. A list of payment calculation period elements may be ordered in the document by ascending adjusted payment date. An FpML document containing an unordered list of payment calculation periods is still regarded as a conformant document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Cashflows">
   <xsd:sequence>
      <xsd:element name="cashflowsMatchParameters" type=" xsd:boolean "/>
      <xsd:element name="principalExchange" type=" PrincipalExchange "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="paymentCalculationPeriod" type=" PaymentCalculationPeriod "
      minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DateRelativeToCalculationPeriodDates

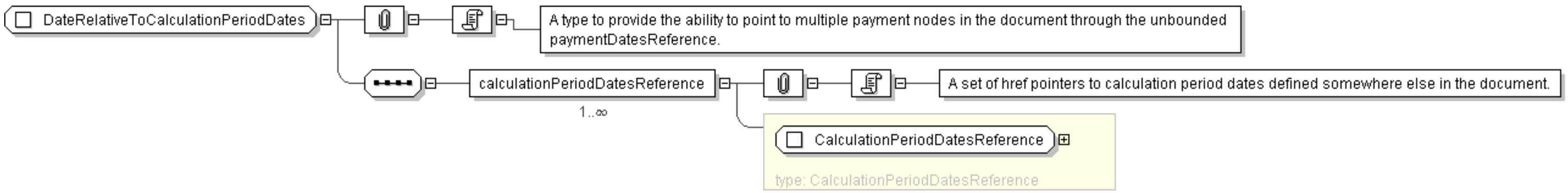
Super-types:	None
Sub-types:	None

Name	DateRelativeToCalculationPeriodDates
Used by (from the same schema document)	Complex Type **FxFixingDate**
Abstract	no
Documentation	A type to provide the ability to point to multiple payment nodes in the document through the unbounded paymentDatesReference.

XML Instance Representation

```
<...>
   <calculationPeriodDatesReference> CalculationPeriodDatesReference
   </calculationPeriodDatesReference> [1..*]
   'A set of href pointers to calculation period dates defined somewhere else in the document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DateRelativeToCalculationPeriodDates">
   <xsd:sequence>
      <xsd:element name="calculationPeriodDatesReference" type=" CalculationPeriodDatesReference
      " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DateRelativeToPaymentDates

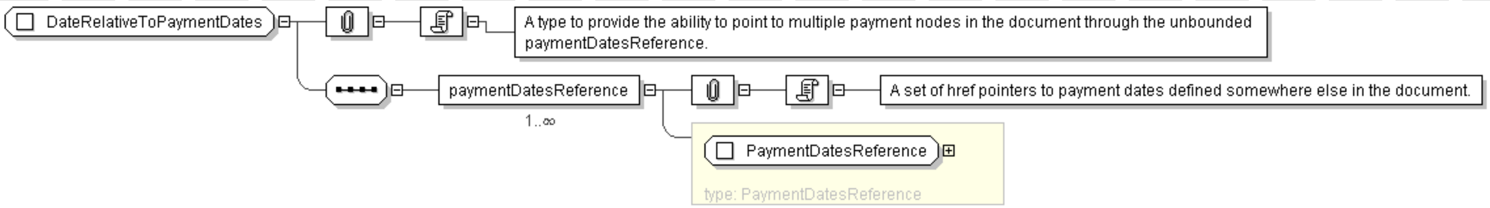
Super-types:	None
Sub-types:	None

Name	DateRelativeToPaymentDates
Used by (from the same schema document)	Complex Type **FxFixingDate**
Abstract	no
Documentation	A type to provide the ability to point to multiple payment nodes in the document through the unbounded paymentDatesReference.

XML Instance Representation

```
<...>
   <paymentDatesReference> PaymentDatesReference </paymentDatesReference> [1..*]
   'A set of href pointers to payment dates defined somewhere else in the document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DateRelativeToPaymentDates">
   <xsd:sequence>
      <xsd:element name="paymentDatesReference" type=" PaymentDatesReference " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Discounting

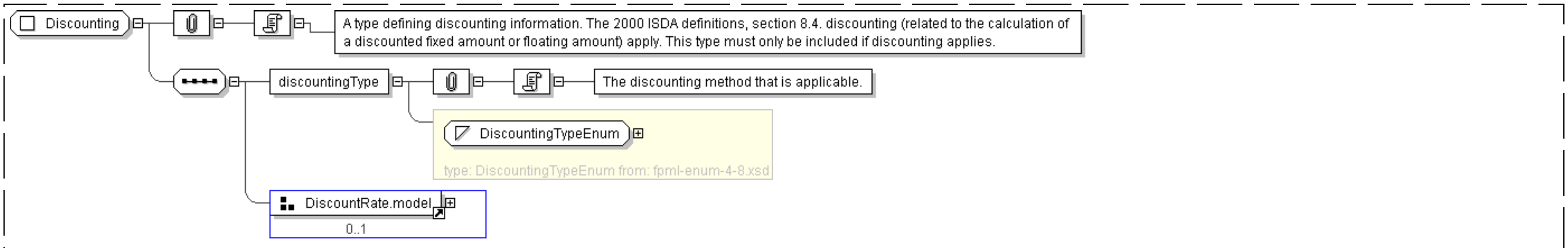
Super-types:	None
Sub-types:	None

Name	Discounting
Used by (from the same schema document)	Complex Type **Calculation**
Abstract	no
Documentation	A type defining discounting information. The 2000 ISDA definitions, section 8.4. discounting (related to the calculation of a discounted fixed amount or floating amount) apply. This type must only be included if discounting applies.

XML Instance Representation

```
<...>
   <discountingType> DiscountingTypeEnum </discountingType> [1]
   'The discounting method that is applicable.'

Start Group: DiscountRate.model [0..1]
      <discountRate> xsd:decimal </discountRate> [1]
      'A discount rate, expressed as a decimal, to be used in the calculation of a discounted
      amount. A discount amount of 5% would be represented as 0.05.'

      <discountRateDayCountFraction> DayCountFraction </discountRateDayCountFraction> [0..1]
      'A discount day count fraction to be used in the calculation of a discounted amount.'

End Group: DiscountRate.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Discounting">
   <xsd:sequence>
      <xsd:element name="discountingType" type=" DiscountingTypeEnum "/>
      <xsd:group ref=" DiscountRate.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: EarlyTerminationEvent

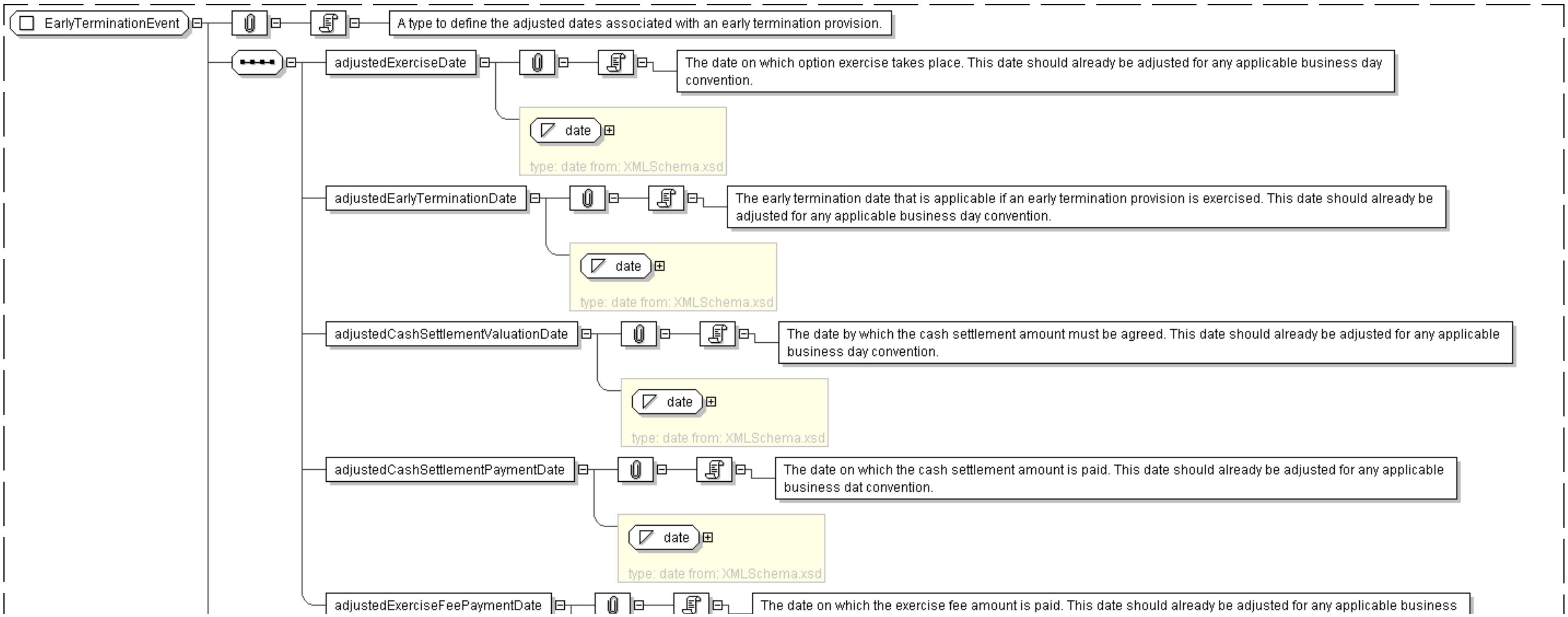
Super-types:	None
Sub-types:	None

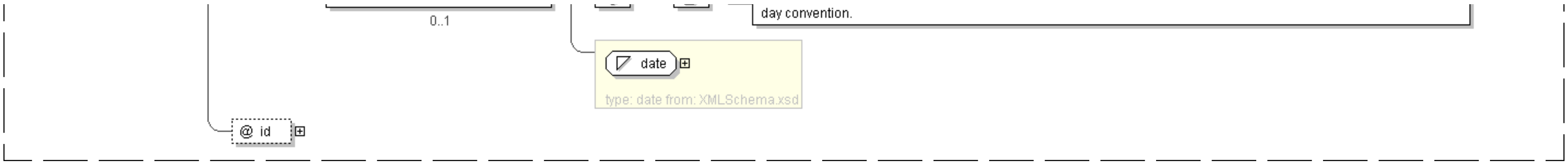
Name	EarlyTerminationEvent
Used by (from the same schema document)	Complex Type **OptionalEarlyTerminationAdjustedDates**
Abstract	no
Documentation	A type to define the adjusted dates associated with an early termination provision.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <adjustedExerciseDate> xsd:date </adjustedExerciseDate> [1]
   'The date on which option exercise takes place. This date should already be adjusted for
   any applicable business day convention.'

   <adjustedEarlyTerminationDate> xsd:date </adjustedEarlyTerminationDate> [1]
   'The early termination date that is applicable if an early termination provision is
   exercised. This date should already be adjusted for any applicable business day convention.'

   <adjustedCashSettlementValuationDate> xsd:date </adjustedCashSettlementValuationDate> [1]
   'The date by which the cash settlement amount must be agreed. This date should already
   be adjusted for any applicable business day convention.'

   <adjustedCashSettlementPaymentDate> xsd:date </adjustedCashSettlementPaymentDate> [1]
   'The date on which the cash settlement amount is paid. This date should already be adjusted
   for any applicable business dat convention.'

   <adjustedExerciseFeePaymentDate> xsd:date </adjustedExerciseFeePaymentDate> [0..1]
   'The date on which the exercise fee amount is paid. This date should already be adjusted
   for any applicable business day convention.'

</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="EarlyTerminationEvent">
   <xsd:sequence>
      <xsd:element name="adjustedExerciseDate" type=" xsd:date "/>
      <xsd:element name="adjustedEarlyTerminationDate" type=" xsd:date "/>
      <xsd:element name="adjustedCashSettlementValuationDate" type=" xsd:date "/>
      <xsd:element name="adjustedCashSettlementPaymentDate" type=" xsd:date "/>
      <xsd:element name="adjustedExerciseFeePaymentDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: EarlyTerminationProvision

Super-types:	None
Sub-types:	None

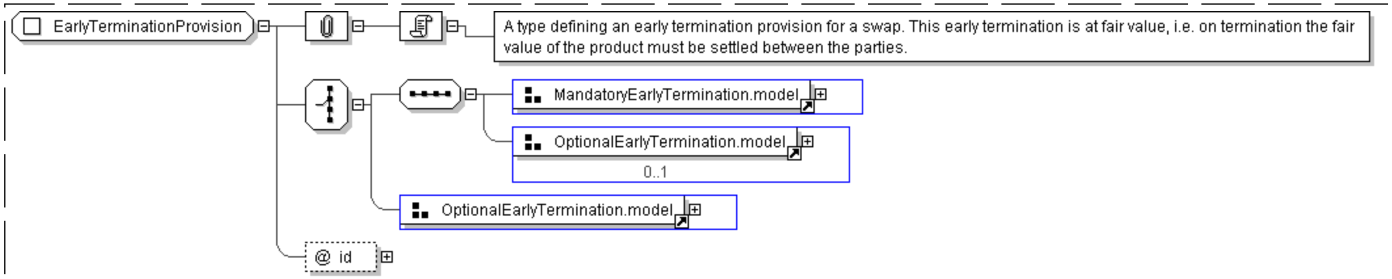
Name	EarlyTerminationProvision
Used by (from the same schema document)	Complex Type **CapFloor** , Complex Type **Swap**
Abstract	no
Documentation	A type defining an early termination provision for a swap. This early termination is at fair value, i.e. on termination the fair value of the product must be settled between the parties.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
Start Choice [1]
         <mandatoryEarlyTermination> MandatoryEarlyTermination </mandatoryEarlyTermination> [1]
         'A mandatory early termination provision to terminate the swap at fair value.'

         <mandatoryEarlyTerminationDateTenor> Period </mandatoryEarlyTerminationDateTenor> [1]
         'Period after trade date of the mandatory early termination date.'

         <mandatoryEarlyTermination> MandatoryEarlyTermination </mandatoryEarlyTermination> [0..1]
         'A mandatory early termination provision to terminate the swap at fair value.'

End Choice
Start Group: OptionalEarlyTermination.model [0..1]
Start Choice [1]
            <optionalEarlyTermination> OptionalEarlyTermination </optionalEarlyTermination> [1]
            'An option for either or both parties to terminate the swap at fair value.'

            <optionalEarlyTerminationParameters> ExercisePeriod </optionalEarlyTerminationParameters> [1]
            'Definition of the first early termination date and the frequency of the termination
            dates subsequent to that. American exercise is defined by having a frequency of one day.'

            <optionalEarlyTermination> OptionalEarlyTermination </optionalEarlyTermination> [0..1]
            'An option for either or both parties to terminate the swap at fair value.'

End Choice
End Group: OptionalEarlyTermination.model
Start Choice [1]
```

```
        <optionalEarlyTermination> OptionalEarlyTermination </optionalEarlyTermination> [1]
        'An option for either or both parties to terminate the swap at fair value.'

        <optionalEarlyTerminationParameters> ExercisePeriod </optionalEarlyTerminationParameters> [1]
        'Definition of the first early termination date and the frequency of the termination
        dates subsequent to that. American exercise is defined by having a frequency of one day.'

        <optionalEarlyTermination> OptionalEarlyTermination </optionalEarlyTermination> [0..1]
        'An option for either or both parties to terminate the swap at fair value.'

End Choice
End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EarlyTerminationProvision">
   <xsd:choice>
      <xsd:sequence>
         <xsd:group ref=" MandatoryEarlyTermination.model "/>
         <xsd:group ref=" OptionalEarlyTermination.model " minOccurs="0"/>
      </xsd:sequence>
      <xsd:group ref=" OptionalEarlyTermination.model "/>
   </xsd:choice>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ExerciseEvent

Super-types:	None
Sub-types:	None

Name	ExerciseEvent
Used by (from the same schema document)	Complex Type **SwaptionAdjustedDates**
Abstract	no
Documentation	A type defining the adjusted dates associated with a particular exercise event.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <adjustedExerciseDate> xsd:date </adjustedExerciseDate> [1]
   'The date on which option exercise takes place. This date should already be adjusted for
   any applicable business day convention.'

   <adjustedRelevantSwapEffectiveDate> xsd:date </adjustedRelevantSwapEffectiveDate> [1]
   'The effective date of the underlying swap associated with a given exercise date. This
   date should already be adjusted for any applicable business day convention.'

   <adjustedCashSettlementValuationDate> xsd:date </adjustedCashSettlementValuationDate> [0..1]
```

'The date by which the cash settlement amount must be agreed. This date should already be adjusted for any applicable business day convention.'

<adjustedCashSettlementPaymentDate> xsd:date </adjustedCashSettlementPaymentDate> [0..1]

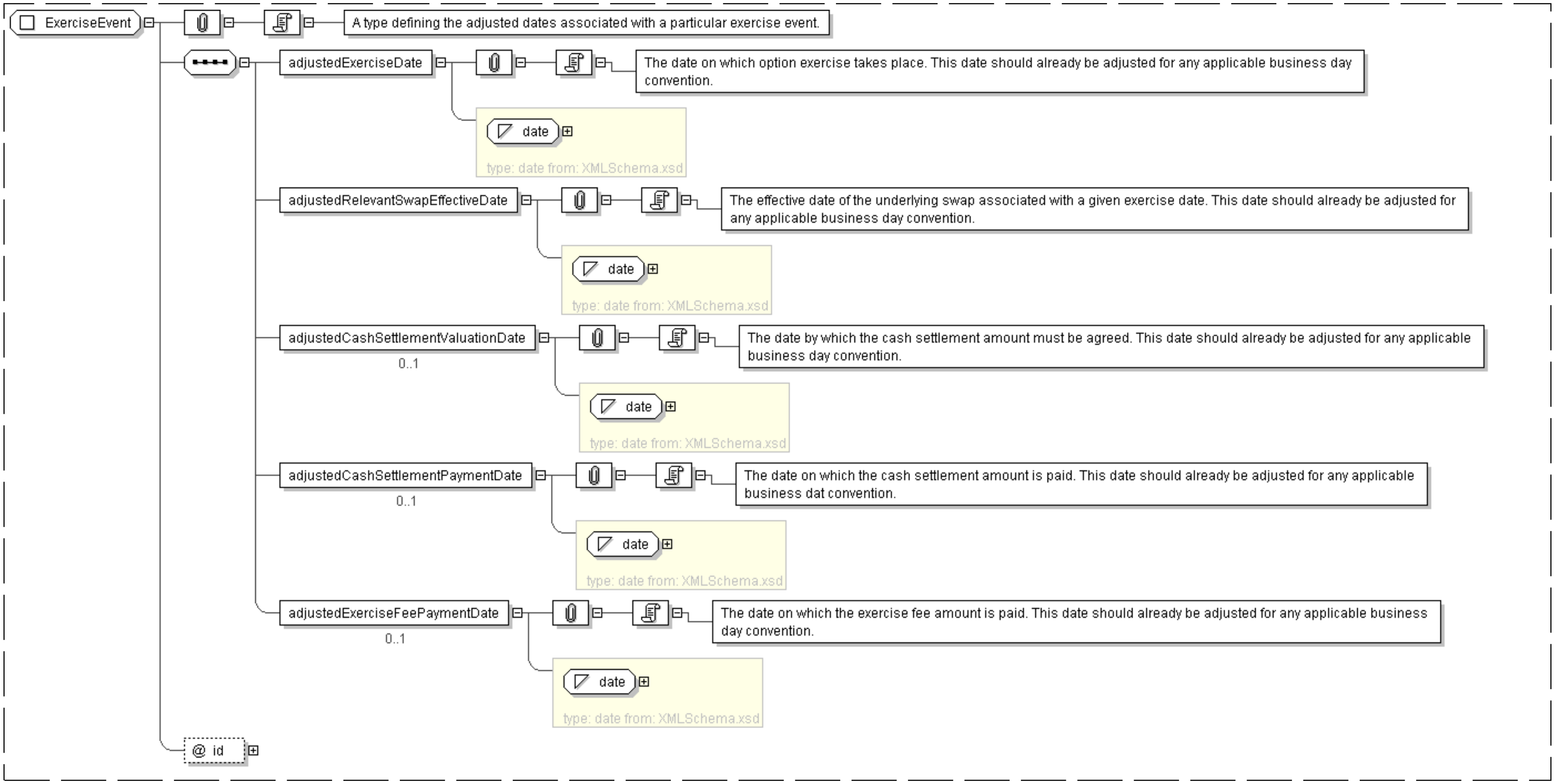
'The date on which the cash settlement amount is paid. This date should already be adjusted for any applicable business dat convention.'

<adjustedExerciseFeePaymentDate> xsd:date </adjustedExerciseFeePaymentDate> [0..1]

'The date on which the exercise fee amount is paid. This date should already be adjusted for any applicable business day convention.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ExerciseEvent">
   <xsd:sequence>
      <xsd:element name="adjustedExerciseDate" type=" xsd:date "/>
      <xsd:element name="adjustedRelevantSwapEffectiveDate" type=" xsd:date "/>
      <xsd:element name="adjustedCashSettlementValuationDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedCashSettlementPaymentDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedExerciseFeePaymentDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ExercisePeriod

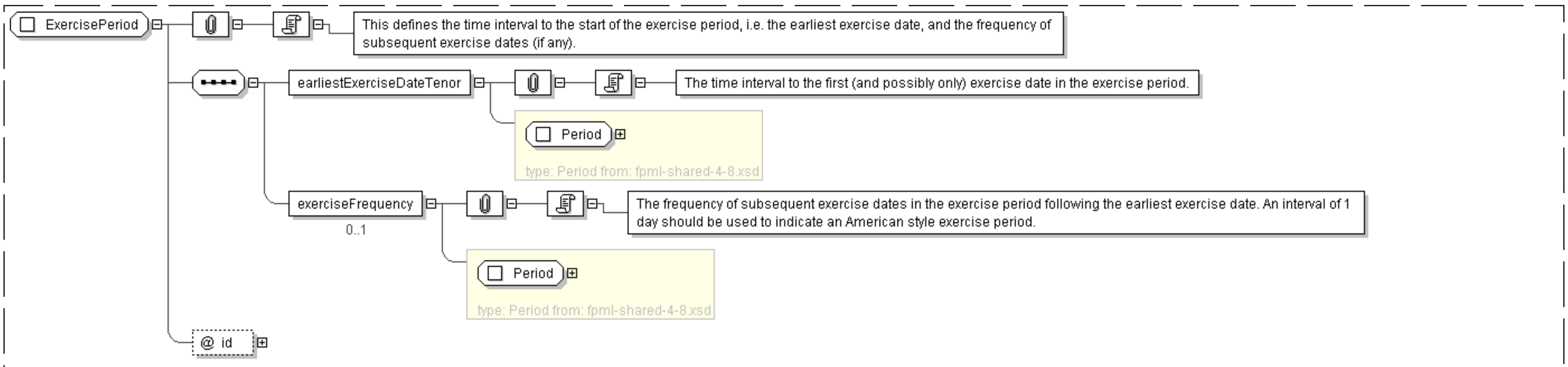
Super-types:	None
Sub-types:	None

Name	ExercisePeriod
Used by (from the same schema document)	Model Group **OptionalEarlyTermination.model**
Abstract	no
Documentation	This defines the time interval to the start of the exercise period, i.e. the earliest exercise date, and the frequency of subsequent exercise dates (if any).

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <earliestExerciseDateTenor> Period </earliestExerciseDateTenor> [1]
   'The time interval to the first (and possibly only) exercise date in the exercise period.'

   <exerciseFrequency> Period </exerciseFrequency> [0..1]
   'The frequency of subsequent exercise dates in the exercise period following the
   earliest exercise date. An interval of 1 day should be used to indicate an American
   style exercise period.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExercisePeriod">
   <xsd:sequence>
      <xsd:element name="earliestExerciseDateTenor" type=" Period "/>
      <xsd:element name="exerciseFrequency" type=" Period " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ExtendibleProvision

Super-types:	None
Sub-types:	None

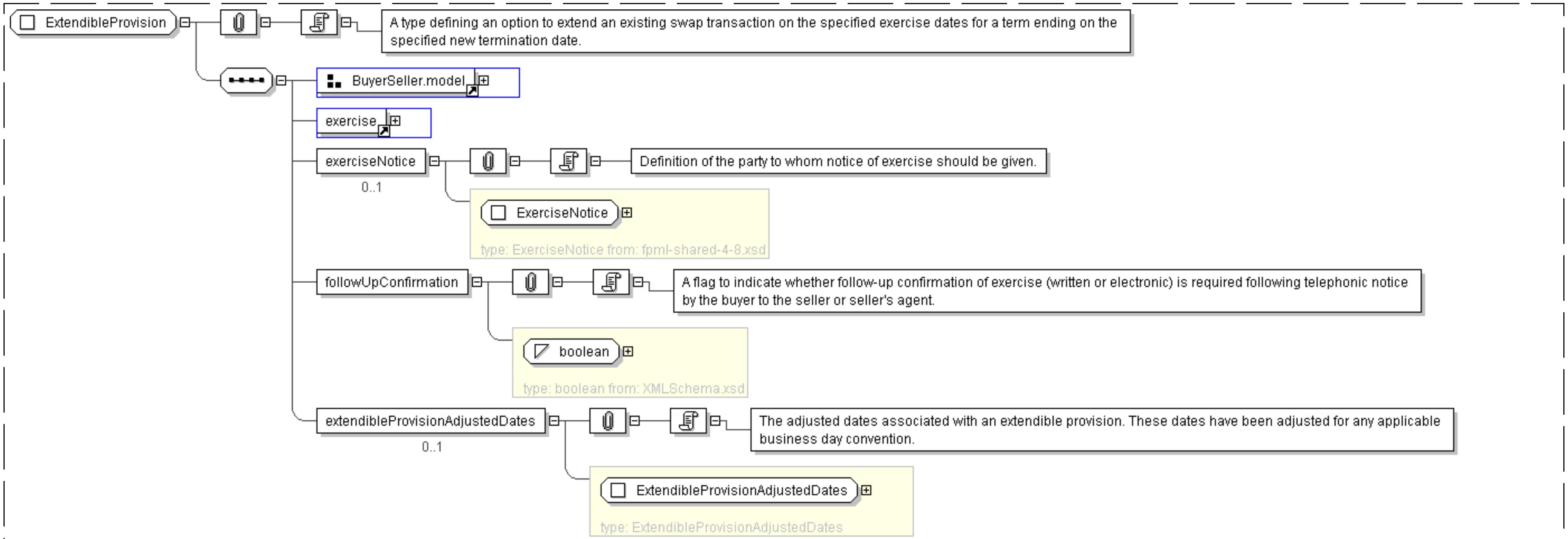
Name	ExtendibleProvision

Used by (from the same schema document)	Complex Type **Swap**
Abstract	no
Documentation	A type defining an option to extend an existing swap transaction on the specified exercise dates for a term ending on the specified new termination date.

XML Instance Representation

```
<...>
   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <exercise> ... </exercise> [1]
   <exerciseNotice> ExerciseNotice </exerciseNotice> [0..1]
   'Definition of the party to whom notice of exercise should be given.'

   <followUpConfirmation> xsd:boolean </followUpConfirmation> [1]
   'A flag to indicate whether follow-up confirmation of exercise (written or electronic)
   is required following telephonic notice by the buyer to the seller or seller\'s agent.'

   <extendibleProvisionAdjustedDates> ExtendibleProvisionAdjustedDates
   </extendibleProvisionAdjustedDates> [0..1]
   'The adjusted dates associated with an extendible provision. These dates have been adjusted
   for any applicable business day convention.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExtendibleProvision">
   <xsd:sequence>
      <xsd:group ref=" BuyerSeller.model "/>
      <xsd:element ref=" exercise "/>
```

```
      <xsd:element name="exerciseNotice" type=" ExerciseNotice " minOccurs="0"/>
      <xsd:element name="followUpConfirmation" type=" xsd:boolean "/>
      <xsd:element name="extendibleProvisionAdjustedDates" type=" ExtendibleProvisionAdjustedDates
      " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ExtendibleProvisionAdjustedDates

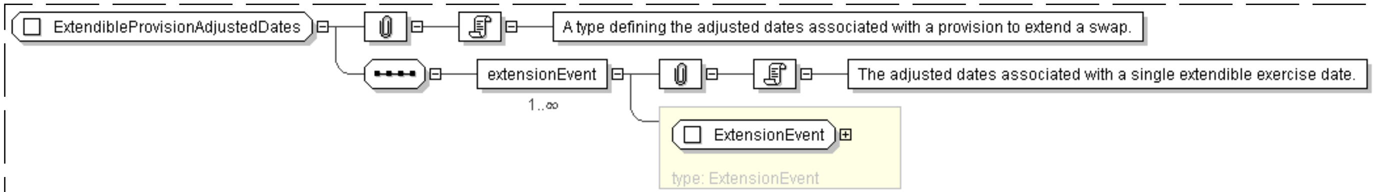
Super-types:	None
Sub-types:	None

Name	ExtendibleProvisionAdjustedDates
Used by (from the same schema document)	Complex Type **ExtendibleProvision**
Abstract	no
Documentation	A type defining the adjusted dates associated with a provision to extend a swap.

XML Instance Representation

```
<...>
   <extensionEvent> ExtensionEvent </extensionEvent> [1..*]
   'The adjusted dates associated with a single extendible exercise date.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ExtendibleProvisionAdjustedDates">
   <xsd:sequence>
      <xsd:element name="extensionEvent" type=" ExtensionEvent " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ExtensionEvent

Super-types:	None
Sub-types:	None

Name	ExtensionEvent
Used by (from the same schema document)	Complex Type **ExtendibleProvisionAdjustedDates**
Abstract	no
Documentation	A type to define the adjusted dates associated with an individual extension event.

XML Instance Representation

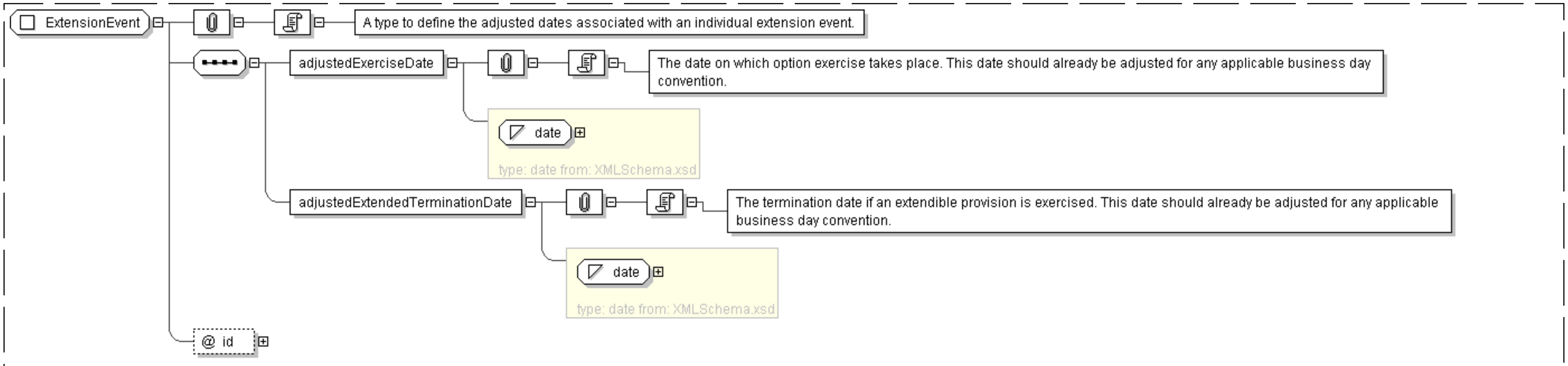
```
<...
id=" xsd:ID [0..1]">
   <adjustedExerciseDate> xsd:date </adjustedExerciseDate> [1]
   'The date on which option exercise takes place. This date should already be adjusted for
   any applicable business day convention.'
```

<adjustedExtendedTerminationDate> xsd:date </adjustedExtendedTerminationDate> [1]

'The termination date if an extendible provision is exercised. This date should already be adjusted for any applicable business day convention.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ExtensionEvent">
   <xsd:sequence>
      <xsd:element name="adjustedExerciseDate" type=" xsd:date "/>
      <xsd:element name="adjustedExtendedTerminationDate" type=" xsd:date "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: FallbackReferencePrice

Super-types:	None
Sub-types:	None

Name	FallbackReferencePrice
Used by (from the same schema document)	Complex Type **PriceSourceDisruption**
Abstract	no
Documentation	The method, prioritized by the order it is listed in this element, to get a replacement rate for the disrupted settlement rate option.

XML Instance Representation

<...>

<valuationPostponement> ValuationPostponement </valuationPostponement> [0..1]

'Specifies how long to wait to get a quote from a settlement rate option upon a price source disruption'

<fallbackSettlementRateOption> SettlementRateOption </fallbackSettlementRateOption> [0..*]

'This settlement rate option will be used in its place.'

<fallbackSurveyValuationPostponenment> Empty </fallbackSurveyValuationPostponenment> [0..1]

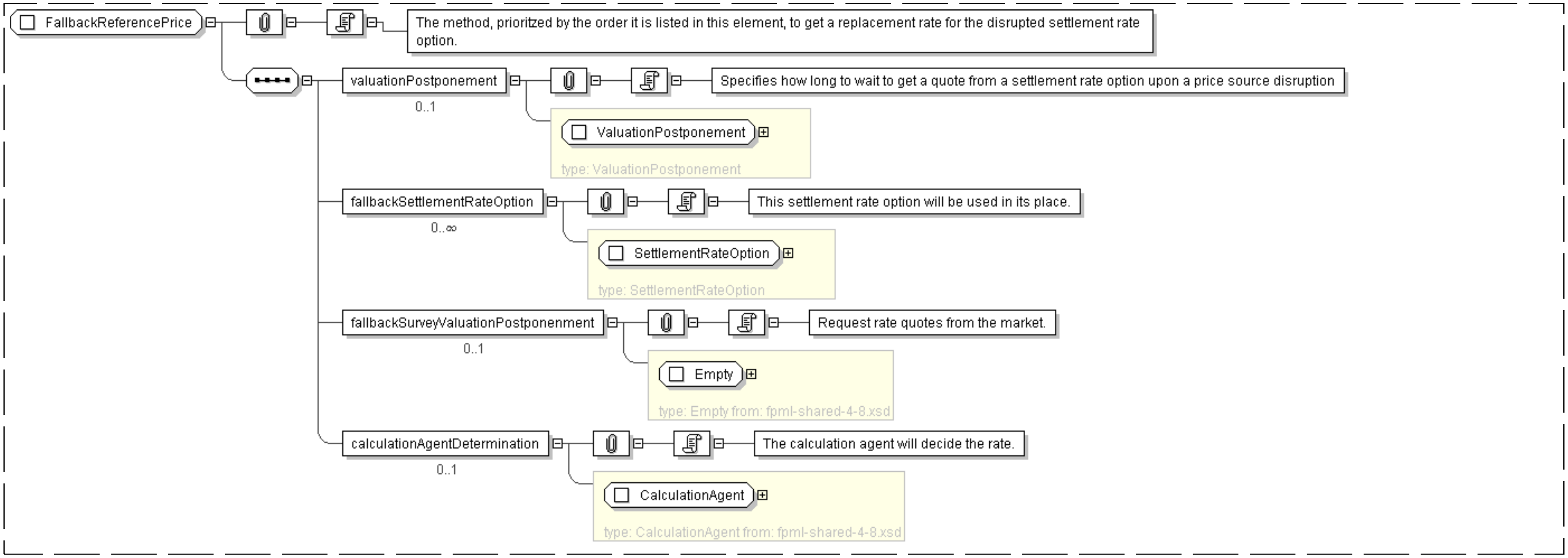
'Request rate quotes from the market.'

<calculationAgentDetermination> CalculationAgent </calculationAgentDetermination> [0..1]

'The calculation agent will decide the rate.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FallbackReferencePrice">
   <xsd:sequence>
      <xsd:element name="valuationPostponement" type=" ValuationPostponement " minOccurs="0"/>
      <xsd:element name="fallbackSettlementRateOption" type=" SettlementRateOption "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="fallbackSurveyValuationPostponenment" type=" Empty " minOccurs="0"/>
      <xsd:element name="calculationAgentDetermination" type=" CalculationAgent " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FinalCalculationPeriodDateAdjustment

Super-types:	None
Sub-types:	None

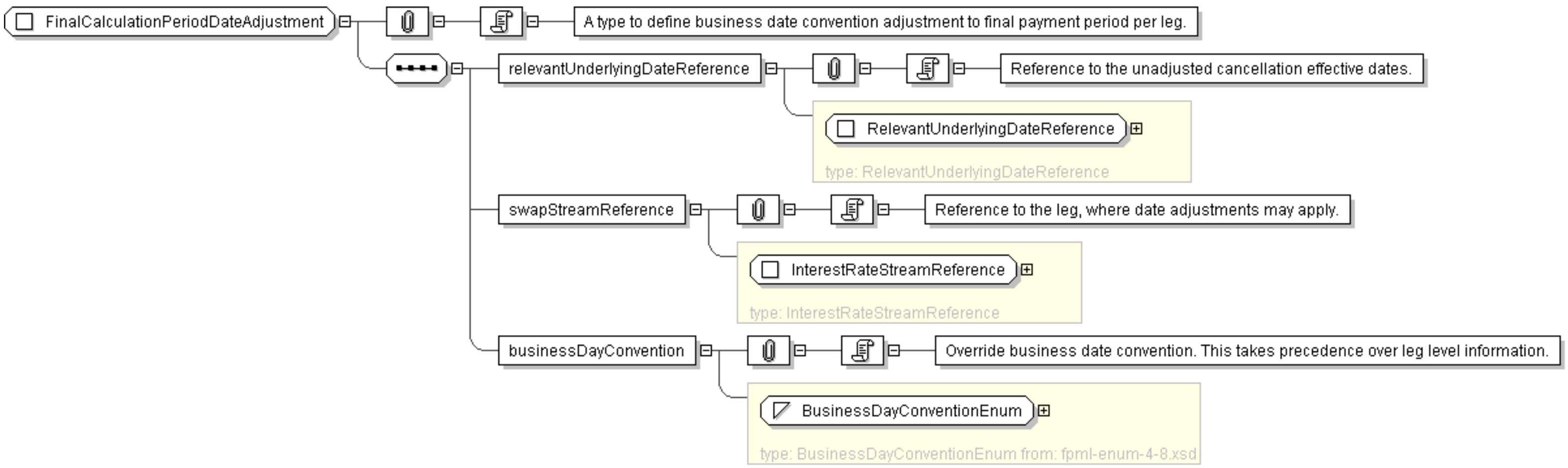
Name	FinalCalculationPeriodDateAdjustment
Used by (from the same schema document)	Complex Type **CancelableProvision**
Abstract	no
Documentation	A type to define business date convention adjustment to final payment period per leg.

XML Instance Representation

```
<...>
   <relevantUnderlyingDateReference> RelevantUnderlyingDateReference
   </relevantUnderlyingDateReference> [1]
   'Reference to the unadjusted cancellation effective dates.'

   <swapStreamReference> InterestRateStreamReference </swapStreamReference> [1]
   'Reference to the leg, where date adjustments may apply.'

   <businessDayConvention> BusinessDayConventionEnum </businessDayConvention> [1]
   'Override business date convention. This takes precedence over leg level information.'
```

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FinalCalculationPeriodDateAdjustment">
   <xsd:sequence>
      <xsd:element name="relevantUnderlyingDateReference" type=" RelevantUnderlyingDateReference "/>
      <xsd:element name="swapStreamReference" type=" InterestRateStreamReference "/>
      <xsd:element name="businessDayConvention" type=" BusinessDayConventionEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FloatingRateDefinition

Super-types:	None
Sub-types:	None

Name	FloatingRateDefinition
Used by (from the same schema document)	Complex Type **CalculationPeriod**
Abstract	no
Documentation	A type defining parameters associated with a floating rate reset. This type forms part of the cashflows representation of a stream.

XML Instance Representation

```
<...>
   <calculatedRate> xsd:decimal </calculatedRate> [0..1]
   'The final calculated rate for a calculation period after any required averaging of rates
   A calculated rate of 5% would be represented as 0.05.'

   <rateObservation> RateObservation </rateObservation> [0..*]
   'The details of a particular rate observation, including the fixing date and observed rate.
   A list of rate observation elements may be ordered in the document by ascending adjusted
   fixing date. An FpML document containing an unordered list of rate observations is
   still regarded as a conformant document.'

   <floatingRateMultiplier> xsd:decimal </floatingRateMultiplier> [0..1]
   'A rate multiplier to apply to the floating rate. The multiplier can be a positive or
   negative decimal. This element should only be included if the multiplier is not equal to
   1 (one).'

   <spread> xsd:decimal </spread> [0..1]
```

'The ISDA Spread, if any, which applies for the calculation period. The spread is a per annum rate, expressed as a decimal. For purposes of determining a calculation period amount, if positive the spread will be added to the floating rate and if negative the spread will be subtracted from the floating rate. A positive 10 basis point (0.1%) spread would be represented as 0.001.'

<capRate> Strike </capRate> [0..*]

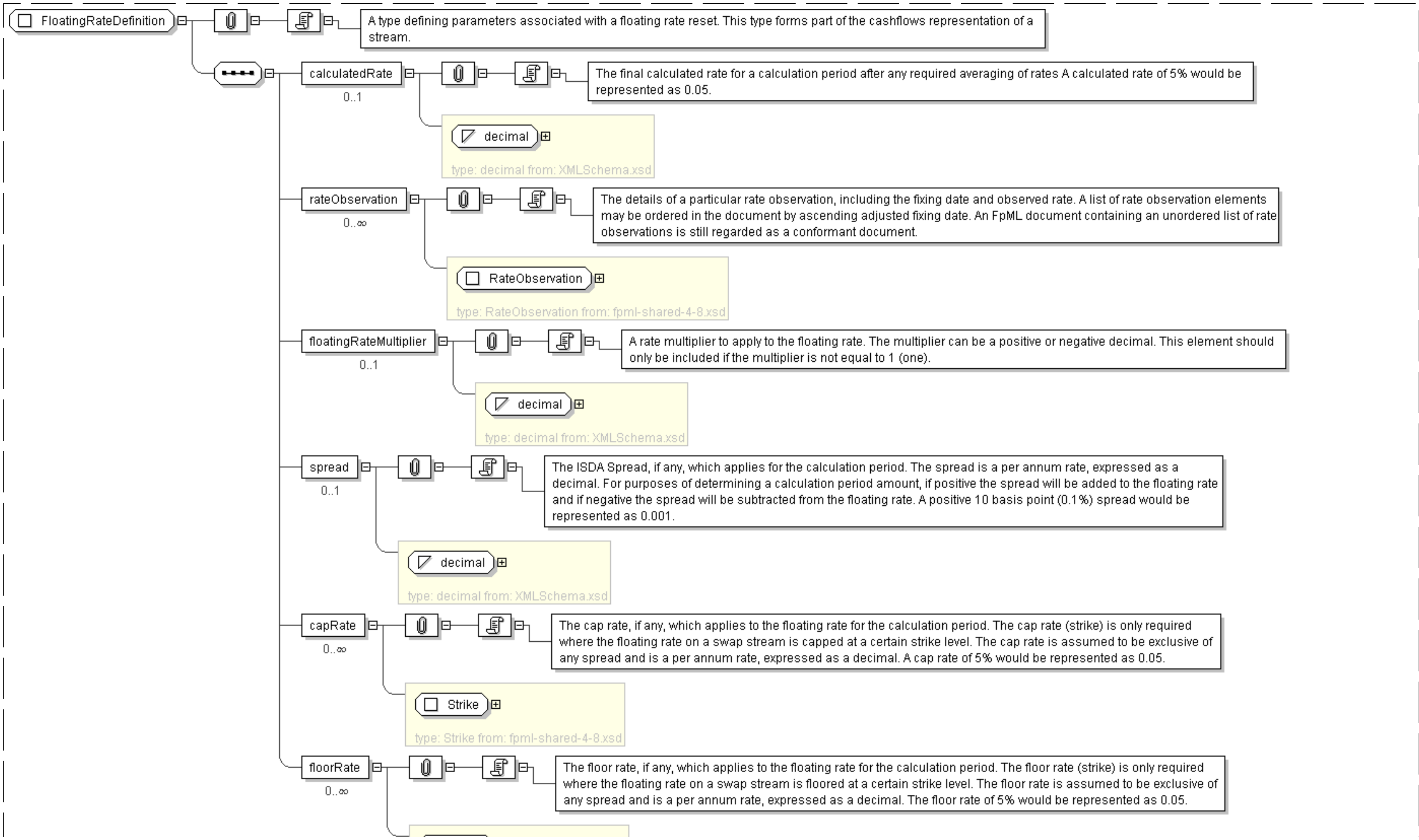
'The cap rate, if any, which applies to the floating rate for the calculation period. The cap rate (strike) is only required where the floating rate on a swap stream is capped at a certain strike level. The cap rate is assumed to be exclusive of any spread and is a per annum rate, expressed as a decimal. A cap rate of 5% would be represented as 0.05.'

<floorRate> Strike </floorRate> [0..*]

'The floor rate, if any, which applies to the floating rate for the calculation period. The floor rate (strike) is only required where the floating rate on a swap stream is floored at a certain strike level. The floor rate is assumed to be exclusive of any spread and is a per annum rate, expressed as a decimal. The floor rate of 5% would be represented as 0.05.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FloatingRateDefinition">
   <xsd:sequence>
      <xsd:element name="calculatedRate" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="rateObservation" type=" RateObservation "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="floatingRateMultiplier" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="spread" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="capRate" type=" Strike " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="floorRate" type=" Strike " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Fra

Super-types:	Product < **Fra** (by extension)
Sub-types:	None

Name	Fra
Used by (from the same schema document)	Element **fra**
Abstract	no
Documentation	A type defining a Forward Rate Agreement (FRA) product.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <adjustedEffectiveDate> RequiredIdentifierDate </adjustedEffectiveDate> [1]
   'The start date of the calculation period. This date should already be adjusted for
   any applicable business day convention. This is also the date when the observed rate
   is applied, the reset date.'

   <adjustedTerminationDate> xsd:date </adjustedTerminationDate> [1]
   'The end date of the calculation period. This date should already be adjusted for
   any applicable business day convention.'

   <paymentDate> AdjustableDate </paymentDate> [1]
   'The payment date. This date is subject to adjustment in accordance with any
   applicable business day convention.'

   <fixingDateOffset> RelativeDateOffset </fixingDateOffset> [1]
```

'Specifies the fixing date relative to the reset date in terms of a business days offset and an associated set of financial business centers. Normally these offset calculation rules will be those specified in the ISDA definition for the relevant floating rate index (ISDA \'s Floating Rate Option). However, non-standard offset calculation rules may apply for a trade if mutually agreed by the principal parties to the transaction. The href attribute on the dateRelativeTo element should reference the id attribute on the adjustedEffectiveDate element.'

<dayCountFraction> DayCountFraction **</dayCountFraction>** [1]

'The day count fraction.'

<calculationPeriodNumberOfDays> xsd:positiveInteger **</calculationPeriodNumberOfDays>** [1]

'The number of days from the adjusted effective date to the adjusted termination date calculated in accordance with the applicable day count fraction.'

<notional> Money **</notional>** [1]

'The notional amount.'

<fixedRate> xsd:decimal **</fixedRate>** [1]

'The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate of 5% would be represented as 0.05.'

<floatingRateIndex> FloatingRateIndex **</floatingRateIndex>** [1]
<indexTenor> Period **</indexTenor>** [1..*]

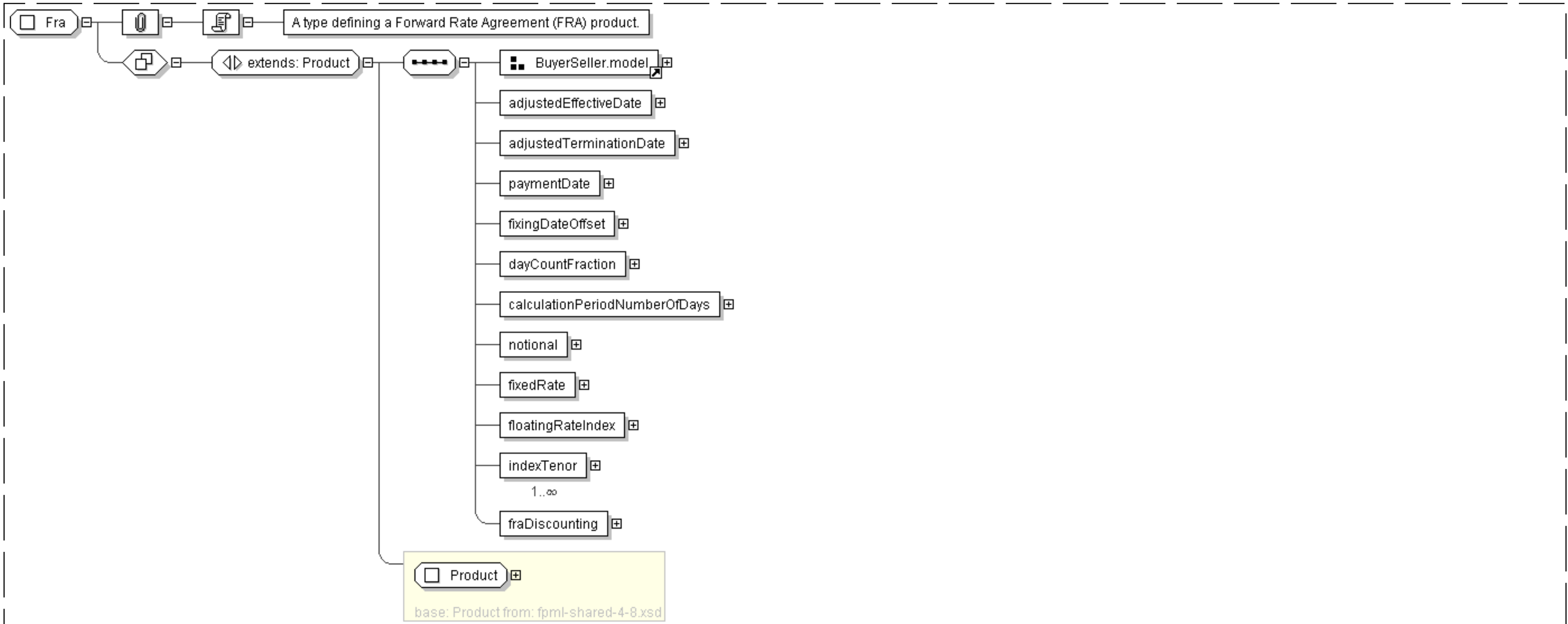
'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'

<fraDiscounting> FraDiscountingEnum **</fraDiscounting>** [1]

'Specifies whether discounting applies and, if so, what type.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Fra">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="adjustedEffectiveDate" type=" RequiredIdentifierDate "/>
            <xsd:element name="adjustedTerminationDate" type=" xsd:date "/>
            <xsd:element name="paymentDate" type=" AdjustableDate "/>
            <xsd:element name="fixingDateOffset" type=" RelativeDateOffset "/>
            <xsd:element name="dayCountFraction" type=" DayCountFraction "/>
            <xsd:element name="calculationPeriodNumberOfDays" type=" xsd:positiveInteger "/>
            <xsd:element name="notional" type=" Money "/>
            <xsd:element name="fixedRate" type=" xsd:decimal "/>
            <xsd:element name="floatingRateIndex" type=" FloatingRateIndex "/>
            <xsd:element name="indexTenor" type=" Period " maxOccurs="unbounded"/>
            <xsd:element name="fraDiscounting" type=" FraDiscountingEnum "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxFixingDate

Super-types:	Offset < **FxFixingDate** (by extension)
Sub-types:	None

Name	FxFixingDate
Used by (from the same schema document)	Complex Type **NonDeliverableSettlement**
Abstract	no
Documentation	A type that is extending the Offset structure for providing the ability to specify an FX fixing date as an offset to dates specified somewhere else in the document.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <periodMultiplier> xsd:integer </periodMultiplier> [1]
   'A time period multiplier, e.g. 1, 2 or 3 etc. A negative value can be used when specifying
   an offset relative to another date, e.g. -2 days.'

   <period> PeriodEnum </period> [1]
   'A time period, e.g. a day, week, month or year of the stream. If the periodMultiplier value
   is 0 (zero) then period must contain the value D (day).'

   <dayType> DayTypeEnum </dayType> [0..1]
   'In the case of an offset specified as a number of days, this element defines
   whether consideration is given as to whether a day is a good business day or not. If a day
   type of business days is specified then non-business days are ignored when calculating
   the offset. The financial business centers to use for determination of business days
   are implied by the context in which this element is used. This element must only be
   included when the offset is specified as a number of days. If the offset is zero days then
   the dayType element should not be included.'

   <businessDayConvention> BusinessDayConventionEnum </businessDayConvention> [1]
   'The convention for adjusting a date if it would otherwise fall on a day that is not a
   business day.'

Start Group: BusinessCentersOrReference.model [0..1]
Start Choice [1]
      <businessCentersReference> BusinessCentersReference </businessCentersReference> [1]
      'A pointer style reference to a set of financial business centers defined elsewhere in
      the document. This set of business centers is used to determine whether a particular day is
      a business day or not.'

      <businessCenters> BusinessCenters </businessCenters> [1]
End Choice
```

End Group: BusinessCentersOrReference.model
Start Choice [1]
<dateRelativeToPaymentDates> DateRelativeToPaymentDates </dateRelativeToPaymentDates> [1]

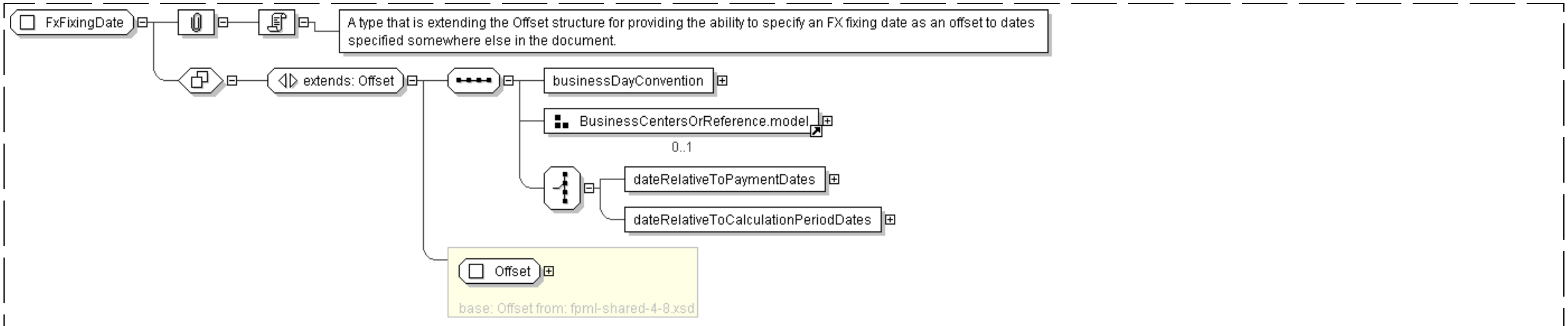
'The payment date references on which settlements in non-deliverable currency are due and will then have to be converted according to the terms specified through the other parts of the nonDeliverableSettlement structure.'

<dateRelativeToCalculationPeriodDates> DateRelativeToCalculationPeriodDates
</dateRelativeToCalculationPeriodDates> [1]

'The calculation period references on which settlements in non-deliverable currency are due and will then have to be converted according to the terms specified through the other parts of the nonDeliverableSettlement structure. Implemented for Brazilian-CDI swaps where it will refer to the termination date of the appropriate leg.'

End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxFixingDate">
   <xsd:complexContent>
      <xsd:extension base=" Offset ">
         <xsd:sequence>
            <xsd:element name="businessDayConvention" type=" BusinessDayConventionEnum "/>
            <xsd:group ref=" BusinessCentersOrReference.model " minOccurs="0"/>
            <xsd:choice>
               <xsd:element name="dateRelativeToPaymentDates" type=" DateRelativeToPaymentDates "/>
               <xsd:element name="dateRelativeToCalculationPeriodDates"
               type=" DateRelativeToCalculationPeriodDates "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxLinkedNotionalAmount

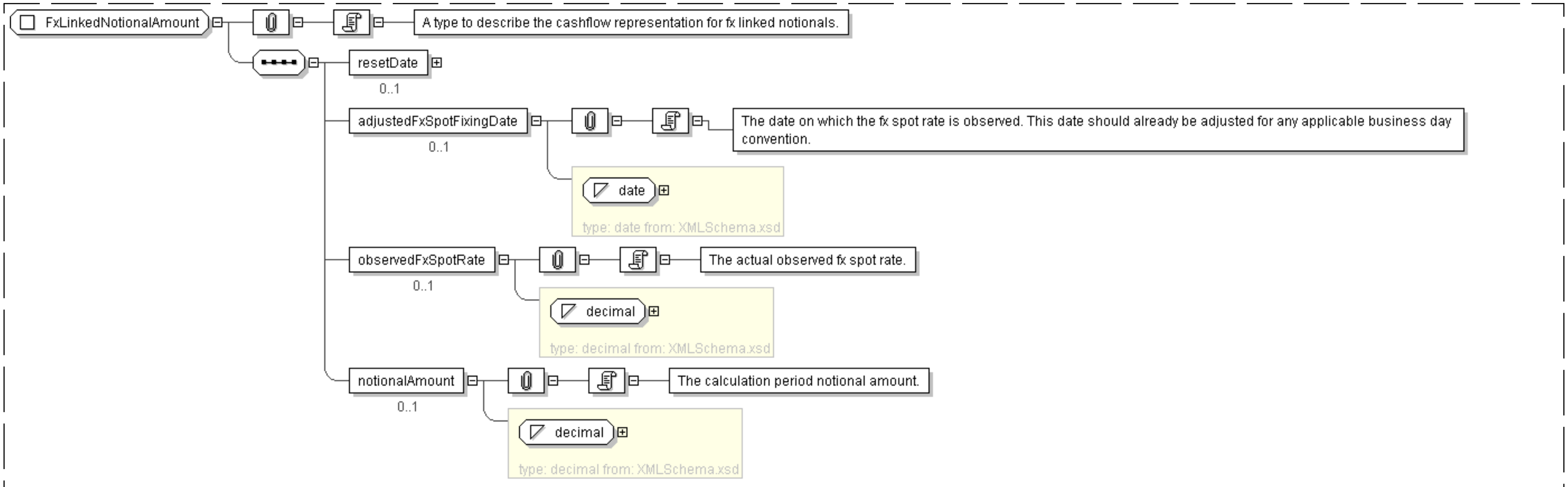
Super-types:	None
Sub-types:	None

Name	FxLinkedNotionalAmount
Used by (from the same schema document)	Complex Type **CalculationPeriod**
Abstract	no
Documentation	A type to describe the cashflow representation for fx linked notionals.

XML Instance Representation

```
<...>
   <resetDate> xsd:date </resetDate> [0..1]
   <adjustedFxSpotFixingDate> xsd:date </adjustedFxSpotFixingDate> [0..1]
   'The date on which the fx spot rate is observed. This date should already be adjusted for
   any applicable business day convention.'

   <observedFxSpotRate> xsd:decimal </observedFxSpotRate> [0..1]
   'The actual observed fx spot rate.'

   <notionalAmount> xsd:decimal </notionalAmount> [0..1]
   'The calculation period notional amount.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxLinkedNotionalAmount">
   <xsd:sequence>
      <xsd:element name="resetDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedFxSpotFixingDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="observedFxSpotRate" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="notionalAmount" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxLinkedNotionalSchedule

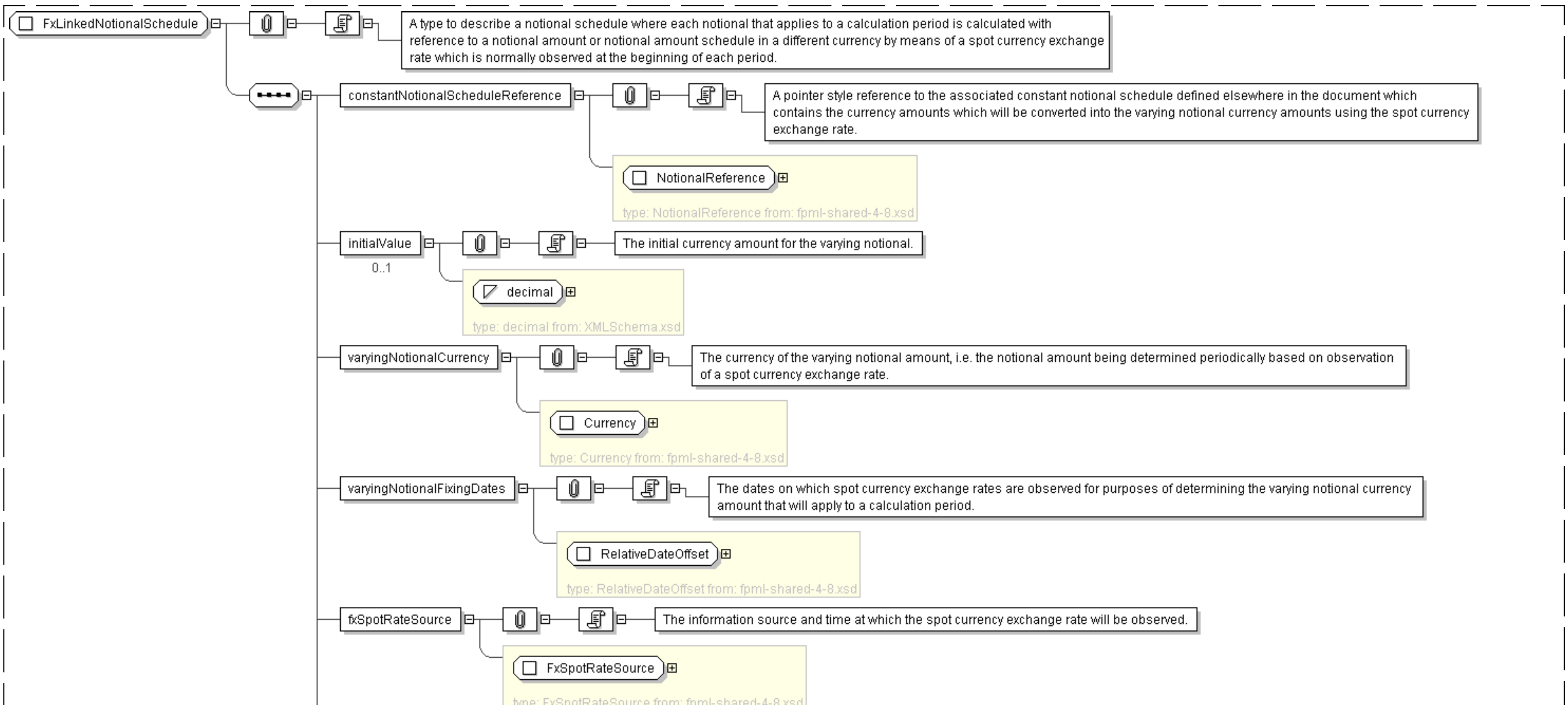
Super-types:	None
Sub-types:	None

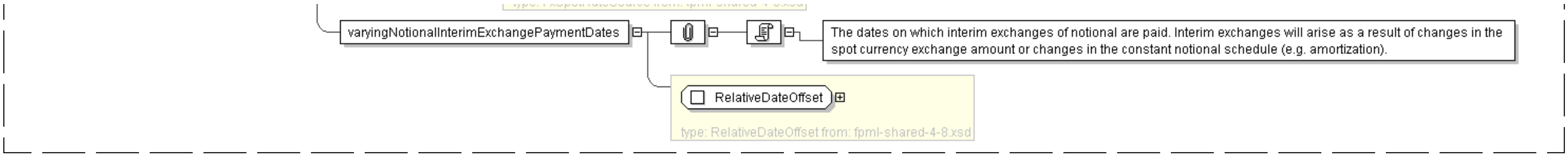
Name	FxLinkedNotionalSchedule
Used by (from the same schema document)	Complex Type **Calculation**
Abstract	no
Documentation	A type to describe a notional schedule where each notional that applies to a calculation period is calculated with reference to a notional amount or notional amount schedule in a different currency by means of a spot currency exchange rate which is normally observed at the beginning of each period.

XML Instance Representation

```
<...>
  <constantNotionalScheduleReference> NotionalReference </constantNotionalScheduleReference> [1]
  'A pointer style reference to the associated constant notional schedule defined elsewhere
  in the document which contains the currency amounts which will be converted into the
  varying notional currency amounts using the spot currency exchange rate.'

  <initialValue> xsd:decimal </initialValue> [0..1]
  'The initial currency amount for the varying notional.'

  <varyingNotionalCurrency> Currency </varyingNotionalCurrency> [1]
  'The currency of the varying notional amount, i.e. the notional amount being
  determined periodically based on observation of a spot currency exchange rate.'

  <varyingNotionalFixingDates> RelativeDateOffset </varyingNotionalFixingDates> [1]
  'The dates on which spot currency exchange rates are observed for purposes of determining
  the varying notional currency amount that will apply to a calculation period.'

  <fxSpotRateSource> FxSpotRateSource </fxSpotRateSource> [1]
  'The information source and time at which the spot currency exchange rate will be observed.'

  <varyingNotionalInterimExchangePaymentDates> RelativeDateOffset
  </varyingNotionalInterimExchangePaymentDates> [1]
  'The dates on which interim exchanges of notional are paid. Interim exchanges will arise as
  a result of changes in the spot currency exchange amount or changes in the constant
  notional schedule (e.g. amortization).'
</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="FxLinkedNotionalSchedule">
   <xsd:sequence>
      <xsd:element name="constantNotionalScheduleReference" type=" NotionalReference "/>
      <xsd:element name="initialValue" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="varyingNotionalCurrency" type=" Currency "/>
      <xsd:element name="varyingNotionalFixingDates" type=" RelativeDateOffset "/>
      <xsd:element name="fxSpotRateSource" type=" FxSpotRateSource "/>
      <xsd:element name="varyingNotionalInterimExchangePaymentDates" type=" RelativeDateOffset "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: InflationRateCalculation

Super-types:	FloatingRateCalculation < **InflationRateCalculation** (by extension)
Sub-types:	None

Name	InflationRateCalculation
Used by (from the same schema document)	Element **inflationRateCalculation**
Abstract	no
Documentation	A type defining the components specifiying an Inflation Rate Calculation

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
   <indexTenor> Period </indexTenor> [0..1]
   'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'
   <floatingRateMultiplierSchedule> Schedule </floatingRateMultiplierSchedule> [0..1]
   'A rate multiplier or multiplier schedule to apply to the floating rate. A multiplier
   schedule is expressed as explicit multipliers and dates. In the case of a schedule, the
   step dates may be subject to adjustment in accordance with any adjustments specified in
   the calculationPeriodDatesAdjustments. The multiplier can be a positive or negative
   decimal. This element should only be included if the multiplier is not equal to 1 (one) for
   the term of the stream.'
   <spreadSchedule> SpreadSchedule </spreadSchedule> [0..*]
   'The ISDA Spread or a Spread schedule expressed as explicit spreads and dates. In the case of
   a schedule, the step dates may be subject to adjustment in accordance with any
   adjustments specified in calculationPeriodDatesAdjustments. The spread is a per annum
   rate, expressed as a decimal. For purposes of determining a calculation period amount,
   if positive the spread will be added to the floating rate and if negative the spread will
   be subtracted from the floating rate. A positive 10 basis point (0.1%) spread would
   be represented as 0.001.'
   <rateTreatment> RateTreatmentEnum </rateTreatment> [0..1]
   'The specification of any rate conversion which needs to be applied to the observed rate
   before being used in any calculations. The two common conversions are for securities quoted
   on a bank discount basis which will need to be converted to either a Money Market Yield or
   Bond Equivalent Yield. See the Annex to the 2000 ISDA Definitions, Section 7.3. Certain
   General Definitions Relating to Floating Rate Options, paragraphs (g) and (h) for
   definitions of these terms.'
   <capRateSchedule> StrikeSchedule </capRateSchedule> [0..*]
```

'The cap rate or cap rate schedule, if any, which applies to the floating rate. The cap rate (strike) is only required where the floating rate on a swap stream is capped at a certain level. A cap rate schedule is expressed as explicit cap rates and dates and the step dates may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments. The cap rate is assumed to be exclusive of any spread and is a per annum rate, expressed as a decimal. A cap rate of 5% would be represented as 0.05.'

<floorRateSchedule> StrikeSchedule </floorRateSchedule> [0..*]

'The floor rate or floor rate schedule, if any, which applies to the floating rate. The floor rate (strike) is only required where the floating rate on a swap stream is floored at a certain strike level. A floor rate schedule is expressed as explicit floor rates and dates and the step dates may be subject to adjustment in accordance with any adjustments specified in calculationPeriodDatesAdjustments. The floor rate is assumed to be exclusive of any spread and is a per annum rate, expressed as a decimal. A floor rate of 5% would be represented as 0.05.'

<initialRate> xsd:decimal </initialRate> [0..1]

'The initial floating rate reset agreed between the principal parties involved in the trade. This is assumed to be the first required reset rate for the first regular calculation period. It should only be included when the rate is not equal to the rate published on the source implied by the floating rate index. An initial rate of 5% would be represented as 0.05.'

<finalRateRounding> Rounding </finalRateRounding> [0..1]

'The rounding convention to apply to the final rate used in determination of a calculation period amount.'

<averagingMethod> AveragingMethodEnum </averagingMethod> [0..1]

'If averaging is applicable, this component specifies whether a weighted or unweighted average method of calculation is to be used. The component must only be included when averaging applies.'

<negativeInterestRateTreatment> NegativeInterestRateTreatmentEnum </negativeInterestRateTreatment> [0..1]

'The specification of any provisions for calculating payment obligations when a floating rate is negative (either due to a quoted negative floating rate or by operation of a spread that is subtracted from the floating rate).'

<inflationLag> Offset </inflationLag> [1]

'an offsetting period from the payment date which determines the reference period for which the inflation index is onserved.'

<indexSource> RateSourcePage </indexSource> [1]

'The reference source such as Reuters or Bloomberg.'

<mainPublication> MainPublication </mainPublication> [0..1]

'The current main publication source such as relevant web site or a government body.'

<interpolationMethod> InterpolationMethod </interpolationMethod> [1]

'The method used when calculating the Inflation Index Level from multiple points - the most common is Linear.'

<initialIndexLevel> xsd:decimal </initialIndexLevel> [0..1]

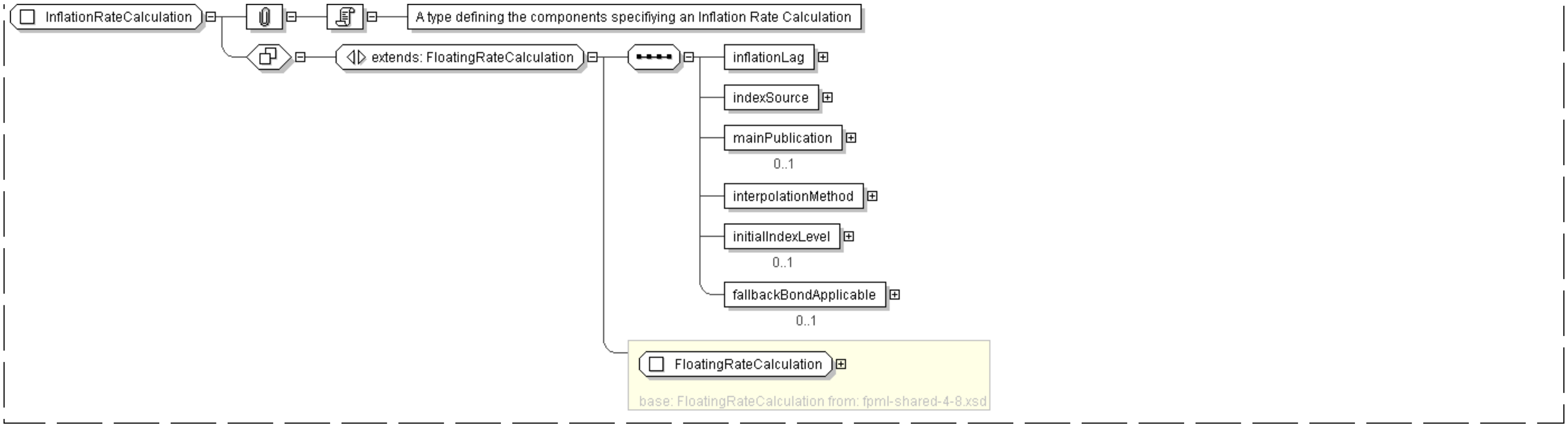
'initial known index level for the first calculation period.'

<fallbackBondApplicable> xsd:boolean </fallbackBondApplicable> [0..1]

'The applicability of a fallback bond as defined in the 2006 ISDA Inflation Derivatives Definitions, sections 1.3 and 1.8. Omission of this element imples a value of true.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="InflationRateCalculation">
   <xsd:complexContent>
      <xsd:extension base=" FloatingRateCalculation ">
         <xsd:sequence>
            <xsd:element name="inflationLag" type=" Offset "/>
            <xsd:element name="indexSource" type=" RateSourcePage "/>
            <xsd:element name="mainPublication" type=" MainPublication " minOccurs="0"/>
            <xsd:element name="interpolationMethod" type=" InterpolationMethod "/>
            <xsd:element name="initialIndexLevel" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="fallbackBondApplicable" type=" xsd:boolean " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestRateStream

Super-types:	Leg < **InterestRateStream** (by extension)
Sub-types:	None

Name	InterestRateStream
Used by (from the same schema document)	Complex Type **CapFloor** , Complex Type **Swap**
Abstract	no
Documentation	A type defining the components specifying an interest rate stream, including both a parametric and cashflow representation for the stream of payments.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <calculationPeriodDates> CalculationPeriodDates </calculationPeriodDates> [1]
   'The calculation periods dates schedule.'

   <paymentDates> PaymentDates </paymentDates> [1]
   'The payment dates schedule.'
```

<resetDates> ResetDates **</resetDates>** [0..1]

'The reset dates schedule. The reset dates schedule only applies for a floating rate stream.'

<calculationPeriodAmount> CalculationPeriodAmount **</calculationPeriodAmount>** [1]

'The calculation period amount parameters.'

<stubCalculationPeriodAmount> StubCalculationPeriodAmount **</stubCalculationPeriodAmount>** [0..1]

'The stub calculation period amount parameters. This element must only be included if there is an initial or final stub calculation period. Even then, it must only be included if either the stub references a different floating rate tenor to the regular calculation periods, or if the stub is calculated as a linear interpolation of two different floating rate tenors, or if a specific stub rate or stub amount has been negotiated.'

<principalExchanges> PrincipalExchanges **</principalExchanges>** [0..1]

'The true/false flags indicating whether initial, intermediate or final exchanges of principal should occur.'

<cashflows> Cashflows **</cashflows>** [0..1]

'The cashflows representation of the swap stream.'

<settlementProvision> SettlementProvision **</settlementProvision>** [0..1]

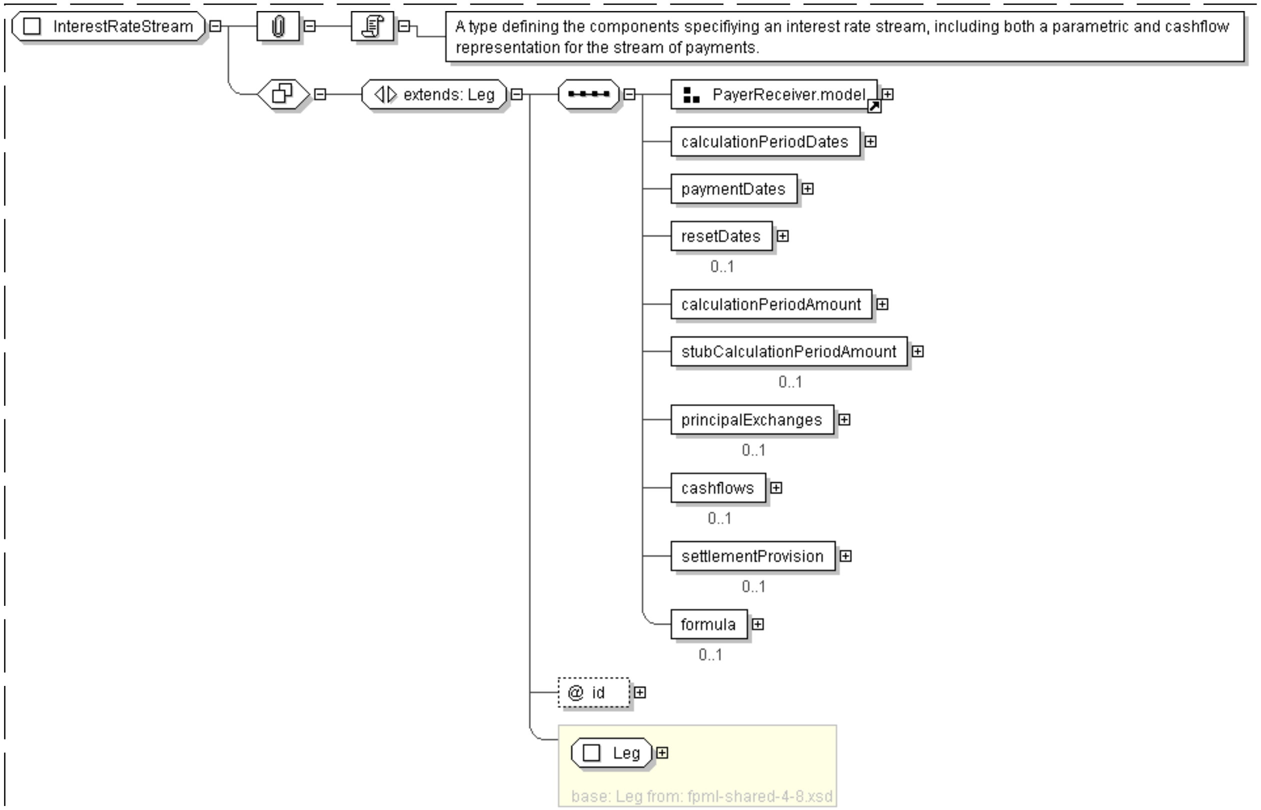
'A provision that allows the specification of settlement terms, occuring when the settlement currency is different to the notional currency of the trade.'

<formula> Formula **</formula>** [0..1]

'An interest rate derivative formula.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestRateStream">
   <xsd:complexContent>
      <xsd:extension base=" Leg ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:element name="calculationPeriodDates" type=" CalculationPeriodDates "/>
            <xsd:element name="paymentDates" type=" PaymentDates "/>
            <xsd:element name="resetDates" type=" ResetDates " minOccurs="0"/>
            <xsd:element name="calculationPeriodAmount" type=" CalculationPeriodAmount "/>
            <xsd:element name="stubCalculationPeriodAmount" type=" StubCalculationPeriodAmount
            " minOccurs="0"/>
            <xsd:element name="principalExchanges" type=" PrincipalExchanges " minOccurs="0"/>
            <xsd:element name="cashflows" type=" Cashflows " minOccurs="0"/>
            <xsd:element name="settlementProvision" type=" SettlementProvision " minOccurs="0"/>
            <xsd:element name="formula" type=" Formula " minOccurs="0"/>
         </xsd:sequence>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestRateStreamReference

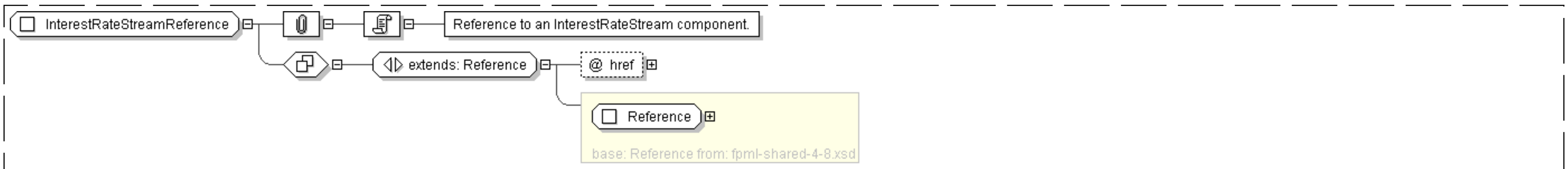
Super-types:	Reference < **InterestRateStreamReference** (by extension)
Sub-types:	None

Name	InterestRateStreamReference
Used by (from the same schema document)	Complex Type **FinalCalculationPeriodDateAdjustment**
Abstract	no
Documentation	Reference to an InterestRateStream component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestRateStreamReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="InterestRateStream"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MandatoryEarlyTermination

Super-types:	None

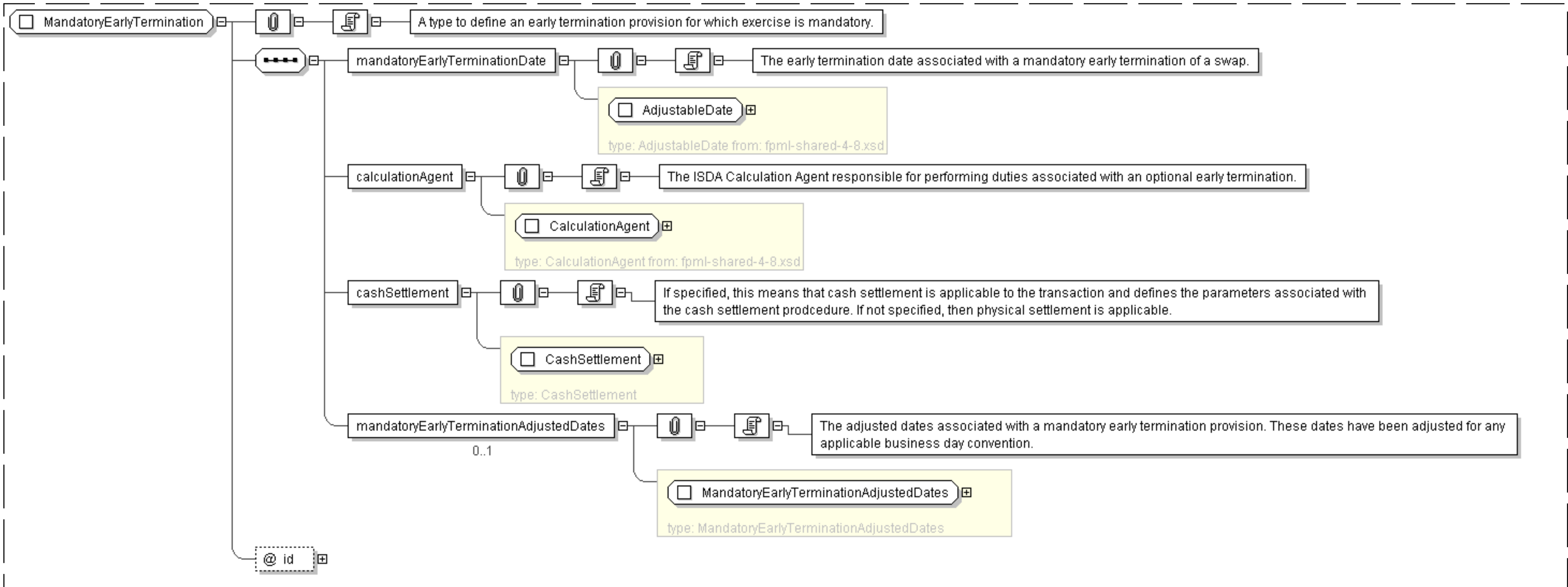
Sub-types:	None

Name	MandatoryEarlyTermination
Used by (from the same schema document)	Model Group **MandatoryEarlyTermination.model** , Model Group **MandatoryEarlyTermination.model**
Abstract	no
Documentation	A type to define an early termination provision for which exercise is mandatory.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <mandatoryEarlyTerminationDate> AdjustableDate </mandatoryEarlyTerminationDate> [1]
   'The early termination date associated with a mandatory early termination of a swap.'

   <calculationAgent> CalculationAgent </calculationAgent> [1]
   'The ISDA Calculation Agent responsible for performing duties associated with an optional
   early termination.'

   <cashSettlement> CashSettlement </cashSettlement> [1]
   'If specified, this means that cash settlement is applicable to the transaction and defines
   the parameters associated with the cash settlement prodcedure. If not specified, then
   physical settlement is applicable.'

   <mandatoryEarlyTerminationAdjustedDates> MandatoryEarlyTerminationAdjustedDates
   </mandatoryEarlyTerminationAdjustedDates> [0..1]
   'The adjusted dates associated with a mandatory early termination provision. These dates
   have been adjusted for any applicable business day convention.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MandatoryEarlyTermination">
   <xsd:sequence>
      <xsd:element name="mandatoryEarlyTerminationDate" type=" AdjustableDate "/>
```

```
        <xsd:element name="calculationAgent" type=" CalculationAgent "/>
        <xsd:element name="cashSettlement" type=" CashSettlement "/>
        <xsd:element name="mandatoryEarlyTerminationAdjustedDates"
        type=" MandatoryEarlyTerminationAdjustedDates " minOccurs="0"/>
    </xsd:sequence>
    <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: MandatoryEarlyTerminationAdjustedDates

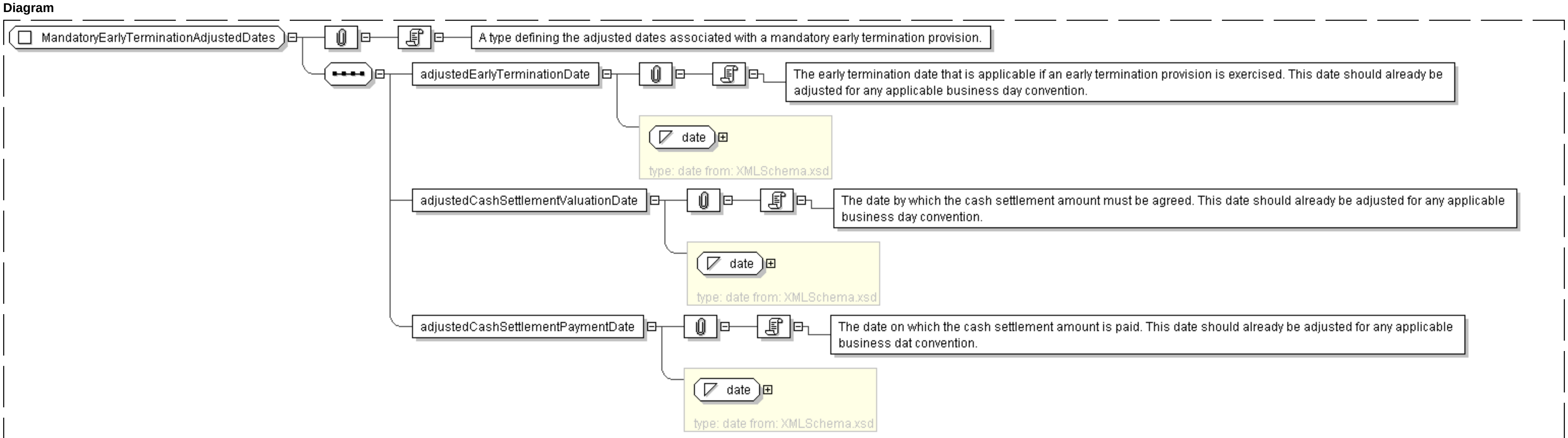
Super-types:	None
Sub-types:	None

Name	MandatoryEarlyTerminationAdjustedDates
Used by (from the same schema document)	Complex Type **MandatoryEarlyTermination**
Abstract	no
Documentation	A type defining the adjusted dates associated with a mandatory early termination provision.

XML Instance Representation

```
<...>
    <adjustedEarlyTerminationDate> xsd:date </adjustedEarlyTerminationDate> [1]
    'The early termination date that is applicable if an early termination provision is
    exercised. This date should already be adjusted for any applicable business day convention.'

    <adjustedCashSettlementValuationDate> xsd:date </adjustedCashSettlementValuationDate> [1]
    'The date by which the cash settlement amount must be agreed. This date should already
    be adjusted for any applicable business day convention.'

    <adjustedCashSettlementPaymentDate> xsd:date </adjustedCashSettlementPaymentDate> [1]
    'The date on which the cash settlement amount is paid. This date should already be adjusted
    for any applicable business dat convention.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MandatoryEarlyTerminationAdjustedDates">
    <xsd:sequence>
```

```
        <xsd:element name="adjustedEarlyTerminationDate" type=" xsd:date "/>
        <xsd:element name="adjustedCashSettlementValuationDate" type=" xsd:date "/>
        <xsd:element name="adjustedCashSettlementPaymentDate" type=" xsd:date "/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: NonDeliverableSettlement

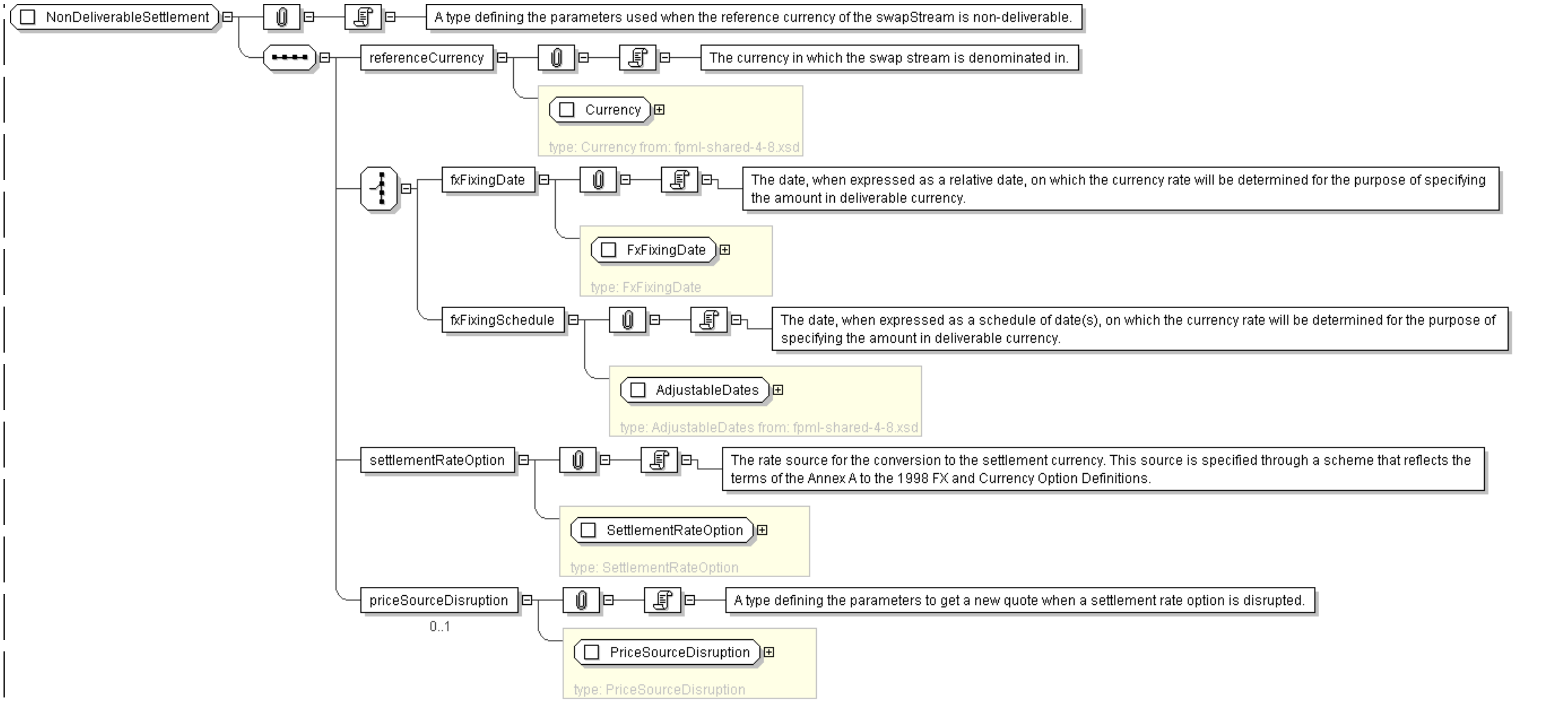
Super-types:	None
Sub-types:	None

Name	NonDeliverableSettlement
Used by (from the same schema document)	Complex Type **SettlementProvision**
Abstract	no
Documentation	A type defining the parameters used when the reference currency of the swapStream is non-deliverable.

XML Instance Representation

```
<...>
    <referenceCurrency> Currency </referenceCurrency> [1]
    'The currency in which the swap stream is denominated in.'
Start Choice [1]
        <fxFixingDate> FxFixingDate </fxFixingDate> [1]
        'The date, when expressed as a relative date, on which the currency rate will be determined
        for the purpose of specifying the amount in deliverable currency.'
        <fxFixingSchedule> AdjustableDates </fxFixingSchedule> [1]
        'The date, when expressed as a schedule of date(s), on which the currency rate will
        be determined for the purpose of specifying the amount in deliverable currency.'
End Choice
    <settlementRateOption> SettlementRateOption </settlementRateOption> [1]
    'The rate source for the conversion to the settlement currency. This source is
    specified through a scheme that reflects the terms of the Annex A to the 1998 FX and
    Currency Option Definitions.'
    <priceSourceDisruption> PriceSourceDisruption </priceSourceDisruption> [0..1]
    'A type defining the parameters to get a new quote when a settlement rate option is disrupted.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NonDeliverableSettlement">
   <xsd:sequence>
      <xsd:element name="referenceCurrency" type=" Currency "/>
      <xsd:choice>
         <xsd:element name="fxFixingDate" type=" FxFixingDate "/>
         <xsd:element name="fxFixingSchedule" type=" AdjustableDates "/>
      </xsd:choice>
      <xsd:element name="settlementRateOption" type=" SettlementRateOption "/>
      <xsd:element name="priceSourceDisruption" type=" PriceSourceDisruption " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Notional

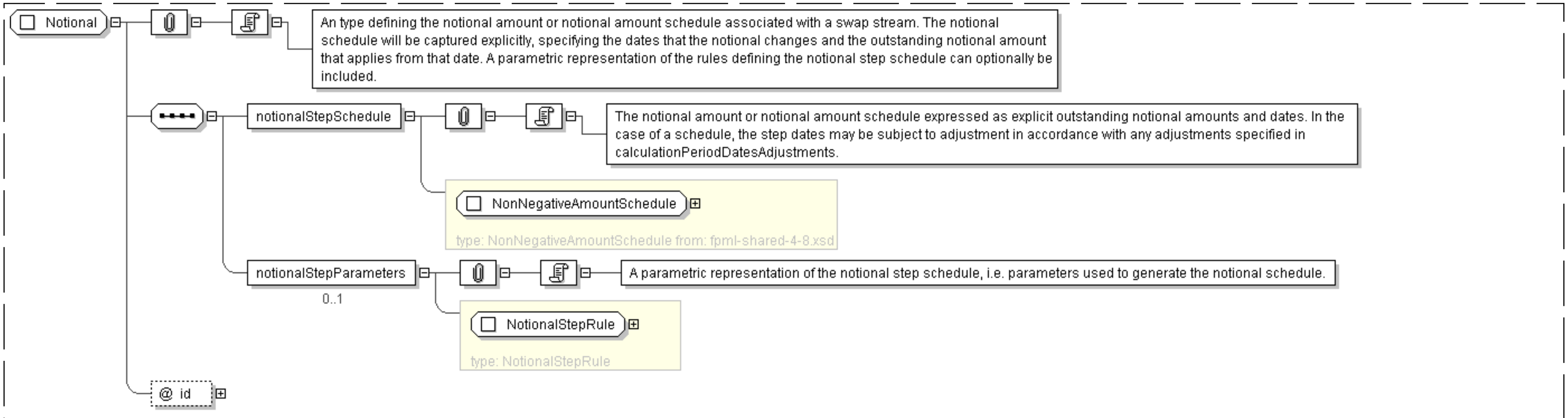
Super-types:	None
Sub-types:	None

Name	Notional
Used by (from the same schema document)	Complex Type **Calculation**
Abstract	no
Documentation	An type defining the notional amount or notional amount schedule associated with a swap stream. The notional schedule will be captured explicitly, specifying the dates that the notional changes and the outstanding notional amount that applies from that date. A parametric representation of the rules defining the notional step schedule can optionally be included.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <notionalStepSchedule> NonNegativeAmountSchedule </notionalStepSchedule> [1]
    'The notional amount or notional amount schedule expressed as explicit outstanding
    notional amounts and dates. In the case of a schedule, the step dates may be subject
    to adjustment in accordance with any adjustments specified
    in calculationPeriodDatesAdjustments.'

    <notionalStepParameters> NotionalStepRule </notionalStepParameters> [0..1]
    'A parametric representation of the notional step schedule, i.e. parameters used to
    generate the notional schedule.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Notional">
   <xsd:sequence>
      <xsd:element name="notionalStepSchedule" type=" NonNegativeAmountSchedule "/>
      <xsd:element name="notionalStepParameters" type=" NotionalStepRule " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: NotionalStepRule

Super-types:	None
Sub-types:	None

Name	NotionalStepRule
Used by (from the same schema document)	Complex Type **Notional**
Abstract	no
Documentation	A type defining a parametric representation of the notional step schedule, i.e. parameters used to generate the notional balance on each step date. The step change in notional can be expressed in terms of either a fixed amount or as a percentage of either the initial notional or previous notional amount. This parametric representation is intended to cover the more common amortizing/accreting.

XML Instance Representation

```
<...>
    <calculationPeriodDatesReference> CalculationPeriodDatesReference
    </calculationPeriodDatesReference> [1]
    'A pointer style reference to the associated calculation period dates component
```

defined elsewhere in the document.'

<stepFrequency> Period </stepFrequency> [1]

'The frequency at which the step changes occur. This frequency must be a multiple of the stream calculation period frequency.'

<firstNotionalStepDate> xsd:date </firstNotionalStepDate> [1]

'Effective date of the first change in notional (i.e. a calculation period start date).'

<lastNotionalStepDate> xsd:date </lastNotionalStepDate> [1]

'Effective date of the last change in notional (i.e. a calculation period start date).'

Start Choice [1]

<notionalStepAmount> xsd:decimal </notionalStepAmount> [1]

'The explicit amount that the notional changes on each step date. This can be a positive or negative amount.'

<notionalStepRate> xsd:decimal </notionalStepRate> [1]

'The percentage amount by which the notional changes on each step date. The percentage is either a percentage applied to the initial notional amount or the previous outstanding notional, depending on the value of the element stepRelativeTo. The percentage can be either positive or negative. A percentage of 5% would be represented as 0.05.'

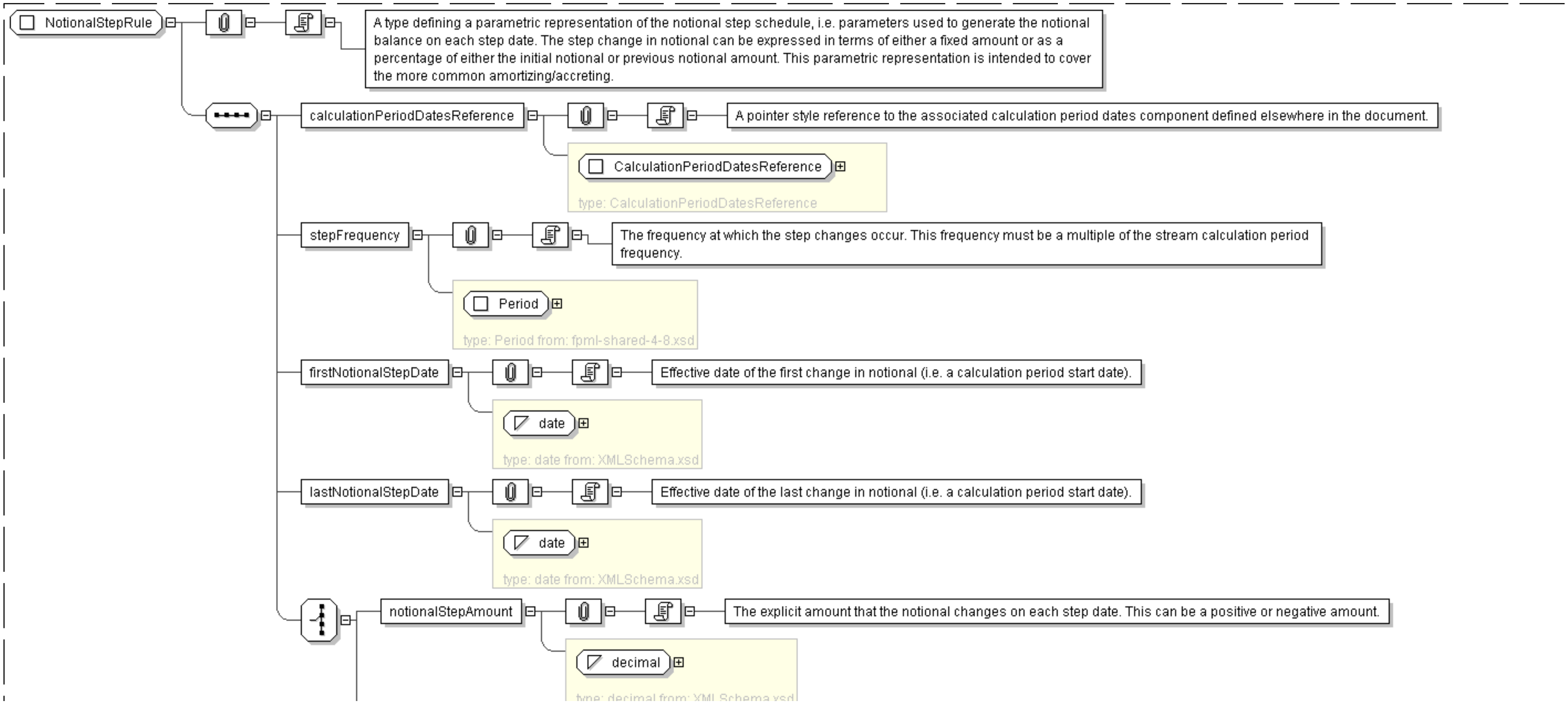
<stepRelativeTo> StepRelativeToEnum </stepRelativeTo> [1]

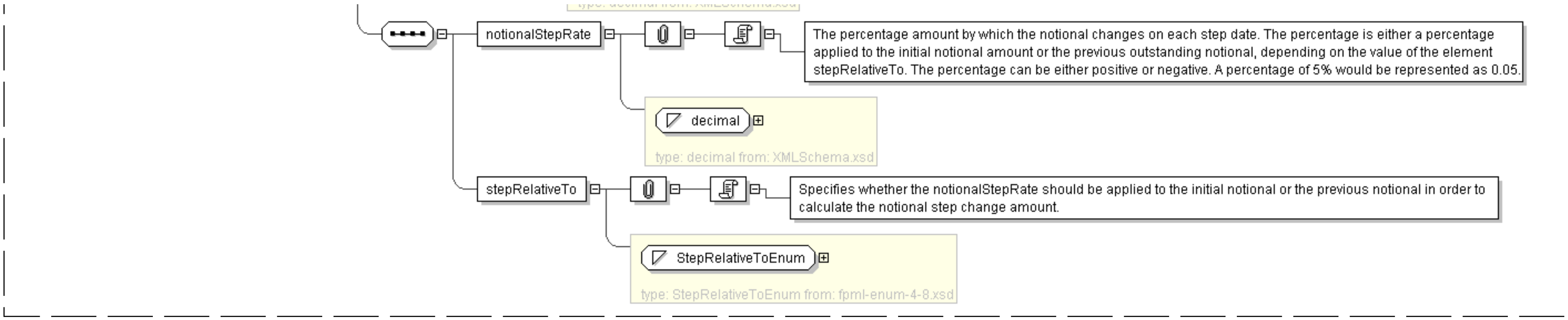
'Specifies whether the notionalStepRate should be applied to the initial notional or the previous notional in order to calculate the notional step change amount.'

End Choice

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="NotionalStepRule">
   <xsd:sequence>
      <xsd:element name="calculationPeriodDatesReference" type=" CalculationPeriodDatesReference "/>
      <xsd:element name="stepFrequency" type=" Period "/>
      <xsd:element name="firstNotionalStepDate" type=" xsd:date "/>
      <xsd:element name="lastNotionalStepDate" type=" xsd:date "/>
      <xsd:choice>
         <xsd:element name="notionalStepAmount" type=" xsd:decimal "/>
         <xsd:sequence>
            <xsd:element name="notionalStepRate" type=" xsd:decimal "/>
            <xsd:element name="stepRelativeTo" type=" StepRelativeToEnum "/>
         </xsd:sequence>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OptionalEarlyTermination

Super-types:	None
Sub-types:	None

Name	OptionalEarlyTermination
Used by (from the same schema document)	Model Group **OptionalEarlyTermination.model** , Model Group **OptionalEarlyTermination.model**
Abstract	no
Documentation	A type defining an early termination provision where either or both parties have the right to exercise.

XML Instance Representation

```
<...>
   <singlePartyOption> SinglePartyOption </singlePartyOption> [0..1]
   'If optional early termination is not available to both parties then this component
   specifies the buyer and seller of the option.'

   <exercise> ... </exercise> [1]
   <exerciseNotice> ExerciseNotice </exerciseNotice> [0..*]
   'Definition of the party to whom notice of exercise should be given.'

   <followUpConfirmation> xsd:boolean </followUpConfirmation> [0..1]
   'A flag to indicate whether follow-up confirmation of exercise (written or electronic)
   is required following telephonic notice by the buyer to the seller or seller\'s agent.'

   <calculationAgent> CalculationAgent </calculationAgent> [1]
   'The ISDA Calculation Agent responsible for performing duties associated with an optional
   early termination.'

   <cashSettlement> CashSettlement </cashSettlement> [1]
```

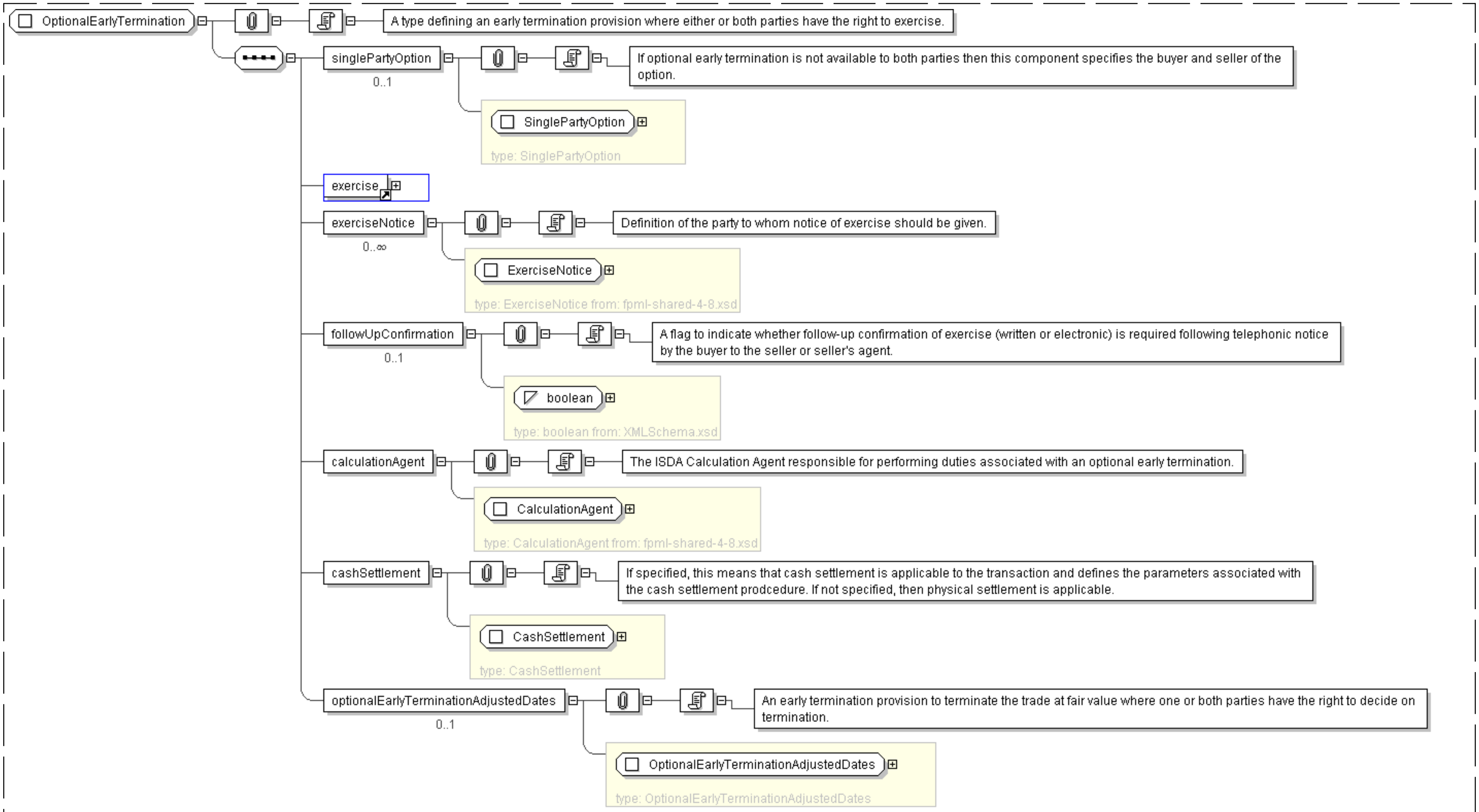
'If specified, this means that cash settlement is applicable to the transaction and defines the parameters associated with the cash settlement prodcedure. If not specified, then physical settlement is applicable.'

<optionalEarlyTerminationAdjustedDates> OptionalEarlyTerminationAdjustedDates </optionalEarlyTerminationAdjustedDates> [0..1]

'An early termination provision to terminate the trade at fair value where one or both parties have the right to decide on termination.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionalEarlyTermination">
   <xsd:sequence>
      <xsd:element name="singlePartyOption" type=" SinglePartyOption " minOccurs="0"/>
      <xsd:element ref=" exercise "/>
      <xsd:element name="exerciseNotice" type=" ExerciseNotice " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="followUpConfirmation" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="calculationAgent" type=" CalculationAgent "/>
      <xsd:element name="cashSettlement" type=" CashSettlement "/>
```

```
        <xsd:element name="optionalEarlyTerminationAdjustedDates"
        type=" OptionalEarlyTerminationAdjustedDates " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OptionalEarlyTerminationAdjustedDates

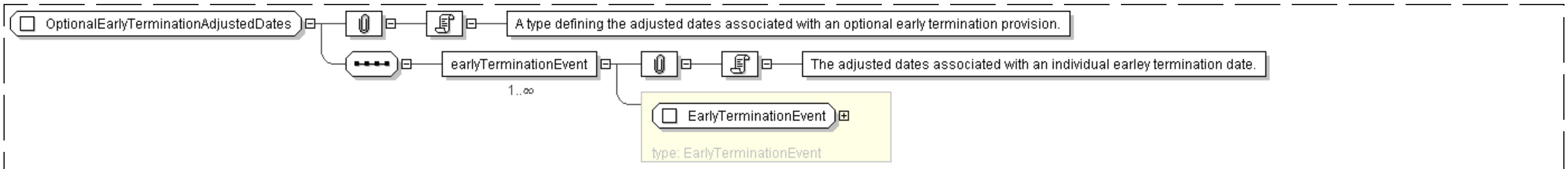
Super-types:	None
Sub-types:	None

Name	OptionalEarlyTerminationAdjustedDates
Used by (from the same schema document)	Complex Type **OptionalEarlyTermination**
Abstract	no
Documentation	A type defining the adjusted dates associated with an optional early termination provision.

XML Instance Representation

```
<...>
    <earlyTerminationEvent> EarlyTerminationEvent </earlyTerminationEvent> [1..*]
    'The adjusted dates associated with an individual earley termination date.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionalEarlyTerminationAdjustedDates">
    <xsd:sequence>
        <xsd:element name="earlyTerminationEvent" type=" EarlyTerminationEvent " maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PaymentCalculationPeriod

Super-types:	PaymentBase < **PaymentCalculationPeriod** (by extension)
Sub-types:	None

Name	PaymentCalculationPeriod
Used by (from the same schema document)	Complex Type **Cashflows**
Abstract	no
Documentation	A type defining the adjusted payment date and associated calculation period parameters required to calculate the actual or projected payment amount. This type forms part of the cashflow representation of a swap stream.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
href=" xsd:IDREF [0..1]
'Attribute that can be used to reference the yield curve used to estimate the discount factor.'

">
    <unadjustedPaymentDate> xsd:date </unadjustedPaymentDate> [0..1]
```

<adjustedPaymentDate> xsd:date **</adjustedPaymentDate>** [0..1]

'The adjusted payment date. This date should already be adjusted for any applicable business day convention. This component is not intended for use in trade confirmation but may be specified to allow the fee structure to also serve as a cashflow type component (all dates the Cashflows type are adjusted payment dates).'

Start Choice [1]

<calculationPeriod> CalculationPeriod **</calculationPeriod>** [1..*]

'The parameters used in the calculation of a fixed or floating rate calculation period amount. A list of calculation period elements may be ordered in the document by ascending start date. An FpML document which contains an unordered list of calcularion periods is still regarded as a conformant document.'

<fixedPaymentAmount> xsd:decimal **</fixedPaymentAmount>** [1]

'A known fixed payment amount.'

End Choice

<discountFactor> xsd:decimal **</discountFactor>** [0..1]

'A decimal value representing the discount factor used to calculate the present value of cash flow.'

<forecastPaymentAmount> Money **</forecastPaymentAmount>** [0..1]

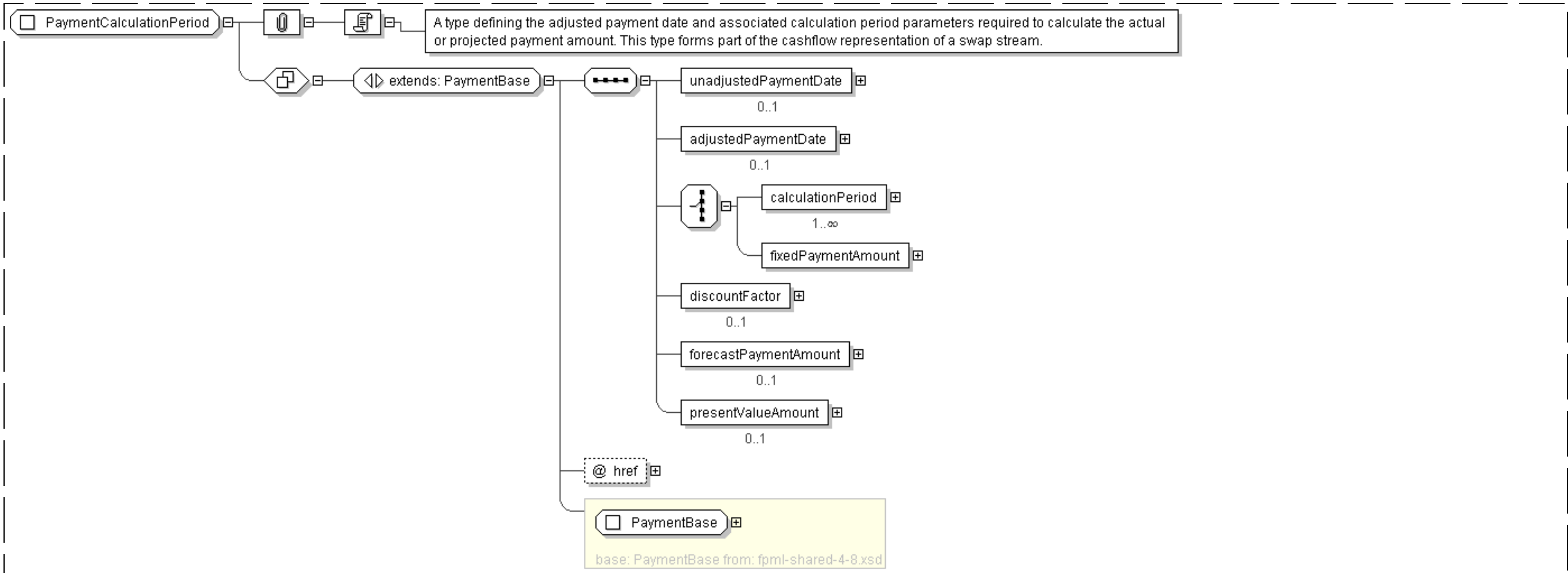
'A monetary amount representing the forecast of the future value of the payment.'

<presentValueAmount> Money **</presentValueAmount>** [0..1]

'A monetary amount representing the present value of the forecast payment.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentCalculationPeriod">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="unadjustedPaymentDate" type=" xsd:date " minOccurs="0"/>
```

```
            <xsd:element name="adjustedPaymentDate" type=" xsd:date " minOccurs="0"/>
            <xsd:choice>
               <xsd:element name="calculationPeriod" type=" CalculationPeriod " maxOccurs="unbounded"/>
               <xsd:element name="fixedPaymentAmount" type=" xsd:decimal "/>
            </xsd:choice>
            <xsd:element name="discountFactor" type=" xsd:decimal " minOccurs="0"/>
            <xsd:element name="forecastPaymentAmount" type=" Money " minOccurs="0"/>
            <xsd:element name="presentValueAmount" type=" Money " minOccurs="0"/>
         </xsd:sequence>
         <xsd:attribute name="href" type=" xsd:IDREF " reference="PricingStructure"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PaymentDates

Super-types:	None
Sub-types:	None

Name	PaymentDates
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no
Documentation	A type defining parameters used to generate the payment dates schedule, including the specification of early or delayed payments. Payment dates are determined relative to the calculation period dates or the reset dates.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <calculationPeriodDatesReference> CalculationPeriodDatesReference
      </calculationPeriodDatesReference> [1]
      'A pointer style reference to the associated calculation period dates component
      defined elsewhere in the document.'

      <resetDatesReference> ResetDatesReference </resetDatesReference> [1]
      'A pointer style reference to the associated reset dates component defined elsewhere in
      the document.'

      <valuationDatesReference> ValuationDatesReference </valuationDatesReference> [1]
      'A pointer style reference to the associated valuation dates component defined elsewhere in
      the document. Implemented for Brazilian-CDI Swaps where it will refer to
      the settlemementProvision/nonDeliverableSettlement/fxFixingDate structure.'

End Choice
   <paymentFrequency> Frequency </paymentFrequency> [1]
   'The frequency at which regular payment dates occur. If the payment frequency is equal to
   the frequency defined in the calculation period dates component then one calculation
   period contributes to each payment amount. If the payment frequency is less frequent than
   the frequency defined in the calculation period dates component then more than one
   calculation period will contribute to the payment amount. A payment frequency more
   frequent than the calculation period frequency or one that is not a multiple of the
   calculation period frequency is invalid. If the payment frequency is of value T (term),
   the period is defined by the swap\swapStream\calculationPerioDates\effectiveDate and the
   swap\swapStream\calculationPerioDates\terminationDate.'

   <firstPaymentDate> xsd:date </firstPaymentDate> [0..1]
   'The first unadjusted payment date. This day may be subject to adjustment in accordance
   with any business day convention specified in paymentDatesAdjustments. This element must
   only be included if there is an initial stub. This date will normally correspond to
   an unadjusted calculation period start or end date. This is true even if early or
   delayed payment is specified to be applicable since the actual first payment date will be
   the specified number of days before or after the applicable adjusted calculation period
   start or end date with the resulting payment date then being adjusted in accordance with
   any business day convention specified in paymentDatesAdjustments.'

   <lastRegularPaymentDate> xsd:date </lastRegularPaymentDate> [0..1]
```

'The last regular unadjusted payment date. This day may be subject to adjustment in accordance with any business day convention specified in paymentDatesAdjustments. This element must only be included if there is a final stub. All calculation periods after this date contribute to the final payment. The final payment is made relative to the final set of calculation periods or the final reset date as the case may be. This date will normally correspond to an unadjusted calculation period start or end date. This is true even if early or delayed payment is specified to be applicable since the actual last regular payment date will be the specified number of days before or after the applicable adjusted calculation period start or end date with the resulting payment date then being adjusted in accordance with any business day convention specified in paymentDatesAdjustments.'

<payRelativeTo> PayRelativeToEnum </payRelativeTo> [1]

'Specifies whether the payments occur relative to each adjusted calculation period start date, adjusted calculation period end date or each reset date. The reset date is applicable in the case of certain euro (former French Franc) floating rate indices. Calculation period start date means relative to the start of the first calculation period contributing to a given payment. Similarly, calculation period end date means the end of the last calculation period contributing to a given payment.The valuation date is applicable for Brazilian-CDI swaps.'

<paymentDaysOffset> Offset </paymentDaysOffset> [0..1]

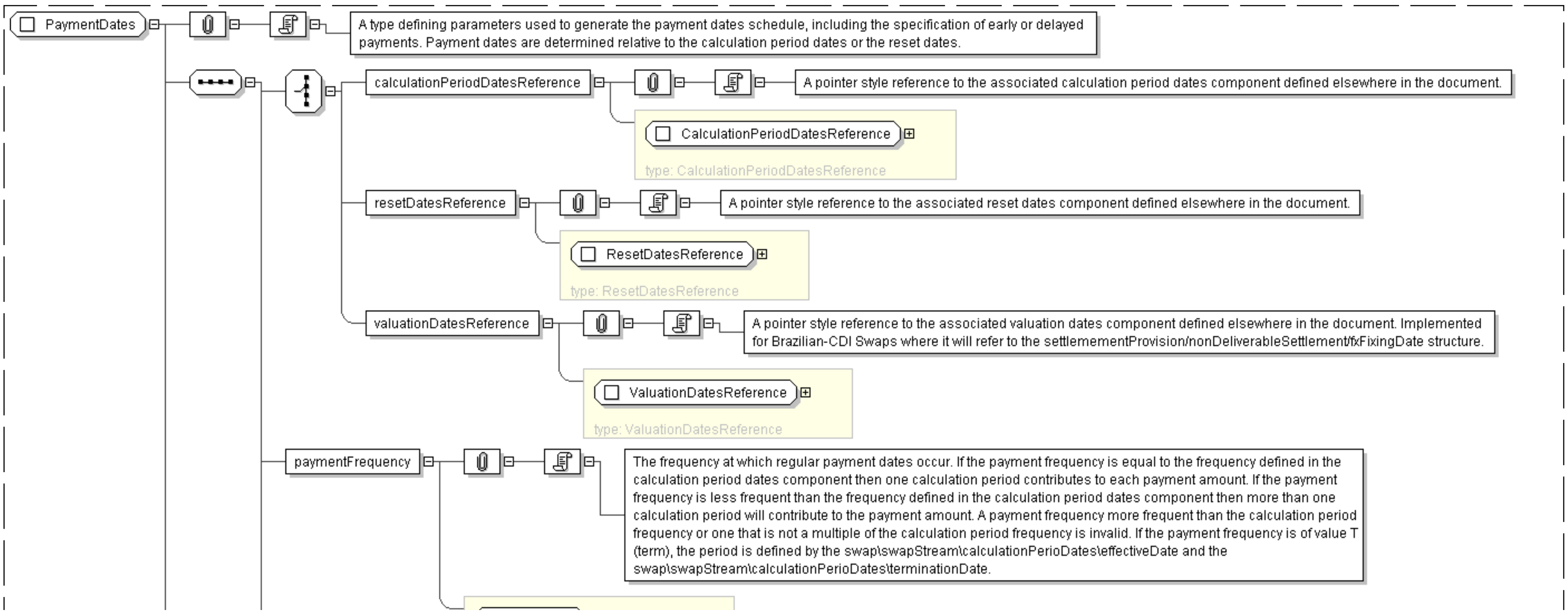
'If early payment or delayed payment is required, specifies the number of days offset that the payment occurs relative to what would otherwise be the unadjusted payment date. The offset can be specified in terms of either calendar or business days. Even in the case of a calendar days offset, the resulting payment date, adjusted for the specified calendar days offset, will still be adjusted in accordance with the specified payment dates adjustments. This element should only be included if early or delayed payment is applicable, i.e. if the periodMultiplier element value is not equal to zero. An early payment would be indicated by a negative periodMultiplier element value and a delayed payment (or payment lag) would be indicated by a positive periodMultiplier element value.'

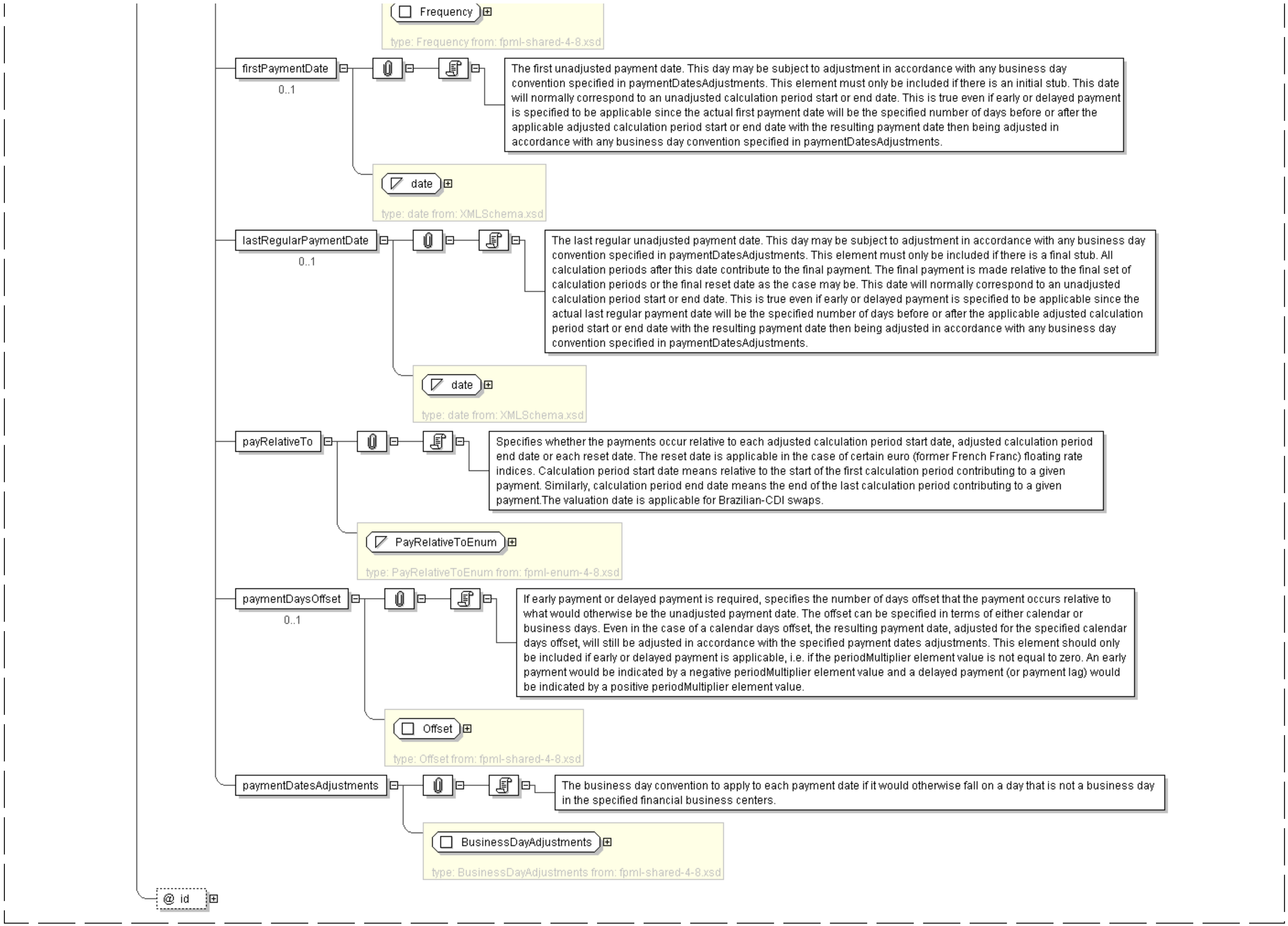
<paymentDatesAdjustments> BusinessDayAdjustments </paymentDatesAdjustments> [1]

'The business day convention to apply to each payment date if it would otherwise fall on a day that is not a business day in the specified financial business centers.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="PaymentDates">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="calculationPeriodDatesReference" type=" CalculationPeriodDatesReference "/>
         <xsd:element name="resetDatesReference" type=" ResetDatesReference "/>
         <xsd:element name="valuationDatesReference" type=" ValuationDatesReference "/>
      </xsd:choice>
```

```
        <xsd:element name="paymentFrequency" type=" Frequency "/>
        <xsd:element name="firstPaymentDate" type=" xsd:date " minOccurs="0"/>
        <xsd:element name="lastRegularPaymentDate" type=" xsd:date " minOccurs="0"/>
        <xsd:element name="payRelativeTo" type=" PayRelativeToEnum "/>
        <xsd:element name="paymentDaysOffset" type=" Offset " minOccurs="0"/>
        <xsd:element name="paymentDatesAdjustments" type=" BusinessDayAdjustments "/>
    </xsd:sequence>
    <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: PaymentDatesReference

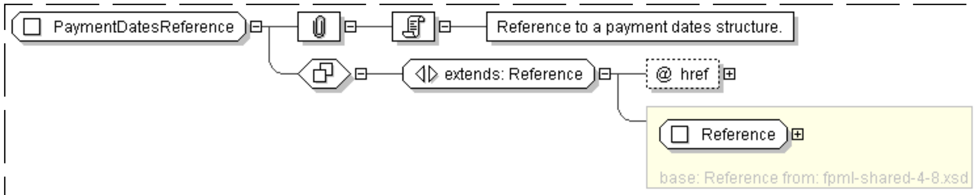
Super-types:	Reference < **PaymentDatesReference** (by extension)
Sub-types:	None

Name	PaymentDatesReference
Used by (from the same schema document)	Complex Type **DateRelativeToPaymentDates**
Abstract	no
Documentation	Reference to a payment dates structure.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentDatesReference">
    <xsd:complexContent>
        <xsd:extension base=" Reference ">
            <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="PaymentDates"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PriceSourceDisruption

Super-types:	None
Sub-types:	None

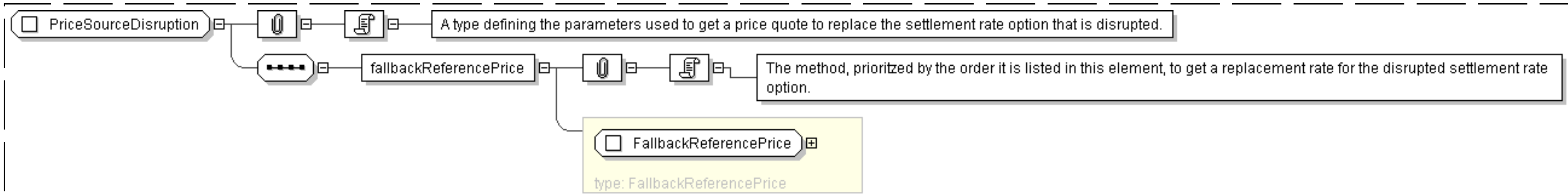
Name	PriceSourceDisruption
Used by (from the same schema document)	Complex Type **NonDeliverableSettlement**
Abstract	no
Documentation	A type defining the parameters used to get a price quote to replace the settlement rate option that is disrupted.

XML Instance Representation

```
<...>
    <fallbackReferencePrice> FallbackReferencePrice </fallbackReferencePrice> [1]
    'The method, prioritzed by the order it is listed in this element, to get a replacement
    rate for the disrupted settlement rate option.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PriceSourceDisruption">
   <xsd:sequence>
      <xsd:element name="fallbackReferencePrice" type=" FallbackReferencePrice "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PrincipalExchange

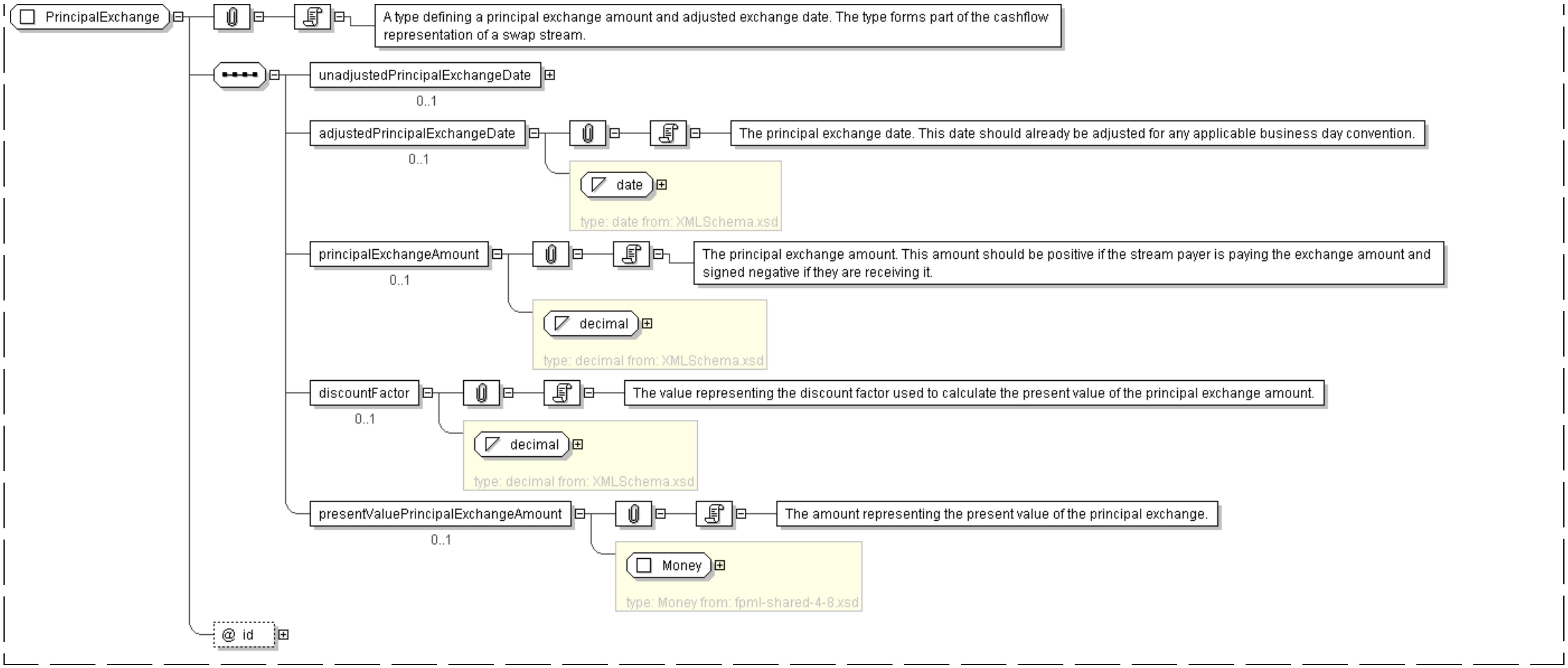
Super-types:	None
Sub-types:	None

Name	PrincipalExchange
Used by (from the same schema document)	Complex Type **Cashflows**
Abstract	no
Documentation	A type defining a principal exchange amount and adjusted exchange date. The type forms part of the cashflow representation of a swap stream.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <unadjustedPrincipalExchangeDate> xsd:date </unadjustedPrincipalExchangeDate> [0..1]
   <adjustedPrincipalExchangeDate> xsd:date </adjustedPrincipalExchangeDate> [0..1]
   'The principal exchange date. This date should already be adjusted for any applicable
   business day convention.'
   <principalExchangeAmount> xsd:decimal </principalExchangeAmount> [0..1]
   'The principal exchange amount. This amount should be positive if the stream payer is
   paying the exchange amount and signed negative if they are receiving it.'
   <discountFactor> xsd:decimal </discountFactor> [0..1]
   'The value representing the discount factor used to calculate the present value of
   the principal exchange amount.'
   <presentValuePrincipalExchangeAmount> Money </presentValuePrincipalExchangeAmount> [0..1]
   'The amount representing the present value of the principal exchange.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PrincipalExchange">
   <xsd:sequence>
      <xsd:element name="unadjustedPrincipalExchangeDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedPrincipalExchangeDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="principalExchangeAmount" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="discountFactor" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="presentValuePrincipalExchangeAmount" type=" Money " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: RelevantUnderlyingDateReference

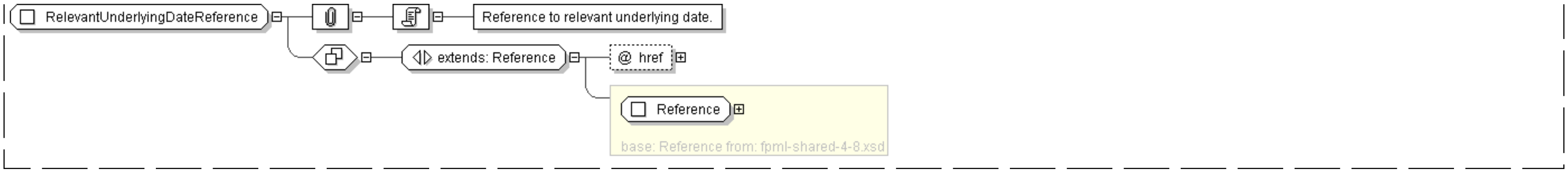
Super-types:	Reference < **RelevantUnderlyingDateReference** (by extension)
Sub-types:	None

Name	RelevantUnderlyingDateReference
Used by (from the same schema document)	Complex Type **FinalCalculationPeriodDateAdjustment**
Abstract	no
Documentation	Reference to relevant underlying date.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RelevantUnderlyingDateReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ResetDates

Super-types:	None
Sub-types:	None

Name	ResetDates
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no
Documentation	A type defining the parameters used to generate the reset dates schedule and associated fixing dates. The reset dates are determined relative to the calculation periods schedules dates.

XML Instance Representation

```
<...
id=" xsd:ID [1]">
   <calculationPeriodDatesReference> CalculationPeriodDatesReference
   </calculationPeriodDatesReference> [1]
   'A pointer style reference to the associated calculation period dates component
   defined elsewhere in the document.'

   <resetRelativeTo> ResetRelativeToEnum </resetRelativeTo> [0..1]
   'Specifies whether the reset dates are determined with respect to each adjusted
   calculation period start date or adjusted calculation period end date. If the reset
   frequency is specified as daily this element must not be included.'

   <initialFixingDate> RelativeDateOffset </initialFixingDate> [0..1]
   <fixingDates> RelativeDateOffset </fixingDates> [1]
   'Specifies the fixing date relative to the reset date in terms of a business days offset and
   an associated set of financial business centers. Normally these offset calculation rules
   will be those specified in the ISDA definition for the relevant floating rate index (ISDA
   \'s Floating Rate Option). However, non-standard offset calculation rules may apply for a
   trade if mutually agreed by the principal parties to the transaction. The href attribute on
   the dateRelativeTo element should reference the id attribute on the resetDates element.'

   <rateCutOffDaysOffset> Offset </rateCutOffDaysOffset> [0..1]
   'Specifies the number of business days before the period end date when the rate cut-off date
   is assumed to apply. The financial business centers associated with determining the rate
   cut-off date are those specified in the reset dates adjustments. The rate cut-off number
   of days must be a negative integer (a value of zero would imply no rate cut off applies
   in which case the rateCutOffDaysOffset element should not be included). The relevant rate
   for each reset date in the period from, and including, a rate cut-off date to, but
   excluding, the next applicable period end date (or, in the case of the last calculation
   period, the termination date) will (solely for purposes of calculating the floating
   amount payable on the next applicable payment date) be deemed to be the relevant rate in
   effect on that rate cut-off date. For example, if rate cut-off days for a daily averaging
   deal is -2 business days, then the refix rate applied on (period end date - 2 days) will
   also be applied as the reset on (period end date - 1 day), i.e. the actual number of
   reset dates remains the same but from the rate cut-off date until the period end date, the
```

same refix rate is applied. Note that in the case of several calculation periods contributing to a single payment, the rate cut-off is assumed only to apply to the final calculation period contributing to that payment. The day type associated with the offset must imply a business days offset.'

<resetFrequency> ResetFrequency </resetFrequency> [1]

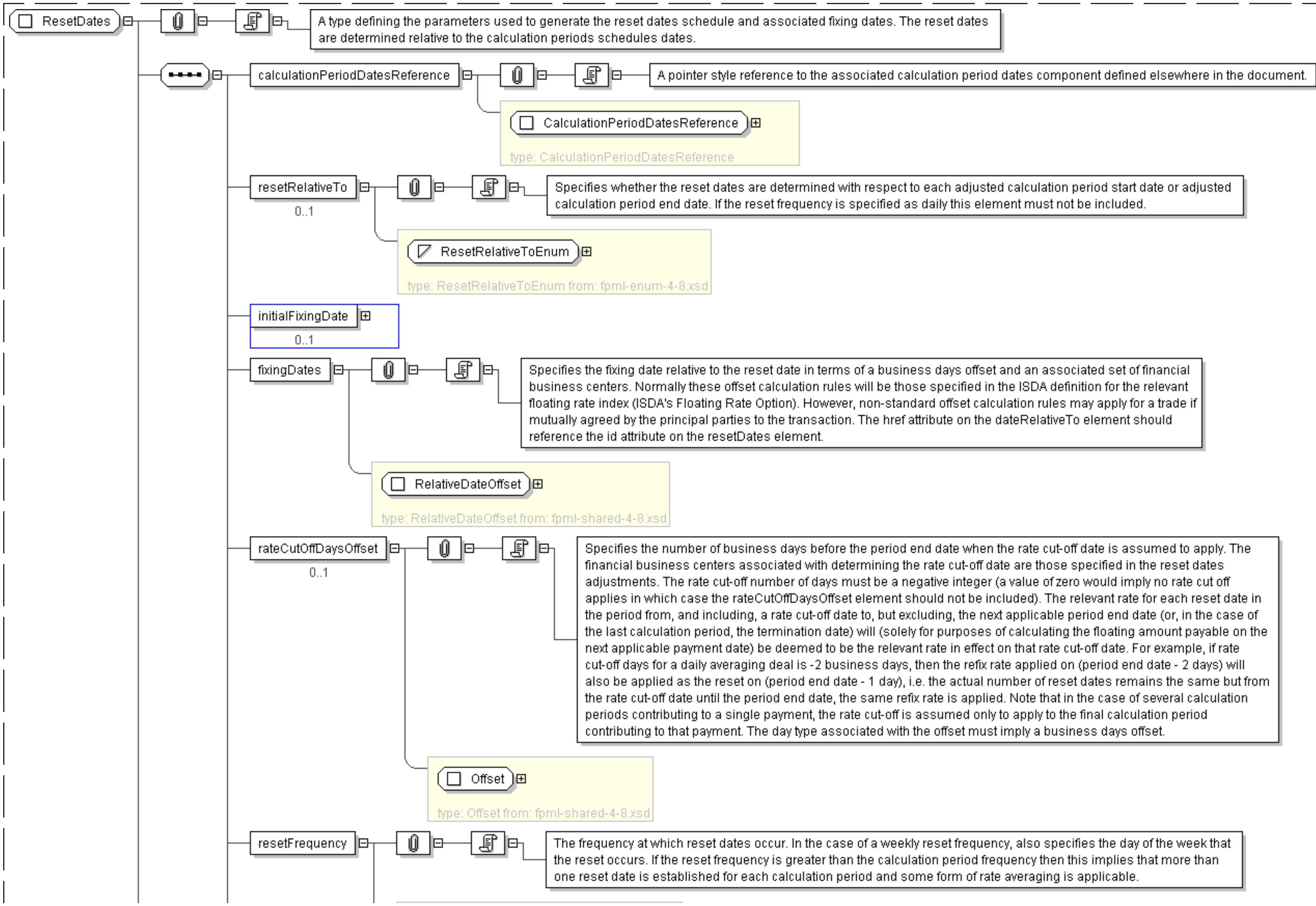
'The frequency at which reset dates occur. In the case of a weekly reset frequency, also specifies the day of the week that the reset occurs. If the reset frequency is greater than the calculation period frequency then this implies that more than one reset date is established for each calculation period and some form of rate averaging is applicable.'

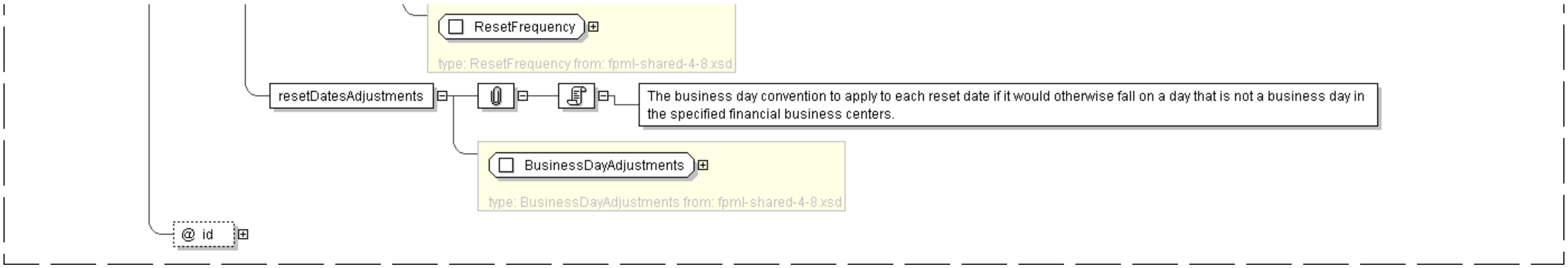
<resetDatesAdjustments> BusinessDayAdjustments </resetDatesAdjustments> [1]

'The business day convention to apply to each reset date if it would otherwise fall on a day that is not a business day in the specified financial business centers.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="ResetDates">
   <xsd:sequence>
      <xsd:element name="calculationPeriodDatesReference" type=" CalculationPeriodDatesReference "/>
      <xsd:element name="resetRelativeTo" type=" ResetRelativeToEnum " minOccurs="0"/>
      <xsd:element name="initialFixingDate" type=" RelativeDateOffset " minOccurs="0"/>
      <xsd:element name="fixingDates" type=" RelativeDateOffset "/>
      <xsd:element name="rateCutOffDaysOffset" type=" Offset " minOccurs="0"/>
      <xsd:element name="resetFrequency" type=" ResetFrequency "/>
      <xsd:element name="resetDatesAdjustments" type=" BusinessDayAdjustments "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="required"/>
</xsd:complexType>
```

top

Complex Type: ResetDatesReference

Super-types:	Reference < **ResetDatesReference** (by extension)
Sub-types:	None

Name	ResetDatesReference
Used by (from the same schema document)	Complex Type **PaymentDates**
Abstract	no
Documentation	Reference to a reset dates component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="ResetDatesReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="ResetDates"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SettlementProvision

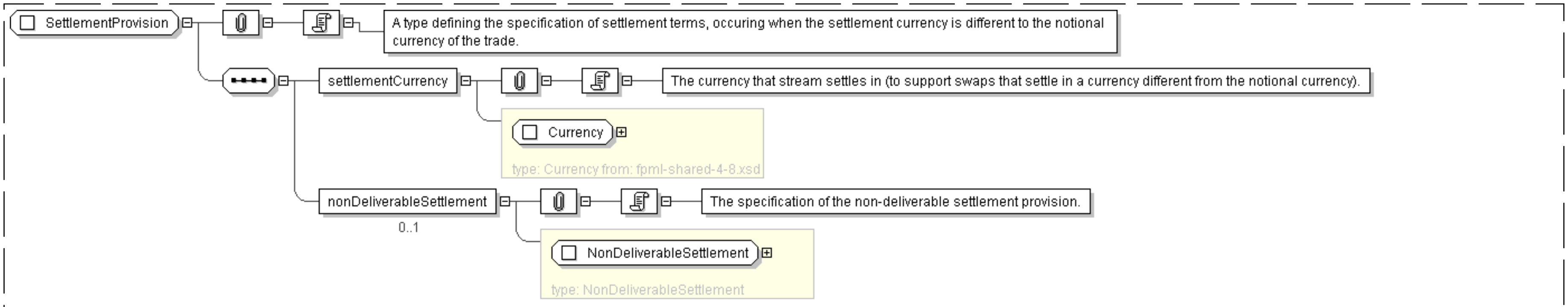
Super-types:	None
Sub-types:	None

Name	SettlementProvision
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no
Documentation	A type defining the specification of settlement terms, occuring when the settlement currency is different to the notional currency of the trade.

XML Instance Representation

```
<...>
   <settlementCurrency> Currency </settlementCurrency> [1]
   'The currency that stream settles in (to support swaps that settle in a currency different
   from the notional currency).'

   <nonDeliverableSettlement> NonDeliverableSettlement </nonDeliverableSettlement> [0..1]
   'The specification of the non-deliverable settlement provision.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementProvision">
   <xsd:sequence>
      <xsd:element name="settlementCurrency" type=" Currency "/>
      <xsd:element name="nonDeliverableSettlement" type=" NonDeliverableSettlement " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SettlementRateOption

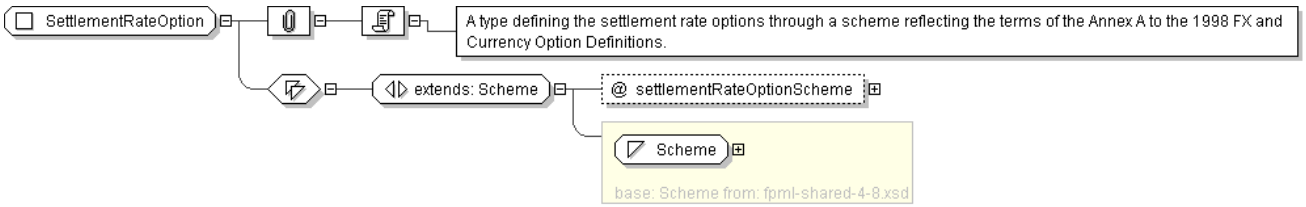
Super-types:	Scheme < **SettlementRateOption** (by extension)
Sub-types:	None

Name	SettlementRateOption
Used by (from the same schema document)	Complex Type **FallbackReferencePrice** , Complex Type **NonDeliverableSettlement**
Abstract	no
Documentation	A type defining the settlement rate options through a scheme reflecting the terms of the Annex A to the 1998 FX and Currency Option Definitions.

XML Instance Representation

```
<...
settlementRateOptionScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SettlementRateOption">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="settlementRateOptionScheme" type=" xsd:anyURI " default="http://www.
         fpml.org/coding-scheme/settlement-rate-option"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: SinglePartyOption

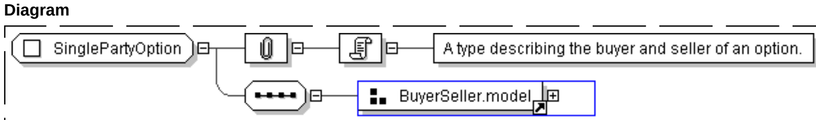
Super-types:	None
Sub-types:	None

Name	SinglePartyOption
Used by (from the same schema document)	Complex Type **OptionalEarlyTermination**
Abstract	no
Documentation	A type describing the buyer and seller of an option.

XML Instance Representation

```
<...>
   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SinglePartyOption">
   <xsd:sequence>
      <xsd:group ref=" BuyerSeller.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: StubCalculationPeriodAmount

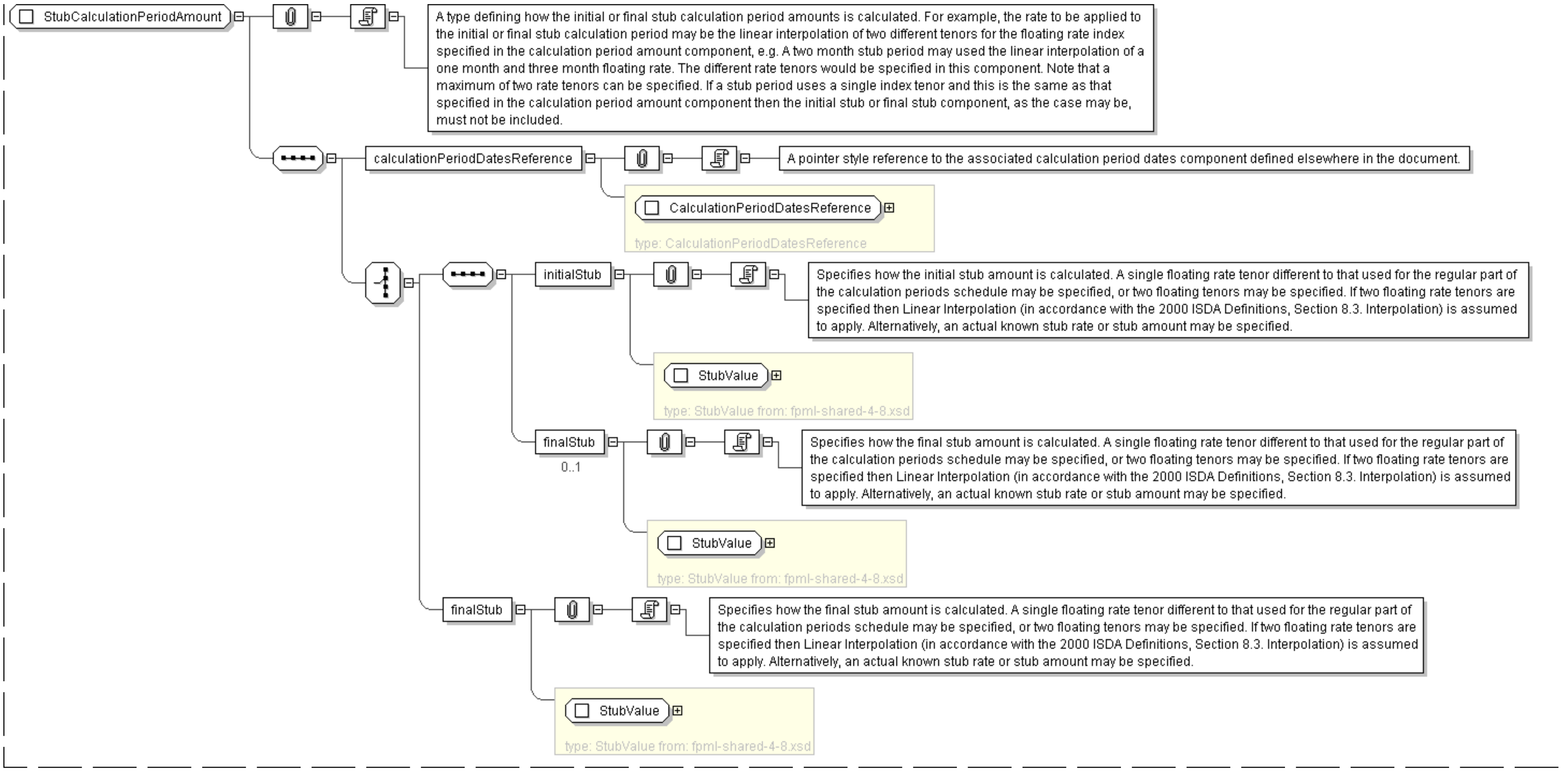
Super-types:	None
Sub-types:	None

Name	StubCalculationPeriodAmount
Used by (from the same schema document)	Complex Type **InterestRateStream**
Abstract	no
Documentation	A type defining how the initial or final stub calculation period amounts is calculated. For example, the rate to be applied to the initial or final stub calculation period may be the linear interpolation of two different tenors for the floating rate index specified in the calculation period amount component, e.g. A two month stub period may used the linear interpolation of a one month and three month floating rate. The different rate tenors would be specified in this component. Note that a maximum of two rate tenors can be specified. If a stub period uses a single index tenor and this is the same as that specified in the calculation period amount component then the initial stub or final stub component, as the case may be, must not be included.

XML Instance Representation

```
<...>
   <calculationPeriodDatesReference> CalculationPeriodDatesReference
   </calculationPeriodDatesReference> [1]
   'A pointer style reference to the associated calculation period dates component
   defined elsewhere in the document.'

Start Choice [1]
      <initialStub> StubValue </initialStub> [1]
      'Specifies how the initial stub amount is calculated. A single floating rate tenor different
      to that used for the regular part of the calculation periods schedule may be specified, or
      two floating tenors may be specified. If two floating rate tenors are specified then
      Linear Interpolation (in accordance with the 2000 ISDA Definitions, Section 8.3.
      Interpolation) is assumed to apply. Alternatively, an actual known stub rate or stub amount
      may be specified.'

      <finalStub> StubValue </finalStub> [0..1]
      'Specifies how the final stub amount is calculated. A single floating rate tenor different
      to that used for the regular part of the calculation periods schedule may be specified, or
      two floating tenors may be specified. If two floating rate tenors are specified then
      Linear Interpolation (in accordance with the 2000 ISDA Definitions, Section 8.3.
      Interpolation) is assumed to apply. Alternatively, an actual known stub rate or stub amount
      may be specified.'

      <finalStub> StubValue </finalStub> [1]
      'Specifies how the final stub amount is calculated. A single floating rate tenor different
      to that used for the regular part of the calculation periods schedule may be specified, or
      two floating tenors may be specified. If two floating rate tenors are specified then
      Linear Interpolation (in accordance with the 2000 ISDA Definitions, Section 8.3.
      Interpolation) is assumed to apply. Alternatively, an actual known stub rate or stub amount
      may be specified.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="StubCalculationPeriodAmount">
   <xsd:sequence>
      <xsd:element name="calculationPeriodDatesReference" type=" CalculationPeriodDatesReference "/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="initialStub" type=" StubValue "/>
            <xsd:element name="finalStub" type=" StubValue " minOccurs="0"/>
         </xsd:sequence>
         <xsd:element name="finalStub" type=" StubValue "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Swap

Super-types:	Product < **Swap** (by extension)
Sub-types:	None

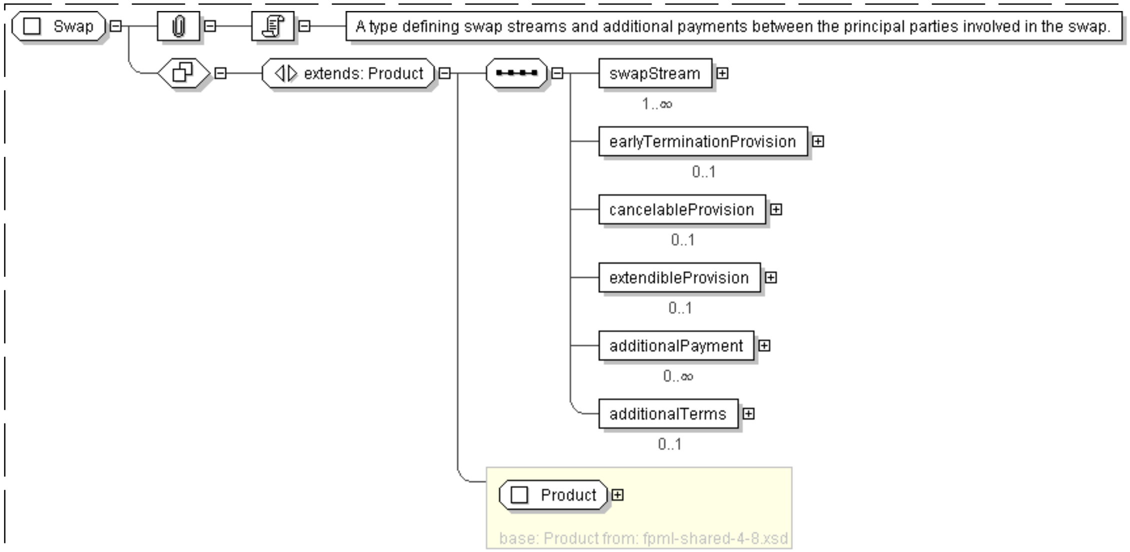
Name	Swap
Used by (from the same schema document)	Element **swap**
Abstract	no

Documentation	A type defining swap streams and additional payments between the principal parties involved in the swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <swapStream> InterestRateStream </swapStream> [1..*]
   'The swap streams.'

   <earlyTerminationProvision> EarlyTerminationProvision </earlyTerminationProvision> [0..1]
   'Parameters specifying provisions relating to the optional and mandatory early terminarion of
   a swap transaction.'

   <cancelableProvision> CancelableProvision </cancelableProvision> [0..1]
   'A provision that allows the specification of an embedded option within a swap giving the
   buyer of the option the right to terminate the swap, in whole or in part, on the
   early termination date.'

   <extendibleProvision> ExtendibleProvision </extendibleProvision> [0..1]
   'A provision that allows the specification of an embedded option with a swap giving the
   buyer of the option the right to extend the swap, in whole or in part, to the
   extended termination date.'

   <additionalPayment> Payment </additionalPayment> [0..*]
   'Additional payments between the principal parties.'

   <additionalTerms> SwapAdditionalTerms </additionalTerms> [0..1]
   'Contains any additional terms to the swap contract.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Swap">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:element name="swapStream" type=" InterestRateStream " maxOccurs="unbounded"/>
            <xsd:element name="earlyTerminationProvision" type=" EarlyTerminationProvision " minOccurs="0"/>
            <xsd:element name="cancelableProvision" type=" CancelableProvision " minOccurs="0"/>
            <xsd:element name="extendibleProvision" type=" ExtendibleProvision " minOccurs="0"/>
            <xsd:element name="additionalPayment" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="additionalTerms" type=" SwapAdditionalTerms " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SwapAdditionalTerms

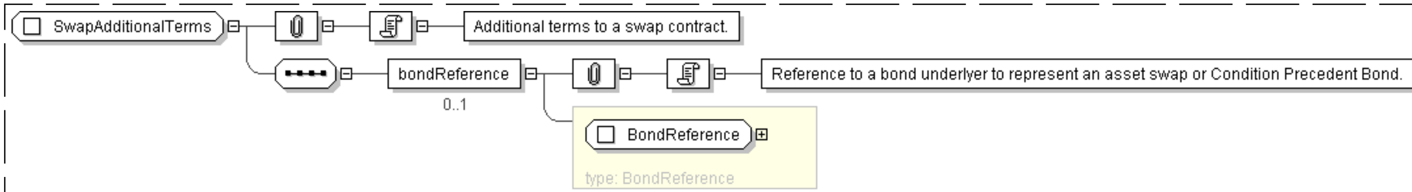
Super-types:	None
Sub-types:	None

Name	SwapAdditionalTerms
Used by (from the same schema document)	Complex Type **Swap**
Abstract	no
Documentation	Additional terms to a swap contract.

XML Instance Representation

```
<...>
   <bondReference> BondReference </bondReference> [0..1]
   'Reference to a bond underlyer to represent an asset swap or Condition Precedent Bond.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SwapAdditionalTerms">
   <xsd:sequence>
      <xsd:element name="bondReference" type=" BondReference " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Swaption

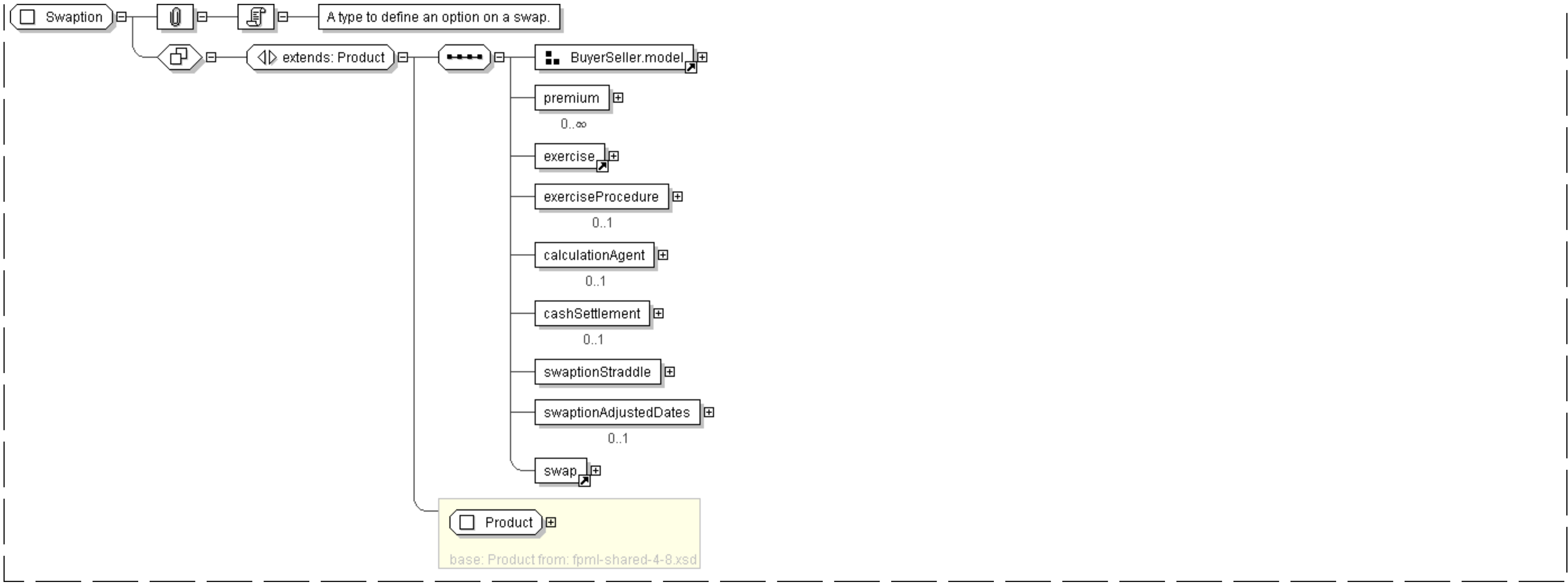
Super-types:	Product < **Swaption** (by extension)
Sub-types:	None

Name	Swaption
Used by (from the same schema document)	Element **swaption**
Abstract	no
Documentation	A type to define an option on a swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

    <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
    'A reference to the party that buys this instrument, ie. pays for this instrument and
    receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
    of FRAs this the fixed rate payer.'

    <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
    'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
    rights defined by this instrument and in return receives a payment for it. See 2000
    ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

    <premium> Payment </premium> [0..*]
    'The option premium amount payable by buyer to seller on the specified payment date.'

    <exercise> ... </exercise> [1]
    <exerciseProcedure> ExerciseProcedure </exerciseProcedure> [0..1]
    'A set of parameters defining procedures associated with the exercise.'

    <calculationAgent> CalculationAgent </calculationAgent> [0..1]
    'The ISDA Calculation Agent responsible for performing duties associated with an optional
    early termination.'

    <cashSettlement> CashSettlement </cashSettlement> [0..1]
    'If specified, this means that cash settlement is applicable to the transaction and defines
    the parameters associated with the cash settlement prodcedure. If not specified, then
    physical settlement is applicable.'

    <swaptionStraddle> xsd:boolean </swaptionStraddle> [1]
    'Whether the option is a swaption or a swaption straddle.'

    <swaptionAdjustedDates> SwaptionAdjustedDates </swaptionAdjustedDates> [0..1]
    'The adjusted dates associated with swaption exercise. These dates have been adjusted for
    any applicable business day convention.'

    <swap> ... </swap> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Swaption">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="premium" type=" Payment " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element ref=" exercise "/>
            <xsd:element name="exerciseProcedure" type=" ExerciseProcedure " minOccurs="0"/>
            <xsd:element name="calculationAgent" type=" CalculationAgent " minOccurs="0"/>
            <xsd:element name="cashSettlement" type=" CashSettlement " minOccurs="0"/>
            <xsd:element name="swaptionStraddle" type=" xsd:boolean "/>
            <xsd:element name="swaptionAdjustedDates" type=" SwaptionAdjustedDates " minOccurs="0"/>
            <xsd:element ref=" swap "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: SwaptionAdjustedDates

Super-types:	None
Sub-types:	None

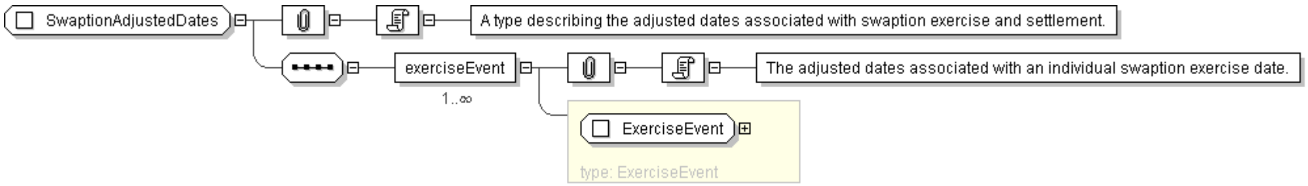
Name	SwaptionAdjustedDates
Used by (from the same schema document)	Complex Type **Swaption**
Abstract	no
Documentation	A type describing the adjusted dates associated with swaption exercise and settlement.

XML Instance Representation

```
<...>
   <exerciseEvent> ExerciseEvent </exerciseEvent> [1..*]
   'The adjusted dates associated with an individual swaption exercise date.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SwaptionAdjustedDates">
   <xsd:sequence>
      <xsd:element name="exerciseEvent" type=" ExerciseEvent " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ValuationDatesReference

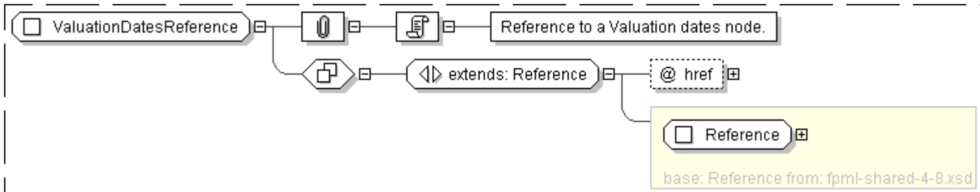
Super-types:	Reference < **ValuationDatesReference** (by extension)
Sub-types:	None

Name	ValuationDatesReference
Used by (from the same schema document)	Complex Type **PaymentDates**
Abstract	no
Documentation	Reference to a Valuation dates node.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationDatesReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="FxFixingDate"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ValuationPostponement

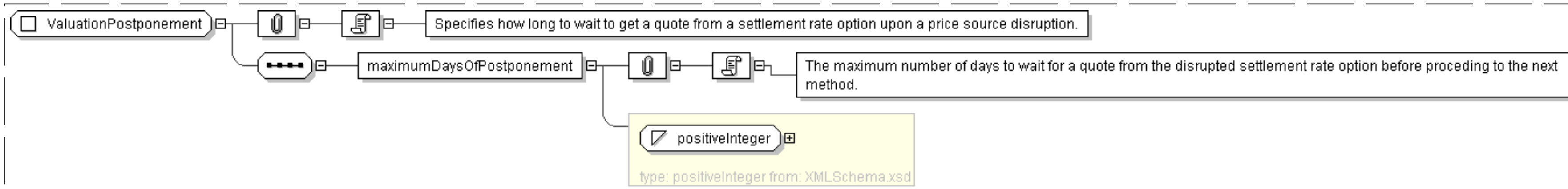
Super-types:	None
Sub-types:	None

Name	ValuationPostponement
Used by (from the same schema document)	Complex Type **FallbackReferencePrice**
Abstract	no
Documentation	Specifies how long to wait to get a quote from a settlement rate option upon a price source disruption.

XML Instance Representation

```
<...>
   <maximumDaysOfPostponement> xsd:positiveInteger </maximumDaysOfPostponement> [1]
   'The maximum number of days to wait for a quote from the disrupted settlement rate
   option before proceding to the next method.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationPostponement">
   <xsd:sequence>
      <xsd:element name="maximumDaysOfPostponement" type=" xsd:positiveInteger "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: YieldCurveMethod

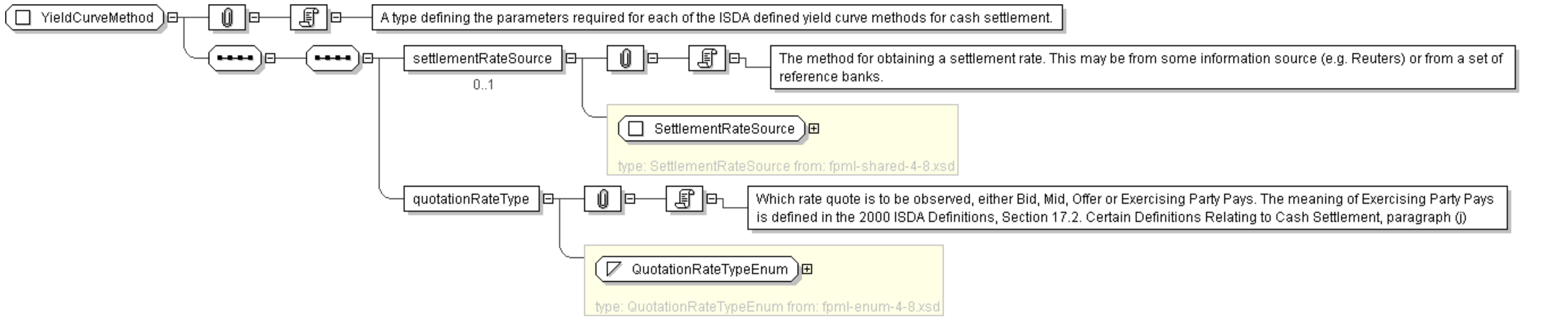
Super-types:	None
Sub-types:	None

Name	YieldCurveMethod
Used by (from the same schema document)	Complex Type **CashSettlement** , Complex Type **CashSettlement** , Complex Type **CashSettlement**
Abstract	no
Documentation	A type defining the parameters required for each of the ISDA defined yield curve methods for cash settlement.

XML Instance Representation

```
<...>
   <settlementRateSource> SettlementRateSource </settlementRateSource> [0..1]
   'The method for obtaining a settlement rate. This may be from some information source (e.
   g. Reuters) or from a set of reference banks.'

   <quotationRateType> QuotationRateTypeEnum </quotationRateType> [1]
   'Which rate quote is to be observed, either Bid, Mid, Offer or Exercising Party Pays.
   The meaning of Exercising Party Pays is defined in the 2000 ISDA Definitions, Section
   17.2. Certain Definitions Relating to Cash Settlement, paragraph (j)'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="YieldCurveMethod">
   <xsd:sequence>
      <xsd:sequence>
         <xsd:element name="settlementRateSource" type=" SettlementRateSource " minOccurs="0"/>
         <xsd:element name="quotationRateType" type=" QuotationRateTypeEnum "/>
      </xsd:sequence>
   </xsd:sequence>
</xsd:complexType>
```

top

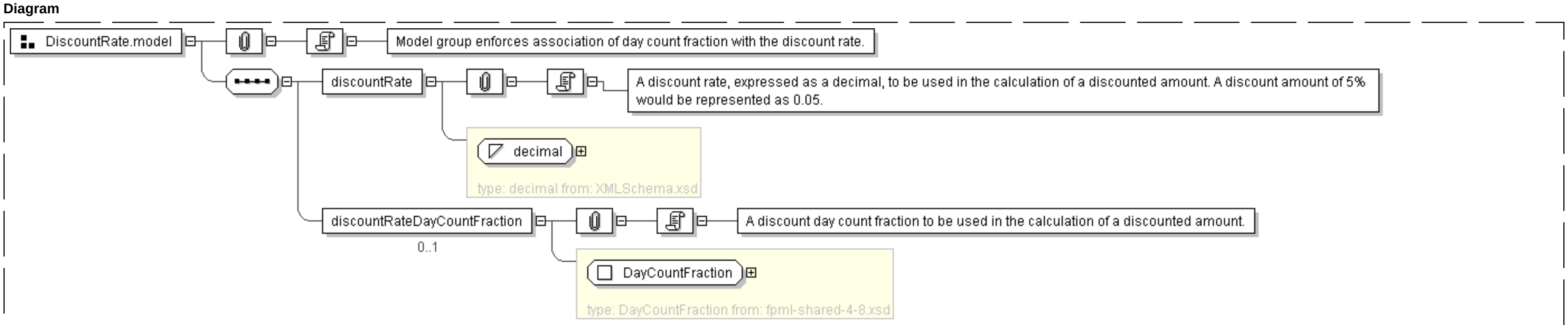
Model Group: DiscountRate.model

Name	DiscountRate.model
Used by (from the same schema document)	Complex Type **Discounting**
Documentation	Model group enforces association of day count fraction with the discount rate.

XML Instance Representation

```
<discountRate> xsd:decimal </discountRate> [1]
'A discount rate, expressed as a decimal, to be used in the calculation of a discounted
amount. A discount amount of 5% would be represented as 0.05.'

<discountRateDayCountFraction> DayCountFraction </discountRateDayCountFraction> [0..1]
'A discount day count fraction to be used in the calculation of a discounted amount.'
```

Diagram



Schema Component Representation

```
<xsd:group name="DiscountRate.model">
   <xsd:sequence>
```

```
        <xsd:element name="discountRate" type=" xsd:decimal "/>
        <xsd:element name="discountRateDayCountFraction" type=" DayCountFraction " minOccurs="0"/>
    </xsd:sequence>
</xsd:group>
```

top

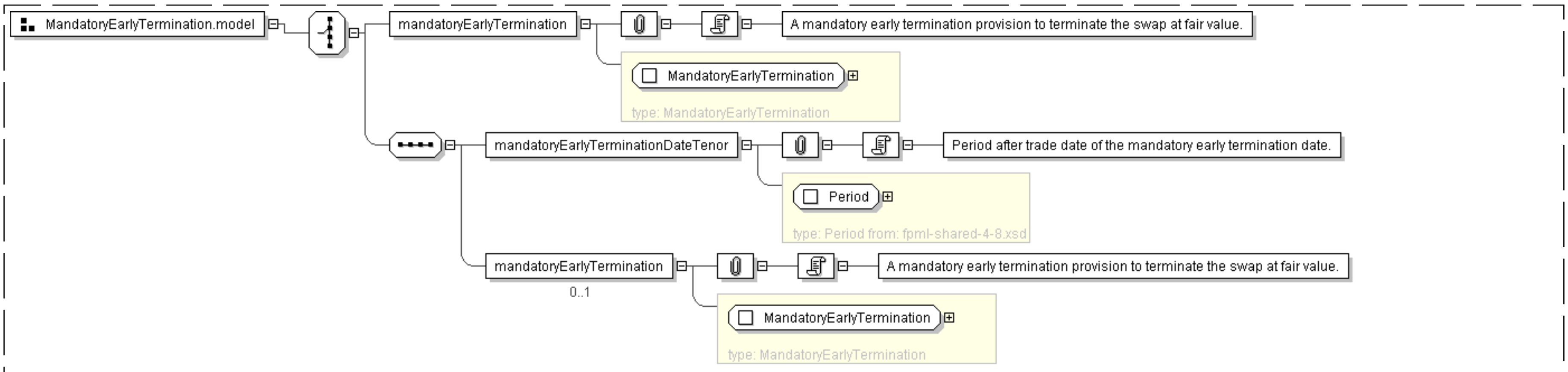
Model Group: MandatoryEarlyTermination.model

Name	MandatoryEarlyTermination.model
Used by (from the same schema document)	Complex Type **EarlyTerminationProvision**

XML Instance Representation

```
Start Choice [1]
    <mandatoryEarlyTermination> MandatoryEarlyTermination </mandatoryEarlyTermination> [1]
    'A mandatory early termination provision to terminate the swap at fair value.'

    <mandatoryEarlyTerminationDateTenor> Period </mandatoryEarlyTerminationDateTenor> [1]
    'Period after trade date of the mandatory early termination date.'

    <mandatoryEarlyTermination> MandatoryEarlyTermination </mandatoryEarlyTermination> [0..1]
    'A mandatory early termination provision to terminate the swap at fair value.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="MandatoryEarlyTermination.model">
    <xsd:choice>
        <xsd:element name="mandatoryEarlyTermination" type=" MandatoryEarlyTermination "/>
        <xsd:sequence>
            <xsd:element name="mandatoryEarlyTerminationDateTenor" type=" Period "/>
            <xsd:element name="mandatoryEarlyTermination" type=" MandatoryEarlyTermination " minOccurs="0"/>
        </xsd:sequence>
    </xsd:choice>
</xsd:group>
```

top

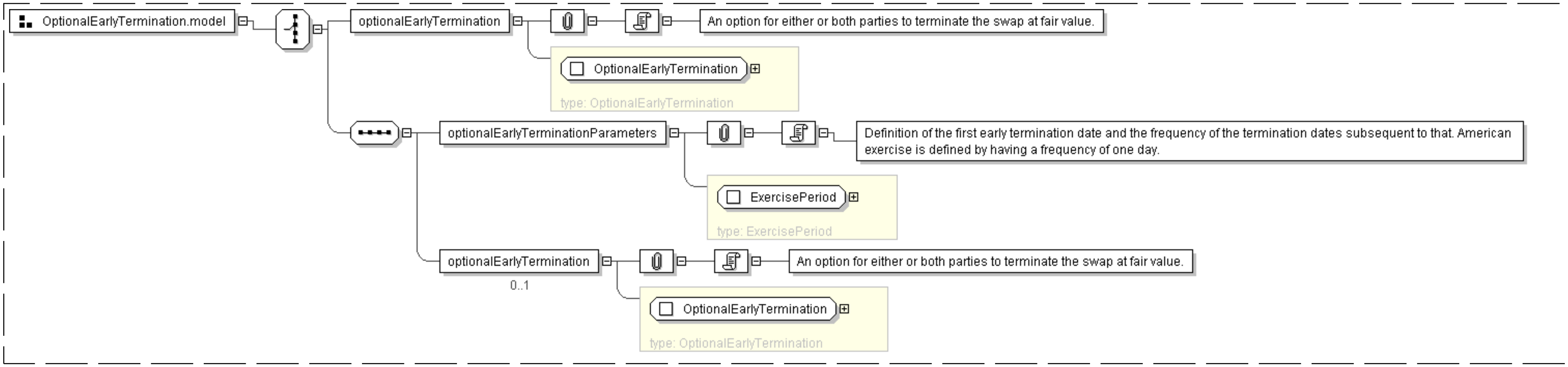
Model Group: OptionalEarlyTermination.model

Name	OptionalEarlyTermination.model
Used by (from the same schema document)	Complex Type **EarlyTerminationProvision** , Complex Type **EarlyTerminationProvision**

XML Instance Representation

```
Start Choice [1]
   <optionalEarlyTermination> OptionalEarlyTermination </optionalEarlyTermination> [1]
   'An option for either or both parties to terminate the swap at fair value.'

   <optionalEarlyTerminationParameters> ExercisePeriod </optionalEarlyTerminationParameters> [1]
   'Definition of the first early termination date and the frequency of the termination
   dates subsequent to that. American exercise is defined by having a frequency of one day.'

   <optionalEarlyTermination> OptionalEarlyTermination </optionalEarlyTermination> [0..1]
   'An option for either or both parties to terminate the swap at fair value.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="OptionalEarlyTermination.model">
   <xsd:choice>
      <xsd:element name="optionalEarlyTermination" type=" OptionalEarlyTermination "/>
      <xsd:sequence>
         <xsd:element name="optionalEarlyTerminationParameters" type=" ExercisePeriod "/>
         <xsd:element name="optionalEarlyTermination" type=" OptionalEarlyTermination " minOccurs="0"/>
      </xsd:sequence>
   </xsd:choice>
</xsd:group>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 2406 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-asset-4-8.xsd ○ fpml-msg-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 2406 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-asset-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-msg-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Definitions

Complex Type: BorrowingOptionType

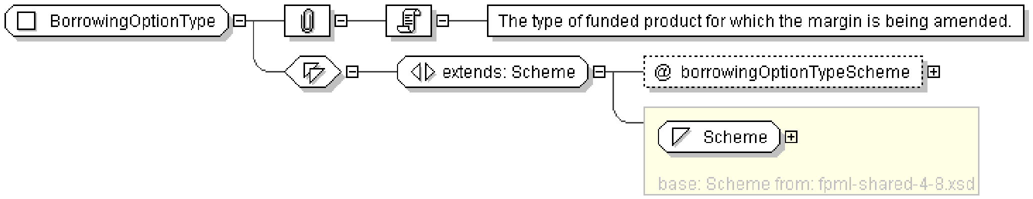
Super-types:	Scheme < **BorrowingOptionType** (by extension)
Sub-types:	None

Name	BorrowingOptionType
Used by (from the same schema document)	Complex Type **MarginRateChange**
Abstract	no
Documentation	The type of funded product for which the margin is being amended.

XML Instance Representation

```
<...
borrowingOptionTypeScheme=" xsd:anyURI [1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BorrowingOptionType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="borrowingOptionTypeScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: DealSummary

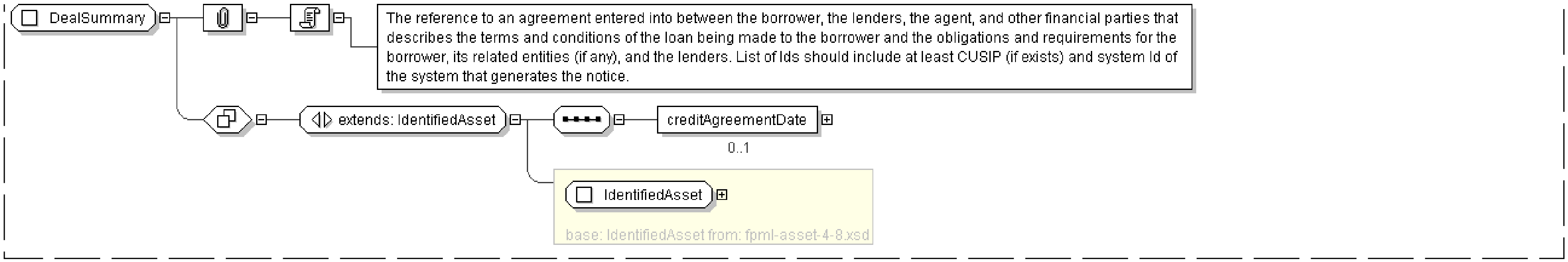
Super-types:	IdentifiedAsset < **DealSummary** (by extension)
Sub-types:	None

Name	DealSummary
Used by (from the same schema document)	Model Group **FacilityNoticeDetails.model**
Abstract	no
Documentation	The reference to an agreement entered into between the borrower, the lenders, the agent, and other financial parties that describes the terms and conditions of the loan being made to the borrower and the obligations and requirements for the borrower, its related entities (if any), and the lenders. List of Ids should include at least CUSIP (if exists) and system Id of the system that generates the notice.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

   <creditAgreementDate> xsd:date </creditAgreementDate> [0..1]
   'The credit agreement date is the closing date (the date where the agreement has been
   signed) for the loans in the credit agreement. Funding of the facilities occurs on
   (or sometimes a little after) the Credit Agreement date.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DealSummary">
   <xsd:complexContent>
      <xsd:extension base=" IdentifiedAsset ">
         <xsd:sequence>
            <xsd:element name="creditAgreementDate" type=" xsd:date " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DrawdownNotice

Super-types:	NotificationMessage < LoanContractNotice (by extension) < **DrawdownNotice** (by extension)
Sub-types:	None

Name	DrawdownNotice
Abstract	no
Documentation	The notification from the agent bank to lender that loan contract is requested by the borrower. A loan contract notice will be created by the agent bank for each of the lenders

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'
```

<eventId> EventId </eventId> [0..1]

'The identifier that defines the business event which requires the creation of a notice.'

<agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]

'A reference to the agent bank for the given deal.'

<borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]

'A reference to the borrower against the associated loan contract(s).'

<lenderPartyReference> PartyReference </lenderPartyReference> [0..1]

'A reference to the lender(s) associated with the associated loan contract(s).'

<dealSummary> DealSummary </dealSummary> [1]

'A data structure which contains the identifying characteristics of the given deal.'

<facilitySummary> FacilitySummary </facilitySummary> [1]

'A data structure which contains the identifying characteristics of the given facility.'

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

Start Choice [1]

'The sender may choose to either transmit the full or partial loan contract details.'

<loanContract> LoanContract </loanContract> [1]

'A core structure describing a loan contract between borrower and lenders forming part or all of the credit line offered by a facility structure within a deal.'

<loanContractSummary> LoanContractSummary </loanContractSummary> [1]

'A basic set of fields used to uniquely identify the loan contract.'

End Choice

<drawdownEventType> DrawdownEventTypeEnum **</drawdownEventType>** [0..1]

'An enumeration that describes whether this message is a drawdown or a rate set notification. The same message structure is used for both, with some business validation differences.'

<conditionsPrecedentType> ConditionsPrecedentEnum **</conditionsPrecedentType>** [0..1]

'An enumeration which describes whether the condition precent have been met, not met or been waived. Please note: this field in not required since conditions precedent may not be applicable in certain scenarios.'

<drawdownPayment> DrawdownPayment **</drawdownPayment>** [1]

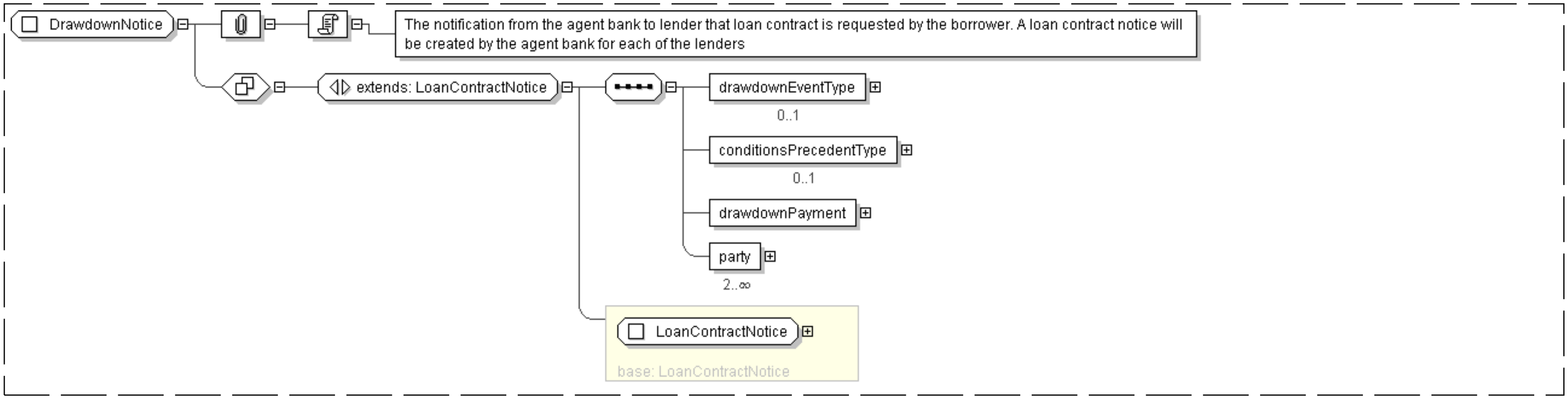
'The lender\'s portion of the drawdown payment.'

<party> Party **</party>** [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DrawdownNotice">
   <xsd:complexContent>
      <xsd:extension base=" LoanContractNotice ">
         <xsd:sequence>
            <xsd:element name="drawdownEventType" type=" DrawdownEventTypeEnum " minOccurs="0"/>
            <xsd:element name="conditionsPrecedentType" type=" ConditionsPrecedentEnum " minOccurs="0"/>
            <xsd:element name="drawdownPayment" type=" DrawdownPayment "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DrawdownPayment

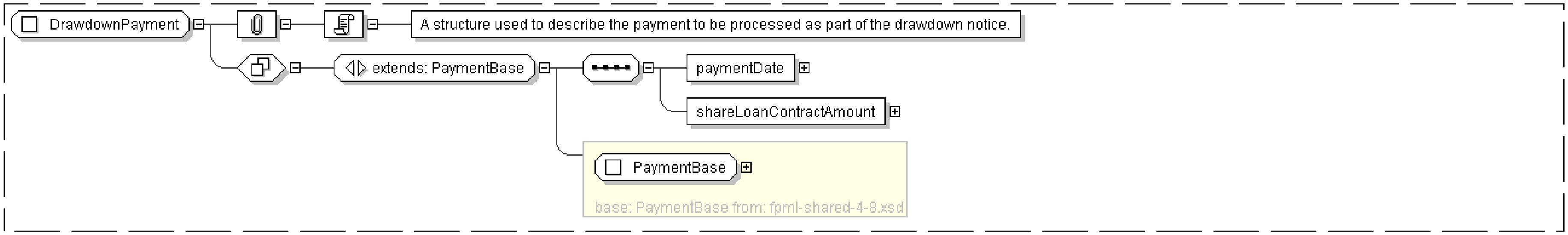
Super-types:	PaymentBase < **DrawdownPayment** (by extension)
Sub-types:	None

Name	DrawdownPayment
Used by (from the same schema document)	Complex Type **DrawdownNotice** , Complex Type **NewLoanContracts**
Abstract	no
Documentation	A structure used to describe the payment to be processed as part of the drawdown notice.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <paymentDate> xsd:date </paymentDate> [1]
   'The date on which the principal payment is made by the lender to the agent bank. This is
   an actual (adjusted) date. Usually defaults to the effective date of the loan contract.'

   <shareLoanContractAmount> Money </shareLoanContractAmount> [1]
   'The amount of principal allocated to the lender for the given drawdown request. This is
   the same as the payment that must be made by the lender to satisfy the drawdown request.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DrawdownPayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="paymentDate" type=" xsd:date "/>
            <xsd:element name="shareLoanContractAmount" type=" Money "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FacilityCommitmentPosition

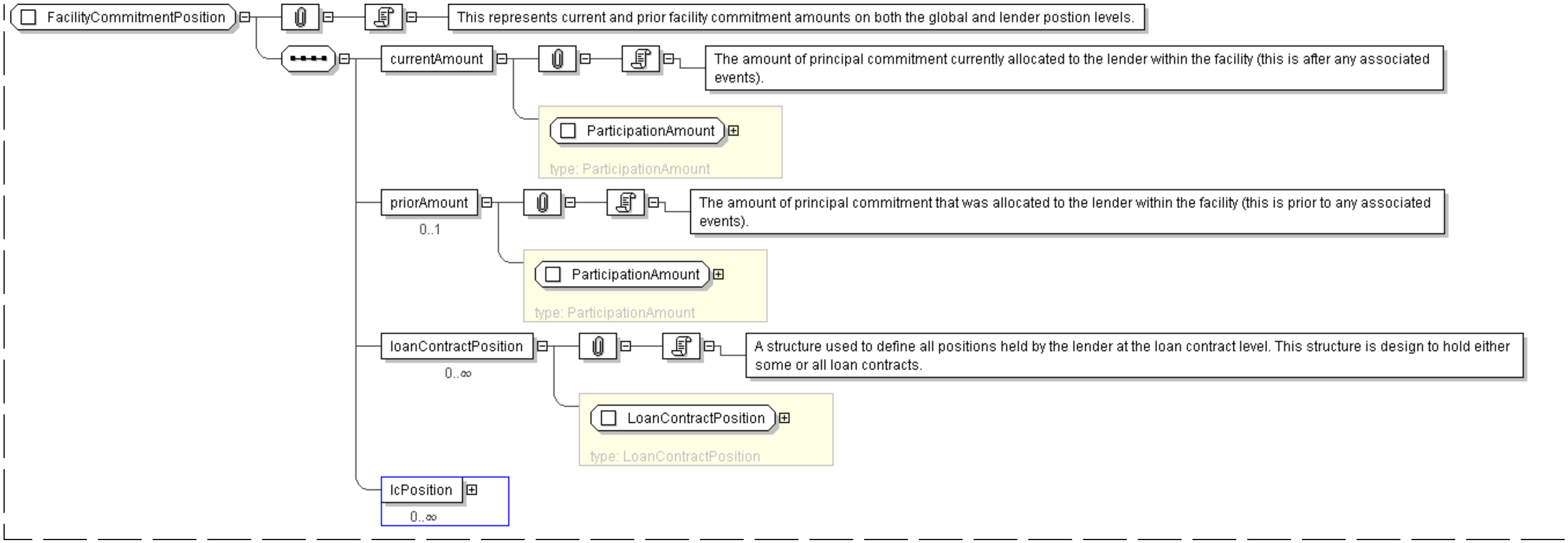
Super-types:	None
Sub-types:	None

Name	FacilityCommitmentPosition
Used by (from the same schema document)	Model Group **FacilityNoticeDetails.model**
Abstract	no
Documentation	This represents current and prior facility commitment amounts on both the global and lender postion levels.

XML Instance Representation

```
<...>
   <currentAmount> ParticipationAmount </currentAmount> [1]
   'The amount of principal commitment currently allocated to the lender within the facility
   (this is after any associated events).'

   <priorAmount> ParticipationAmount </priorAmount> [0..1]
   'The amount of principal commitment that was allocated to the lender within the facility
   (this is prior to any associated events).'

   <loanContractPosition> LoanContractPosition </loanContractPosition> [0..*]
   'A structure used to define all positions held by the lender at the loan contract level.
   This structure is design to hold either some or all loan contracts.'

   <lcPosition> LcPosition </lcPosition> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FacilityCommitmentPosition">
   <xsd:sequence>
      <xsd:element name="currentAmount" type=" ParticipationAmount "/>
      <xsd:element name="priorAmount" type=" ParticipationAmount " minOccurs="0"/>
      <xsd:element name="loanContractPosition" type=" LoanContractPosition "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="lcPosition" type=" LcPosition " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FacilityNotice

Super-types:	NotificationMessage < **FacilityNotice** (by extension)
Sub-types:	• LcAmendmentNotice (by extension) • LcBalanceNotice (by extension) • LcIssuanceNotice (by extension) • LcTerminationNotice (by extension) • OneOffFeeNotice (by extension) • OnGoingFeeNotice (by extension) • PricingChangeNotice (by extension) • RepaymentNotice (by extension) • RolloverNotice (by extension)

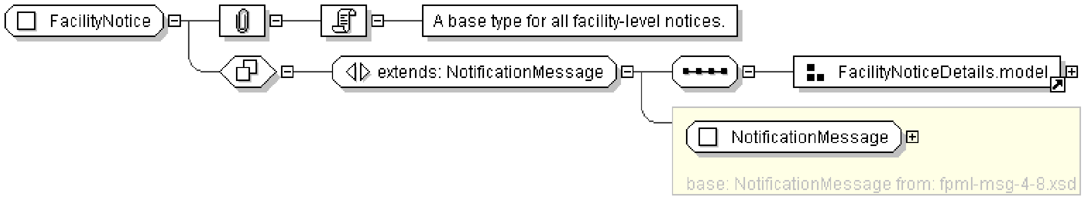
Name	FacilityNotice
Abstract	yes
Documentation	A base type for all facility-level notices.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
```

```
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
   business event.'

   <comments> xsd:string </comments> [0..1]
   'A free-form, manually entered field which will be used by users directly for
   additional information.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FacilityNotice" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:group ref=" FacilityNoticeDetails.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FacilityRepayment

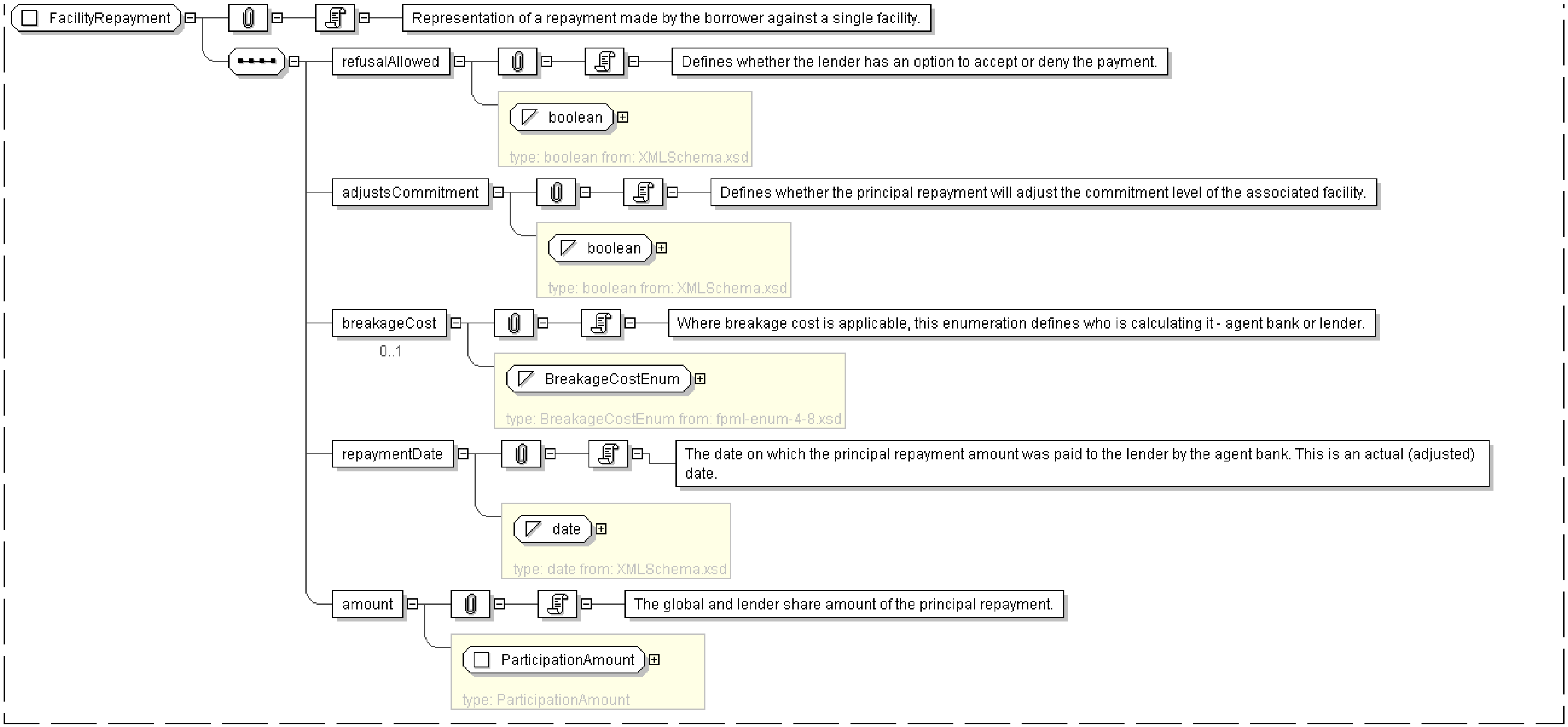
Super-types:	None
Sub-types:	None

Name	FacilityRepayment
Used by (from the same schema document)	Complex Type **Repayment**
Abstract	no
Documentation	Representation of a repayment made by the borrower against a single facility.

XML Instance Representation

```
<...>
   <refusalAllowed> xsd:boolean </refusalAllowed> [1]
   'Defines whether the lender has an option to accept or deny the payment.'

   <adjustsCommitment> xsd:boolean </adjustsCommitment> [1]
   'Defines whether the principal repayment will adjust the commitment level of the
   associated facility.'

   <breakageCost> BreakageCostEnum </breakageCost> [0..1]
   'Where breakage cost is applicable, this enumeration defines who is calculating it - agent
   bank or lender.'

   <repaymentDate> xsd:date </repaymentDate> [1]
   'The date on which the principal repayment amount was paid to the lender by the agent
   bank. This is an actual (adjusted) date.'

   <amount> ParticipationAmount </amount> [1]
   'The global and lender share amount of the principal repayment.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FacilityRepayment">
   <xsd:sequence>
      <xsd:element name="refusalAllowed" type=" xsd:boolean "/>
      <xsd:element name="adjustsCommitment" type=" xsd:boolean "/>
      <xsd:element name="breakageCost" type=" BreakageCostEnum " minOccurs="0"/>
      <xsd:element name="repaymentDate" type=" xsd:date "/>
      <xsd:element name="amount" type=" ParticipationAmount "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FacilitySummary

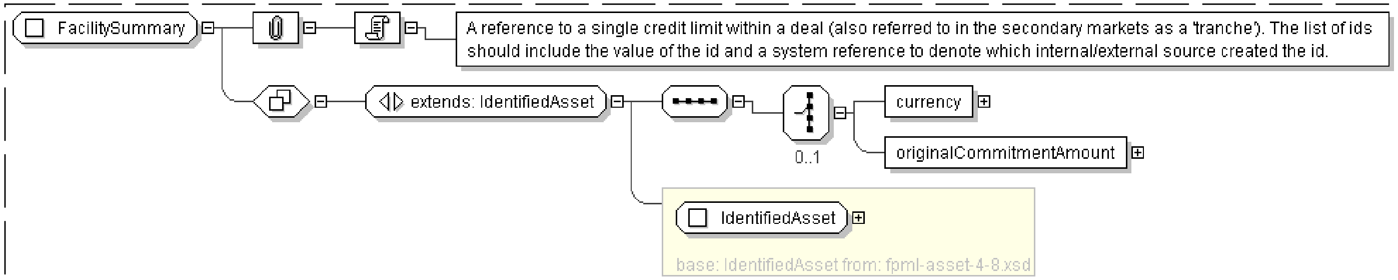
Super-types:	IdentifiedAsset < **FacilitySummary** (by extension)
Sub-types:	None

Name	FacilitySummary
Used by (from the same schema document)	Model Group **FacilityNoticeDetails.model**
Abstract	no
Documentation	A reference to a single credit limit within a deal (also referred to in the secondary markets as a 'tranche'). The list of ids should include the value of the id and a system reference to denote which internal/external source created the id.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <instrumentId> InstrumentId </instrumentId> [1..*]
   'Identification of the underlying asset, using public and/or private identifiers.'

   <description> xsd:string </description> [0..1]
   'Long name of the underlying asset.'

Start Choice [0..1]
      <currency> Currency </currency> [1]
      'Facility denomination currency.'

      <originalCommitmentAmount> Money </originalCommitmentAmount> [1]
      'Original global commitment amount of the facility.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FacilitySummary">
   <xsd:complexContent>
      <xsd:extension base=" IdentifiedAsset ">
         <xsd:sequence>
            <xsd:choice minOccurs="0">
               <xsd:element name="currency" type=" Currency "/>
               <xsd:element name="originalCommitmentAmount" type=" Money "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FeeAccrualPeriod

Super-types:	None
Sub-types:	None

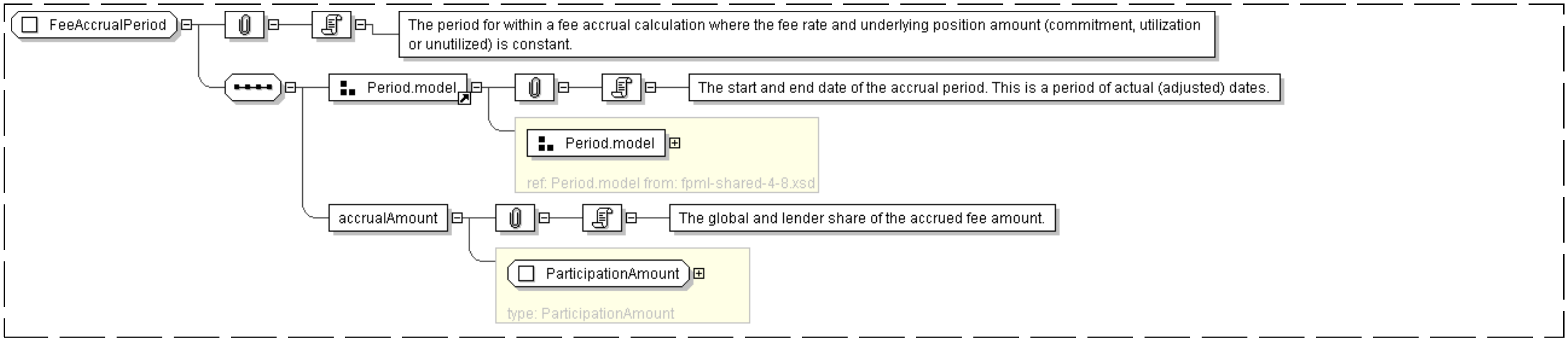
Name	FeeAccrualPeriod
Used by (from the same schema document)	Complex Type **FeeAccrualSchedule**
Abstract	no
Documentation	The period for within a fee accrual calculation where the fee rate and underlying position amount (commitment, utilization or unutilized) is constant.

XML Instance Representation

```
<...>
```

```
    <startDate> xsd:date </startDate> [1]
    'Date on which this period begins.'

    <endDate> xsd:date </endDate> [1]
    'Date on which this period ends.'

    <accrualAmount> ParticipationAmount </accrualAmount> [1]
    'The global and lender share of the accrued fee amount.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FeeAccrualPeriod">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="accrualAmount" type=" ParticipationAmount "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FeeAccrualSchedule

Super-types:	None
Sub-types:	None

Name	FeeAccrualSchedule
Used by (from the same schema document)	Complex Type **OnGoingFeeNotice**
Abstract	no
Documentation	The details of the underlying elements that effect the calculation of a fee accrual.

XML Instance Representation

```
<...>
Start Choice [1]
      <lenderCommitmentPeriod> LenderPositionPeriod </lenderCommitmentPeriod> [1..*]
      'The minimal period within the entire fee period where both the lender and global
      commitment amounts remain constant.'

      <lenderUtilizationPeriod> LenderPositionPeriod </lenderUtilizationPeriod> [1..*]
      'The minimal period within the entire fee period where both the lender and global
      utilization amounts remain constant..'
```

<lenderUnutilizedPeriod> LenderPositionPeriod </lenderUnutilizedPeriod> [1..*]

'The minimal period within the entire fee period where both lender and global unutilized amounts remain constant.'

<lcBalancePeriod> LenderPositionPeriod </lcBalancePeriod> [1..*]

'The minimal period where both lender and global LC amounts remain constant.'

End Choice

<feeRatePeriod> RatePeriod </feeRatePeriod> [1..*]

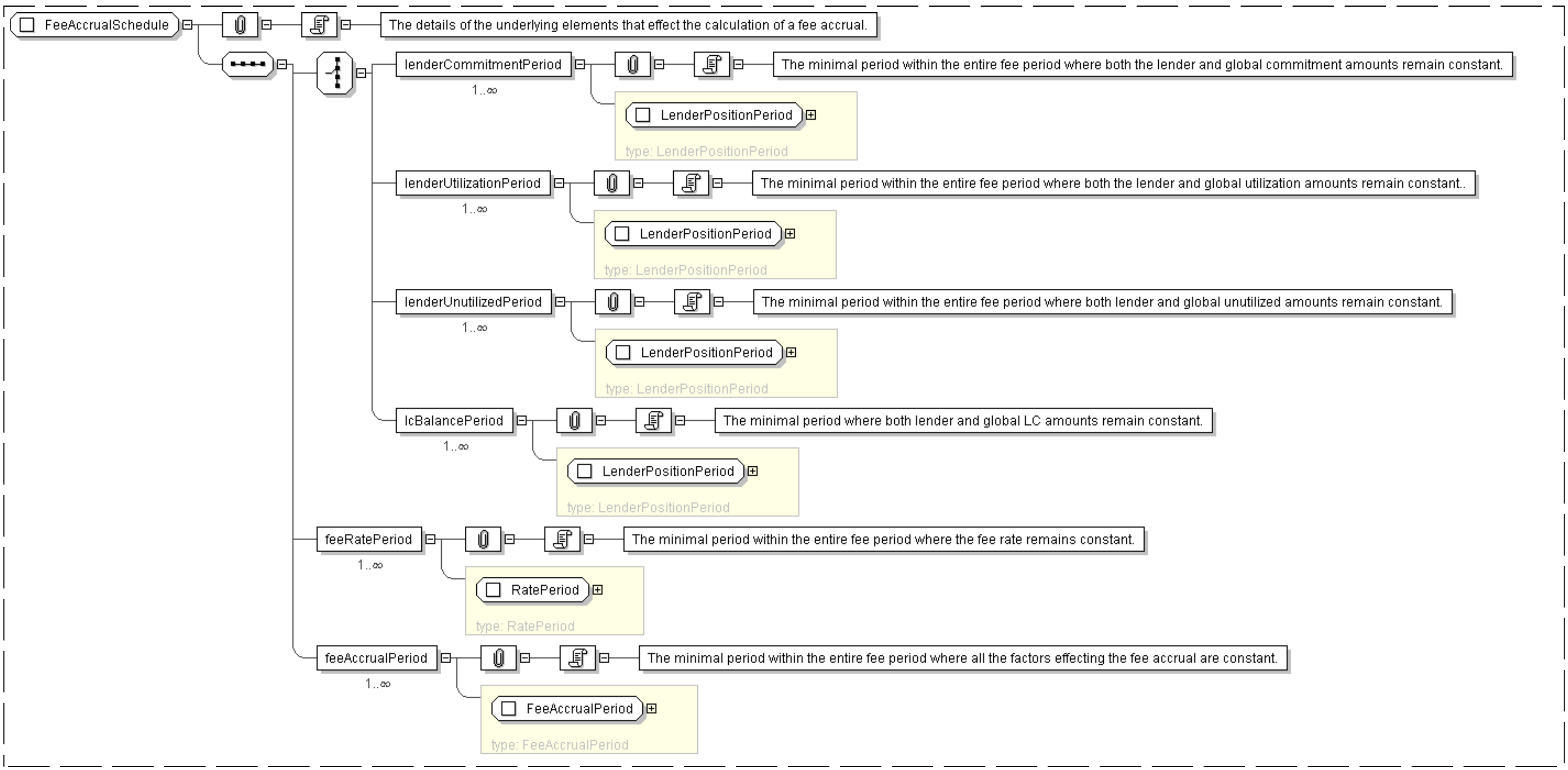
'The minimal period within the entire fee period where the fee rate remains constant.'

<feeAccrualPeriod> FeeAccrualPeriod </feeAccrualPeriod> [1..*]

'The minimal period within the entire fee period where all the factors effecting the fee accrual are constant.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FeeAccrualSchedule">
   <xsd:sequence>
```

```
      <xsd:choice>
         <xsd:element name="lenderCommitmentPeriod" type=" LenderPositionPeriod " maxOccurs="unbounded"/>
         <xsd:element name="lenderUtilizationPeriod" type=" LenderPositionPeriod "
         maxOccurs="unbounded"/>
         <xsd:element name="lenderUnutilizedPeriod" type=" LenderPositionPeriod " maxOccurs="unbounded"/>
         <xsd:element name="lcBalancePeriod" type=" LenderPositionPeriod " maxOccurs="unbounded"/>
      </xsd:choice>
      <xsd:element name="feeRatePeriod" type=" RatePeriod " maxOccurs="unbounded"/>
      <xsd:element name="feeAccrualPeriod" type=" FeeAccrualPeriod " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxTerms

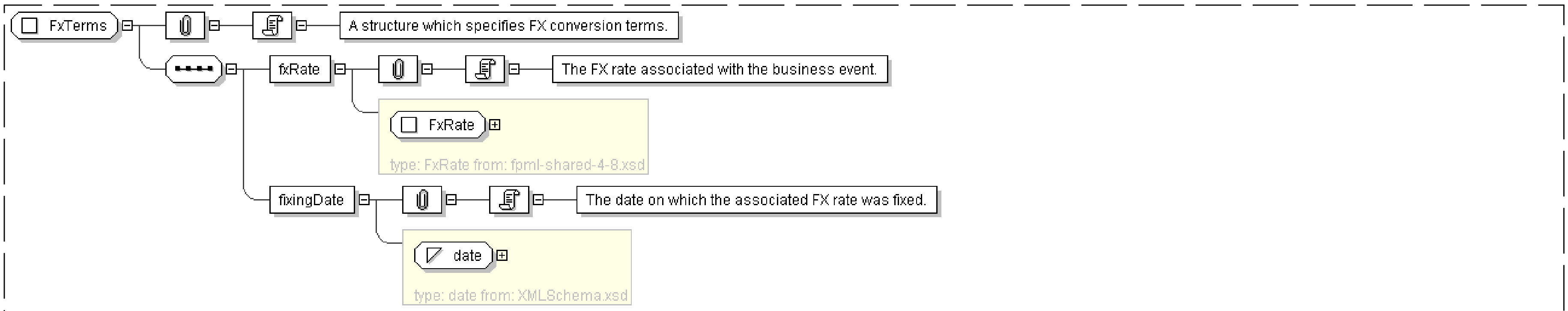
Super-types:	None
Sub-types:	None

Name	FxTerms
Used by (from the same schema document)	Complex Type **FxTermsSchedule** , Complex Type **LetterOfCredit**
Abstract	no
Documentation	A structure which specifies FX conversion terms.

XML Instance Representation

```
<...>
   <fxRate> FxRate </fxRate> [1]
   'The FX rate associated with the business event.'

   <fixingDate> xsd:date </fixingDate> [1]
   'The date on which the associated FX rate was fixed.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxTerms">
   <xsd:sequence>
      <xsd:element name="fxRate" type=" FxRate "/>
      <xsd:element name="fixingDate" type=" xsd:date "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxTermsSchedule

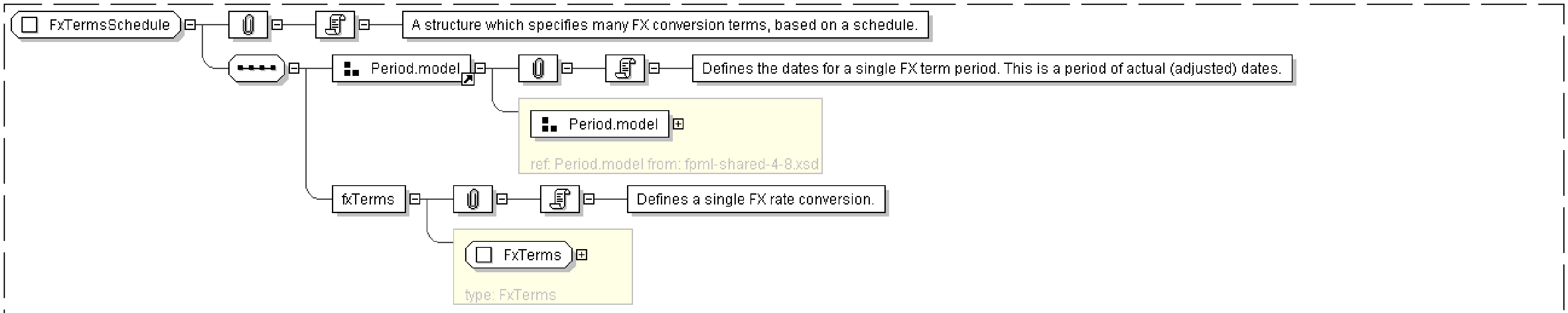
Super-types:	None
Sub-types:	None

Name	FxTermsSchedule
Used by (from the same schema document)	Complex Type **LoanContract**
Abstract	no
Documentation	A structure which specifies many FX conversion terms, based on a schedule.

XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'

   <fxTerms> FxTerms </fxTerms> [1]
   'Defines a single FX rate conversion.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxTermsSchedule">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="fxTerms" type=" FxTerms "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: InterestAccrualPeriod

Super-types:	None
Sub-types:	None

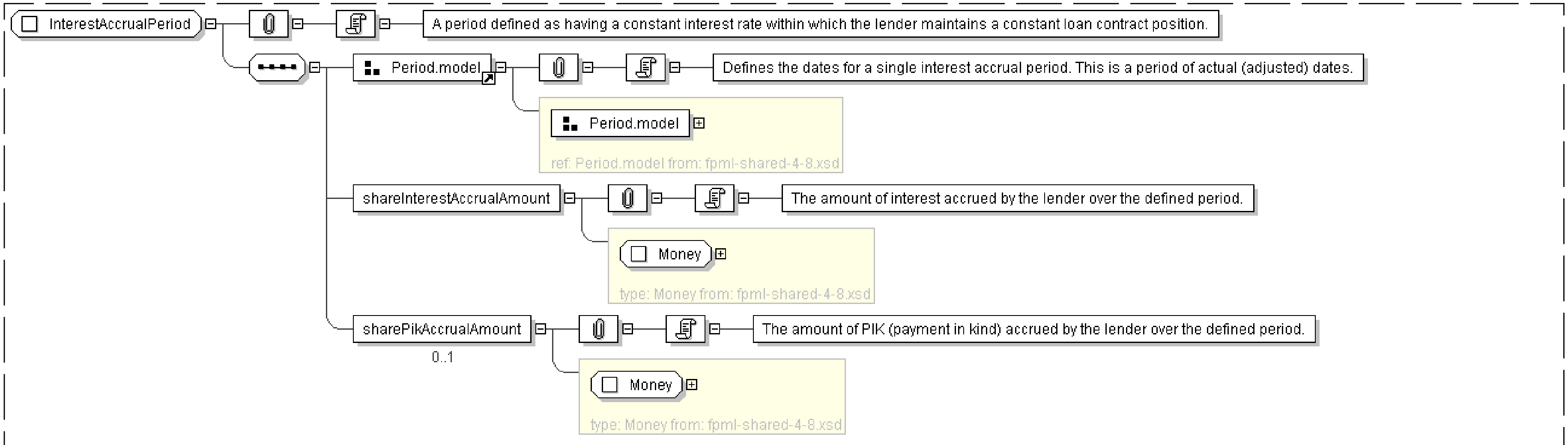
Name	InterestAccrualPeriod
Used by (from the same schema document)	Complex Type **InterestAccrualSchedule**

Abstract	no
Documentation	A period defined as having a constant interest rate within which the lender maintains a constant loan contract position.

XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'

   <shareInterestAccrualAmount> Money </shareInterestAccrualAmount> [1]
   'The amount of interest accrued by the lender over the defined period.'

   <sharePikAccrualAmount> Money </sharePikAccrualAmount> [0..1]
   'The amount of PIK (payment in kind) accrued by the lender over the defined period.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestAccrualPeriod">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="shareInterestAccrualAmount" type=" Money "/>
      <xsd:element name="sharePikAccrualAmount" type=" Money " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: InterestAccrualSchedule

Super-types:	None
Sub-types:	None

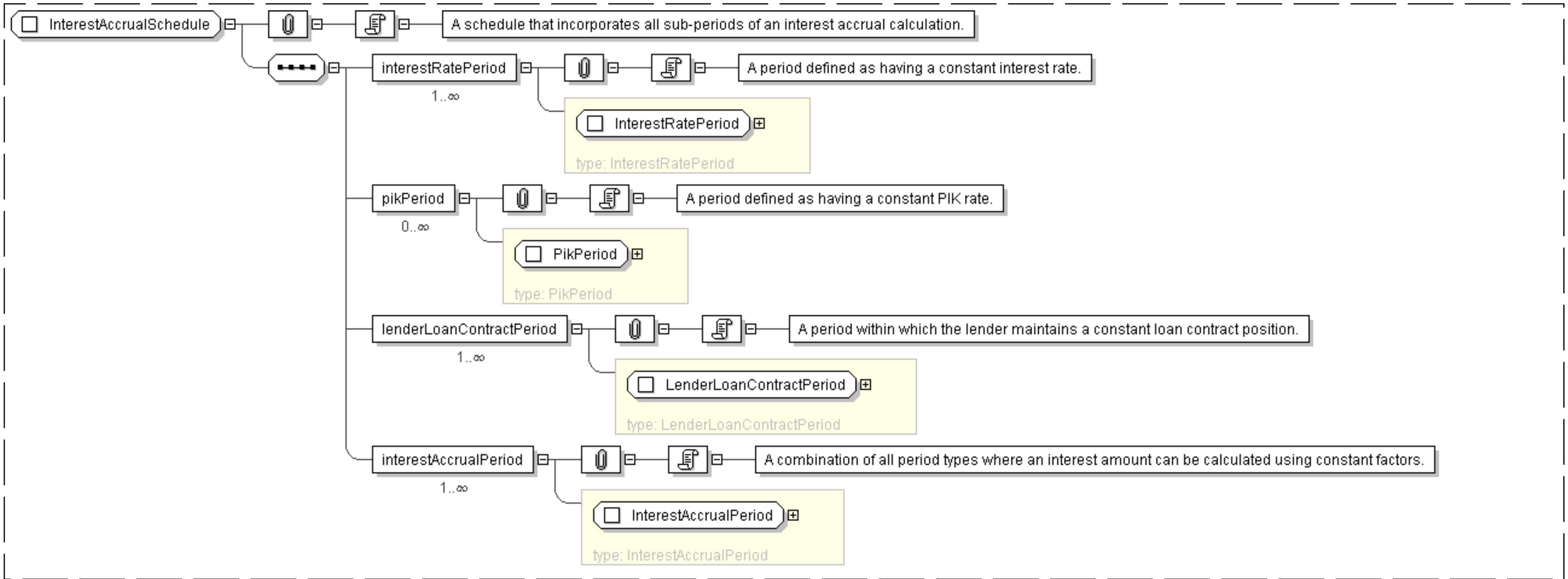
Name	InterestAccrualSchedule

Used by (from the same schema document)	Model Group **InterestPaymentDetails.model**
Abstract	no
Documentation	A schedule that incorporates all sub-periods of an interest accrual calculation.

XML Instance Representation

```
<...>
   <interestRatePeriod> InterestRatePeriod </interestRatePeriod> [1..*]
   'A period defined as having a constant interest rate.'

   <pikPeriod> PikPeriod </pikPeriod> [0..*]
   'A period defined as having a constant PIK rate.'

   <lenderLoanContractPeriod> LenderLoanContractPeriod </lenderLoanContractPeriod> [1..*]
   'A period within which the lender maintains a constant loan contract position.'

   <interestAccrualPeriod> InterestAccrualPeriod </interestAccrualPeriod> [1..*]
   'A combination of all period types where an interest amount can be calculated using
   constant factors.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestAccrualSchedule">
   <xsd:sequence>
      <xsd:element name="interestRatePeriod" type=" InterestRatePeriod " maxOccurs="unbounded"/>
      <xsd:element name="pikPeriod" type=" PikPeriod " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="lenderLoanContractPeriod" type=" LenderLoanContractPeriod
      " maxOccurs="unbounded"/>
      <xsd:element name="interestAccrualPeriod" type=" InterestAccrualPeriod " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: InterestPayment

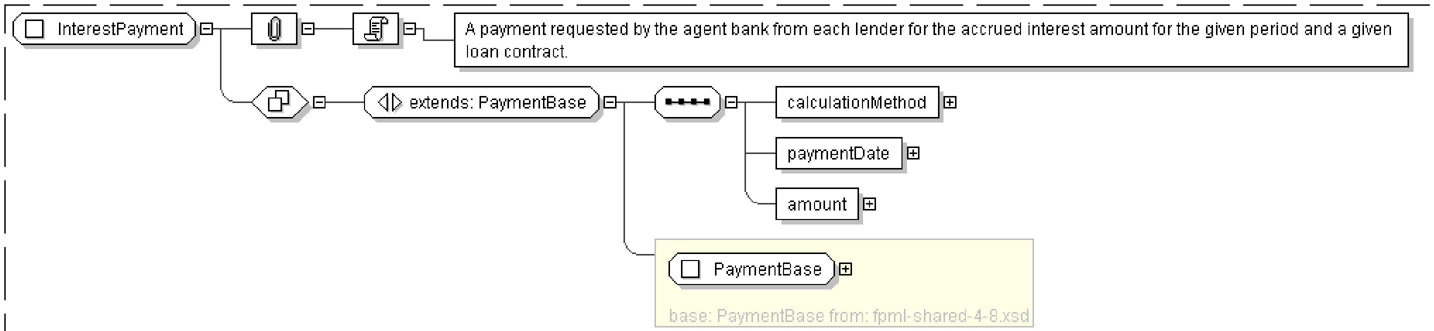
Super-types:	PaymentBase < **InterestPayment** (by extension)
Sub-types:	None

Name	InterestPayment
Used by (from the same schema document)	Model Group **InterestPaymentDetails.model**
Abstract	no
Documentation	A payment requested by the agent bank from each lender for the accrued interest amount for the given period and a given loan contract.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <calculationMethod> InterestCalculationMethodEnum </calculationMethod> [1]
   'Defines the way in which the agent bank is allocating interest payments - can be (i) pro-
   rata at the time of the interest payment or (ii) based on the loan contract share
   throughout the interest period (which is the preferred method).'

   <paymentDate> xsd:date </paymentDate> [1]
   'The date on which interest was paid to the lender by the agent bank. This is an
   actual (adjusted) date.'

   <amount> ParticipationAmount </amount> [1]
   'The amount of interest paid by the borrower to the agent bank and share paid to the lender.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestPayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="calculationMethod" type=" InterestCalculationMethodEnum "/>
            <xsd:element name="paymentDate" type=" xsd:date "/>
            <xsd:element name="amount" type=" ParticipationAmount "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestPaymentNotice

Super-types:	NotificationMessage < LoanContractNotice (by extension) < **InterestPaymentNotice** (by extension)
Sub-types:	None

Name	InterestPaymentNotice
Abstract	no
Documentation	A notice defining the payment requested by the agent bank from each lender for given interest accrual period for a given loan contract.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
```

business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

Start Choice [1]

'The sender may choose to either transmit the full or partial loan contract details.'

<loanContract> LoanContract </loanContract> [1]

'A core structure describing a loan contract between borrower and lenders forming part or all of the credit line offered by a facility structure within a deal.'

<loanContractSummary> LoanContractSummary </loanContractSummary> [1]

'A basic set of fields used to uniquely identify the loan contract.'

End Choice

<interestPayment> InterestPayment **</interestPayment>** [1]

'Represents the total amount of interest paid by the borrower to the agent bank and the share of it paid to the lender.'

<interestAccrualSchedule> InterestAccrualSchedule **</interestAccrualSchedule>** [1]

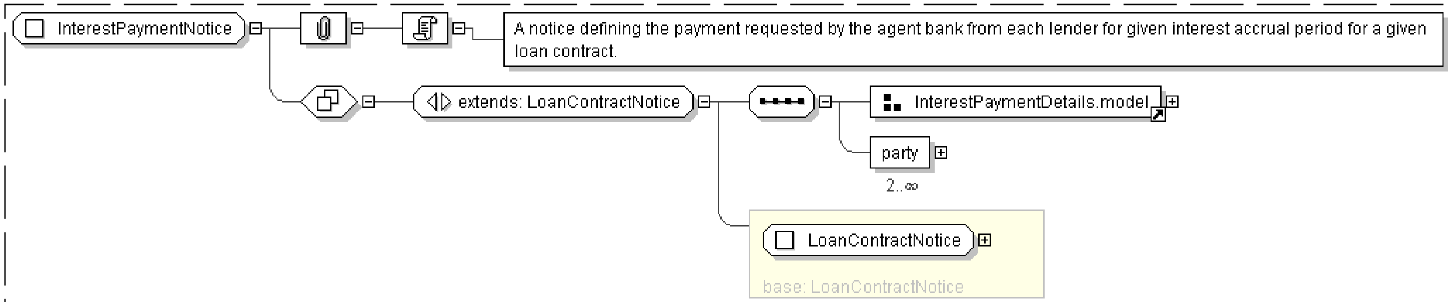
'A schedule that incorporates all sub-periods of an interest accrual calculation.'

<party> Party **</party>** [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="InterestPaymentNotice">
   <xsd:complexContent>
      <xsd:extension base=" LoanContractNotice ">
         <xsd:sequence>
            <xsd:group ref=" InterestPaymentDetails.model "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: InterestRatePeriod

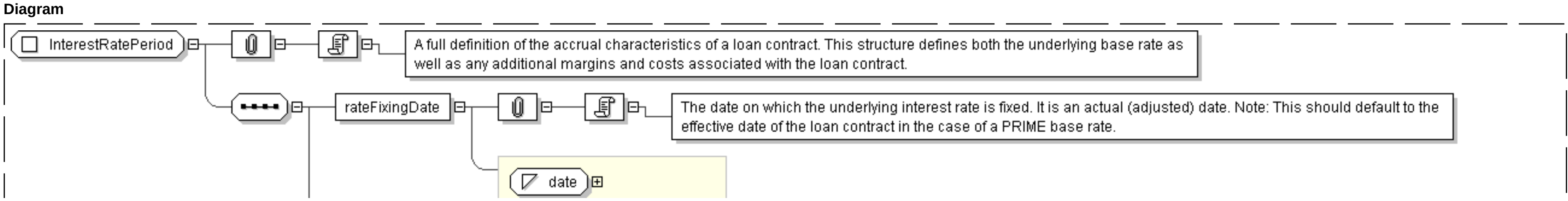
Super-types:	None
Sub-types:	None

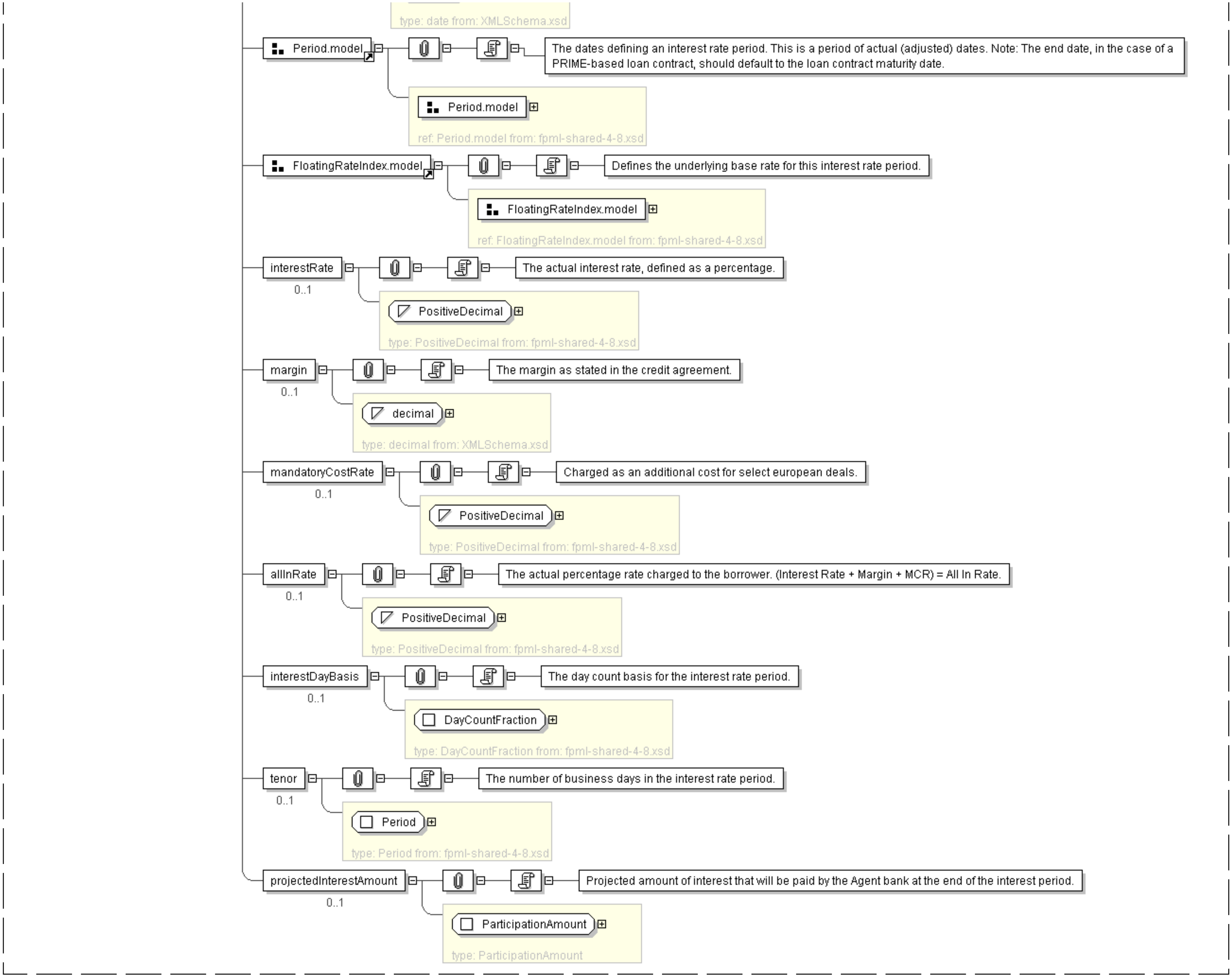
Name	InterestRatePeriod
Used by (from the same schema document)	Complex Type **InterestAccrualSchedule** , Complex Type **LoanContract**
Abstract	no
Documentation	A full definition of the accrual characteristics of a loan contract. This structure defines both the underlying base rate as well as any additional margins and costs associated with the loan contract.

XML Instance Representation

```
<...>
   <rateFixingDate> xsd:date </rateFixingDate> [1]
   'The date on which the underlying interest rate is fixed. It is an actual (adjusted)
   date. Note: This should default to the effective date of the loan contract in the case of
   a PRIME base rate.'

   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'

   <floatingRateIndex> FloatingRateIndex </floatingRateIndex> [1]
   <indexTenor> Period </indexTenor> [0..1]
   'The ISDA Designated Maturity, i.e. the tenor of the floating rate.'

   <interestRate> PositiveDecimal </interestRate> [0..1]
   'The actual interest rate, defined as a percentage.'

   <margin> xsd:decimal </margin> [0..1]
   'The margin as stated in the credit agreement.'

   <mandatoryCostRate> PositiveDecimal </mandatoryCostRate> [0..1]
   'Charged as an additional cost for select european deals.'

   <allInRate> PositiveDecimal </allInRate> [0..1]
   'The actual percentage rate charged to the borrower. (Interest Rate + Margin + MCR) = All
   In Rate.'

   <interestDayBasis> DayCountFraction </interestDayBasis> [0..1]
   'The day count basis for the interest rate period.'

   <tenor> Period </tenor> [0..1]
   'The number of business days in the interest rate period.'

   <projectedInterestAmount> ParticipationAmount </projectedInterestAmount> [0..1]
   'Projected amount of interest that will be paid by the Agent bank at the end of the
   interest period.'

</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="InterestRatePeriod">
```

```
    <xsd:sequence>
       <xsd:element name="rateFixingDate" type=" xsd:date "/>
       <xsd:group ref=" Period.model "/>
       <xsd:group ref=" FloatingRateIndex.model "/>
       <xsd:element name="interestRate" type=" PositiveDecimal " minOccurs="0"/>
       <xsd:element name="margin" type=" xsd:decimal " minOccurs="0"/>
       <xsd:element name="mandatoryCostRate" type=" PositiveDecimal " minOccurs="0"/>
       <xsd:element name="allInRate" type=" PositiveDecimal " minOccurs="0"/>
       <xsd:element name="interestDayBasis" type=" DayCountFraction " minOccurs="0"/>
       <xsd:element name="tenor" type=" Period " minOccurs="0"/>
       <xsd:element name="projectedInterestAmount" type=" ParticipationAmount " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LcAmendmentNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **LcAmendmentNotice** (by extension)
Sub-types:	None

Name	LcAmendmentNotice
Abstract	no
Documentation	Letter of Credit amendment notice.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'
```

<lenderPartyReference> PartyReference </lenderPartyReference> [0..1]

'A reference to the lender(s) associated with the associated loan contract(s).'

<dealSummary> DealSummary </dealSummary> [1]

'A data structure which contains the identifying characteristics of the given deal.'

<facilitySummary> FacilitySummary </facilitySummary> [1]

'A data structure which contains the identifying characteristics of the given facility.'

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

<effectiveDate> xsd:date **</effectiveDate>** [1]

'Effective date of the amendment.'

<priorLc> LetterOfCredit **</priorLc>** [1]

'The letter of credit before the amendment.'

<postLc> LetterOfCredit **</postLc>** [1]

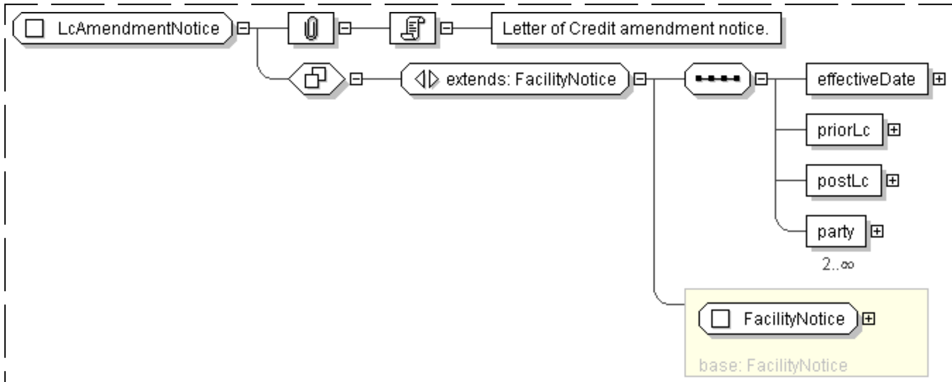
'The letter of credit after the amendment.'

<party> Party **</party>** [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="LcAmendmentNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="effectiveDate" type=" xsd:date "/>
            <xsd:element name="priorLc" type=" LetterOfCredit "/>
```

```
            <xsd:element name="postLc" type=" LetterOfCredit "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: LcBalanceNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **LcBalanceNotice** (by extension)
Sub-types:	None

Name	LcBalanceNotice
Abstract	no
Documentation	Letter of Credit balance change notice.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
```

'A data structure which contains the identifying characteristics of the given facility.'

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

<lcSummary> LcSummary </lcSummary> [1]

'A basic set of fields to identify an LC. Please note that the partyReference within the contract identifier should refer to the Issuing Bank.'

<effectiveDate> xsd:date </effectiveDate> [1]

'Effective date of the balance change.'

<priorAmount> ParticipationAmount </priorAmount> [0..1]

'The global and lender share amount of the L/C before any associated balance change.'

<balanceChangeAmount> ParticipationAmount </balanceChangeAmount> [1]

'The amount that the L/C has shifted by. Shown at both the global and share levels.'

<currentAmount> ParticipationAmount </currentAmount> [1]

'The global and lender share amount of the L/C after any associated balance change.'

<lcDrawFlag> xsd:boolean </lcDrawFlag> [1]

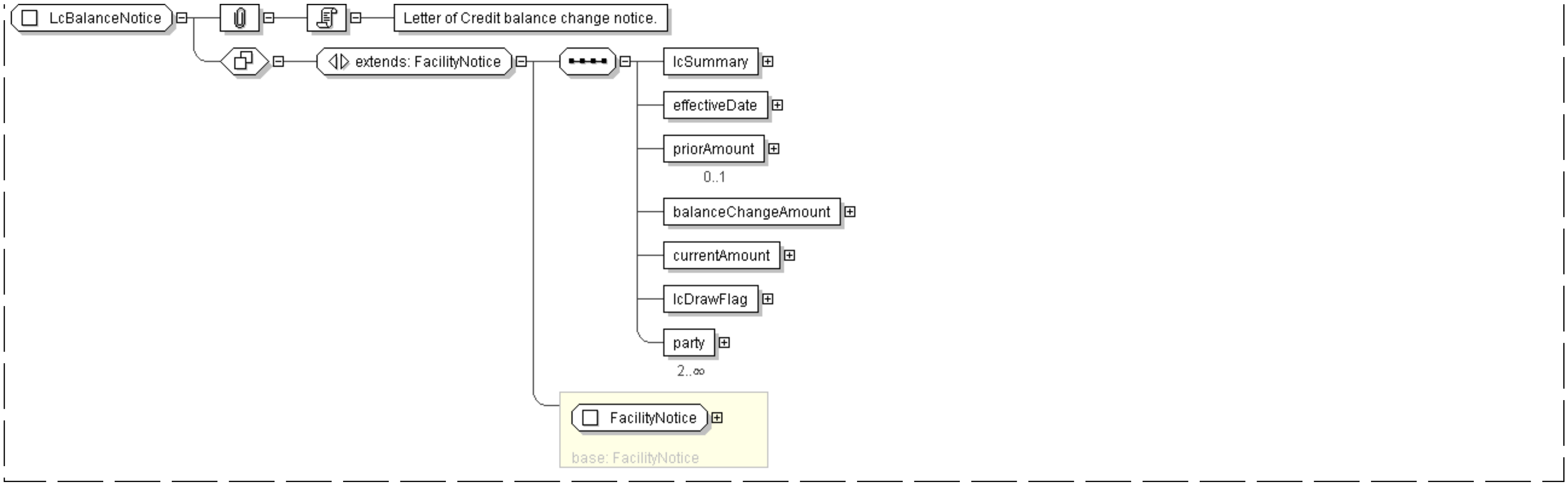
'Set to false for a normal increase or decrease in the LC amount. An LC draw results in a reduction of the LC amount and signifies that a loan drawdown will take place in conjunction with this message.'

<party> Party </party> [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="LcBalanceNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="lcSummary" type=" LcSummary "/>
            <xsd:element name="effectiveDate" type=" xsd:date "/>
            <xsd:element name="priorAmount" type=" ParticipationAmount " minOccurs="0"/>
            <xsd:element name="balanceChangeAmount" type=" ParticipationAmount "/>
            <xsd:element name="currentAmount" type=" ParticipationAmount "/>
            <xsd:element name="lcDrawFlag" type=" xsd:boolean "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: LcEvergreenOption

Super-types:	None
Sub-types:	None

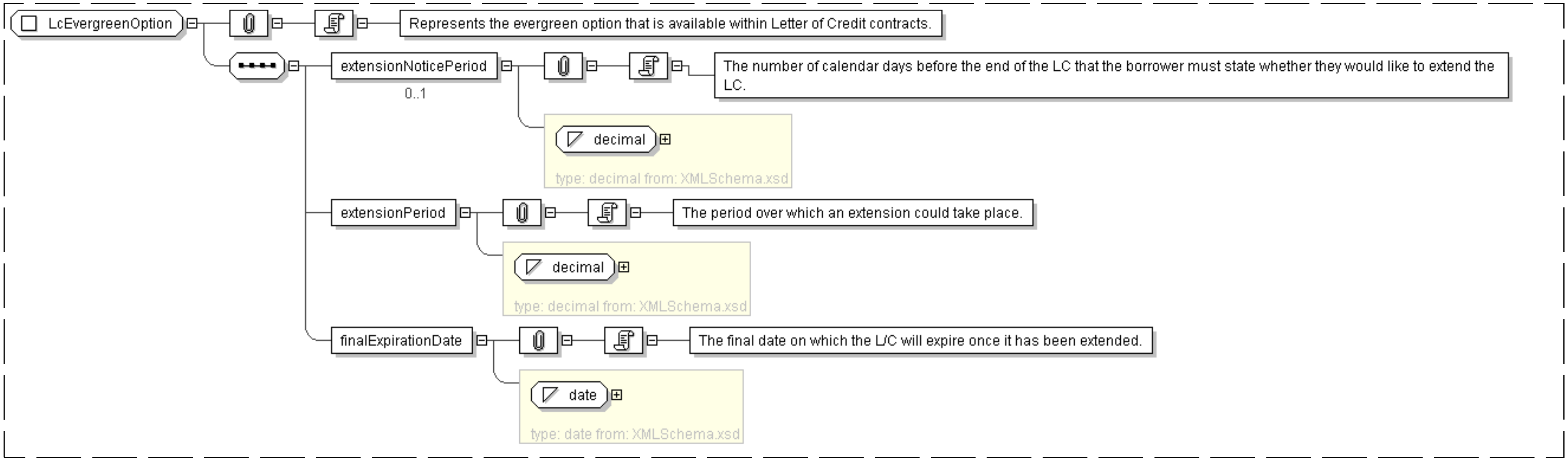
Name	LcEvergreenOption
Used by (from the same schema document)	Complex Type **LetterOfCredit**
Abstract	no
Documentation	Represents the evergreen option that is available within Letter of Credit contracts.

XML Instance Representation

```
<...>
   <extensionNoticePeriod> xsd:decimal </extensionNoticePeriod> [0..1]
   'The number of calendar days before the end of the LC that the borrower must state whether
   they would like to extend the LC.'

   <extensionPeriod> xsd:decimal </extensionPeriod> [1]
   'The period over which an extension could take place.'
```

```
    <finalExpirationDate> xsd:date </finalExpirationDate> [1]
    'The final date on which the L/C will expire once it has been extended.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LcEvergreenOption">
   <xsd:sequence>
      <xsd:element name="extensionNoticePeriod" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="extensionPeriod" type=" xsd:decimal "/>
      <xsd:element name="finalExpirationDate" type=" xsd:date "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LcIssuanceNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **LcIssuanceNotice** (by extension)
Sub-types:	None

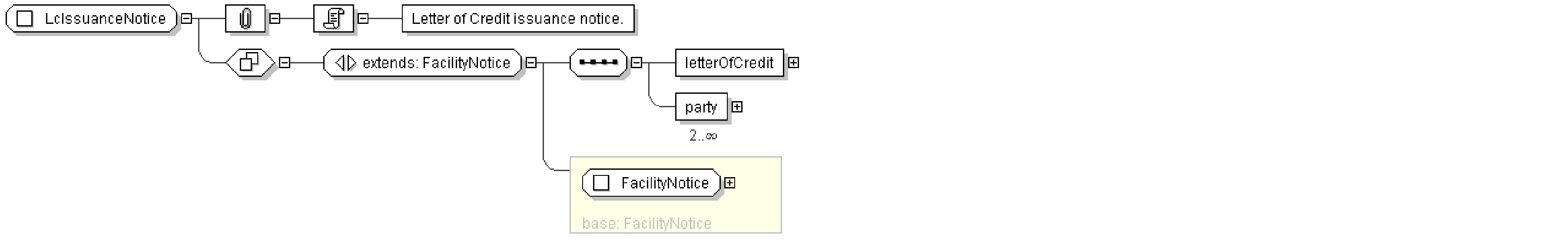
Name	LcIssuanceNotice
Abstract	no
Documentation	Letter of Credit issuance notice.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'
```

```
"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
   business event.'

   <comments> xsd:string </comments> [0..1]
   'A free-form, manually entered field which will be used by users directly for
   additional information.'

   <letterOfCredit> LetterOfCredit </letterOfCredit> [1]
   <party> Party </party> [2..*]
   'The parties involved with the associated transaction.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LcIssuanceNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="letterOfCredit" type=" LetterOfCredit "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: LcPosition

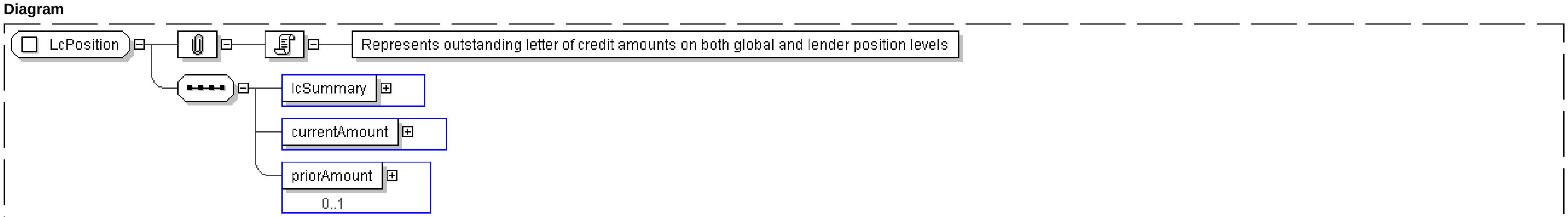
Super-types:	None
Sub-types:	None

Name	LcPosition
Used by (from the same schema document)	Complex Type **FacilityCommitmentPosition**
Abstract	no
Documentation	Represents outstanding letter of credit amounts on both global and lender position levels

XML Instance Representation

```
<...>
   <lcSummary> LcSummary </lcSummary> [1]
   <currentAmount> ParticipationAmount </currentAmount> [1]
   <priorAmount> ParticipationAmount </priorAmount> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LcPosition">
   <xsd:sequence>
      <xsd:element name="lcSummary" type=" LcSummary "/>
      <xsd:element name="currentAmount" type=" ParticipationAmount "/>
```

```
        <xsd:element name="priorAmount" type=" ParticipationAmount " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LcSummary

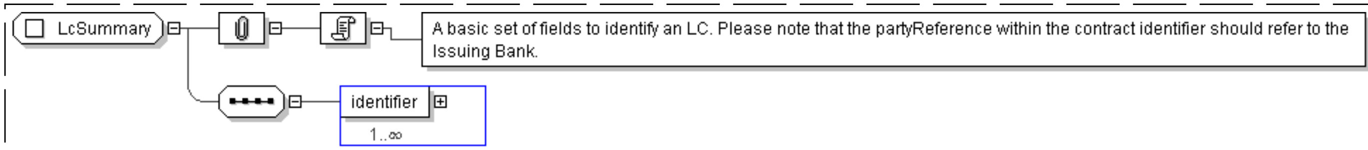
Super-types:	None
Sub-types:	None

Name	LcSummary
Used by (from the same schema document)	Complex Type **LcBalanceNotice** , Complex Type **LcPosition** , Complex Type **LcTerminationNotice** , Complex Type **LetterOfCredit** , Complex Type **OneOffFeeNotice** , Complex Type **OnGoingFeeRateChange** , Complex Type **OnGoingFeeNotice**
Abstract	no
Documentation	A basic set of fields to identify an LC. Please note that the partyReference within the contract identifier should refer to the Issuing Bank.

XML Instance Representation

```
<...>
   <identifier> ContractIdentifier </identifier> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LcSummary">
   <xsd:sequence>
      <xsd:element name="identifier" type=" ContractIdentifier " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LcTerminationNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **LcTerminationNotice** (by extension)
Sub-types:	None

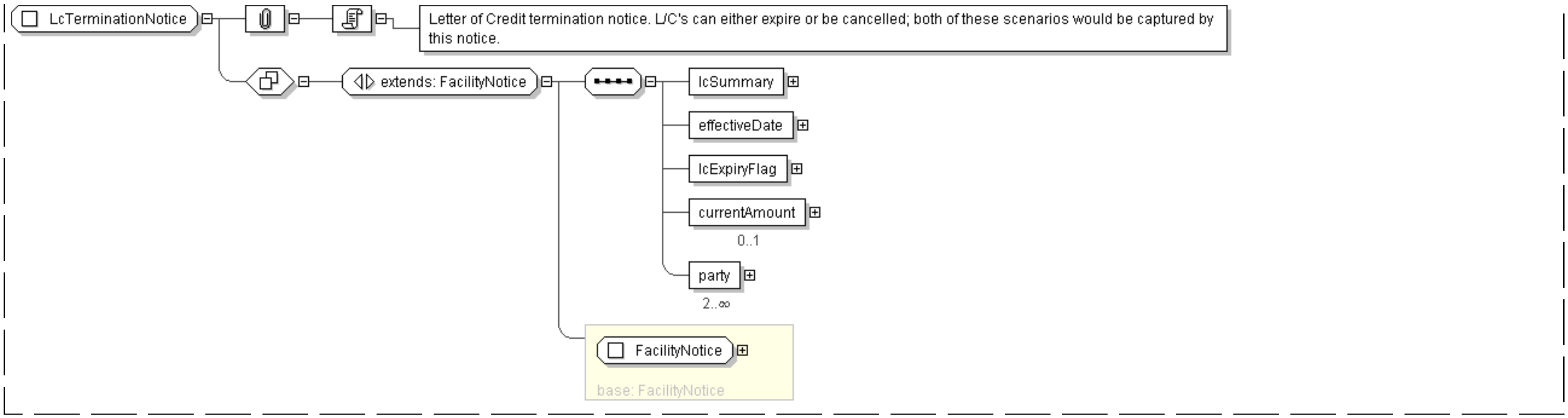
Name	LcTerminationNotice
Abstract	no
Documentation	Letter of Credit termination notice. L/C's can either expire or be cancelled; both of these scenarios would be captured by this notice.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
```

```
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
   business event.'

   <comments> xsd:string </comments> [0..1]
   'A free-form, manually entered field which will be used by users directly for
   additional information.'

   <lcSummary> LcSummary </lcSummary> [1]
   <effectiveDate> xsd:date </effectiveDate> [1]
   <lcExpiryFlag> xsd:boolean </lcExpiryFlag> [1]
   'Determines whether this event was created due to a natural expiration of the LC or
   an unscheduled cancellation.'

   <currentAmount> ParticipationAmount </currentAmount> [0..1]
   <party> Party </party> [2..*]
   'The parties involved with the associated transaction.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LcTerminationNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="lcSummary" type=" LcSummary "/>
            <xsd:element name="effectiveDate" type=" xsd:date "/>
            <xsd:element name="lcExpiryFlag" type=" xsd:boolean "/>
            <xsd:element name="currentAmount" type=" ParticipationAmount " minOccurs="0"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: LenderLoanContractPeriod

Super-types:	None
Sub-types:	None

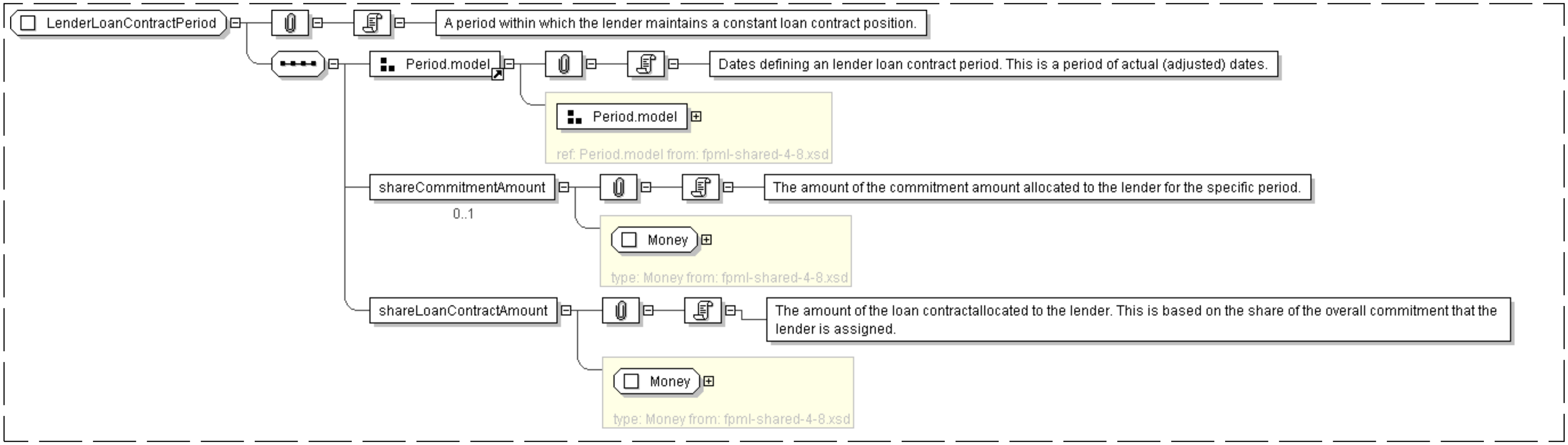
Name	LenderLoanContractPeriod
Used by (from the same schema document)	Complex Type **InterestAccrualSchedule**
Abstract	no
Documentation	A period within which the lender maintains a constant loan contract position.

XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'

   <shareCommitmentAmount> Money </shareCommitmentAmount> [0..1]
   'The amount of the commitment amount allocated to the lender for the specific period.'

   <shareLoanContractAmount> Money </shareLoanContractAmount> [1]
   'The amount of the loan contractallocated to the lender. This is based on the share of
```

```
    the overall commitment that the lender is assigned.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LenderLoanContractPeriod">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="shareCommitmentAmount" type=" Money " minOccurs="0"/>
      <xsd:element name="shareLoanContractAmount" type=" Money "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LenderPositionPeriod

Super-types:	None
Sub-types:	None

Name	LenderPositionPeriod
Used by (from the same schema document)	Complex Type **FeeAccrualSchedule** , Complex Type **FeeAccrualSchedule** , Complex Type **FeeAccrualSchedule** , Complex Type **FeeAccrualSchedule**
Abstract	no
Documentation	A period within which the lender maintains a constant position amount.

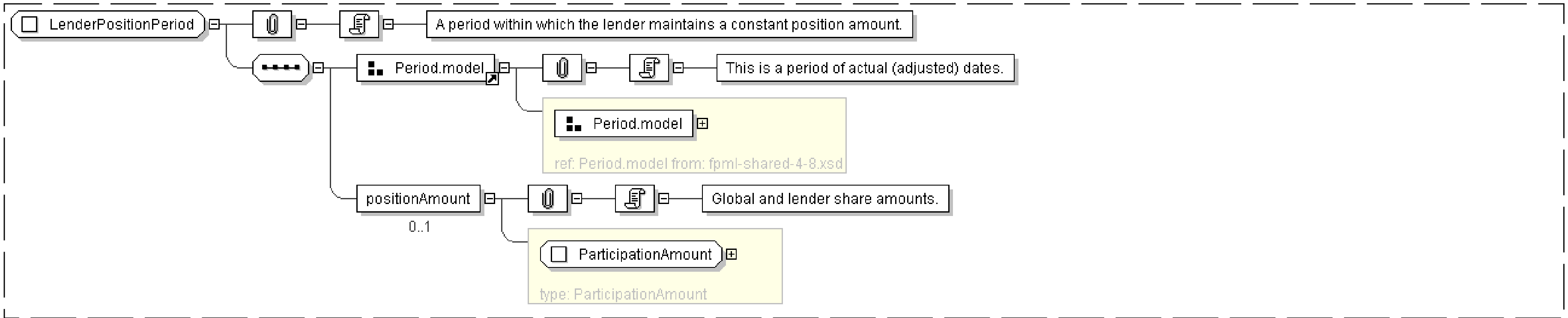
XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'

   <positionAmount> ParticipationAmount </positionAmount> [0..1]
```

'Global and lender share amounts.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="LenderPositionPeriod">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="positionAmount" type=" ParticipationAmount " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LetterOfCredit

Super-types:	None
Sub-types:	None

Name	LetterOfCredit
Used by (from the same schema document)	Complex Type **LcAmendmentNotice** , Complex Type **LcAmendmentNotice** , Complex Type **LcIssuanceNotice**
Abstract	no
Documentation	An unfunded borrowing in the form of a Letter of Credit.

XML Instance Representation

<...>
<lcSummary> LcSummary </lcSummary> [1]

'A basic set of fields to identify an LC. Please note that the partyReference within the contract identifier should refer to the Issuing Bank.'

<lcType> LcTypeEnum </lcType> [1]

'Defines the type of Letter of Credit that is issued.'

<lcPurpose> LcPurposeEnum </lcPurpose> [1]

'Defines the purpose of a Letter of Credit.'

<borrowerPartyReference> PartyReference </borrowerPartyReference> [1]

'There could be multiple borrowers against a loan contract however the agents have been trying to promote the concept of an administrative borrower. Hence, only one being shown in the field list.'

Start Choice [1]
<beneficiaryPartyReference> PartyReference </beneficiaryPartyReference> [1]

'A party reference of the beneficiary.'

<beneficiaryPartyName> xsd:string </beneficiaryPartyName> [1]

'A textual descriptor of the beneficiary.'

End Choice

<originalAmount> Money </originalAmount> [1]

'Original amount associated with the LC.'

<amount> Money </amount> [1]

'An amount associated with the letter of credit.'

<effectiveDate> xsd:date </effectiveDate> [1]

'Effective date of the loan contract. This is the date on which the funds are passed to the borrower.'

<expiryDate> xsd:date </expiryDate> [1]

'Maturity date of the LC.'

<fxTerms> FxTerms </fxTerms> [0..1]

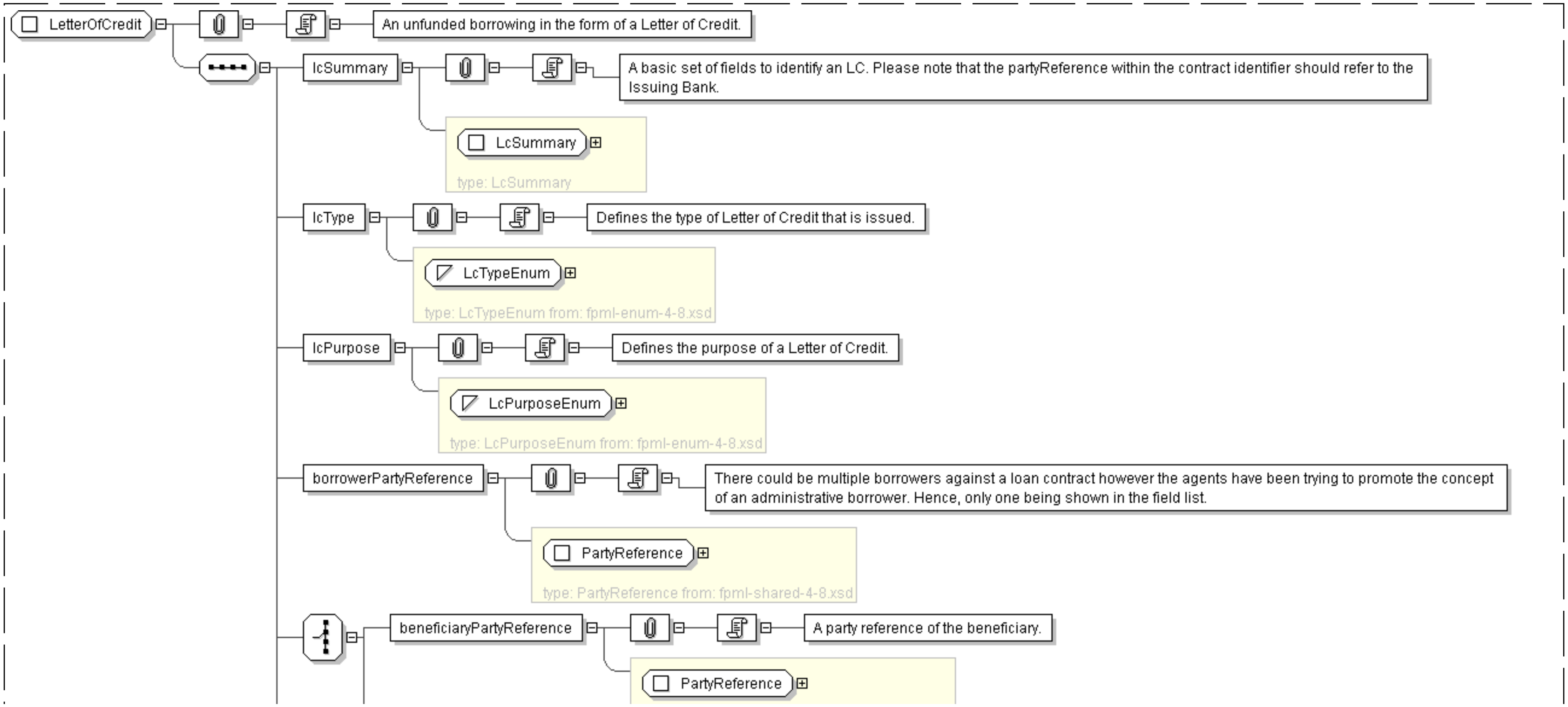
'Defines FX exchange rate when loan contract and facility currencies are different.'

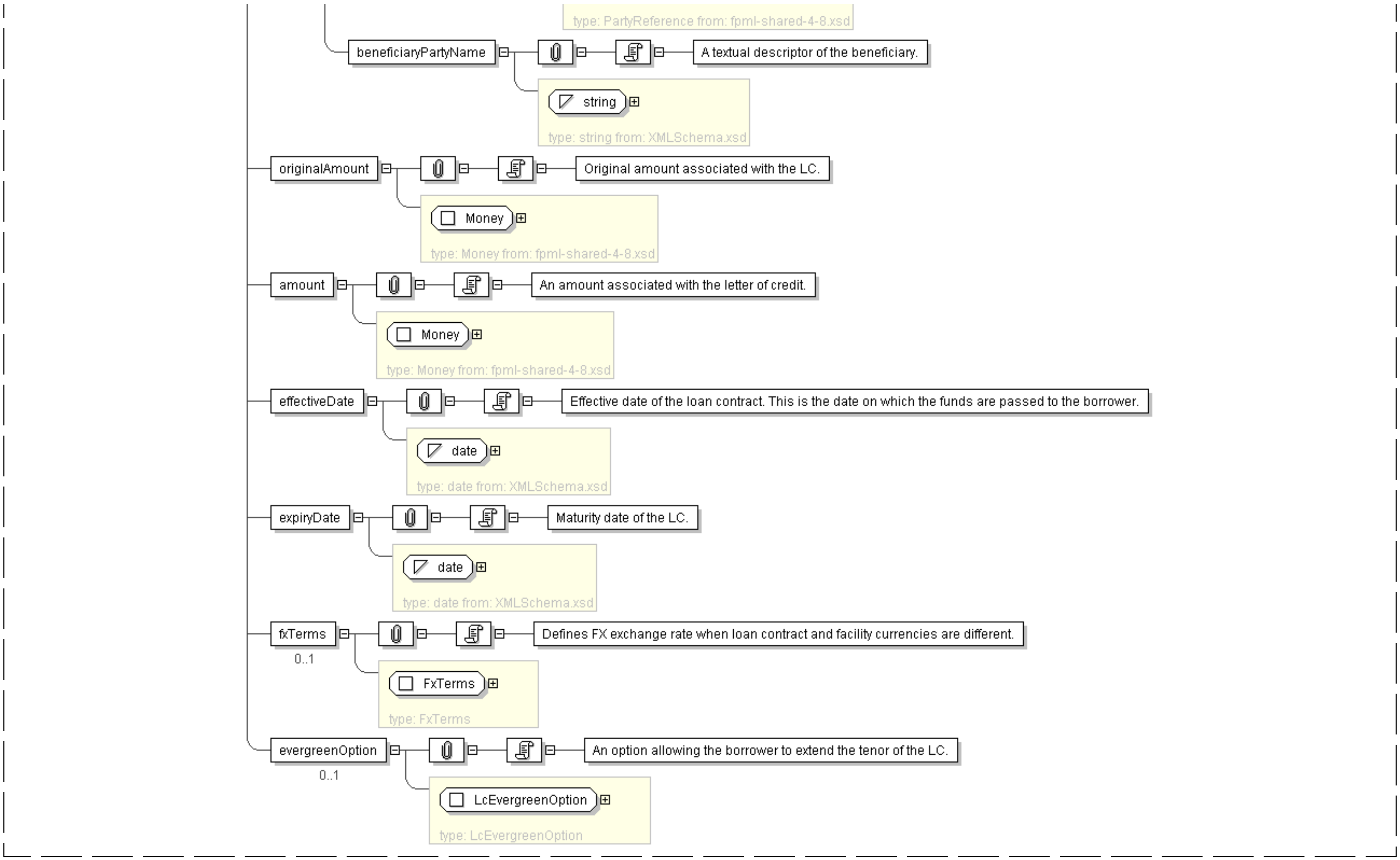
<evergreenOption> LcEvergreenOption </evergreenOption> [0..1]

'An option allowing the borrower to extend the tenor of the LC.'

</...>

Diagram





Schema Component Representation

```
<xsd:complexType name="LetterOfCredit">
   <xsd:sequence>
      <xsd:element name="lcSummary" type=" LcSummary "/>
      <xsd:element name="lcType" type=" LcTypeEnum "/>
      <xsd:element name="lcPurpose" type=" LcPurposeEnum "/>
      <xsd:element name="borrowerPartyReference" type=" PartyReference "/>
      <xsd:choice>
         <xsd:element name="beneficiaryPartyReference" type=" PartyReference "/>
         <xsd:element name="beneficiaryPartyName" type=" xsd:string "/>
      </xsd:choice>
      <xsd:element name="originalAmount" type=" Money "/>
      <xsd:element name="amount" type=" Money "/>
      <xsd:element name="effectiveDate" type=" xsd:date "/>
      <xsd:element name="expiryDate" type=" xsd:date "/>
      <xsd:element name="fxTerms" type=" FxTerms " minOccurs="0"/>
```

```
        <xsd:element name="evergreenOption" type=" LcEvergreenOption " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LoanContract

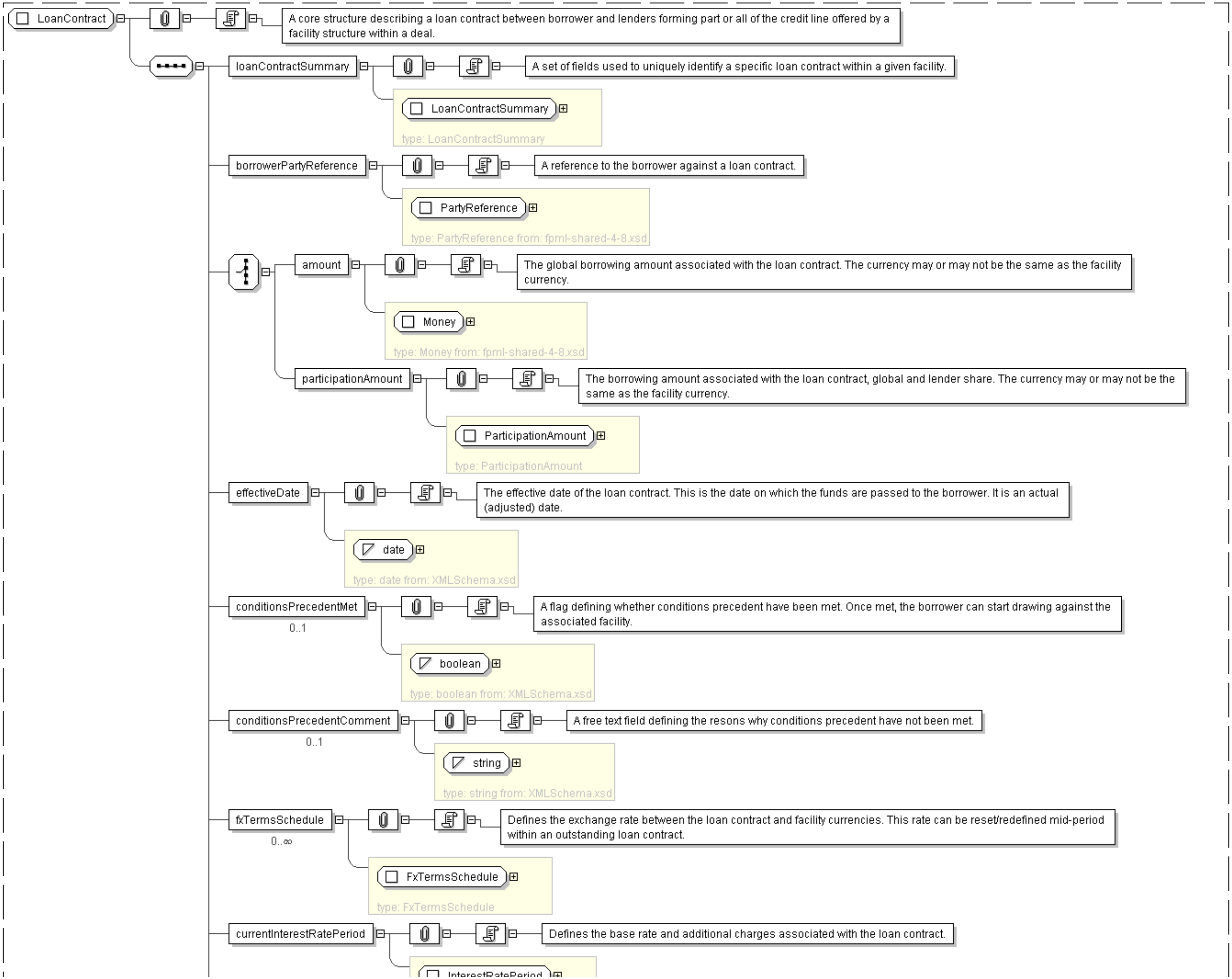
Super-types:	None
Sub-types:	None

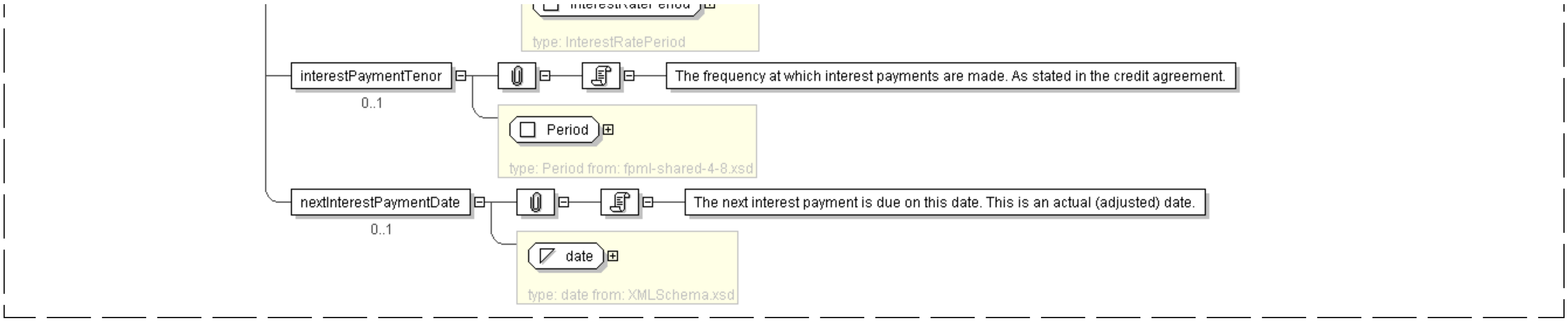
Name	LoanContract
Used by (from the same schema document)	Complex Type **LoanContractNotice** , Complex Type **NewLoanContracts**
Abstract	no
Documentation	A core structure describing a loan contract between borrower and lenders forming part or all of the credit line offered by a facility structure within a deal.

XML Instance Representation

```
<...>
    <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
    'A set of fields used to uniquely identify a specific loan contract within a given facility.'

    <borrowerPartyReference> PartyReference </borrowerPartyReference> [1]
    'A reference to the borrower against a loan contract.'

Start Choice [1]
        <amount> Money </amount> [1]
        'The global borrowing amount associated with the loan contract. The currency may or may not
        be the same as the facility currency.'

        <participationAmount> ParticipationAmount </participationAmount> [1]
        'The borrowing amount associated with the loan contract, global and lender share. The
        currency may or may not be the same as the facility currency.'

End Choice
    <effectiveDate> xsd:date </effectiveDate> [1]
    'The effective date of the loan contract. This is the date on which the funds are passed to
    the borrower. It is an actual (adjusted) date.'

    <conditionsPrecedentMet> xsd:boolean </conditionsPrecedentMet> [0..1]
    'A flag defining whether conditions precedent have been met. Once met, the borrower can
    start drawing against the associated facility.'

    <conditionsPrecedentComment> xsd:string </conditionsPrecedentComment> [0..1]
    'A free text field defining the resons why conditions precedent have not been met.'

    <fxTermsSchedule> FxTermsSchedule </fxTermsSchedule> [0..*]
    'Defines the exchange rate between the loan contract and facility currencies. This rate can
    be reset/redefined mid-period within an outstanding loan contract.'

    <currentInterestRatePeriod> InterestRatePeriod </currentInterestRatePeriod> [1]
    'Defines the base rate and additional charges associated with the loan contract.'

    <interestPaymentTenor> Period </interestPaymentTenor> [0..1]
    'The frequency at which interest payments are made. As stated in the credit agreement.'

    <nextInterestPaymentDate> xsd:date </nextInterestPaymentDate> [0..1]
    'The next interest payment is due on this date. This is an actual (adjusted) date.'

</...>
```

Diagram


LoanContract
A core structure describing a loan contract between borrower and lenders forming part or all of the credit line offered by a facility structure within a deal.
loanContractSummary
A set of fields used to uniquely identify a specific loan contract within a given facility.
LoanContractSummary
type: LoanContractSummary
borrowerPartyReference
A reference to the borrower against a loan contract.
PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
amount
The global borrowing amount associated with the loan contract. The currency may or may not be the same as the facility currency.
Money
type: Money from: fpml-shared-4-8.xsd
participationAmount
The borrowing amount associated with the loan contract, global and lender share. The currency may or may not be the same as the facility currency.
ParticipationAmount
type: ParticipationAmount
effectiveDate
The effective date of the loan contract. This is the date on which the funds are passed to the borrower. It is an actual (adjusted) date.
date
type: date from: XMLSchema.xsd
conditionsPrecedentMet
0..1
A flag defining whether conditions precedent have been met. Once met, the borrower can start drawing against the associated facility.
boolean
type: boolean from: XMLSchema.xsd
conditionsPrecedentComment
0..1
A free text field defining the resons why conditions precedent have not been met.
string
type: string from: XMLSchema.xsd
fxTermsSchedule
0..∞
Defines the exchange rate between the loan contract and facility currencies. This rate can be reset/redefined mid-period within an outstanding loan contract.
FxTermsSchedule
type: FxTermsSchedule
currentInterestRatePeriod
Defines the base rate and additional charges associated with the loan contract.



Schema Component Representation

```
<xsd:complexType name="LoanContract">
   <xsd:sequence>
      <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
      <xsd:element name="borrowerPartyReference" type=" PartyReference "/>
      <xsd:choice>
         <xsd:element name="amount" type=" Money "/>
         <xsd:element name="participationAmount" type=" ParticipationAmount "/>
      </xsd:choice>
      <xsd:element name="effectiveDate" type=" xsd:date "/>
      <xsd:element name="conditionsPrecedentMet" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="conditionsPrecedentComment" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="fxTermsSchedule" type=" FxTermsSchedule "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="currentInterestRatePeriod" type=" InterestRatePeriod "/>
      <xsd:element name="interestPaymentTenor" type=" Period " minOccurs="0"/>
      <xsd:element name="nextInterestPaymentDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LoanContractNotice

Super-types:	NotificationMessage < **LoanContractNotice** (by extension)
Sub-types:	• DrawdownNotice (by extension) • InterestPaymentNotice (by extension)

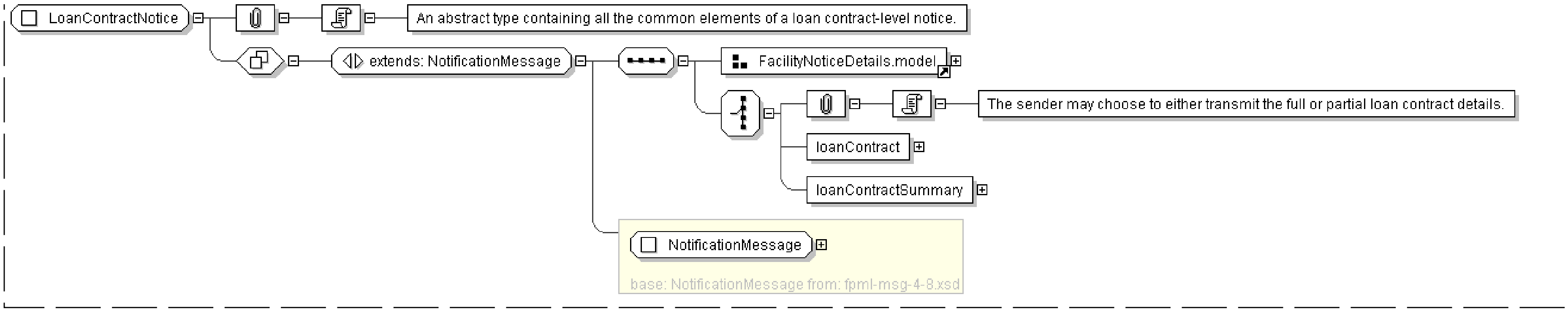
Name	LoanContractNotice
Abstract	yes
Documentation	An abstract type containing all the common elements of a loan contract-level notice.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
```

```
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
   business event.'

   <comments> xsd:string </comments> [0..1]
   'A free-form, manually entered field which will be used by users directly for
   additional information.'

Start Choice [1]
'The sender may choose to either transmit the full or partial loan contract details.'

      <loanContract> LoanContract </loanContract> [1]
      'A core structure describing a loan contract between borrower and lenders forming part or
      all of the credit line offered by a facility structure within a deal.'

      <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
      'A basic set of fields used to uniquely identify the loan contract.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LoanContractNotice" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:group ref=" FacilityNoticeDetails.model "/>
            <xsd:choice>
               <xsd:element name="loanContract" type=" LoanContract "/>
               <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: LoanContractPosition

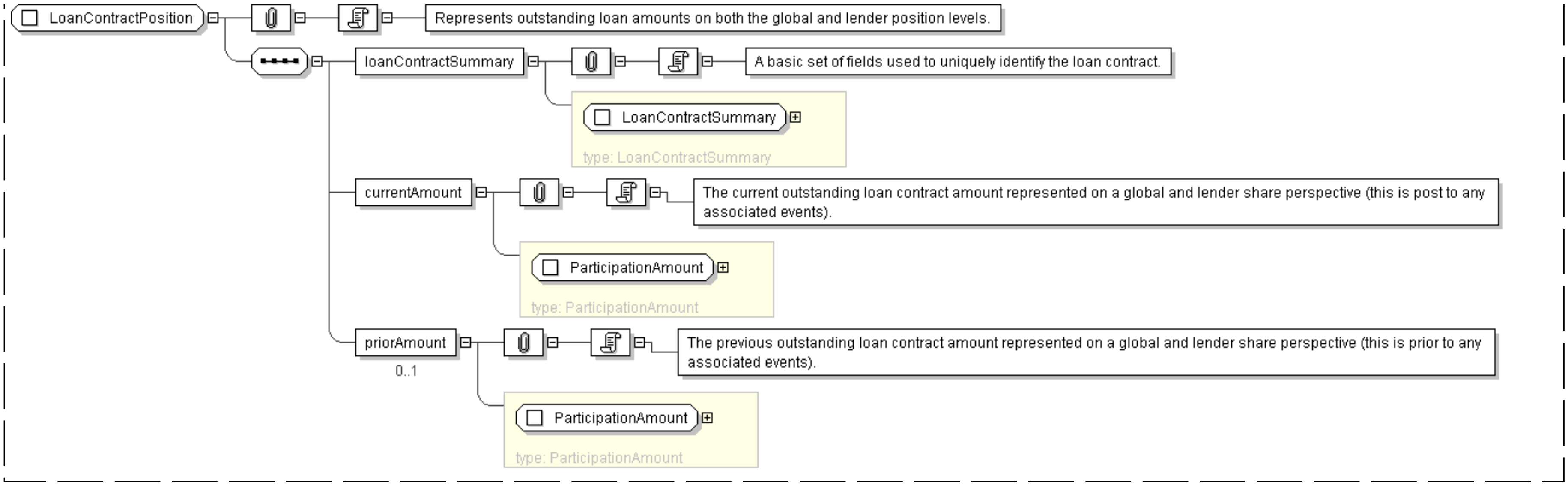
Super-types:	None
Sub-types:	None

Name	LoanContractPosition
Used by (from the same schema document)	Complex Type **FacilityCommitmentPosition**
Abstract	no
Documentation	Represents outstanding loan amounts on both the global and lender position levels.

XML Instance Representation

```
<...>
   <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
   'A basic set of fields used to uniquely identify the loan contract.'

   <currentAmount> ParticipationAmount </currentAmount> [1]
   'The current outstanding loan contract amount represented on a global and lender
   share perspective (this is post to any associated events).'

   <priorAmount> ParticipationAmount </priorAmount> [0..1]
   'The previous outstanding loan contract amount represented on a global and lender
   share perspective (this is prior to any associated events).'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LoanContractPosition">
   <xsd:sequence>
      <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
      <xsd:element name="currentAmount" type=" ParticipationAmount "/>
      <xsd:element name="priorAmount" type=" ParticipationAmount " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LoanContractRepayment

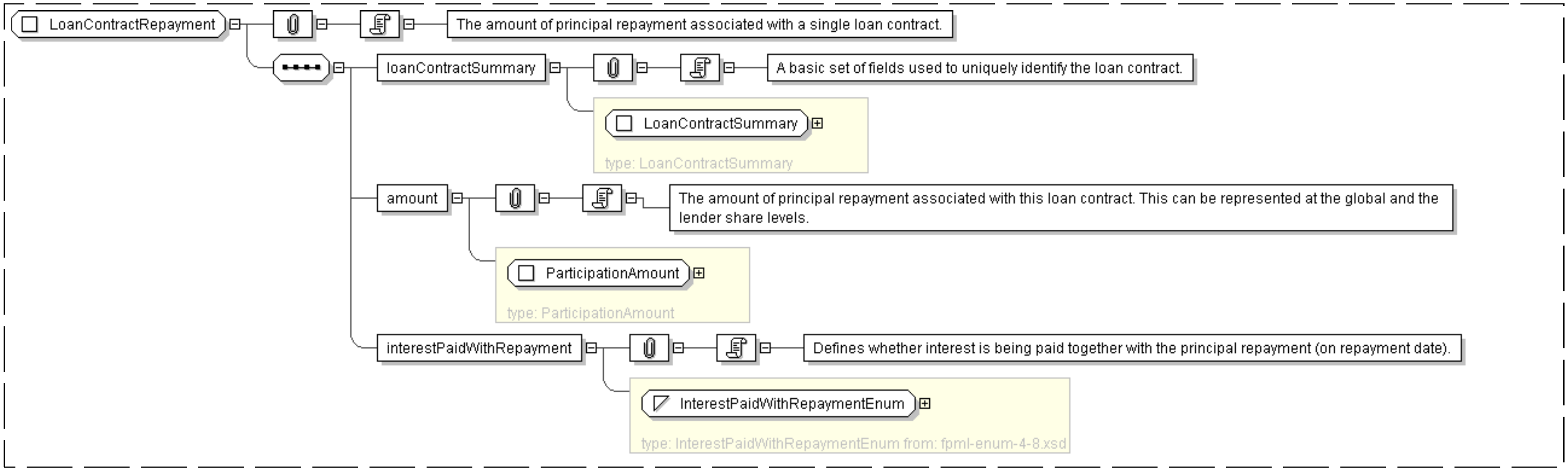
Super-types:	None
Sub-types:	None

Name	LoanContractRepayment
Used by (from the same schema document)	Complex Type **Repayment**
Abstract	no
Documentation	The amount of principal repayment associated with a single loan contract.

XML Instance Representation

```
<...>
   <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
   'A basic set of fields used to uniquely identify the loan contract.'

   <amount> ParticipationAmount </amount> [1]
   'The amount of principal repayment associated with this loan contract. This can be
   represented at the global and the lender share levels.'

   <interestPaidWithRepayment> InterestPaidWithRepaymentEnum </interestPaidWithRepayment> [1]
   'Defines whether interest is being paid together with the principal repayment (on
   repayment date).'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LoanContractRepayment">
   <xsd:sequence>
      <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
      <xsd:element name="amount" type=" ParticipationAmount "/>
      <xsd:element name="interestPaidWithRepayment" type=" InterestPaidWithRepaymentEnum "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: LoanContractSummary

Super-types:	None
Sub-types:	None

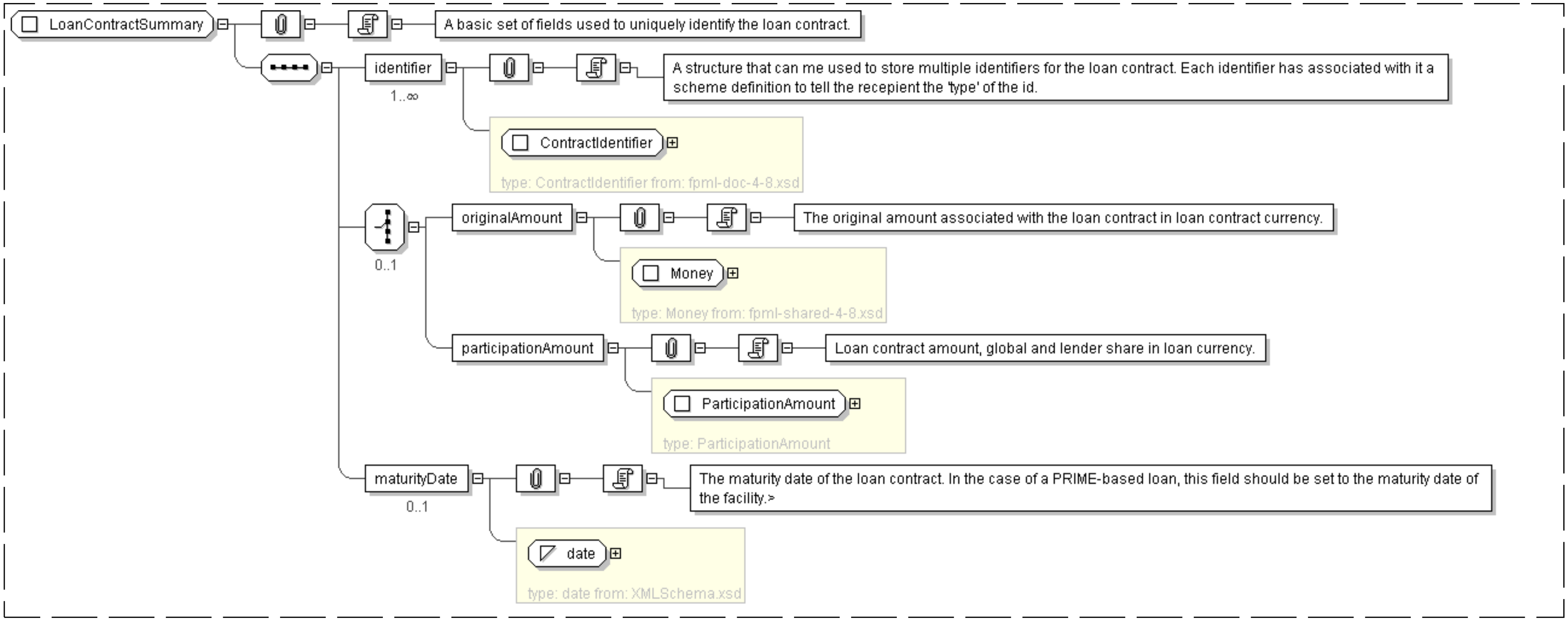
Name	LoanContractSummary
Used by (from the same schema document)	Complex Type LoanContract , Complex Type LoanContractNotice , Complex Type LoanContractPosition , Complex Type LoanContractRepayment , Complex Type MarginRateChange , Complex Type MaturingLoanContract , Complex Type OneOffFeeNotice , Complex Type OnGoingFeeNotice
Abstract	no
Documentation	A basic set of fields used to uniquely identify the loan contract.

XML Instance Representation

```
<...>
   <identifier> ContractIdentifier </identifier> [1..*]
   'A structure that can me used to store multiple identifiers for the loan contract.
   Each identifier has associated with it a scheme definition to tell the recepient the \'type
   \' of the id.'

Start Choice [0..1]
      <originalAmount> Money </originalAmount> [1]
      'The original amount associated with the loan contract in loan contract currency.'

      <participationAmount> ParticipationAmount </participationAmount> [1]
      'Loan contract amount, global and lender share in loan currency.'
```

```
End Choice
   <maturityDate> xsd:date </maturityDate> [0..1]
   'The maturity date of the loan contract. In the case of a PRIME-based loan, this field
   should be set to the maturity date of the facility.>'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="LoanContractSummary">
   <xsd:sequence>
      <xsd:element name="identifier" type=" ContractIdentifier " maxOccurs="unbounded"/>
      <xsd:choice minOccurs="0">
         <xsd:element name="originalAmount" type=" Money "/>
         <xsd:element name="participationAmount" type=" ParticipationAmount "/>
      </xsd:choice>
      <xsd:element name="maturityDate" type=" xsd:date " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: MarginRateChange

Super-types:	None
Sub-types:	None

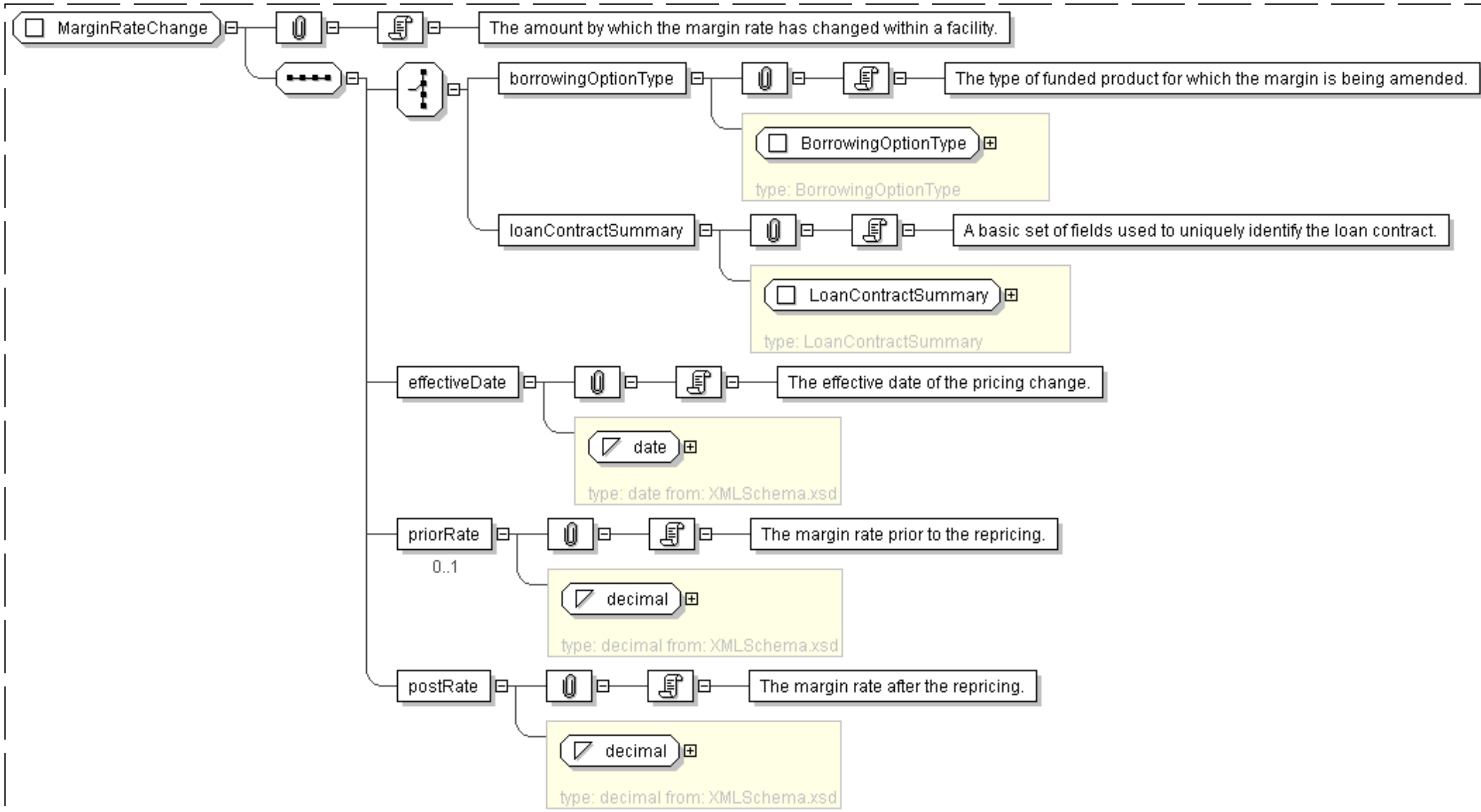
Name	MarginRateChange
Used by (from the same schema document)	Complex Type **PricingChangeNotice**

Abstract	no
Documentation	The amount by which the margin rate has changed within a facility.

XML Instance Representation

```
<...>
Start Choice [1]
      <borrowingOptionType> BorrowingOptionType </borrowingOptionType> [1]
      'The type of funded product for which the margin is being amended.'

      <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
      'A basic set of fields used to uniquely identify the loan contract.'

End Choice
   <effectiveDate> xsd:date </effectiveDate> [1]
   'The effective date of the pricing change.'

   <priorRate> xsd:decimal </priorRate> [0..1]
   'The margin rate prior to the repricing.'

   <postRate> xsd:decimal </postRate> [1]
   'The margin rate after the repricing.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MarginRateChange">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="borrowingOptionType" type=" BorrowingOptionType "/>
         <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
      </xsd:choice>
      <xsd:element name="effectiveDate" type=" xsd:date "/>
      <xsd:element name="priorRate" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="postRate" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: MaturingLoanContract

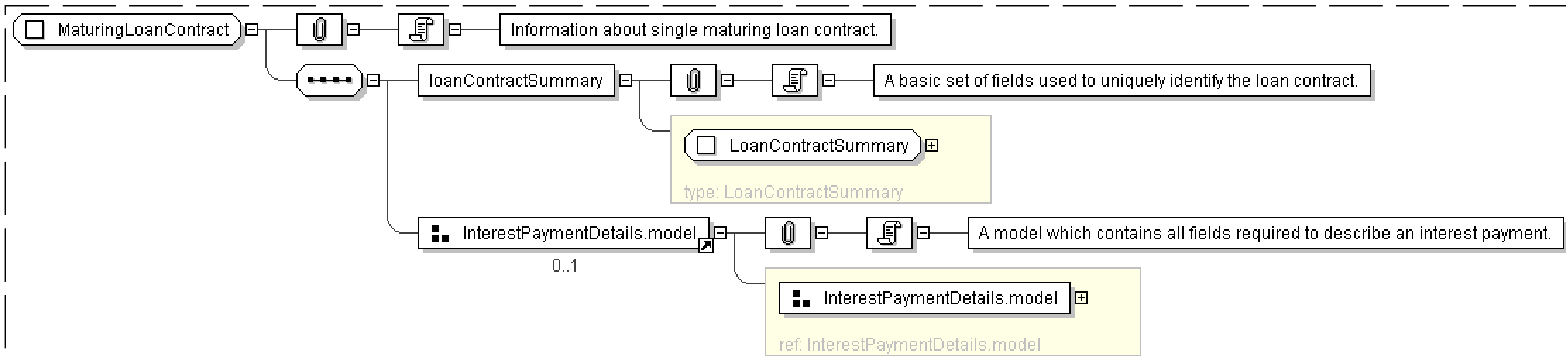
Super-types:	None
Sub-types:	None

Name	MaturingLoanContract
Used by (from the same schema document)	Complex Type **MaturingLoanContracts**
Abstract	no
Documentation	Information about single maturing loan contract.

XML Instance Representation

```
<...>
   <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
   'A basic set of fields used to uniquely identify the loan contract.'

Start Group: InterestPaymentDetails.model [0..1]
'A model which contains all fields required to describe an interest payment.'

      <interestPayment> InterestPayment </interestPayment> [1]
      'Represents the total amount of interest paid by the borrower to the agent bank and the
      share of it paid to the lender.'

      <interestAccrualSchedule> InterestAccrualSchedule </interestAccrualSchedule> [1]
      'A schedule that incorporates all sub-periods of an interest accrual calculation.'

End Group: InterestPaymentDetails.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MaturingLoanContract">
   <xsd:sequence>
      <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
      <xsd:group ref=" InterestPaymentDetails.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: MaturingLoanContracts

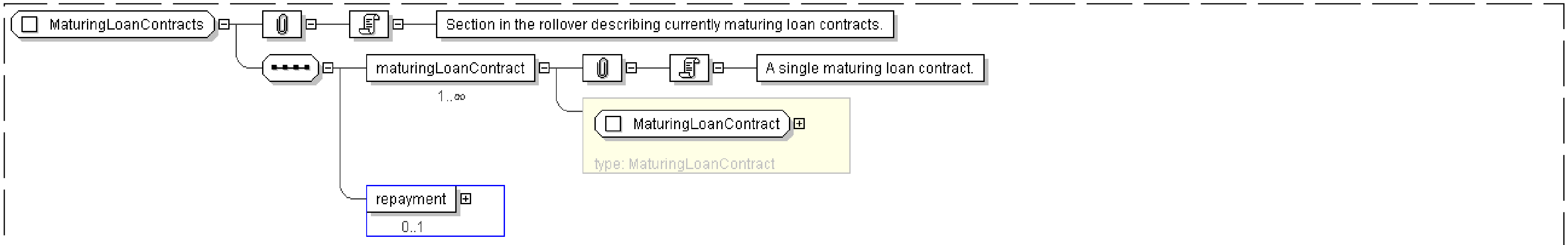
Super-types:	None
Sub-types:	None

Name	MaturingLoanContracts
Used by (from the same schema document)	Complex Type **RolloverNotice**
Abstract	no
Documentation	Section in the rollover describing currently maturing loan contracts.

XML Instance Representation

```
<...>
   <maturingLoanContract> MaturingLoanContract </maturingLoanContract> [1..*]
   'A single maturing loan contract.'

   <repayment> Repayment </repayment> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MaturingLoanContracts">
   <xsd:sequence>
      <xsd:element name="maturingLoanContract" type=" MaturingLoanContract " maxOccurs="unbounded"/>
      <xsd:element name="repayment" type=" Repayment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: NewLoanContracts

Super-types:	None
Sub-types:	None

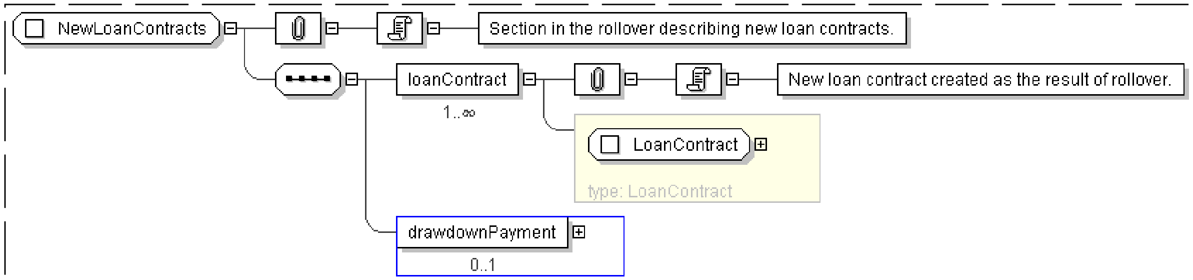
Name	NewLoanContracts
Used by (from the same schema document)	Complex Type **RolloverNotice**

Abstract	no
Documentation	Section in the rollover describing new loan contracts.

XML Instance Representation

```
<...>
   <loanContract> LoanContract </loanContract> [1..*]
   'New loan contract created as the result of rollover.'

   <drawdownPayment> DrawdownPayment </drawdownPayment> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NewLoanContracts">
   <xsd:sequence>
      <xsd:element name="loanContract" type=" LoanContract " maxOccurs="unbounded"/>
      <xsd:element name="drawdownPayment" type=" DrawdownPayment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OnGoingFeeNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **OnGoingFeeNotice** (by extension)
Sub-types:	None

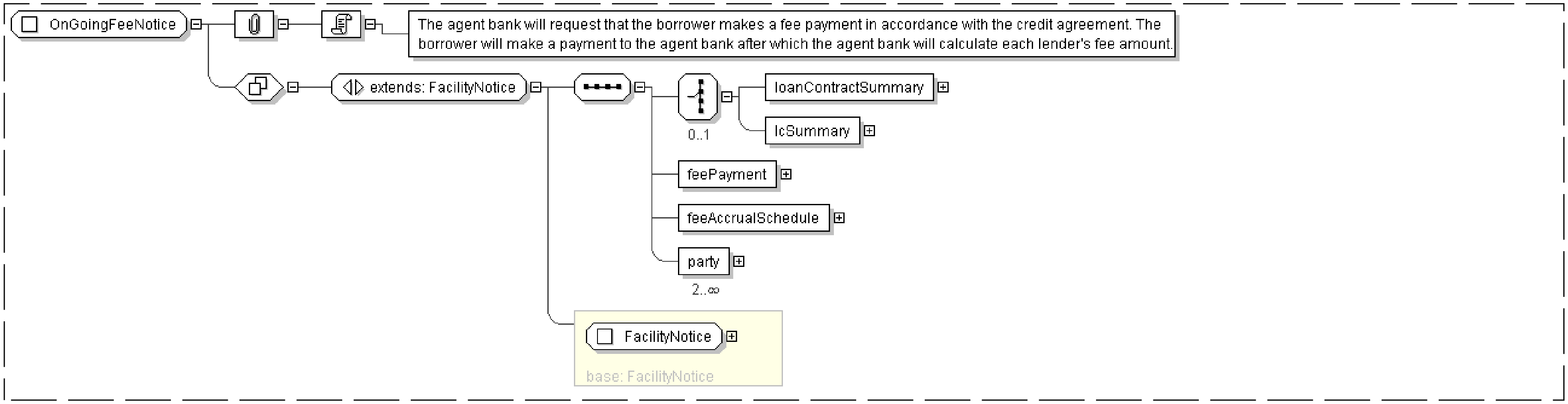
Name	OnGoingFeeNotice
Abstract	no
Documentation	The agent bank will request that the borrower makes a fee payment in accordance with the credit agreement. The borrower will make a payment to the agent bank after which the agent bank will calculate each lender's fee amount.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
```

```
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
   business event.'

   <comments> xsd:string </comments> [0..1]
   'A free-form, manually entered field which will be used by users directly for
   additional information.'

Start Choice [0..1]
      <loanContractSummary> LoanContractSummary </loanContractSummary> [1]
      'A basic set of fields used to uniquely identify the loan contract.'

      <lcSummary> LcSummary </lcSummary> [1]
      'A basic set of fields used to uniquely identify a letter of credit.'

End Choice
   <feePayment> OnGoingFeePayment </feePayment> [1]
   'A representation of the on-going fee payment.'

   <feeAccrualSchedule> FeeAccrualSchedule </feeAccrualSchedule> [1]
   'The details of the underlying elements that effect the calculation of a fee accrual.'

   <party> Party </party> [2..*]
   'The parties involved with the associated transaction.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OnGoingFeeNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:choice minOccurs="0">
               <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
               <xsd:element name="lcSummary" type=" LcSummary "/>
            </xsd:choice>
            <xsd:element name="feePayment" type=" OnGoingFeePayment "/>
            <xsd:element name="feeAccrualSchedule" type=" FeeAccrualSchedule "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OnGoingFeePayment

Super-types:	PaymentBase < **OnGoingFeePayment** (by extension)
Sub-types:	None

Name	OnGoingFeePayment
Used by (from the same schema document)	Complex Type **OnGoingFeeNotice**
Abstract	no
Documentation	The details of a payment made by the borrower to the agent bank related to a given on-going facilty fee.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <feeType> OnGoingFeeTypeEnum </feeType> [1]
   'Describes the type of the on-going fee.'

   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
```

'Date on which this period ends.'

<feeDayBasis> DayCountFraction **</feeDayBasis>** [0..1]

'The day count basis for the fee calculation period.'

<paymentDate> xsd:date **</paymentDate>** [1]

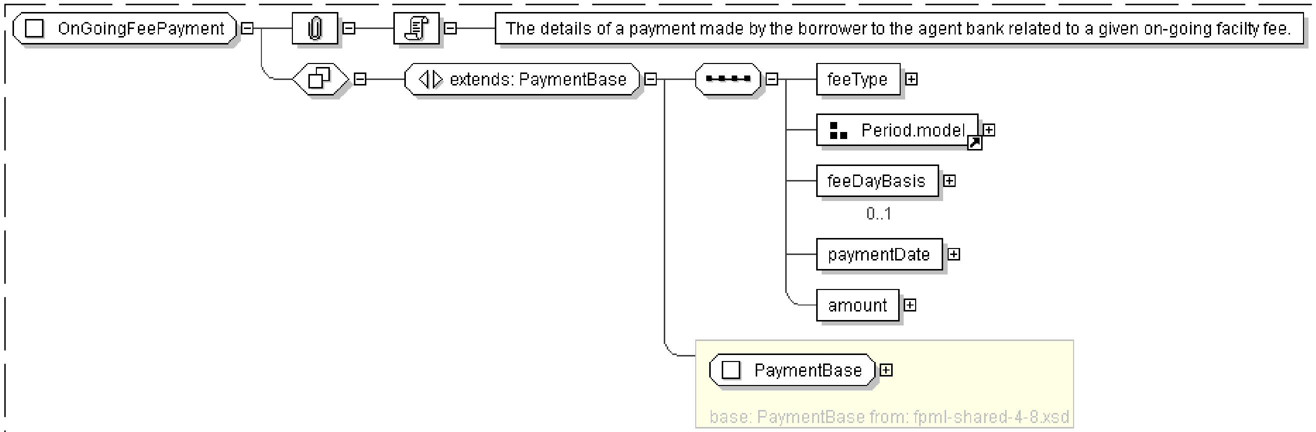
'The day on which the fee is paid by the borrower to the agent bank. This is an actual (adjusted) date.'

<amount> ParticipationAmount **</amount>** [1]

'The global amount describes the amount paid by the borrower to the agent bank whereas the share amount describes the amount paid by the agent bank to the lender.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="OnGoingFeePayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:element name="feeType" type=" OnGoingFeeTypeEnum "/>
            <xsd:group ref=" Period.model "/>
            <xsd:element name="feeDayBasis" type=" DayCountFraction " minOccurs="0"/>
            <xsd:element name="paymentDate" type=" xsd:date "/>
            <xsd:element name="amount" type=" ParticipationAmount "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OnGoingFeeRateChange

Super-types:	None
Sub-types:	None

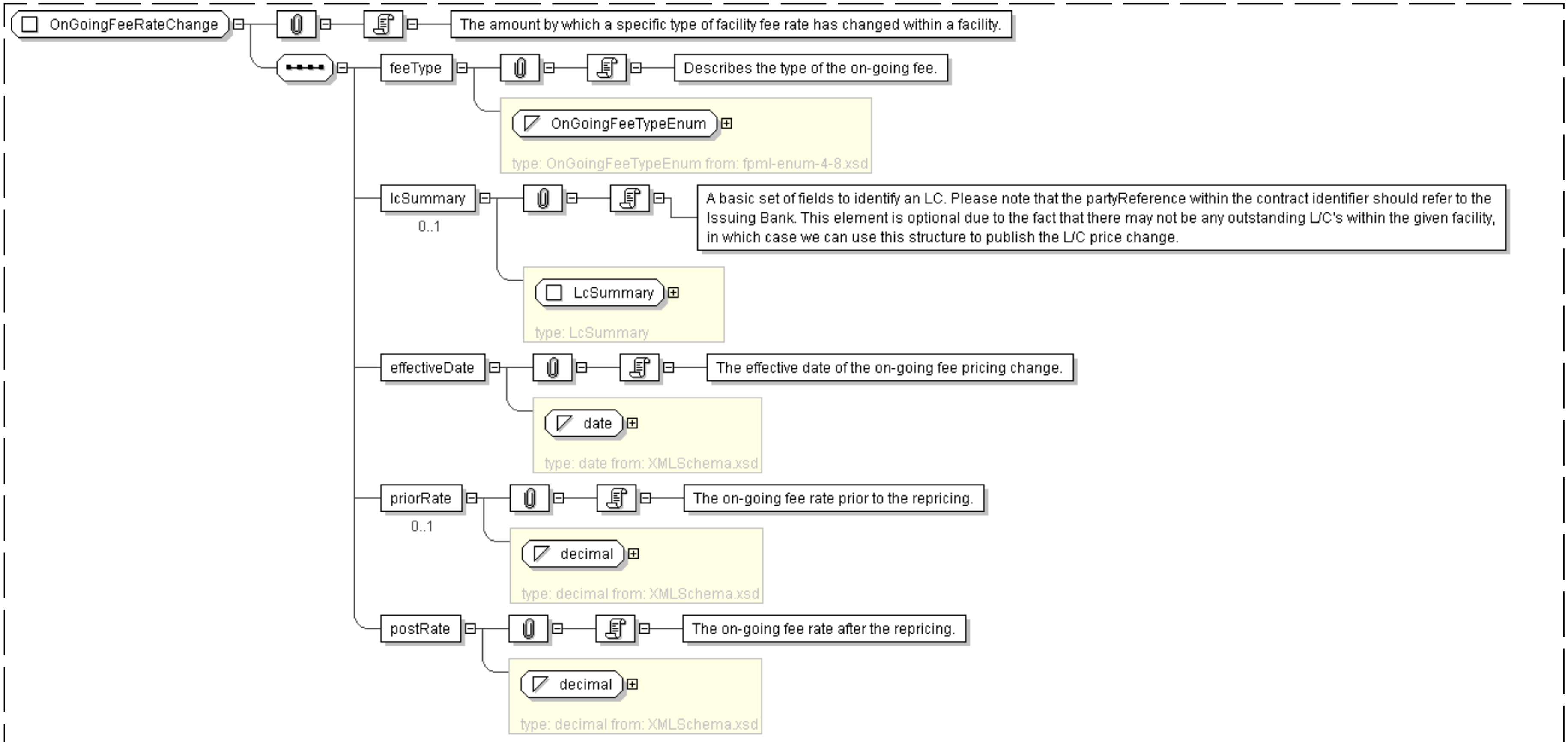
Name	OnGoingFeeRateChange
Used by (from the same schema document)	Complex Type **PricingChangeNotice** , Complex Type **PricingChangeNotice**
Abstract	no

Documentation	The amount by which a specific type of facility fee rate has changed within a facility.

XML Instance Representation

```
<...>
  <feeType> OnGoingFeeTypeEnum </feeType> [1]
  'Describes the type of the on-going fee.'

  <lcSummary> LcSummary </lcSummary> [0..1]
  'A basic set of fields to identify an LC. Please note that the partyReference within
  the contract identifier should refer to the Issuing Bank. This element is optional due to
  the fact that there may not be any outstanding L/C\'s within the given facility, in which
  case we can use this structure to publish the L/C price change.'

  <effectiveDate> xsd:date </effectiveDate> [1]
  'The effective date of the on-going fee pricing change.'

  <priorRate> xsd:decimal </priorRate> [0..1]
  'The on-going fee rate prior to the repricing.'

  <postRate> xsd:decimal </postRate> [1]
  'The on-going fee rate after the repricing.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OnGoingFeeRateChange">
   <xsd:sequence>
      <xsd:element name="feeType" type=" OnGoingFeeTypeEnum "/>
      <xsd:element name="lcSummary" type=" LcSummary " minOccurs="0"/>
      <xsd:element name="effectiveDate" type=" xsd:date "/>
      <xsd:element name="priorRate" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="postRate" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OneOffFeeNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **OneOffFeeNotice** (by extension)
Sub-types:	None

Name	OneOffFeeNotice
Abstract	no
Documentation	This defines a notification of a one-off fee being paid at either the loan contract or facility levels.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'
```

<dealSummary> DealSummary </dealSummary> [1]

'A data structure which contains the identifying characteristics of the given deal.'

<facilitySummary> FacilitySummary </facilitySummary> [1]

'A data structure which contains the identifying characteristics of the given facility.'

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

Start Choice [0..1]

<loanContractSummary> LoanContractSummary </loanContractSummary> [1]

'A basic set of fields used to uniquely identify the loan contract.'

<lcSummary> LcSummary </lcSummary> [1]

'A basic set of fields used to uniquely identify a letter of credit.'

End Choice

<feePayment> OneOffFeePayment </feePayment> [1]

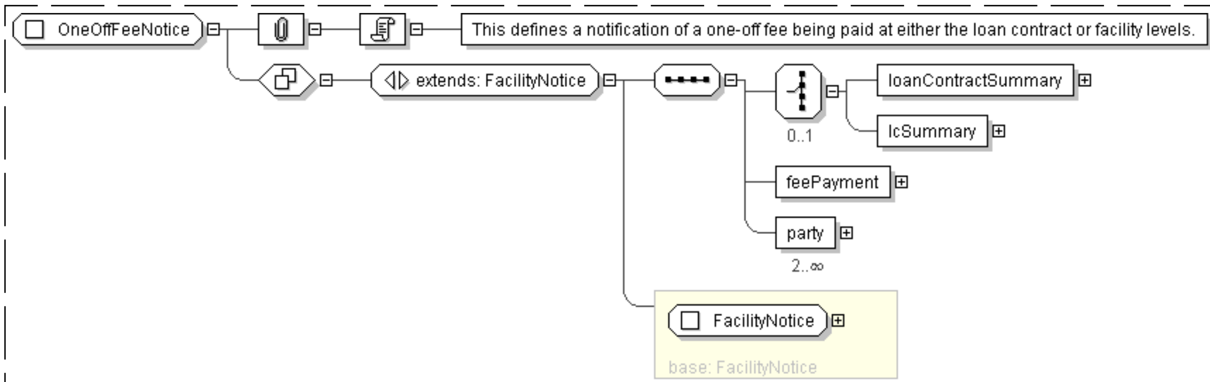
'A representation of the one-off payment.'

<party> Party </party> [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="OneOffFeeNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:choice minOccurs="0">
               <xsd:element name="loanContractSummary" type=" LoanContractSummary "/>
               <xsd:element name="lcSummary" type=" LcSummary "/>
```

```
            </xsd:choice>
            <xsd:element name="feePayment" type=" OneOffFeePayment "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OneOffFeePayment

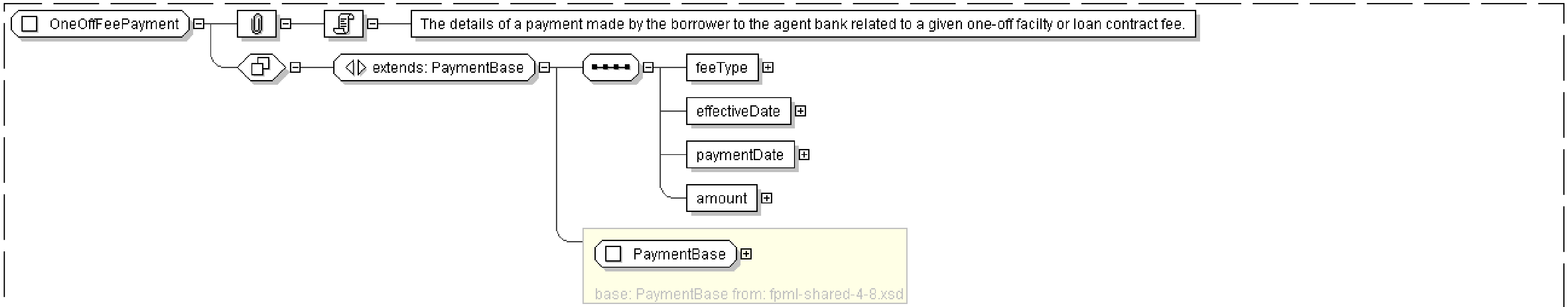
Super-types:	PaymentBase < **OneOffFeePayment** (by extension)
Sub-types:	None

Name	OneOffFeePayment
Used by (from the same schema document)	Complex Type **OneOffFeeNotice**
Abstract	no
Documentation	The details of a payment made by the borrower to the agent bank related to a given one-off facilty or loan contract fee.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <feeType> OneOffFeeTypeEnum </feeType> [1]
   'Describes the type of the one-off fee.'

   <effectiveDate> xsd:date </effectiveDate> [1]
   'The date on which the fee is due. It is an actual (adjusted) date.'

   <paymentDate> xsd:date </paymentDate> [1]
   'The date on which the fee is paid by the borrower to the agent bank. This is an
   actual (adjusted) date.'

   <amount> ParticipationAmount </amount> [1]
   'The global amount describes the amount paid by the borrower to the agent bank whereas
   the share amount describes the amount paid by the agent bank to the lender.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OneOffFeePayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
```

```
        <xsd:sequence>
            <xsd:element name="feeType" type=" OneOffFeeTypeEnum "/>
            <xsd:element name="effectiveDate" type=" xsd:date "/>
            <xsd:element name="paymentDate" type=" xsd:date "/>
            <xsd:element name="amount" type=" ParticipationAmount "/>
        </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ParticipationAmount

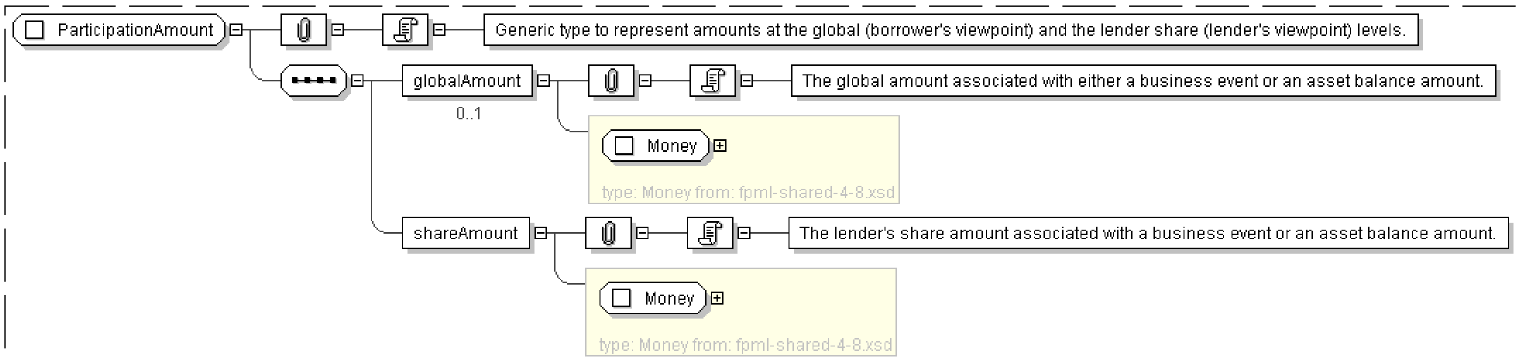
Super-types:	None
Sub-types:	None

Name	ParticipationAmount
Used by (from the same schema document)	Complex Type **FacilityCommitmentPosition** , Complex Type **FacilityCommitmentPosition** , Complex Type **FacilityRepayment** , Complex Type **FeeAccrualPeriod** , Complex Type **InterestPayment** , Complex Type **InterestRatePeriod** , Complex Type **LcBalanceNotice** , Complex Type **LcBalanceNotice** , Complex Type **LcBalanceNotice** , Complex Type **LcPosition** , Complex Type **LcPosition** , Complex Type **LcTerminationNotice** , Complex Type **LenderPositionPeriod** , Complex Type **LoanContract** , Complex Type **LoanContractPosition** , Complex Type **LoanContractPosition** , Complex Type **LoanContractRepayment** , Complex Type **LoanContractSummary** , Complex Type **OneOffFeePayment** , Complex Type **OnGoingFeePayment**
Abstract	no
Documentation	Generic type to represent amounts at the global (borrower's viewpoint) and the lender share (lender's viewpoint) levels.

XML Instance Representation

```
<...>
   <globalAmount> Money </globalAmount> [0..1]
   'The global amount associated with either a business event or an asset balance amount.'

   <shareAmount> Money </shareAmount> [1]
   'The lender\'s share amount associated with a business event or an asset balance amount.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ParticipationAmount">
   <xsd:sequence>
      <xsd:element name="globalAmount" type=" Money " minOccurs="0"/>
      <xsd:element name="shareAmount" type=" Money "/>
```

```
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PikPeriod

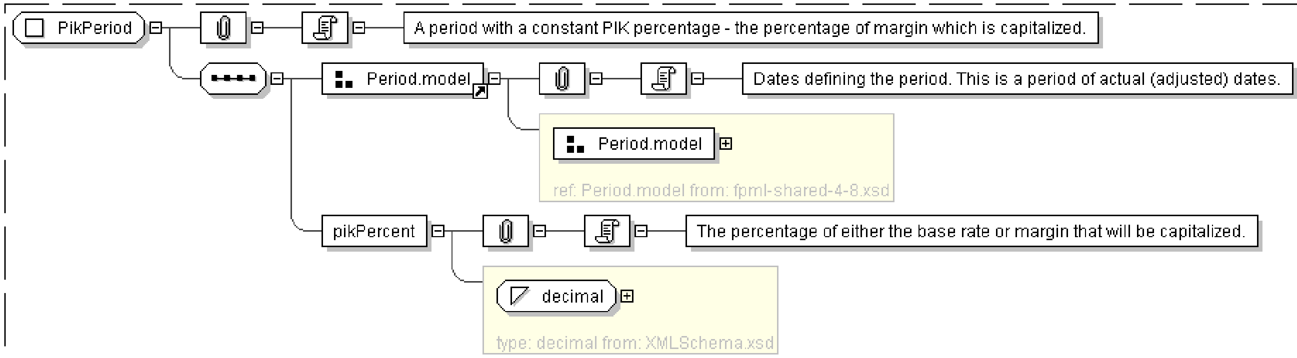
Super-types:	None
Sub-types:	None

Name	PikPeriod
Used by (from the same schema document)	Complex Type **InterestAccrualSchedule**
Abstract	no
Documentation	A period with a constant PIK percentage - the percentage of margin which is capitalized.

XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'

   <pikPercent> xsd:decimal </pikPercent> [1]
   'The percentage of either the base rate or margin that will be capitalized.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PikPeriod">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="pikPercent" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PricingChangeNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **PricingChangeNotice** (by extension)

Sub-types:	None

Name	PricingChangeNotice
Abstract	no
Documentation	A notice used to notify changes in the pricing of a given facility.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'

   <facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]
   'A structure which contains the position being held by the lender on both the facility and
   loan contract levels. This position information is from the message sender\'s viewpoint as
   of the date of the associated notice.'

   <exceptionFlag> xsd:boolean </exceptionFlag> [0..1]
   'A flag which can be set by the message sender in order to signify an exceptional
   business event.'

   <comments> xsd:string </comments> [0..1]
   'A free-form, manually entered field which will be used by users directly for
```

additional information.'

<pricingChangeReason> PricingChangeReason </pricingChangeReason> [0..1]

'Denotes the reason a facility has had to be re-priced.'

Start Choice [1]

<marginRateChange> MarginRateChange </marginRateChange> [1..*]

'The amount by which the margin rate has changed within a facility.'

<onGoingFeeRateChange> OnGoingFeeRateChange </onGoingFeeRateChange> [0..*]

''

<onGoingFeeRateChange> OnGoingFeeRateChange </onGoingFeeRateChange> [1..*]

''

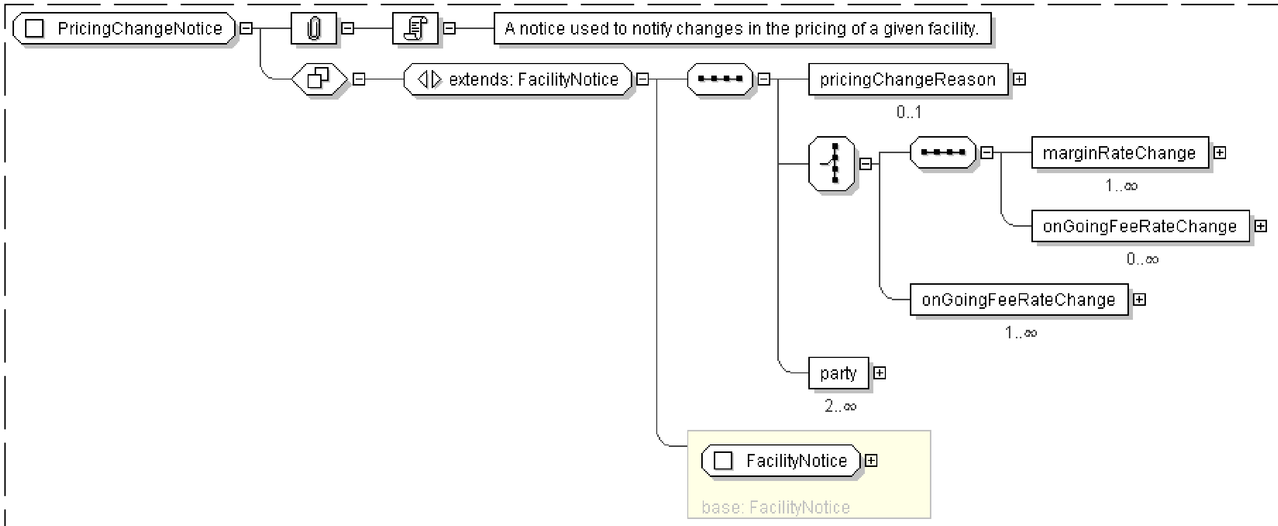
End Choice

<party> Party </party> [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingChangeNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="pricingChangeReason" type=" PricingChangeReason " minOccurs="0"/>
            <xsd:choice>
               <xsd:sequence>
                  <xsd:element name="marginRateChange" type=" MarginRateChange " maxOccurs="unbounded"/>
                  <xsd:element name="onGoingFeeRateChange" type=" OnGoingFeeRateChange "
                  minOccurs="0" maxOccurs="unbounded"/>
               </xsd:sequence>
               <xsd:element name="onGoingFeeRateChange" type=" OnGoingFeeRateChange " maxOccurs="unbounded"/>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
```

```
</xsd:complexType>
```

top

Complex Type: PricingChangeReason

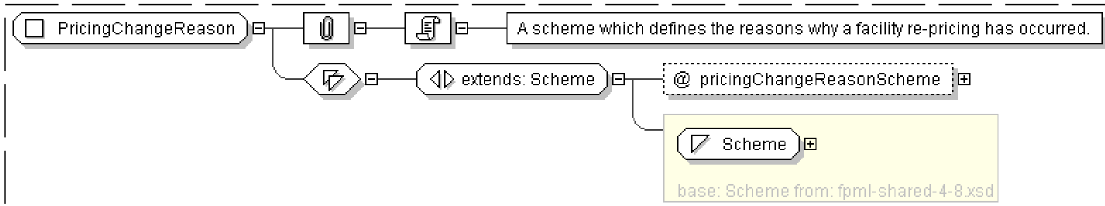
Super-types:	Scheme < **PricingChangeReason** (by extension)
Sub-types:	None

Name	PricingChangeReason
Used by (from the same schema document)	Complex Type **PricingChangeNotice**
Abstract	no
Documentation	A scheme which defines the reasons why a facility re-pricing has occurred.

XML Instance Representation

```
<...
pricingChangeReasonScheme=" xsd:anyURI [1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingChangeReason">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="pricingChangeReasonScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: RatePeriod

Super-types:	None
Sub-types:	None

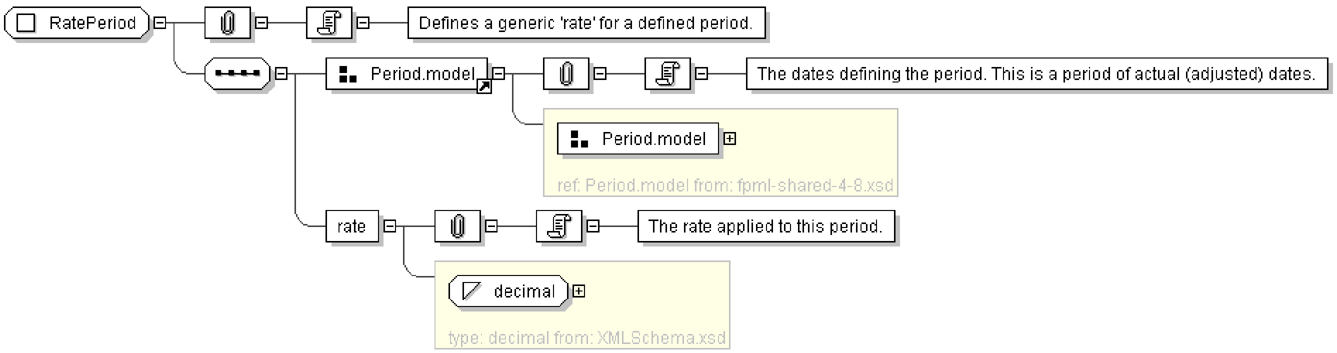
Name	RatePeriod
Used by (from the same schema document)	Complex Type **FeeAccrualSchedule**
Abstract	no
Documentation	Defines a generic 'rate' for a defined period.

XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
```

```
'Date on which this period ends.'

<rate> xsd:decimal </rate> [1]
'The rate applied to this period.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RatePeriod">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:element name="rate" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Repayment

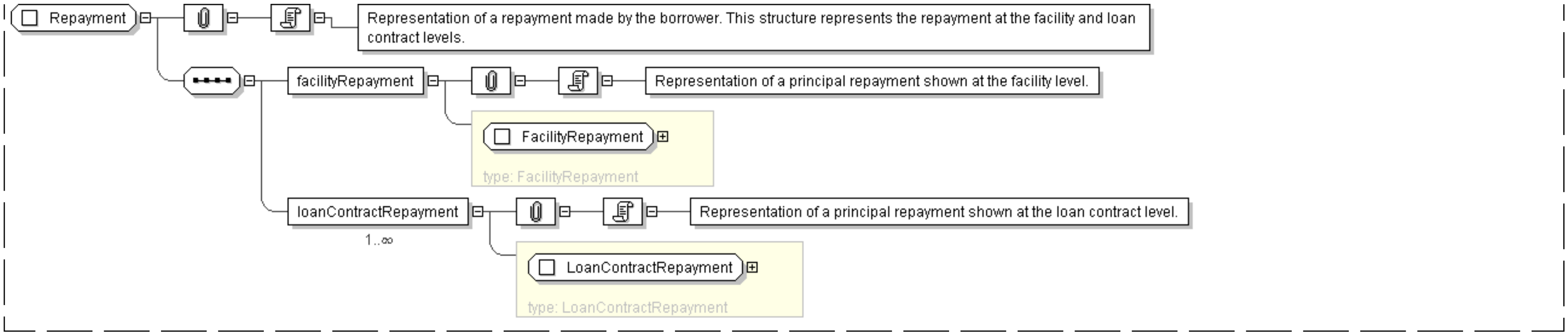
Super-types:	None
Sub-types:	None

Name	Repayment
Used by (from the same schema document)	Complex Type **MaturingLoanContracts** , Complex Type **RepaymentNotice**
Abstract	no
Documentation	Representation of a repayment made by the borrower. This structure represents the repayment at the facility and loan contract levels.

XML Instance Representation

```
<...>
   <facilityRepayment> FacilityRepayment </facilityRepayment> [1]
   'Representation of a principal repayment shown at the facility level.'

   <loanContractRepayment> LoanContractRepayment </loanContractRepayment> [1..*]
   'Representation of a principal repayment shown at the loan contract level.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Repayment">
   <xsd:sequence>
      <xsd:element name="facilityRepayment" type=" FacilityRepayment "/>
      <xsd:element name="loanContractRepayment" type=" LoanContractRepayment " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: RepaymentNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **RepaymentNotice** (by extension)
Sub-types:	None

Name	RepaymentNotice
Abstract	no
Documentation	A notice describing a principal repayment to be made by the borrower.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'
```

<eventId> EventId </eventId> [0..1]

'The identifier that defines the business event which requires the creation of a notice.'

<agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]

'A reference to the agent bank for the given deal.'

<borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]

'A reference to the borrower against the associated loan contract(s).'

<lenderPartyReference> PartyReference </lenderPartyReference> [0..1]

'A reference to the lender(s) associated with the associated loan contract(s).'

<dealSummary> DealSummary </dealSummary> [1]

'A data structure which contains the identifying characteristics of the given deal.'

<facilitySummary> FacilitySummary </facilitySummary> [1]

'A data structure which contains the identifying characteristics of the given facility.'

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

<repayment> Repayment </repayment> [1]

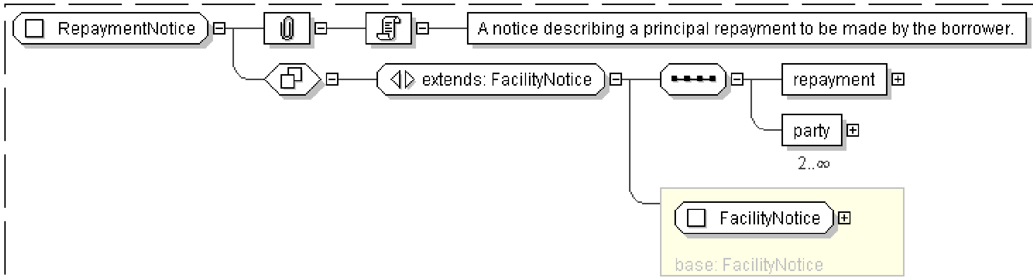
'Representation of a repayment made by the borrower. This structure represents the repayment at the facility and loan contract levels.'

<party> Party </party> [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="RepaymentNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="repayment" type=" Repayment "/>
```

```
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RolloverNotice

Super-types:	NotificationMessage < FacilityNotice (by extension) < **RolloverNotice** (by extension)
Sub-types:	None

Name	RolloverNotice
Abstract	no
Documentation	A rollover notice used for both simple as well as complex rollover situations.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <noticeDate> xsd:date </noticeDate> [1]
   'The date on which the notice was generated.'

   <eventId> EventId </eventId> [0..1]
   'The identifier that defines the business event which requires the creation of a notice.'

   <agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]
   'A reference to the agent bank for the given deal.'

   <borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]
   'A reference to the borrower against the associated loan contract(s).'

   <lenderPartyReference> PartyReference </lenderPartyReference> [0..1]
   'A reference to the lender(s) associated with the associated loan contract(s).'

   <dealSummary> DealSummary </dealSummary> [1]
   'A data structure which contains the identifying characteristics of the given deal.'

   <facilitySummary> FacilitySummary </facilitySummary> [1]
   'A data structure which contains the identifying characteristics of the given facility.'
```

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

<maturingLoanContracts> MaturingLoanContracts **</maturingLoanContracts>** [1]

'Details of all loan contracts due to mature and all corresponding interest payments to be paid for the given rollover event.'

<newLoanContracts> NewLoanContracts **</newLoanContracts>** [1]

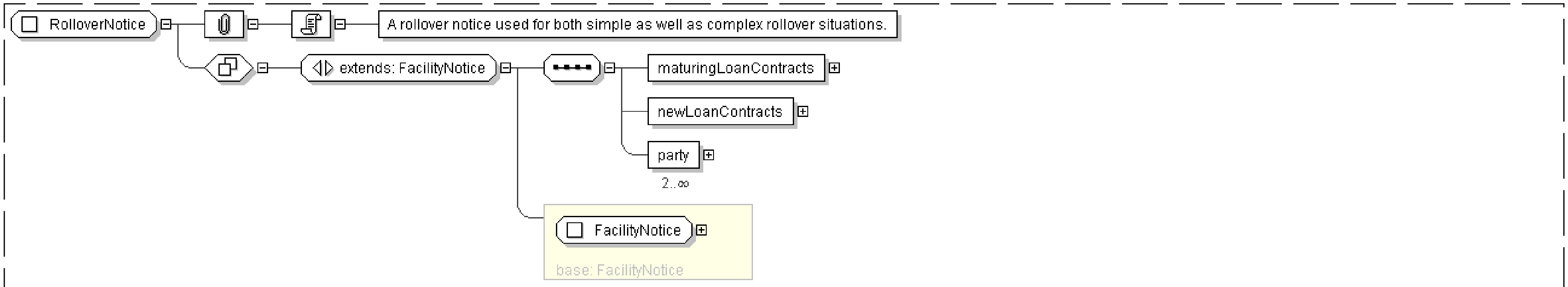
'A list of the new loan contracts to be created as a result of this rollover.'

<party> Party **</party>** [2..*]

'The parties involved with the associated transaction.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="RolloverNotice">
   <xsd:complexContent>
      <xsd:extension base=" FacilityNotice ">
         <xsd:sequence>
            <xsd:element name="maturingLoanContracts" type=" MaturingLoanContracts "/>
            <xsd:element name="newLoanContracts" type=" NewLoanContracts "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Model Group: FacilityNoticeDetails.model

Name	FacilityNoticeDetails.model

Used by (from the same schema document)	Complex Type **FacilityNotice** , Complex Type **LoanContractNotice**
Documentation	A model which contains all fields required on the business header section of a facility notice.

XML Instance Representation

<noticeDate> xsd:date </noticeDate> [1]

'The date on which the notice was generated.'

<eventId> EventId </eventId> [0..1]

'The identifier that defines the business event which requires the creation of a notice.'

<agentBankPartyReference> PartyReference </agentBankPartyReference> [0..1]

'A reference to the agent bank for the given deal.'

<borrowerPartyReference> PartyReference </borrowerPartyReference> [0..1]

'A reference to the borrower against the associated loan contract(s).'

<lenderPartyReference> PartyReference </lenderPartyReference> [0..1]

'A reference to the lender(s) associated with the associated loan contract(s).'

<dealSummary> DealSummary </dealSummary> [1]

'A data structure which contains the identifying characteristics of the given deal.'

<facilitySummary> FacilitySummary </facilitySummary> [1]

'A data structure which contains the identifying characteristics of the given facility.'

<facilityCommitmentPosition> FacilityCommitmentPosition </facilityCommitmentPosition> [0..1]

'A structure which contains the position being held by the lender on both the facility and loan contract levels. This position information is from the message sender\'s viewpoint as of the date of the associated notice.'

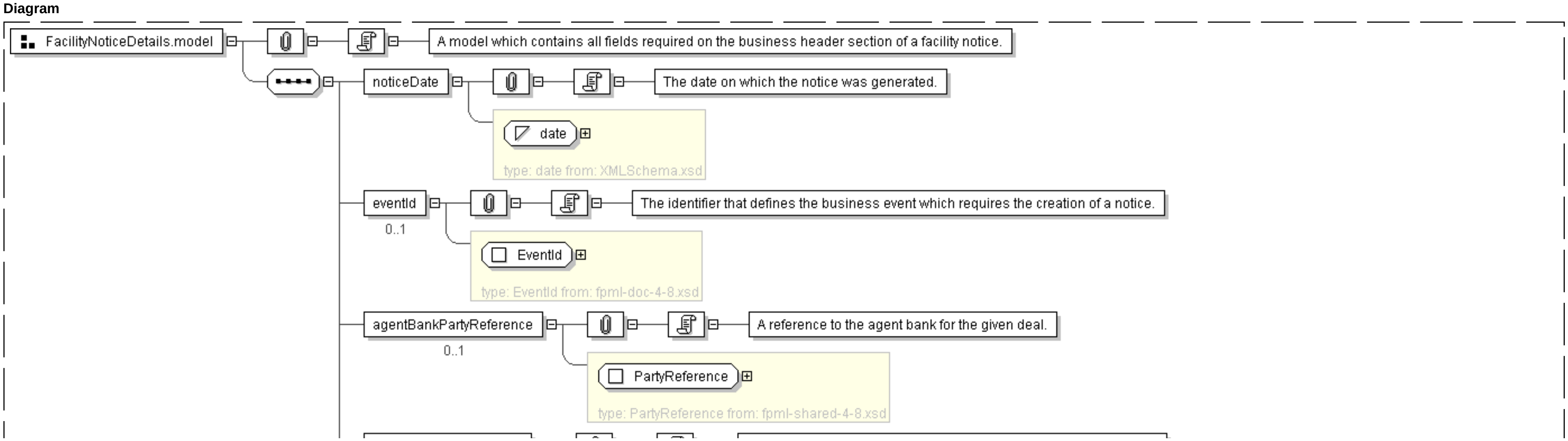
<exceptionFlag> xsd:boolean </exceptionFlag> [0..1]

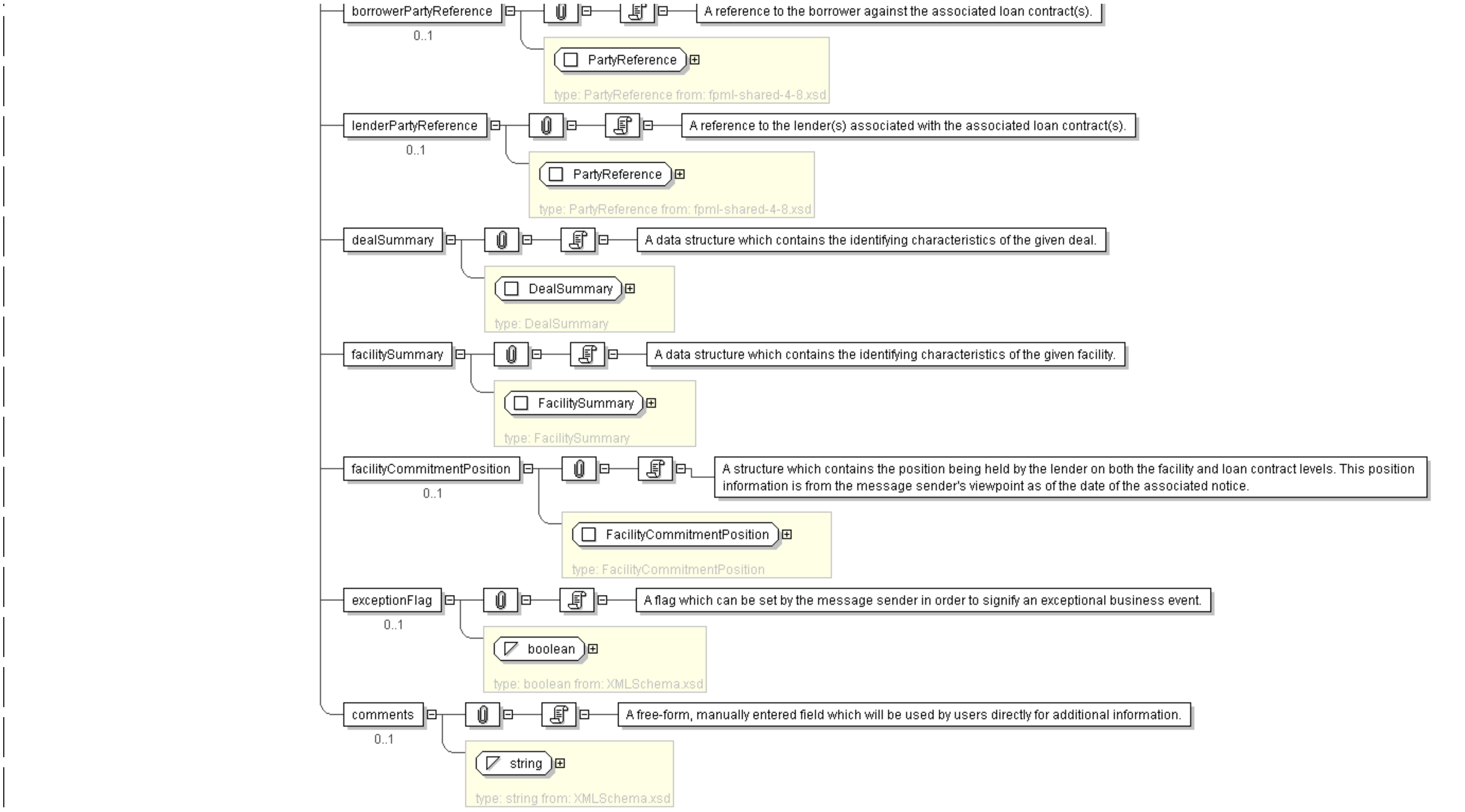
'A flag which can be set by the message sender in order to signify an exceptional business event.'

<comments> xsd:string </comments> [0..1]

'A free-form, manually entered field which will be used by users directly for additional information.'

Diagram





Schema Component Representation

```
<xsd:group name="FacilityNoticeDetails.model">
   <xsd:sequence>
      <xsd:element name="noticeDate" type=" xsd:date "/>
      <xsd:element name="eventId" type=" EventId " minOccurs="0"/>
      <xsd:element name="agentBankPartyReference" type=" PartyReference " minOccurs="0"/>
      <xsd:element name="borrowerPartyReference" type=" PartyReference " minOccurs="0"/>
      <xsd:element name="lenderPartyReference" type=" PartyReference " minOccurs="0"/>
      <xsd:element name="dealSummary" type=" DealSummary "/>
      <xsd:element name="facilitySummary" type=" FacilitySummary "/>
      <xsd:element name="facilityCommitmentPosition" type=" FacilityCommitmentPosition
      " minOccurs="0"/>
      <xsd:element name="exceptionFlag" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="comments" type=" xsd:string " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

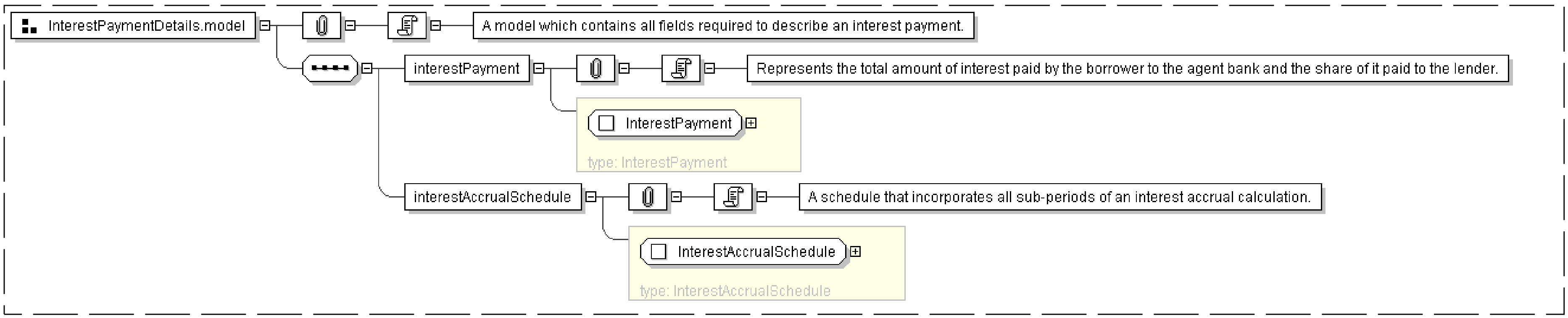
Model Group: InterestPaymentDetails.model

Name	InterestPaymentDetails.model
Used by (from the same schema document)	Complex Type **InterestPaymentNotice** , Complex Type **MaturingLoanContract**
Documentation	A model which contains all fields required to describe an interest payment.

XML Instance Representation

```
<interestPayment> InterestPayment </interestPayment> [1]
'Represents the total amount of interest paid by the borrower to the agent bank and the
share of it paid to the lender.'

<interestAccrualSchedule> InterestAccrualSchedule </interestAccrualSchedule> [1]
'A schedule that incorporates all sub-periods of an interest accrual calculation.'
```

Diagram



Schema Component Representation

```
<xsd:group name="InterestPaymentDetails.model">
   <xsd:sequence>
      <xsd:element name="interestPayment" type=" InterestPayment "/>
      <xsd:element name="interestAccrualSchedule" type=" InterestAccrualSchedule "/>
   </xsd:sequence>
</xsd:group>
```

top

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
    - If the element/attribute's type is in the schema, a link is provided to it.
    - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-posttrade-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-posttrade-4-8.xsd"/>
   ...
```

```
</xsd:schema>
```

top

Global Definitions

Complex Type: NovationMatched

Super-types:	NovationNotificationMessage < **NovationMatched** (by extension)
Sub-types:	None

Name	NovationMatched
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="NovationMatched">
   <xsd:complexContent>
      <xsd:extension base=" NovationNotificationMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAlleged

Super-types:	NotificationMessage < **TradeAlleged** (by extension)
Sub-types:	None

Name	TradeAlleged
Abstract	no
Documentation	A type defining the content model for a message sent by a confirmation provider when it believes that one party has been tardy in providing its side of a transaction.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
```

<validation> Validation </validation> [0..*]
<tradeIdentifier> TradeIdentifier **</tradeIdentifier>** [1]

'An instance of a unique trade identifier.'

<bestFitTradeId> TradeIdentifier **</bestFitTradeId>** [0..*]

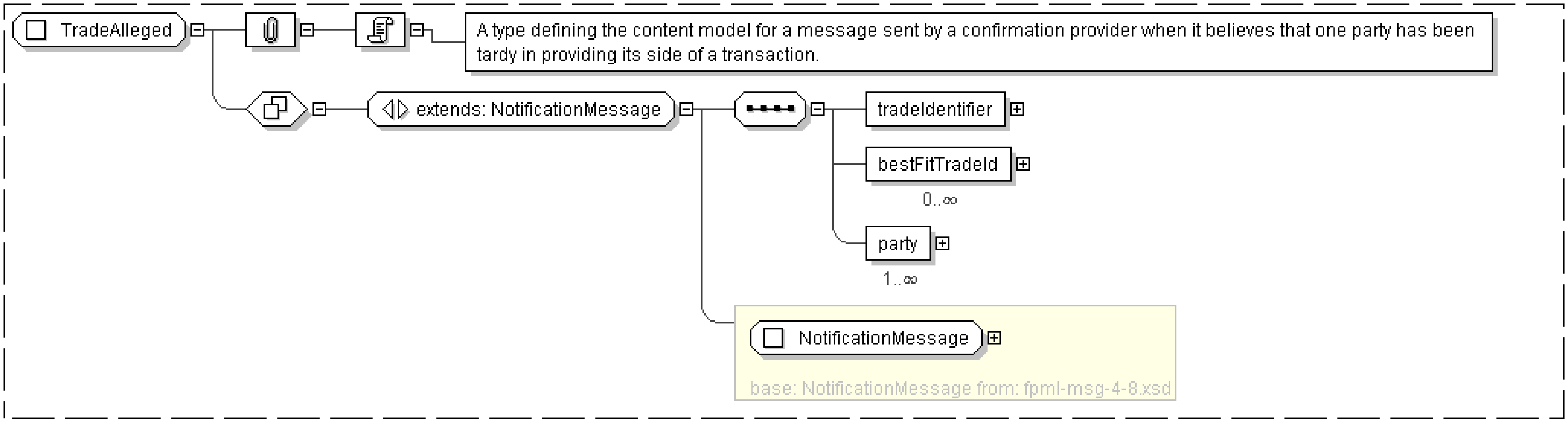
'A trade identifier for a transaction that closely resembles the characteristics of the trade under consideration.'

<party> Party **</party>** [1..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAlleged">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
            <xsd:element name="bestFitTradeId" type=" TradeIdentifier " minOccurs="0"
            maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeMatched

Super-types:	NotificationMessage < **TradeMatched** (by extension)
Sub-types:	None

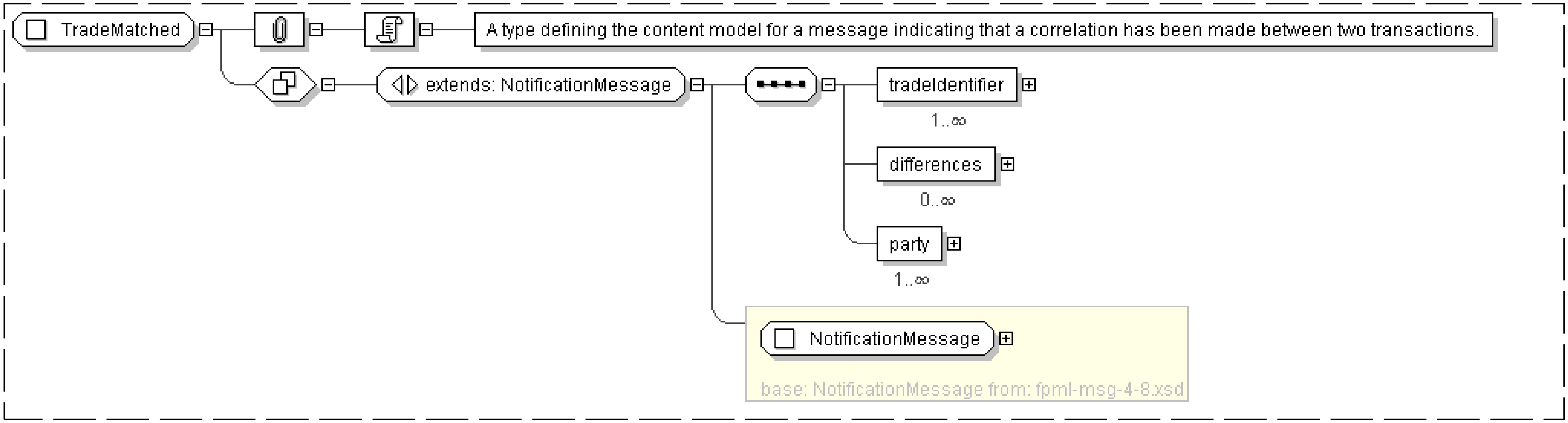
Name	TradeMatched
Abstract	no
Documentation	A type defining the content model for a message indicating that a correlation has been made between two transactions.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1..*]
   'An instance of a unique trade identifier.'

   <differences> TradeDifference </differences> [0..*]
   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
```

```
to time during the term of the trade, but may include other parties involved in, or
incidental to, the trade, such as parties acting in the role of novation transferor/
transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeMatched">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier " maxOccurs="unbounded"/>
            <xsd:element name="differences" type=" TradeDifference " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeMismatched

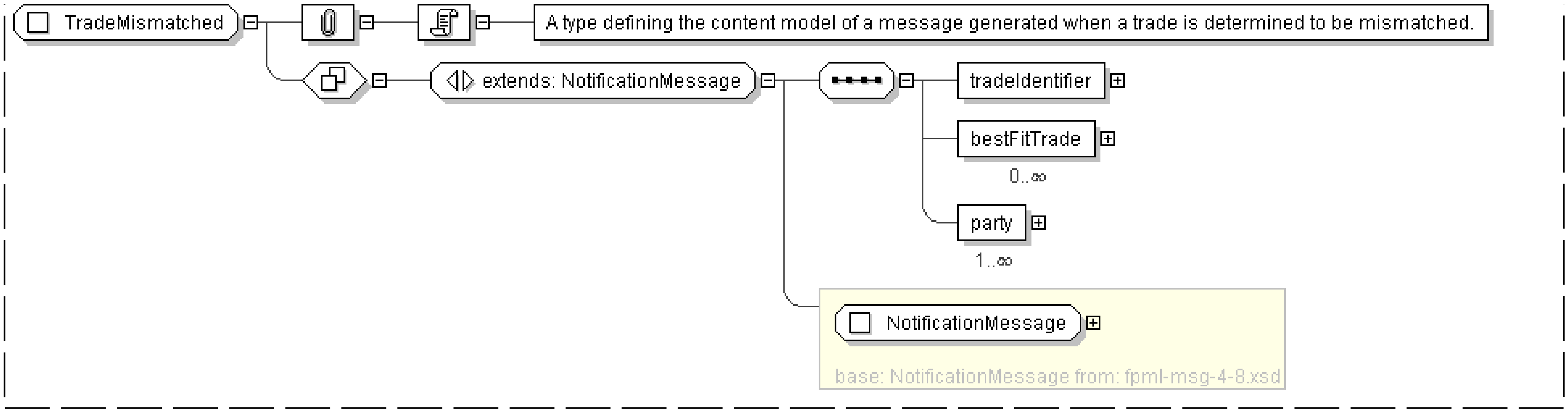
Super-types:	NotificationMessage < **TradeMismatched** (by extension)
Sub-types:	None

Name	TradeMismatched
Abstract	no
Documentation	A type defining the content model of a message generated when a trade is determined to be mismatched.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]
   'An instance of a unique trade identifier.'

   <bestFitTrade> BestFitTrade </bestFitTrade> [0..*]
   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeMismatched">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
            <xsd:element name="bestFitTrade" type=" BestFitTrade " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeUnmatched

Super-types:	NotificationMessage < **TradeUnmatched** (by extension)
Sub-types:	None

Name	TradeUnmatched
Abstract	no
Documentation	A type defining the content model of a message generated when a trade is determined to be unmatched.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
```

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> NotificationMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]

'An instance of a unique trade identifier.'

<bestFitTradeId> TradeIdentifier </bestFitTradeId> [0..*]

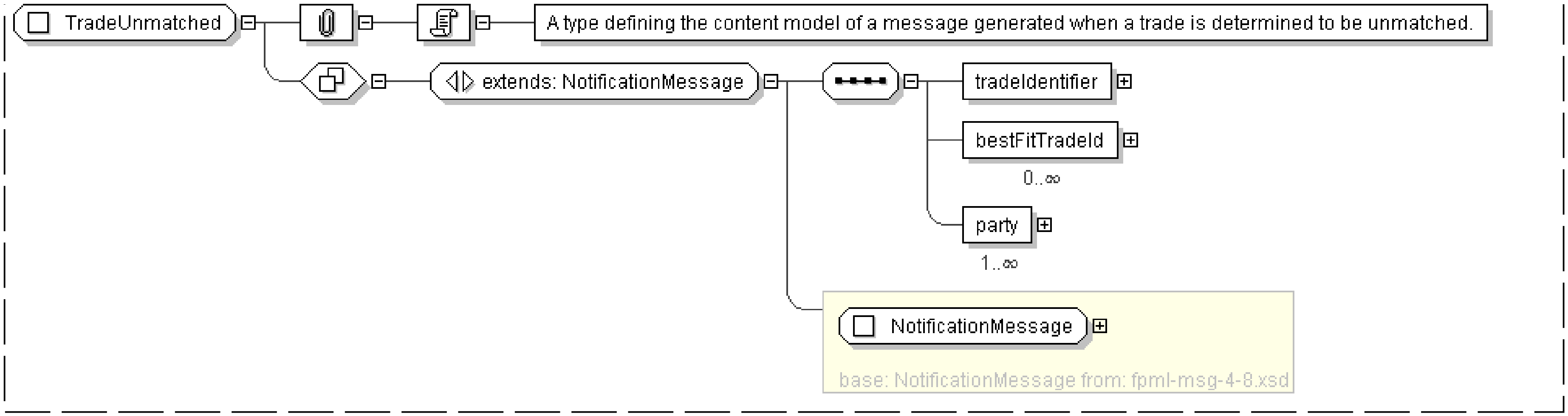
'A trade identifier for a transaction that closely resembles the characteristics of the trade under consideration.'

<party> Party </party> [1..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeUnmatched">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
            <xsd:element name="bestFitTradeId" type=" TradeIdentifier " minOccurs="0"
            maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type   Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress

Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

Table of Contents

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Schema Composition	• This schema includes components from the following schema document(s):
	  ○ fpml-riskdef-4-8.xsd
	  ○ fpml-cd-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	http://www.fpml.org/2010/FpML-4-8
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	http://www.fpml.org/2010/FpML-4-8

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-riskdef-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-cd-4-8.xsd"/>
   ...
</xsd:schema>
```

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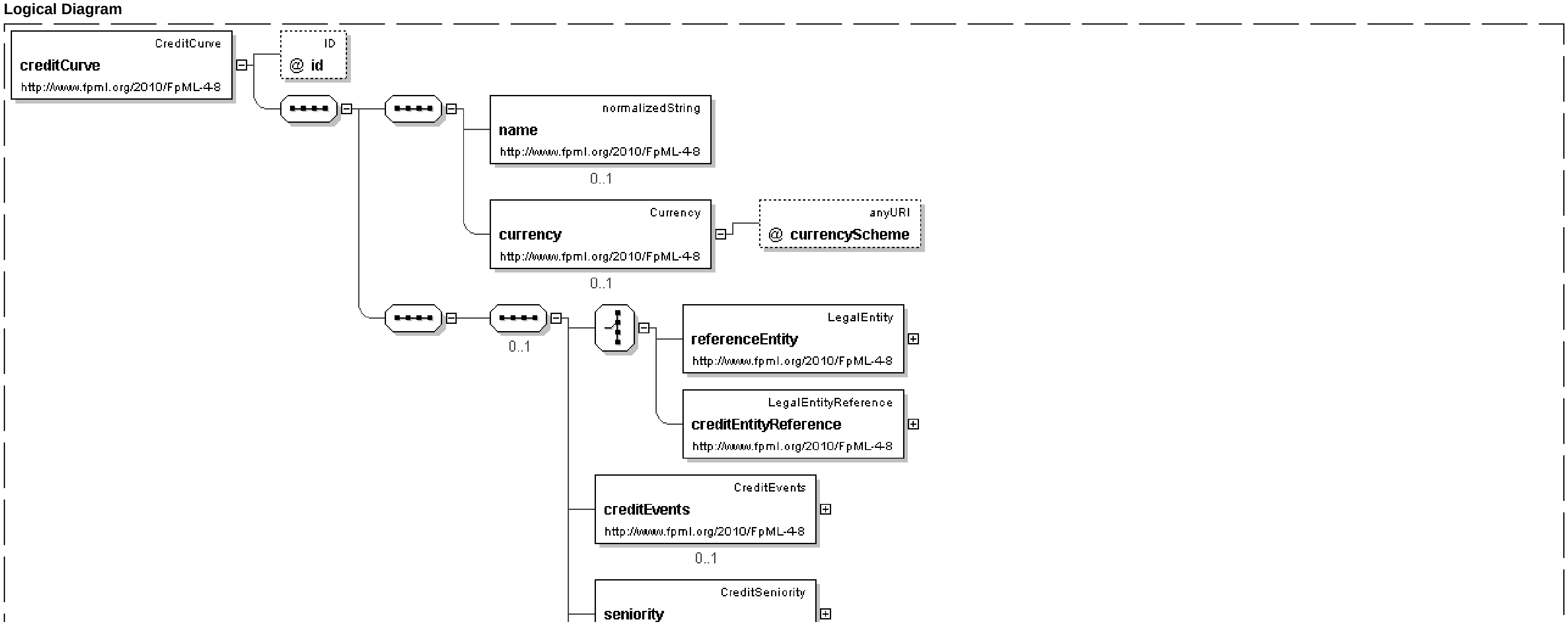
Global Declarations

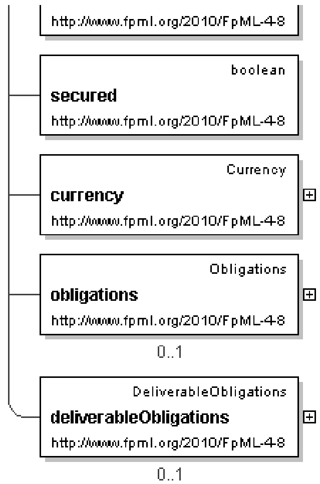
Element: creditCurve

- *This element can be used wherever the following element is referenced:*
  - pricingStructure

Name	creditCurve
Type	CreditCurve
Nillable	no
Abstract	no

Logical Diagram



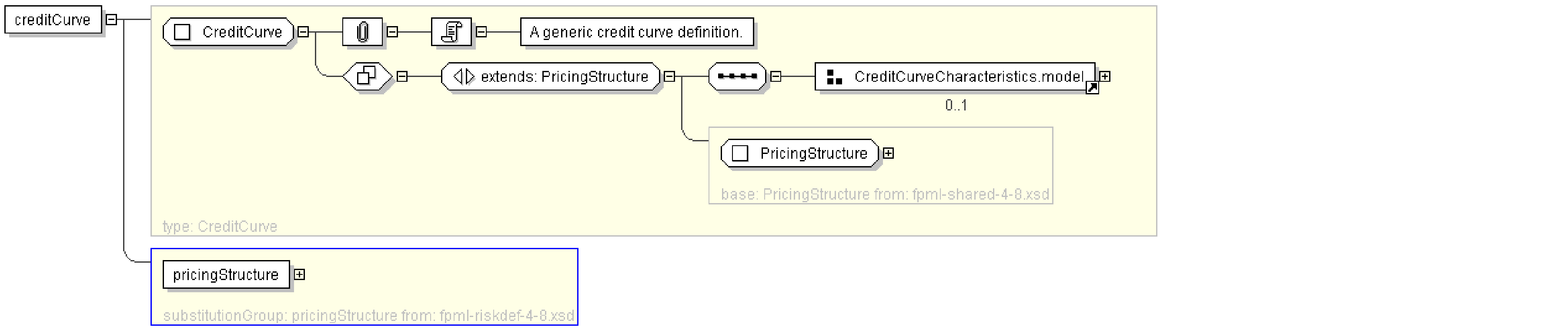


XML Instance Representation

```
<creditCurve
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

Start Group: CreditCurveCharacteristics.model [0..1]
Start Choice [1]
      <referenceEntity> LegalEntity </referenceEntity> [1]
      'The entity for which this is defined.'

      <creditEntityReference> LegalEntityReference </creditEntityReference> [1]
      'An XML reference a credit entity defined elsewhere in the document.'

End Choice
   <creditEvents> CreditEvents </creditEvents> [0..1]
   'The material credit event.'

   <seniority> CreditSeniority </seniority> [1]
   'The level of seniority of the deliverable obligation.'

   <secured> xsd:boolean </secured> [1]
   'Whether the deliverable obligation is secured or unsecured.'

   <currency> Currency </currency> [1]
   'The currency of denomination of the deliverable obligation.'

   <obligations> Obligations </obligations> [0..1]
   'The underlying obligations of the reference entity on which you are buying or
   selling protection'

   <deliverableObligations> DeliverableObligations </deliverableObligations> [0..1]
   'What sort of obligation may be delivered in the event of the credit event. ISDA 2003
   Term: Obligation Category/Deliverable Obligation Category'
```

```
End Group: CreditCurveCharacteristics.model
</creditCurve>
```

Diagram



Schema Component Representation

```
<xsd:element name="creditCurve" type=" CreditCurve " substitutionGroup="pricingStructure"/>
```

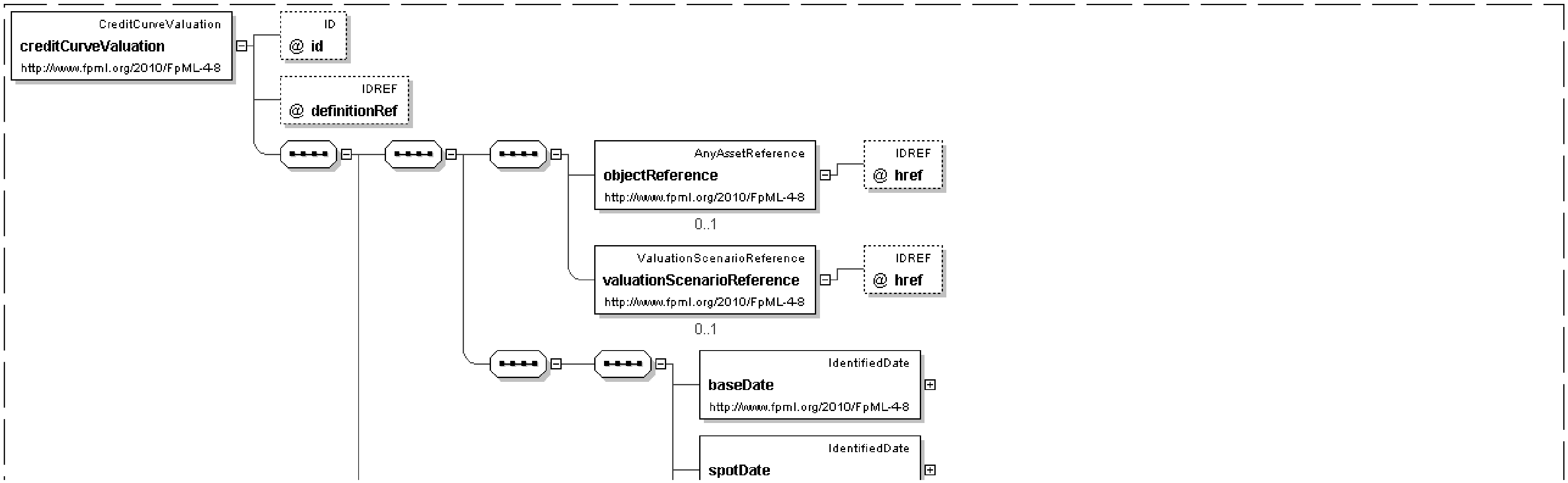
top

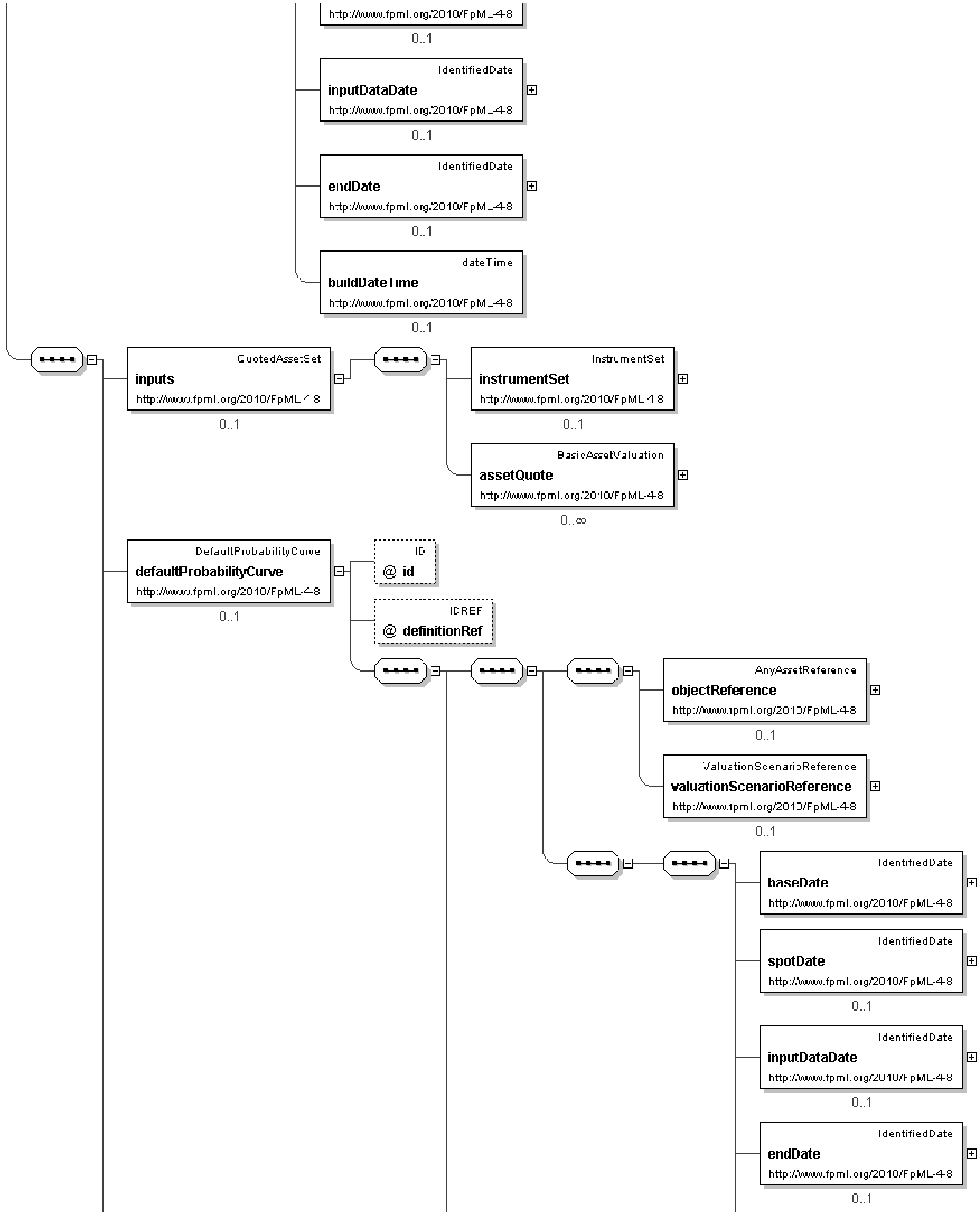
Element: creditCurveValuation

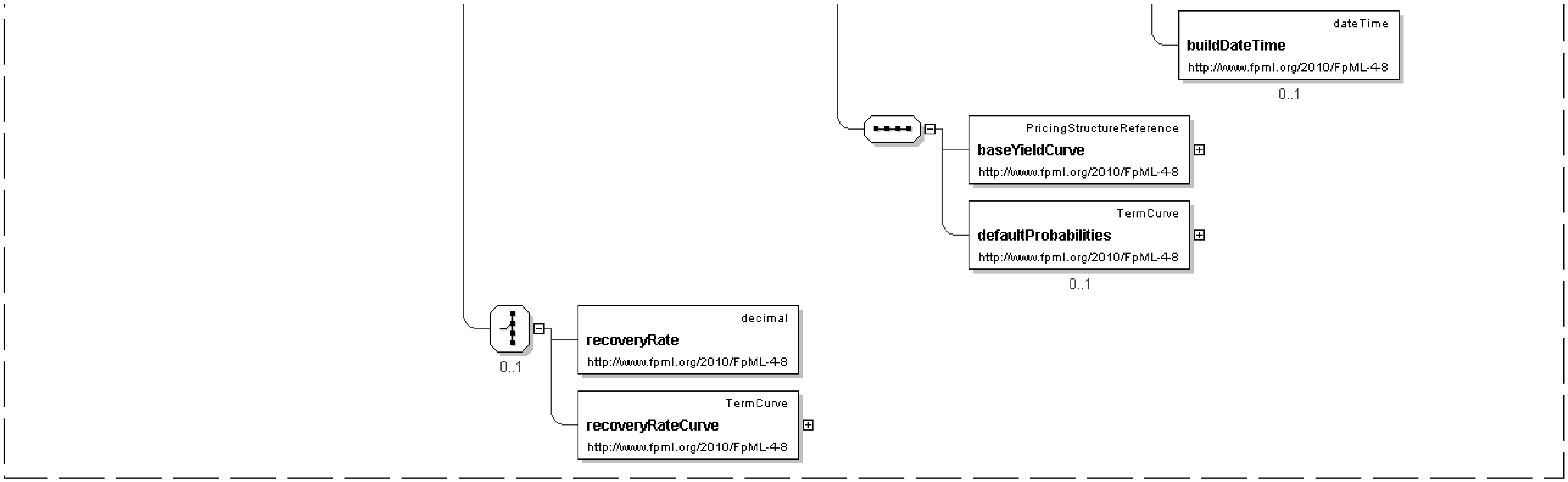
- *This element can be used wherever the following element is referenced:*
  - pricingStructureValuation

Name	creditCurveValuation
Type	CreditCurveValuation
Nillable	no
Abstract	no

Logical Diagram




http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
inputDataDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
endDate
http://www.fpml.org/2010/FpML-4-8
0..1
dateTime
buildDateTime
http://www.fpml.org/2010/FpML-4-8
0..1
QuotedAssetSet
inputs
http://www.fpml.org/2010/FpML-4-8
0..1
InstrumentSet
instrumentSet
http://www.fpml.org/2010/FpML-4-8
0..1
BasicAssetValuation
assetQuote
http://www.fpml.org/2010/FpML-4-8
0..∞
DefaultProbabilityCurve
defaultProbabilityCurve
http://www.fpml.org/2010/FpML-4-8
0..1
ID
@ id
IDREF
@ definitionRef
AnyAssetReference
objectReference
http://www.fpml.org/2010/FpML-4-8
0..1
ValuationScenarioReference
valuationScenarioReference
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
baseDate
http://www.fpml.org/2010/FpML-4-8
IdentifiedDate
spotDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
inputDataDate
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedDate
endDate
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<creditCurveValuation
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

   <baseDate> IdentifiedDate </baseDate> [1]
   'The base date for which the structure applies, i.e. the curve date. Normally this will
   align with the valuation date.'

   <spotDate> IdentifiedDate </spotDate> [0..1]
   'The spot settlement date for which the structure applies, normally 0-2 days after the
   base date. The difference between the baseDate and the spotDate is termed the settlement
   lag, and is sometimes called \"days to spot\".'

   <inputDataDate> IdentifiedDate </inputDataDate> [0..1]
   'The date from which the input data used to construct the pricing input was obtained. Often
   the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in
   which input data from one date is used to generate a curve for a later date.'

   <endDate> IdentifiedDate </endDate> [0..1]
   'The last date for which data is supplied in this pricing input.'

   <buildDateTime> xsd:dateTime </buildDateTime> [0..1]
   'The date and time when the pricing input was generated.'

   <inputs> QuotedAssetSet </inputs> [0..1]
   <defaultProbabilityCurve> DefaultProbabilityCurve </defaultProbabilityCurve> [0..1]
```

'A curve of default probabilities.'

Start Group: RecoveryRate.model [0..1]

'A recovery rate value or curve.'

Start Choice [1]

<recoveryRate> xsd:decimal </recoveryRate> [1]

'A single recovery rate, to be used for all terms.'

<recoveryRateCurve> TermCurve </recoveryRateCurve> [1]

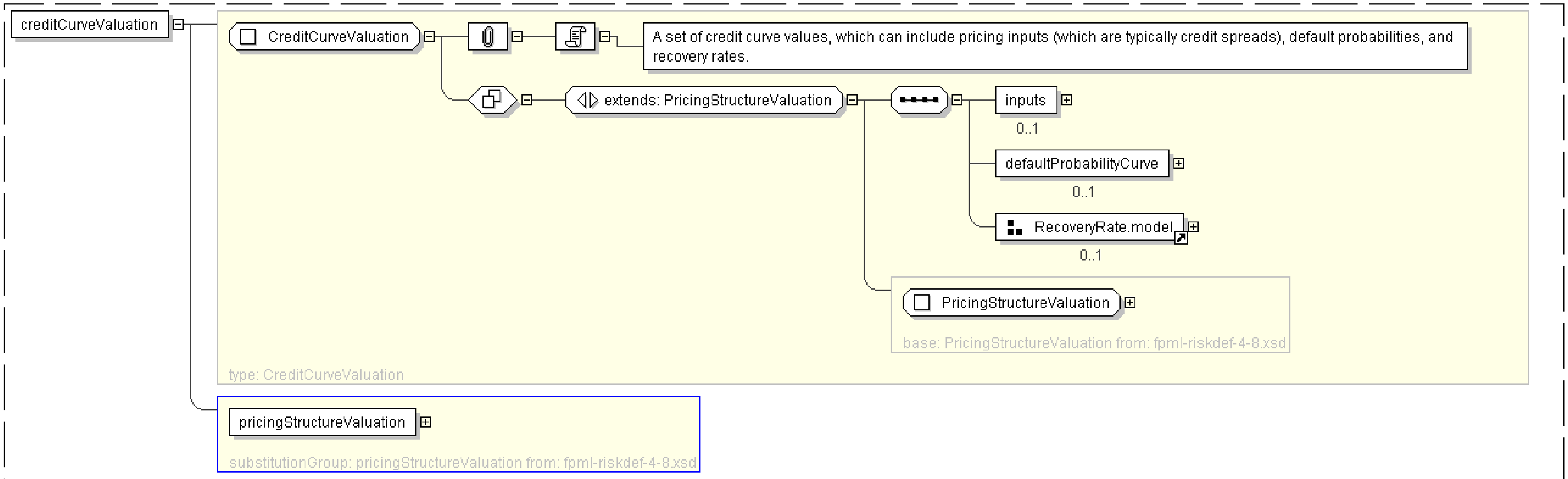
'A curve of recovery rates, allowing different terms to have different recovery rates.'

End Choice

End Group: RecoveryRate.model

</creditCurveValuation>

Diagram



Schema Component Representation

```
<xsd:element name="creditCurveValuation" type=" CreditCurveValuation
" substitutionGroup="pricingStructureValuation"/>
```

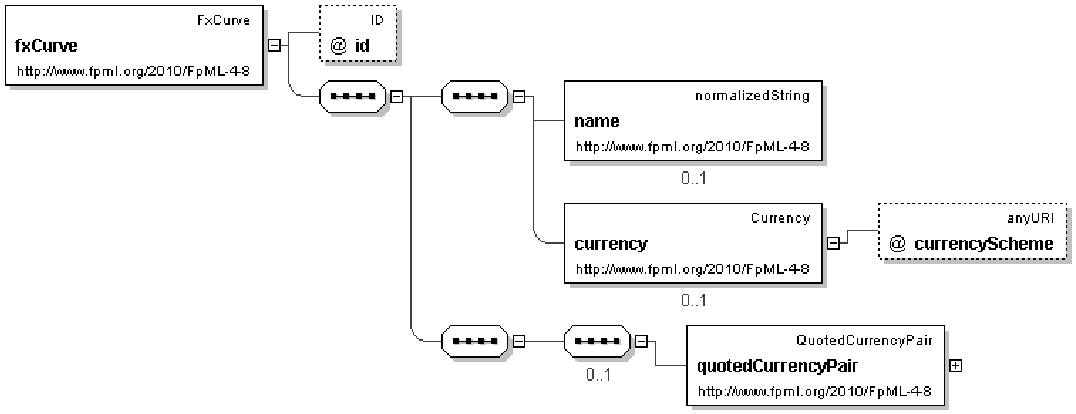
top

Element: fxCurve

- *This element can be used wherever the following element is referenced:*
  - pricingStructure

Name	fxCurve
Type	FxCurve
Nillable	no
Abstract	no

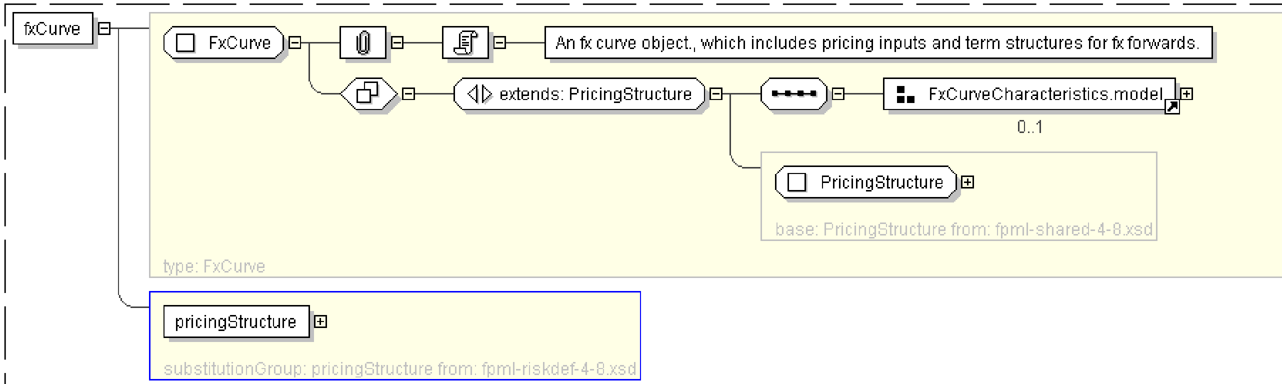
Logical Diagram



XML Instance Representation

```
<fxCurve
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

Start Group: FxCurveCharacteristics.model [0..1]
      <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
      'Defines the two currencies for an FX trade and the quotation relationship between the
      two currencies.'

End Group: FxCurveCharacteristics.model
</fxCurve>
```

Diagram



Schema Component Representation

```
<xsd:element name="fxCurve" type=" FxCurve " substitutionGroup="pricingStructure"/>
```

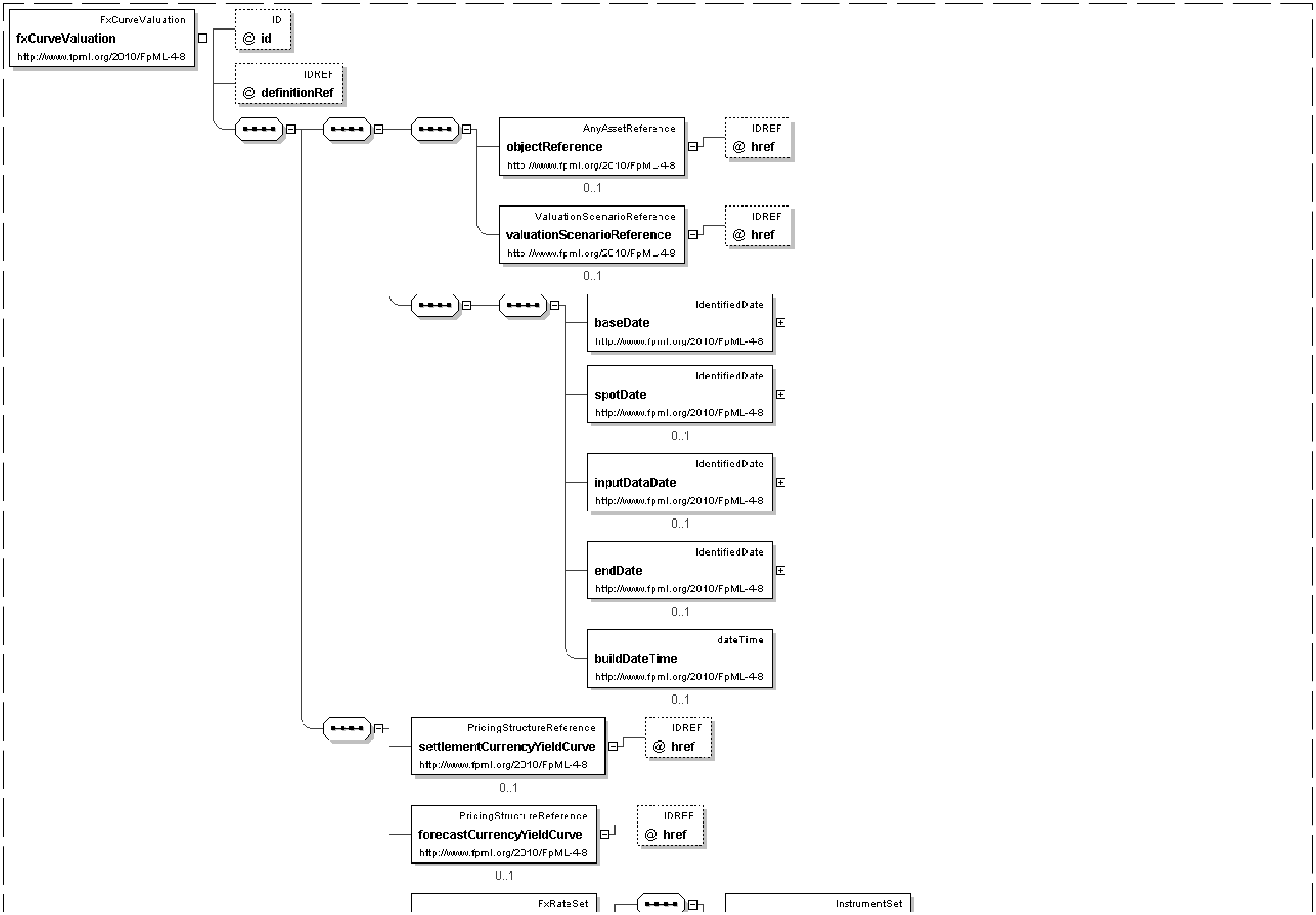
top

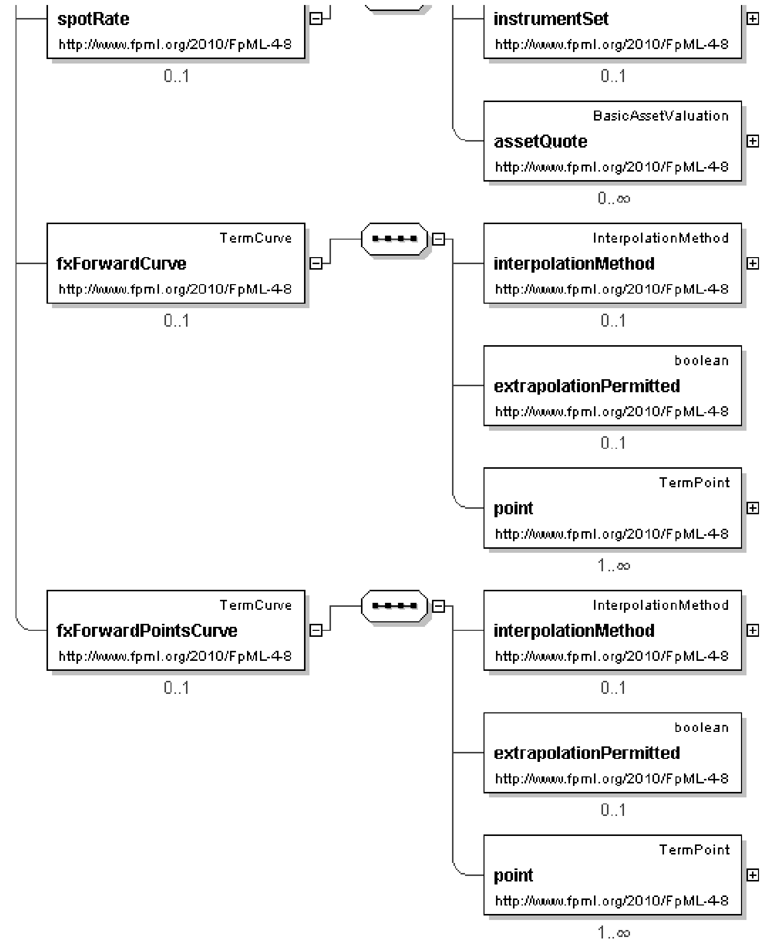
Element: fxCurveValuation

- *This element can be used wherever the following element is referenced:*
  - pricingStructureValuation

Name	fxCurveValuation
Type	FxCurveValuation
Nillable	no
Abstract	no

Logical Diagram





XML Instance Representation

<fxCurveValuation
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]

'An optional reference to the scenario that this valuation applies to.'

">
<objectReference> AnyAssetReference </objectReference> [0..1]

'A reference to the asset or pricing structure that this values.'

<valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]

'A reference to the valuation scenario used to calculate this valuation. If the Valuation occurs within a ValuationSet, this value is optional and is defaulted from the ValuationSet. If this value occurs in both places, the lower level value (i.e. the one here) overrides that in the higher (i.e. ValuationSet).'

<baseDate> IdentifiedDate </baseDate> [1]

'The base date for which the structure applies, i.e. the curve date. Normally this will align with the valuation date.'

<spotDate> IdentifiedDate </spotDate> [0..1]

'The spot settlement date for which the structure applies, normally 0-2 days after the

base date. The difference between the baseDate and the spotDate is termed the settlement lag, and is sometimes called \"days to spot\".'

<inputDataDate> IdentifiedDate </inputDataDate> [0..1]

'The date from which the input data used to construct the pricing input was obtained. Often the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]

'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]

'The date and time when the pricing input was generated.'

<settlementCurrencyYieldCurve> PricingStructureReference </settlementCurrencyYieldCurve> [0..1]
<forecastCurrencyYieldCurve> PricingStructureReference </forecastCurrencyYieldCurve> [0..1]
<spotRate> FxRateSet </spotRate> [0..1]
<fxForwardCurve> TermCurve </fxForwardCurve> [0..1]

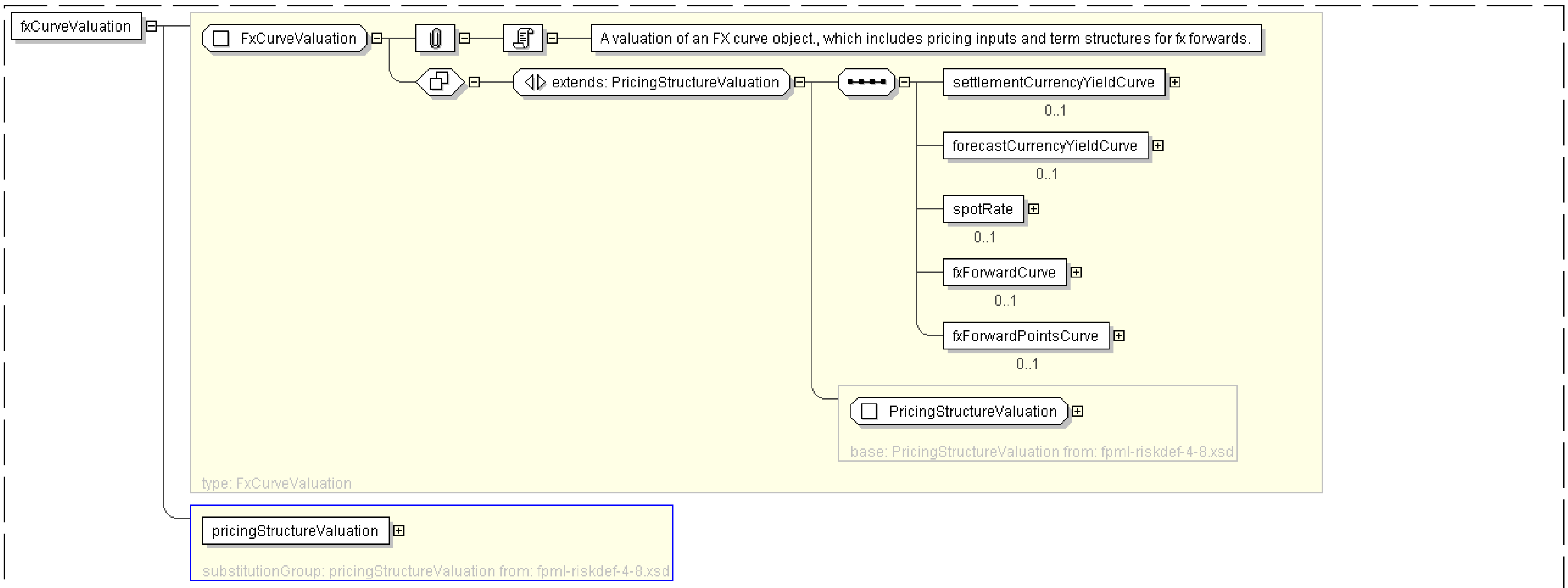
'A curve of fx forward rates.'

<fxForwardPointsCurve> TermCurve </fxForwardPointsCurve> [0..1]

'A curve of fx forward point spreads.'

</fxCurveValuation>

Diagram



Schema Component Representation

```
<xsd:element name="fxCurveValuation" type=" FxCurveValuation
" substitutionGroup="pricingStructureValuation"/>
```

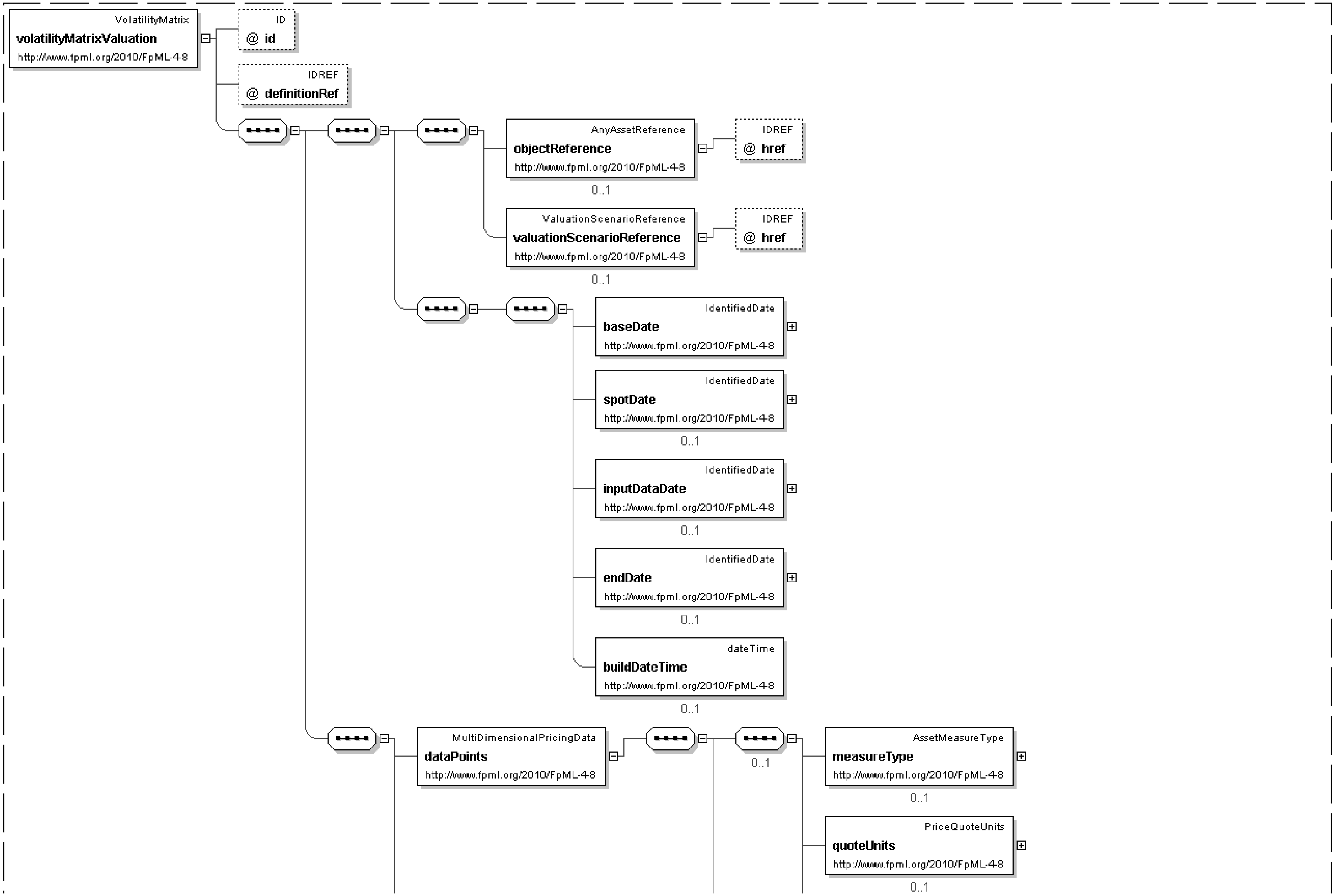
top

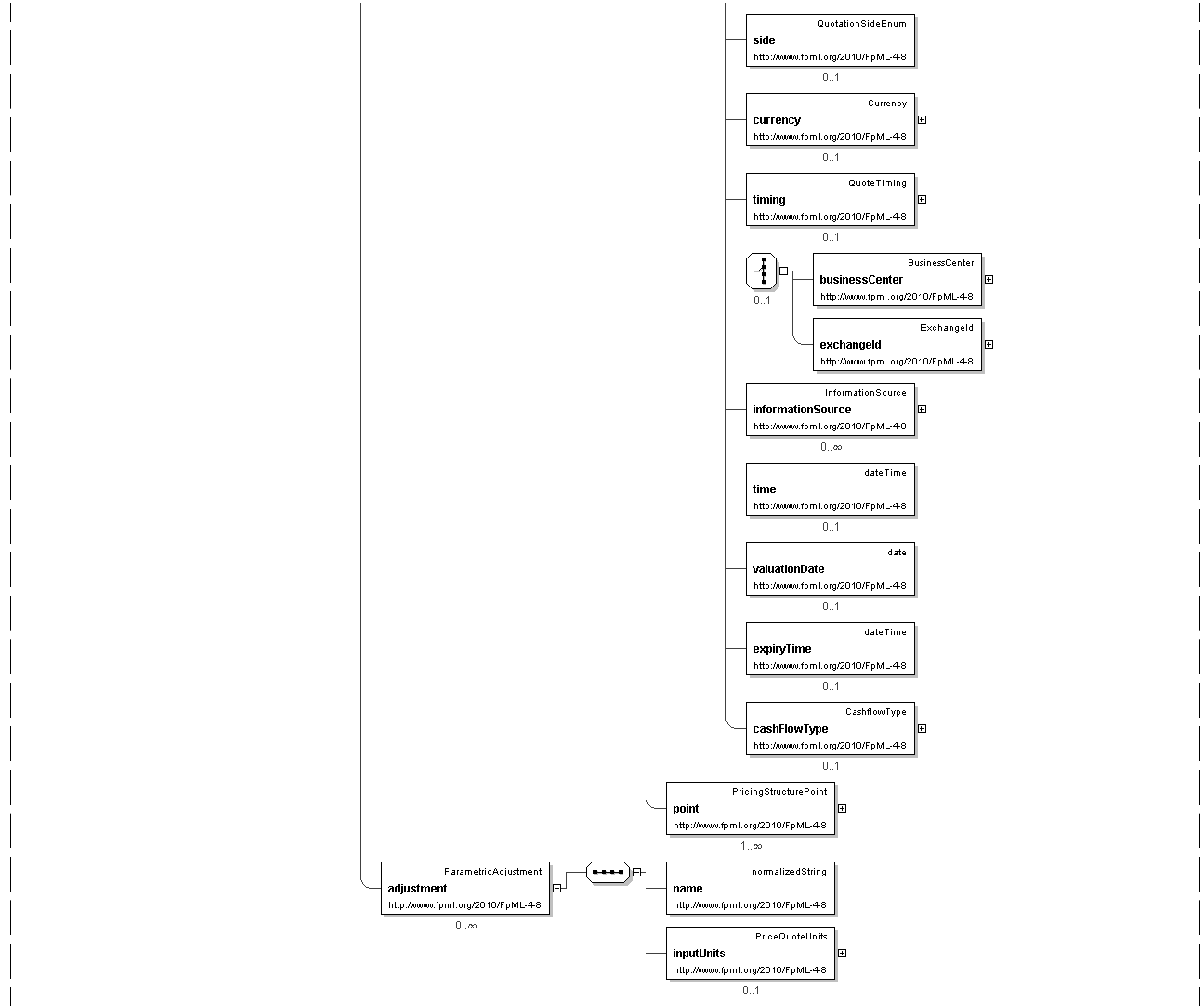
Element: volatilityMatrixValuation

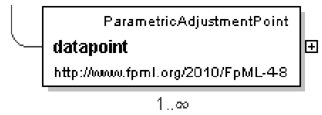
- *This element can be used wherever the following element is referenced:*
  - pricingStructureValuation

Name	volatilityMatrixValuation
Type	VolatilityMatrix
Nillable	no
Abstract	no

Logical Diagram



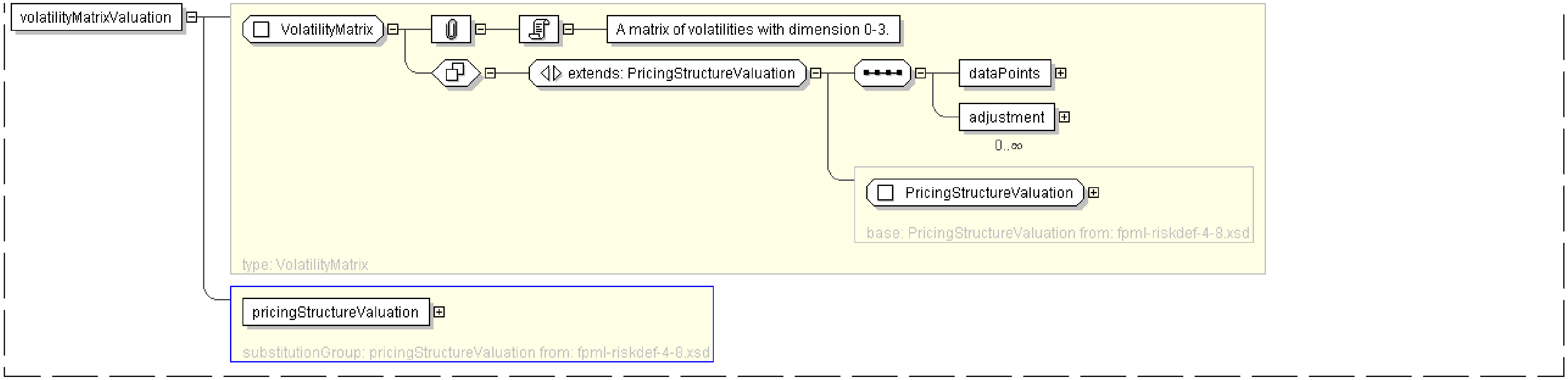

QuotationSideEnum
side
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
currency
http://www.fpml.org/2010/FpML-4-8
0..1
QuoteTiming
timing
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
BusinessCenter
businessCenter
http://www.fpml.org/2010/FpML-4-8
ExchangeId
exchangeId
http://www.fpml.org/2010/FpML-4-8
InformationSource
informationSource
http://www.fpml.org/2010/FpML-4-8
0..∞
dateTime
time
http://www.fpml.org/2010/FpML-4-8
0..1
date
valuationDate
http://www.fpml.org/2010/FpML-4-8
0..1
dateTime
expiryTime
http://www.fpml.org/2010/FpML-4-8
0..1
CashflowType
cashFlowType
http://www.fpml.org/2010/FpML-4-8
0..1
PricingStructurePoint
point
http://www.fpml.org/2010/FpML-4-8
1..∞
ParametricAdjustment
adjustment
http://www.fpml.org/2010/FpML-4-8
0..∞
normalizedString
name
http://www.fpml.org/2010/FpML-4-8
PriceQuoteUnits
inputUnits
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<volatilityMatrixValuation
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

   <baseDate> IdentifiedDate </baseDate> [1]
   'The base date for which the structure applies, i.e. the curve date. Normally this will
   align with the valuation date.'

   <spotDate> IdentifiedDate </spotDate> [0..1]
   'The spot settlement date for which the structure applies, normally 0-2 days after the
   base date. The difference between the baseDate and the spotDate is termed the settlement
   lag, and is sometimes called \"days to spot\".'

   <inputDataDate> IdentifiedDate </inputDataDate> [0..1]
   'The date from which the input data used to construct the pricing input was obtained. Often
   the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in
   which input data from one date is used to generate a curve for a later date.'

   <endDate> IdentifiedDate </endDate> [0..1]
   'The last date for which data is supplied in this pricing input.'

   <buildDateTime> xsd:dateTime </buildDateTime> [0..1]
   'The date and time when the pricing input was generated.'

   <dataPoints> MultiDimensionalPricingData </dataPoints> [1]
   'The raw volatility matrix data, expressed as a multi-dimensional array.'

   <adjustment> ParametricAdjustment </adjustment> [0..*]
   'An adjustment factor, such as for vol smile/skew.'

</volatilityMatrixValuation>
```

Diagram



Schema Component Representation

```
<xsd:element name="volatilityMatrixValuation" type=" VolatilityMatrix
" substitutionGroup="pricingStructureValuation"/>
```

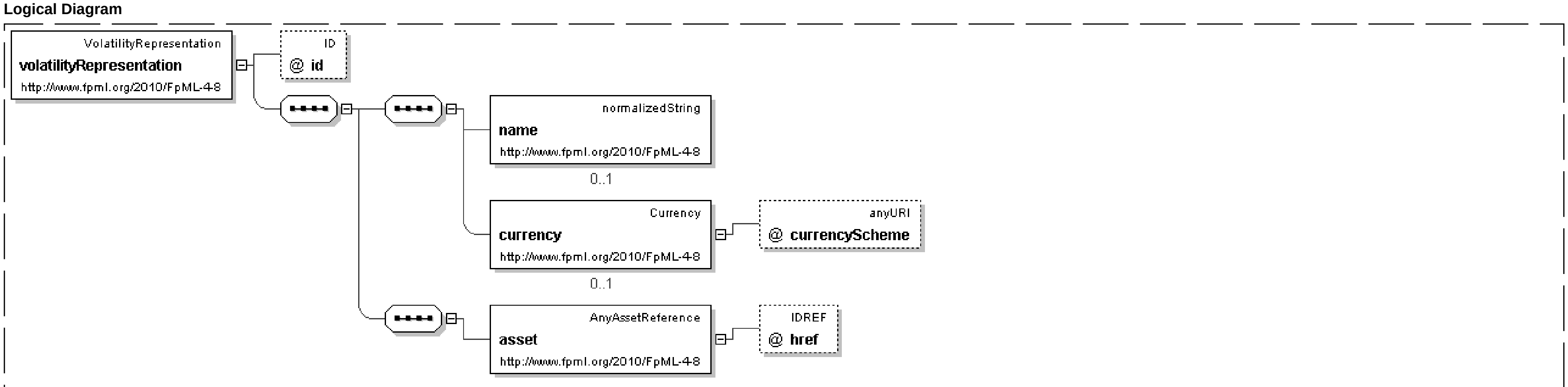
top

Element: volatilityRepresentation

- *This element can be used wherever the following element is referenced:*
  - pricingStructure

Name	volatilityRepresentation
Type	VolatilityRepresentation
Nillable	no
Abstract	no

Logical Diagram

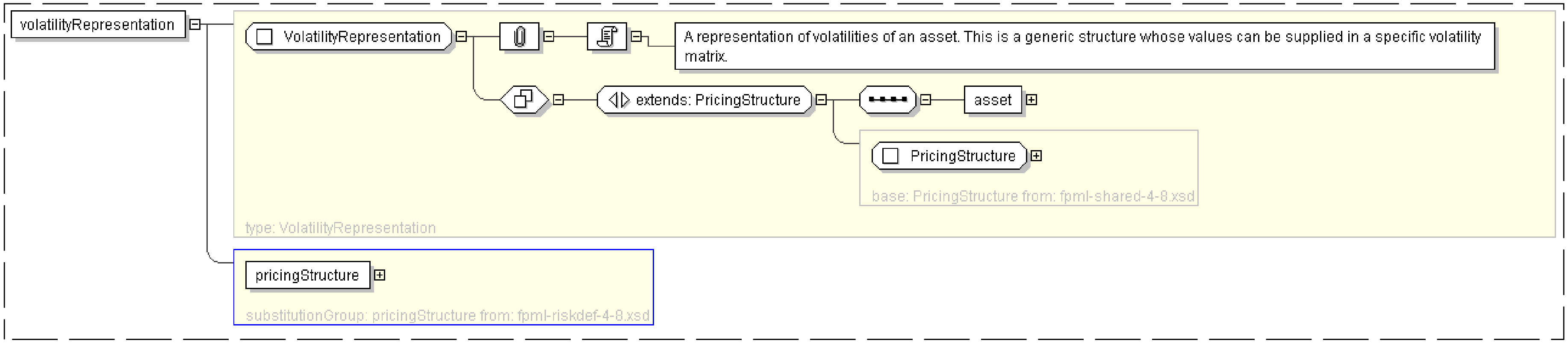


XML Instance Representation

```
<volatilityRepresentation
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'
```

```
<currency> Currency </currency> [0..1]
'The currency that the structure is expressed in (this is relevant mostly for the Interes
Rates asset class).'
<asset> AnyAssetReference </asset> [1]
'A reference to the asset whose volatility is modeled.'
</volatilityRepresentation>
```

Diagram



Schema Component Representation

```
<xsd:element name="volatilityRepresentation" type=" VolatilityRepresentation
" substitutionGroup="pricingStructure"/>
```

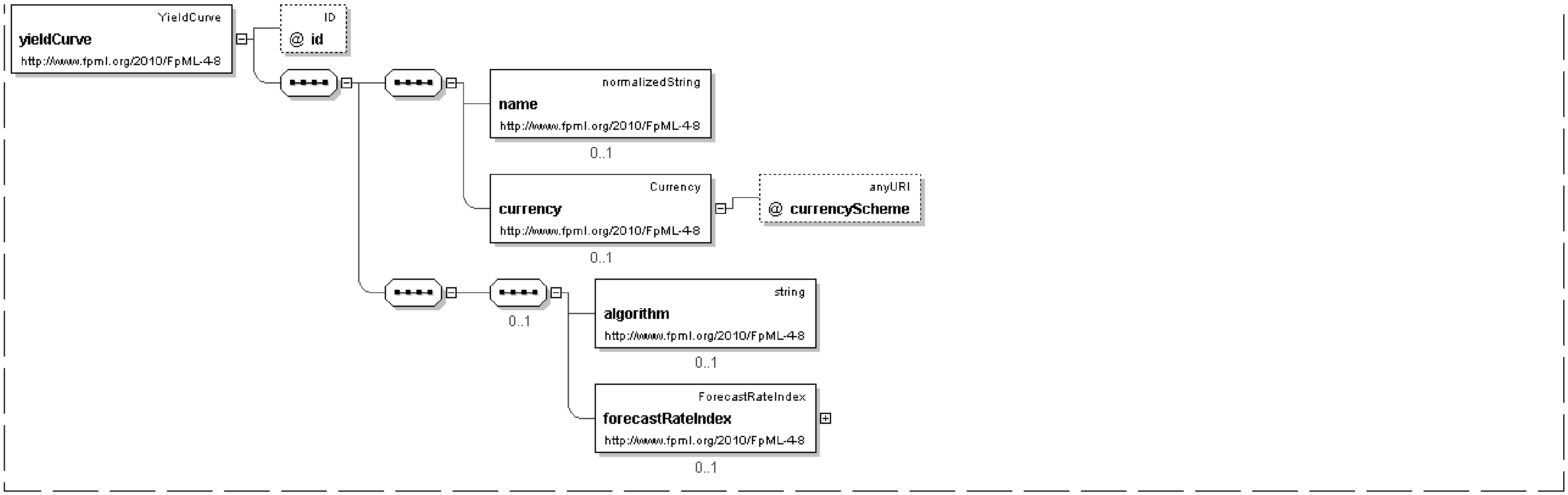
top

Element: yieldCurve

- *This element can be used wherever the following element is referenced:*
  - pricingStructure

Name	yieldCurve
Type	YieldCurve
Nillable	no
Abstract	no

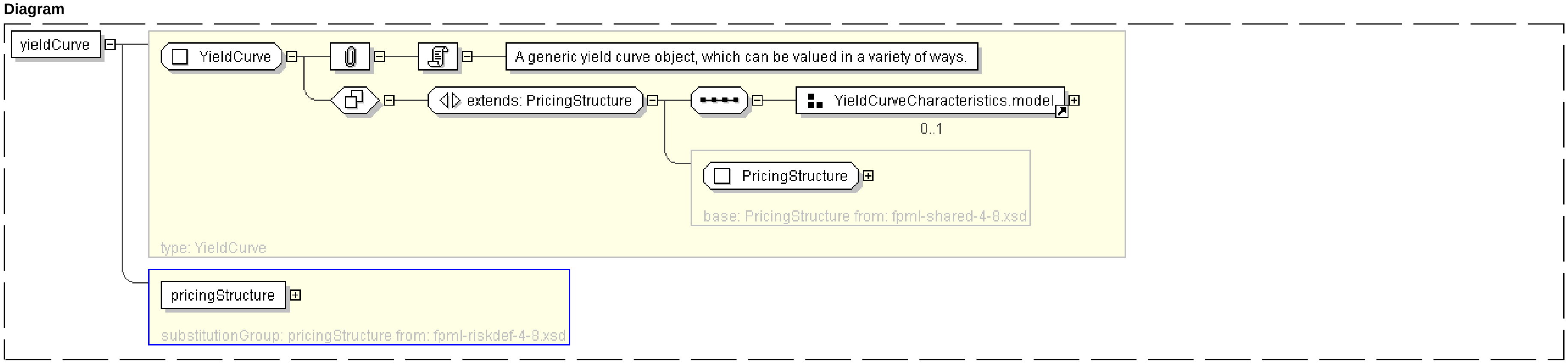
Logical Diagram



XML Instance Representation

```
<yieldCurve
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

Start Group: YieldCurveCharacteristics.model [0..1]
      <algorithm> xsd:string </algorithm> [0..1]
      <forecastRateIndex> ForecastRateIndex </forecastRateIndex> [0..1]
End Group: YieldCurveCharacteristics.model
</yieldCurve>
```

Diagram



Schema Component Representation

```
<xsd:element name="yieldCurve" type=" YieldCurve " substitutionGroup="pricingStructure"/>
```

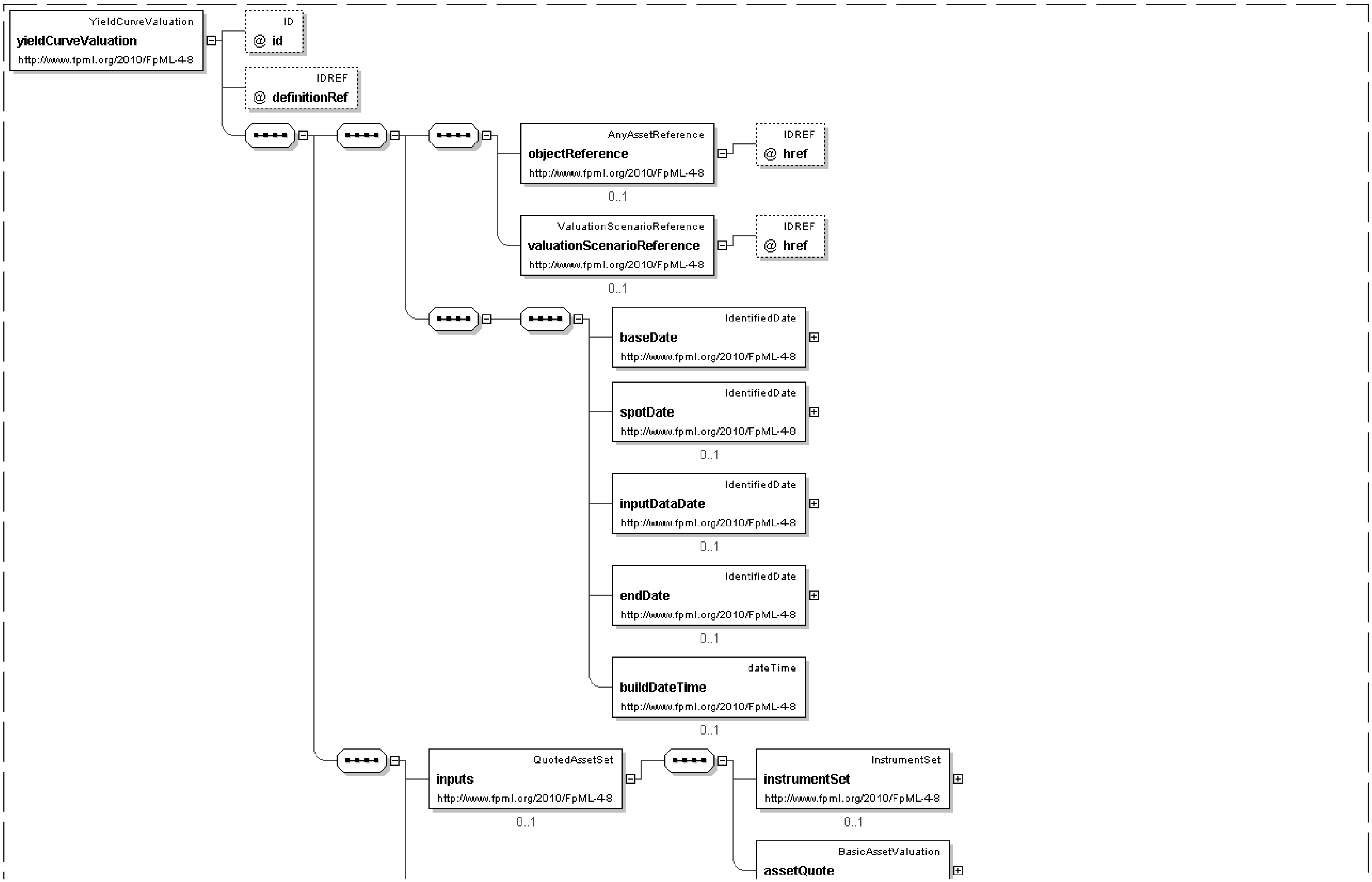
top

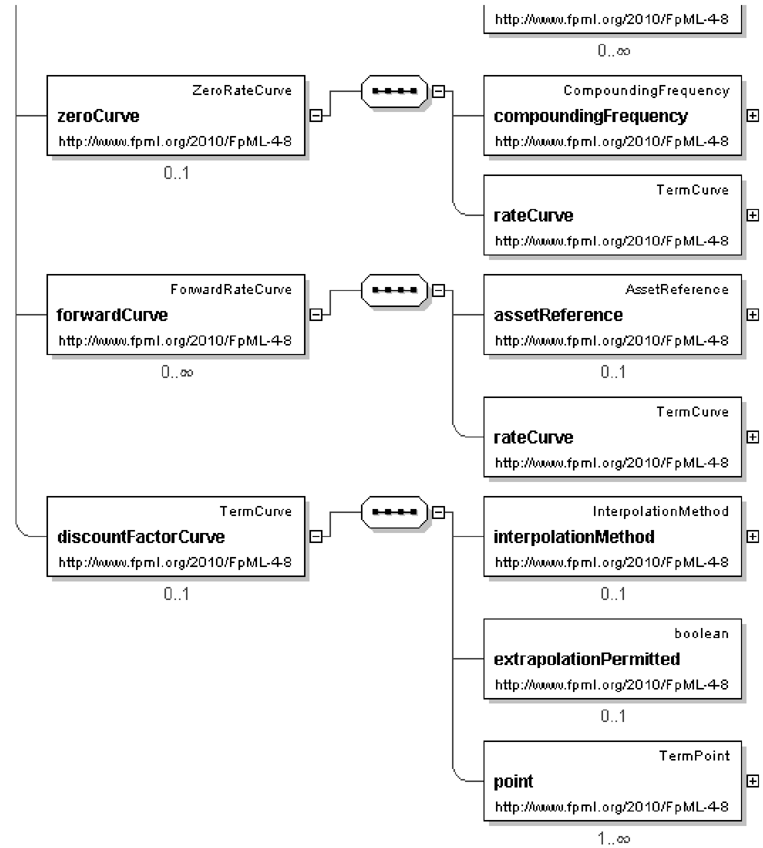
Element: yieldCurveValuation

- *This element can be used wherever the following element is referenced:*
  - pricingStructureValuation

Name	yieldCurveValuation
Type	YieldCurveValuation
Nillable	no
Abstract	no

Logical Diagram





XML Instance Representation

```
<yieldCurveValuation
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]

'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]

   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]

   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

   <baseDate> IdentifiedDate </baseDate> [1]

   'The base date for which the structure applies, i.e. the curve date. Normally this will
   align with the valuation date.'

   <spotDate> IdentifiedDate </spotDate> [0..1]

   'The spot settlement date for which the structure applies, normally 0-2 days after the
   base date. The difference between the baseDate and the spotDate is termed the settlement
   lag, and is sometimes called \"days to spot\".'

   <inputDataDate> IdentifiedDate </inputDataDate> [0..1]
```

'The date from which the input data used to construct the pricing input was obtained. Often the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]

'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]

'The date and time when the pricing input was generated.'

<inputs> QuotedAssetSet </inputs> [0..1]
<zeroCurve> ZeroRateCurve </zeroCurve> [0..1]

'A curve of zero rates.'

<forwardCurve> ForwardRateCurve </forwardCurve> [0..*]

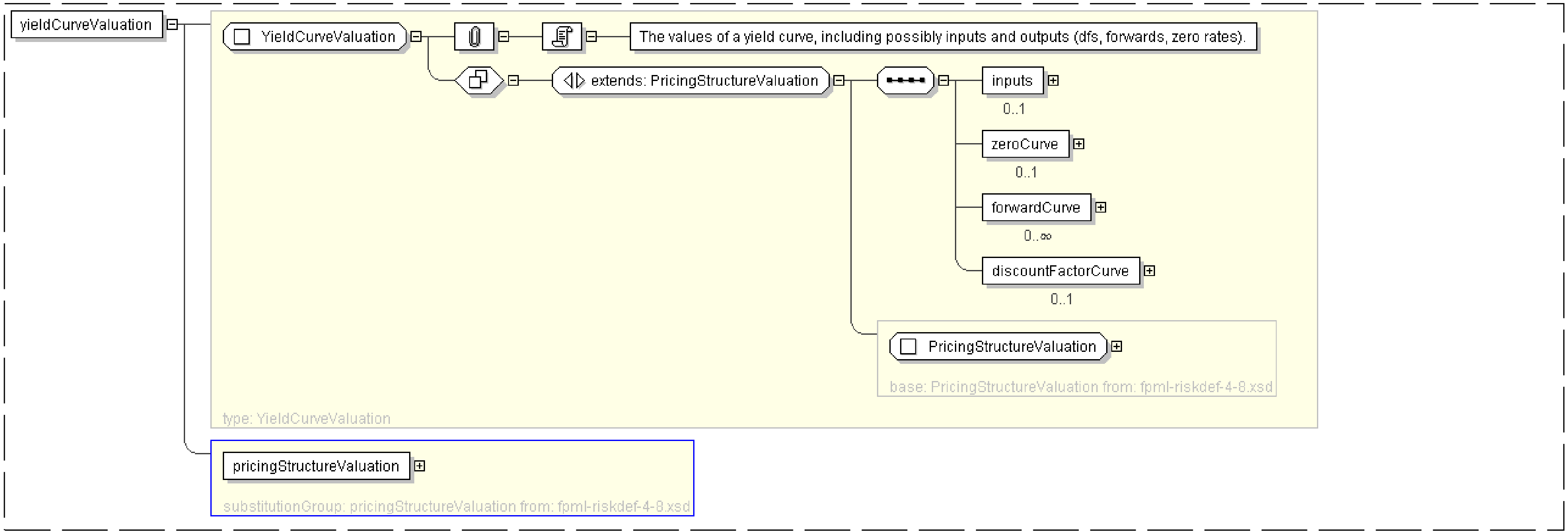
'A curve of forward rates.'

<discountFactorCurve> TermCurve </discountFactorCurve> [0..1]

'A curve of discount factors.'

</yieldCurveValuation>

Diagram



Schema Component Representation

```
<xsd:element name="yieldCurveValuation" type=" YieldCurveValuation
" substitutionGroup="pricingStructureValuation"/>
```

top

Global Definitions

Complex Type: CompoundingFrequency

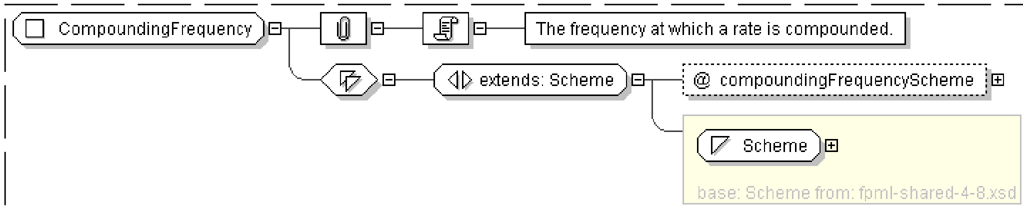
Super-types:	Scheme < **CompoundingFrequency** (by extension)
Sub-types:	None

Name	CompoundingFrequency
Used by (from the same schema document)	Complex Type **ZeroRateCurve**
Abstract	no
Documentation	The frequency at which a rate is compounded.

XML Instance Representation

```
<...
compoundingFrequencyScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CompoundingFrequency">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="compoundingFrequencyScheme" type=" xsd:anyURI " default="http://www.
         fpml.org/coding-scheme/compounding-frequency"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CreditCurve

Super-types:	PricingStructure < **CreditCurve** (by extension)
Sub-types:	None

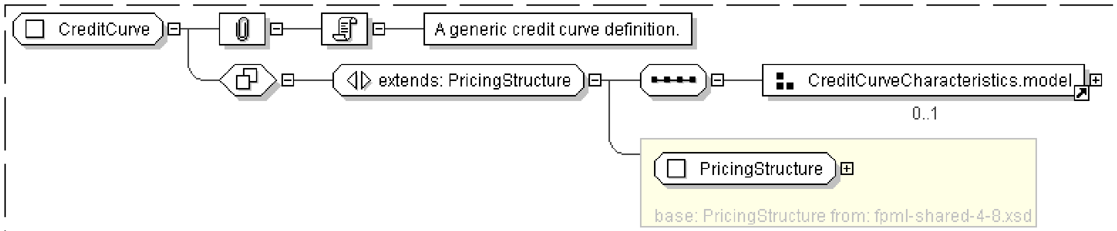
Name	CreditCurve
Used by (from the same schema document)	Element **creditCurve**
Abstract	no
Documentation	A generic credit curve definition.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

Start Group: CreditCurveCharacteristics.model [0..1]
```

```
Start Choice [1]
        <referenceEntity> LegalEntity </referenceEntity> [1]
        'The entity for which this is defined.'

        <creditEntityReference> LegalEntityReference </creditEntityReference> [1]
        'An XML reference a credit entity defined elsewhere in the document.'

End Choice
      <creditEvents> CreditEvents </creditEvents> [0..1]
      'The material credit event.'

      <seniority> CreditSeniority </seniority> [1]
      'The level of seniority of the deliverable obligation.'

      <secured> xsd:boolean </secured> [1]
      'Whether the deliverable obligation is secured or unsecured.'

      <currency> Currency </currency> [1]
      'The currency of denomination of the deliverable obligation.'

      <obligations> Obligations </obligations> [0..1]
      'The underlying obligations of the reference entity on which you are buying or
      selling protection'

      <deliverableObligations> DeliverableObligations </deliverableObligations> [0..1]
      'What sort of obligation may be delivered in the event of the credit event. ISDA 2003
      Term: Obligation Category/Deliverable Obligation Category'

End Group: CreditCurveCharacteristics.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditCurve">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructure ">
         <xsd:sequence>
            <xsd:group ref=" CreditCurveCharacteristics.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CreditCurveValuation

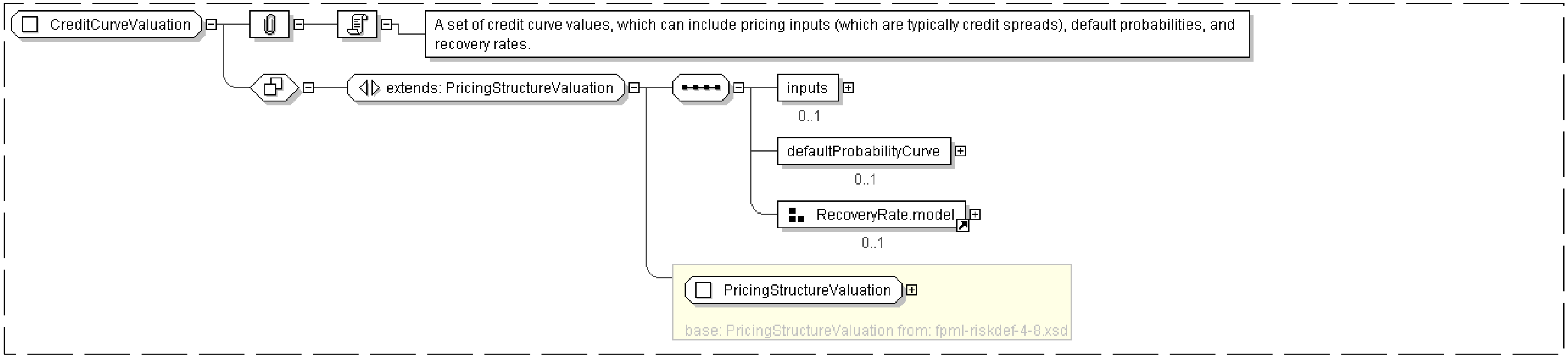
Super-types:	PricingStructureValuation < **CreditCurveValuation** (by extension)
Sub-types:	None

Name	CreditCurveValuation
Used by (from the same schema document)	Element **creditCurveValuation**
Abstract	no
Documentation	A set of credit curve values, which can include pricing inputs (which are typically credit spreads), default probabilities, and recovery rates.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

   <baseDate> IdentifiedDate </baseDate> [1]
   'The base date for which the structure applies, i.e. the curve date. Normally this will
   align with the valuation date.'

   <spotDate> IdentifiedDate </spotDate> [0..1]
   'The spot settlement date for which the structure applies, normally 0-2 days after the
   base date. The difference between the baseDate and the spotDate is termed the settlement
   lag, and is sometimes called \"days to spot\".'

   <inputDataDate> IdentifiedDate </inputDataDate> [0..1]
   'The date from which the input data used to construct the pricing input was obtained. Often
   the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in
   which input data from one date is used to generate a curve for a later date.'

   <endDate> IdentifiedDate </endDate> [0..1]
   'The last date for which data is supplied in this pricing input.'

   <buildDateTime> xsd:dateTime </buildDateTime> [0..1]
   'The date and time when the pricing input was generated.'

   <inputs> QuotedAssetSet </inputs> [0..1]
   <defaultProbabilityCurve> DefaultProbabilityCurve </defaultProbabilityCurve> [0..1]
   'A curve of default probabilities.'
Start Group: RecoveryRate.model [0..1]
'A recovery rate value or curve.'

Start Choice [1]
         <recoveryRate> xsd:decimal </recoveryRate> [1]
         'A single recovery rate, to be used for all terms.'

         <recoveryRateCurve> TermCurve </recoveryRateCurve> [1]
         'A curve of recovery rates, allowing different terms to have different recovery rates.'

End Choice
End Group: RecoveryRate.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditCurveValuation">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructureValuation ">
         <xsd:sequence>
            <xsd:element name="inputs" type=" QuotedAssetSet " minOccurs="0"/>
            <xsd:element name="defaultProbabilityCurve" type=" DefaultProbabilityCurve " minOccurs="0"/>
            <xsd:group ref=" RecoveryRate.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DefaultProbabilityCurve

Super-types:	PricingStructureValuation < **DefaultProbabilityCurve** (by extension)
Sub-types:	None

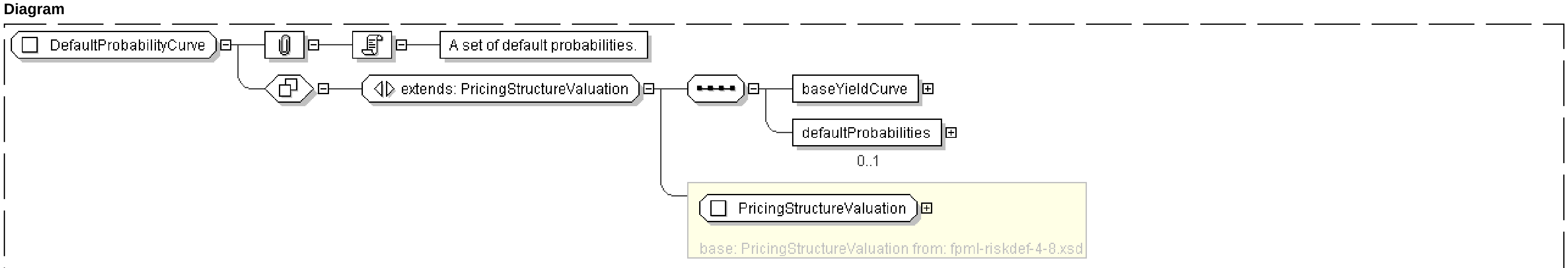
Name	DefaultProbabilityCurve
Used by (from the same schema document)	Complex Type **CreditCurveValuation**
Abstract	no
Documentation	A set of default probabilities.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'
```

```
    <baseDate> IdentifiedDate </baseDate> [1]
    'The base date for which the structure applies, i.e. the curve date. Normally this will
    align with the valuation date.'

    <spotDate> IdentifiedDate </spotDate> [0..1]
    'The spot settlement date for which the structure applies, normally 0-2 days after the
    base date. The difference between the baseDate and the spotDate is termed the settlement
    lag, and is sometimes called \"days to spot\".'

    <inputDataDate> IdentifiedDate </inputDataDate> [0..1]
    'The date from which the input data used to construct the pricing input was obtained. Often
    the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in
    which input data from one date is used to generate a curve for a later date.'

    <endDate> IdentifiedDate </endDate> [0..1]
    'The last date for which data is supplied in this pricing input.'

    <buildDateTime> xsd:dateTime </buildDateTime> [0..1]
    'The date and time when the pricing input was generated.'

    <baseYieldCurve> PricingStructureReference </baseYieldCurve> [1]
    'A reference to the yield curve values used as a basis for this credit curve valuation.'

    <defaultProbabilities> TermCurve </defaultProbabilities> [0..1]
    'A collection of default probabilities.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DefaultProbabilityCurve">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructureValuation ">
         <xsd:sequence>
            <xsd:element name="baseYieldCurve" type=" PricingStructureReference "/>
            <xsd:element name="defaultProbabilities" type=" TermCurve " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ForwardRateCurve

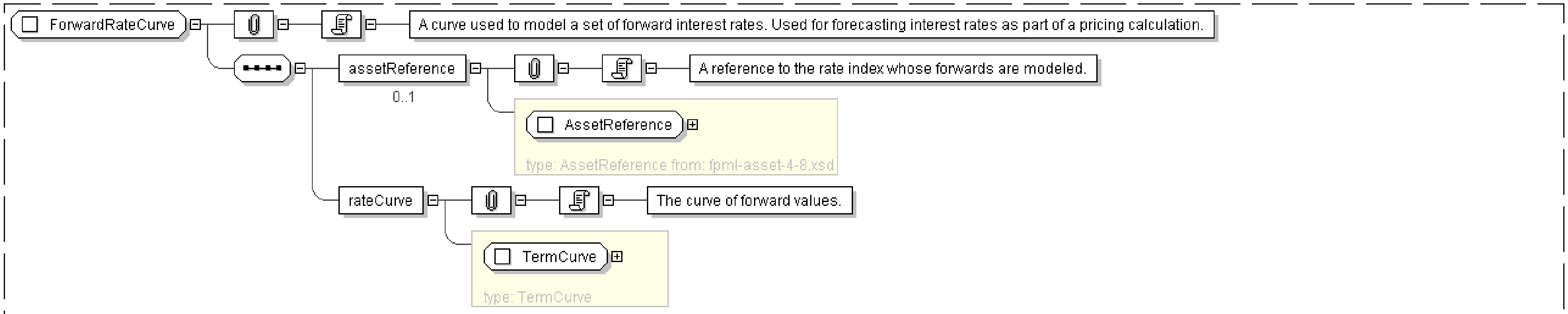
Super-types:	None
Sub-types:	None

Name	ForwardRateCurve
Used by (from the same schema document)	Complex Type **YieldCurveValuation**
Abstract	no
Documentation	A curve used to model a set of forward interest rates. Used for forecasting interest rates as part of a pricing calculation.

XML Instance Representation

```
<...>
   <assetReference> AssetReference </assetReference> [0..1]
   'A reference to the rate index whose forwards are modeled.'

   <rateCurve> TermCurve </rateCurve> [1]
   'The curve of forward values.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ForwardRateCurve">
   <xsd:sequence>
      <xsd:element name="assetReference" type=" AssetReference " minOccurs="0"/>
      <xsd:element name="rateCurve" type=" TermCurve "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FxCurve

Super-types:	PricingStructure < **FxCurve** (by extension)
Sub-types:	None

Name	FxCurve
Used by (from the same schema document)	Element **fxCurve**
Abstract	no
Documentation	An fx curve object., which includes pricing inputs and term structures for fx forwards.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'
```

<currency> Currency </currency> [0..1]

'The currency that the structure is expressed in (this is relevant mostly for the Interes Rates asset class).'

Start Group: FxCurveCharacteristics.model [0..1]

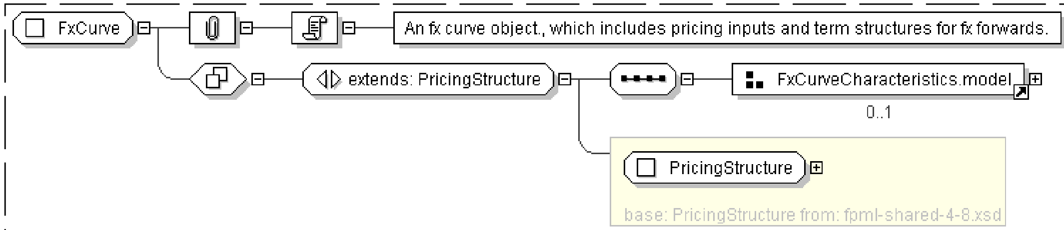
<quotedCurrencyPair> QuotedCurrencyPair **</quotedCurrencyPair>** [1]

'Defines the two currencies for an FX trade and the quotation relationship between the two currencies.'

End Group: FxCurveCharacteristics.model

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxCurve">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructure ">
         <xsd:sequence>
            <xsd:group ref=" FxCurveCharacteristics.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxCurveValuation

Super-types:	PricingStructureValuation < **FxCurveValuation** (by extension)
Sub-types:	None

Name	FxCurveValuation
Used by (from the same schema document)	Element **fxCurveValuation**
Abstract	no
Documentation	A valuation of an FX curve object., which includes pricing inputs and term structures for fx forwards.

XML Instance Representation

<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]"

'An optional reference to the scenario that this valuation applies to.'

">

<objectReference> AnyAssetReference </objectReference> [0..1]

'A reference to the asset or pricing structure that this values.'

<valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]

'A reference to the valuation scenario used to calculate this valuation. If the Valuation occurs within a ValuationSet, this value is optional and is defaulted from

the ValuationSet. If this value occurs in both places, the lower level value (i.e. the one here) overrides that in the higher (i.e. ValuationSet).'

<baseDate> IdentifiedDate </baseDate> [1]

'The base date for which the structure applies, i.e. the curve date. Normally this will align with the valuation date.'

<spotDate> IdentifiedDate </spotDate> [0..1]

'The spot settlement date for which the structure applies, normally 0-2 days after the base date. The difference between the baseDate and the spotDate is termed the settlement lag, and is sometimes called \"days to spot\".'

<inputDataDate> IdentifiedDate </inputDataDate> [0..1]

'The date from which the input data used to construct the pricing input was obtained. Often the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]

'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]

'The date and time when the pricing input was generated.'

<settlementCurrencyYieldCurve> PricingStructureReference **</settlementCurrencyYieldCurve>** [0..1]
<forecastCurrencyYieldCurve> PricingStructureReference **</forecastCurrencyYieldCurve>** [0..1]
<spotRate> FxRateSet **</spotRate>** [0..1]
<fxForwardCurve> TermCurve **</fxForwardCurve>** [0..1]

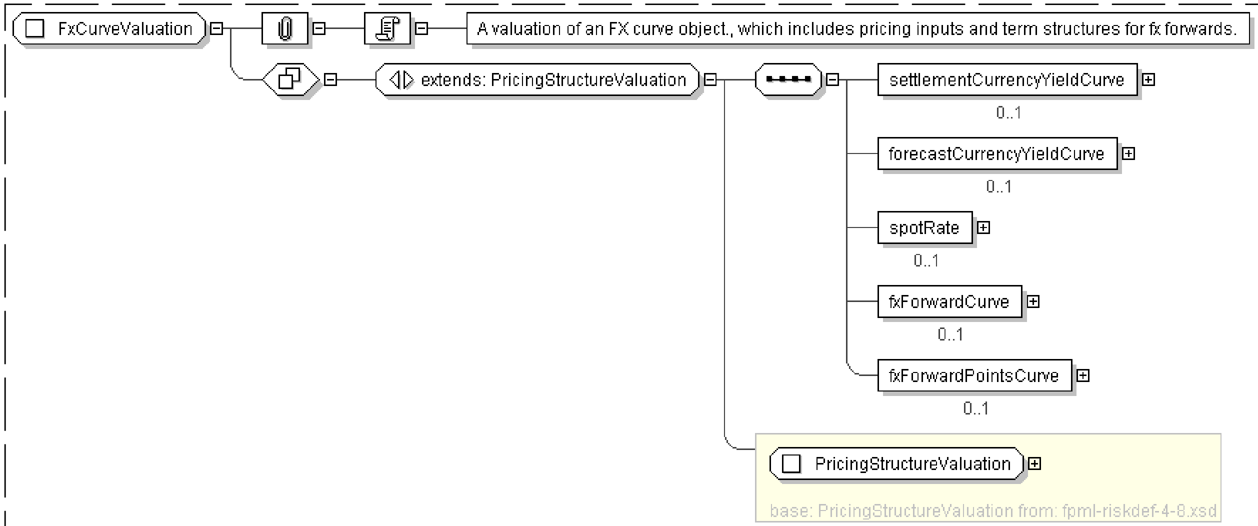
'A curve of fx forward rates.'

<fxForwardPointsCurve> TermCurve **</fxForwardPointsCurve>** [0..1]

'A curve of fx forward point spreads.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxCurveValuation">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructureValuation ">
```

```
        <xsd:sequence>
           <xsd:element name="settlementCurrencyYieldCurve" type=" PricingStructureReference
           " minOccurs="0"/>
           <xsd:element name="forecastCurrencyYieldCurve" type=" PricingStructureReference "
           minOccurs="0"/>
           <xsd:element name="spotRate" type=" FxRateSet " minOccurs="0"/>
           <xsd:element name="fxForwardCurve" type=" TermCurve " minOccurs="0"/>
           <xsd:element name="fxForwardPointsCurve" type=" TermCurve " minOccurs="0"/>
        </xsd:sequence>
     </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FxRateSet

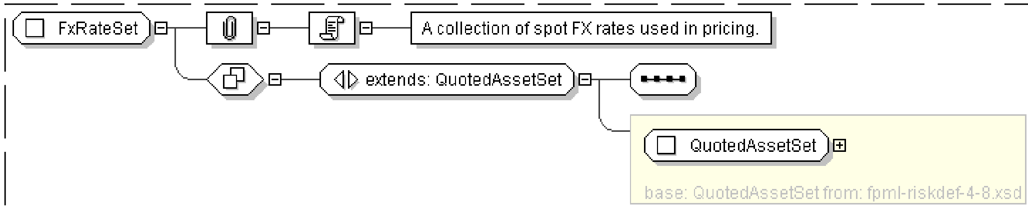
Super-types:	QuotedAssetSet < **FxRateSet** (by extension)
Sub-types:	None

Name	FxRateSet
Used by (from the same schema document)	Complex Type **FxCurveValuation**
Abstract	no
Documentation	A collection of spot FX rates used in pricing.

XML Instance Representation

```
<...>
   <instrumentSet> InstrumentSet </instrumentSet> [0..1]
   'A collection of instruments used as a basis for quotation.'

   <assetQuote> BasicAssetValuation </assetQuote> [0..*]
   'A collection of valuations (quotes) for the assets needed in the set. Normally these
   quotes will be for the underlying assets listed above, but they don\'t necesarily have to be.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FxRateSet">
  <xsd:complexContent>
     <xsd:extension base=" QuotedAssetSet ">
        <xsd:sequence/>
     </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MultiDimensionalPricingData

Super-types:	None
Sub-types:	None

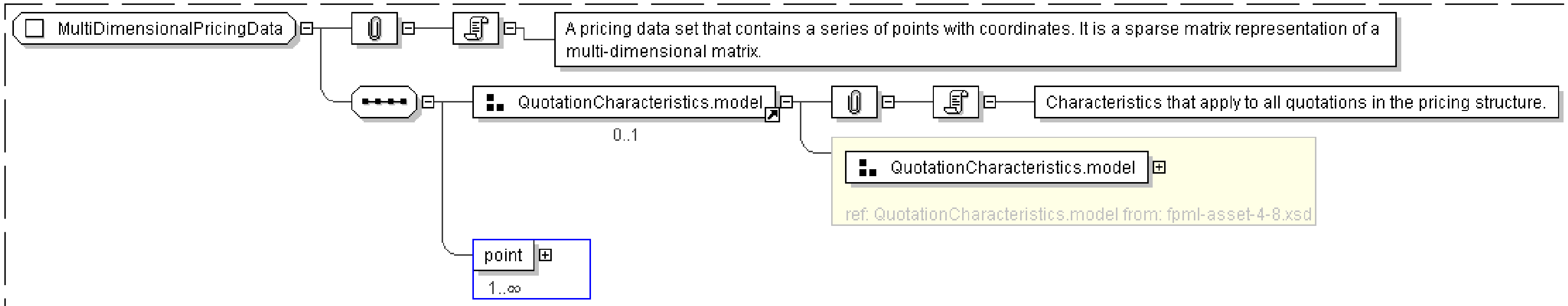
Name	MultiDimensionalPricingData
Used by (from the same schema document)	Complex Type **VolatilityMatrix**
Abstract	no
Documentation	A pricing data set that contains a series of points with coordinates. It is a sparse matrix representation of a multi-dimensional matrix.

XML Instance Representation

```
<...>
Start Group: QuotationCharacteristics.model [0..1]
'Characteristics that apply to all quotations in the pricing structure.'

      <measureType> AssetMeasureType </measureType> [0..1]
      'The type of the value that is measured. This could be an NPV, a cash flow, a clean price, etc.'

      <quoteUnits> PriceQuoteUnits </quoteUnits> [0..1]
      'The optional units that the measure is expressed in. If not supplied, this is assumed to be
      a price/value in currency units.'

      <side> QuotationSideEnum </side> [0..1]
      'The side (bid/mid/ask) of the measure.'

      <currency> Currency </currency> [0..1]
      'The optional currency that the measure is expressed in. If not supplied, this is
      defaulted from the reportingCurrency in the valuationScenarioDefinition.'

      <timing> QuoteTiming </timing> [0..1]
      'When during a day the quote is for. Typically, if this element is supplied, the
      QuoteLocation needs also to be supplied.'
Start Group: QuoteLocation.model [0..1]
'Where the quote is from.'

Start Choice [1]
            <businessCenter> BusinessCenter </businessCenter> [1]
            'A city or other business center.'

            <exchangeId> ExchangeId </exchangeId> [1]
            'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
End Group: QuoteLocation.model
      <informationSource> InformationSource </informationSource> [0..*]
      'The information source where a published or displayed market rate will be obtained, e.
      g. Telerate Page 3750.'

      <time> xsd:dateTime </time> [0..1]
      'When the quote was observed or derived.'

      <valuationDate> xsd:date </valuationDate> [0..1]
      'When the quote was computed.'

      <expiryTime> xsd:dateTime </expiryTime> [0..1]
      'When does the quote cease to be valid.'

      <cashFlowType> CashflowType </cashFlowType> [0..1]
```

```
      'For cash flows, the type of the cash flows. Examples include: Coupon payment, Premium
      Fee, Settlement Fee, Brokerage Fee, etc.'

End Group: QuotationCharacteristics.model
   <point> PricingStructurePoint </point> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MultiDimensionalPricingData">
   <xsd:sequence>
      <xsd:group ref=" QuotationCharacteristics.model " minOccurs="0"/>
      <xsd:element name="point" type=" PricingStructurePoint " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ParametricAdjustment

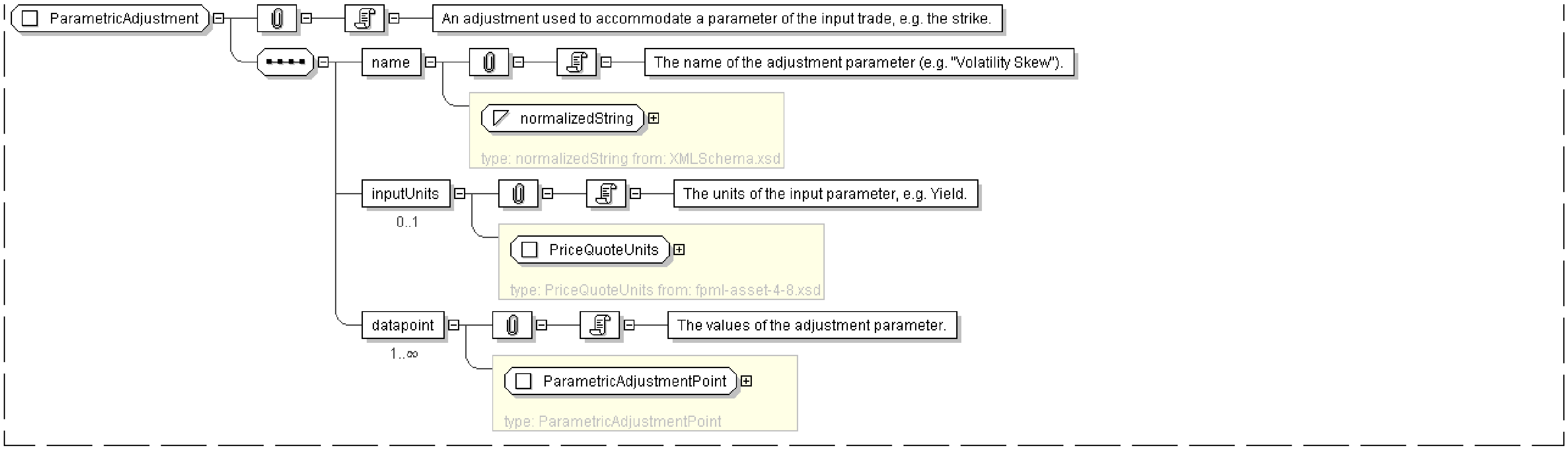
Super-types:	None
Sub-types:	None

Name	ParametricAdjustment
Used by (from the same schema document)	Complex Type **VolatilityMatrix**
Abstract	no
Documentation	An adjustment used to accommodate a parameter of the input trade, e.g. the strike.

XML Instance Representation

```
<...>
   <name> xsd:normalizedString </name> [1]
   'The name of the adjustment parameter (e.g. \"Volatility Skew\").'

   <inputUnits> PriceQuoteUnits </inputUnits> [0..1]
   'The units of the input parameter, e.g. Yield.'

   <datapoint> ParametricAdjustmentPoint </datapoint> [1..*]
   'The values of the adjustment parameter.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ParametricAdjustment">
   <xsd:sequence>
      <xsd:element name="name" type=" xsd:normalizedString "/>
      <xsd:element name="inputUnits" type=" PriceQuoteUnits " minOccurs="0"/>
      <xsd:element name="datapoint" type=" ParametricAdjustmentPoint " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ParametricAdjustmentPoint

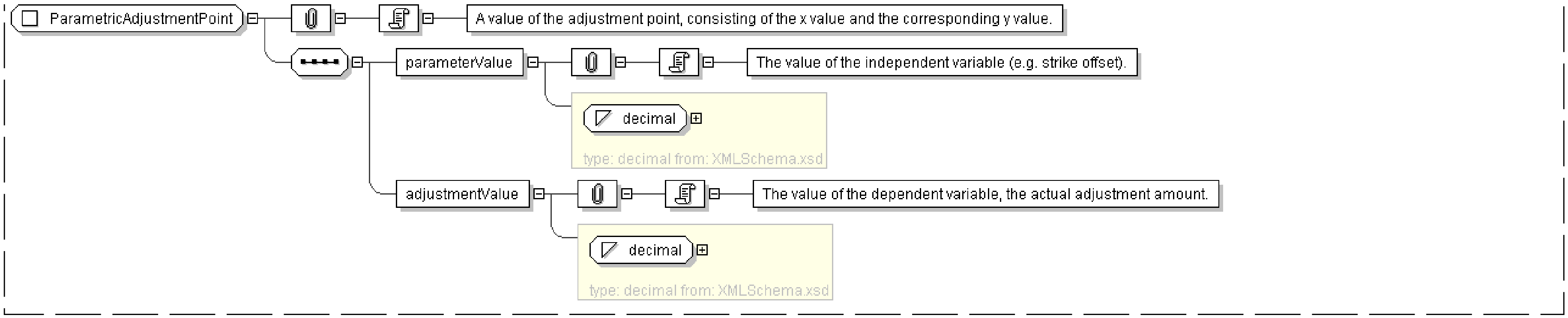
Super-types:	None
Sub-types:	None

Name	ParametricAdjustmentPoint
Used by (from the same schema document)	Complex Type **ParametricAdjustment**
Abstract	no
Documentation	A value of the adjustment point, consisting of the x value and the corresponding y value.

XML Instance Representation

```
<...>
   <parameterValue> xsd:decimal </parameterValue> [1]
   'The value of the independent variable (e.g. strike offset).'

   <adjustmentValue> xsd:decimal </adjustmentValue> [1]
   'The value of the dependent variable, the actual adjustment amount.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ParametricAdjustmentPoint">
   <xsd:sequence>
      <xsd:element name="parameterValue" type=" xsd:decimal "/>
      <xsd:element name="adjustmentValue" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PricingStructurePoint

Super-types:	None
Sub-types:	None

Name	PricingStructurePoint
Used by (from the same schema document)	Complex Type **MultiDimensionalPricingData**
Abstract	no
Documentation	A single valued point with a set of coordinates that define an arbitrary number of indentifying indexes (0 or more). Note that the collection of coordinates/coordinate references for a PricingStructurePoint must not define a given dimension (other than "generic") more than once. This is to avoid ambiguity.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Group: PricingCoordinateOrReference.model [0..*]
Start Choice [1]
         <coordinate> PricingDataPointCoordinate </coordinate> [1]
         'An explicit, filled in data point coordinate. This might specify expiration, strike, etc.'

         <coordinateReference> PricingDataPointCoordinateReference </coordinateReference> [1]
         'A reference to a pricing data point coordinate within this document.'

End Choice
End Group: PricingCoordinateOrReference.model
Start Group: UnderlyingAssetOrReference.model [0..1]
Start Choice [1]
         <underlyingAsset> ... </underlyingAsset> [1]
         'An underlying asset that defines the meaning of the value, i.e. the product that the
         value corresponds to. For example, this could be a caplet or simple european swaption.'

         <underlyingAssetReference> AssetReference </underlyingAssetReference> [0..1]
         'A reference to an underlying asset that defines the meaning of the value, i.e. the
         product that the value corresponds to. For example, this could be a caplet or simple
```

european swaption.'

End Choice
End Group: UnderlyingAssetOrReference.model
<value> xsd:decimal </value> [0..1]

'The value of the the quotation.'

<measureType> AssetMeasureType </measureType> [0..1]

'The type of the value that is measured. This could be an NPV, a cash flow, a clean price, etc.'

<quoteUnits> PriceQuoteUnits </quoteUnits> [0..1]

'The optional units that the measure is expressed in. If not supplied, this is assumed to be a price/value in currency units.'

<side> QuotationSideEnum </side> [0..1]

'The side (bid/mid/ask) of the measure.'

<currency> Currency </currency> [0..1]

'The optional currency that the measure is expressed in. If not supplied, this is defaulted from the reportingCurrency in the valuationScenarioDefinition.'

<timing> QuoteTiming </timing> [0..1]

'When during a day the quote is for. Typically, if this element is supplied, the QuoteLocation needs also to be supplied.'

Start Group: QuoteLocation.model [0..1]

'Where the quote is from.'

Start Choice [1]
<businessCenter> BusinessCenter </businessCenter> [1]

'A city or other business center.'

<exchangeId> ExchangeId </exchangeId> [1]

'The exchange (e.g. stock or futures exchange) from which the quote is obtained.'

End Choice
End Group: QuoteLocation.model
<informationSource> InformationSource </informationSource> [0..*]

'The information source where a published or displayed market rate will be obtained, e. g. Telerate Page 3750.'

<time> xsd:dateTime </time> [0..1]

'When the quote was observed or derived.'

<valuationDate> xsd:date </valuationDate> [0..1]

'When the quote was computed.'

<expiryTime> xsd:dateTime </expiryTime> [0..1]

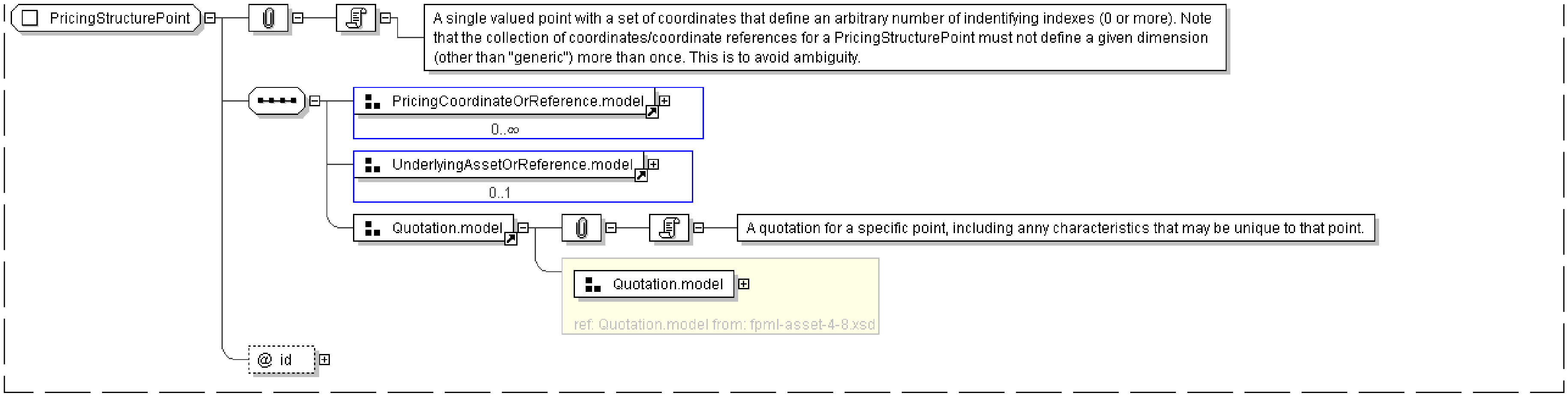
'When does the quote cease to be valid.'

<cashFlowType> CashflowType </cashFlowType> [0..1]

'For cash flows, the type of the cash flows. Examples include: Coupon payment, Premium Fee, Settlement Fee, Brokerage Fee, etc.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingStructurePoint">
   <xsd:sequence>
      <xsd:group ref=" PricingCoordinateOrReference.model " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:group ref=" UnderlyingAssetOrReference.model " minOccurs="0"/>
      <xsd:group ref=" Quotation.model "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: TermCurve

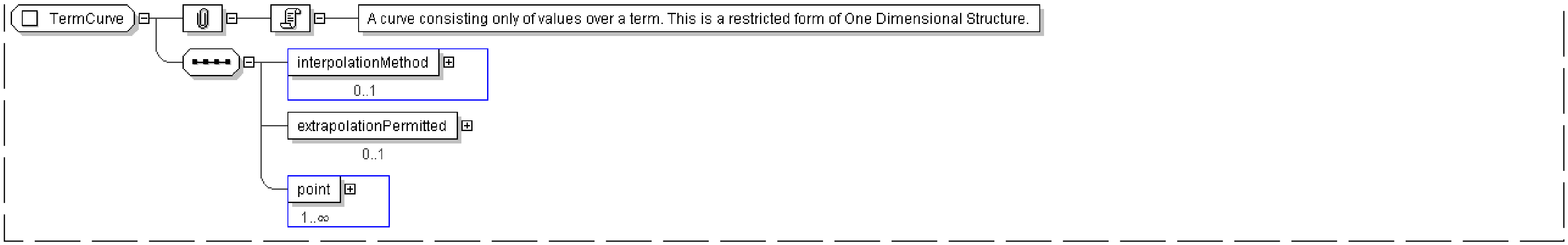
Super-types:	None
Sub-types:	None

Name	TermCurve
Used by (from the same schema document)	Complex Type **DefaultProbabilityCurve** , Complex Type **ForwardRateCurve** , Complex Type **FxCurveValuation** , Complex Type **FxCurveValuation** , Complex Type **YieldCurveValuation** , Complex Type **ZeroRateCurve** , Model Group **RecoveryRate.model**
Abstract	no
Documentation	A curve consisting only of values over a term. This is a restricted form of One Dimensional Structure.

XML Instance Representation

```
<...>
   <interpolationMethod> InterpolationMethod </interpolationMethod> [0..1]
   <extrapolationPermitted> xsd:boolean </extrapolationPermitted> [0..1]
   <point> TermPoint </point> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TermCurve">
   <xsd:sequence>
      <xsd:element name="interpolationMethod" type=" InterpolationMethod " minOccurs="0"/>
      <xsd:element name="extrapolationPermitted" type=" xsd:boolean " minOccurs="0"/>
      <xsd:element name="point" type=" TermPoint " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TermPoint

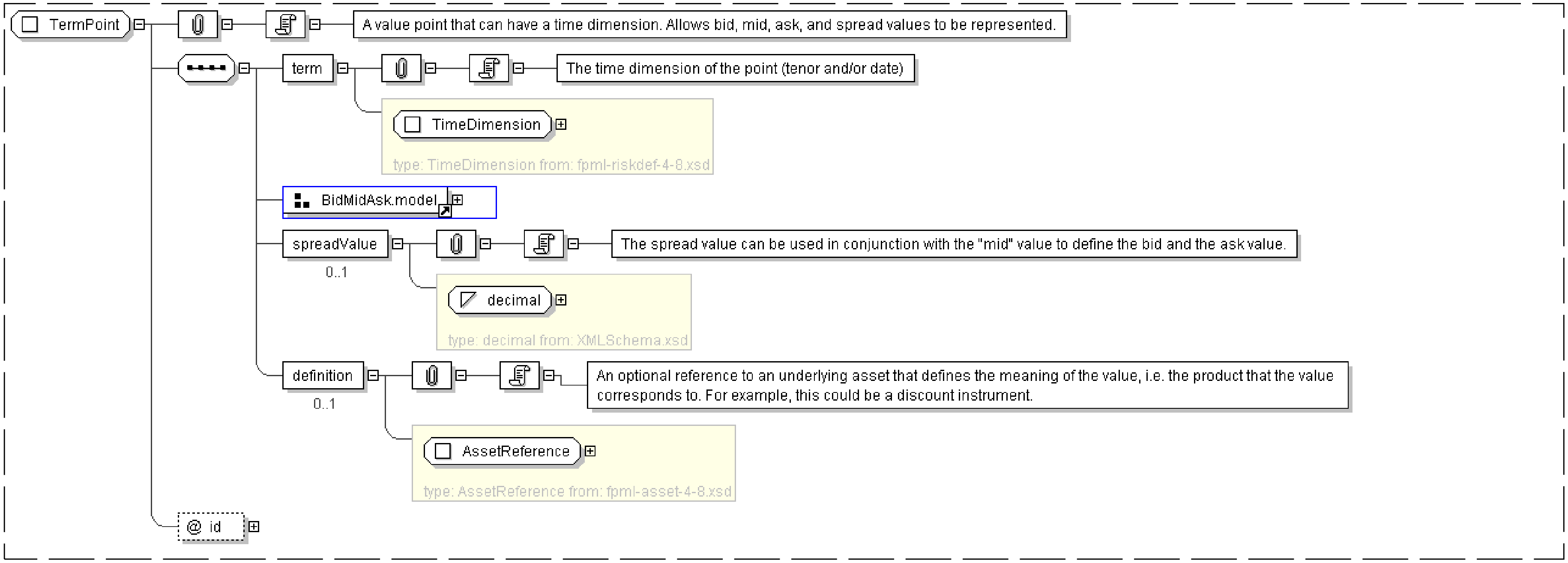
Super-types:	None
Sub-types:	None

Name	TermPoint
Used by (from the same schema document)	Complex Type **TermCurve**
Abstract	no
Documentation	A value point that can have a time dimension. Allows bid, mid, ask, and spread values to be represented.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <term> TimeDimension </term> [1]
   'The time dimension of the point (tenor and/or date)'

   <bid> xsd:decimal </bid> [0..1]
   'A price \"bid\" by a buyer for an asset, i.e. the price a buyer is willing to pay.'

   <mid> xsd:decimal </mid> [0..1]
   'A price midway between the bid and the ask price.'

   <ask> xsd:decimal </ask> [0..1]
   'A price \"asked\" by a seller for an asset, i.e. the price at which a seller is willing
   to sell.'

   <spreadValue> xsd:decimal </spreadValue> [0..1]
   'The spread value can be used in conjunction with the \"mid\" value to define the bid and
   the ask value.'

   <definition> AssetReference </definition> [0..1]
   'An optional reference to an underlying asset that defines the meaning of the value, i.e.
   the product that the value corresponds to. For example, this could be a discount instrument.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TermPoint">
   <xsd:sequence>
      <xsd:element name="term" type=" TimeDimension "/>
      <xsd:group ref=" BidMidAsk.model "/>
      <xsd:element name="spreadValue" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="definition" type=" AssetReference " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: VolatilityMatrix

Super-types:	PricingStructureValuation < **VolatilityMatrix** (by extension)
Sub-types:	None

Name	VolatilityMatrix
Used by (from the same schema document)	Element **volatilityMatrixValuation**
Abstract	no
Documentation	A matrix of volatilities with dimension 0-3.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
```

'A reference to the asset or pricing structure that this values.'

<valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]

'A reference to the valuation scenario used to calculate this valuation. If the Valuation occurs within a ValuationSet, this value is optional and is defaulted from the ValuationSet. If this value occurs in both places, the lower level value (i.e. the one here) overrides that in the higher (i.e. ValuationSet).'

<baseDate> IdentifiedDate </baseDate> [1]

'The base date for which the structure applies, i.e. the curve date. Normally this will align with the valuation date.'

<spotDate> IdentifiedDate </spotDate> [0..1]

'The spot settlement date for which the structure applies, normally 0-2 days after the base date. The difference between the baseDate and the spotDate is termed the settlement lag, and is sometimes called \"days to spot\".'

<inputDataDate> IdentifiedDate </inputDataDate> [0..1]

'The date from which the input data used to construct the pricing input was obtained. Often the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]

'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]

'The date and time when the pricing input was generated.'

<dataPoints> MultiDimensionalPricingData </dataPoints> [1]

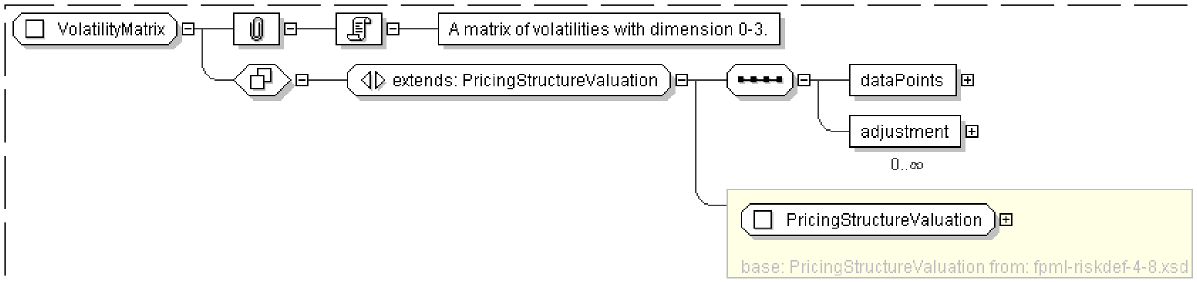
'The raw volatility matrix data, expressed as a multi-dimensional array.'

<adjustment> ParametricAdjustment </adjustment> [0..*]

'An adjustment factor, such as for vol smile/skew.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="VolatilityMatrix">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructureValuation ">
         <xsd:sequence>
            <xsd:element name="dataPoints" type=" MultiDimensionalPricingData "/>
            <xsd:element name="adjustment" type=" ParametricAdjustment "
            minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: VolatilityRepresentation

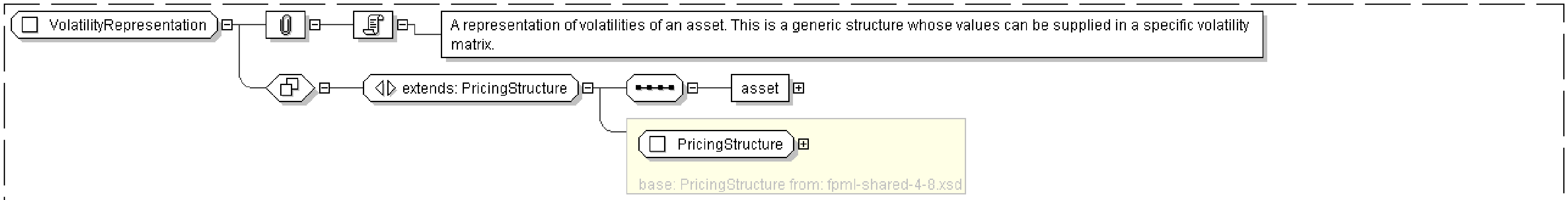
Super-types:	PricingStructure < **VolatilityRepresentation** (by extension)
Sub-types:	None

Name	VolatilityRepresentation
Used by (from the same schema document)	Element **volatilityRepresentation**
Abstract	no
Documentation	A representation of volatilities of an asset. This is a generic structure whose values can be supplied in a specific volatility matrix.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

   <asset> AnyAssetReference </asset> [1]
   'A reference to the asset whose volatility is modeled.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="VolatilityRepresentation">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructure ">
         <xsd:sequence>
            <xsd:element name="asset" type=" AnyAssetReference "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: YieldCurve

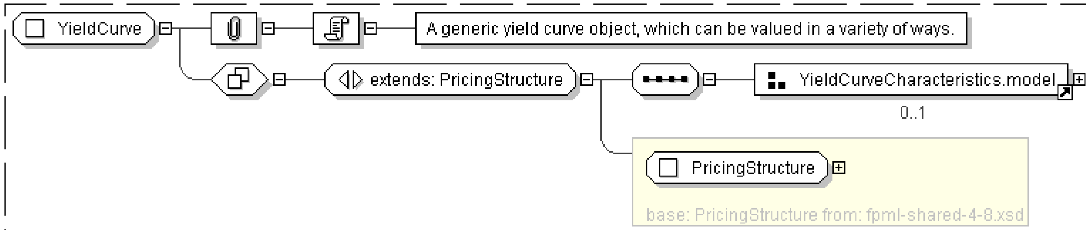
Super-types:	PricingStructure < **YieldCurve** (by extension)
Sub-types:	None

Name	YieldCurve
Used by (from the same schema document)	Element **yieldCurve**
Abstract	no
Documentation	A generic yield curve object, which can be valued in a variety of ways.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

Start Group: YieldCurveCharacteristics.model [0..1]
      <algorithm> xsd:string </algorithm> [0..1]
      <forecastRateIndex> ForecastRateIndex </forecastRateIndex> [0..1]
End Group: YieldCurveCharacteristics.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="YieldCurve">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructure ">
         <xsd:sequence>
            <xsd:group ref=" YieldCurveCharacteristics.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: YieldCurveValuation

Super-types:	PricingStructureValuation < **YieldCurveValuation** (by extension)
Sub-types:	None

Name	YieldCurveValuation
Used by (from the same schema document)	Element **yieldCurveValuation**
Abstract	no
Documentation	The values of a yield curve, including possibly inputs and outputs (dfs, forwards, zero rates).

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
```

definitionRef=" xsd:IDREF [0..1]

'An optional reference to the scenario that this valuation applies to.'

">

<objectReference> AnyAssetReference </objectReference> [0..1]

'A reference to the asset or pricing structure that this values.'

<valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]

'A reference to the valuation scenario used to calculate this valuation. If the Valuation occurs within a ValuationSet, this value is optional and is defaulted from the ValuationSet. If this value occurs in both places, the lower level value (i.e. the one here) overrides that in the higher (i.e. ValuationSet).'

<baseDate> IdentifiedDate </baseDate> [1]

'The base date for which the structure applies, i.e. the curve date. Normally this will align with the valuation date.'

<spotDate> IdentifiedDate </spotDate> [0..1]

'The spot settlement date for which the structure applies, normally 0-2 days after the base date. The difference between the baseDate and the spotDate is termed the settlement lag, and is sometimes called \"days to spot\".'

<inputDataDate> IdentifiedDate </inputDataDate> [0..1]

'The date from which the input data used to construct the pricing input was obtained. Often the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]

'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]

'The date and time when the pricing input was generated.'

<inputs> QuotedAssetSet </inputs> [0..1]
<zeroCurve> ZeroRateCurve </zeroCurve> [0..1]

'A curve of zero rates.'

<forwardCurve> ForwardRateCurve </forwardCurve> [0..*]

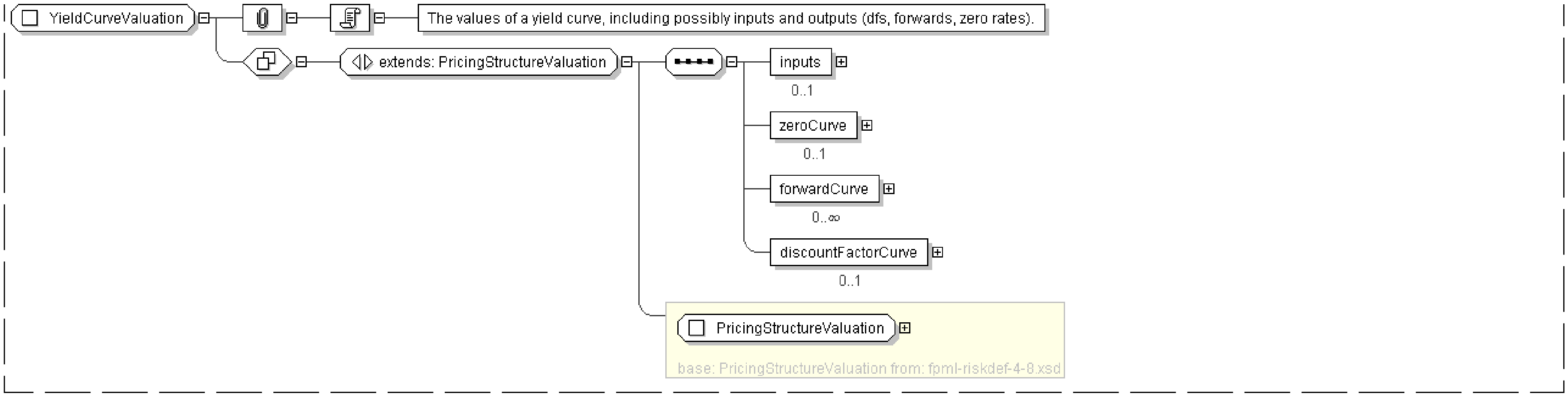
'A curve of forward rates.'

<discountFactorCurve> TermCurve </discountFactorCurve> [0..1]

'A curve of discount factors.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="YieldCurveValuation">
   <xsd:complexContent>
      <xsd:extension base=" PricingStructureValuation ">
         <xsd:sequence>
            <xsd:element name="inputs" type=" QuotedAssetSet " minOccurs="0"/>
            <xsd:element name="zeroCurve" type=" ZeroRateCurve " minOccurs="0"/>
            <xsd:element name="forwardCurve" type=" ForwardRateCurve " minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="discountFactorCurve" type=" TermCurve " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ZeroRateCurve

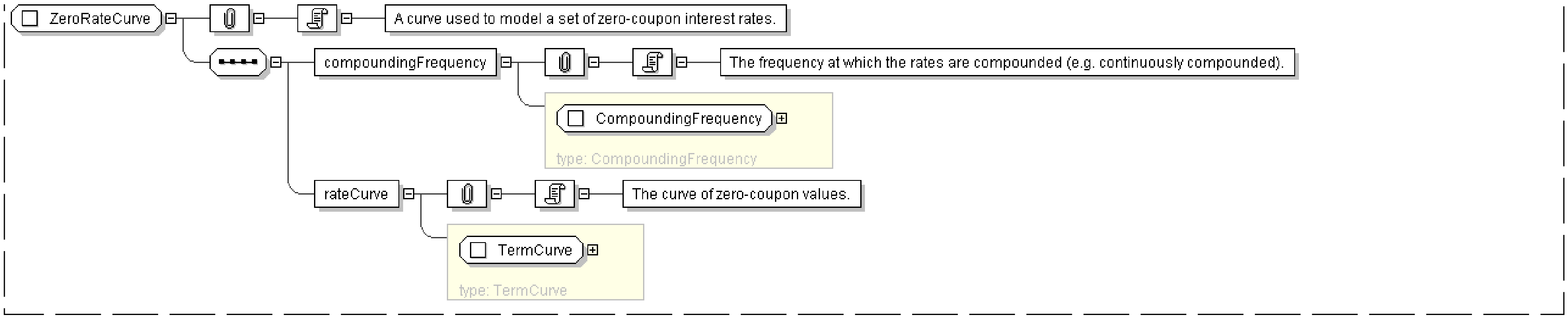
Super-types:	None
Sub-types:	None

Name	ZeroRateCurve
Used by (from the same schema document)	Complex Type **YieldCurveValuation**
Abstract	no
Documentation	A curve used to model a set of zero-coupon interest rates.

XML Instance Representation

```
<...>
   <compoundingFrequency> CompoundingFrequency </compoundingFrequency> [1]
   'The frequency at which the rates are compounded (e.g. continuously compounded).'

   <rateCurve> TermCurve </rateCurve> [1]
   'The curve of zero-coupon values.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ZeroRateCurve">
   <xsd:sequence>
      <xsd:element name="compoundingFrequency" type=" CompoundingFrequency "/>
      <xsd:element name="rateCurve" type=" TermCurve "/>
   </xsd:sequence>
</xsd:complexType>
```

top

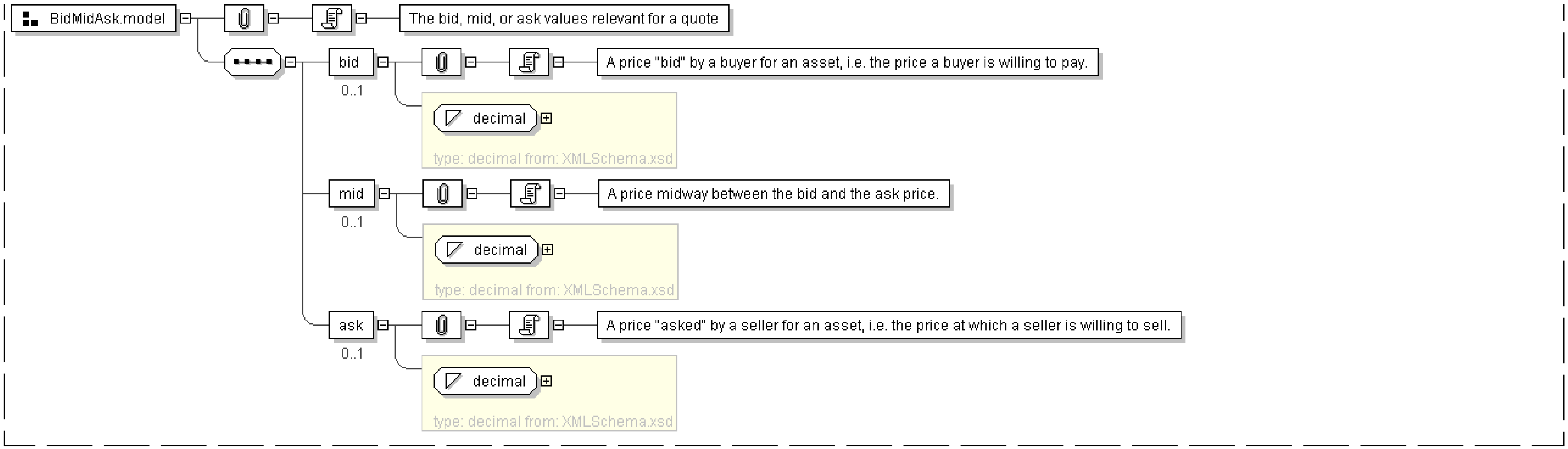
Model Group: BidMidAsk.model

Name	BidMidAsk.model
Used by (from the same schema document)	Complex Type **TermPoint**
Documentation	The bid, mid, or ask values relevant for a quote

XML Instance Representation

```
<bid> xsd:decimal </bid> [0..1]
'A price \"bid\" by a buyer for an asset, i.e. the price a buyer is willing to pay.'

<mid> xsd:decimal </mid> [0..1]
'A price midway between the bid and the ask price.'

<ask> xsd:decimal </ask> [0..1]
'A price \"asked\" by a seller for an asset, i.e. the price at which a seller is willing
to sell.'
```

Diagram



Schema Component Representation

```
<xsd:group name="BidMidAsk.model">
   <xsd:sequence>
      <xsd:element name="bid" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="mid" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="ask" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: CreditCurveCharacteristics.model

Name	CreditCurveCharacteristics.model
Used by (from the same schema document)	Complex Type **CreditCurve**
Documentation	The set of characterstics that describe the outputs of a credit curve.

XML Instance Representation

```
Start Choice [1]
   <referenceEntity> LegalEntity </referenceEntity> [1]
   'The entity for which this is defined.'

   <creditEntityReference> LegalEntityReference </creditEntityReference> [1]
   'An XML reference a credit entity defined elsewhere in the document.'

End Choice
<creditEvents> CreditEvents </creditEvents> [0..1]
'The material credit event.'

<seniority> CreditSeniority </seniority> [1]
'The level of seniority of the deliverable obligation.'

<secured> xsd:boolean </secured> [1]
'Whether the deliverable obligation is secured or unsecured.'

<currency> Currency </currency> [1]
'The currency of denomination of the deliverable obligation.'
```

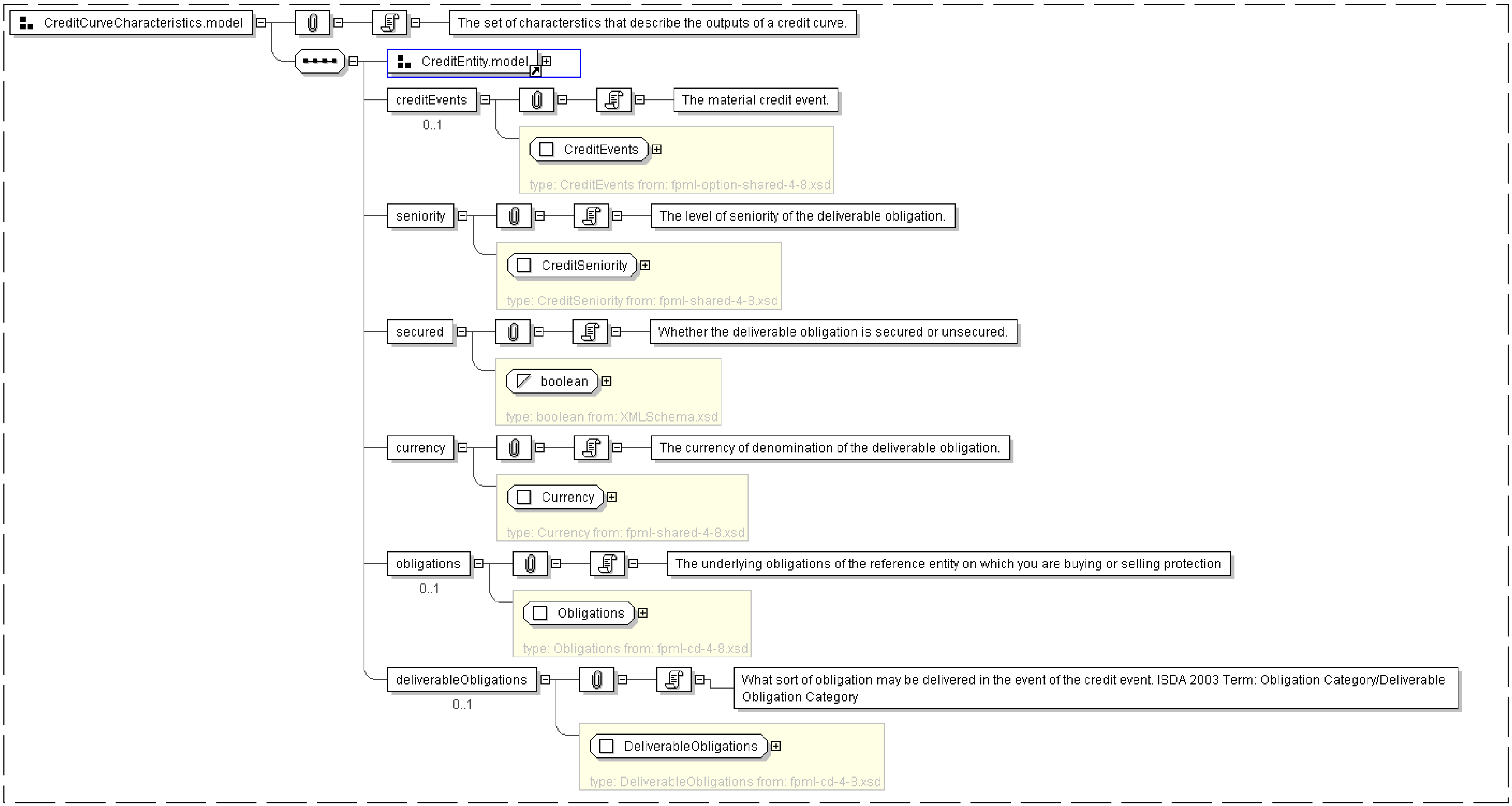
<obligations> Obligations </obligations> [0..1]

'The underlying obligations of the reference entity on which you are buying or selling protection'

<deliverableObligations> DeliverableObligations </deliverableObligations> [0..1]

'What sort of obligation may be delivered in the event of the credit event. ISDA 2003 Term: Obligation Category/Deliverable Obligation Category'

Diagram



Schema Component Representation

```
<xsd:group name="CreditCurveCharacteristics.model">
   <xsd:sequence>
      <xsd:group ref=" CreditEntity.model "/>
      <xsd:element name="creditEvents" type=" CreditEvents " minOccurs="0"/>
      <xsd:element name="seniority" type=" CreditSeniority "/>
      <xsd:element name="secured" type=" xsd:boolean "/>
      <xsd:element name="currency" type=" Currency "/>
```

```
      <xsd:element name="obligations" type=" Obligations " minOccurs="0"/>
      <xsd:element name="deliverableObligations" type=" DeliverableObligations " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

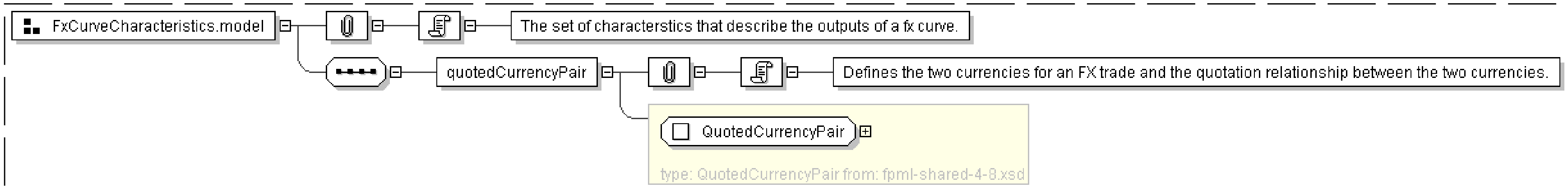
Model Group: FxCurveCharacteristics.model

Name	FxCurveCharacteristics.model
Used by (from the same schema document)	Complex Type **FxCurve**
Documentation	The set of characterstics that describe the outputs of a fx curve.

XML Instance Representation

```
<quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
'Defines the two currencies for an FX trade and the quotation relationship between the
two currencies.'
```

Diagram



Schema Component Representation

```
<xsd:group name="FxCurveCharacteristics.model">
   <xsd:sequence>
      <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
   </xsd:sequence>
</xsd:group>
```

top

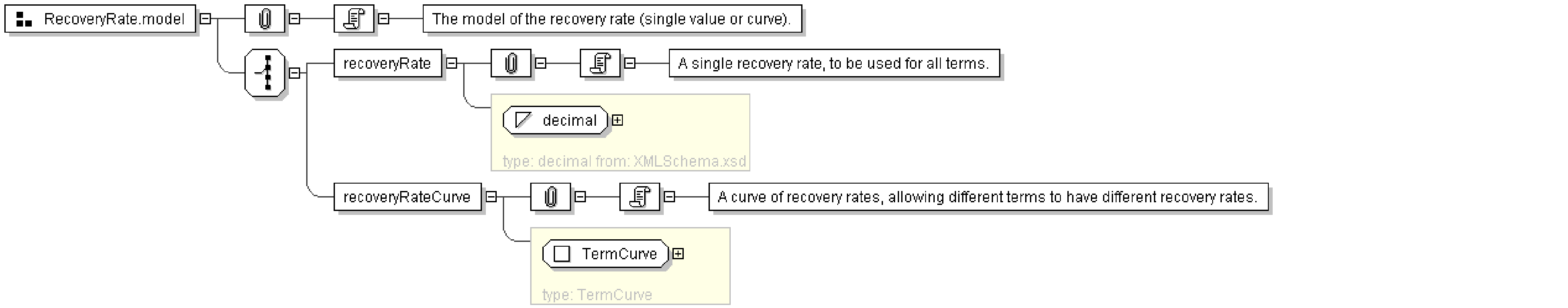
Model Group: RecoveryRate.model

Name	RecoveryRate.model
Used by (from the same schema document)	Complex Type **CreditCurveValuation**
Documentation	The model of the recovery rate (single value or curve).

XML Instance Representation

```
Start Choice [1]
   <recoveryRate> xsd:decimal </recoveryRate> [1]
   'A single recovery rate, to be used for all terms.'

   <recoveryRateCurve> TermCurve </recoveryRateCurve> [1]
   'A curve of recovery rates, allowing different terms to have different recovery rates.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="RecoveryRate.model">
   <xsd:choice>
      <xsd:element name="recoveryRate" type=" xsd:decimal "/>
      <xsd:element name="recoveryRateCurve" type=" TermCurve "/>
   </xsd:choice>
</xsd:group>
```

top

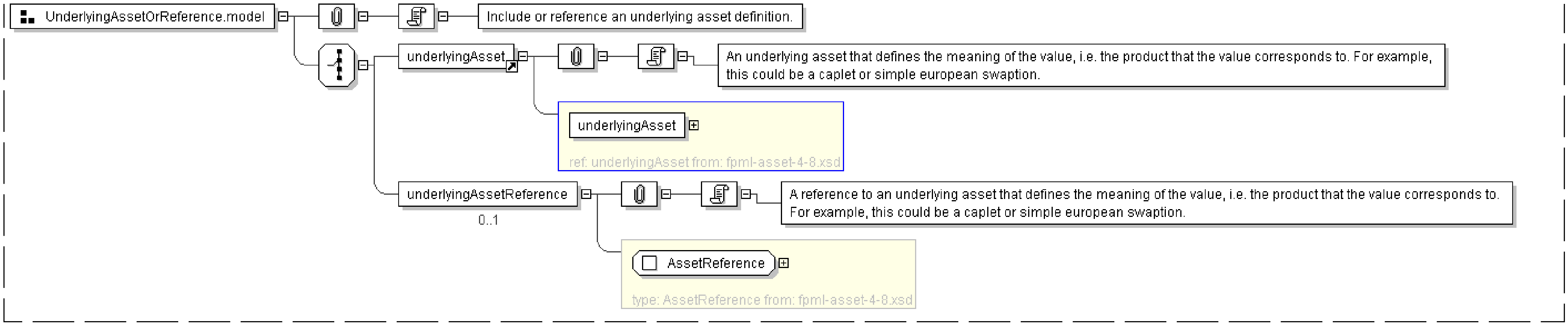
Model Group: UnderlyingAssetOrReference.model

Name	UnderlyingAssetOrReference.model
Used by (from the same schema document)	Complex Type **PricingStructurePoint**
Documentation	Include or reference an underlying asset definition.

XML Instance Representation

```
Start Choice [1]
   <underlyingAsset> ... </underlyingAsset> [1]
   'An underlying asset that defines the meaning of the value, i.e. the product that the
   value corresponds to. For example, this could be a caplet or simple european swaption.'

   <underlyingAssetReference> AssetReference </underlyingAssetReference> [0..1]
   'A reference to an underlying asset that defines the meaning of the value, i.e. the
   product that the value corresponds to. For example, this could be a caplet or simple
   european swaption.'
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="UnderlyingAssetOrReference.model">
   <xsd:choice>
      <xsd:element ref=" underlyingAsset "/>
      <xsd:element name="underlyingAssetReference" type=" AssetReference " minOccurs="0"/>
   </xsd:choice>
</xsd:group>
```

[top](#)

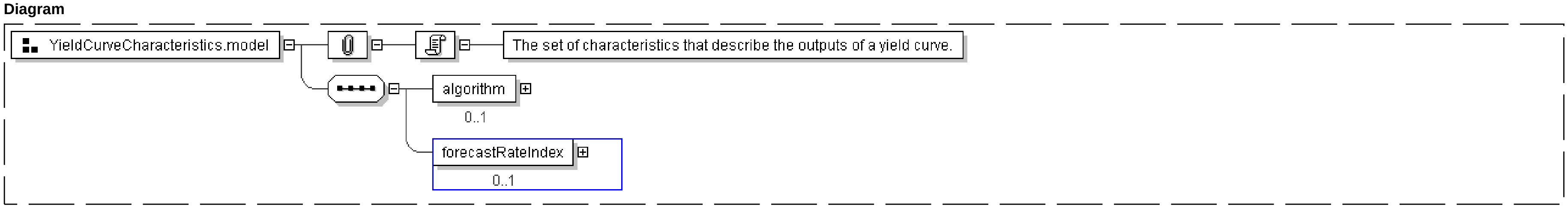
Model Group: YieldCurveCharacteristics.model

Name	YieldCurveCharacteristics.model
Used by (from the same schema document)	Complex Type **YieldCurve**
Documentation	The set of characteristics that describe the outputs of a yield curve.

XML Instance Representation

```
<algorithm> xsd:string </algorithm> [0..1]
<forecastRateIndex> ForecastRateIndex </forecastRateIndex> [0..1]
```

Diagram



Schema Component Representation

```
<xsd:group name="YieldCurveCharacteristics.model">
   <xsd:sequence>
      <xsd:element name="algorithm" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="forecastRateIndex" type=" ForecastRateIndex " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

[top](#)

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Schema Composition	• This schema imports schema(s) from the following namespace(s):
	  ○ *http://www.w3.org/2000/09/xmldsig#* (at xmldsig-core-schema.xsd)
	• This schema includes components from the following schema document(s):
	  ○ fpml-doc-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml-annotation	http://www.fpml.org/annotation
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:import namespace="http://www.w3.org/2000/09/xmldsig#" schemaLocation="xmldsig-core-
   schema.xsd"/>
   <xsd:include schemaLocation="fpml-doc-4-8.xsd"/>
   ...
</xsd:schema>
```

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Global Definitions

Complex Type: AdditionalData

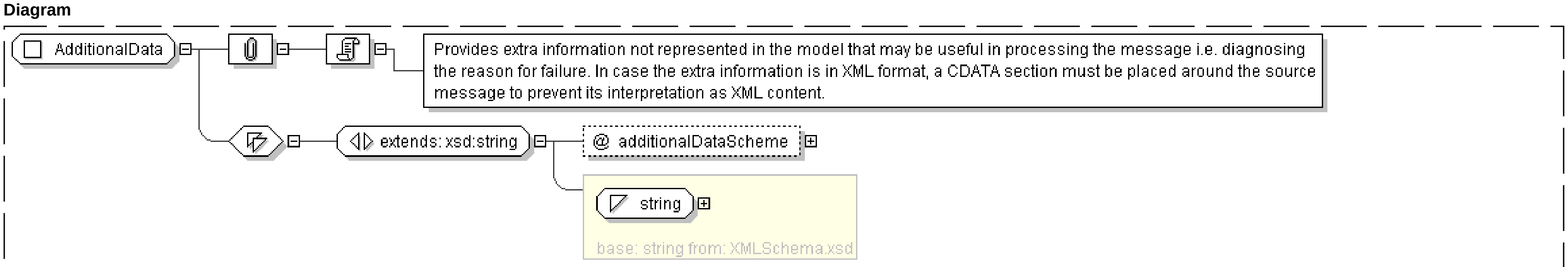
Super-types:	xsd:string < **AdditionalData** (by extension)
Sub-types:	None

Name	AdditionalData
Used by (from the same schema document)	Complex Type **Reason** , Model Group **Exception.model**
Abstract	no
Documentation	Provides extra information not represented in the model that may be useful in processing the message i.e. diagnosing the reason for failure. In case the extra information is in XML format, a CDATA section must be placed around the source message to prevent its interpretation as XML content.

XML Instance Representation

```
<...
additionalDataScheme=" xsd:anyURI [0..1]">
xsd:string
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AdditionalData">
   <xsd:simpleContent>
      <xsd:extension base=" xsd:string ">
         <xsd:attribute name="additionalDataScheme" type=" xsd:anyURI " use="optional"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: ConversationId

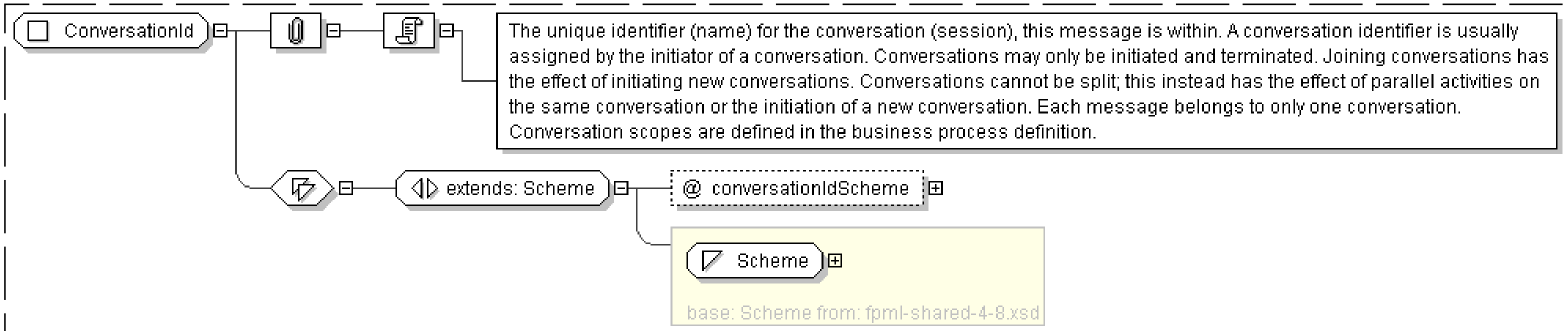
Super-types:	Scheme < **ConversationId** (by extension)
Sub-types:	None

Name	ConversationId
Used by (from the same schema document)	Complex Type **MessageHeader**
Abstract	no
Documentation	The unique identifier (name) for the conversation (session), this message is within. A conversation identifier is usually assigned by the initiator of a conversation. Conversations may only be initiated and terminated. Joining conversations has the effect of initiating new conversations. Conversations cannot be split; this instead has the effect of parallel activities on the same conversation or the initiation of a new conversation. Each message belongs to only one conversation. Conversation scopes are defined in the business process definition.

XML Instance Representation

```
<...
conversationIdScheme=" xsd:anyURI [1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ConversationId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="conversationIdScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Message

Super-types:	Document < **Message** (by extension)

Sub-types:	NotificationMessage (by extension)
	  ○ MessageRejected (by extension)
	RequestMessage (by extension)
	  ○ RequestTradeStatus (by extension)
	ResponseMessage (by extension)
	  ○ TradeNotFound (by extension)
	  ○ TradeStatus (by extension)
	  ○ TradeErrorResponse (by extension)
	    ▪ TradeAlreadyCancelled (by extension)
	    ▪ TradeAlreadyTerminated (by extension)
	  ○ TradeAlreadySubmitted (by extension)

Name	Message
Abstract	yes
Documentation	A type defining the basic structure of all FpML messages which is refined by its derived types.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

"/>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="Message" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Document "/>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MessageAddress

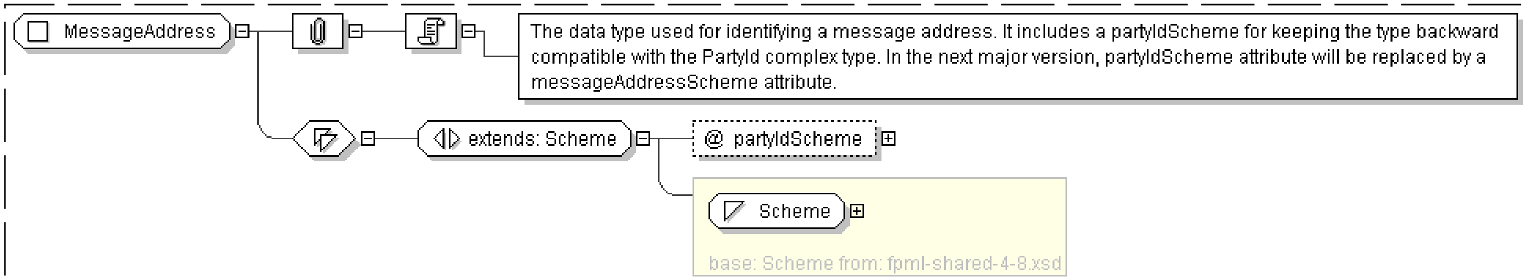
Super-types:	Scheme < **MessageAddress** (by extension)
Sub-types:	None

Name	MessageAddress
Used by (from the same schema document)	Model Group **MessageHeader.model** , Model Group **MessageHeader.model** , Model Group **MessageHeader.model**
Abstract	no
Documentation	The data type used for identifying a message address. It includes a partyIdScheme for keeping the type backward compatible with the PartyId complex type. In the next major version, partyIdScheme attribute will be replaced by a messageAddressScheme attribute.

XML Instance Representation

```
<...
partyIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MessageAddress">
    <xsd:simpleContent>
        <xsd:extension base=" Scheme ">
            <xsd:attribute name="partyIdScheme" type=" xsd:anyURI " default="http://www.fpml.org/
            ext/iso9362"/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: MessageHeader

Super-types:	None

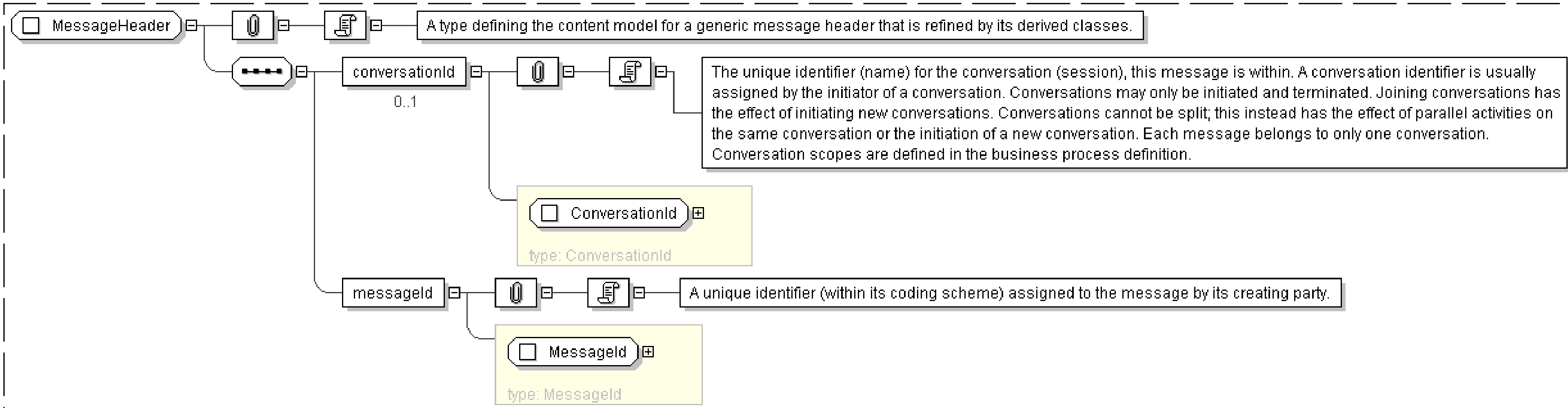
Sub-types:	• NotificationMessageHeader (by extension) • RequestMessageHeader (by extension) • ResponseMessageHeader (by extension)

Name	MessageHeader
Abstract	yes
Documentation	A type defining the content model for a generic message header that is refined by its derived classes.

XML Instance Representation

```
<...>
   <conversationId> ConversationId </conversationId> [0..1]
   'The unique identifier (name) for the conversation (session), this message is within.
   A conversation identifier is usually assigned by the initiator of a conversation.
   Conversations may only be initiated and terminated. Joining conversations has the effect
   of initiating new conversations. Conversations cannot be split; this instead has the effect
   of parallel activities on the same conversation or the initiation of a new conversation.
   Each message belongs to only one conversation. Conversation scopes are defined in the
   business process definition.'

   <messageId> MessageId </messageId> [1]
   'A unique identifier (within its coding scheme) assigned to the message by its creating party.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MessageHeader" abstract="true">
   <xsd:sequence>
      <xsd:element name="conversationId" type=" ConversationId " minOccurs="0"/>
      <xsd:element name="messageId" type=" MessageId "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: MessageId

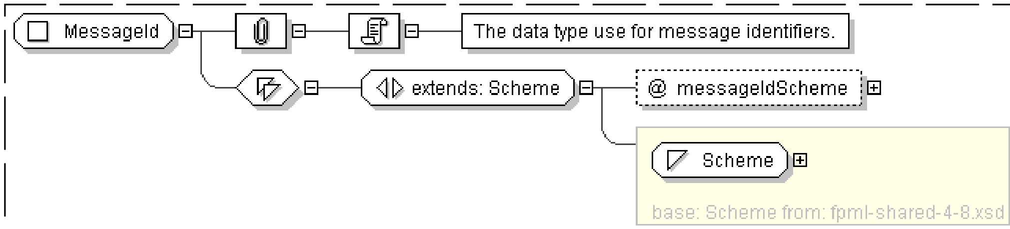
Super-types:	Scheme < **MessageId** (by extension)
Sub-types:	None

Name	MessageId
Used by (from the same schema document)	Complex Type **MessageHeader** , Complex Type **NotificationMessageHeader** , Complex Type **ResponseMessageHeader**
Abstract	no
Documentation	The data type use for message identifiers.

XML Instance Representation

```
<...
messageIdScheme=" xsd:anyURI [1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MessageId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="messageIdScheme" type=" xsd:anyURI " use="required"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: MessageRejected

Super-types:	Document < Message (by extension) < NotificationMessage (by extension) < **MessageRejected** (by extension)
Sub-types:	None

Name	MessageRejected
Abstract	no
Documentation	A type defining the content for a standard message sent when a recipient cannot interpret or process an earlier message.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
```

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">

<header> NotificationMessageHeader </header> [1]

<validation> Validation </validation> [0..*]

<reason> Reason **</reason>** [1..*]

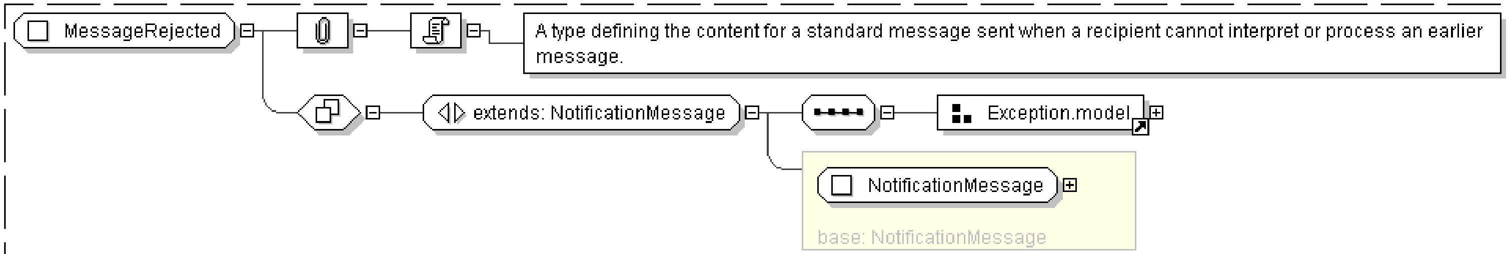
'An instance of the Reason type used to record the nature of any errors associated with a message.'

<additionalData> AdditionalData **</additionalData>** [0..1]

'Any string of additional data that may help the message processor, for example in a rejection message this might contain a code value or the text of the original request (within a CDATA section).'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="MessageRejected">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:group ref=" Exception.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NotificationMessage

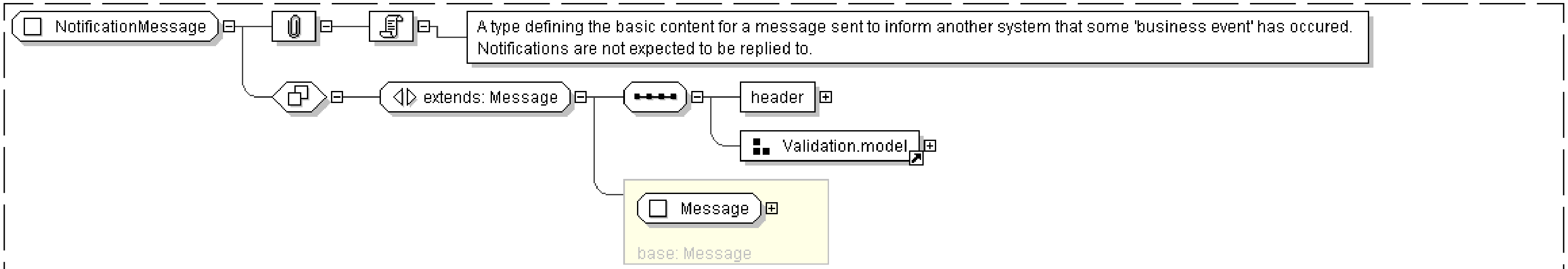
Super-types:	Document < Message (by extension) < **NotificationMessage** (by extension)
Sub-types:	• MessageRejected (by extension)

Name	NotificationMessage
Abstract	yes
Documentation	A type defining the basic content for a message sent to inform another system that some 'business event' has occured. Notifications are not expected to be replied to.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NotificationMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Message ">
         <xsd:sequence>
            <xsd:element name="header" type=" NotificationMessageHeader "/>
            <xsd:group ref=" Validation.model "/>
         </xsd:sequence>
```

```
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NotificationMessageHeader

Super-types:	MessageHeader < **NotificationMessageHeader** (by extension)
Sub-types:	None

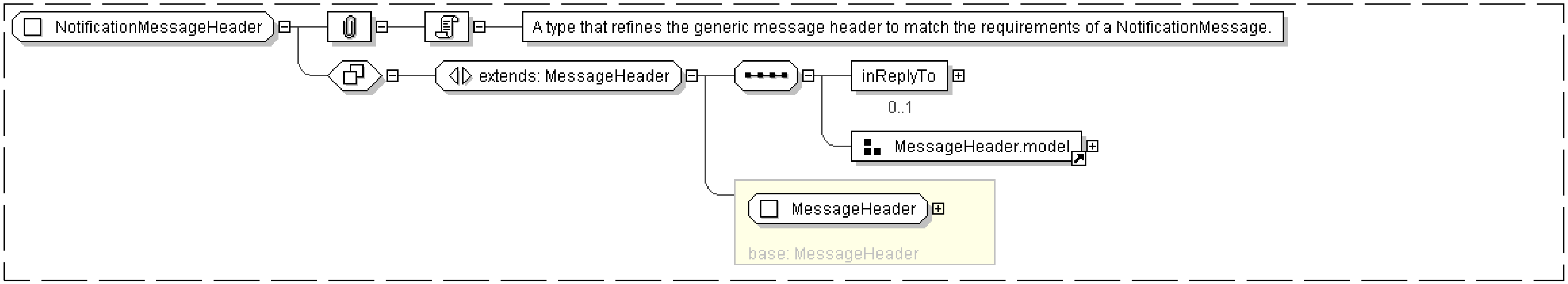
Name	NotificationMessageHeader
Used by (from the same schema document)	Complex Type **NotificationMessage**
Abstract	no
Documentation	A type that refines the generic message header to match the requirements of a NotificationMessage.

XML Instance Representation

```
<...>
  <conversationId> ConversationId </conversationId> [0..1]
  'The unique identifier (name) for the conversation (session), this message is within.
  A conversation identifier is usually assigned by the initiator of a conversation.
  Conversations may only be initiated and terminated. Joining conversations has the effect
  of initiating new conversations. Conversations cannot be split; this instead has the effect
  of parallel activities on the same conversation or the initiation of a new conversation.
  Each message belongs to only one conversation. Conversation scopes are defined in the
  business process definition.'

  <messageId> MessageId </messageId> [1]
  'A unique identifier (within its coding scheme) assigned to the message by its creating party.'

  <inReplyTo> MessageId </inReplyTo> [0..1]
  'A copy of the unique message identifier (within it own coding scheme) to which this message
  is responding.'

  <sentBy> MessageAddress </sentBy> [1]
  'The unique identifier (within its coding scheme) for the originator of a message instance.'

  <sendTo> MessageAddress </sendTo> [0..*]
  'A unique identifier (within its coding scheme) indicating an intended recipent of a message.'

  <copyTo> MessageAddress </copyTo> [0..*]
  'A unique identifier (within the specified coding scheme) giving the details of some party
  to whom a copy of this message will be sent for reference.'

  <creationTimestamp> xsd:dateTime </creationTimestamp> [1]
  'The date and time (on the source system) when this message instance was created.'

  <expiryTimestamp> xsd:dateTime </expiryTimestamp> [0..1]
  'The date and time (on the source system) when this message instance will be
  considered expired.'

  <partyMessageInformation> PartyMessageInformation </partyMessageInformation> [0..*]
  'Additional message information that may be provided by each involved party.'
```

```
    <dsig:Signature> ... </dsig:Signature> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NotificationMessageHeader">
   <xsd:complexContent>
      <xsd:extension base=" MessageHeader ">
         <xsd:sequence>
            <xsd:element name="inReplyTo" type=" MessageId " minOccurs="0"/>
            <xsd:group ref=" MessageHeader.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PartyMessageInformation

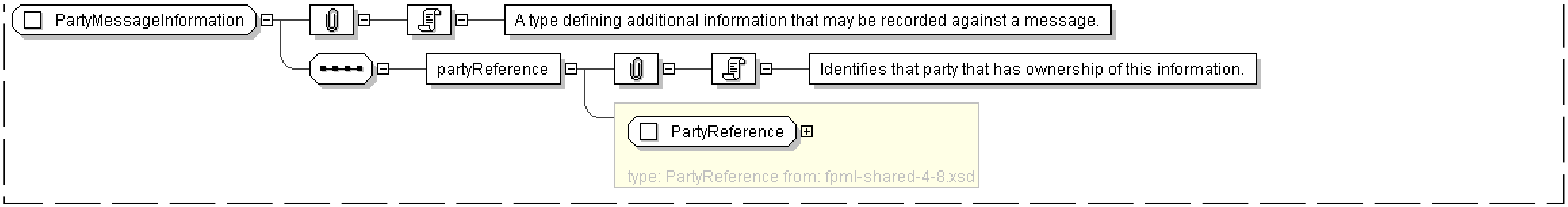
Super-types:	None
Sub-types:	None

Name	PartyMessageInformation
Used by (from the same schema document)	Model Group **MessageHeader.model**
Abstract	no
Documentation	A type defining additional information that may be recorded against a message.

XML Instance Representation

```
<...>
   <partyReference> PartyReference </partyReference> [1]
   'Identifies that party that has ownership of this information.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartyMessageInformation">
   <xsd:sequence>
      <xsd:element name="partyReference" type=" PartyReference "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ProblemLocation

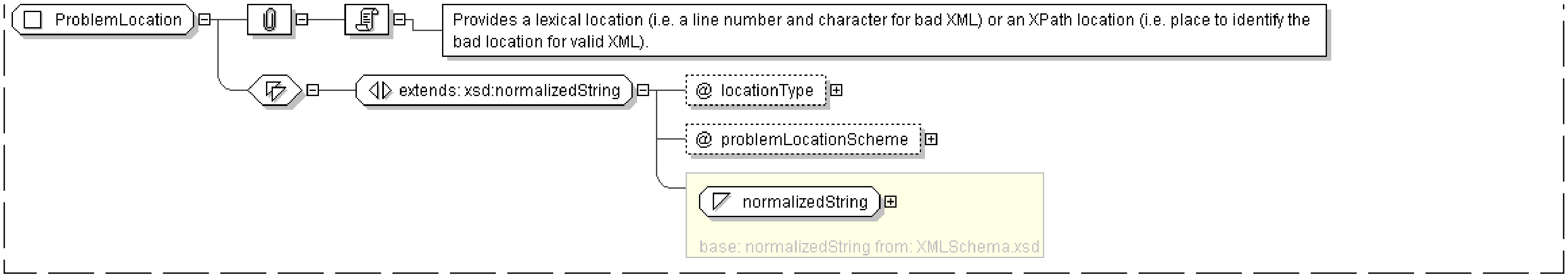
Super-types:	xsd:normalizedString < **ProblemLocation** (by extension)
Sub-types:	None

Name	ProblemLocation
Used by (from the same schema document)	Complex Type **Reason**
Abstract	no
Documentation	Provides a lexical location (i.e. a line number and character for bad XML) or an XPath location (i.e. place to identify the bad location for valid XML).

XML Instance Representation

```
<...
locationType=" xsd:token [0..1]
'The value of the locationType attribute defines which type of location has been given. It
may take the values \'lexical\' or \'xpath\'.'

"
problemLocationScheme=" xsd:anyURI [0..1]
'DEPRECATED. It will be removed in FpML 5.0. New implementations are encouraged to use
the locationType attribute.'

">
xsd:normalizedString
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ProblemLocation">
   <xsd:simpleContent>
      <xsd:extension base=" xsd:normalizedString ">
         <xsd:attribute name="locationType" type=" xsd:token "/>
         <xsd:attribute name="problemLocationScheme" type=" xsd:anyURI "
         deprecated="true" deprecatedReason="This attribute was introduced by mistake in FpML
         4.2. instead of keeping the locationType attribute."/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: Reason

Super-types:	None
Sub-types:	None

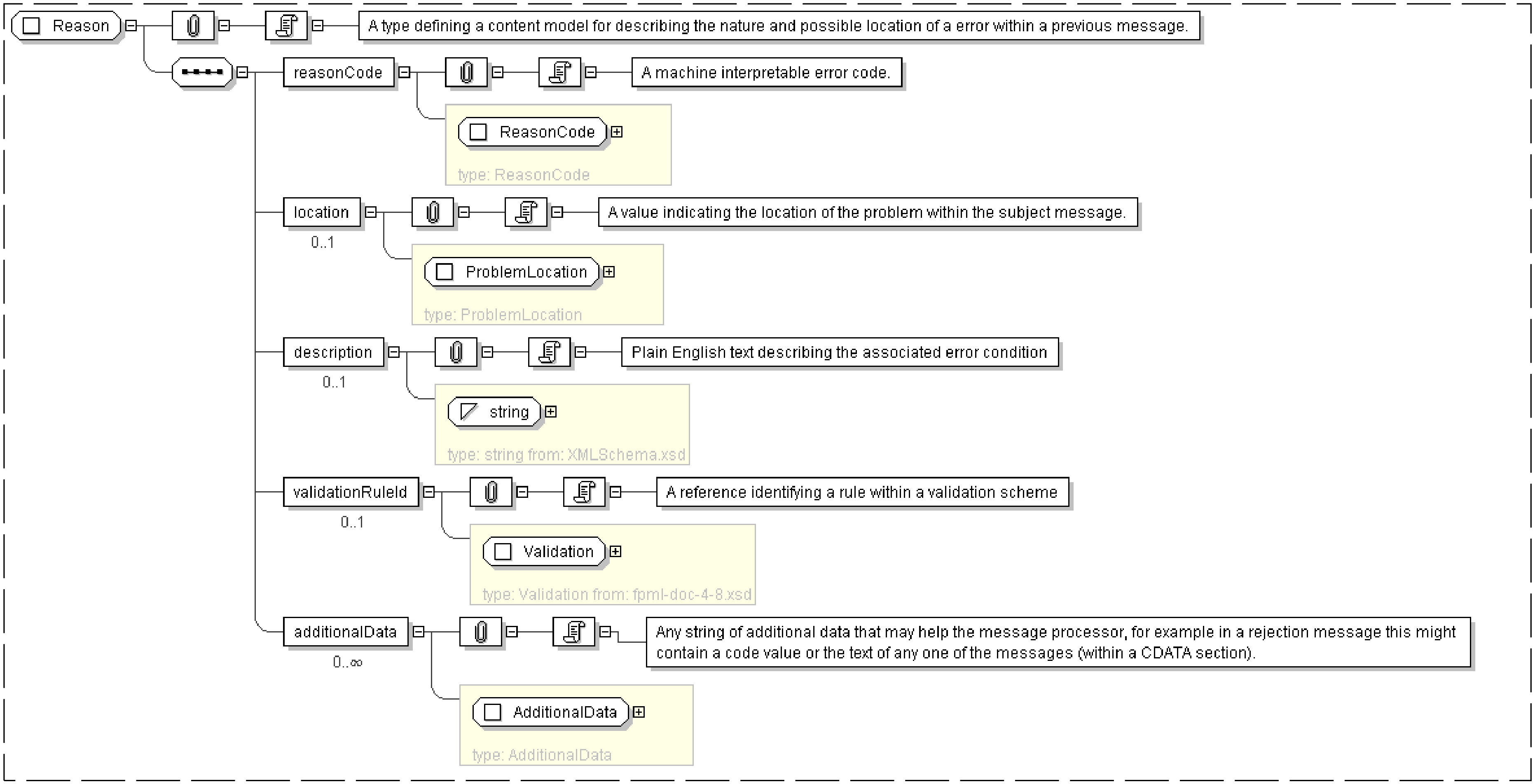
Name	Reason
Used by (from the same schema document)	Model Group **Exception.model**
Abstract	no
Documentation	A type defining a content model for describing the nature and possible location of a error within a previous message.

XML Instance Representation

```
<...>
   <reasonCode> ReasonCode </reasonCode> [1]
   'A machine interpretable error code.'

   <location> ProblemLocation </location> [0..1]
   'A value indicating the location of the problem within the subject message.'

   <description> xsd:string </description> [0..1]
   'Plain English text describing the associated error condition'

   <validationRuleId> Validation </validationRuleId> [0..1]
   'A reference identifying a rule within a validation scheme'

   <additionalData> AdditionalData </additionalData> [0..*]
   'Any string of additional data that may help the message processor, for example in a
   rejection message this might contain a code value or the text of any one of the
```

```
messages (within a CDATA section).'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Reason">
   <xsd:sequence>
      <xsd:element name="reasonCode" type=" ReasonCode "/>
      <xsd:element name="location" type=" ProblemLocation " minOccurs="0"/>
      <xsd:element name="description" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="validationRuleId" type=" Validation " minOccurs="0"/>
      <xsd:element name="additionalData" type=" AdditionalData " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ReasonCode

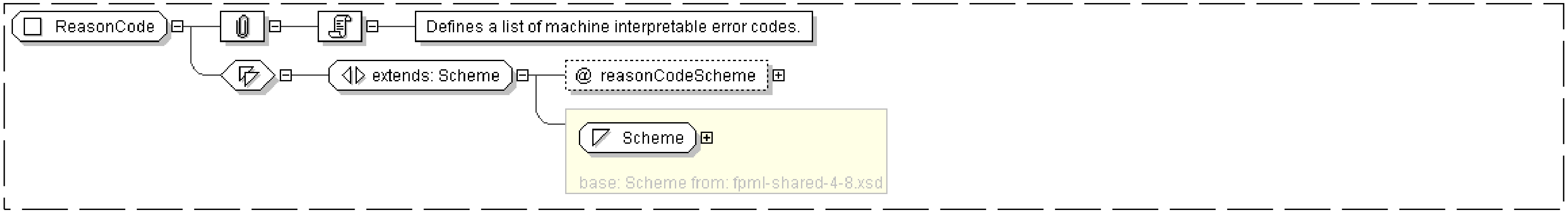
Super-types:	Scheme < **ReasonCode** (by extension)
Sub-types:	None

Name	ReasonCode
Used by (from the same schema document)	Complex Type **Reason**
Abstract	no
Documentation	Defines a list of machine interpretable error codes.

XML Instance Representation

```
<...
reasonCodeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ReasonCode">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="reasonCodeScheme" type=" xsd:anyURI " default="http://www.fpml.org/
         coding-scheme/reason-code"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: RequestMessage

Super-types:	Document < Message (by extension) < **RequestMessage** (by extension)
Sub-types:	• RequestTradeStatus (by extension)

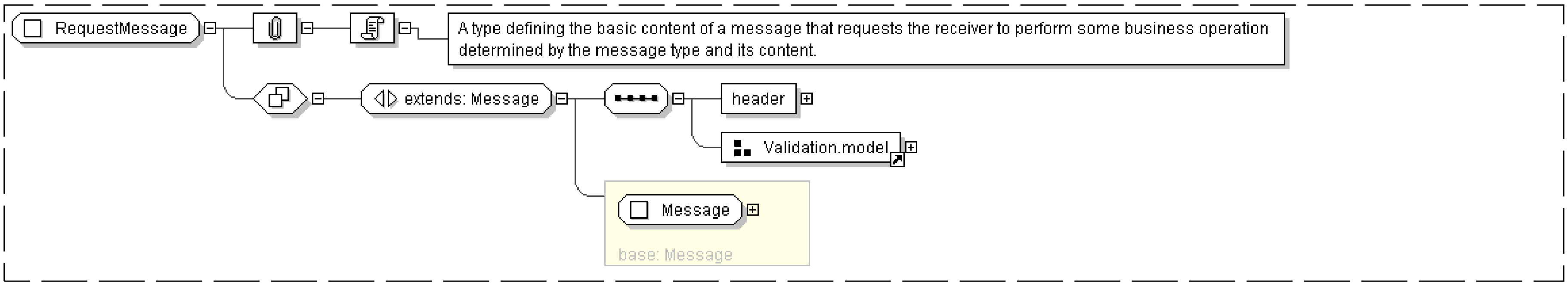
Name	RequestMessage
Abstract	yes
Documentation	A type defining the basic content of a message that requests the receiver to perform some business operation determined by the message type and its content.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
```

```
"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Message ">
         <xsd:sequence>
            <xsd:element name="header" type=" RequestMessageHeader "/>
            <xsd:group ref=" Validation.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestMessageHeader

Super-types:	MessageHeader < **RequestMessageHeader** (by extension)
Sub-types:	None

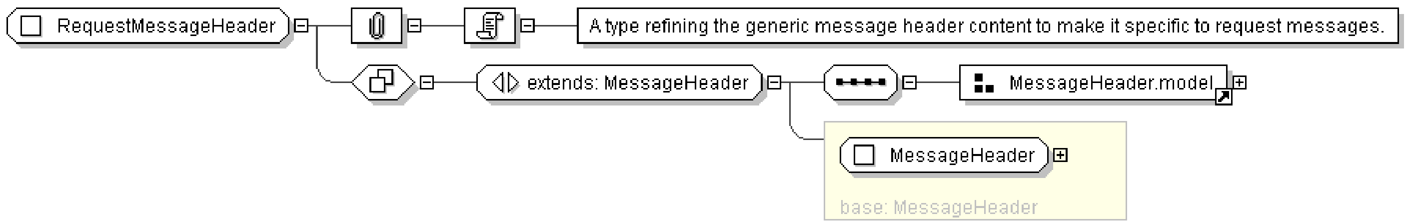
Name	RequestMessageHeader
Used by (from the same schema document)	Complex Type **RequestMessage**

Abstract	no
Documentation	A type refining the generic message header content to make it specific to request messages.

XML Instance Representation

```
<...>
   <conversationId> ConversationId </conversationId> [0..1]
   'The unique identifier (name) for the conversation (session), this message is within.
   A conversation identifier is usually assigned by the initiator of a conversation.
   Conversations may only be initiated and terminated. Joining conversations has the effect
   of initiating new conversations. Conversations cannot be split; this instead has the effect
   of parallel activities on the same conversation or the initiation of a new conversation.
   Each message belongs to only one conversation. Conversation scopes are defined in the
   business process definition.'

   <messageId> MessageId </messageId> [1]
   'A unique identifier (within its coding scheme) assigned to the message by its creating party.'

   <sentBy> MessageAddress </sentBy> [1]
   'The unique identifier (within its coding scheme) for the originator of a message instance.'

   <sendTo> MessageAddress </sendTo> [0..*]
   'A unique identifier (within its coding scheme) indicating an intended recipent of a message.'

   <copyTo> MessageAddress </copyTo> [0..*]
   'A unique identifier (within the specified coding scheme) giving the details of some party
   to whom a copy of this message will be sent for reference.'

   <creationTimestamp> xsd:dateTime </creationTimestamp> [1]
   'The date and time (on the source system) when this message instance was created.'

   <expiryTimestamp> xsd:dateTime </expiryTimestamp> [0..1]
   'The date and time (on the source system) when this message instance will be
   considered expired.'

   <partyMessageInformation> PartyMessageInformation </partyMessageInformation> [0..*]
   'Additional message information that may be provided by each involved party.'

   <dsig:Signature> ... </dsig:Signature> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestMessageHeader">
   <xsd:complexContent>
      <xsd:extension base=" MessageHeader ">
```

```
        <xsd:sequence>
            <xsd:group ref=" MessageHeader.model "/>
        </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestTradeStatus

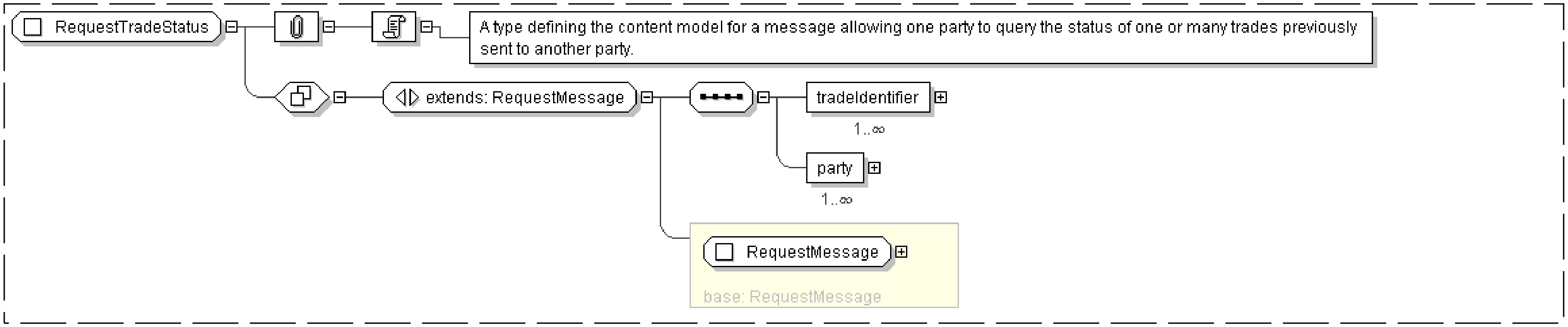
Super-types:	Document < Message (by extension) < RequestMessage (by extension) < **RequestTradeStatus** (by extension)
Sub-types:	None

Name	RequestTradeStatus
Abstract	no
Documentation	A type defining the content model for a message allowing one party to query the status of one or many trades previously sent to another party.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1..*]
   'An instance of a unique trade identifier.'

   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestTradeStatus">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ResponseMessage

Super-types:	Document < Message (by extension) < **ResponseMessage** (by extension)

Sub-types:	• TradeNotFound (by extension)
	• TradeStatus (by extension)
	• TradeErrorResponse (by extension)
	  ◦ TradeAlreadyCancelled (by extension)
	  ◦ TradeAlreadyTerminated (by extension)
	• TradeAlreadySubmitted (by extension)

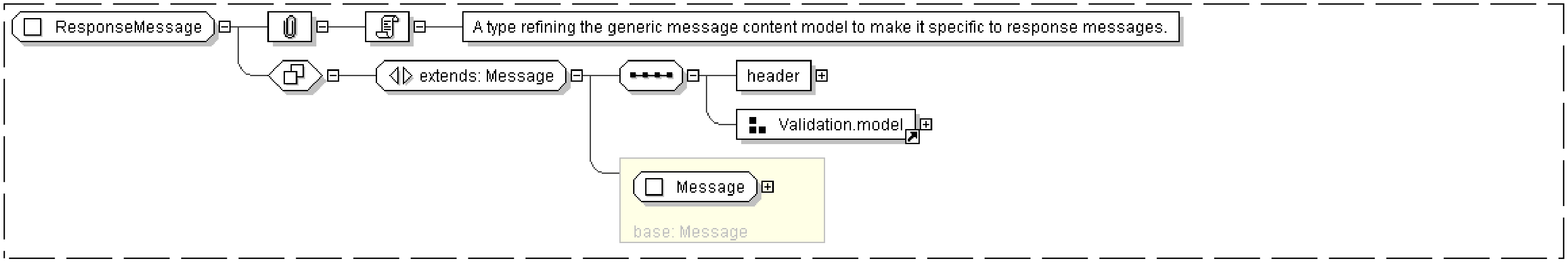
Name	ResponseMessage
Abstract	yes
Documentation	A type refining the generic message content model to make it specific to response messages.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'
```

```
"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ResponseMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Message ">
         <xsd:sequence>
            <xsd:element name="header" type=" ResponseMessageHeader "/>
            <xsd:group ref=" Validation.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ResponseMessageHeader

Super-types:	MessageHeader < **ResponseMessageHeader** (by extension)
Sub-types:	None

Name	ResponseMessageHeader
Used by (from the same schema document)	Complex Type **ResponseMessage**
Abstract	no
Documentation	A type refining the generic message header to make it specific to response messages.

XML Instance Representation

```
<...>
   <conversationId> ConversationId </conversationId> [0..1]
```

'The unique identifier (name) for the conversation (session), this message is within. A conversation identifier is usually assigned by the initiator of a conversation. Conversations may only be initiated and terminated. Joining conversations has the effect of initiating new conversations. Conversations cannot be split; this instead has the effect of parallel activities on the same conversation or the initiation of a new conversation. Each message belongs to only one conversation. Conversation scopes are defined in the business process definition.'

<messageId> MessageId </messageId> [1]

'A unique identifier (within its coding scheme) assigned to the message by its creating party.'

<inReplyTo> MessageId **</inReplyTo>** [1]

'A copy of the unique message identifier (within it own coding scheme) to which this message is responding.'

<sentBy> MessageAddress **</sentBy>** [1]

'The unique identifier (within its coding scheme) for the originator of a message instance.'

<sendTo> MessageAddress **</sendTo>** [0..*]

'A unique identifier (within its coding scheme) indicating an intended recipent of a message.'

<copyTo> MessageAddress **</copyTo>** [0..*]

'A unique identifier (within the specified coding scheme) giving the details of some party to whom a copy of this message will be sent for reference.'

<creationTimestamp> xsd:dateTime **</creationTimestamp>** [1]

'The date and time (on the source system) when this message instance was created.'

<expiryTimestamp> xsd:dateTime **</expiryTimestamp>** [0..1]

'The date and time (on the source system) when this message instance will be considered expired.'

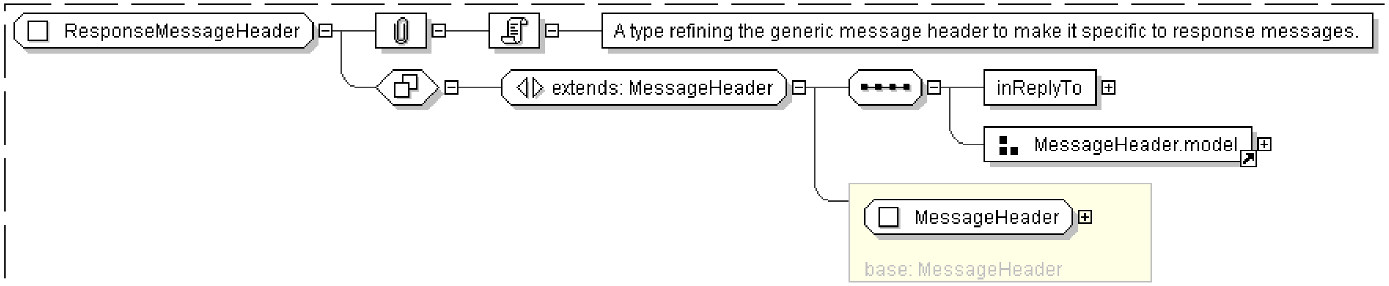
<partyMessageInformation> PartyMessageInformation **</partyMessageInformation>** [0..*]

'Additional message information that may be provided by each involved party.'

<dsig:Signature> ... </dsig:Signature> [0..*]

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ResponseMessageHeader">
   <xsd:complexContent>
      <xsd:extension base=" MessageHeader ">
         <xsd:sequence>
```

```
            <xsd:element name="inReplyTo" type=" MessageId "/>
            <xsd:group ref=" MessageHeader.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAlreadyCancelled

Super-types:	Document < Message (by extension) < ResponseMessage (by extension) < TradeErrorResponse (by extension) < **TradeAlreadyCancelled** (by extension)
Sub-types:	None

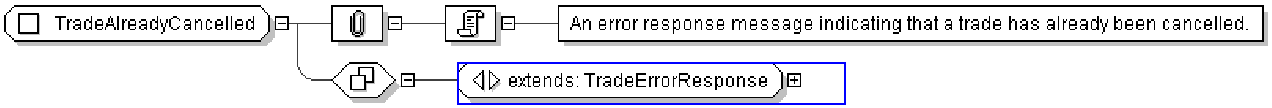
Name	TradeAlreadyCancelled
Abstract	no
Documentation	An error response message indicating that a trade has already been cancelled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Choice [1]
      <trade> Trade </trade> [1]
      'An element that allows the full details of the trade to be used as a mechanism for
      identifying the trade for which the post-trade event pertains'

      <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
      'A container since an individual trade can be referenced by two or more
      different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
```

```
to time during the term of the trade, but may include other parties involved in, or
incidental to, the trade, such as parties acting in the role of novation transferor/
transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAlreadyCancelled">
   <xsd:complexContent>
      <xsd:extension base=" TradeErrorResponse "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAlreadySubmitted

Super-types:	Document < Message (by extension) < ResponseMessage (by extension) < **TradeAlreadySubmitted** (by extension)
Sub-types:	None

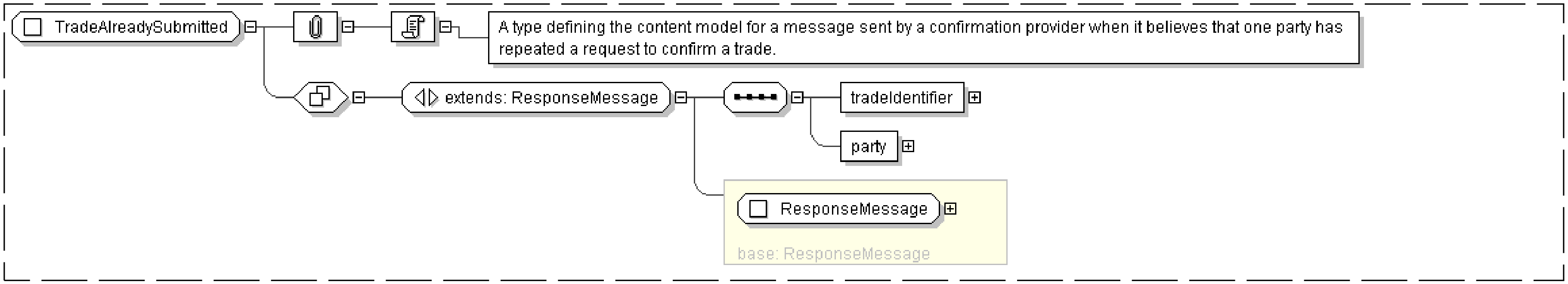
Name	TradeAlreadySubmitted
Abstract	no
Documentation	A type defining the content model for a message sent by a confirmation provider when it believes that one party has repeated a request to confirm a trade.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
```

```
<validation> Validation </validation> [0..*]
<tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]
'An instance of a unique trade identifier.'

<party> Party </party> [1]
'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
a trade lifecycle. For example, the principal parties obligated to make payments from time
to time during the term of the trade, but may include other parties involved in, or
incidental to, the trade, such as parties acting in the role of novation transferor/
transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
within a document.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAlreadySubmitted">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
            <xsd:element name="party" type=" Party "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAlreadyTerminated

Super-types:	Document < Message (by extension) < ResponseMessage (by extension) < TradeErrorResponse (by extension) < **TradeAlreadyTerminated** (by extension)
Sub-types:	None

Name	TradeAlreadyTerminated
Abstract	no
Documentation	An error response message indicating that a trade has already been terminated.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
```

7'|'4-8'}) [1]

'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> ResponseMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
Start Choice [1]
<trade> Trade </trade> [1]

'An element that allows the full details of the trade to be used as a mechanism for identifying the trade for which the post-trade event pertains'

<tradeReference> PartyTradeIdentifiers </tradeReference> [1]

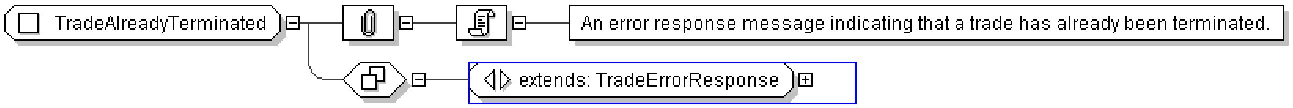
'A container since an individual trade can be referenced by two or more different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
<party> Party </party> [1..*]

'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in a trade lifecycle. For example, the principal parties obligated to make payments from time to time during the term of the trade, but may include other parties involved in, or incidental to, the trade, such as parties acting in the role of novation transferor/ transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places within a document.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAlreadyTerminated">
   <xsd:complexContent>
      <xsd:extension base=" TradeErrorResponse "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeErrorResponse

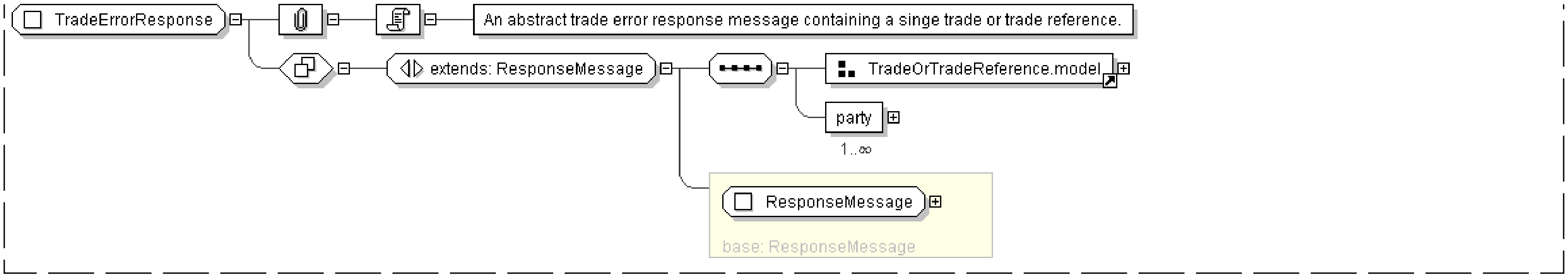
Super-types:	Document < Message (by extension) < ResponseMessage (by extension) < **TradeErrorResponse** (by extension)
Sub-types:	• TradeAlreadyCancelled (by extension) • TradeAlreadyTerminated (by extension)

Name	TradeErrorResponse
Abstract	yes
Documentation	An abstract trade error response message containing a singe trade or trade reference.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Choice [1]
      <trade> Trade </trade> [1]
      'An element that allows the full details of the trade to be used as a mechanism for
      identifying the trade for which the post-trade event pertains'

      <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
      'A container since an individual trade can be referenced by two or more
      different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeErrorResponse" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:group ref=" TradeOrTradeReference.model "/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeNotFound

Super-types:	Document < Message (by extension) < ResponseMessage (by extension) < **TradeNotFound** (by extension)
Sub-types:	None

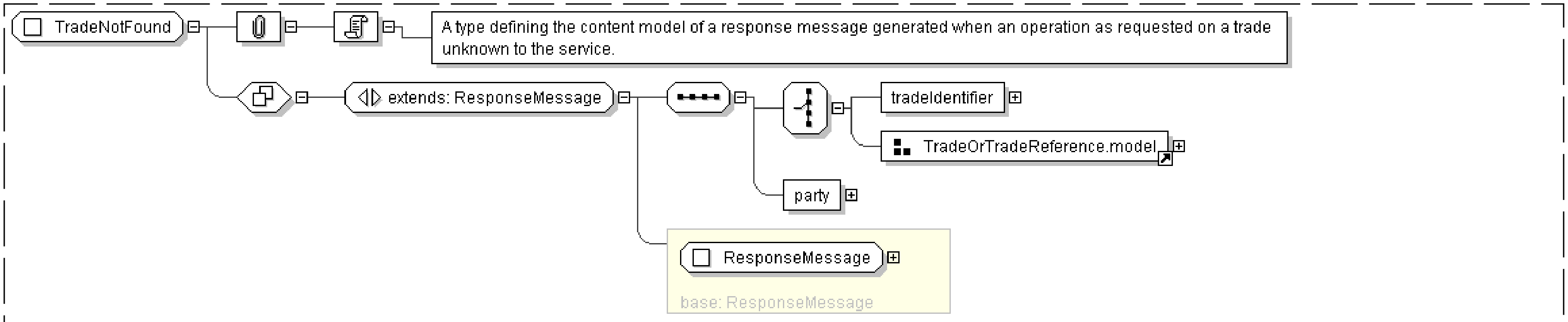
Name	TradeNotFound
Abstract	no
Documentation	A type defining the content model of a response message generated when an operation as requested on a trade unknown to the service.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'
```

```
">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Choice [1]
      <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]
      'An instance of a unique trade identifier.'

Start Choice [1]
         <trade> Trade </trade> [1]
         'An element that allows the full details of the trade to be used as a mechanism for
         identifying the trade for which the post-trade event pertains'

         <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
         'A container since an individual trade can be referenced by two or more
         different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
End Choice
   <party> Party </party> [1]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeNotFound">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:choice>
               <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
               <xsd:group ref=" TradeOrTradeReference.model "/>
            </xsd:choice>
            <xsd:element name="party" type=" Party "/>
         </xsd:sequence>
      </xsd:extension>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeStatus

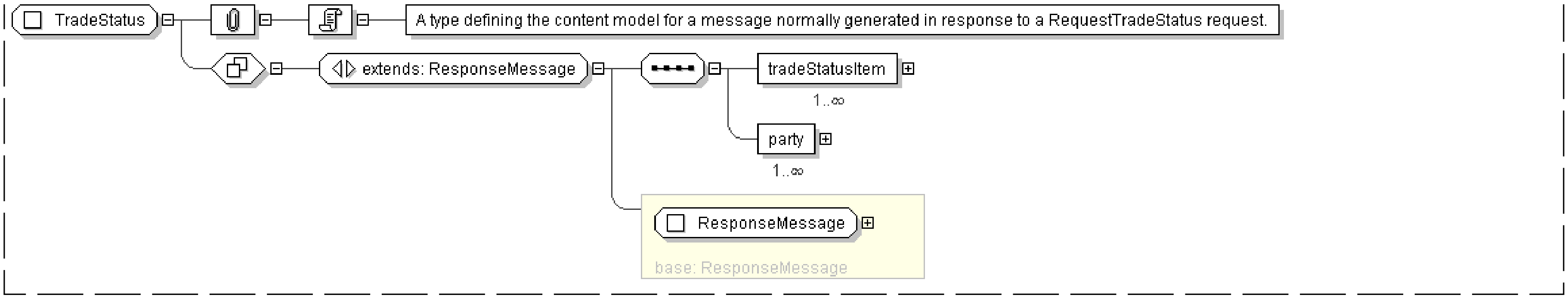
Super-types:	Document < Message (by extension) < ResponseMessage (by extension) < **TradeStatus** (by extension)
Sub-types:	None

Name	TradeStatus
Abstract	no
Documentation	A type defining the content model for a message normally generated in response to a RequestTradeStatus request.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <tradeStatusItem> TradeStatusItem </tradeStatusItem> [1..*]
   'A collection of data values describing the state of the given trade.'

   <party> Party </party> [1..*]
   'A legal entity or a subdivision of a legal entity.','Parties can perform multiple roles in
   a trade lifecycle. For example, the principal parties obligated to make payments from time
   to time during the term of the trade, but may include other parties involved in, or
   incidental to, the trade, such as parties acting in the role of novation transferor/
   transferee, broker, calculation agent, etc. In FpML roles are defined in multiple places
   within a document.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeStatus">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="tradeStatusItem" type=" TradeStatusItem " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeStatusItem

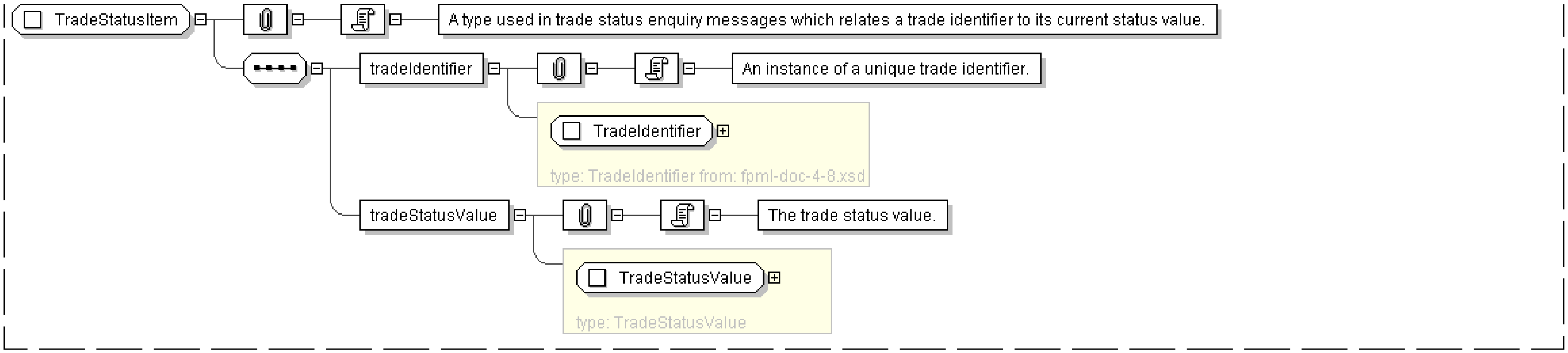
Super-types:	None
Sub-types:	None

Name	TradeStatusItem
Used by (from the same schema document)	Complex Type **TradeStatus**
Abstract	no
Documentation	A type used in trade status enquiry messages which relates a trade identifier to its current status value.

XML Instance Representation

```
<...>
   <tradeIdentifier> TradeIdentifier </tradeIdentifier> [1]
   'An instance of a unique trade identifier.'

   <tradeStatusValue> TradeStatusValue </tradeStatusValue> [1]
   'The trade status value.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeStatusItem">
   <xsd:sequence>
      <xsd:element name="tradeIdentifier" type=" TradeIdentifier "/>
      <xsd:element name="tradeStatusValue" type=" TradeStatusValue "/>
   </xsd:sequence>
</xsd:complexType>
```

[top](#top)

Complex Type: TradeStatusValue

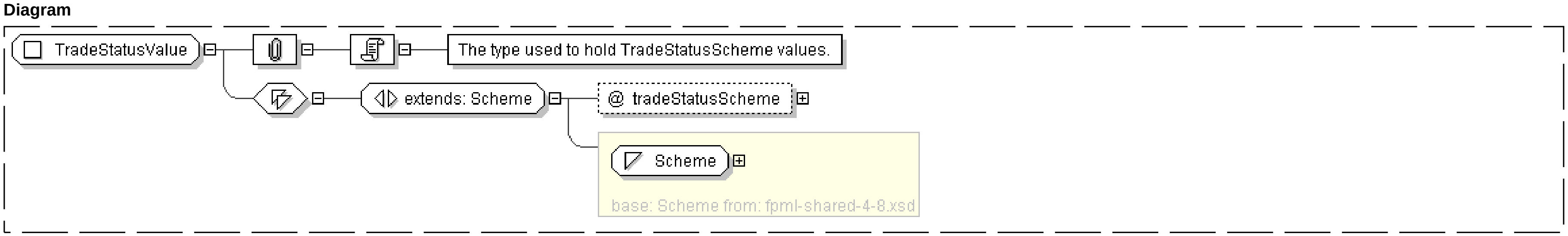
Super-types:	Scheme < **TradeStatusValue** (by extension)
Sub-types:	None

Name	TradeStatusValue
Used by (from the same schema document)	Complex Type **TradeStatusItem**
Abstract	no
Documentation	The type used to hold TradeStatusScheme values.

XML Instance Representation

```
<...
tradeStatusScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeStatusValue">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="tradeStatusScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

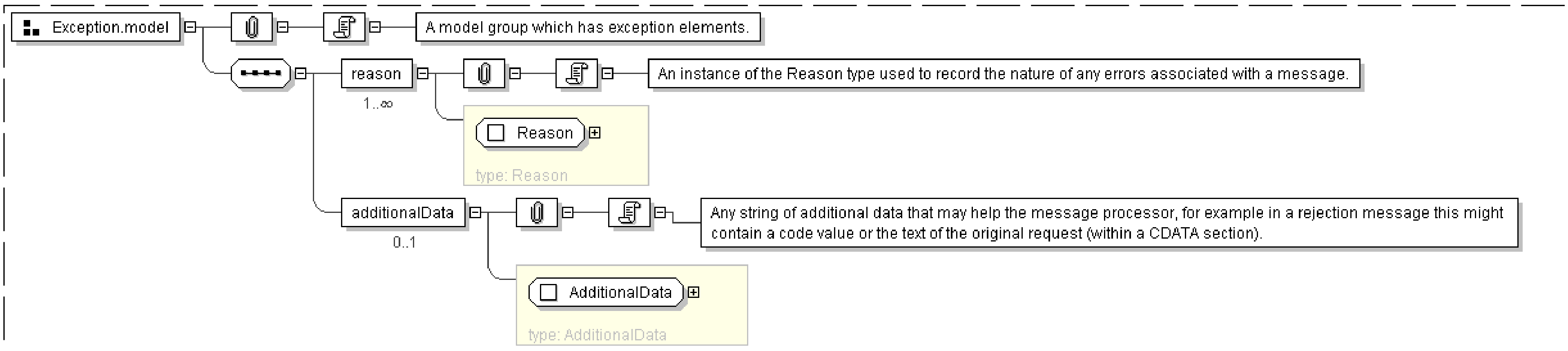
Model Group: Exception.model

Name	Exception.model
Used by (from the same schema document)	Complex Type **MessageRejected**
Documentation	A model group which has exception elements.

XML Instance Representation

```
<reason> Reason </reason> [1..*]
'An instance of the Reason type used to record the nature of any errors associated with
a message.'

<additionalData> AdditionalData </additionalData> [0..1]
'Any string of additional data that may help the message processor, for example in a
rejection message this might contain a code value or the text of the original request (within
a CDATA section).'
```

Diagram



Schema Component Representation

```
<xsd:group name="Exception.model">
   <xsd:sequence>
      <xsd:element name="reason" type=" Reason " maxOccurs="unbounded"/>
      <xsd:element name="additionalData" type=" AdditionalData " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

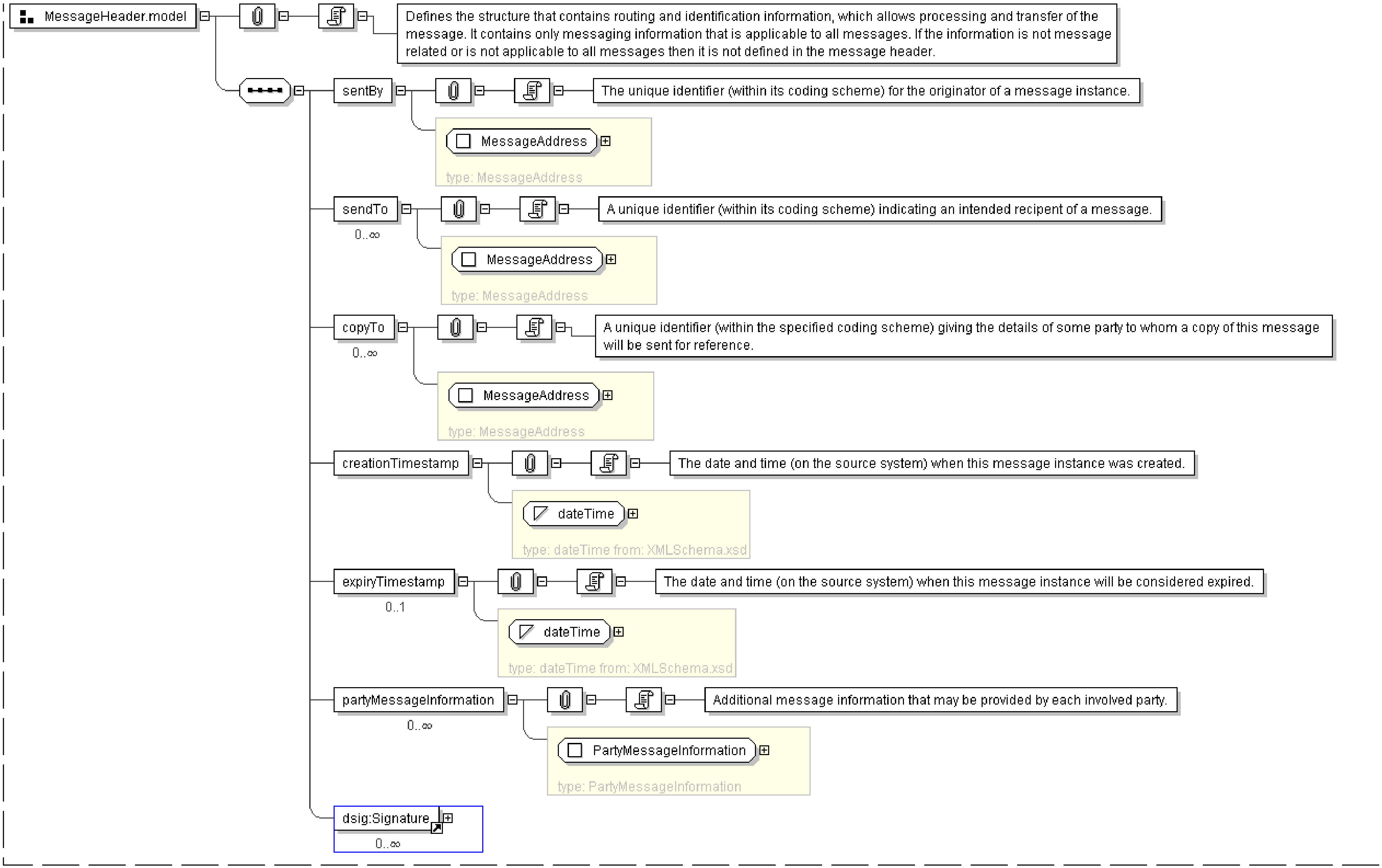
Model Group: MessageHeader.model

Name	MessageHeader.model
Used by (from the same schema document)	Complex Type **NotificationMessageHeader** , Complex Type **RequestMessageHeader** , Complex Type **ResponseMessageHeader**
Documentation	Defines the structure that contains routing and identification information, which allows processing and transfer of the message. It contains only messaging information that is applicable to all messages. If the information is not message related or is not applicable to all messages then it is not defined in the message header.

XML Instance Representation

```
<sentBy> MessageAddress </sentBy> [1]
'The unique identifier (within its coding scheme) for the originator of a message instance.'

<sendTo> MessageAddress </sendTo> [0..*]
'A unique identifier (within its coding scheme) indicating an intended recipent of a message.'

<copyTo> MessageAddress </copyTo> [0..*]
'A unique identifier (within the specified coding scheme) giving the details of some party
to whom a copy of this message will be sent for reference.'

<creationTimestamp> xsd:dateTime </creationTimestamp> [1]
'The date and time (on the source system) when this message instance was created.'

<expiryTimestamp> xsd:dateTime </expiryTimestamp> [0..1]
'The date and time (on the source system) when this message instance will be
considered expired.'

<partyMessageInformation> PartyMessageInformation </partyMessageInformation> [0..*]
'Additional message information that may be provided by each involved party.'

<dsig:Signature> ... </dsig:Signature> [0..*]
```

Diagram



Schema Component Representation

```
<xsd:group name="MessageHeader.model">
   <xsd:sequence>
      <xsd:element name="sentBy" type=" MessageAddress "/>
      <xsd:element name="sendTo" type=" MessageAddress " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="copyTo" type=" MessageAddress " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="creationTimestamp" type=" xsd:dateTime "/>
      <xsd:element name="expiryTimestamp" type=" xsd:dateTime " minOccurs="0"/>
      <xsd:element name="partyMessageInformation" type=" PartyMessageInformation "
      minOccurs="0" maxOccurs="unbounded"/>
```

```
    <xsd:element ref=" dsig:Signature " minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:group>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
```

```
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-asset-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-asset-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Definitions

Complex Type: Asian

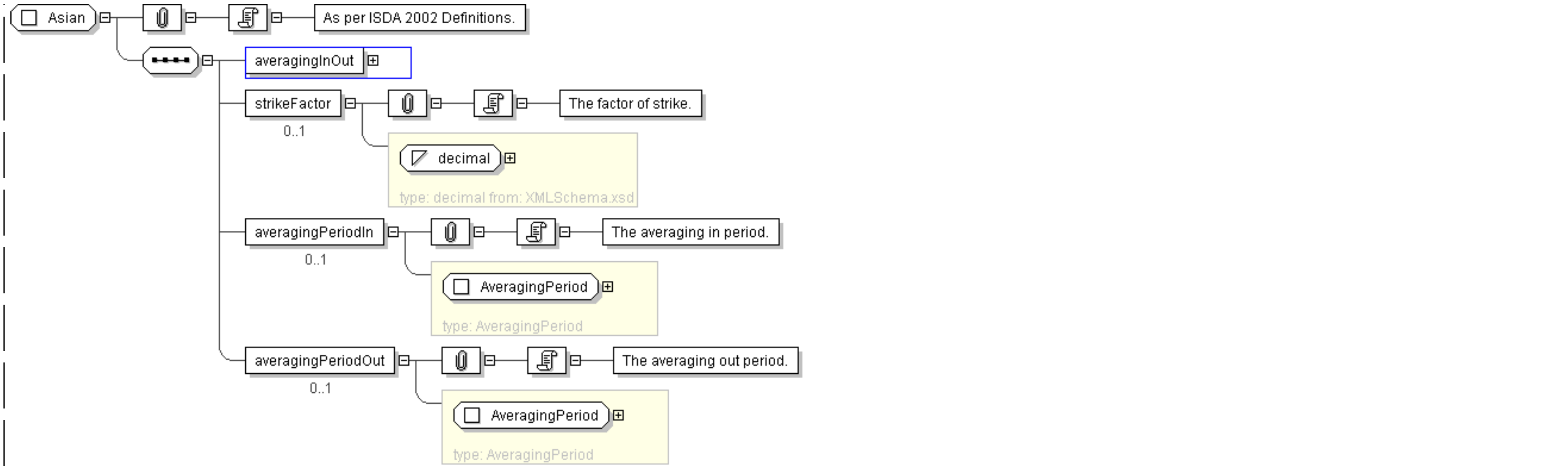
Super-types:	None
Sub-types:	None

Name	Asian
Used by (from the same schema document)	Model Group **OptionFeature.model**
Abstract	no
Documentation	As per ISDA 2002 Definitions.

XML Instance Representation

```
<...>
   <averagingInOut> AveragingInOutEnum </averagingInOut> [1]
   <strikeFactor> xsd:decimal </strikeFactor> [0..1]
   'The factor of strike.'

   <averagingPeriodIn> AveragingPeriod </averagingPeriodIn> [0..1]
   'The averaging in period.'

   <averagingPeriodOut> AveragingPeriod </averagingPeriodOut> [0..1]
   'The averaging out period.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Asian">
   <xsd:sequence>
      <xsd:element name="averagingInOut" type=" AveragingInOutEnum "/>
      <xsd:element name="strikeFactor" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="averagingPeriodIn" type=" AveragingPeriod " minOccurs="0"/>
      <xsd:element name="averagingPeriodOut" type=" AveragingPeriod " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AveragingObservationList

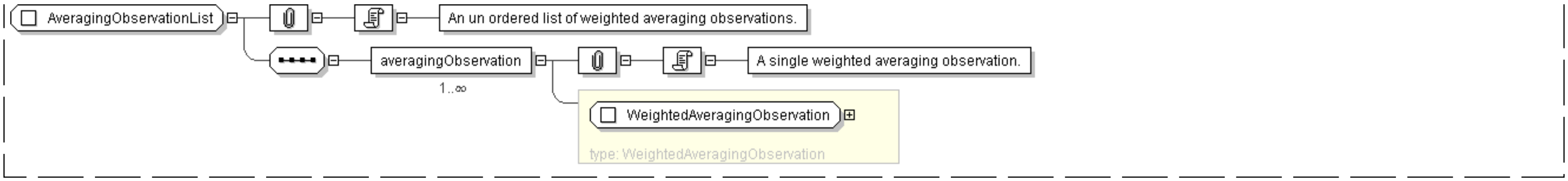
Super-types:	None
Sub-types:	None

Name	AveragingObservationList
Used by (from the same schema document)	Complex Type **AveragingPeriod**
Abstract	no
Documentation	An un ordered list of weighted averaging observations.

XML Instance Representation

```
<...>
   <averagingObservation> WeightedAveragingObservation </averagingObservation> [1..*]
   'A single weighted averaging observation.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AveragingObservationList">
   <xsd:sequence>
      <xsd:element name="averagingObservation" type=" WeightedAveragingObservation
      " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AveragingPeriod

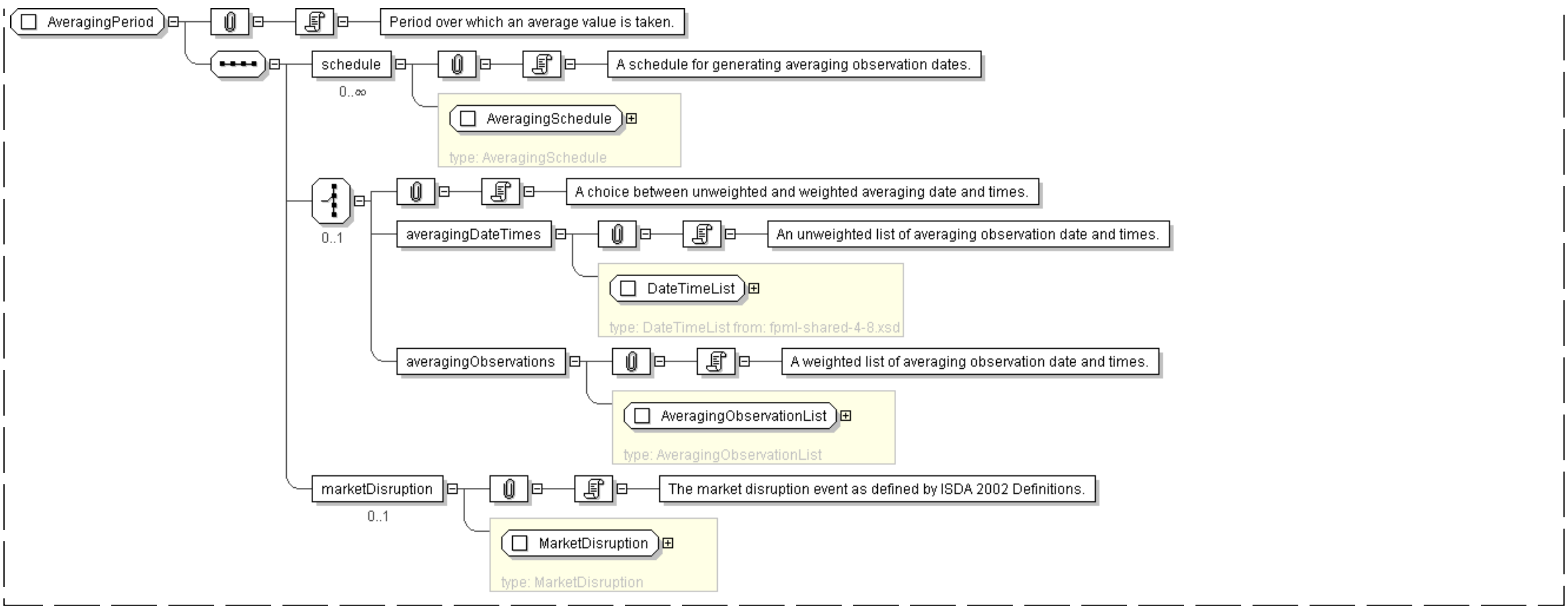
Super-types:	None
Sub-types:	None

Name	AveragingPeriod
Used by (from the same schema document)	Complex Type **Asian** , Complex Type **Asian**
Abstract	no
Documentation	Period over which an average value is taken.

XML Instance Representation

```
<...>
   <schedule> AveragingSchedule </schedule> [0..*]
   'A schedule for generating averaging observation dates.'
Start Choice [0..1]
'A choice between unweighted and weighted averaging date and times.'

      <averagingDateTimes> DateTimeList </averagingDateTimes> [1]
      'An unweighted list of averaging observation date and times.'

      <averagingObservations> AveragingObservationList </averagingObservations> [1]
      'A weighted list of averaging observation date and times.'
End Choice
   <marketDisruption> MarketDisruption </marketDisruption> [0..1]
   'The market disruption event as defined by ISDA 2002 Definitions.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AveragingPeriod">
   <xsd:sequence>
      <xsd:element name="schedule" type=" AveragingSchedule " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:choice minOccurs="0">
         <xsd:element name="averagingDateTimes" type=" DateTimeList "/>
         <xsd:element name="averagingObservations" type=" AveragingObservationList "/>
      </xsd:choice>
      <xsd:element name="marketDisruption" type=" MarketDisruption " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AveragingSchedule

Super-types:	None
Sub-types:	None

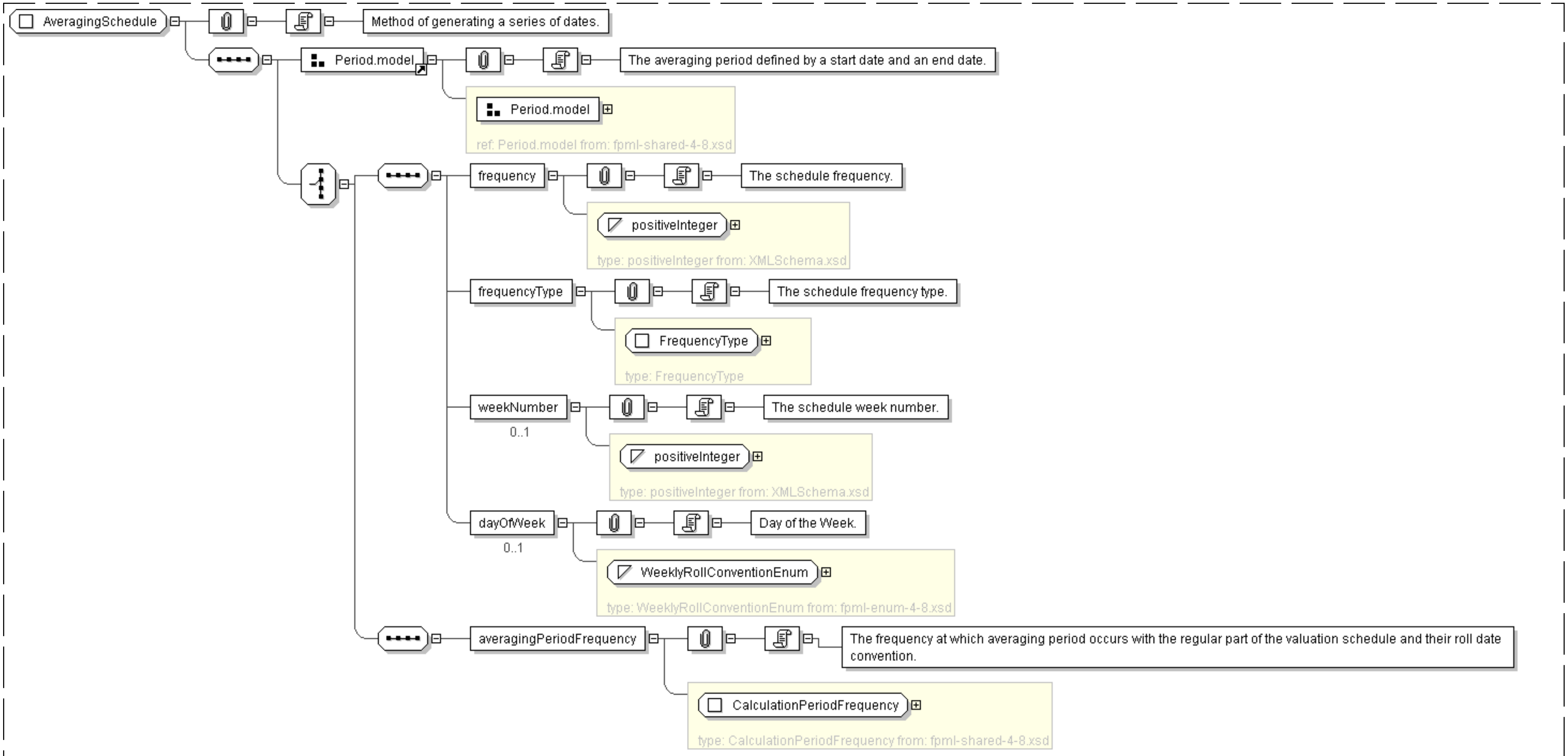
Name	AveragingSchedule
Used by (from the same schema document)	Complex Type **AveragingPeriod** , Complex Type **TriggerEvent**
Abstract	no
Documentation	Method of generating a series of dates.

XML Instance Representation

```
<...>
   <startDate> xsd:date </startDate> [1]
   'Date on which this period begins.'

   <endDate> xsd:date </endDate> [1]
   'Date on which this period ends.'
```

```
Start Choice [1]
      <frequency> xsd:positiveInteger </frequency> [1]
      'The schedule frequency.'

      <frequencyType> FrequencyType </frequencyType> [1]
      'The schedule frequency type.'

      <weekNumber> xsd:positiveInteger </weekNumber> [0..1]
      'The schedule week number.'

      <dayOfWeek> WeeklyRollConventionEnum </dayOfWeek> [0..1]
      'Day of the Week.'

      <averagingPeriodFrequency> CalculationPeriodFrequency </averagingPeriodFrequency> [1]
      'The frequency at which averaging period occurs with the regular part of the valuation
      schedule and their roll date convention.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AveragingSchedule">
   <xsd:sequence>
      <xsd:group ref=" Period.model "/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="frequency" type=" xsd:positiveInteger "/>
            <xsd:element name="frequencyType" type=" FrequencyType "/>
            <xsd:element name="weekNumber" type=" xsd:positiveInteger " minOccurs="0"/>
            <xsd:element name="dayOfWeek" type=" WeeklyRollConventionEnum " minOccurs="0"/>
         </xsd:sequence>
         <xsd:sequence>
            <xsd:element name="averagingPeriodFrequency" type=" CalculationPeriodFrequency "/>
         </xsd:sequence>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Barrier

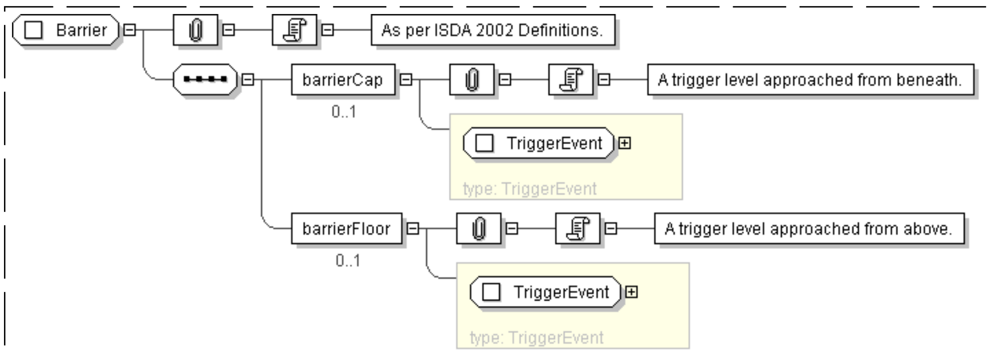
Super-types:	None
Sub-types:	None

Name	Barrier
Used by (from the same schema document)	Model Group **OptionFeature.model**
Abstract	no
Documentation	As per ISDA 2002 Definitions.

XML Instance Representation

```
<...>
   <barrierCap> TriggerEvent </barrierCap> [0..1]
   'A trigger level approached from beneath.'

   <barrierFloor> TriggerEvent </barrierFloor> [0..1]
   'A trigger level approached from above.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Barrier">
   <xsd:sequence>
      <xsd:element name="barrierCap" type=" TriggerEvent " minOccurs="0"/>
      <xsd:element name="barrierFloor" type=" TriggerEvent " minOccurs="0"/>
```

```
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CalendarSpread

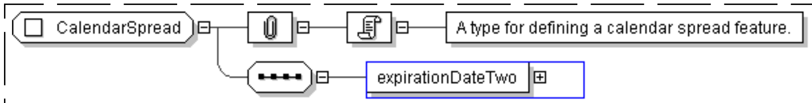
Super-types:	None
Sub-types:	None

Name	CalendarSpread
Used by (from the same schema document)	Complex Type **StrategyFeature**
Abstract	no
Documentation	A type for defining a calendar spread feature.

XML Instance Representation

```
<...>
   <expirationDateTwo> AdjustableOrRelativeDate </expirationDateTwo> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalendarSpread">
   <xsd:sequence>
      <xsd:element name="expirationDateTwo" type=" AdjustableOrRelativeDate "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ClassifiedPayment

Super-types:	SimplePayment < **ClassifiedPayment** (by extension)
Sub-types:	None

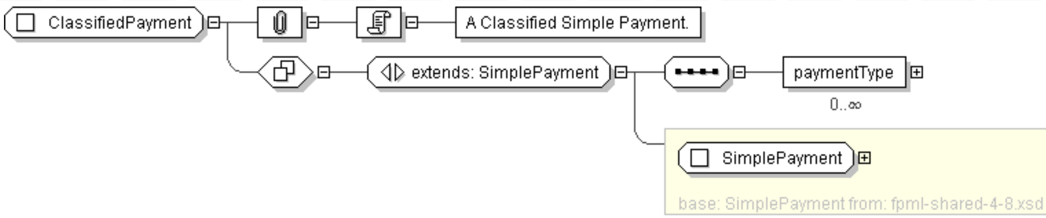
Name	ClassifiedPayment
Abstract	no
Documentation	A Classified Simple Payment.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentAmount> Money </paymentAmount> [1]
   <paymentDate> AdjustableOrRelativeAndAdjustedDate </paymentDate> [1]
   'The payment date. This date is subject to adjustment in accordance with any
   applicable business day convention.'
```

```
    <paymentType> PaymentType </paymentType> [0..*]
    'Payment classification.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ClassifiedPayment">
   <xsd:complexContent>
      <xsd:extension base=" SimplePayment ">
         <xsd:sequence>
            <xsd:element name="paymentType" type=" PaymentType " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: Composite

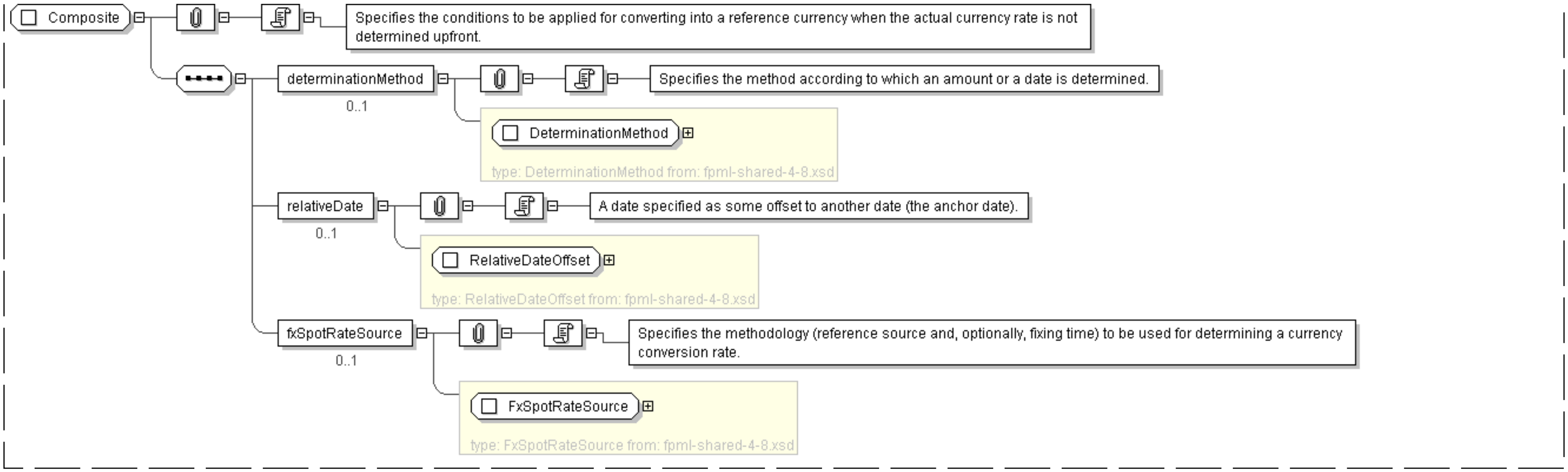
Super-types:	None
Sub-types:	None

Name	Composite
Used by (from the same schema document)	Complex Type **FxFeature** , Complex Type **FxFeature**
Abstract	no
Documentation	Specifies the conditions to be applied for converting into a reference currency when the actual currency rate is not determined upfront.

XML Instance Representation

```
<...>
    <determinationMethod> DeterminationMethod </determinationMethod> [0..1]
    'Specifies the method according to which an amount or a date is determined.'

    <relativeDate> RelativeDateOffset </relativeDate> [0..1]
    'A date specified as some offset to another date (the anchor date).'

    <fxSpotRateSource> FxSpotRateSource </fxSpotRateSource> [0..1]
    'Specifies the methodology (reference source and, optionally, fixing time) to be used
    for determining a currency conversion rate.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Composite">
   <xsd:sequence>
      <xsd:element name="determinationMethod" type=" DeterminationMethod " minOccurs="0"/>
      <xsd:element name="relativeDate" type=" RelativeDateOffset " minOccurs="0"/>
      <xsd:element name="fxSpotRateSource" type=" FxSpotRateSource " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CreditEventNotice

Super-types:	None
Sub-types:	None

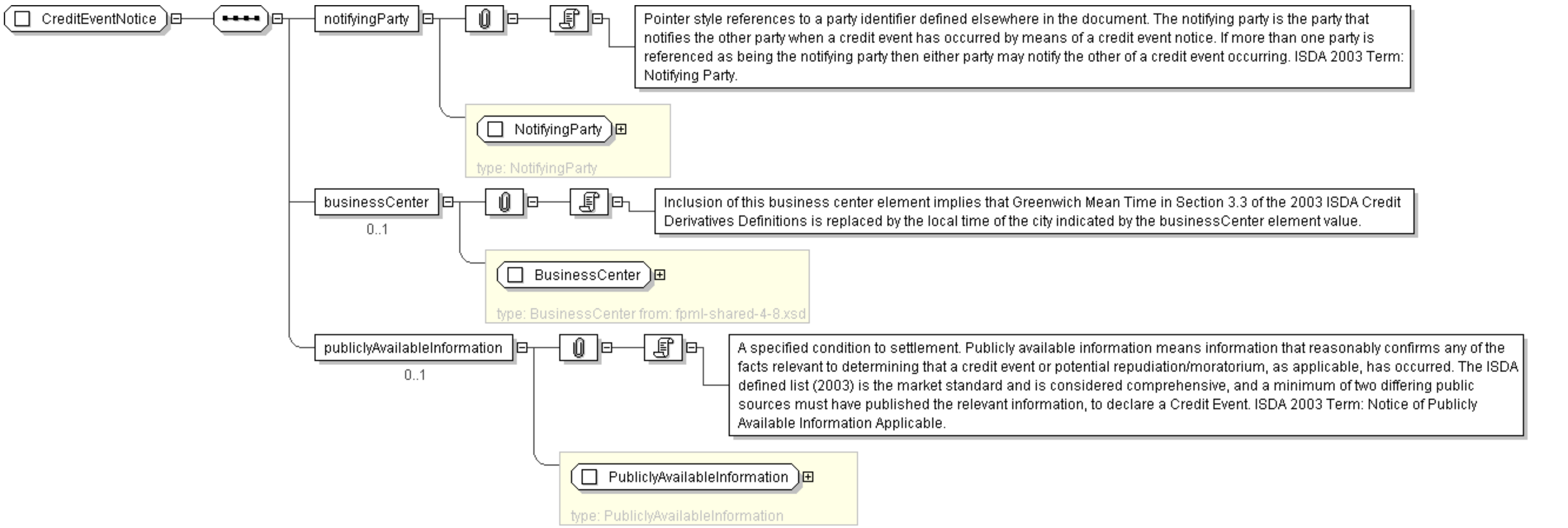
Name	CreditEventNotice
Used by (from the same schema document)	Complex Type **CreditEvents**
Abstract	no

XML Instance Representation

```
<...>
   <notifyingParty> NotifyingParty </notifyingParty> [1]
   'Pointer style references to a party identifier defined elsewhere in the document.
   The notifying party is the party that notifies the other party when a credit event has
   occurred by means of a credit event notice. If more than one party is referenced as being
   the notifying party then either party may notify the other of a credit event occurring.
   ISDA 2003 Term: Notifying Party.'

   <businessCenter> BusinessCenter </businessCenter> [0..1]
   'Inclusion of this business center element implies that Greenwich Mean Time in Section 3.3
   of the 2003 ISDA Credit Derivatives Definitions is replaced by the local time of the
   city indicated by the businessCenter element value.'

   <publiclyAvailableInformation> PubliclyAvailableInformation </
   publiclyAvailableInformation> [0..1]
   'A specified condition to settlement. Publicly available information means information
   that reasonably confirms any of the facts relevant to determining that a credit event
   or potential repudiation/moratorium, as applicable, has occurred. The ISDA defined list
```

```
(2003) is the market standard and is considered comprehensive, and a minimum of two
differing public sources must have published the relevant information, to declare a
Credit Event. ISDA 2003 Term: Notice of Publicly Available Information Applicable.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditEventNotice">
   <xsd:sequence>
      <xsd:element name="notifyingParty" type=" NotifyingParty "/>
      <xsd:element name="businessCenter" type=" BusinessCenter " minOccurs="0"/>
      <xsd:element name="publiclyAvailableInformation" type=" PubliclyAvailableInformation
      " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CreditEvents

Super-types:	None
Sub-types:	None

Name	CreditEvents
Used by (from the same schema document)	Complex Type **Trigger**
Abstract	no

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <bankruptcy> Empty </bankruptcy> [0..1]
   'A credit event. The reference entity has been dissolved or has become insolvent. It
   also covers events that may be a precursor to insolvency such as instigation of bankruptcy
   or insolvency proceedings. Sovereign trades are not subject to Bankruptcy as \"technically\"
```

a Sovereign cannot become bankrupt. ISDA 2003 Term: Bankruptcy.'

<failureToPay> FailureToPay </failureToPay> [0..1]

'A credit event. This credit event triggers, after the expiration of any applicable grace period, if the reference entity fails to make due payments in an aggregrate amount of not less than the payment requirement on one or more obligations (e.g. a missed coupon payment). ISDA 2003 Term: Failure to Pay.'

<failureToPayPrincipal> Empty </failureToPayPrincipal> [0..1]

'A credit event. Corresponds to the failure by the Reference Entity to pay an expected principal amount or the payment of an actual principal amount that is less than the expected principal amount. ISDA 2003 Term: Failure to Pay Principal.'

<failureToPayInterest> Empty </failureToPayInterest> [0..1]

'A credit event. Corresponds to the failure by the Reference Entity to pay an expected interest amount or the payment of an actual interest amount that is less than the expected interest amount. ISDA 2003 Term: Failure to Pay Interest.'

<obligationDefault> Empty </obligationDefault> [0..1]

'A credit event. One or more of the obligations have become capable of being declared due and payable before they would otherwise have been due and payable as a result of, or on the basis of, the occurrence of a default, event of default or other similar condition or event other than failure to pay. ISDA 2003 Term: Obligation Default.'

<obligationAcceleration> Empty </obligationAcceleration> [0..1]

'A credit event. One or more of the obligations have been declared due and payable before they would otherwise have been due and payable as a result of, or on the basis of, the occurrence of a default, event of default or other similar condition or event other than failure to pay (preferred by the market over Obligation Default, because more definitive and encompasses the definition of Obligation Default - this is more favorable to the Seller). Subject to the default requirement amount. ISDA 2003 Term: Obligation Acceleration.'

<repudiationMoratorium> Empty </repudiationMoratorium> [0..1]

'A credit event. The reference entity, or a governmental authority, either refuses to recognise or challenges the validity of one or more obligations of the reference entity, or imposes a moratorium thereby postponing payments on one or more of the obligations of the reference entity. Subject to the default requirement amount. ISDA 2003 Term: Repudiation/Moratorium.'

<restructuring> Restructuring </restructuring> [0..1]

'A credit event. A restructuring is an event that materially impacts the reference entity \'s obligations, such as an interest rate reduction, principal reduction, deferral of interest or principal, change in priority ranking, or change in currency or composition of payment. ISDA 2003 Term: Restructuring.'

<distressedRatingsDowngrade> Empty </distressedRatingsDowngrade> [0..1]

'A credit event. Results from the fact that the rating of the reference obligation is downgraded to a distressed rating level. From a usage standpoint, this credit event is typically not applicable in case of RMBS trades.'

<maturityExtension> Empty </maturityExtension> [0..1]

'A credit event. Results from the fact that the underlier fails to make principal payments as expected.'

<writedown> Empty </writedown> [0..1]

'A credit event. Results from the fact that the underlier writes down its outstanding principal amount.'

<impliedWritedown> Empty </impliedWritedown> [0..1]

'A credit event. Results from the fact that losses occur to the underlying instruments that do not result in reductions of the outstanding principal of the reference obligation.'

<defaultRequirement> Money </defaultRequirement> [0..1]

'In relation to certain credit events, serves as a threshold for Obligation Acceleration, Obligation Default, Repudiation/Moratorium and Restructuring. Market standard

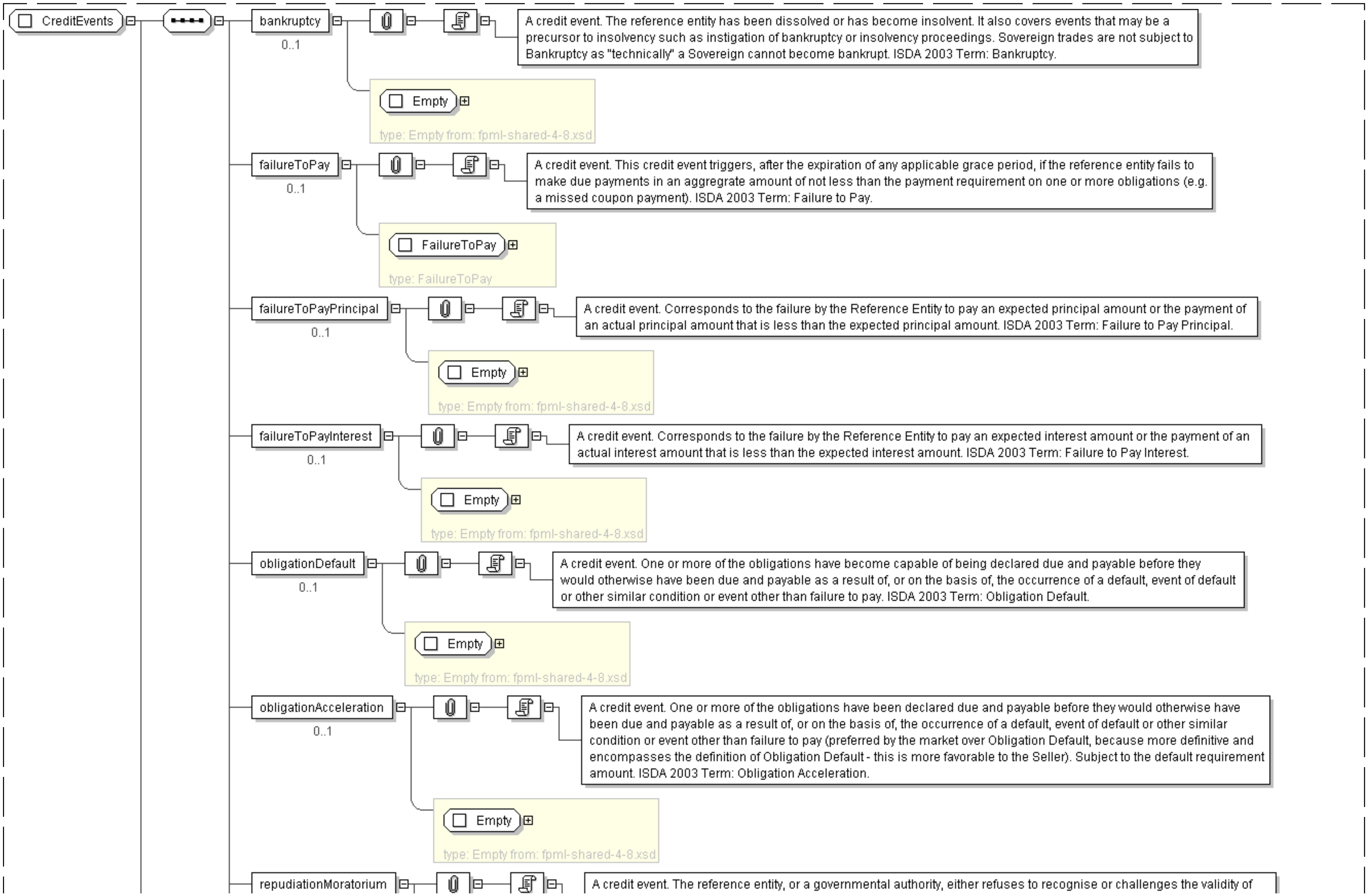
is USD 10,000,000 (JPY 1,000,000,000 for all Japanese Yen trades). This is applied on an aggregate or total basis across all Obligations of the Reference Entity. Used to prevent technical/operational errors from triggering credit events. ISDA 2003 Term: Default Requirement.'

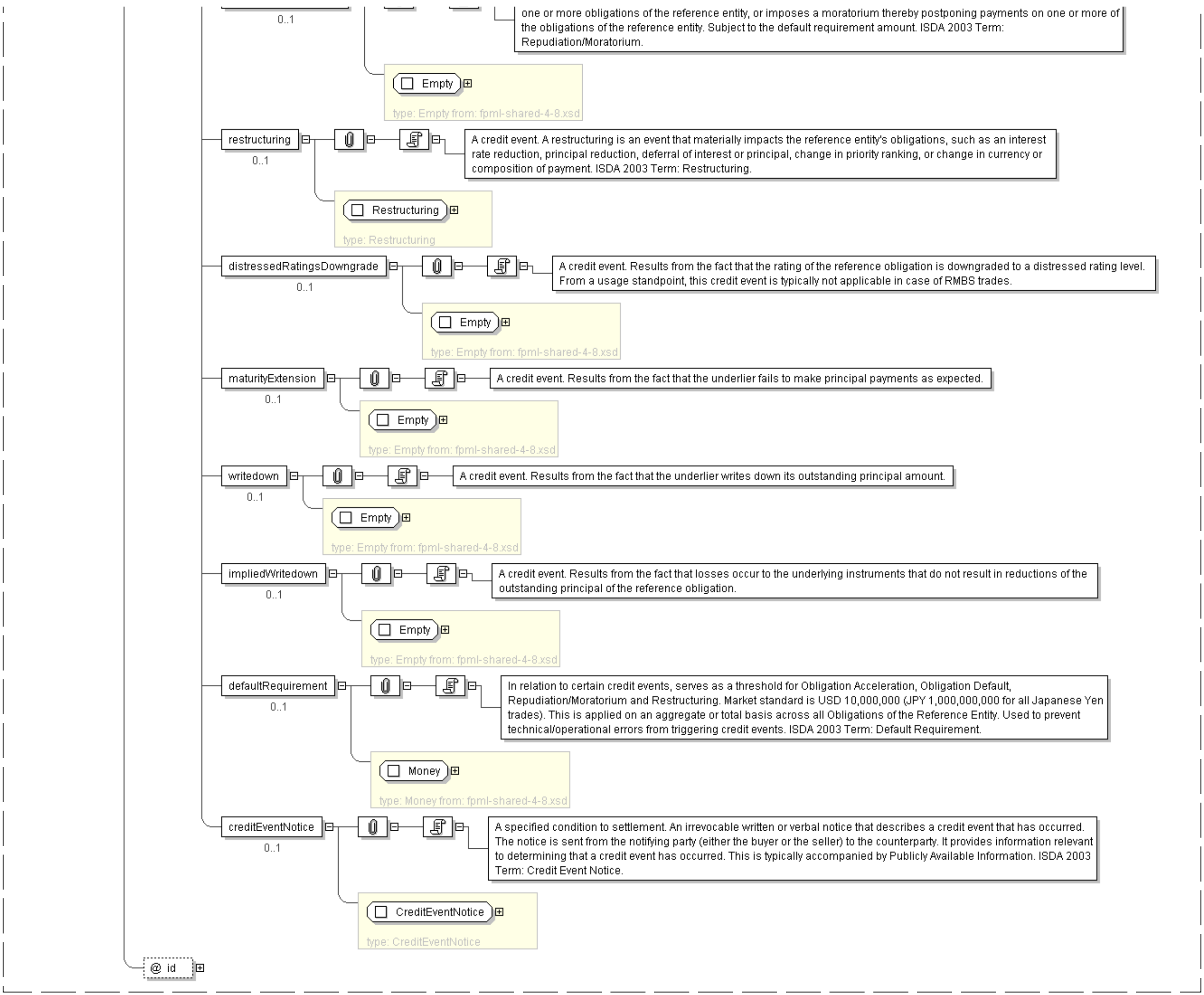
<creditEventNotice> CreditEventNotice </creditEventNotice> [0..1]

'A specified condition to settlement. An irrevocable written or verbal notice that describes a credit event that has occurred. The notice is sent from the notifying party (either the buyer or the seller) to the counterparty. It provides information relevant to determining that a credit event has occurred. This is typically accompanied by Publicly Available Information. ISDA 2003 Term: Credit Event Notice.'

</...>

Diagram




0..1
one or more obligations of the reference entity, or imposes a moratorium thereby postponing payments on one or more of the obligations of the reference entity. Subject to the default requirement amount. ISDA 2003 Term: Repudiation/Moratorium.
Empty
type: Empty from: fpml-shared-4-8.xsd
restructuring
0..1
A credit event. A restructuring is an event that materially impacts the reference entity's obligations, such as an interest rate reduction, principal reduction, deferral of interest or principal, change in priority ranking, or change in currency or composition of payment. ISDA 2003 Term: Restructuring.
Restructuring
type: Restructuring
distressedRatingsDowngrade
0..1
A credit event. Results from the fact that the rating of the reference obligation is downgraded to a distressed rating level. From a usage standpoint, this credit event is typically not applicable in case of RMBS trades.
Empty
type: Empty from: fpml-shared-4-8.xsd
maturityExtension
0..1
A credit event. Results from the fact that the underlier fails to make principal payments as expected.
Empty
type: Empty from: fpml-shared-4-8.xsd
writedown
0..1
A credit event. Results from the fact that the underlier writes down its outstanding principal amount.
Empty
type: Empty from: fpml-shared-4-8.xsd
impliedWritedown
0..1
A credit event. Results from the fact that losses occur to the underlying instruments that do not result in reductions of the outstanding principal of the reference obligation.
Empty
type: Empty from: fpml-shared-4-8.xsd
defaultRequirement
0..1
In relation to certain credit events, serves as a threshold for Obligation Acceleration, Obligation Default, Repudiation/Moratorium and Restructuring. Market standard is USD 10,000,000 (JPY 1,000,000,000 for all Japanese Yen trades). This is applied on an aggregate or total basis across all Obligations of the Reference Entity. Used to prevent technical/operational errors from triggering credit events. ISDA 2003 Term: Default Requirement.
Money
type: Money from: fpml-shared-4-8.xsd
creditEventNotice
0..1
A specified condition to settlement. An irrevocable written or verbal notice that describes a credit event that has occurred. The notice is sent from the notifying party (either the buyer or the seller) to the counterparty. It provides information relevant to determining that a credit event has occurred. This is typically accompanied by Publicly Available Information. ISDA 2003 Term: Credit Event Notice.
CreditEventNotice
type: CreditEventNotice
@ id

Schema Component Representation

```
<xsd:complexType name="CreditEvents">
   <xsd:sequence>
      <xsd:element name="bankruptcy" type=" Empty " minOccurs="0"/>
      <xsd:element name="failureToPay" type=" FailureToPay " minOccurs="0"/>
      <xsd:element name="failureToPayPrincipal" type=" Empty " minOccurs="0"/>
      <xsd:element name="failureToPayInterest" type=" Empty " minOccurs="0"/>
      <xsd:element name="obligationDefault" type=" Empty " minOccurs="0"/>
      <xsd:element name="obligationAcceleration" type=" Empty " minOccurs="0"/>
      <xsd:element name="repudiationMoratorium" type=" Empty " minOccurs="0"/>
      <xsd:element name="restructuring" type=" Restructuring " minOccurs="0"/>
      <xsd:element name="distressedRatingsDowngrade" type=" Empty " minOccurs="0"/>
      <xsd:element name="maturityExtension" type=" Empty " minOccurs="0"/>
      <xsd:element name="writedown" type=" Empty " minOccurs="0"/>
      <xsd:element name="impliedWritedown" type=" Empty " minOccurs="0"/>
      <xsd:element name="defaultRequirement" type=" Money " minOccurs="0"/>
      <xsd:element name="creditEventNotice" type=" CreditEventNotice " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
</xsd:complexType>
```

top

Complex Type: CreditEventsReference

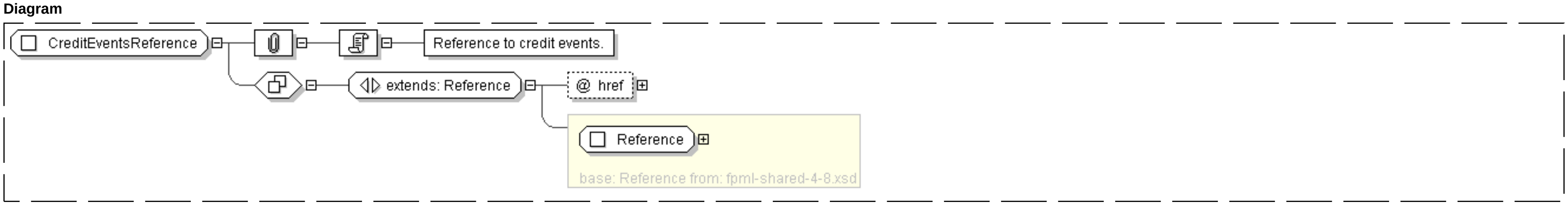
Super-types:	Reference < **CreditEventsReference** (by extension)
Sub-types:	None

Name	CreditEventsReference
Used by (from the same schema document)	Complex Type **Trigger**
Abstract	no
Documentation	Reference to credit events.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CreditEventsReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="CreditEvents"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FailureToPay

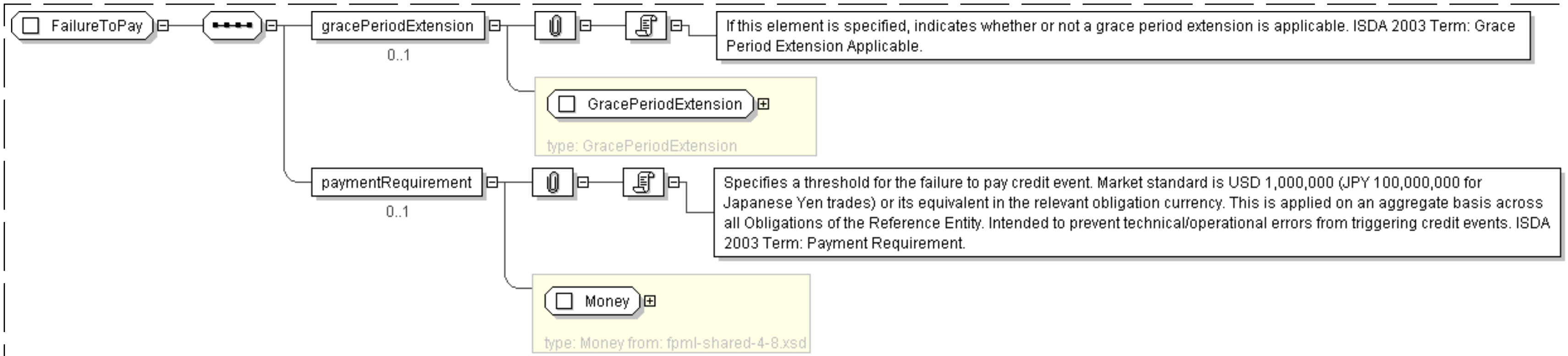
Super-types:	None
Sub-types:	None

Name	FailureToPay
Used by (from the same schema document)	Complex Type **CreditEvents**
Abstract	no

XML Instance Representation

```
<...>
   <gracePeriodExtension> GracePeriodExtension </gracePeriodExtension> [0..1]
   'If this element is specified, indicates whether or not a grace period extension is
   applicable. ISDA 2003 Term: Grace Period Extension Applicable.'

   <paymentRequirement> Money </paymentRequirement> [0..1]
   'Specifies a threshold for the failure to pay credit event. Market standard is USD
   1,000,000 (JPY 100,000,000 for Japanese Yen trades) or its equivalent in the
   relevant obligation currency. This is applied on an aggregate basis across all Obligations
   of the Reference Entity. Intended to prevent technical/operational errors from
   triggering credit events. ISDA 2003 Term: Payment Requirement.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FailureToPay">
   <xsd:sequence>
      <xsd:element name="gracePeriodExtension" type=" GracePeriodExtension " minOccurs="0"/>
      <xsd:element name="paymentRequirement" type=" Money " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FeaturePayment

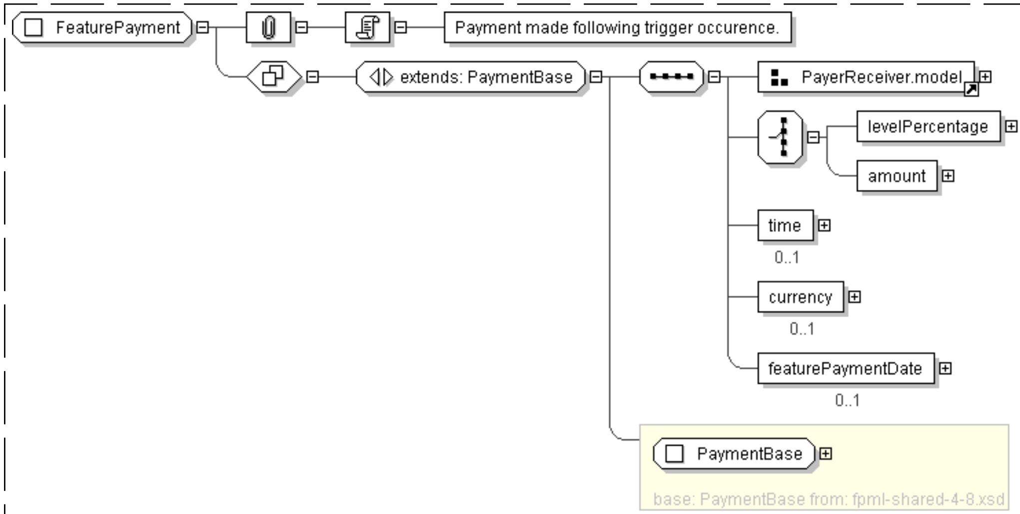
Super-types:	PaymentBase < **FeaturePayment** (by extension)
Sub-types:	None

Name	FeaturePayment
Used by (from the same schema document)	Complex Type **TriggerEvent**
Abstract	no
Documentation	Payment made following trigger occurence.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

Start Choice [1]
      <levelPercentage> xsd:decimal </levelPercentage> [1]
      'The trigger level percentage.'

      <amount> NonNegativeDecimal </amount> [1]
      'The monetary quantity in currency units.'

End Choice
   <time> TimeTypeEnum </time> [0..1]
   'The feature payment time.'

   <currency> Currency </currency> [0..1]
   'The currency in which an amount is denominated.'

   <featurePaymentDate> AdjustableOrRelativeDate </featurePaymentDate> [0..1]
   'The feature payment date.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FeaturePayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model "/>
            <xsd:choice>
               <xsd:element name="levelPercentage" type=" xsd:decimal "/>
               <xsd:element name="amount" type=" NonNegativeDecimal "/>
            </xsd:choice>
            <xsd:element name="time" type=" TimeTypeEnum " minOccurs="0"/>
```

```
            <xsd:element name="currency" type=" Currency " minOccurs="0"/>
            <xsd:element name="featurePaymentDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: FrequencyType

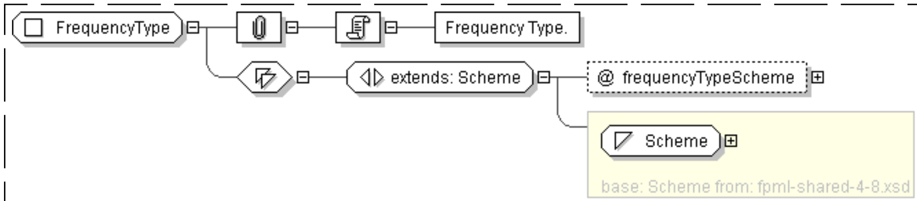
Super-types:	Scheme < **FrequencyType** (by extension)
Sub-types:	None

Name	FrequencyType
Used by (from the same schema document)	Complex Type **AveragingSchedule**
Abstract	no
Documentation	Frequency Type.

XML Instance Representation

```
<...
frequencyTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FrequencyType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="frequencyTypeScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: FxFeature

Super-types:	None
Sub-types:	None

Name	FxFeature
Used by (from the same schema document)	Model Group **OptionBaseFeature.model**
Abstract	no
Documentation	A type for defining Fx Features.

XML Instance Representation

```
<...>
   <referenceCurrency> IdentifiedCurrency </referenceCurrency> [1]
```

'Specifies the reference currency of the trade.'

Start Choice [1]
<composite> Composite </composite> [1]

'If "Composite" is specified as the Settlement Type in the relevant Transaction Supplement, an amount in the Settlement Currency, determined by the Calculation Agent as being equal to the number of Options exercised or deemed exercised, multiplied by: (Settlement Price − Strike Price) / (Strike Price − Settlement Price) x Multiplier provided that if the above is equal to a negative amount the Option Cash Settlement Amount shall be deemed to be zero.'

<quanto> Quanto </quanto> [1]

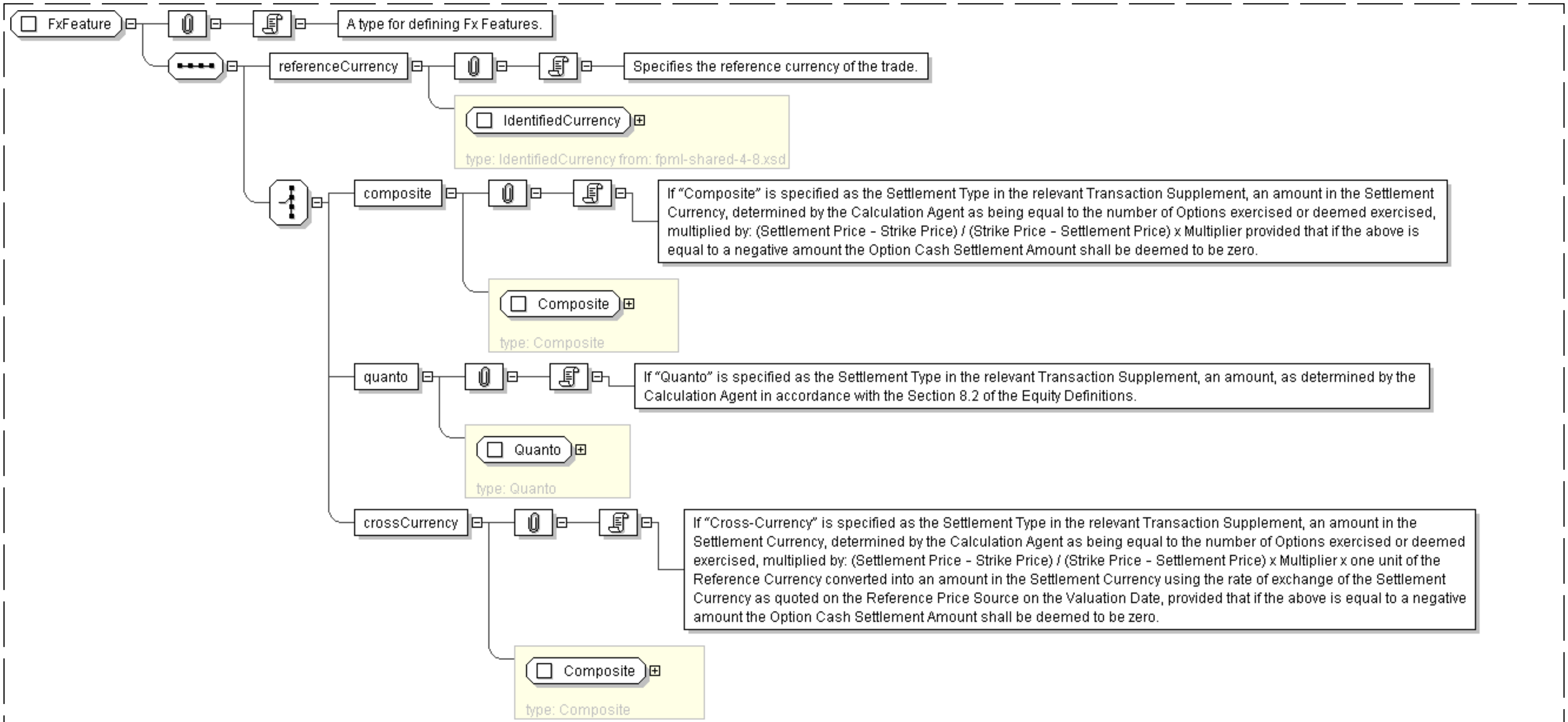
'If "Quanto" is specified as the Settlement Type in the relevant Transaction Supplement, an amount, as determined by the Calculation Agent in accordance with the Section 8.2 of the Equity Definitions.'

<crossCurrency> Composite </crossCurrency> [1]

'If "Cross-Currency" is specified as the Settlement Type in the relevant Transaction Supplement, an amount in the Settlement Currency, determined by the Calculation Agent as being equal to the number of Options exercised or deemed exercised, multiplied by: (Settlement Price − Strike Price) / (Strike Price − Settlement Price) x Multiplier x one unit of the Reference Currency converted into an amount in the Settlement Currency using the rate of exchange of the Settlement Currency as quoted on the Reference Price Source on the Valuation Date, provided that if the above is equal to a negative amount the Option Cash Settlement Amount shall be deemed to be zero.'

End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="FxFeature">
   <xsd:sequence>
      <xsd:element name="referenceCurrency" type=" IdentifiedCurrency "/>
      <xsd:choice>
         <xsd:element name="composite" type=" Composite "/>
         <xsd:element name="quanto" type=" Quanto "/>
         <xsd:element name="crossCurrency" type=" Composite "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: GracePeriodExtension

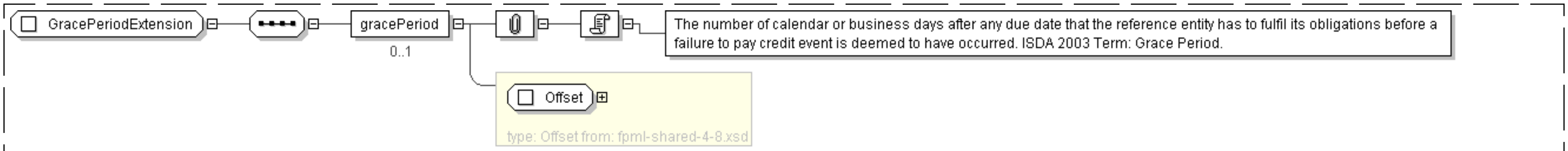
Super-types:	None
Sub-types:	None

Name	GracePeriodExtension
Used by (from the same schema document)	Complex Type **FailureToPay**
Abstract	no

XML Instance Representation

```
<...>
   <gracePeriod> Offset </gracePeriod> [0..1]
   'The number of calendar or business days after any due date that the reference entity has
   to fulfil its obligations before a failure to pay credit event is deemed to have occurred.
   ISDA 2003 Term: Grace Period.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GracePeriodExtension">
   <xsd:sequence>
      <xsd:element name="gracePeriod" type=" Offset " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Knock

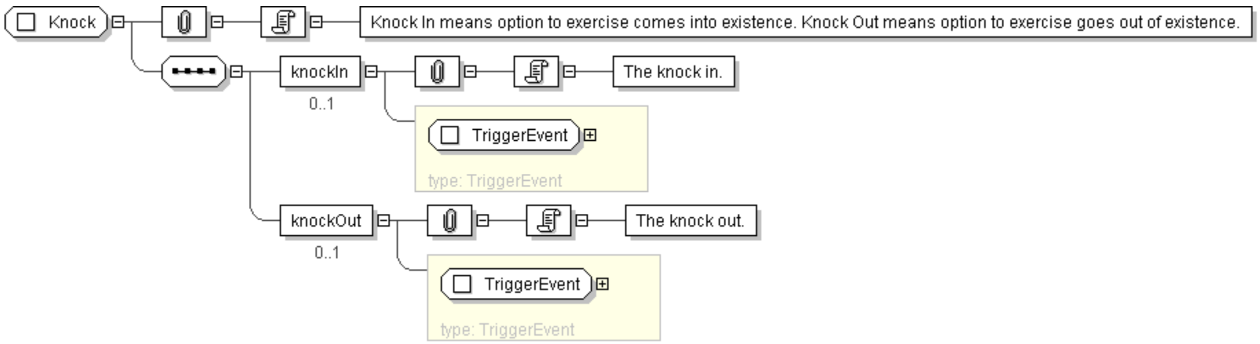
Super-types:	None
Sub-types:	None

Name	Knock
Used by (from the same schema document)	Model Group **OptionFeature.model**
Abstract	no
Documentation	Knock In means option to exercise comes into existence. Knock Out means option to exercise goes out of existence.

XML Instance Representation

```
<...>
   <knockIn> TriggerEvent </knockIn> [0..1]
   'The knock in.'

   <knockOut> TriggerEvent </knockOut> [0..1]
   'The knock out.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Knock">
   <xsd:sequence>
      <xsd:element name="knockIn" type=" TriggerEvent " minOccurs="0"/>
      <xsd:element name="knockOut" type=" TriggerEvent " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: MarketDisruption

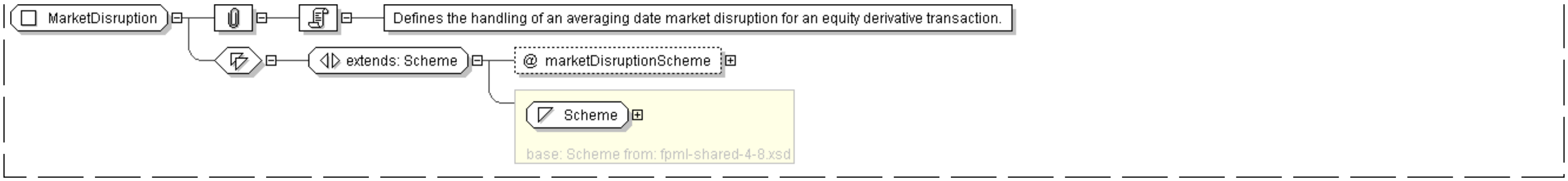
Super-types:	Scheme < **MarketDisruption** (by extension)
Sub-types:	None

Name	MarketDisruption
Used by (from the same schema document)	Complex Type **AveragingPeriod**
Abstract	no
Documentation	Defines the handling of an averaging date market disruption for an equity derivative transaction.

XML Instance Representation

```
<...
marketDisruptionScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MarketDisruption">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="marketDisruptionScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/market-disruption"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: NotifyingParty

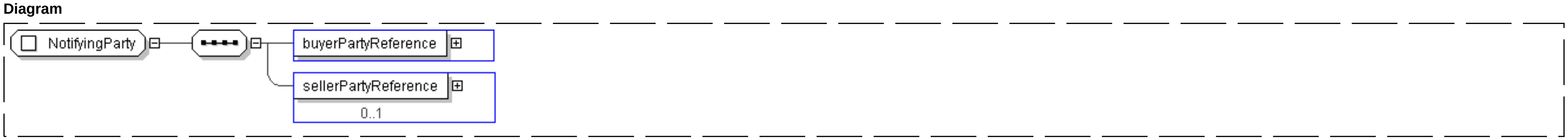
Super-types:	None
Sub-types:	None

Name	NotifyingParty
Used by (from the same schema document)	Complex Type **CreditEventNotice**
Abstract	no

XML Instance Representation

```
<...>
   <buyerPartyReference> PartyReference </buyerPartyReference> [1]
   <sellerPartyReference> PartyReference </sellerPartyReference> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NotifyingParty">
   <xsd:sequence>
      <xsd:element name="buyerPartyReference" type=" PartyReference "/>
      <xsd:element name="sellerPartyReference" type=" PartyReference " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OptionBase

Super-types:	Product < **OptionBase** (by extension)
Sub-types:	• OptionBaseExtended (by extension)

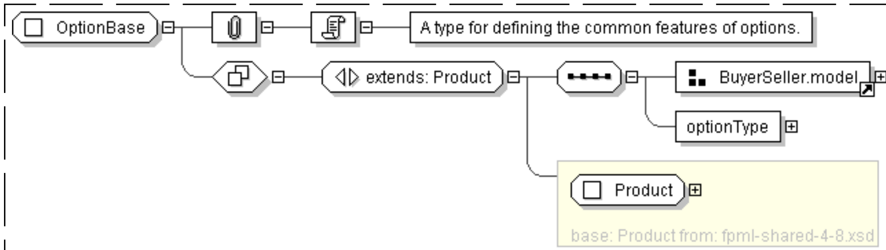
Name	OptionBase

Abstract	yes
Documentation	A type for defining the common features of options.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <optionType> OptionTypeEnum </optionType> [1]
   'The type of option transaction. From a usage standpoint, put/call is the default option
   type, while payer/receiver indicator is used for options index credit default
   swaps, consistently with the industry practice. Straddle is used for the case of
   straddle strategy, that combine a call and a put with the same strike.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionBase" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" Product ">
         <xsd:sequence>
            <xsd:group ref=" BuyerSeller.model "/>
            <xsd:element name="optionType" type=" OptionTypeEnum "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OptionBaseExtended

Super-types:	Product < OptionBase (by extension) < **OptionBaseExtended** (by extension)

Sub-types:	None

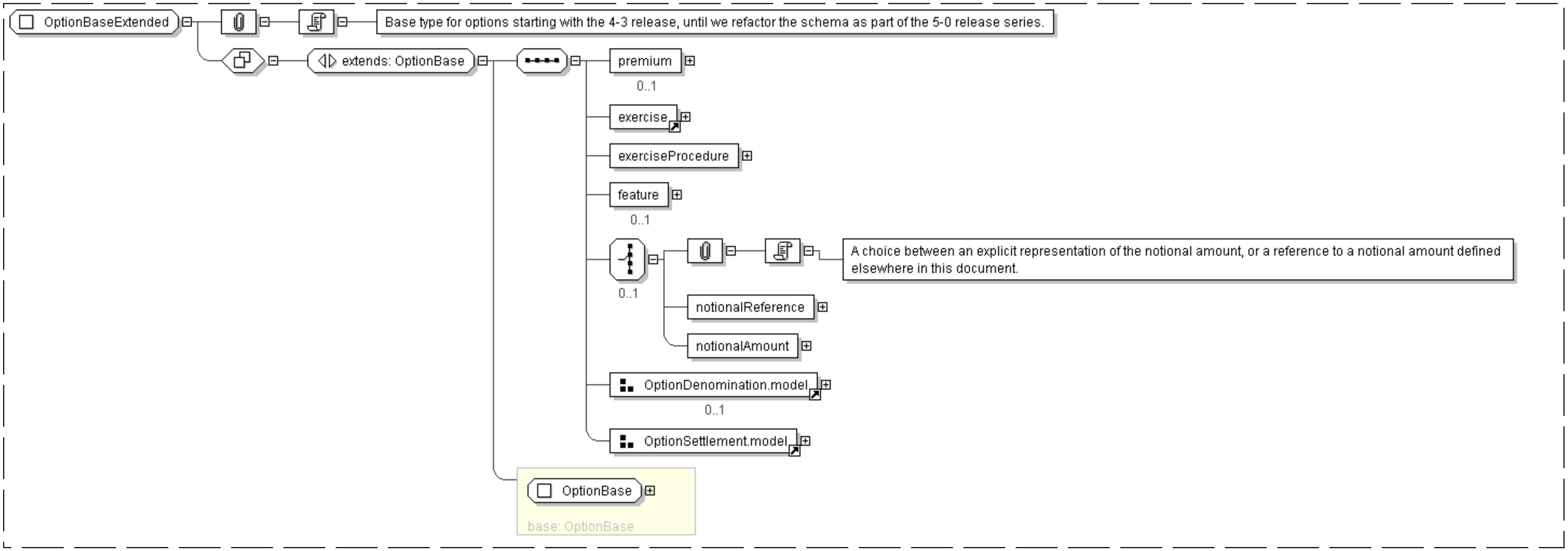
Name	OptionBaseExtended
Abstract	yes
Documentation	Base type for options starting with the 4-3 release, until we refactor the schema as part of the 5-0 release series.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
   'A reference to the party that buys this instrument, ie. pays for this instrument and
   receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
   of FRAs this the fixed rate payer.'

   <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
   'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
   rights defined by this instrument and in return receives a payment for it. See 2000
   ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

   <optionType> OptionTypeEnum </optionType> [1]
   'The type of option transaction. From a usage standpoint, put/call is the default option
   type, while payer/receiver indicator is used for options index credit default
   swaps, consistently with the industry practice. Straddle is used for the case of
   straddle strategy, that combine a call and a put with the same strike.'

   <premium> Premium </premium> [0..1]
   'The option premium payable by the buyer to the seller.'

   <exercise> ... </exercise> [1]
   <exerciseProcedure> ExerciseProcedure </exerciseProcedure> [1]
   'A set of parameters defining procedures associated with the exercise.'

   <feature> OptionFeature </feature> [0..1]
   'An Option feature such as quanto, asian, barrier, knock.'

Start Choice [0..1]
'A choice between an explicit representation of the notional amount, or a reference to
a notional amount defined elsewhere in this document.'

      <notionalReference> NotionalAmountReference </notionalReference> [1]
      <notionalAmount> Money </notionalAmount> [1]
End Choice
Start Group: OptionDenomination.model [0..1]
      <optionEntitlement> PositiveDecimal </optionEntitlement> [1]
      'The number of units of underlyer per option comprised in the option transaction.'

      <entitlementCurrency> Currency </entitlementCurrency> [0..1]
      'TODO'

      <numberOfOptions> PositiveDecimal </numberOfOptions> [0..1]
      'The number of options comprised in the option transaction.'

End Group: OptionDenomination.model
```

```
    <settlementType> SettlementTypeEnum </settlementType> [0..1]
    <settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
        <settlementAmount> Money </settlementAmount> [1]
        'Settlement Amount'

        <settlementCurrency> Currency </settlementCurrency> [1]
        'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionBaseExtended" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" OptionBase ">
         <xsd:sequence>
            <xsd:element name="premium" type=" Premium " minOccurs="0"/>
            <xsd:element ref=" exercise "/>
            <xsd:element name="exerciseProcedure" type=" ExerciseProcedure "/>
            <xsd:element name="feature" type=" OptionFeature " minOccurs="0"/>
            <xsd:choice minOccurs="0">
               <xsd:element name="notionalReference" type=" NotionalAmountReference "/>
               <xsd:element name="notionalAmount" type=" Money "/>
            </xsd:choice>
            <xsd:group ref=" OptionDenomination.model " minOccurs="0"/>
            <xsd:group ref=" OptionSettlement.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: OptionFeature

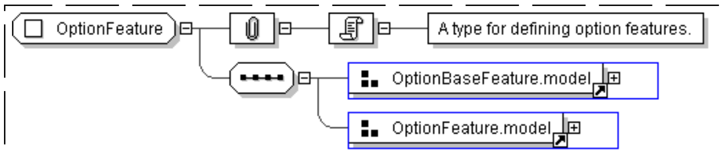
Super-types:	None
Sub-types:	None

Name	OptionFeature
Used by (from the same schema document)	Complex Type **OptionBaseExtended**
Abstract	no
Documentation	A type for defining option features.

XML Instance Representation

```
<...>
   <fxFeature> FxFeature </fxFeature> [0..1]
   'A quanto or composite FX feature.'

   <strategyFeature> StrategyFeature </strategyFeature> [0..1]
   'A simple strategy feature.'

   <asian> Asian </asian> [0..1]
   'An option where and average price is taken on valuation.'

   <barrier> Barrier </barrier> [0..1]
   'An option with a barrier feature.'

   <knock> Knock </knock> [0..1]
   'A knock feature.'

   <passThrough> PassThrough </passThrough> [0..1]
   'Pass through payments from the underlyer, such as dividends.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionFeature">
   <xsd:sequence>
      <xsd:group ref=" OptionBaseFeature.model "/>
      <xsd:group ref=" OptionFeature.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OptionNumericStrike

Super-types:	None
Sub-types:	• OptionStrike (by extension)

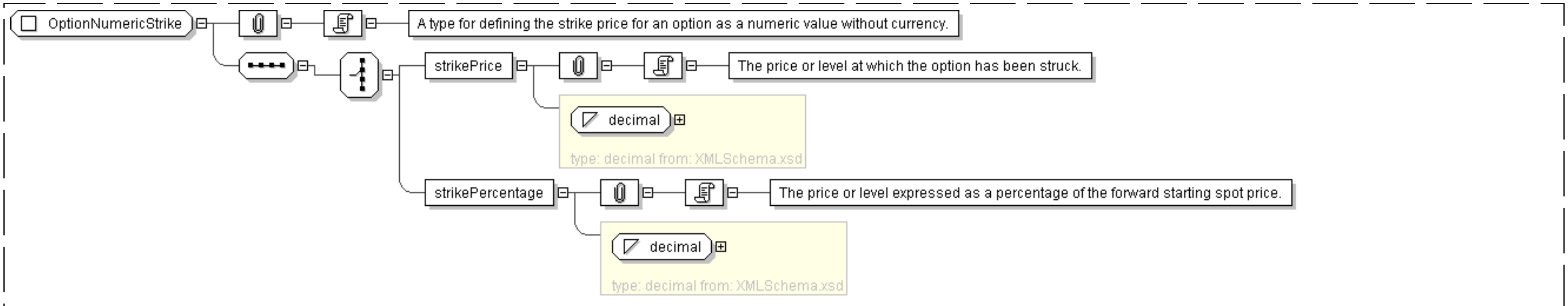
Name	OptionNumericStrike

Abstract	no
Documentation	A type for defining the strike price for an option as a numeric value without currency.

XML Instance Representation

```
<...>
Start Choice [1]
      <strikePrice> xsd:decimal </strikePrice> [1]
      'The price or level at which the option has been struck.'

      <strikePercentage> xsd:decimal </strikePercentage> [1]
      'The price or level expressed as a percentage of the forward starting spot price.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionNumericStrike">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="strikePrice" type=" xsd:decimal "/>
         <xsd:element name="strikePercentage" type=" xsd:decimal "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: OptionStrike

Super-types:	OptionNumericStrike < **OptionStrike** (by extension)
Sub-types:	None

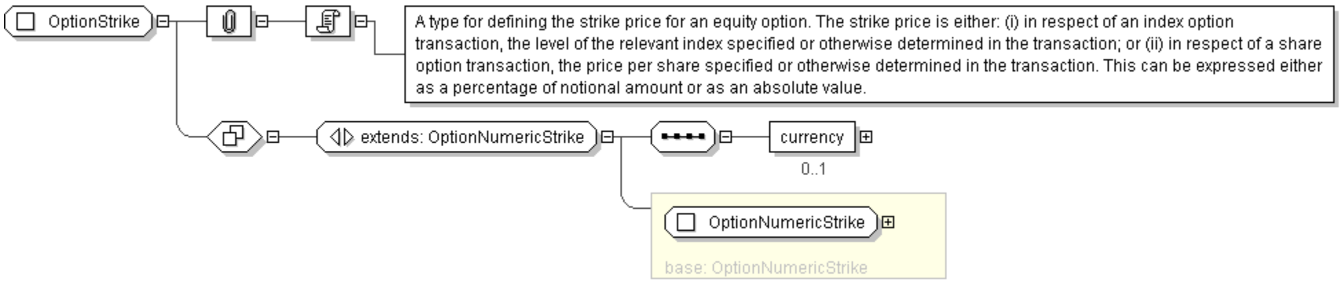
Name	OptionStrike
Used by (from the same schema document)	Complex Type **StrikeSpread**
Abstract	no
Documentation	A type for defining the strike price for an equity option. The strike price is either: (i) in respect of an index option transaction, the level of the relevant index specified or otherwise determined in the transaction; or (ii) in respect of a share option transaction, the price per share specified or otherwise determined in the transaction. This can be expressed either as a percentage of notional amount or as an absolute value.

XML Instance Representation

```
<...>
Start Choice [1]
      <strikePrice> xsd:decimal </strikePrice> [1]
      'The price or level at which the option has been struck.'
```

```
        <strikePercentage> xsd:decimal </strikePercentage> [1]
        'The price or level expressed as a percentage of the forward starting spot price.'
End Choice
    <currency> Currency </currency> [0..1]
    'The currency in which an amount is denominated.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="OptionStrike">
   <xsd:complexContent>
      <xsd:extension base=" OptionNumericStrike ">
         <xsd:sequence>
            <xsd:element name="currency" type=" Currency " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PassThrough

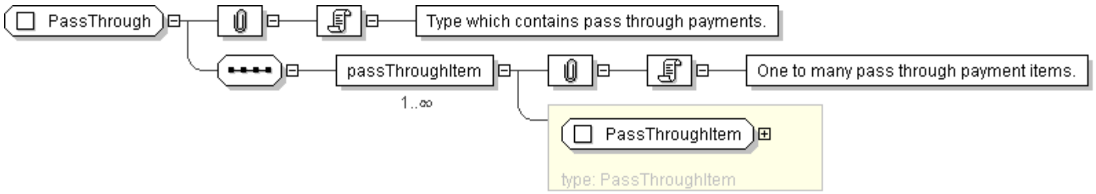
Super-types:	None
Sub-types:	None

Name	PassThrough
Used by (from the same schema document)	Model Group **OptionFeature.model**
Abstract	no
Documentation	Type which contains pass through payments.

XML Instance Representation

```
<...>
    <passThroughItem> PassThroughItem </passThroughItem> [1..*]
    'One to many pass through payment items.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PassThrough">
   <xsd:sequence>
      <xsd:element name="passThroughItem" type=" PassThroughItem " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PassThroughItem

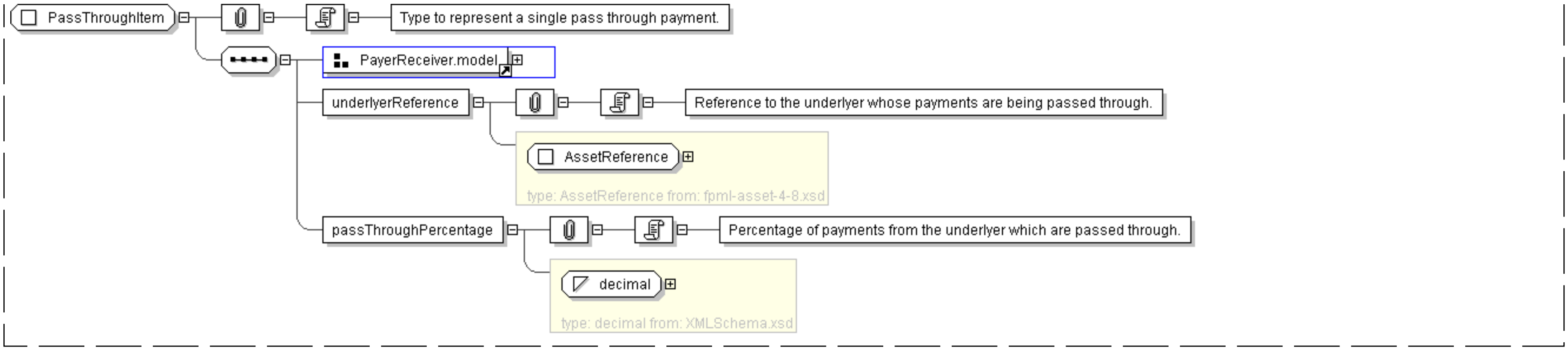
Super-types:	None
Sub-types:	None

Name	PassThroughItem
Used by (from the same schema document)	Complex Type **PassThrough**
Abstract	no
Documentation	Type to represent a single pass through payment.

XML Instance Representation

```
<...>
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <underlyerReference> AssetReference </underlyerReference> [1]
   'Reference to the underlyer whose payments are being passed through.'

   <passThroughPercentage> xsd:decimal </passThroughPercentage> [1]
   'Percentage of payments from the underlyer which are passed through.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PassThroughItem">
   <xsd:sequence>
      <xsd:group ref=" PayerReceiver.model "/>
      <xsd:element name="underlyerReference" type=" AssetReference "/>
      <xsd:element name="passThroughPercentage" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Premium

Super-types:	SimplePayment < **Premium** (by extension)
Sub-types:	None

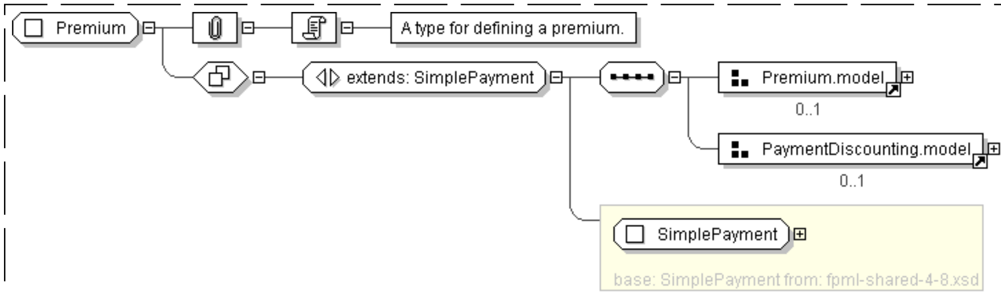
Name	Premium
Used by (from the same schema document)	Complex Type **OptionBaseExtended**
Abstract	no
Documentation	A type for defining a premium.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentAmount> Money </paymentAmount> [1]
   <paymentDate> AdjustableOrRelativeAndAdjustedDate </paymentDate> [1]
   'The payment date. This date is subject to adjustment in accordance with any
   applicable business day convention.'

Start Group: Premium.model [0..1]
      <premiumType> PremiumTypeEnum </premiumType> [0..1]
      'Forward start Premium type'

      <pricePerOption> Money </pricePerOption> [0..1]
      'The amount of premium to be paid expressed as a function of the number of options.'

      <percentageOfNotional> xsd:decimal </percentageOfNotional> [0..1]
```

```
    'The amount of premium to be paid expressed as a percentage of the notional value of
    the transaction. A percentage of 5% would be expressed as 0.05.'

End Group: Premium.model
Start Group: PaymentDiscounting.model [0..1]
    <discountFactor> xsd:decimal </discountFactor> [0..1]
    'The value representing the discount factor used to calculate the present value of the
    cash flow.'

    <presentValueAmount> Money </presentValueAmount> [0..1]
    'The amount representing the present value of the forecast payment.'

End Group: PaymentDiscounting.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Premium">
   <xsd:complexContent>
      <xsd:extension base=" SimplePayment ">
         <xsd:sequence>
            <xsd:group ref=" Premium.model " minOccurs="0"/>
            <xsd:group ref=" PaymentDiscounting.model " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PubliclyAvailableInformation

Super-types:	None
Sub-types:	None

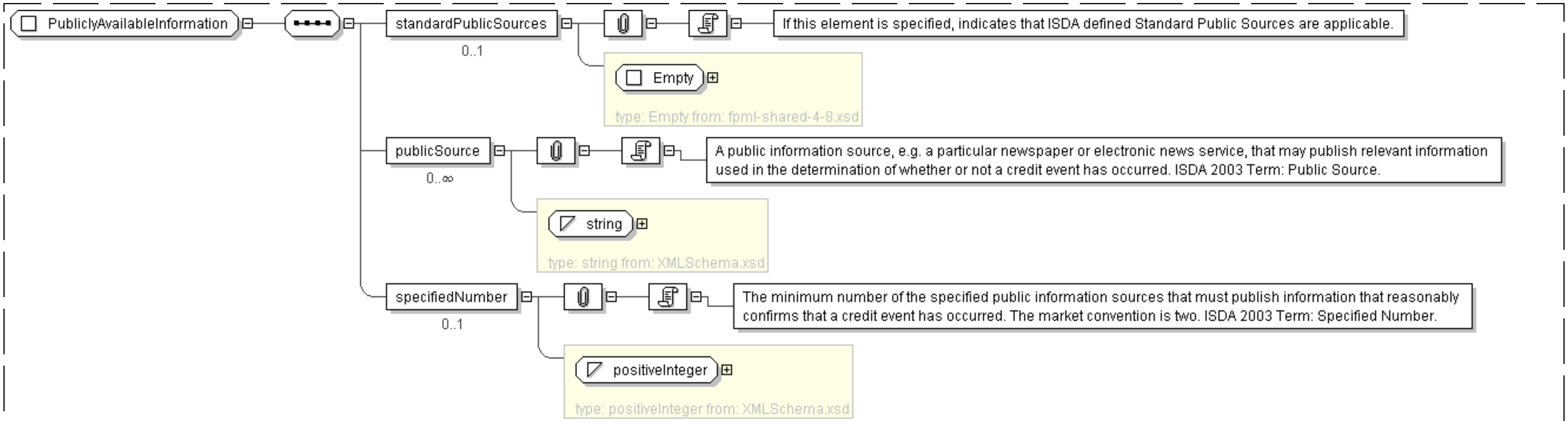
Name	PubliclyAvailableInformation
Used by (from the same schema document)	Complex Type **CreditEventNotice**
Abstract	no

XML Instance Representation

```
<...>
   <standardPublicSources> Empty </standardPublicSources> [0..1]
   'If this element is specified, indicates that ISDA defined Standard Public Sources
   are applicable.'

   <publicSource> xsd:string </publicSource> [0..*]
   'A public information source, e.g. a particular newspaper or electronic news service, that
   may publish relevant information used in the determination of whether or not a credit event
```

```
has occurred. ISDA 2003 Term: Public Source.'

<specifiedNumber> xsd:positiveInteger </specifiedNumber> [0..1]
'The minimum number of the specified public information sources that must publish
information that reasonably confirms that a credit event has occurred. The market convention
is two. ISDA 2003 Term: Specified Number.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PubliclyAvailableInformation">
   <xsd:sequence>
      <xsd:element name="standardPublicSources" type=" Empty " minOccurs="0"/>
      <xsd:element name="publicSource" type=" xsd:string " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="specifiedNumber" type=" xsd:positiveInteger " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Quanto

Super-types:	None
Sub-types:	None

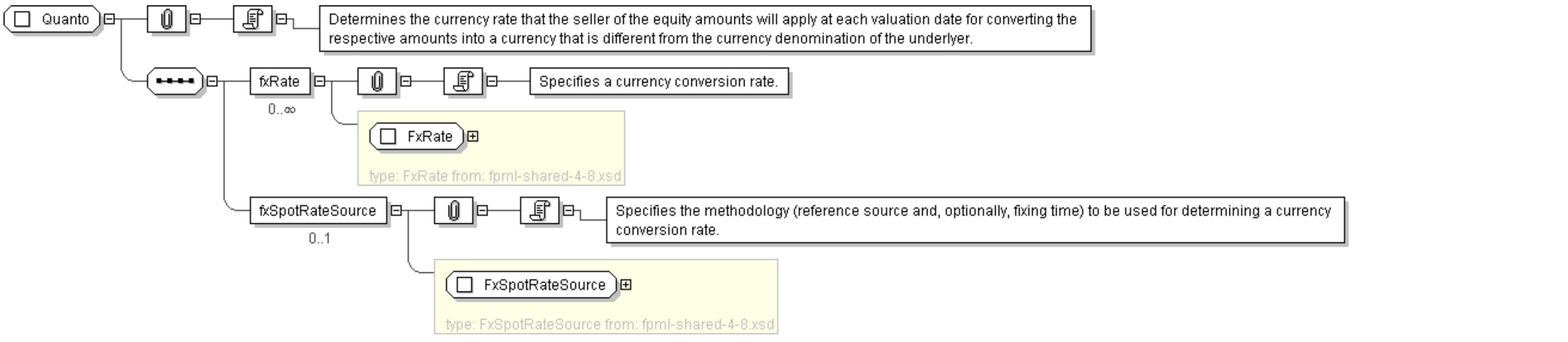
Name	Quanto
Used by (from the same schema document)	Complex Type **FxFeature**
Abstract	no
Documentation	Determines the currency rate that the seller of the equity amounts will apply at each valuation date for converting the respective amounts into a currency that is different from the currency denomination of the underlyer.

XML Instance Representation

```
<...>
  <fxRate> FxRate </fxRate> [0..*]
  'Specifies a currency conversion rate.'

  <fxSpotRateSource> FxSpotRateSource </fxSpotRateSource> [0..1]
  'Specifies the methodology (reference source and, optionally, fixing time) to be used
  for determining a currency conversion rate.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Quanto">
   <xsd:sequence>
      <xsd:element name="fxRate" type=" FxRate " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="fxSpotRateSource" type=" FxSpotRateSource " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Restructuring

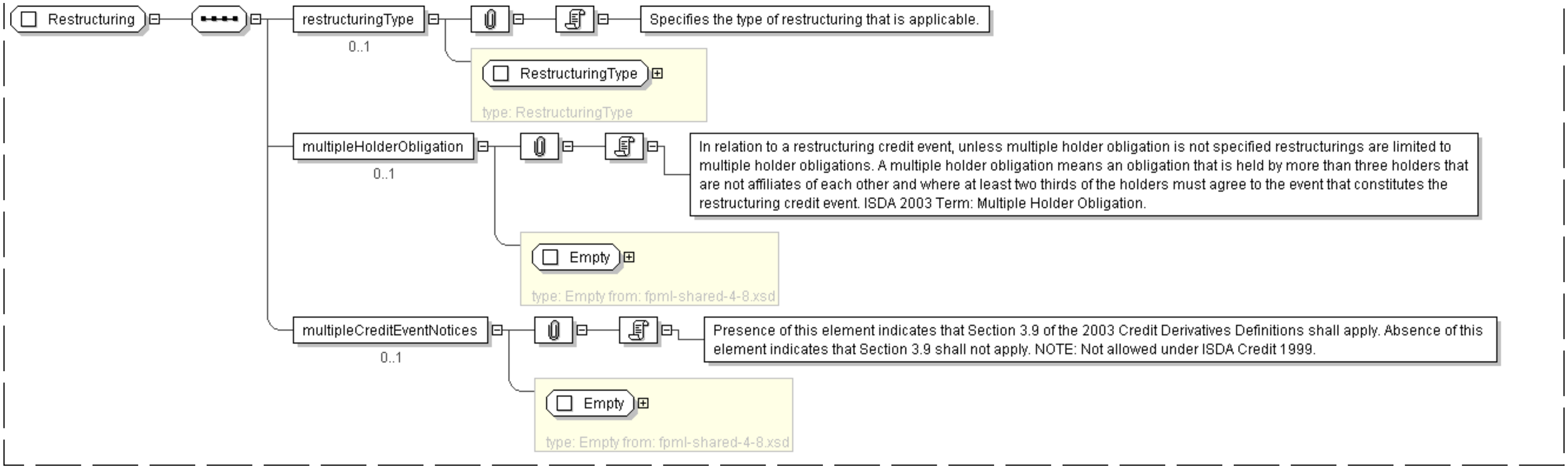
Super-types:	None
Sub-types:	None

Name	Restructuring
Used by (from the same schema document)	Complex Type **CreditEvents**
Abstract	no

XML Instance Representation

```
<...>
   <restructuringType> RestructuringType </restructuringType> [0..1]
   'Specifies the type of restructuring that is applicable.'

   <multipleHolderObligation> Empty </multipleHolderObligation> [0..1]
   'In relation to a restructuring credit event, unless multiple holder obligation is
   not specified restructurings are limited to multiple holder obligations. A multiple
   holder obligation means an obligation that is held by more than three holders that are
   not affiliates of each other and where at least two thirds of the holders must agree to
   the event that constitutes the restructuring credit event. ISDA 2003 Term: Multiple
   Holder Obligation.'

   <multipleCreditEventNotices> Empty </multipleCreditEventNotices> [0..1]
   'Presence of this element indicates that Section 3.9 of the 2003 Credit Derivatives
   Definitions shall apply. Absence of this element indicates that Section 3.9 shall not
   apply. NOTE: Not allowed under ISDA Credit 1999.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Restructuring">
   <xsd:sequence>
      <xsd:element name="restructuringType" type=" RestructuringType " minOccurs="0"/>
      <xsd:element name="multipleHolderObligation" type=" Empty " minOccurs="0"/>
      <xsd:element name="multipleCreditEventNotices" type=" Empty " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: RestructuringType

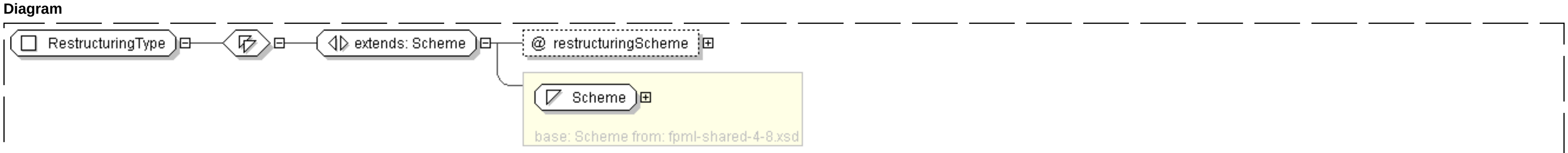
Super-types:	Scheme < **RestructuringType** (by extension)
Sub-types:	None

Name	RestructuringType
Used by (from the same schema document)	Complex Type **Restructuring**
Abstract	no

XML Instance Representation

```
<...
restructuringScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RestructuringType">
   <xsd:simpleContent>
```

```
        <xsd:extension base=" Scheme ">
           <xsd:attribute name="restructuringScheme" type=" xsd:anyURI " default="http://www.fpml.
           org/coding-scheme/restructuring"/>
        </xsd:extension>
     </xsd:simpleContent>
  </xsd:complexType>
```

top

Complex Type: StrategyFeature

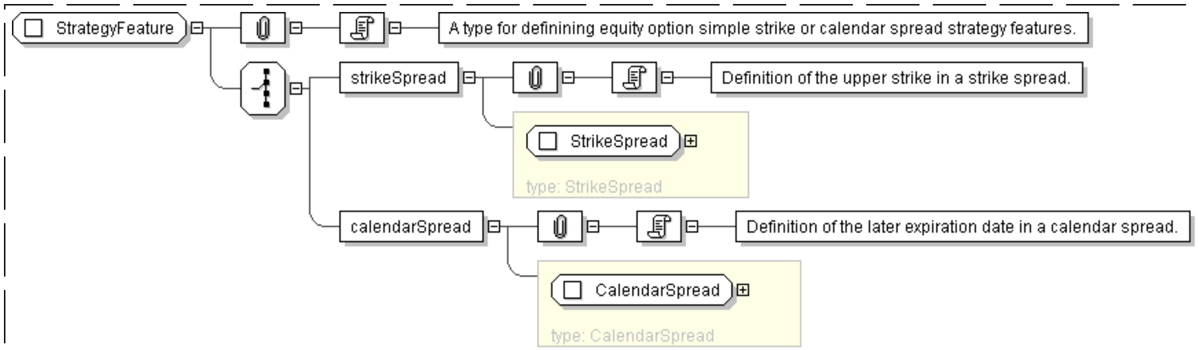
Super-types:	None
Sub-types:	None

Name	StrategyFeature
Used by (from the same schema document)	Model Group **OptionBaseFeature.model**
Abstract	no
Documentation	A type for definining equity option simple strike or calendar spread strategy features.

XML Instance Representation

```
<...>
Start Choice [1]
      <strikeSpread> StrikeSpread </strikeSpread> [1]
      'Definition of the upper strike in a strike spread.'

      <calendarSpread> CalendarSpread </calendarSpread> [1]
      'Definition of the later expiration date in a calendar spread.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="StrategyFeature">
   <xsd:choice>
      <xsd:element name="strikeSpread" type=" StrikeSpread "/>
      <xsd:element name="calendarSpread" type=" CalendarSpread "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: StrikeSpread

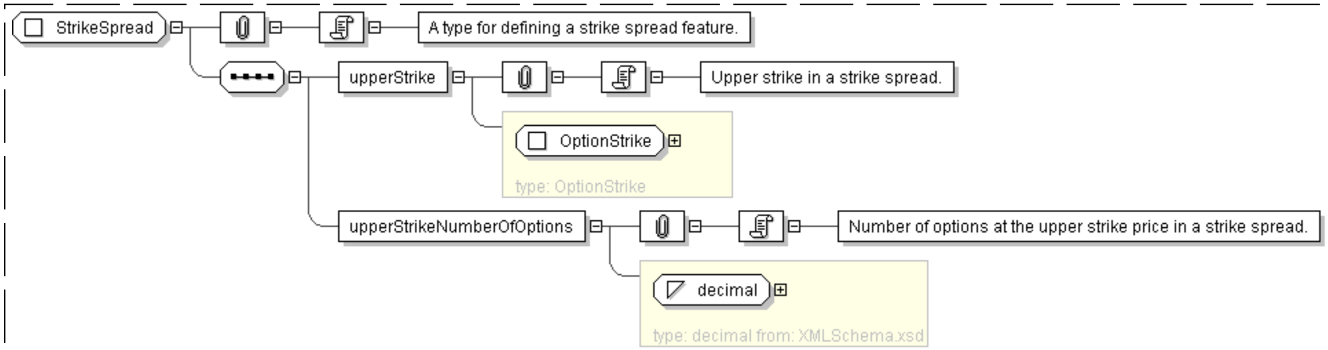
Super-types:	None
Sub-types:	None

Name	StrikeSpread
Used by (from the same schema document)	Complex Type **StrategyFeature**
Abstract	no
Documentation	A type for defining a strike spread feature.

XML Instance Representation

```
<...>
   <upperStrike> OptionStrike </upperStrike> [1]
   'Upper strike in a strike spread.'

   <upperStrikeNumberOfOptions> xsd:decimal </upperStrikeNumberOfOptions> [1]
   'Number of options at the upper strike price in a strike spread.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="StrikeSpread">
   <xsd:sequence>
      <xsd:element name="upperStrike" type=" OptionStrike "/>
      <xsd:element name="upperStrikeNumberOfOptions" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Trigger

Super-types:	None
Sub-types:	None

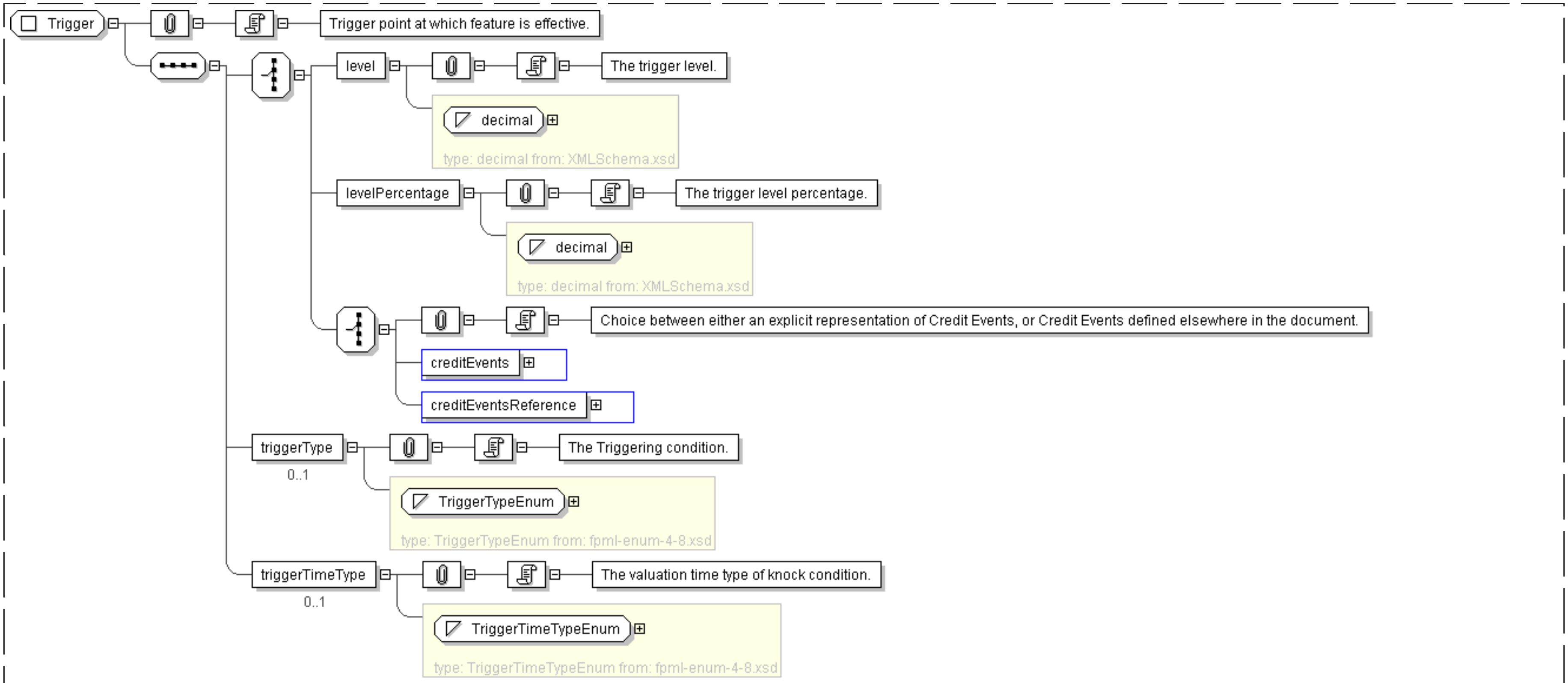
Name	Trigger
Used by (from the same schema document)	Complex Type **TriggerEvent**
Abstract	no
Documentation	Trigger point at which feature is effective.

XML Instance Representation

```
<...>
Start Choice [1]
      <level> xsd:decimal </level> [1]
      'The trigger level.'
```

```
      <levelPercentage> xsd:decimal </levelPercentage> [1]
      'The trigger level percentage.'

Start Choice [1]
'Choice between either an explicit representation of Credit Events, or Credit Events
defined elsewhere in the document.'

         <creditEvents> CreditEvents </creditEvents> [1]
         <creditEventsReference> CreditEventsReference </creditEventsReference> [1]
End Choice
End Choice
   <triggerType> TriggerTypeEnum </triggerType> [0..1]
   'The Triggering condition.'

   <triggerTimeType> TriggerTimeTypeEnum </triggerTimeType> [0..1]
   'The valuation time type of knock condition.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Trigger">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="level" type=" xsd:decimal "/>
         <xsd:element name="levelPercentage" type=" xsd:decimal "/>
         <xsd:choice>
            <xsd:element name="creditEvents" type=" CreditEvents "/>
```

```
            <xsd:element name="creditEventsReference" type=" CreditEventsReference "/>
         </xsd:choice>
      </xsd:choice>
      <xsd:element name="triggerType" type=" TriggerTypeEnum " minOccurs="0" maxOccurs="1"/>
      <xsd:element name="triggerTimeType" type=" TriggerTimeTypeEnum " minOccurs="0" maxOccurs="1"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TriggerEvent

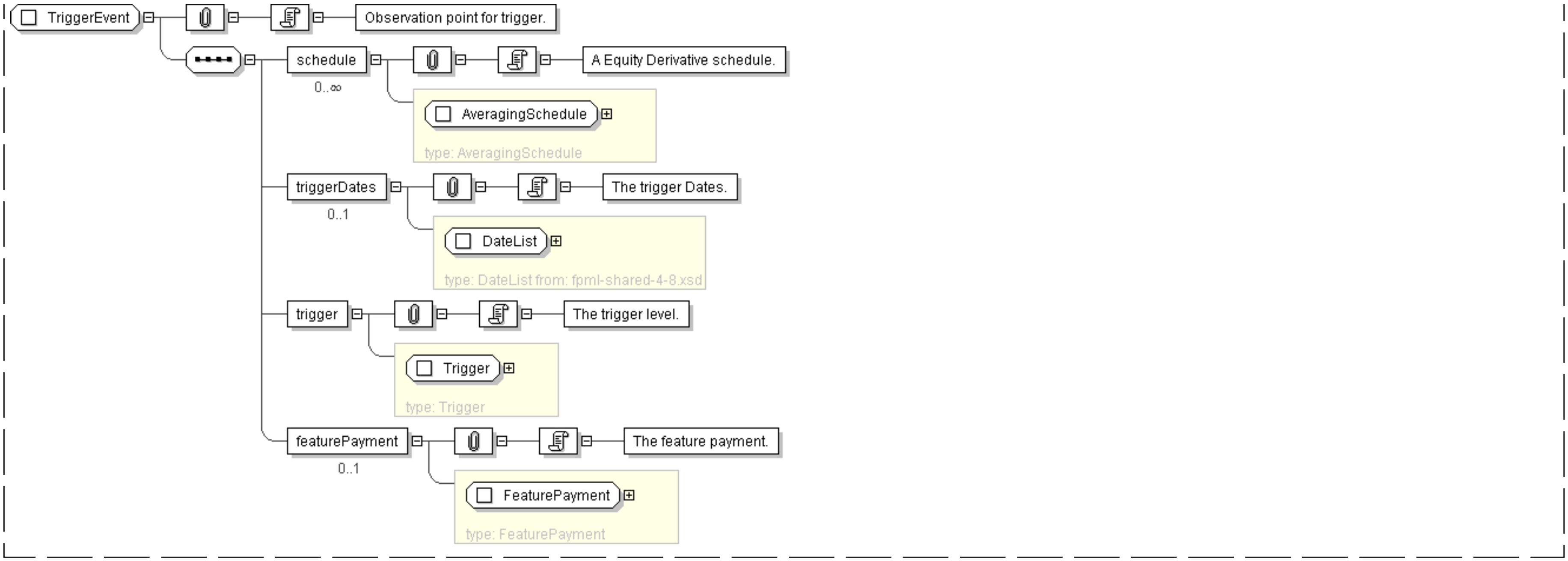
Super-types:	None
Sub-types:	None

Name	TriggerEvent
Used by (from the same schema document)	Complex Type **Barrier** , Complex Type **Barrier** , Complex Type **Knock** , Complex Type **Knock**
Abstract	no
Documentation	Observation point for trigger.

XML Instance Representation

```
<...>
   <schedule> AveragingSchedule </schedule> [0..*]
   'A Equity Derivative schedule.'

   <triggerDates> DateList </triggerDates> [0..1]
   'The trigger Dates.'

   <trigger> Trigger </trigger> [1]
   'The trigger level.'

   <featurePayment> FeaturePayment </featurePayment> [0..1]
   'The feature payment.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TriggerEvent">
   <xsd:sequence>
      <xsd:element name="schedule" type=" AveragingSchedule " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="triggerDates" type=" DateList " minOccurs="0"/>
      <xsd:element name="trigger" type=" Trigger "/>
      <xsd:element name="featurePayment" type=" FeaturePayment " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: WeightedAveragingObservation

Super-types:	None
Sub-types:	None

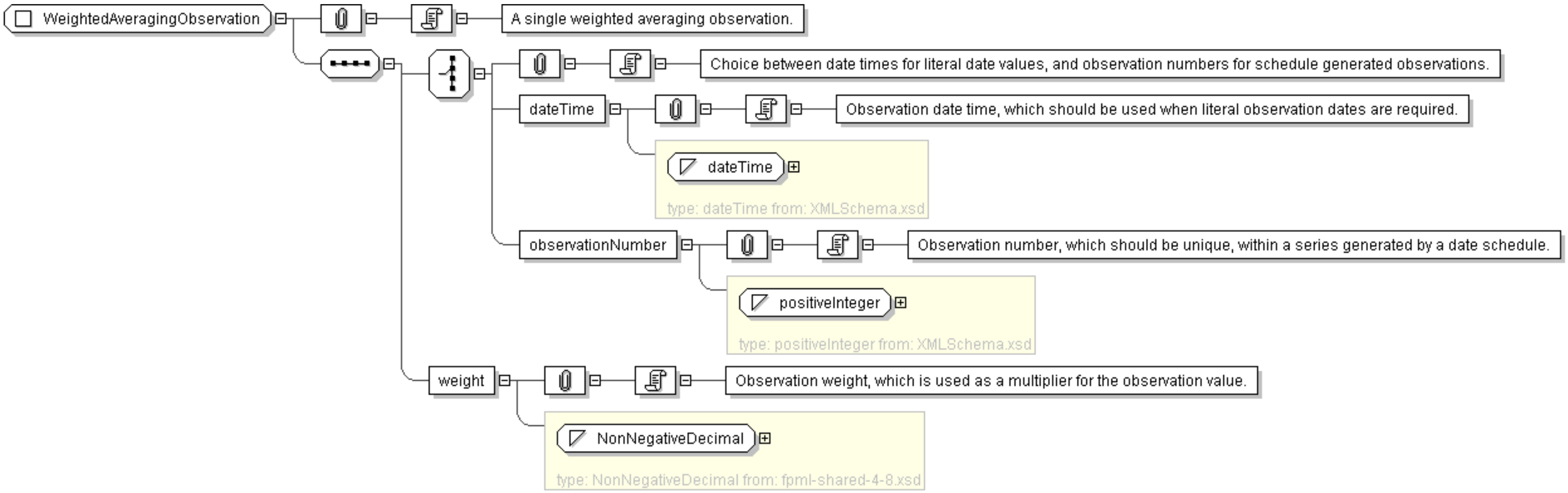
Name	WeightedAveragingObservation
Used by (from the same schema document)	Complex Type **AveragingObservationList**
Abstract	no
Documentation	A single weighted averaging observation.

XML Instance Representation

```
<...>
Start Choice [1]
'Choice between date times for literal date values, and observation numbers for
schedule generated observations.'

      <dateTime> xsd:dateTime </dateTime> [1]
      'Observation date time, which should be used when literal observation dates are required.'

      <observationNumber> xsd:positiveInteger </observationNumber> [1]
      'Observation number, which should be unique, within a series generated by a date schedule.'
```

```
End Choice
   <weight> NonNegativeDecimal </weight> [1]
   'Observation weight, which is used as a multiplier for the observation value.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="WeightedAveragingObservation">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="dateTime" type=" xsd:dateTime "/>
         <xsd:element name="observationNumber" type=" xsd:positiveInteger "/>
      </xsd:choice>
      <xsd:element name="weight" type=" NonNegativeDecimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

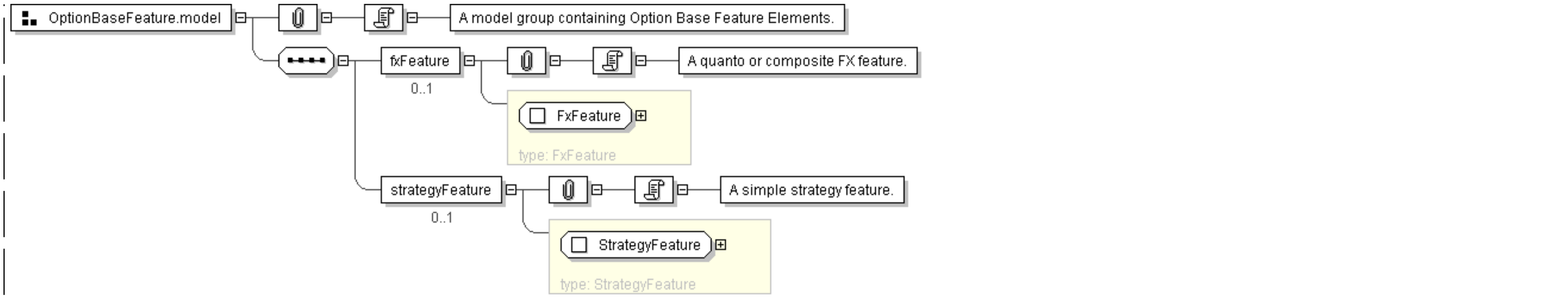
Model Group: OptionBaseFeature.model

Name	OptionBaseFeature.model
Used by (from the same schema document)	Complex Type **OptionFeature**
Documentation	A model group containing Option Base Feature Elements.

XML Instance Representation

```
<fxFeature> FxFeature </fxFeature> [0..1]
'A quanto or composite FX feature.'

<strategyFeature> StrategyFeature </strategyFeature> [0..1]
'A simple strategy feature.'
```

Diagram



Schema Component Representation

```
<xsd:group name="OptionBaseFeature.model">
   <xsd:sequence>
      <xsd:element name="fxFeature" type=" FxFeature " minOccurs="0"/>
      <xsd:element name="strategyFeature" type=" StrategyFeature " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

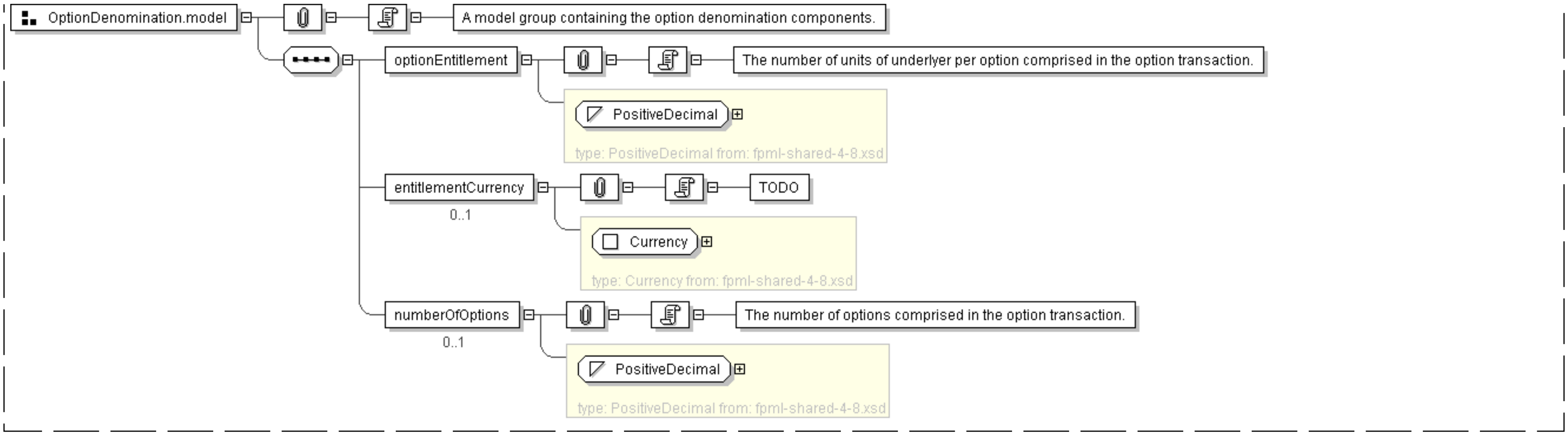
Model Group: OptionDenomination.model

Name	OptionDenomination.model
Used by (from the same schema document)	Complex Type **OptionBaseExtended**
Documentation	A model group containing the option denomination components.

XML Instance Representation

```
<optionEntitlement> PositiveDecimal </optionEntitlement> [1]
'The number of units of underlyer per option comprised in the option transaction.'

<entitlementCurrency> Currency </entitlementCurrency> [0..1]
'TODO'

<numberOfOptions> PositiveDecimal </numberOfOptions> [0..1]
'The number of options comprised in the option transaction.'
```

Diagram



Schema Component Representation

```
<xsd:group name="OptionDenomination.model">
   <xsd:sequence>
      <xsd:element name="optionEntitlement" type=" PositiveDecimal "/>
      <xsd:element name="entitlementCurrency" type=" Currency " minOccurs="0"/>
      <xsd:element name="numberOfOptions" type=" PositiveDecimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

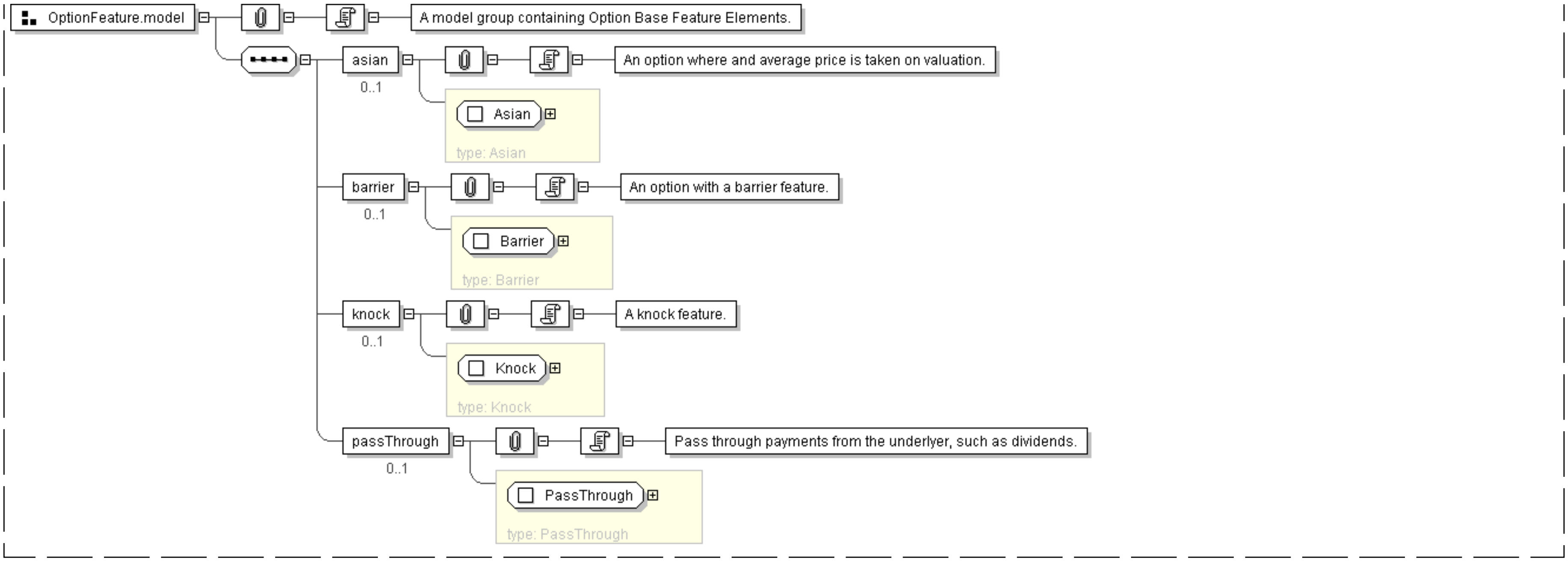
Model Group: OptionFeature.model

Name	OptionFeature.model
Used by (from the same schema document)	Complex Type **OptionFeature**
Documentation	A model group containing Option Base Feature Elements.

XML Instance Representation

```
<asian> Asian </asian> [0..1]
'An option where and average price is taken on valuation.'

<barrier> Barrier </barrier> [0..1]
'An option with a barrier feature.'

<knock> Knock </knock> [0..1]
'A knock feature.'

<passThrough> PassThrough </passThrough> [0..1]
'Pass through payments from the underlyer, such as dividends.'
```

Diagram



Schema Component Representation

```
<xsd:group name="OptionFeature.model">
   <xsd:sequence>
      <xsd:element name="asian" type=" Asian " minOccurs="0"/>
      <xsd:element name="barrier" type=" Barrier " minOccurs="0"/>
      <xsd:element name="knock" type=" Knock " minOccurs="0"/>
      <xsd:element name="passThrough" type=" PassThrough " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

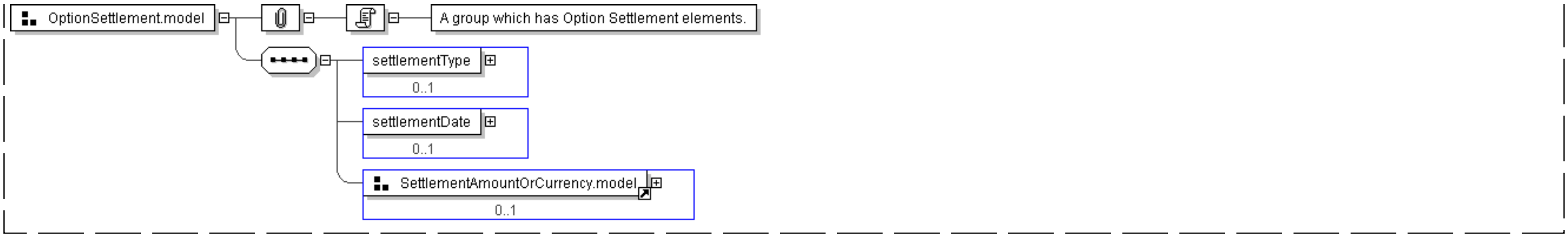
Model Group: OptionSettlement.model

Name	OptionSettlement.model
Used by (from the same schema document)	Complex Type **OptionBaseExtended**
Documentation	A group which has Option Settlement elements.

XML Instance Representation

```
<settlementType> SettlementTypeEnum </settlementType> [0..1]
<settlementDate> AdjustableOrRelativeDate </settlementDate> [0..1]
Start Group: SettlementAmountOrCurrency.model [0..1]
Start Choice [1]
      <settlementAmount> Money </settlementAmount> [1]
      'Settlement Amount'

      <settlementCurrency> Currency </settlementCurrency> [1]
      'Settlement Currency for use where the Settlement Amount cannot be known in advance'

End Choice
End Group: SettlementAmountOrCurrency.model
```

Diagram



Schema Component Representation

```
<xsd:group name="OptionSettlement.model">
   <xsd:sequence>
      <xsd:element name="settlementType" type=" SettlementTypeEnum " minOccurs="0"/>
      <xsd:element name="settlementDate" type=" AdjustableOrRelativeDate " minOccurs="0"/>
      <xsd:group ref=" SettlementAmountOrCurrency.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

[top](#)

Legend

Complex Type: AusAddress

Schema Component Type   Schema Component Name

Super-types:	[Address](#) < AusAddress (by extension)
Sub-types:	• [QLDAddress](#) (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ◦ fpml-msg-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml-annotation	http://www.fpml.org/annotation
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-msg-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Definitions

Complex Type: AffectedTransactions

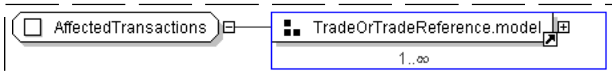
Super-types:	None
Sub-types:	None

Name	AffectedTransactions
Abstract	no

XML Instance Representation

```
<...>
Start Group: TradeOrTradeReference.model [1..*]
Start Choice [1]
         <trade> Trade </trade> [1]
         'An element that allows the full details of the trade to be used as a mechanism for
         identifying the trade for which the post-trade event pertains'

         <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
         'A container since an individual trade can be referenced by two or more
         different partyTradeIdentifier elements - each allocated by a different party.'

End Choice
End Group: TradeOrTradeReference.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AffectedTransactions">
   <xsd:group ref=" TradeOrTradeReference.model " maxOccurs="unbounded"/>
</xsd:complexType>
```

top

Complex Type: Novation

Super-types:	Event < **Novation** (by extension)
Sub-types:	None

Name	Novation
Used by (from the same schema document)	Model Group **NovationMessage.model**
Abstract	no
Documentation	An event type that records the occurrence of a novation

XML Instance Representation

```
<...>
   <eventId> EventId </eventId> [0..*]
   ''

Start Choice [1]
Start Choice [1]
         <newTransactionReference> PartyTradeIdentifiers </newTransactionReference> [1]
         'Indicates a reference to the new transaction between the transferee and the remaining party.'

         <newTransaction> Trade </newTransaction> [1]
         'Indicates the new transaction between the transferee and the remaining party.'

End Choice
Start Choice [1]
         <oldTransactionReference> PartyTradeIdentifiers </oldTransactionReference> [1]
         'Indicates a reference to the original trade between the transferor and the remaining party.'

         <oldTransaction> Trade </oldTransaction> [1]
         'Indicates the original trade between the transferor and the remaining party.'
```

End Choice
Start Choice [0..1]

<newTransactionReference> PartyTradeIdentifiers </newTransactionReference> [1]

'Indicates a reference to the new transaction between the transferee and the remaining party.'

<newTransaction> Trade </newTransaction> [1]

'Indicates the new transaction between the transferee and the remaining party.'

End Choice
End Choice

<transferor> PartyReference </transferor> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Transferor (outgoing party) in the novation. The Transferor means a party which transfers by novation to a Transferee all of its rights, liabilities, duties and obligations with respect to a Remaining Party. In a four-way novation the party referenced is Transferor 1 which transfers by novation to Transferee 1 all of its rights, liabilities, duties and obligations with respect to Transferor 2. ISDA 2004 Novation Term: Transferor (three-way novation) or Transferor 1 (four-way novation).'

<transferee> PartyReference </transferee> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Transferee (incoming party) in the novation. Transferee means a party which accepts by way of novation all rights, liabilities, duties and obligations of a Transferor with respect to a Remaining Party. In a four-way novation the party referenced is Transferee 1 which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 1. ISDA 2004 Novation Term: Transferee (three-way novation) or Transferee 1 (four-way novation).'

<remainingParty> PartyReference </remainingParty> [1]

'A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Remaining Party in the novation. Remaining Party means a party which consents to a Transferor\'s transfer by novation and the acceptance thereof by the Transferee of all of the Transferor\'s rights, liabilities, duties and obligations with respect to such Remaining Party under and with respect of the Novated Amount of a transaction. In a four-way novation the party referenced is Transferor 2 per the ISDA definition and acts in the role of a Transferor. Transferor 2 transfers by novation to Transferee 2 all of its rights, liabilities, duties and obligations with respect to Transferor 1. ISDA 2004 Novation Term: Remaining Party (three-way novation) or Transferor 2 (four-way novation).'

<otherRemainingParty> PartyReference </otherRemainingParty> [0..1]

'A pointer style reference to a party identifier defined elsewhere in the document. This element is not applicable in a three-way novation and should be omitted. In a four-way novation the party referenced is Transferee 2. Transferee 2 means a party which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 2. ISDA 2004 Novation Term: Transferee 2 (four-way novation).'

<novationDate> xsd:date </novationDate> [1]

'Specifies the date that one party\'s legal obligations with regard to a trade are transferred to another party. It corresponds to the Novation Date section of the 2004 ISDA Novation Definitions, section 1.16.'

<novationTradeDate> xsd:date </novationTradeDate> [0..1]

'Specifies the date the parties agree to assign or novate a trade. If this element is not specified, the novationTradeDate will be deemed to be the novationDate. It corresponds to the Novation Trade Date section of the 2004 ISDA Novation Definitions, section 1.17.'

Start Choice [0..1]

<novatedAmount> Money </novatedAmount> [1]

'The amount which represents the portion of the Old Transaction being novated.'

<novatedNumberOfOptions> xsd:decimal </novatedNumberOfOptions> [1]

'The number of options which represent the portion of the Old Transaction being novated.'

End Choice

<remainingTrade> Trade </remainingTrade> [0..1]

'This element contains a description of the remaining portion of a partially novated trade.'

<fullFirstCalculationPeriod> xsd:boolean </fullFirstCalculationPeriod> [0..1]

'This element corresponds to the applicability of the Full First Calculation Period as defined in the 2004 ISDA Novation Definitions, section 1.20.'

<firstPeriodStartDate> FirstPeriodStartDate **</firstPeriodStartDate>** [0..2]

'Element that is used to be able to make sense of the "new transaction" without requiring reference back to the "old transaction". In the case of interest rate products there are potentially 2 "first period start dates" to reference – one with respect to each party to the new transaction. For Credit Default Swaps there is just the one with respect to the party that is the fixed rate payer.'

<nonReliance> Empty **</nonReliance>** [0..1]

'This element corresponds to the non-Reliance section in the 2004 ISDA Novation Definitions, section 2.1 (c) (i). The element appears in the instance document when non-Reliance is applicable.'

<creditDerivativesNotices> CreditDerivativesNotices **</creditDerivativesNotices>** [0..1]

'This element should be specified if one or more of either a Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party. The type of notice or notices that have been delivered should be indicated by setting the relevant boolean element value(s) to true. The absence of the element means that no Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party.'

<contractualDefinitions> ContractualDefinitions **</contractualDefinitions>** [0..*]

'The definitions (such as those published by ISDA) that will define the terms of the novation transaction.'

Start Choice [1]

<contractualSupplement> ContractualSupplement **</contractualSupplement>** [0..*]

'DEPRECATED - This element will be removed in the next major version of FpML. The element contractualTermsSupplement should be used instead. Definition: A contractual supplement (such as those published by ISDA) that will apply to the trade.'

<contractualTermsSupplement> ContractualTermsSupplement **</contractualTermsSupplement>** [0..*]

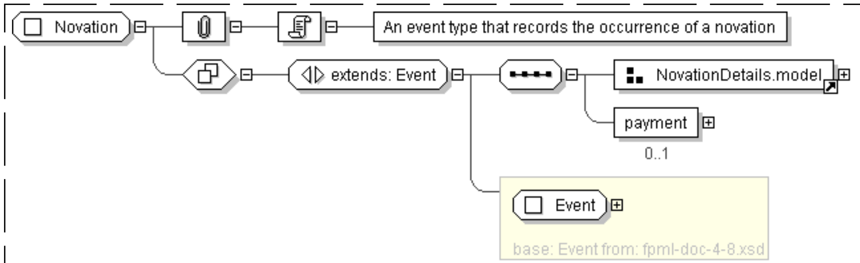
'A contractual supplement (such as those published by ISDA) that will apply to the trade.'

End Choice

<payment> Payment **</payment>** [0..1]

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="Novation">
   <xsd:complexContent>
      <xsd:extension base=" Event ">
         <xsd:sequence>
            <xsd:group ref=" NovationDetails.model "/>
            <xsd:element name="payment" type=" Payment " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationNotificationMessage

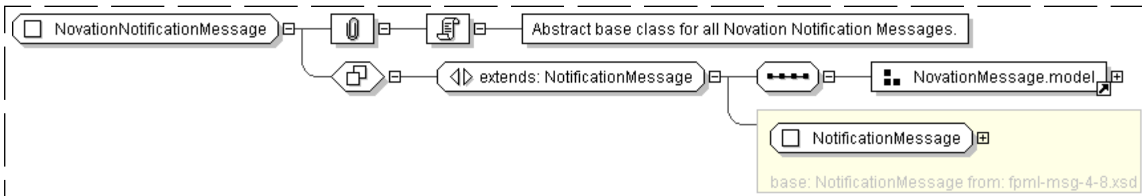
Super-types:	NotificationMessage < **NovationNotificationMessage** (by extension)
Sub-types:	None

Name	NovationNotificationMessage
Abstract	yes
Documentation	Abstract base class for all Novation Notification Messages.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationNotificationMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:group ref=" NovationMessage.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationRequestMessage

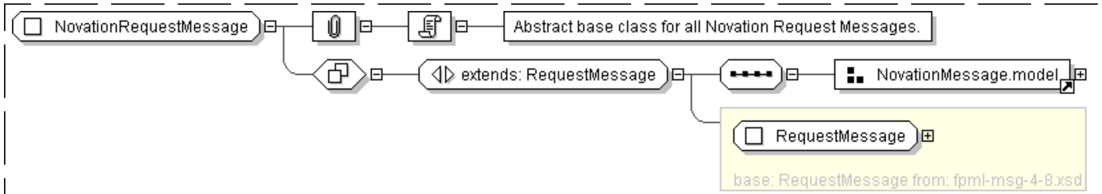
Super-types:	RequestMessage < **NovationRequestMessage** (by extension)
Sub-types:	None

Name	NovationRequestMessage
Abstract	yes
Documentation	Abstract base class for all Novation Request Messages.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationRequestMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:group ref=" NovationMessage.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationResponseMessage

Super-types:	ResponseMessage < **NovationResponseMessage** (by extension)
Sub-types:	None

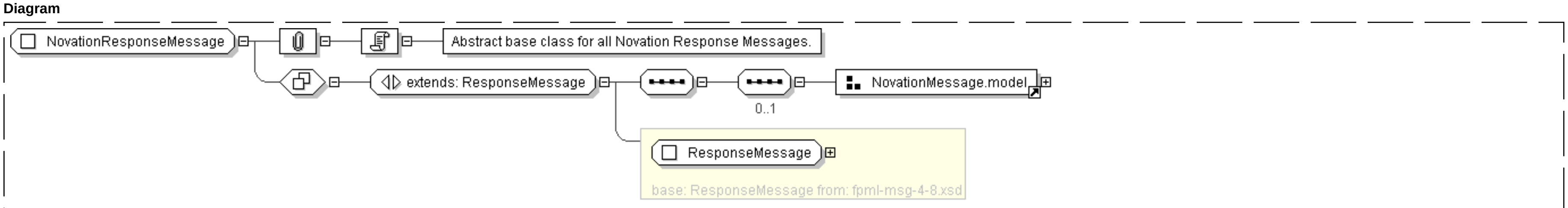
Name	NovationResponseMessage

Abstract	yes
Documentation	Abstract base class for all Novation Response Messages.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Sequence [0..1]
      <novation> Novation </novation> [1]
      <party> Party </party> [3..*]
End Sequence
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationResponseMessage" abstract="true">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:sequence minOccurs="0">
               <xsd:group ref=" NovationMessage.model "/>
            </xsd:sequence>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PartialTerminationAmount

Super-types:	None
Sub-types:	None

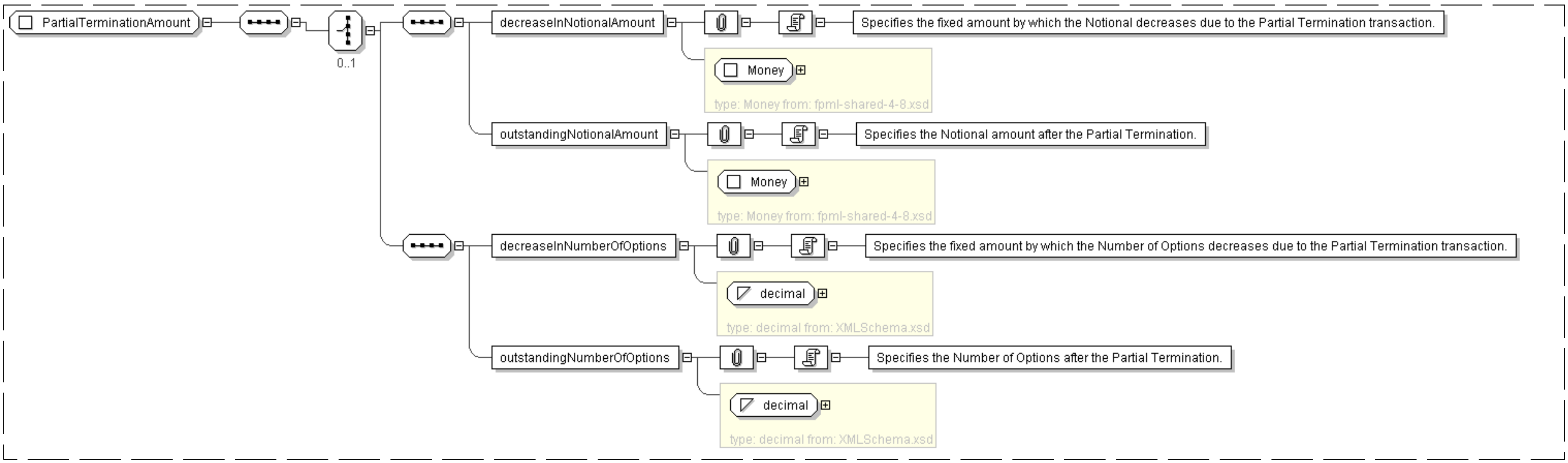
Name	PartialTerminationAmount

Used by (from the same schema document)	Model Group **TerminationDetails.model**
Abstract	no

XML Instance Representation

```
<...>
Start Choice [0..1]
      <decreaseInNotionalAmount> Money </decreaseInNotionalAmount> [1]
      'Specifies the fixed amount by which the Notional decreases due to the Partial
      Termination transaction.'

      <outstandingNotionalAmount> Money </outstandingNotionalAmount> [1]
      'Specifies the Notional amount after the Partial Termination.'

      <decreaseInNumberOfOptions> xsd:decimal </decreaseInNumberOfOptions> [1]
      'Specifies the fixed amount by which the Number of Options decreases due to the
      Partial Termination transaction.'

      <outstandingNumberOfOptions> xsd:decimal </outstandingNumberOfOptions> [1]
      'Specifies the Number of Options after the Partial Termination.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PartialTerminationAmount">
   <xsd:sequence>
      <xsd:choice minOccurs="0">
         <xsd:sequence>
            <xsd:element name="decreaseInNotionalAmount" type=" Money "/>
            <xsd:element name="outstandingNotionalAmount" type=" Money "/>
         </xsd:sequence>
         <xsd:sequence>
            <xsd:element name="decreaseInNumberOfOptions" type=" xsd:decimal "/>
            <xsd:element name="outstandingNumberOfOptions" type=" xsd:decimal "/>
         </xsd:sequence>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: Termination

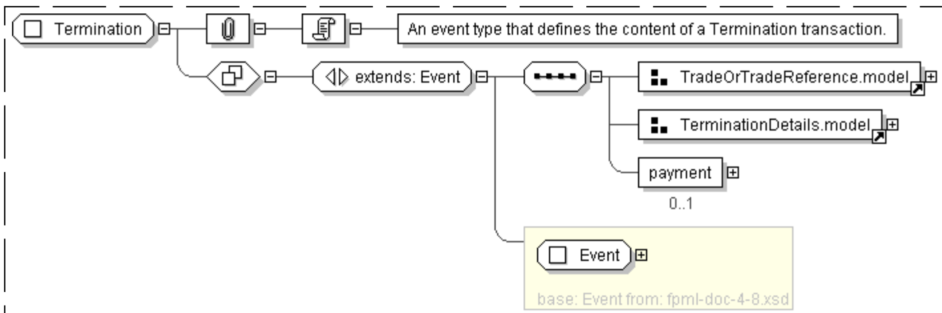
Super-types:	Event < **Termination** (by extension)
Sub-types:	None

Name	Termination
Abstract	no
Documentation	An event type that defines the content of a Termination transaction.

XML Instance Representation

```
<...>
   <eventId> EventId </eventId> [0..*]
   ''

Start Choice [1]
      <trade> Trade </trade> [1]
      'An element that allows the full details of the trade to be used as a mechanism for
      identifying the trade for which the post-trade event pertains'

      <tradeReference> PartyTradeIdentifiers </tradeReference> [1]
      'A container since an individual trade can be referenced by two or more
      different partyTradeIdentifier elements - each allocated by a different party.'
End Choice
   <terminationTradeDate> xsd:date </terminationTradeDate> [1]
   'The date on which the the parties enter into the Termination transaction.'

   <terminationEffectiveDate> xsd:date </terminationEffectiveDate> [1]
   'The date on which the Termination becomes effective.'

Start Choice [1]
      <full> Empty </full> [1]
      'The use of the Full element indicates that this is a Full Termination.'

      <partial> PartialTerminationAmount </partial> [1]
      'The use of the Partial element indicates that this is a Partial Termination.'
End Choice
   <payment> Payment </payment> [0..1]
   'A payment for the right to terminate the trade.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Termination">
```

```
    <xsd:complexContent>
      <xsd:extension base=" Event ">
        <xsd:sequence>
          <xsd:group ref=" TradeOrTradeReference.model "/>
          <xsd:group ref=" TerminationDetails.model "/>
          <xsd:element name="payment" type=" Payment " minOccurs="0"/>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAmendment

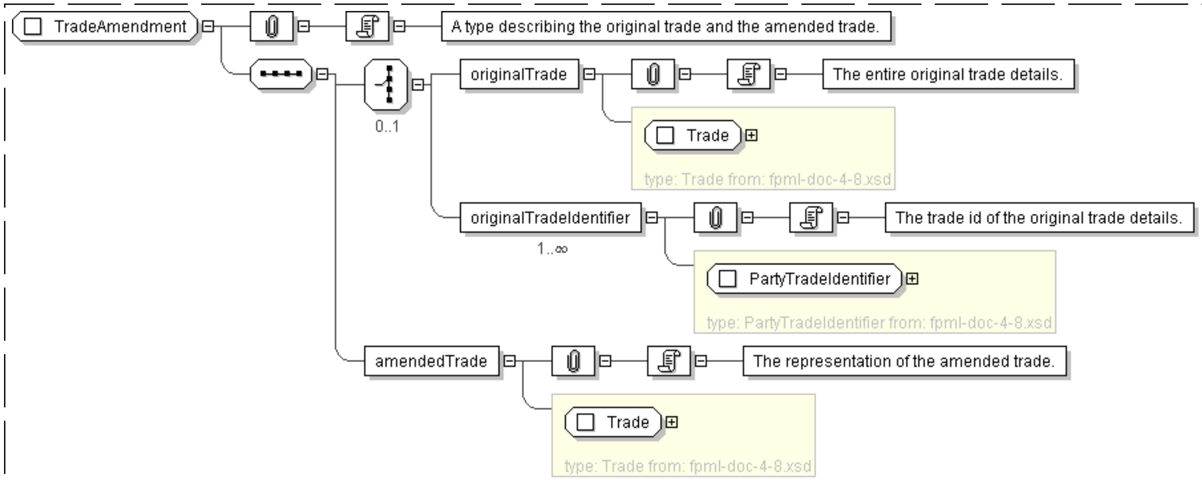
Super-types:	None
Sub-types:	None

Name	TradeAmendment
Abstract	no
Documentation	A type describing the original trade and the amended trade.

XML Instance Representation

```
<...>
Start Choice [0..1]
    <originalTrade> Trade </originalTrade> [1]
    'The entire original trade details.'

    <originalTradeIdentifier> PartyTradeIdentifier </originalTradeIdentifier> [1..*]
    'The trade id of the original trade details.'

End Choice
  <amendedTrade> Trade </amendedTrade> [1]
  'The representation of the amended trade.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAmendment">
  <xsd:sequence>
    <xsd:choice minOccurs="0">
```

```
        <xsd:element name="originalTrade" type=" Trade "/>
        <xsd:element name="originalTradeIdentifier" type=" PartyTradeIdentifier "
        maxOccurs="unbounded"/>
      </xsd:choice>
      <xsd:element name="amendedTrade" type=" Trade "/>
    </xsd:sequence>
</xsd:complexType>
```

top

Model Group: NovationDetails.model

Name	NovationDetails.model
Used by (from the same schema document)	Complex Type **Novation**

XML Instance Representation

```
Start Choice [1]
Start Choice [1]
      <newTransactionReference> PartyTradeIdentifiers </newTransactionReference> [1]
      'Indicates a reference to the new transaction between the transferee and the remaining party.'

      <newTransaction> Trade </newTransaction> [1]
      'Indicates the new transaction between the transferee and the remaining party.'

End Choice
Start Choice [1]
      <oldTransactionReference> PartyTradeIdentifiers </oldTransactionReference> [1]
      'Indicates a reference to the original trade between the transferor and the remaining party.'

      <oldTransaction> Trade </oldTransaction> [1]
      'Indicates the original trade between the transferor and the remaining party.'

End Choice
Start Choice [0..1]
      <newTransactionReference> PartyTradeIdentifiers </newTransactionReference> [1]
      'Indicates a reference to the new transaction between the transferee and the remaining party.'

      <newTransaction> Trade </newTransaction> [1]
      'Indicates the new transaction between the transferee and the remaining party.'

End Choice
End Choice
<transferor> PartyReference </transferor> [1]
'A pointer style reference to a party identifier defined elsewhere in the document. In a
three-way novation the party referenced is the Transferor (outgoing party) in the novation.
The Transferor means a party which transfers by novation to a Transferee all of its
rights, liabilities, duties and obligations with respect to a Remaining Party. In a four-
way novation the party referenced is Transferor 1 which transfers by novation to Transferee
1 all of its rights, liabilities, duties and obligations with respect to Transferor 2.
ISDA 2004 Novation Term: Transferor (three-way novation) or Transferor 1 (four-way novation).'

<transferee> PartyReference </transferee> [1]
'A pointer style reference to a party identifier defined elsewhere in the document. In a
three-way novation the party referenced is the Transferee (incoming party) in the
novation. Transferee means a party which accepts by way of novation all rights,
liabilities, duties and obligations of a Transferor with respect to a Remaining Party. In
a four-way novation the party referenced is Transferee 1 which accepts by way of novation
the rights, liabilities, duties and obligations of Transferor 1. ISDA 2004 Novation
Term: Transferee (three-way novation) or Transferee 1 (four-way novation).'

<remainingParty> PartyReference </remainingParty> [1]
'A pointer style reference to a party identifier defined elsewhere in the document. In a
three-way novation the party referenced is the Remaining Party in the novation. Remaining
Party means a party which consents to a Transferor\'s transfer by novation and the
acceptance thereof by the Transferee of all of the Transferor\'s rights, liabilities,
duties and obligations with respect to such Remaining Party under and with respect of
```

the Novated Amount of a transaction. In a four-way novation the party referenced is Transferor 2 per the ISDA definition and acts in the role of a Transferor. Transferor 2 transfers by novation to Transferee 2 all of its rights, liabilities, duties and obligations with respect to Transferor 1. ISDA 2004 Novation Term: Remaining Party (three-way novation) or Transferor 2 (four-way novation).'

<otherRemainingParty> PartyReference </otherRemainingParty> [0..1]

'A pointer style reference to a party identifier defined elsewhere in the document. This element is not applicable in a three-way novation and should be omitted. In a four-way novation the party referenced is Transferee 2. Transferee 2 means a party which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 2. ISDA 2004 Novation Term: Transferee 2 (four-way novation).'

<novationDate> xsd:date </novationDate> [1]

'Specifies the date that one party\'s legal obligations with regard to a trade are transferred to another party. It corresponds to the Novation Date section of the 2004 ISDA Novation Definitions, section 1.16.'

<novationTradeDate> xsd:date </novationTradeDate> [0..1]

'Specifies the date the parties agree to assign or novate a trade. If this element is not specified, the novationTradeDate will be deemed to be the novationDate. It corresponds to the Novation Trade Date section of the 2004 ISDA Novation Definitions, section 1.17.'

Start Choice [0..1]

<novatedAmount> Money </novatedAmount> [1]

'The amount which represents the portion of the Old Transaction being novated.'

<novatedNumberOfOptions> xsd:decimal </novatedNumberOfOptions> [1]

'The number of options which represent the portion of the Old Transaction being novated.'

End Choice

<remainingTrade> Trade </remainingTrade> [0..1]

'This element contains a description of the remaining portion of a partially novated trade.'

<fullFirstCalculationPeriod> xsd:boolean </fullFirstCalculationPeriod> [0..1]

'This element corresponds to the applicability of the Full First Calculation Period as defined in the 2004 ISDA Novation Definitions, section 1.20.'

<firstPeriodStartDate> FirstPeriodStartDate </firstPeriodStartDate> [0..2]

'Element that is used to be able to make sense of the "new transaction" without requiring reference back to the "old transaction". In the case of interest rate products there are potentially 2 "first period start dates" to reference – one with respect to each party to the new transaction. For Credit Default Swaps there is just the one with respect to the party that is the fixed rate payer.'

<nonReliance> Empty </nonReliance> [0..1]

'This element corresponds to the non-Reliance section in the 2004 ISDA Novation Definitions, section 2.1 (c) (i). The element appears in the instance document when non-Reliance is applicable.'

<creditDerivativesNotices> CreditDerivativesNotices </creditDerivativesNotices> [0..1]

'This element should be specified if one or more of either a Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party. The type of notice or notices that have been delivered should be indicated by setting the relevant boolean element value(s) to true. The absence of the element means that no Credit Event Notice, Notice of Publicly Available Information, Notice of Physical Settlement or Notice of Intended Physical Settlement, as applicable, has been delivered by or to the Transferor or the Remaining Party.'

<contractualDefinitions> ContractualDefinitions </contractualDefinitions> [0..*]

'The definitions (such as those published by ISDA) that will define the terms of the novation transaction.'

Start Choice [1]

<contractualSupplement> ContractualSupplement </contractualSupplement> [0..*]

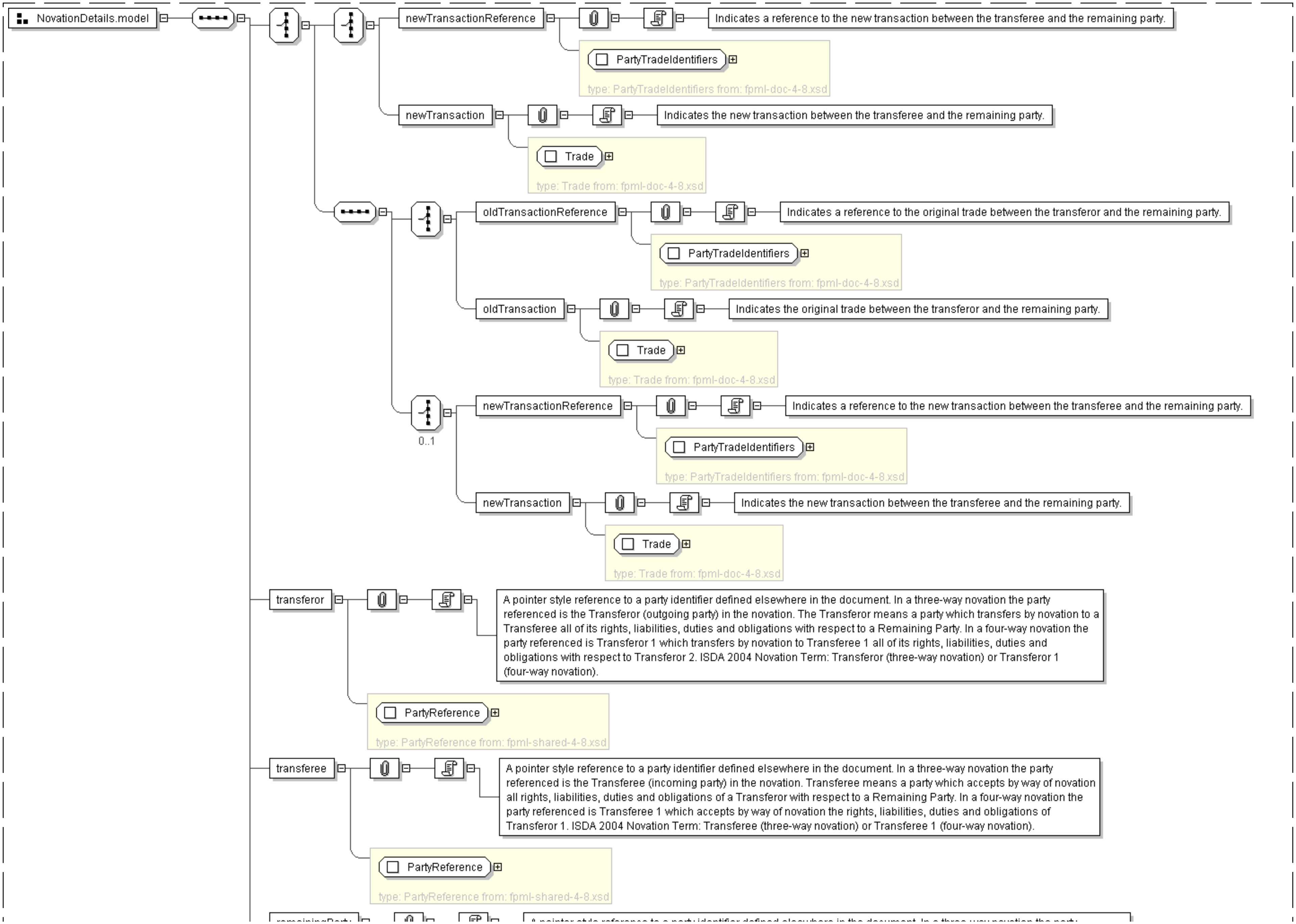
'DEPRECATED - This element will be removed in the next major version of FpML. The element contractualTermsSupplement should be used instead. Definition: A contractual supplement (such as those published by ISDA) that will apply to the trade.'

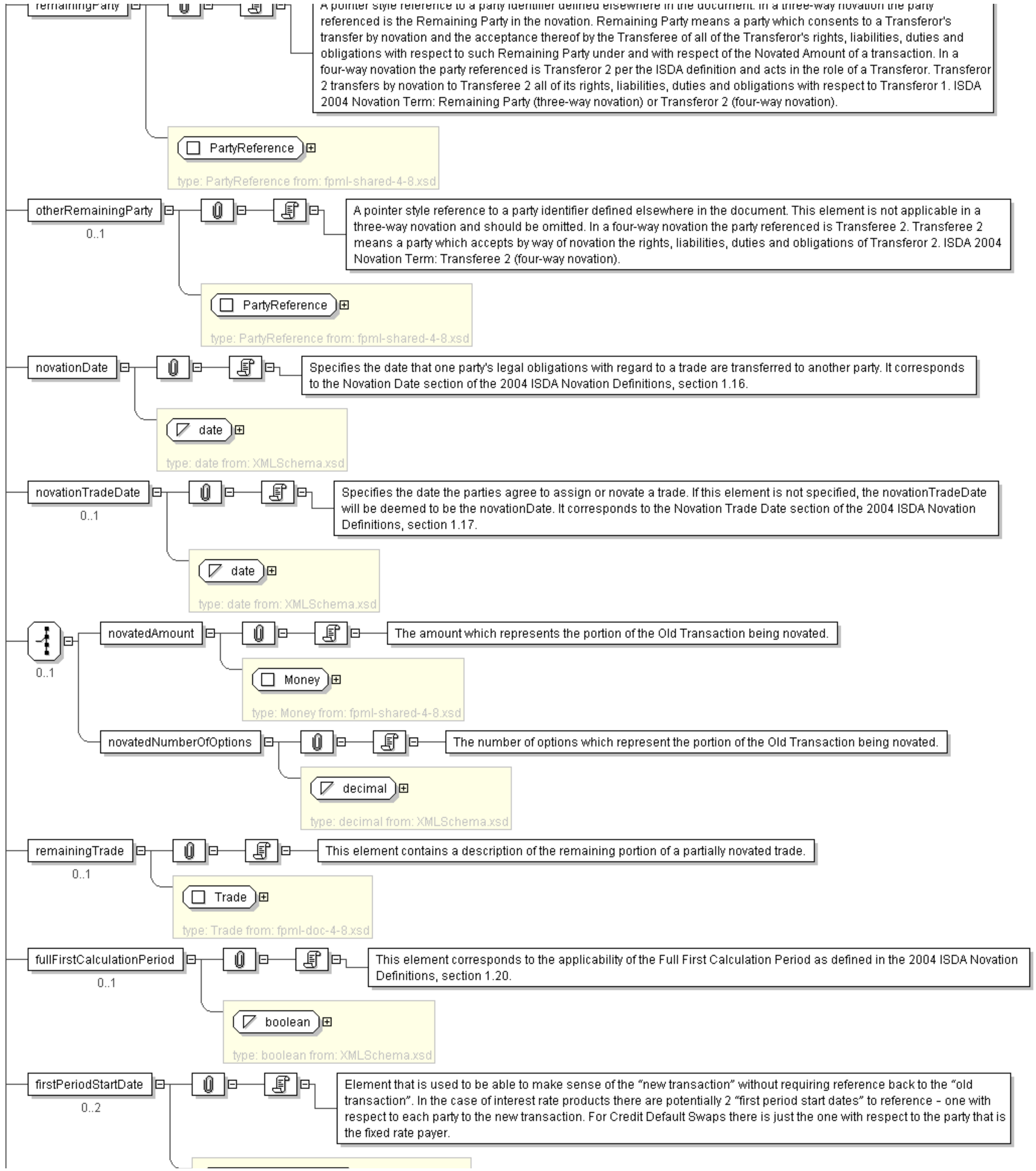
<contractualTermsSupplement> ContractualTermsSupplement </contractualTermsSupplement> [0..*]

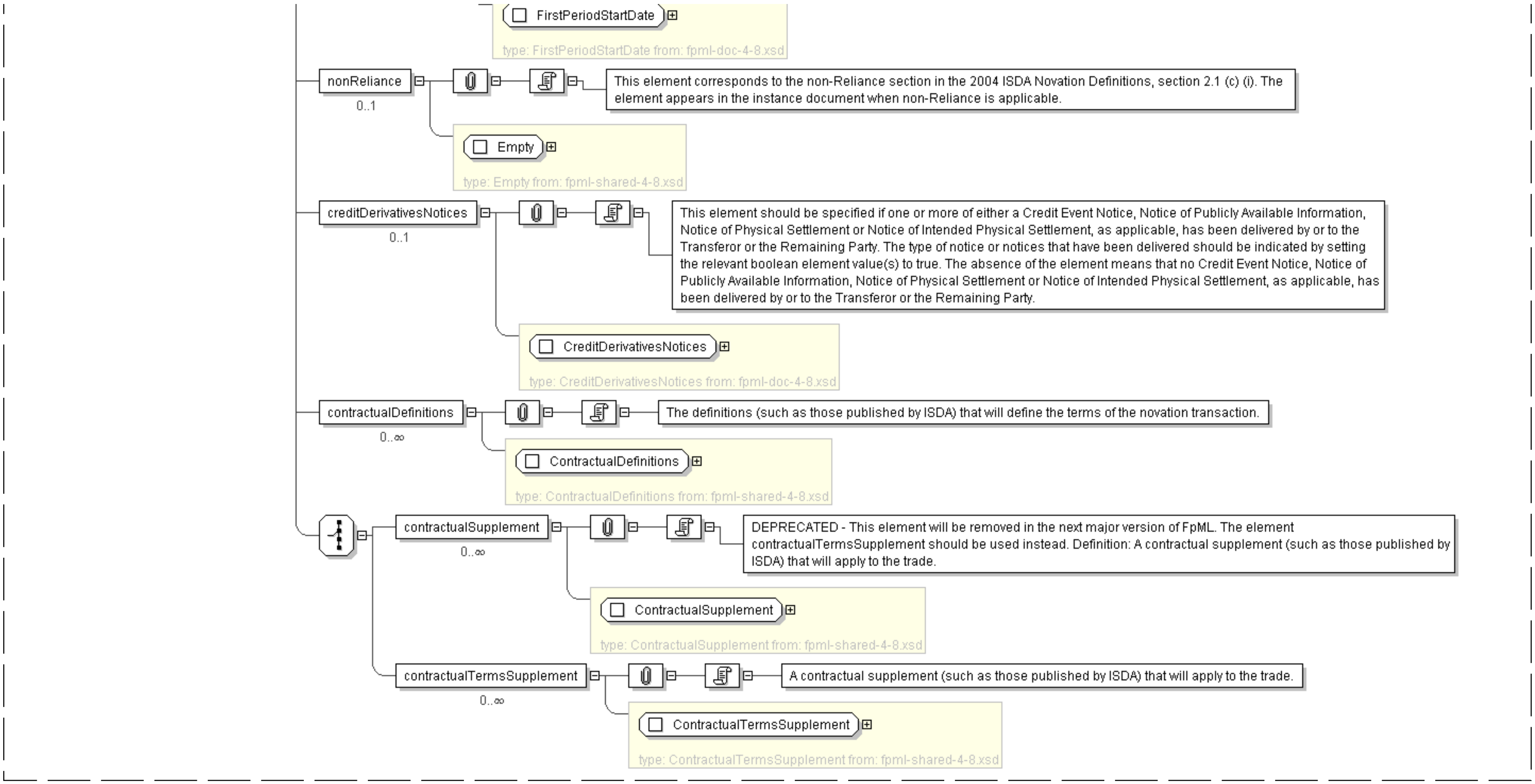
'A contractual supplement (such as those published by ISDA) that will apply to the trade.'

End Choice

Diagram




remainingParty
A pointer style reference to a party identifier defined elsewhere in the document. In a three-way novation the party referenced is the Remaining Party in the novation. Remaining Party means a party which consents to a Transferor's transfer by novation and the acceptance thereof by the Transferee of all of the Transferor's rights, liabilities, duties and obligations with respect to such Remaining Party under and with respect of the Novated Amount of a transaction. In a four-way novation the party referenced is Transferor 2 per the ISDA definition and acts in the role of a Transferor. Transferor 2 transfers by novation to Transferee 2 all of its rights, liabilities, duties and obligations with respect to Transferor 1. ISDA 2004 Novation Term: Remaining Party (three-way novation) or Transferor 2 (four-way novation).
PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
otherRemainingParty
0..1
A pointer style reference to a party identifier defined elsewhere in the document. This element is not applicable in a three-way novation and should be omitted. In a four-way novation the party referenced is Transferee 2. Transferee 2 means a party which accepts by way of novation the rights, liabilities, duties and obligations of Transferor 2. ISDA 2004 Novation Term: Transferee 2 (four-way novation).
PartyReference
type: PartyReference from: fpml-shared-4-8.xsd
novationDate
Specifies the date that one party's legal obligations with regard to a trade are transferred to another party. It corresponds to the Novation Date section of the 2004 ISDA Novation Definitions, section 1.16.
date
type: date from: XMLSchema.xsd
novationTradeDate
0..1
Specifies the date the parties agree to assign or novate a trade. If this element is not specified, the novationTradeDate will be deemed to be the novationDate. It corresponds to the Novation Trade Date section of the 2004 ISDA Novation Definitions, section 1.17.
date
type: date from: XMLSchema.xsd
0..1
novatedAmount
The amount which represents the portion of the Old Transaction being novated.
Money
type: Money from: fpml-shared-4-8.xsd
novatedNumberOfOptions
The number of options which represent the portion of the Old Transaction being novated.
decimal
type: decimal from: XMLSchema.xsd
remainingTrade
0..1
This element contains a description of the remaining portion of a partially novated trade.
Trade
type: Trade from: fpml-doc-4-8.xsd
fullFirstCalculationPeriod
0..1
This element corresponds to the applicability of the Full First Calculation Period as defined in the 2004 ISDA Novation Definitions, section 1.20.
boolean
type: boolean from: XMLSchema.xsd
firstPeriodStartDate
0..2
Element that is used to be able to make sense of the “new transaction” without requiring reference back to the “old transaction”. In the case of interest rate products there are potentially 2 “first period start dates” to reference – one with respect to each party to the new transaction. For Credit Default Swaps there is just the one with respect to the party that is the fixed rate payer.



Schema Component Representation

```
<xsd:group name="NovationDetails.model">
   <xsd:sequence>
      <xsd:choice>
         <xsd:choice>
            <xsd:element name="newTransactionReference" type=" PartyTradeIdentifiers "/>
            <xsd:element name="newTransaction" type=" Trade "/>
         </xsd:choice>
         <xsd:sequence>
            <xsd:choice>
               <xsd:element name="oldTransactionReference" type=" PartyTradeIdentifiers "/>
               <xsd:element name="oldTransaction" type=" Trade "/>
            </xsd:choice>
            <xsd:choice minOccurs="0">
               <xsd:element name="newTransactionReference" type=" PartyTradeIdentifiers "/>
               <xsd:element name="newTransaction" type=" Trade "/>
            </xsd:choice>
         </xsd:sequence>
      </xsd:choice>
      <xsd:element name="transferor" type=" PartyReference "/>
      <xsd:element name="transferee" type=" PartyReference "/>
      <xsd:element name="remainingParty" type=" PartyReference "/>
      <xsd:element name="otherRemainingParty" type=" PartyReference " minOccurs="0"/>
      <xsd:element name="novationDate" type=" xsd:date "/>
      <xsd:element name="novationTradeDate" type=" xsd:date " minOccurs="0"/>
```

```
        <xsd:choice minOccurs="0">
           <xsd:element name="novatedAmount" type=" Money "/>
           <xsd:element name="novatedNumberOfOptions" type=" xsd:decimal "/>
        </xsd:choice>
        <xsd:element name="remainingTrade" type=" Trade " minOccurs="0"/>
        <xsd:element name="fullFirstCalculationPeriod" type=" xsd:boolean " minOccurs="0"/>
        <xsd:element name="firstPeriodStartDate" type=" FirstPeriodStartDate "
        minOccurs="0" maxOccurs="2"/>
        <xsd:element name="nonReliance" type=" Empty " minOccurs="0"/>
        <xsd:element name="creditDerivativesNotices" type=" CreditDerivativesNotices " minOccurs="0"/>
        <xsd:element name="contractualDefinitions" type=" ContractualDefinitions "
        minOccurs="0" maxOccurs="unbounded"/>
        <xsd:choice>
           <xsd:element name="contractualSupplement" type=" ContractualSupplement "
           minOccurs="0" maxOccurs="unbounded" deprecated="true"
           deprecatedReason="The contractualTermsSupplement includes the publication date, which was
           not present in the contractualSupplement"/>
           <xsd:element name="contractualTermsSupplement" type=" ContractualTermsSupplement
           " minOccurs="0" maxOccurs="unbounded"/>
        </xsd:choice>
     </xsd:sequence>
  </xsd:group>
```

top

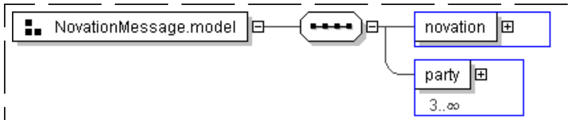
Model Group: NovationMessage.model

Name	NovationMessage.model
Used by (from the same schema document)	Complex Type **NovationNotificationMessage** , Complex Type **NovationRequestMessage** , Complex Type **NovationResponseMessage**

XML Instance Representation

```
<novation> Novation </novation> [1]
<party> Party </party> [3..*]
```

Diagram



Schema Component Representation

```
<xsd:group name="NovationMessage.model">
   <xsd:sequence>
      <xsd:element name="novation" type=" Novation "/>
      <xsd:element name="party" type=" Party " minOccurs="3" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: TerminationDetails.model

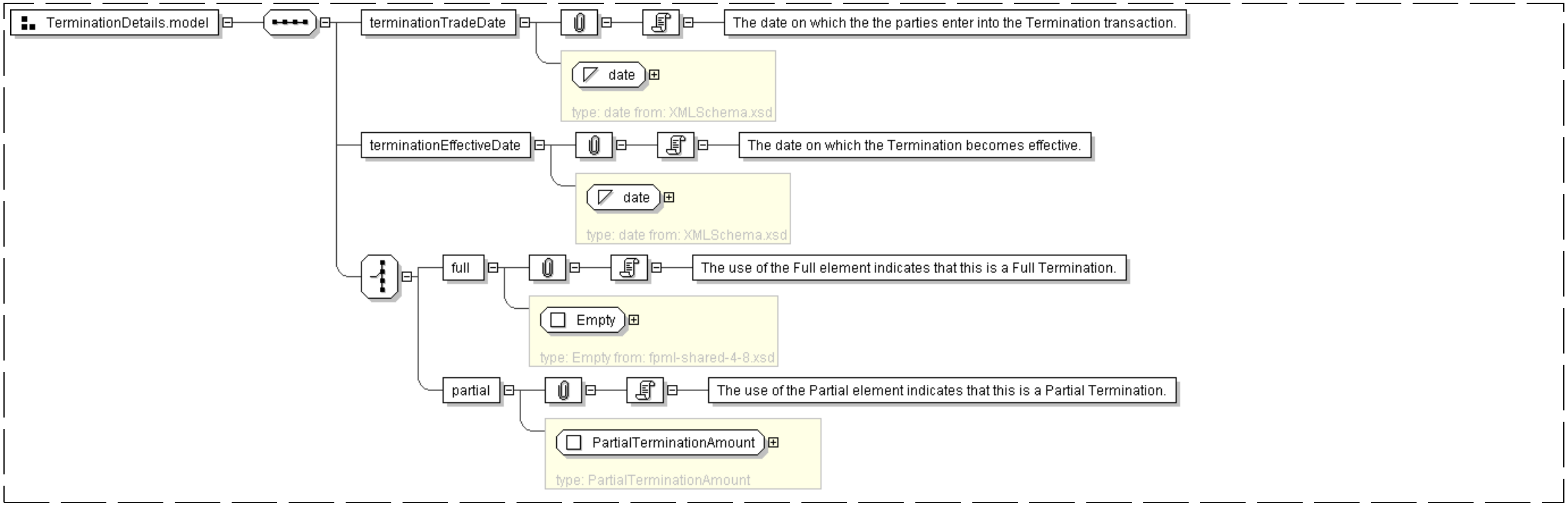
Name	TerminationDetails.model
Used by (from the same schema document)	Complex Type **Termination**

XML Instance Representation

```
<terminationTradeDate> xsd:date </terminationTradeDate> [1]
'The date on which the the parties enter into the Termination transaction.'

<terminationEffectiveDate> xsd:date </terminationEffectiveDate> [1]
'The date on which the Termination becomes effective.'
```

```
Start Choice [1]
   <full> Empty </full> [1]
   'The use of the Full element indicates that this is a Full Termination.'

   <partial> PartialTerminationAmount </partial> [1]
   'The use of the Partial element indicates that this is a Partial Termination.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="TerminationDetails.model">
   <xsd:sequence>
      <xsd:element name="terminationTradeDate" type=" xsd:date "/>
      <xsd:element name="terminationEffectiveDate" type=" xsd:date "/>
      <xsd:choice>
         <xsd:element name="full" type=" Empty "/>
         <xsd:element name="partial" type=" PartialTerminationAmount "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:group>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress

Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

top

Generated by <oXygen/> XML Editor using a modified version of xs3p that adds schema diagrams and chunking support.

XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-posttrade-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
```

```
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-posttrade-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Definitions

Complex Type: AmendmentConfirmed

Super-types:	NotificationMessage < **AmendmentConfirmed** (by extension)
Sub-types:	None

Name	AmendmentConfirmed
Abstract	no
Documentation	A message generated when an Amendment is determined to be confirmed.

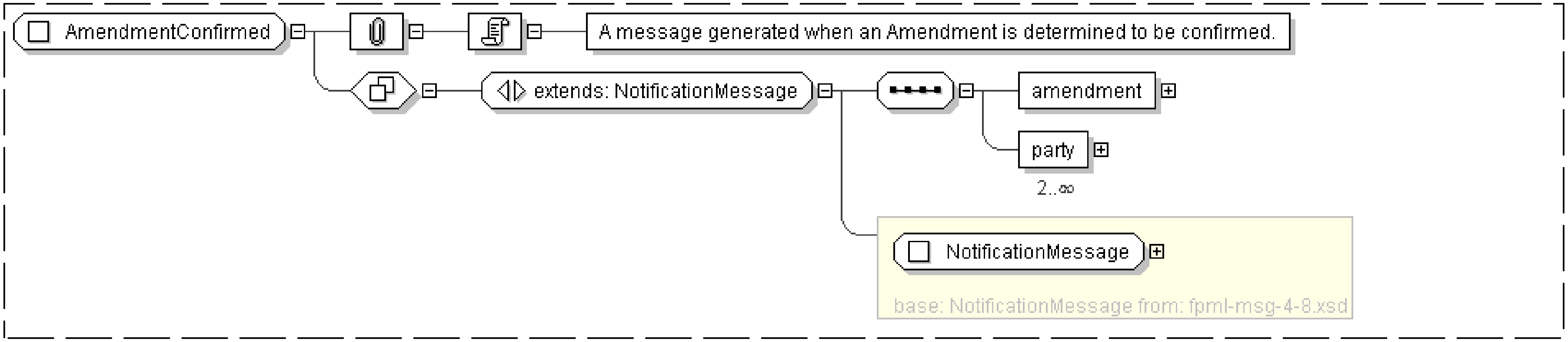
XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <amendment> Amendment </amendment> [1]
   <party> Party </party> [2..*]
```

'One party element for each of the principal parties and any other party that is referenced.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="AmendmentConfirmed">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="amendment" type=" Amendment "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: IncreaseConfirmed

Super-types:	NotificationMessage < **IncreaseConfirmed** (by extension)
Sub-types:	None

Name	IncreaseConfirmed
Abstract	no
Documentation	A message generated when an Increase is determined to be confirmed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
```

'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]

'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

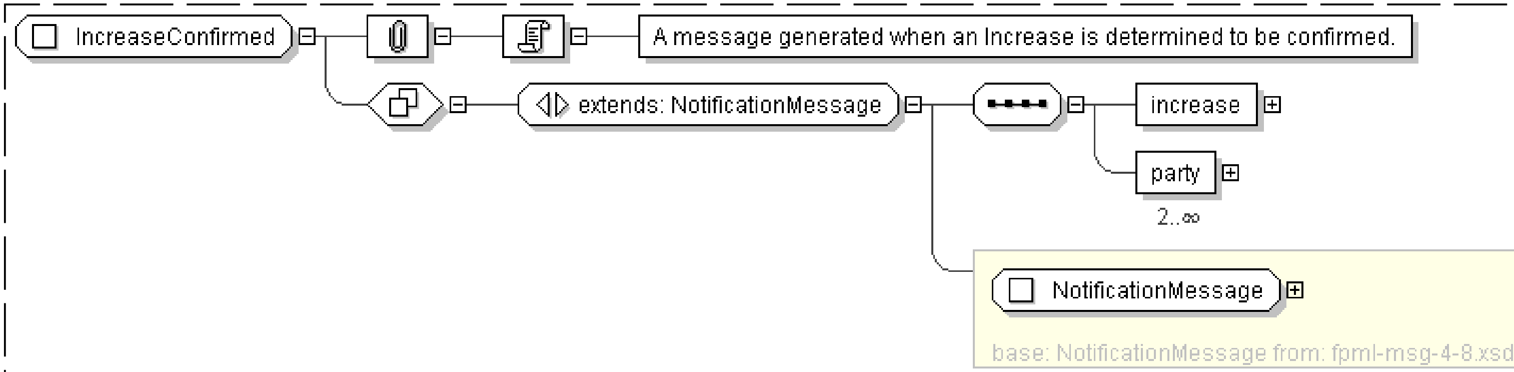
'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> NotificationMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<increase> Increase **</increase>** [1]
<party> Party **</party>** [2..*]

'One party element for each of the principal parties and any other party that is referenced.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="IncreaseConfirmed">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="increase" type=" Increase "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
```

```
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationAlleged

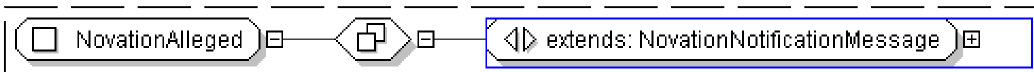
Super-types:	NovationNotificationMessage < **NovationAlleged** (by extension)
Sub-types:	None

Name	NovationAlleged
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationAlleged">
   <xsd:complexContent>
      <xsd:extension base=" NovationNotificationMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationConfirmed

Super-types:	NovationNotificationMessage < **NovationConfirmed** (by extension)
Sub-types:	None

Name	NovationConfirmed
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="NovationConfirmed">
   <xsd:complexContent>
      <xsd:extension base=" NovationNotificationMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestAmendmentConfirmation

Super-types:	RequestMessage < **RequestAmendmentConfirmation** (by extension)
Sub-types:	None

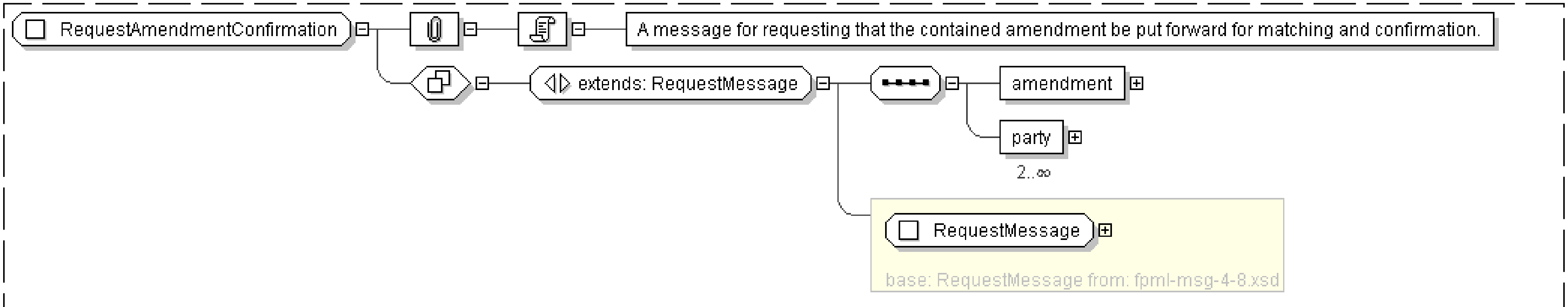
Name	RequestAmendmentConfirmation
Abstract	no
Documentation	A message for requesting that the contained amendment be put forward for matching and confirmation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
```

```
    <validation> Validation </validation> [0..*]
    <amendment> Amendment </amendment> [1]
    <party> Party </party> [2..*]
    'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestAmendmentConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="amendment" type=" Amendment "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestIncreaseConfirmation

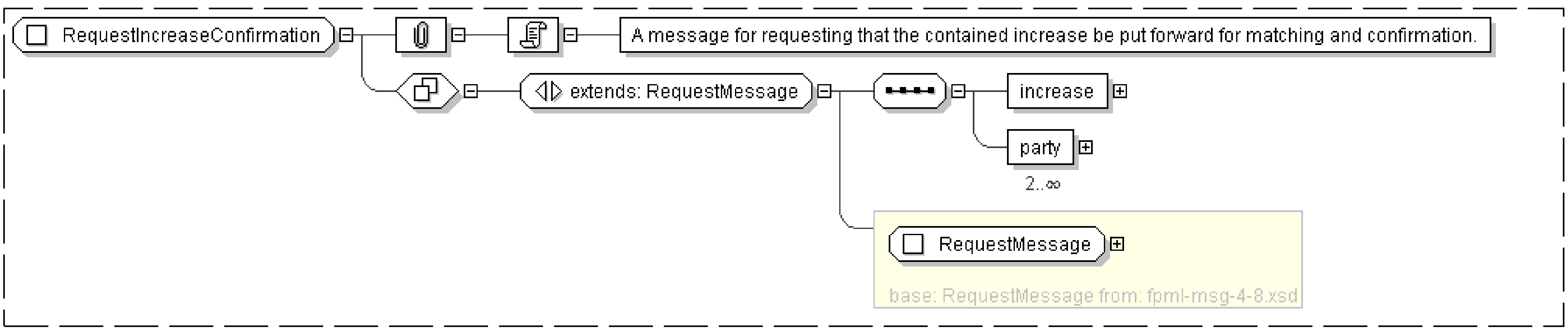
Super-types:	RequestMessage < **RequestIncreaseConfirmation** (by extension)
Sub-types:	None

Name	RequestIncreaseConfirmation
Abstract	no
Documentation	A message for requesting that the contained increase be put forward for matching and confirmation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <increase> Increase </increase> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestIncreaseConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
```

```
        <xsd:sequence>
            <xsd:element name="increase" type=" Increase "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
        </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestNovationConfirmation

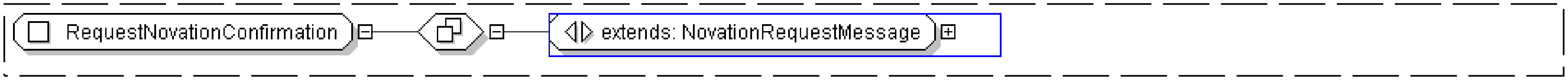
Super-types:	NovationRequestMessage < **RequestNovationConfirmation** (by extension)
Sub-types:	None

Name	RequestNovationConfirmation
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestNovationConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" NovationRequestMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestTerminationConfirmation

Super-types:	RequestMessage < **RequestTerminationConfirmation** (by extension)
Sub-types:	None

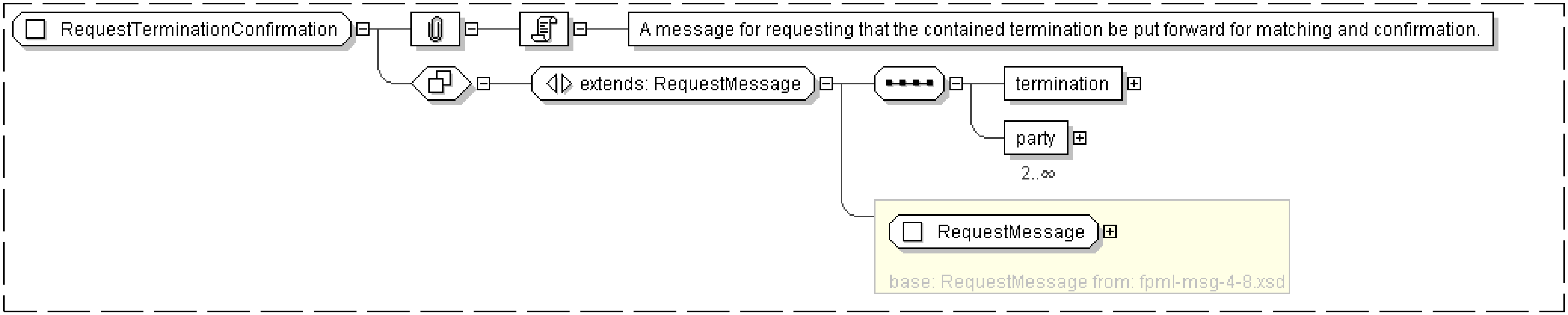
Name	RequestTerminationConfirmation
Abstract	no
Documentation	A message for requesting that the contained termination be put forward for matching and confirmation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
```

```
    <validation> Validation </validation> [0..*]
    <termination> Termination </termination> [1]
    <party> Party </party> [2..*]
    'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestTerminationConfirmation">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="termination" type=" Termination "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TerminationConfirmed

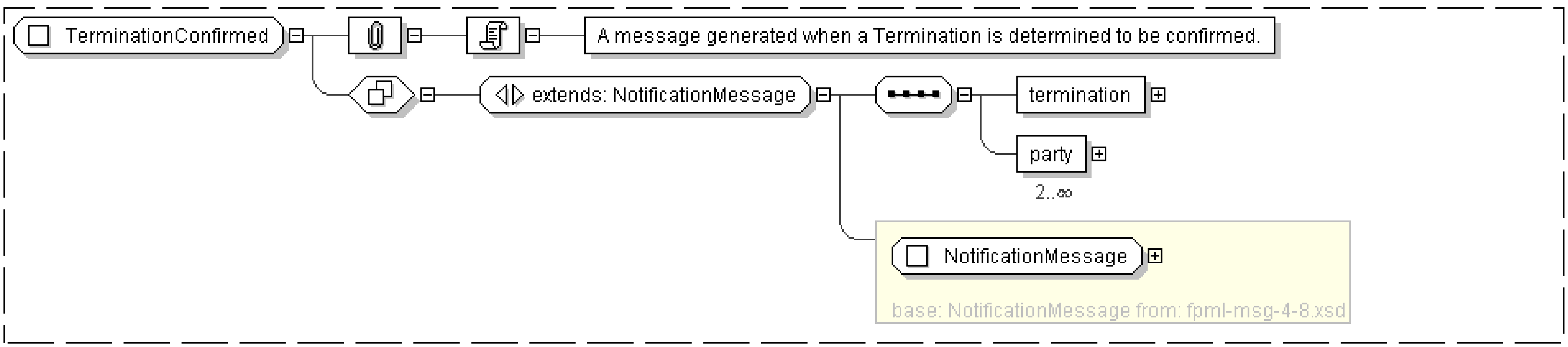
Super-types:	NotificationMessage < **TerminationConfirmed** (by extension)
Sub-types:	None

Name	TerminationConfirmed
Abstract	no
Documentation	A message generated when a Termination is determined to be confirmed.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <termination> Termination </termination> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TerminationConfirmed">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
```

```
        <xsd:sequence>
            <xsd:element name="termination" type=" Termination "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**
Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.

- If the element/attribute's type is in the schema, a link is provided to it.
- For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/

xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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Generated by <oXygen/> XML Editor using a modified version of xs3p that adds schema diagrams and chunking support.

XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ◦ fpml-posttrade-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML"
```

```
targetNamespace="http://www.fpml.org/2010/FpML-4-8"
version="$Revision: 6991 $" attributeFormDefault="unqualified"
elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-posttrade-4-8.xsd"/>
   ...
</xsd:schema>
```

top

Global Definitions

Complex Type: NovateTrade

Super-types:	NovationRequestMessage < **NovateTrade** (by extension)
Sub-types:	None

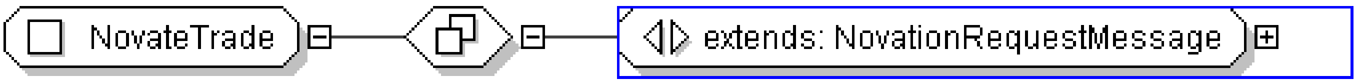
Name	NovateTrade
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have
```

```
been made between releases within a version (i.e. from Trial
Recommendation to Recommendation) the actual build number stays
the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovateTrade">
   <xsd:complexContent>
      <xsd:extension base=" NovationRequestMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeNovated

Super-types:	NovationNotificationMessage < **TradeNovated** (by extension)
Sub-types:	None

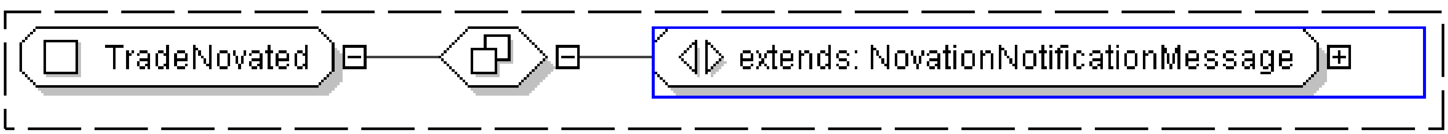
Name	TradeNovated
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-
3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message
adheres to.'
```

```
"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeNovated">
   <xsd:complexContent>
      <xsd:extension base=" NovationNotificationMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
```

```
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-posttrade-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
```

```
    <xsd:include schemaLocation="fpml-posttrade-4-8.xsd"/>
    ...
</xsd:schema>
```

top

Global Definitions

Complex Type: NovationConsentGranted

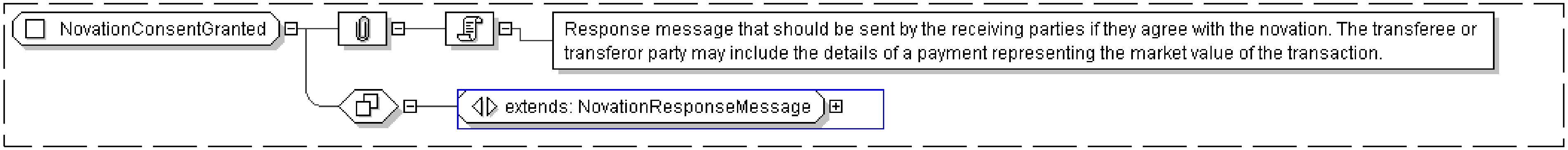
Super-types:	NovationResponseMessage < **NovationConsentGranted** (by extension)
Sub-types:	None

Name	NovationConsentGranted
Abstract	no
Documentation	Response message that should be sent by the receiving parties if they agree with the novation. The transferee or transferor party may include the details of a payment representing the market value of the transaction.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
Start Sequence [0..1]
      <novation> Novation </novation> [1]
      <party> Party </party> [3..*]
End Sequence
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationConsentGranted">
   <xsd:complexContent>
      <xsd:extension base=" NovationResponseMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationConsentRefused

Super-types:	NovationResponseMessage < **NovationConsentRefused** (by extension)
Sub-types:	None

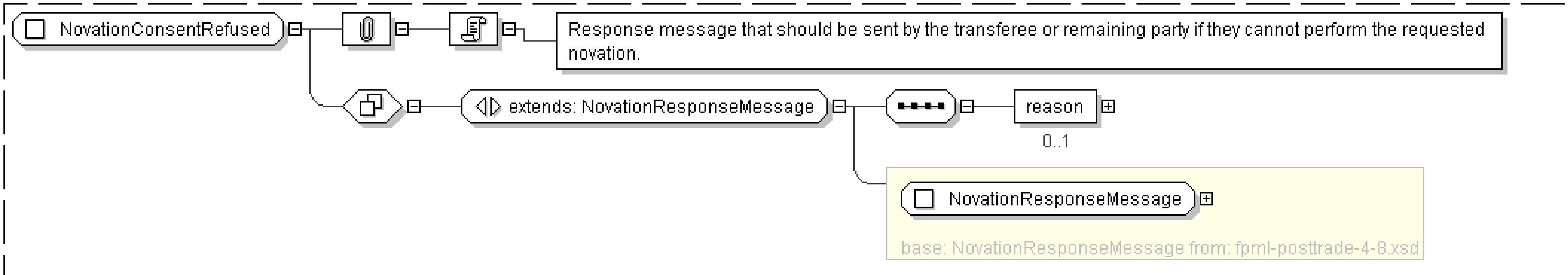
Name	NovationConsentRefused
Abstract	no
Documentation	Response message that should be sent by the transferee or remaining party if they cannot perform the requested novation.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
```

```
    <header> ResponseMessageHeader </header> [1]
    <validation> Validation </validation> [0..*]
Start Sequence [0..1]
        <novation> Novation </novation> [1]
        <party> Party </party> [3..*]
End Sequence
    <reason> Reason </reason> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationConsentRefused">
   <xsd:complexContent>
      <xsd:extension base=" NovationResponseMessage ">
         <xsd:sequence>
            <xsd:element name="reason" type=" Reason " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: NovationConsentRequest

Super-types:	NovationRequestMessage < **NovationConsentRequest** (by extension)
Sub-types:	None

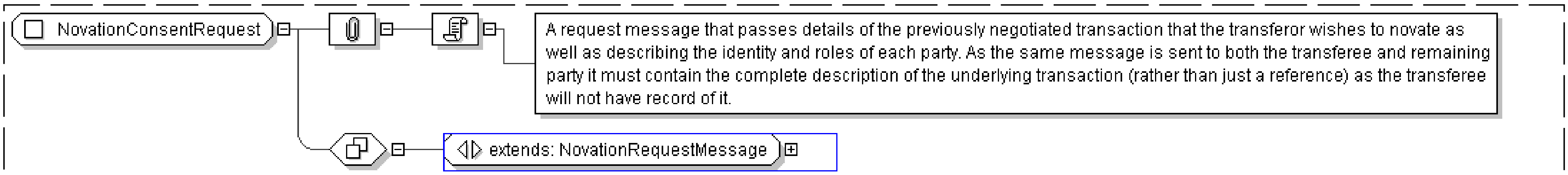
Name	NovationConsentRequest
Abstract	no
Documentation	A request message that passes details of the previously negotiated transaction that the transferor wishes to novate as well as describing the identity and roles of each party. As the same message is sent to both the transferee and remaining party it must contain the complete description of the underlying transaction (rather than just a reference) as the transferee will not have record of it.

XML Instance Representation

```
<...
```

```
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <novation> Novation </novation> [1]
   <party> Party </party> [3..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="NovationConsentRequest">
   <xsd:complexContent>
      <xsd:extension base=" NovationRequestMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAmendmentRequest

Super-types:	RequestMessage < **TradeAmendmentRequest** (by extension)

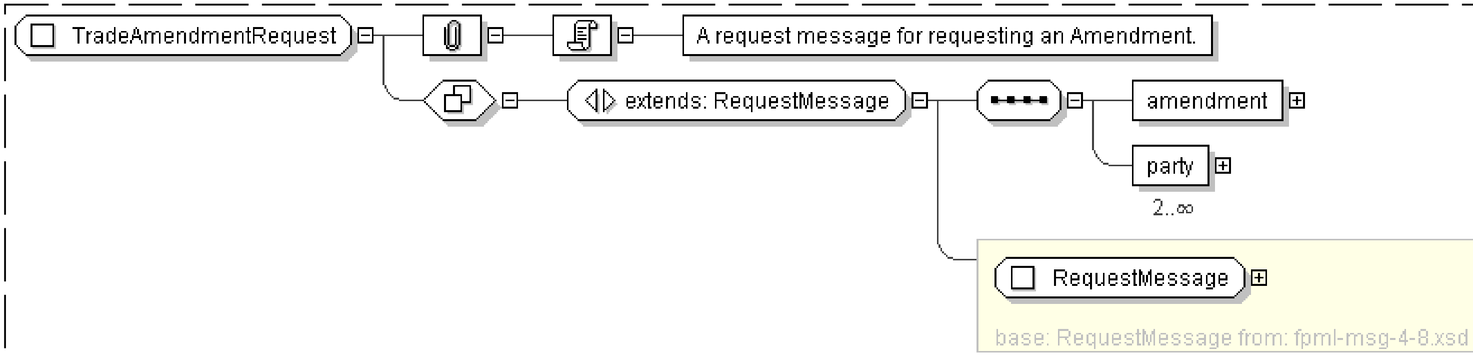
Sub-types:	None

Name	TradeAmendmentRequest
Abstract	no
Documentation	A request message for requesting an Amendment.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <amendment> Amendment </amendment> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAmendmentRequest">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="amendment" type=" Amendment "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeAmendmentResponse

Super-types:	ResponseMessage < **TradeAmendmentResponse** (by extension)
Sub-types:	None

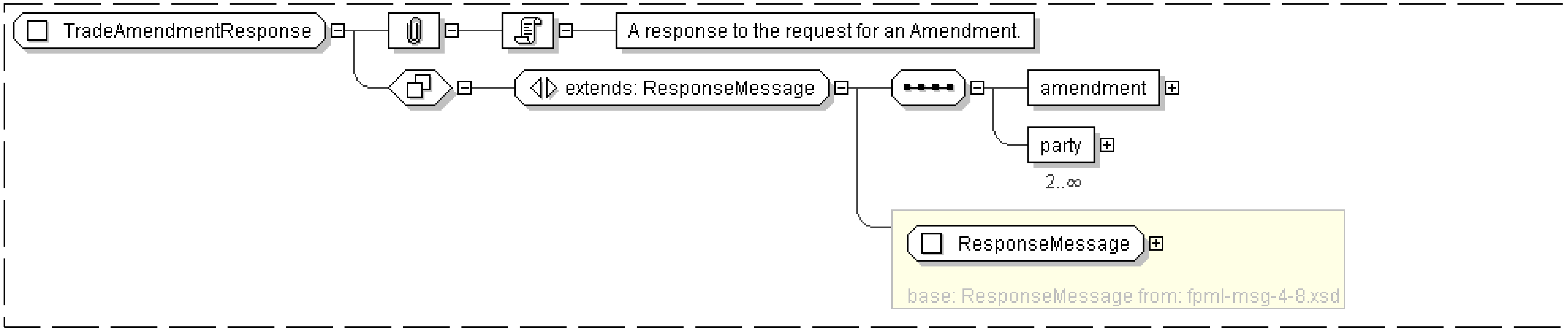
Name	TradeAmendmentResponse
Abstract	no
Documentation	A response to the request for an Amendment.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
```

```
    <amendment> Amendment </amendment> [1]
    <party> Party </party> [2..*]
    'One party element for each of the principal parties and any other party that is referenced.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeAmendmentResponse">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="amendment" type=" Amendment "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeIncreaseRequest

Super-types:	RequestMessage < **TradeIncreaseRequest** (by extension)
Sub-types:	None

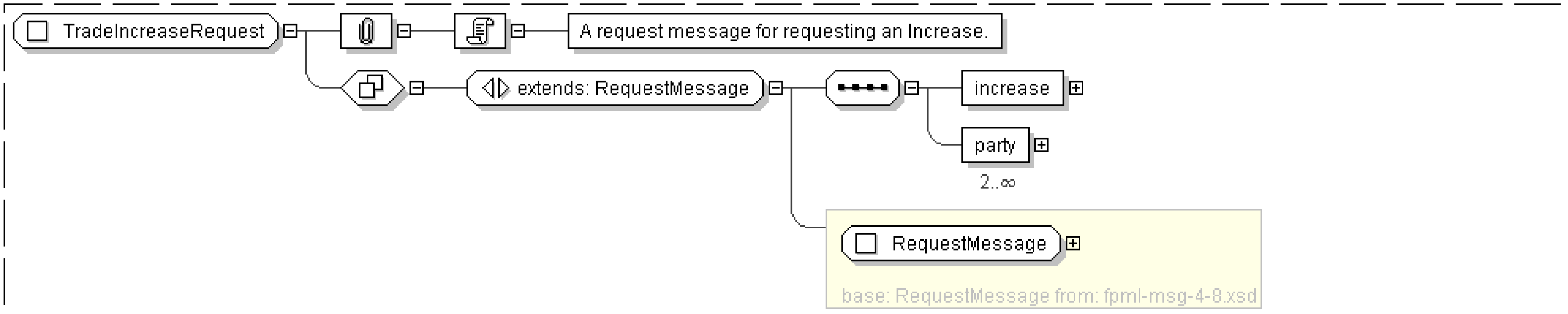
Name	TradeIncreaseRequest
Abstract	no
Documentation	A request message for requesting an Increase.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
```

```
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <increase> Increase </increase> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeIncreaseRequest">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="increase" type=" Increase "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
```

```
</xsd:complexType>
```

top

Complex Type: TradeIncreaseResponse

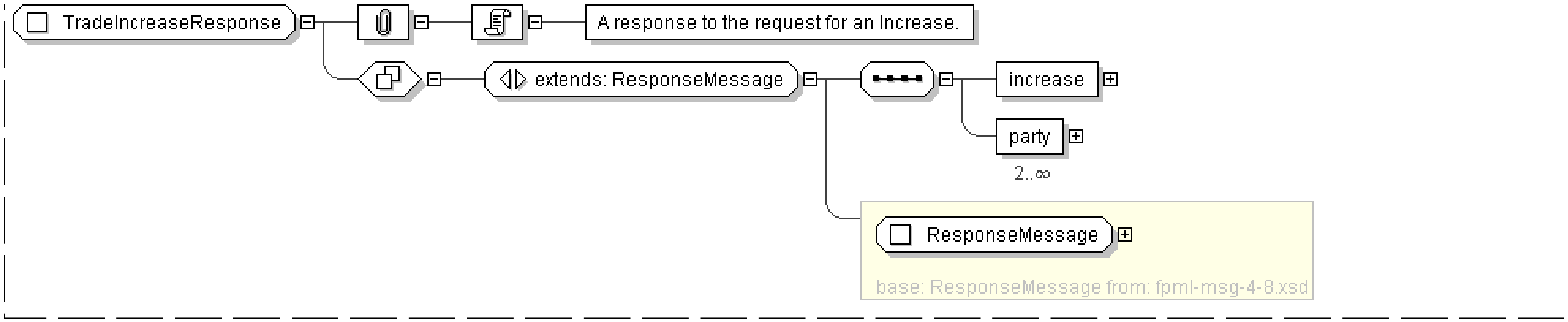
Super-types:	ResponseMessage < **TradeIncreaseResponse** (by extension)
Sub-types:	None

Name	TradeIncreaseResponse
Abstract	no
Documentation	A response to the request for an Increase.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <increase> Increase </increase> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeIncreaseResponse">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="increase" type=" Increase "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeTerminationRequest

Super-types:	RequestMessage < **TradeTerminationRequest** (by extension)
Sub-types:	None

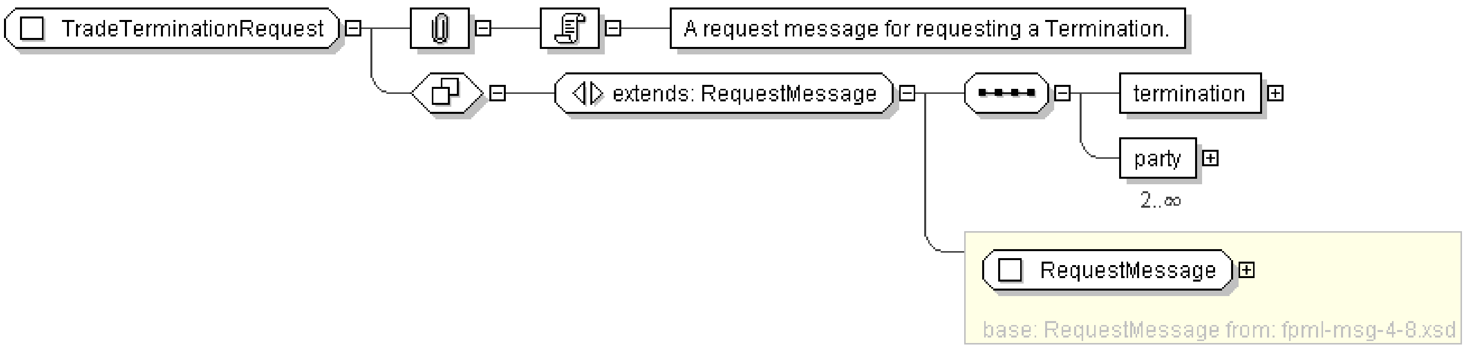
Name	TradeTerminationRequest
Abstract	no
Documentation	A request message for requesting a Termination.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
```

```
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <termination> Termination </termination> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeTerminationRequest">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="termination" type=" Termination "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeTerminationResponse

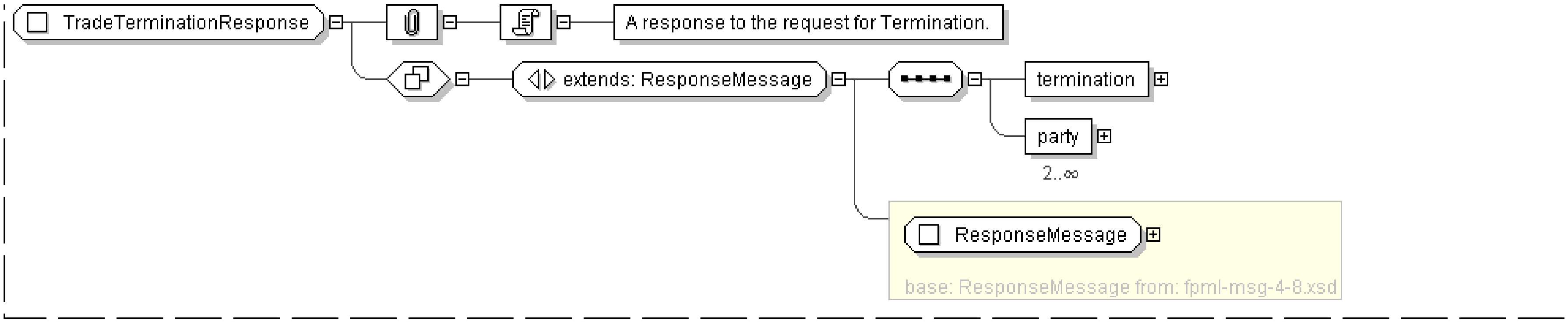
Super-types:	ResponseMessage < **TradeTerminationResponse** (by extension)
Sub-types:	None

Name	TradeTerminationResponse
Abstract	no
Documentation	A response to the request for Termination.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <termination> Termination </termination> [1]
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeTerminationResponse">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="termination" type=" Termination "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
```

```
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
    - If the element/attribute's type is in the schema, a link is provided to it.
    - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.

org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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Generated by <oXygen/> XML Editor using a modified version of xs3p that adds schema diagrams and chunking support.

XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-msg-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml-annotation	http://www.fpml.org/annotation
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
```

```
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
    <xsd:include schemaLocation="fpml-msg-4-8.xsd"/>
    ...
</xsd:schema>
```

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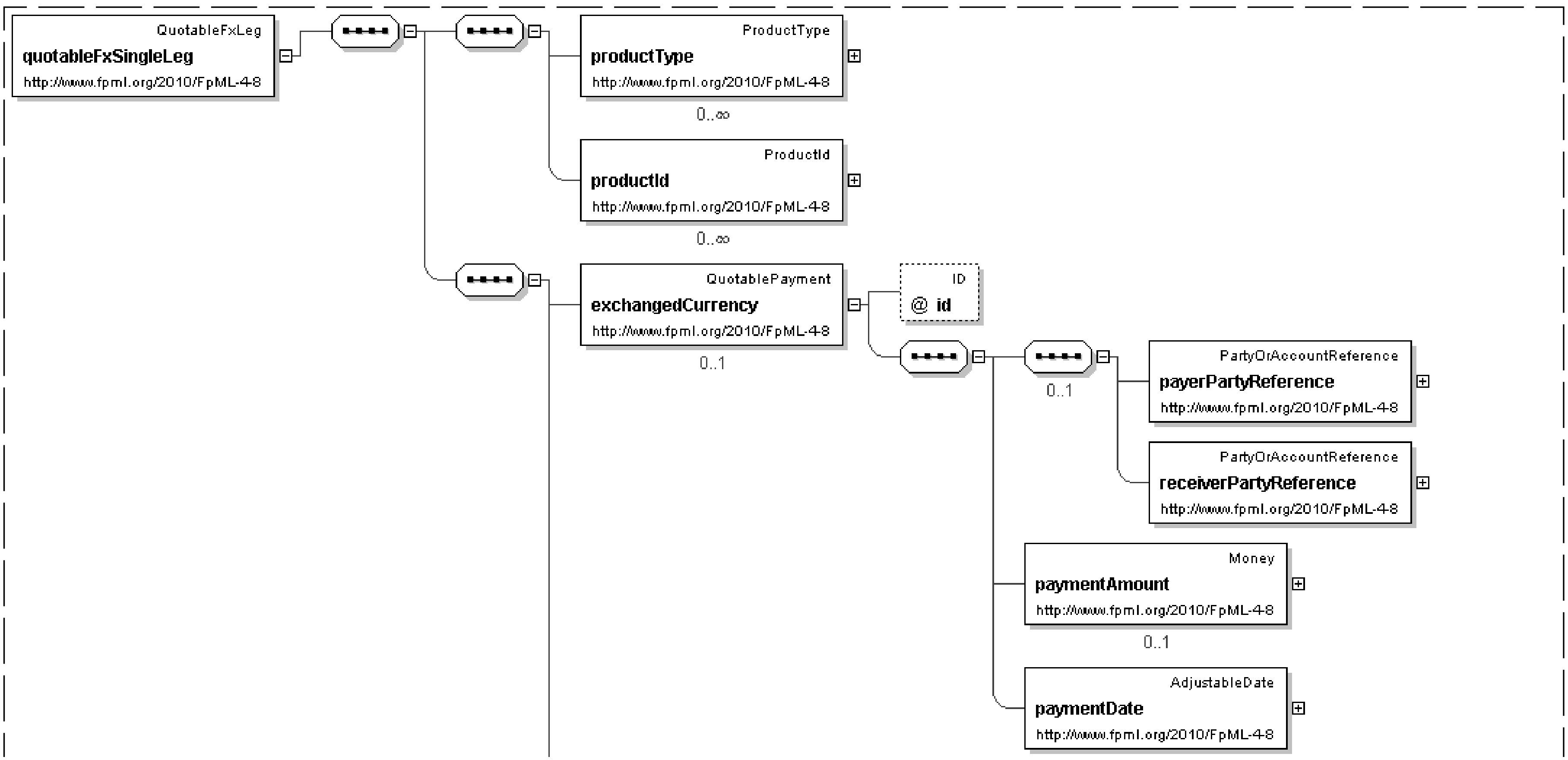
Global Declarations

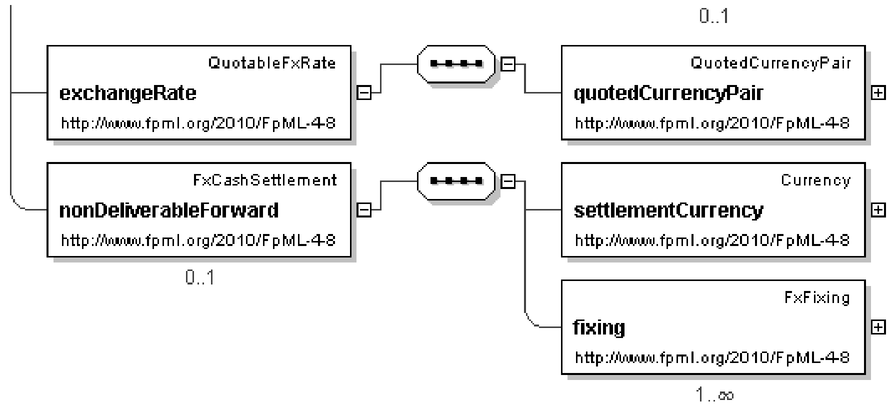
Element: quotableFxSingleLeg

- *This element can be used wherever the following element is referenced:*
  - quotableProduct

Name	quotableFxSingleLeg
Type	QuotableFxLeg
Nillable	no
Abstract	no

Logical Diagram

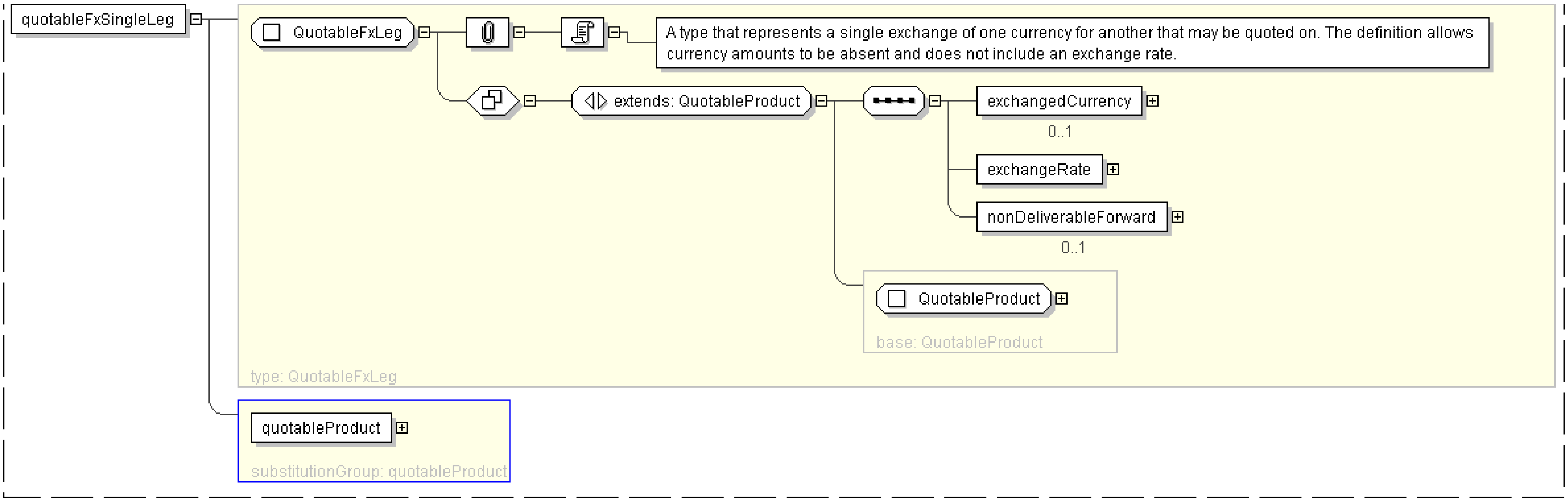




XML Instance Representation

```
<quotableFxSingleLeg>
   <productType> ProductType </productType> [0..*]

   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]

   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <exchangedCurrency> QuotablePayment </exchangedCurrency> [0..1]
   <exchangeRate> QuotableFxRate </exchangeRate> [1]
   <nonDeliverableForward> FxCashSettlement </nonDeliverableForward> [0..1]

   'Used to describe a particular type of FX forward transaction that is settled in a
   single currency.'

</quotableFxSingleLeg>
```

Diagram



Schema Component Representation

```
<xsd:element name="quotableFxSingleLeg" type=" QuotableFxLeg
" substitutionGroup="quotableProduct"/>
```

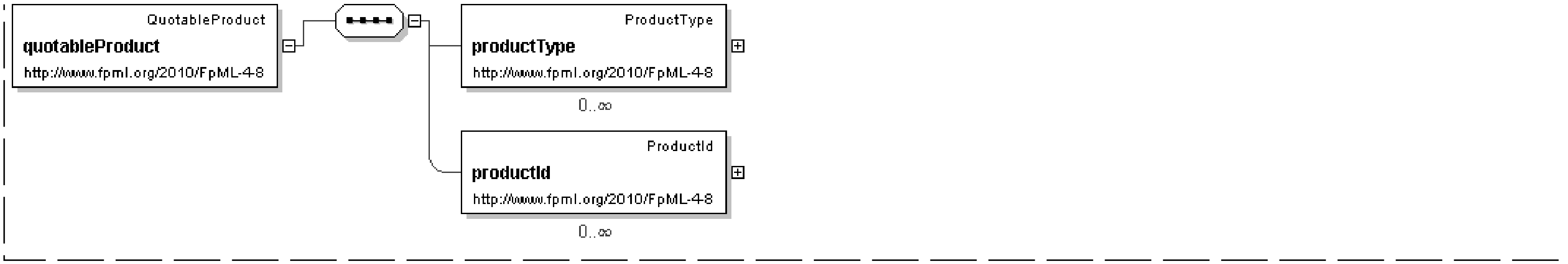
top

Element: quotableProduct

- *The following elements can be used wherever this element is referenced:*
  - quotableFxSingleLeg

Name	quotableProduct
Used by (from the same schema document)	Complex Type **QuoteUpdated** , Complex Type **RequestQuote**
Type	QuotableProduct
Nillable	no
Abstract	yes

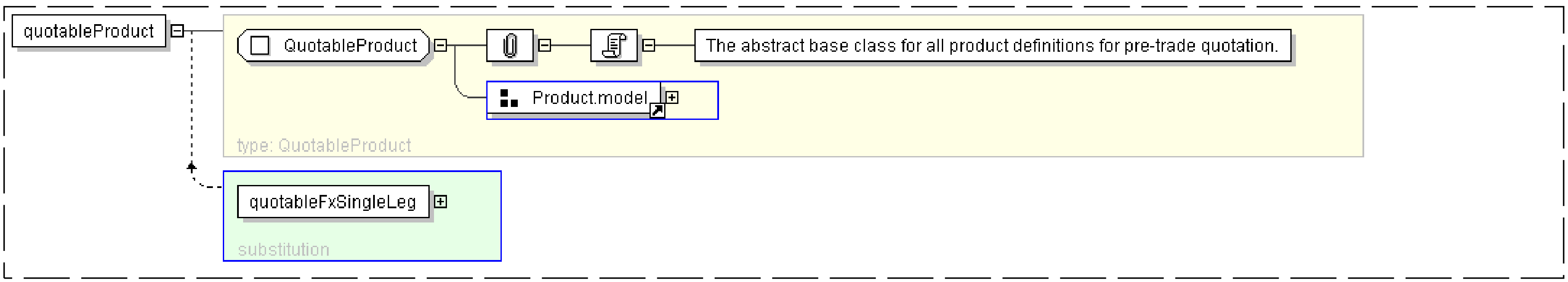
Logical Diagram



XML Instance Representation

```
<quotableProduct>
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

</quotableProduct>
```

Diagram



Schema Component Representation

```
<xsd:element name="quotableProduct" type=" QuotableProduct " abstract="true"/>
```

top

Global Definitions

Complex Type: AcceptQuote

Super-types:	ResponseMessage < **AcceptQuote** (by extension)
Sub-types:	None

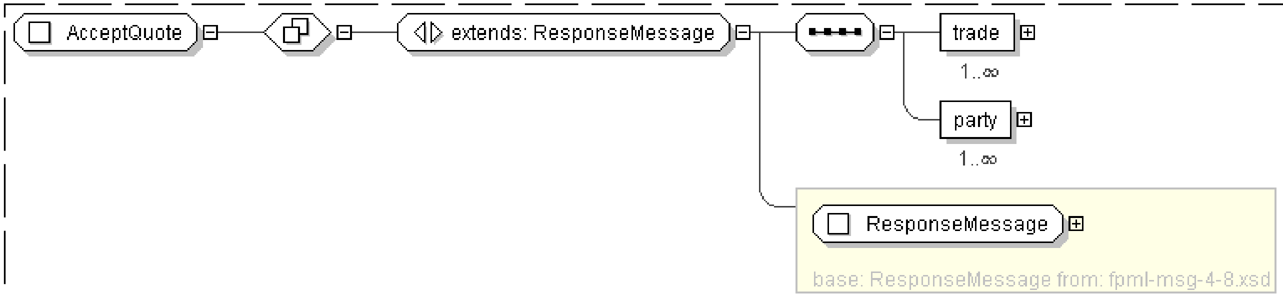
Name	AcceptQuote

Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <trade> Trade </trade> [1..*]
   <party> Party </party> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AcceptQuote">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuotableFxLeg

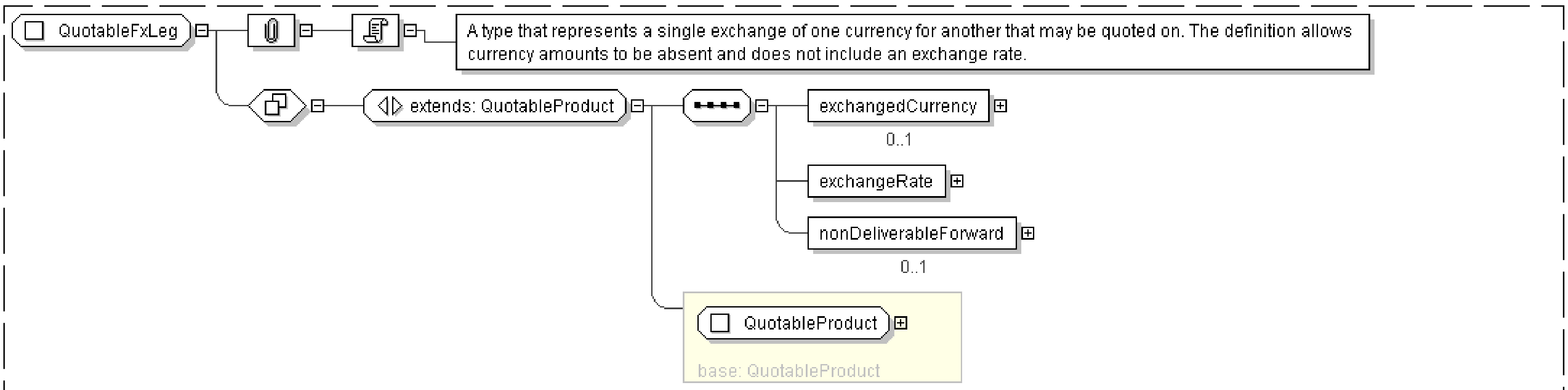
Super-types:	QuotableProduct < **QuotableFxLeg** (by extension)
Sub-types:	None

Name	QuotableFxLeg
Used by (from the same schema document)	Element **quotableFxSingleLeg**
Abstract	no
Documentation	A type that represents a single exchange of one currency for another that may be quoted on. The definition allows currency amounts to be absent and does not include an exchange rate.

XML Instance Representation

```
<...>
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

   <exchangedCurrency> QuotablePayment </exchangedCurrency> [0..1]
   <exchangeRate> QuotableFxRate </exchangeRate> [1]
   <nonDeliverableForward> FxCashSettlement </nonDeliverableForward> [0..1]
   'Used to describe a particular type of FX forward transaction that is settled in a
   single currency.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotableFxLeg">
   <xsd:complexContent>
      <xsd:extension base=" QuotableProduct ">
         <xsd:sequence>
            <xsd:element name="exchangedCurrency" type=" QuotablePayment " minOccurs="0"/>
            <xsd:element name="exchangeRate" type=" QuotableFxRate "/>
            <xsd:element name="nonDeliverableForward" type=" FxCashSettlement " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuotableFxRate

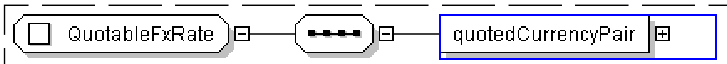
Super-types:	None
Sub-types:	None

Name	QuotableFxRate
Used by (from the same schema document)	Complex Type **QuotableFxLeg**
Abstract	no

XML Instance Representation

```
<...>
   <quotedCurrencyPair> QuotedCurrencyPair </quotedCurrencyPair> [1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotableFxRate">
   <xsd:sequence>
      <xsd:element name="quotedCurrencyPair" type=" QuotedCurrencyPair "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: QuotablePayment

Super-types:	PaymentBase < **QuotablePayment** (by extension)
Sub-types:	None

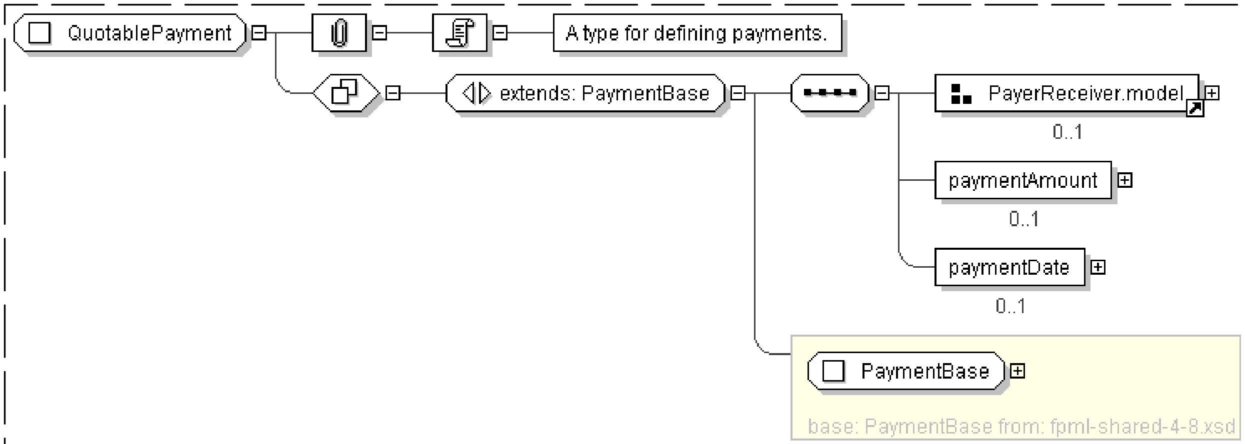
Name	QuotablePayment

Used by (from the same schema document)	Complex Type **QuotableFxLeg**
Abstract	no
Documentation	A type for defining payments.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Group: PayerReceiver.model [0..1]
      <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
      'A reference to the party responsible for making the payments defined by this structure.'

      <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
      'A reference to the party that receives the payments corresponding to this structure.'

End Group: PayerReceiver.model
   <paymentAmount> Money </paymentAmount> [0..1]
   'The currency amount of the payment.'

   <paymentDate> AdjustableDate </paymentDate> [0..1]
   'The payment date. This date is subject to adjustment in accordance with any
   applicable business day convention.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotablePayment">
   <xsd:complexContent>
      <xsd:extension base=" PaymentBase ">
         <xsd:sequence>
            <xsd:group ref=" PayerReceiver.model " minOccurs="0"/>
            <xsd:element name="paymentAmount" type=" Money " minOccurs="0"/>
            <xsd:element name="paymentDate" type=" AdjustableDate " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
```

```
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuotableProduct

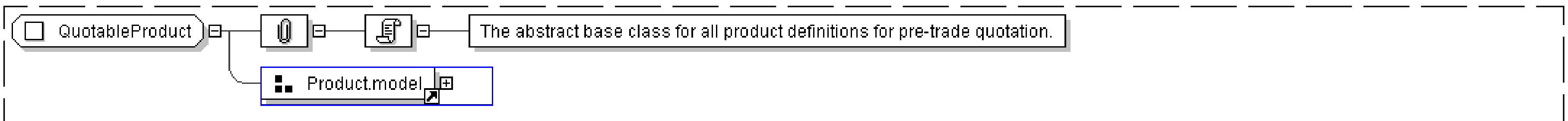
Super-types:	None
Sub-types:	• QuotableFxLeg (by extension)

Name	QuotableProduct
Used by (from the same schema document)	Element **quotableProduct**
Abstract	yes
Documentation	The abstract base class for all product definitions for pre-trade quotation.

XML Instance Representation

```
<...>
    <productType> ProductType </productType> [0..*]
    'A classification of the type of product. FpML defines a simple product categorization using
    a coding scheme.'

    <productId> ProductId </productId> [0..*]
    'A product reference identifier allocated by a party. FpML does not define the domain
    values associated with this element. Note that the domain values for this element are
    not strictly an enumerated list.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotableProduct" abstract="true">
    <xsd:group ref=" Product.model "/>
</xsd:complexType>
```

top

Complex Type: Quote

Super-types:	ResponseMessage < **Quote** (by extension)
Sub-types:	None

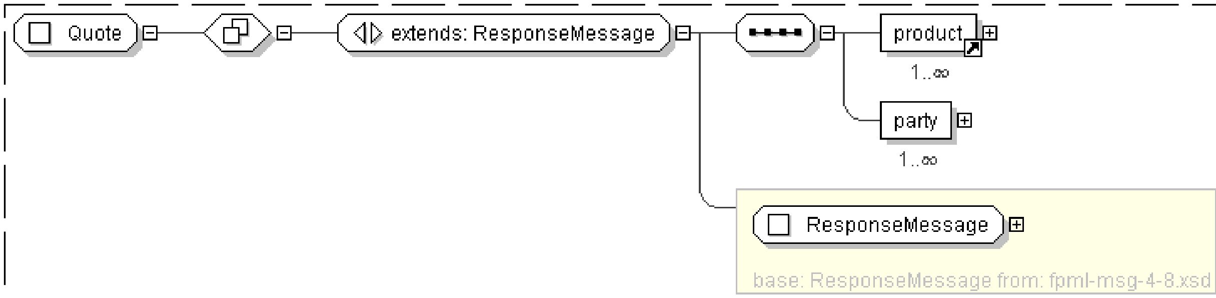
Name	Quote

Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <product> ... </product> [1..*]
   <party> Party </party> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Quote">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element ref=" product " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuoteAcceptanceConfirmed

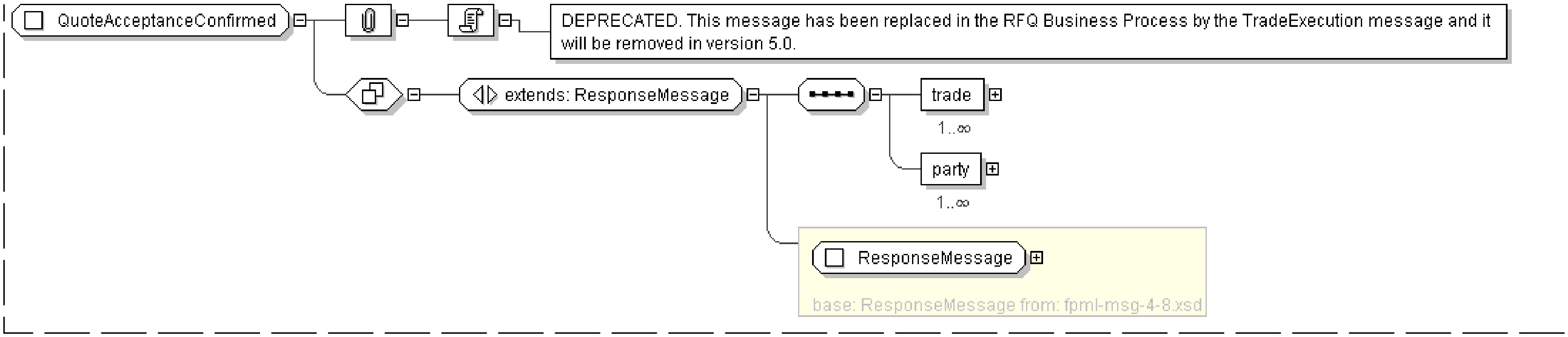
Super-types:	ResponseMessage < **QuoteAcceptanceConfirmed** (by extension)
Sub-types:	None

Name	QuoteAcceptanceConfirmed
Abstract	no
Documentation	DEPRECATED. This message has been replaced in the RFQ Business Process by the TradeExecution message and it will be removed in version 5.0.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <trade> Trade </trade> [1..*]
   <party> Party </party> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuoteAcceptanceConfirmed" deprecated="true"
deprecatedReason="The message has been replaced by the TradeExecution message to provide
the link between the RFQ and Trade Execution processes.">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="trade" type=" Trade " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuoteAlreadyExpired

Super-types:	ResponseMessage < **QuoteAlreadyExpired** (by extension)
Sub-types:	None

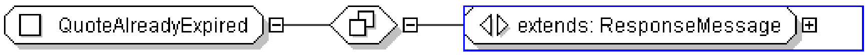
Name	QuoteAlreadyExpired
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
```

```
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuoteAlreadyExpired">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage "/>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuoteUpdated

Super-types:	ResponseMessage < **QuoteUpdated** (by extension)
Sub-types:	None

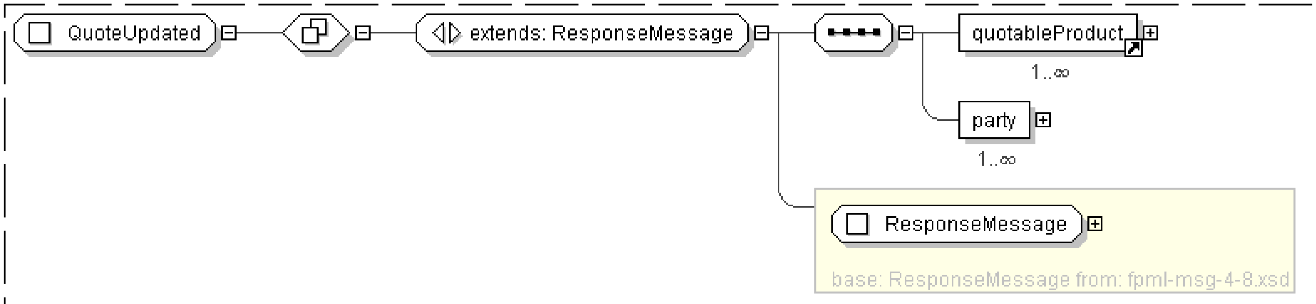
Name	QuoteUpdated
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
```

```
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <quotableProduct> ... </quotableProduct> [1..*]
   <party> Party </party> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuoteUpdated">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element ref=" quotableProduct " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestQuote

Super-types:	RequestMessage < **RequestQuote** (by extension)
Sub-types:	None

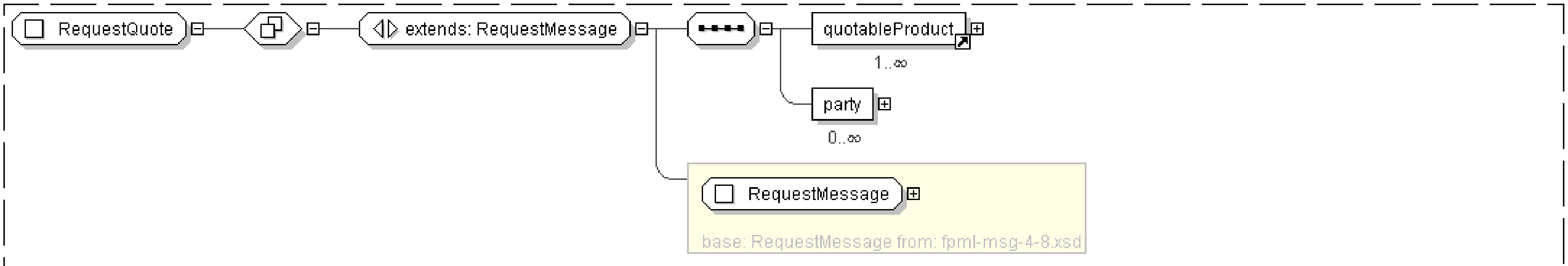
Name	RequestQuote
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'
```

```
"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <quotableProduct> ... </quotableProduct> [1..*]
   <party> Party </party> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestQuote">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element ref=" quotableProduct " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestQuoteResponse

Super-types:	ResponseMessage < **RequestQuoteResponse** (by extension)

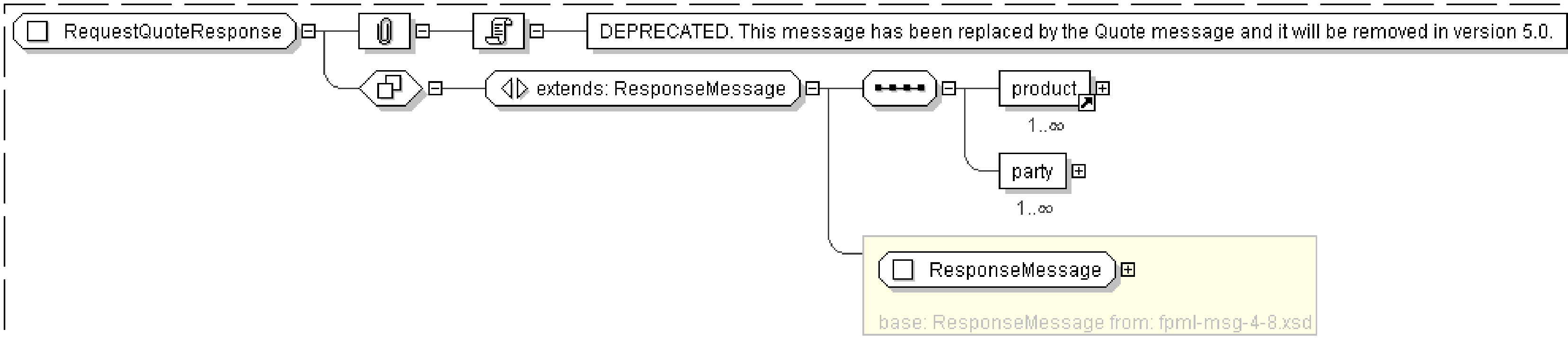
Sub-types:	None

Name	RequestQuoteResponse
Abstract	no
Documentation	DEPRECATED. This message has been replaced by the Quote message and it will be removed in version 5.0.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <product> ... </product> [1..*]
   <party> Party </party> [1..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestQuoteResponse" deprecated="true" deprecatedReason="The naming
of the message was not clear, it has been replaced by the Quote message">
   <xsd:complexContent>
```

```
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element ref=" product " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

top

Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ◦ fpml-reporting-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-reporting-4-8.xsd"/>
   ...
</xsd:schema>
```

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Global Definitions

Complex Type: AllegedCashflow

Super-types:	None
Sub-types:	None

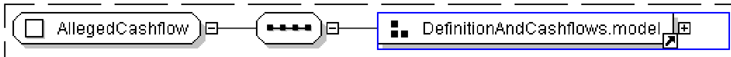
Name	AllegedCashflow
Used by (from the same schema document)	Complex Type **TradeCashflowsMatchResult**
Abstract	no

XML Instance Representation

```
<...>
   <asOfDate> xsd:dateTime </asOfDate> [0..1]
   'The date and time at which the set of cashflows was defined.'

   <tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
   'Unique identifier assigned by the party asserting the set of cashflows to be reconciled.'

Start Group: TradeCashflows.model [0..1]
      <tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
      'Structure that holds reference to the trade through the tradeId and optionally some
      trade-specific elements for identifying the trade in the case of trades that have not
      been negotiated through electronic platforms and for which the counterparty\'s trade ID has
      not been captured.'

      <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
      'The adjusted date in which the payments are being paid/received.'

      <payment> PaymentMatching </payment> [1..*]
      'Specifies the payment that is exposed to the matching process. Usually there will be a
      single payment but for cross-currency swaps a different payment per currency shall be provided.'
```

```
End Group: TradeCashflows.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AllegedCashflow">
   <xsd:sequence>
      <xsd:group ref=" DefinitionAndCashflows.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AssertedCashflow

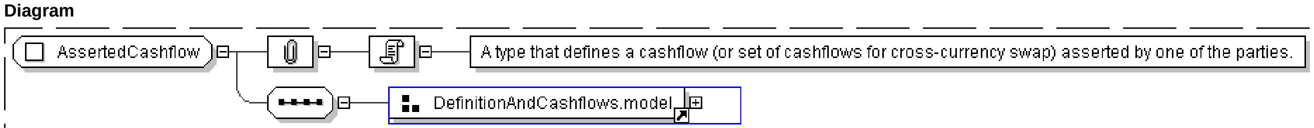
Super-types:	None
Sub-types:	None

Name	AssertedCashflow
Used by (from the same schema document)	Complex Type **TradeCashflowsMatchResult**
Abstract	no
Documentation	A type that defines a cashflow (or set of cashflows for cross-currency swap) asserted by one of the parties.

XML Instance Representation

```
<...>
   <asOfDate> xsd:dateTime </asOfDate> [0..1]
   'The date and time at which the set of cashflows was defined.'

   <tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
   'Unique identifier assigned by the party asserting the set of cashflows to be reconciled.'

Start Group: TradeCashflows.model [0..1]
      <tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
      'Structure that holds reference to the trade through the tradeId and optionally some
      trade-specific elements for identifying the trade in the case of trades that have not
      been negotiated through electronic platforms and for which the counterparty\'s trade ID has
      not been captured.'

      <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
      'The adjusted date in which the payments are being paid/received.'

      <payment> PaymentMatching </payment> [1..*]
      'Specifies the payment that is exposed to the matching process. Usually there will be a
      single payment but for cross-currency swaps a different payment per currency shall be provided.'

End Group: TradeCashflows.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AssertedCashflow">
   <xsd:sequence>
      <xsd:group ref=" DefinitionAndCashflows.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: AssertedPosition

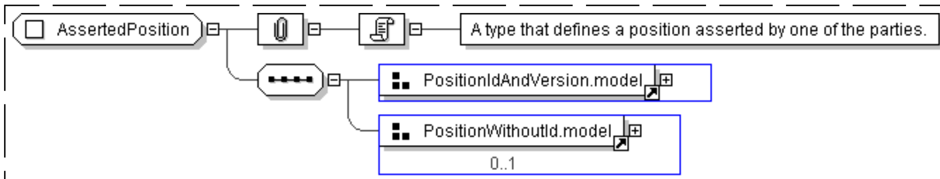
Super-types:	None
Sub-types:	None

Name	AssertedPosition
Used by (from the same schema document)	Complex Type **PositionMatchResult** , Complex Type **PositionMatchResult**
Abstract	no
Documentation	A type that defines a position asserted by one of the parties.

XML Instance Representation

```
<...>
   <positionId> PositionId </positionId> [1]
   'A version-independent identifier for the position, possibly based on trade identifier.'

   <version> xsd:positiveInteger </version> [0..1]
   'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
   newer versions. There is no requirement that version identifiers for a position be
   sequential or small, so for example timestamp-based version identifiers could be used.'

Start Group: PositionWithoutId.model [0..1]
      <reportingRoles> ReportingRoles </reportingRoles> [0..1]
      'Information about the roles of the parties with respect to reporting the positions.'

      <constituent> PositionConstituent </constituent> [1]
      'The components that create this position.'

      <scheduledDate> ScheduledDate </scheduledDate> [0..*]
      'Position level schedule date, such as final payment dates, in a simple and flexible format.'

      <valuation> AssetValuation </valuation> [0..*]
      'Valuation reported for the position, such as NPV or accrued interest. The asset/
      object references in the valuations should refer to the deal or components of the deal in
      the position, e.g. legs, streams, or underlyers.'

End Group: PositionWithoutId.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AssertedPosition">
   <xsd:sequence>
      <xsd:group ref=" PositionIdAndVersion.model "/>
```

```
        <xsd:group ref=" PositionWithoutId.model " minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CalculationDetails

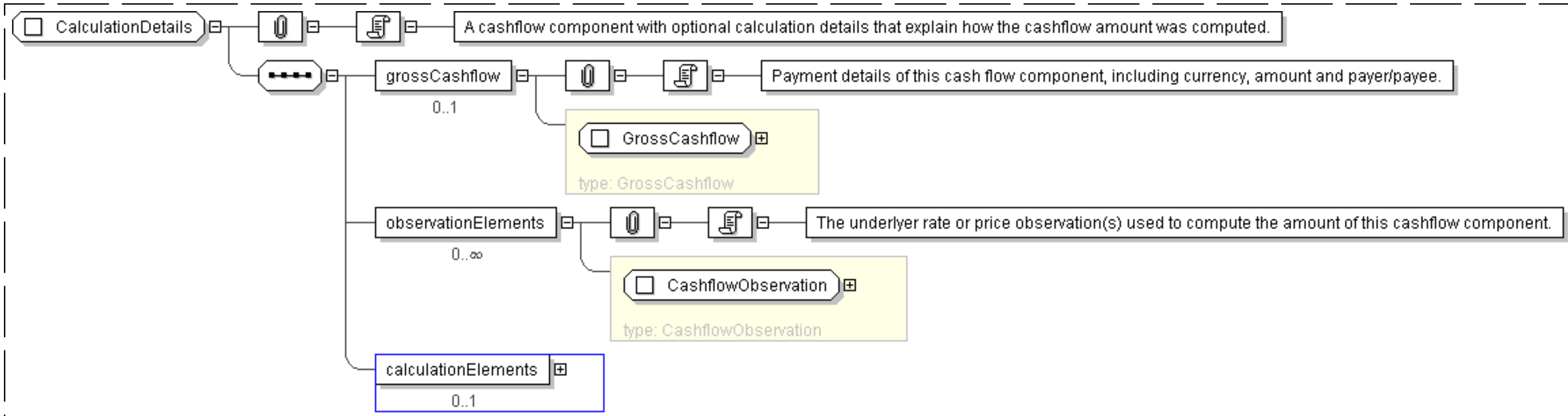
Super-types:	None
Sub-types:	None

Name	CalculationDetails
Used by (from the same schema document)	Complex Type **PaymentMatching**
Abstract	no
Documentation	A cashflow component with optional calculation details that explain how the cashflow amount was computed.

XML Instance Representation

```
<...>
   <grossCashflow> GrossCashflow </grossCashflow> [0..1]
   'Payment details of this cash flow component, including currency, amount and payer/payee.'

   <observationElements> CashflowObservation </observationElements> [0..*]
   'The underlyer rate or price observation(s) used to compute the amount of this
   cashflow component.'

   <calculationElements> CashflowCalculationElements </calculationElements> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CalculationDetails">
   <xsd:sequence>
      <xsd:element name="grossCashflow" type=" GrossCashflow " minOccurs="0"/>
      <xsd:element name="observationElements" type=" CashflowObservation "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="calculationElements" type=" CashflowCalculationElements " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CancelTradeCashflows

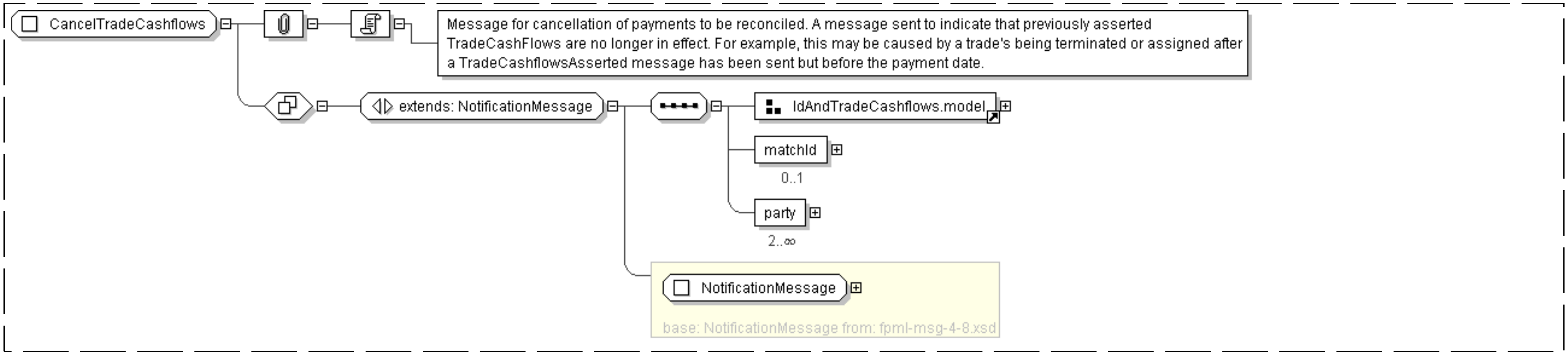
Super-types:	NotificationMessage < **CancelTradeCashflows** (by extension)
Sub-types:	None

Name	CancelTradeCashflows
Abstract	no
Documentation	Message for cancellation of payments to be reconciled. A message sent to indicate that previously asserted TradeCashFlows are no longer in effect. For example, this may be caused by a trade's being terminated or assigned after a TradeCashflowsAsserted message has been sent but before the payment date.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
   'Unique identifier assigned by either party to a set of cashflows.'

Start Group: TradeCashflows.model [0..1]
      <tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
      'Structure that holds reference to the trade through the tradeId and optionally some
      trade-specific elements for identifying the trade in the case of trades that have not
      been negotiated through electronic platforms and for which the counterparty\'s trade ID has
      not been captured.'

      <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
      'The adjusted date in which the payments are being paid/received.'

      <payment> PaymentMatching </payment> [1..*]
      'Specifies the payment that is exposed to the matching process. Usually there will be a
      single payment but for cross-currency swaps a different payment per currency shall be provided.'

End Group: TradeCashflows.model
   <matchId> MatchId </matchId> [0..1]
   'A unique identifier assigned by matching service to each set of matched cashflows.'

   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CancelTradeCashflows">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:group ref=" IdAndTradeCashflows.model "/>
            <xsd:element name="matchId" type=" MatchId " minOccurs="0"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CashflowCalculationElements

Super-types:	None
Sub-types:	None

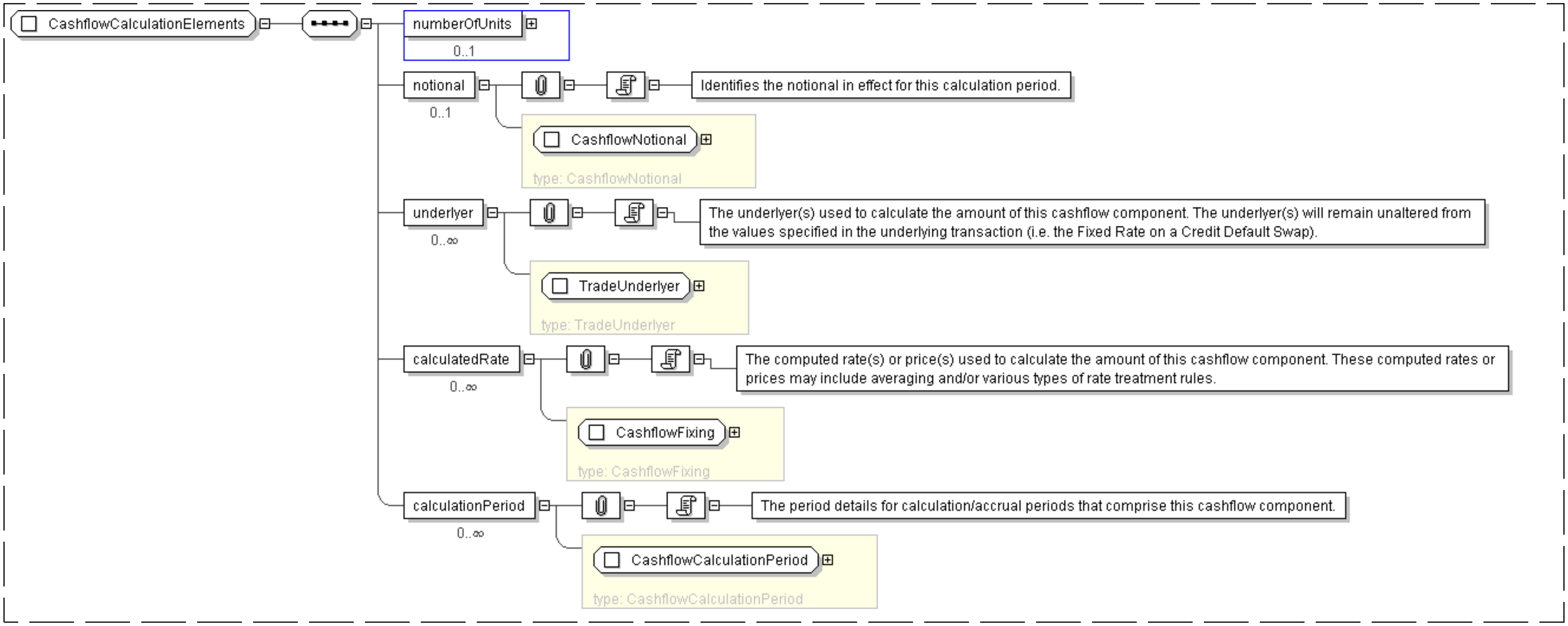
Name	CashflowCalculationElements
Used by (from the same schema document)	Complex Type **CalculationDetails**
Abstract	no

XML Instance Representation

```
<...>
   <numberOfUnits> UnderlyerReferenceUnits </numberOfUnits> [0..1]
   <notional> CashflowNotional </notional> [0..1]
   'Identifies the notional in effect for this calculation period.'

   <underlyer> TradeUnderlyer </underlyer> [0..*]
   'The underlyer(s) used to calculate the amount of this cashflow component. The underlyer
   (s) will remain unaltered from the values specified in the underlying transaction (i.e.
   the Fixed Rate on a Credit Default Swap).'

   <calculatedRate> CashflowFixing </calculatedRate> [0..*]
   'The computed rate(s) or price(s) used to calculate the amount of this cashflow
   component. These computed rates or prices may include averaging and/or various types of
   rate treatment rules.'

   <calculationPeriod> CashflowCalculationPeriod </calculationPeriod> [0..*]
   'The period details for calculation/accrual periods that comprise this cashflow component.'
```

```
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowCalculationElements">
   <xsd:sequence>
      <xsd:element name="numberOfUnits" type=" UnderlyerReferenceUnits " minOccurs="0"/>
      <xsd:element name="notional" type=" CashflowNotional " minOccurs="0"/>
      <xsd:element name="underlyer" type=" TradeUnderlyer " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="calculatedRate" type=" CashflowFixing " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="calculationPeriod" type=" CashflowCalculationPeriod "
      minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CashflowCalculationPeriod

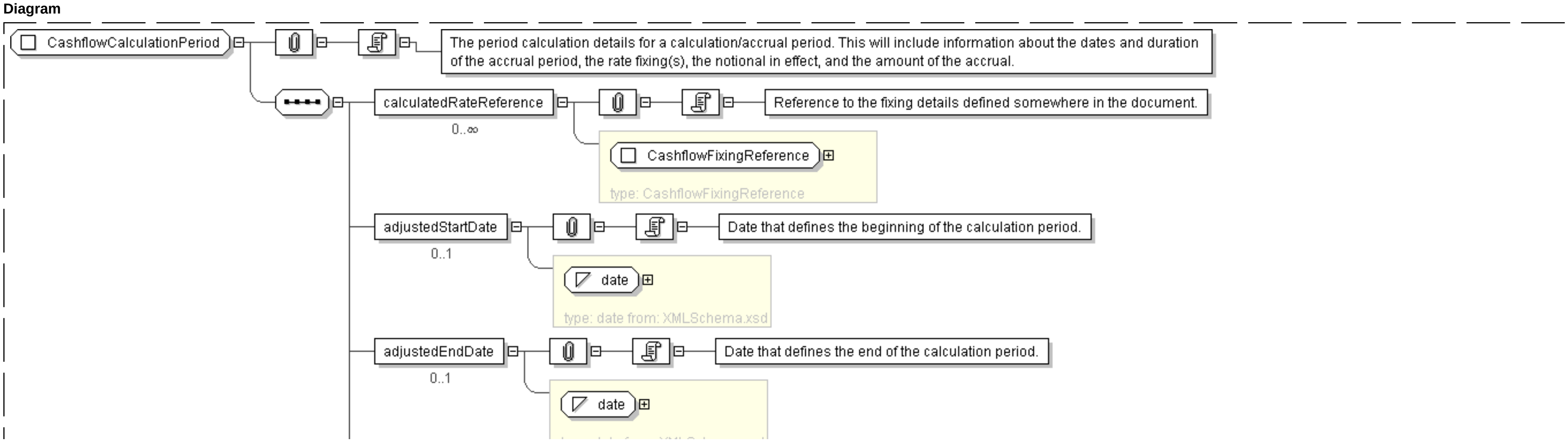
Super-types:	None
Sub-types:	None

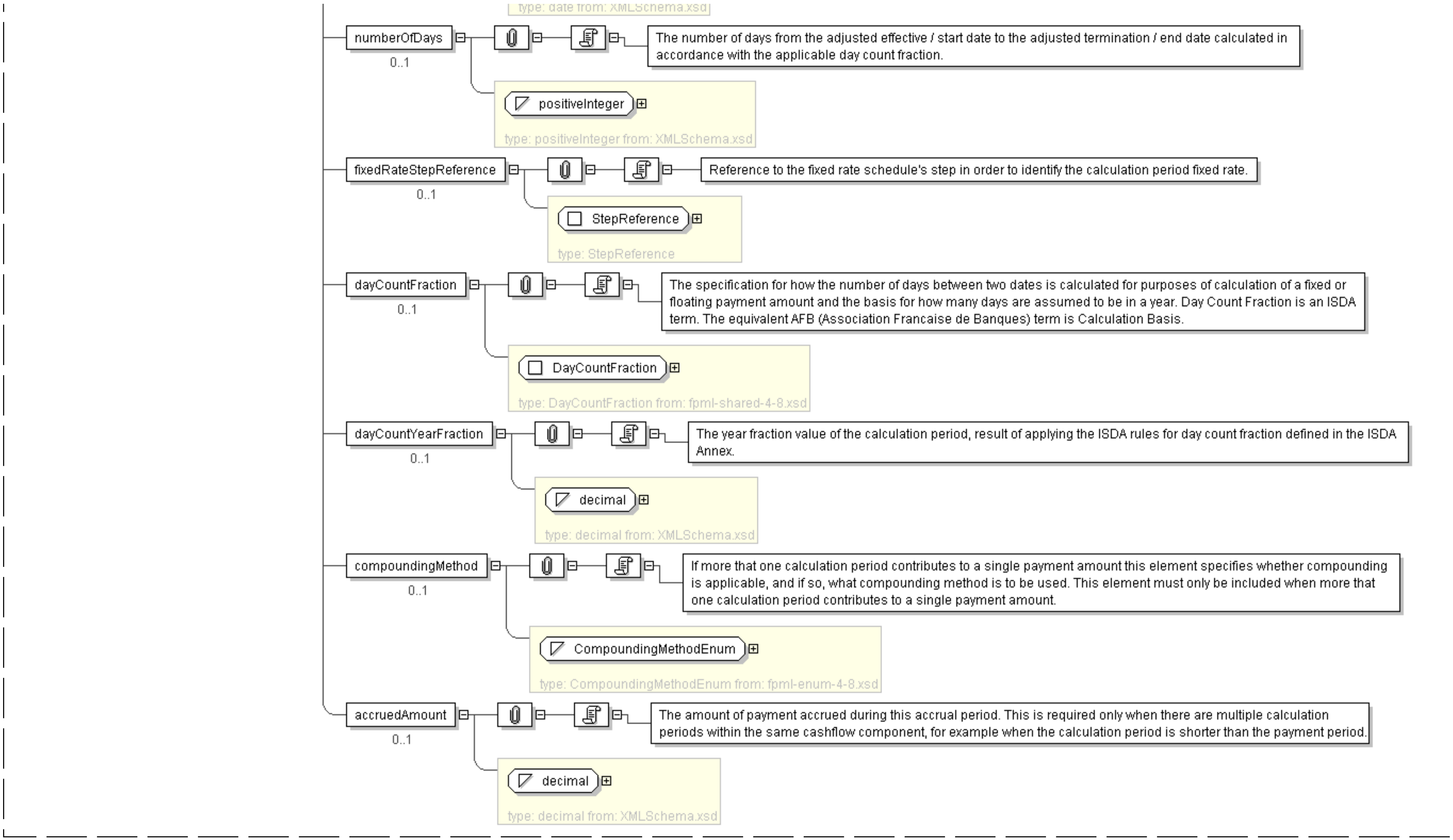
Name	CashflowCalculationPeriod
Used by (from the same schema document)	Complex Type **CashflowCalculationElements**
Abstract	no
Documentation	The period calculation details for a calculation/accrual period. This will include information about the dates and duration of the accrual period, the rate fixing (s), the notional in effect, and the amount of the accrual.

XML Instance Representation

```
<...>
   <calculatedRateReference> CashflowFixingReference </calculatedRateReference> [0..*]
   'Reference to the fixing details defined somewhere in the document.'

   <adjustedStartDate> xsd:date </adjustedStartDate> [0..1]
   'Date that defines the beginning of the calculation period.'

   <adjustedEndDate> xsd:date </adjustedEndDate> [0..1]
   'Date that defines the end of the calculation period.'

   <numberOfDays> xsd:positiveInteger </numberOfDays> [0..1]
   'The number of days from the adjusted effective / start date to the adjusted termination /
   end date calculated in accordance with the applicable day count fraction.'

   <fixedRateStepReference> StepReference </fixedRateStepReference> [0..1]
   'Reference to the fixed rate schedule\'s step in order to identify the calculation period
   fixed rate.'

   <dayCountFraction> DayCountFraction </dayCountFraction> [0..1]
   'The specification for how the number of days between two dates is calculated for purposes
   of calculation of a fixed or floating payment amount and the basis for how many days
   are assumed to be in a year. Day Count Fraction is an ISDA term. The equivalent
   AFB (Association Francaise de Banques) term is Calculation Basis.'

   <dayCountYearFraction> xsd:decimal </dayCountYearFraction> [0..1]
   'The year fraction value of the calculation period, result of applying the ISDA rules for
   day count fraction defined in the ISDA Annex.'

   <compoundingMethod> CompoundingMethodEnum </compoundingMethod> [0..1]
   'If more that one calculation period contributes to a single payment amount this
   element specifies whether compounding is applicable, and if so, what compounding method is
   to be used. This element must only be included when more that one calculation
   period contributes to a single payment amount.'

   <accruedAmount> xsd:decimal </accruedAmount> [0..1]
   'The amount of payment accrued during this accrual period. This is required only when there
   are multiple calculation periods within the same cashflow component, for example when
   the calculation period is shorter than the payment period.'

</...>
```

Diagram





Schema Component Representation

```
<xsd:complexType name="CashflowCalculationPeriod">
   <xsd:sequence>
      <xsd:element name="calculatedRateReference" type=" CashflowFixingReference "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="adjustedStartDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="adjustedEndDate" type=" xsd:date " minOccurs="0"/>
      <xsd:element name="numberOfDays" type=" xsd:positiveInteger " minOccurs="0"/>
      <xsd:element name="fixedRateStepReference" type=" StepReference " minOccurs="0"/>
      <xsd:element name="dayCountFraction" type=" DayCountFraction " minOccurs="0"/>
      <xsd:element name="dayCountYearFraction" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="compoundingMethod" type=" CompoundingMethodEnum " minOccurs="0"/>
      <xsd:element name="accruedAmount" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: CashflowFixing

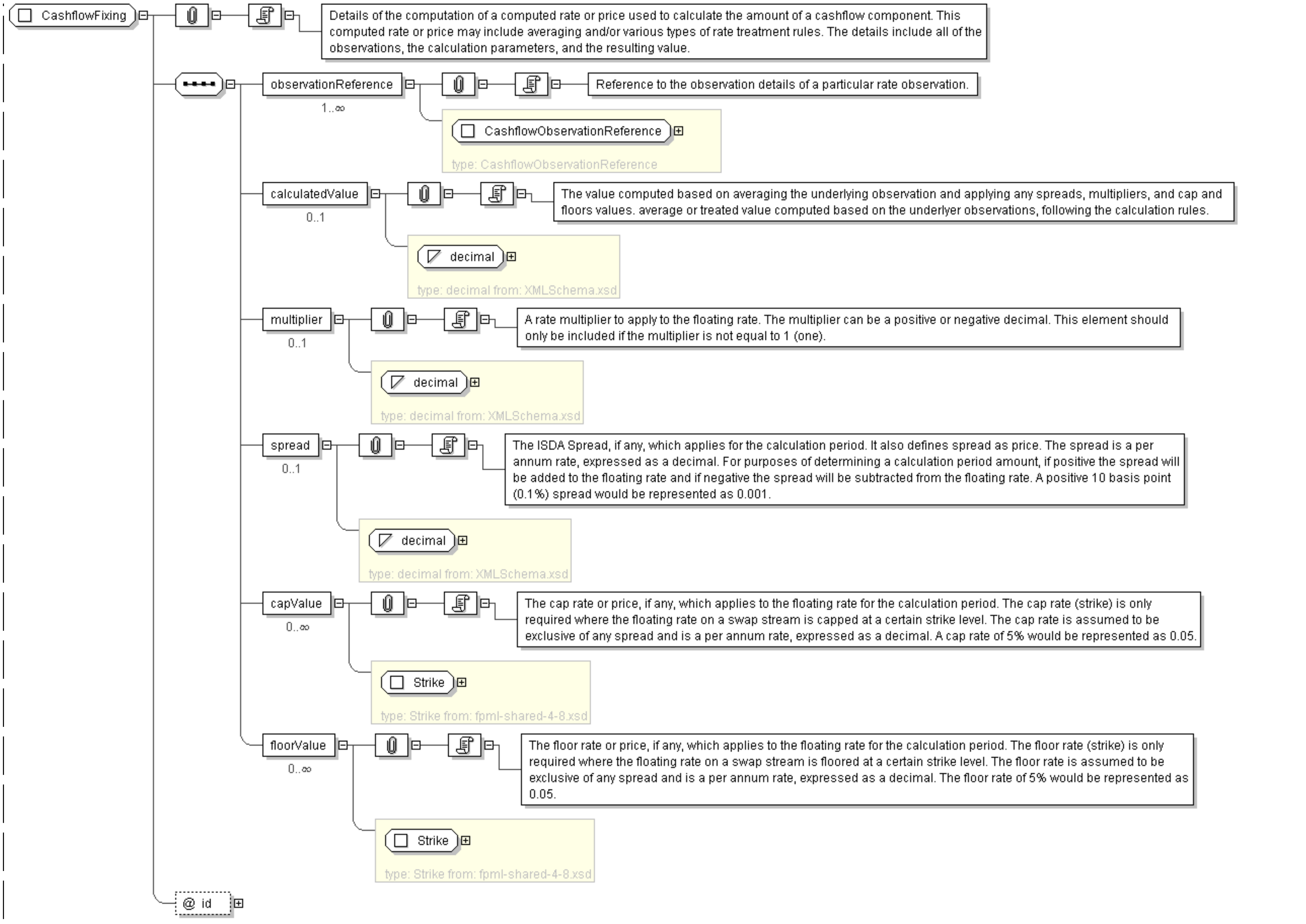
Super-types:	None
Sub-types:	None

Name	CashflowFixing
Used by (from the same schema document)	Complex Type **CashflowCalculationElements**
Abstract	no
Documentation	Details of the computation of a computed rate or price used to calculate the amount of a cashflow component. This computed rate or price may include averaging and/or various types of rate treatment rules. The details include all of the observations, the calculation parameters, and the resulting value.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <observationReference> CashflowObservationReference </observationReference> [1..*]
    'Reference to the observation details of a particular rate observation.'

    <calculatedValue> xsd:decimal </calculatedValue> [0..1]
    'The value computed based on averaging the underlying observation and applying any
    spreads, multipliers, and cap and floors values. average or treated value computed based on
    the underlyer observations, following the calculation rules.'

    <multiplier> xsd:decimal </multiplier> [0..1]
    'A rate multiplier to apply to the floating rate. The multiplier can be a positive or
    negative decimal. This element should only be included if the multiplier is not equal to
    1 (one).'

    <spread> xsd:decimal </spread> [0..1]
    'The ISDA Spread, if any, which applies for the calculation period. It also defines spread
    as price. The spread is a per annum rate, expressed as a decimal. For purposes of determining
    a calculation period amount, if positive the spread will be added to the floating rate and
    if negative the spread will be subtracted from the floating rate. A positive 10 basis
    point (0.1%) spread would be represented as 0.001.'

    <capValue> Strike </capValue> [0..*]
    'The cap rate or price, if any, which applies to the floating rate for the calculation
    period. The cap rate (strike) is only required where the floating rate on a swap stream
    is capped at a certain strike level. The cap rate is assumed to be exclusive of any spread
    and is a per annum rate, expressed as a decimal. A cap rate of 5% would be represented as 0.05.'

    <floorValue> Strike </floorValue> [0..*]
    'The floor rate or price, if any, which applies to the floating rate for the
    calculation period. The floor rate (strike) is only required where the floating rate on a
    swap stream is floored at a certain strike level. The floor rate is assumed to be exclusive
    of any spread and is a per annum rate, expressed as a decimal. The floor rate of 5% would
    be represented as 0.05.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowFixing">
   <xsd:sequence>
      <xsd:element name="observationReference" type=" CashflowObservationReference
      " maxOccurs="unbounded"/>
      <xsd:element name="calculatedValue" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="multiplier" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="spread" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="capValue" type=" Strike " minOccurs="0" maxOccurs="unbounded"/>
```

```
        <xsd:element name="floorValue" type=" Strike " minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CashflowFixingReference

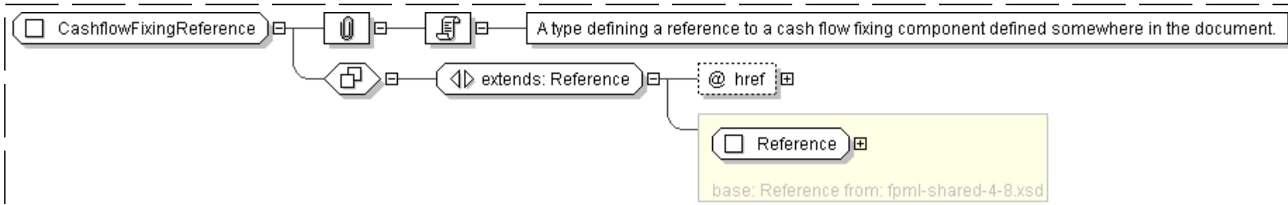
Super-types:	Reference < **CashflowFixingReference** (by extension)
Sub-types:	None

Name	CashflowFixingReference
Used by (from the same schema document)	Complex Type **CashflowCalculationPeriod**
Abstract	no
Documentation	A type defining a reference to a cash flow fixing component defined somewhere in the document.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowFixingReference">
    <xsd:complexContent>
        <xsd:extension base=" Reference ">
            <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="CashflowFixing"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: CashflowId

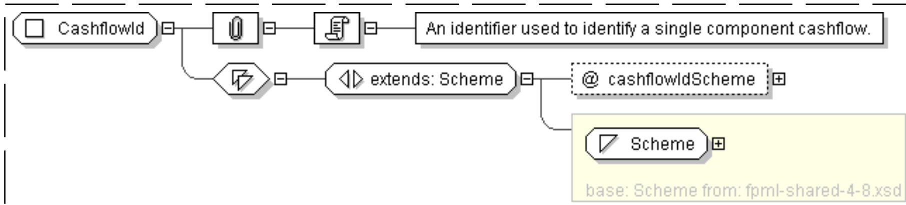
Super-types:	Scheme < **CashflowId** (by extension)
Sub-types:	None

Name	CashflowId
Used by (from the same schema document)	Complex Type **GrossCashflow**
Abstract	no
Documentation	An identifier used to identify a single component cashflow.

XML Instance Representation

```
<...
cashflowIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="cashflowIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: CashflowNotional

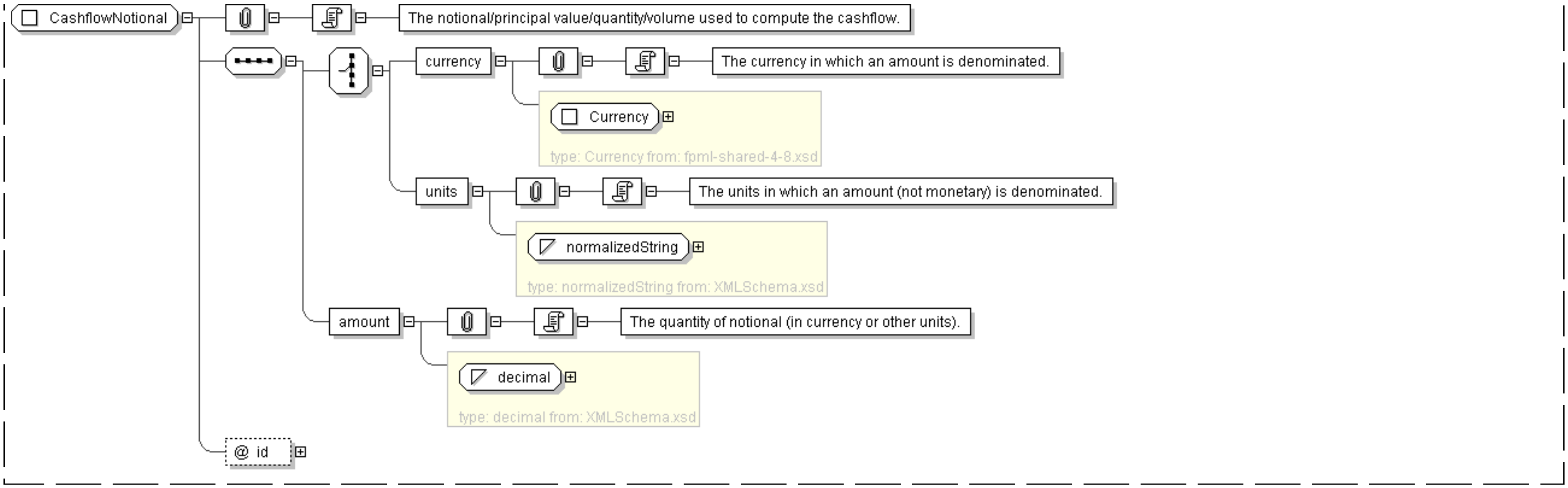
Super-types:	None
Sub-types:	None

Name	CashflowNotional
Used by (from the same schema document)	Complex Type **CashflowCalculationElements** , Complex Type **TradeDetails**
Abstract	no
Documentation	The notional/principal value/quantity/volume used to compute the cashflow.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <currency> Currency </currency> [1]
      'The currency in which an amount is denominated.'

      <units> xsd:normalizedString </units> [1]
      'The units in which an amount (not monetary) is denominated.'

End Choice
   <amount> xsd:decimal </amount> [1]
   'The quantity of notional (in currency or other units).'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowNotional">
   <xsd:sequence>
      <xsd:choice>
         <xsd:element name="currency" type=" Currency "/>
         <xsd:element name="units" type=" xsd:normalizedString "/>
      </xsd:choice>
      <xsd:element name="amount" type=" xsd:decimal "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: CashflowObservation

Super-types:	None
Sub-types:	None

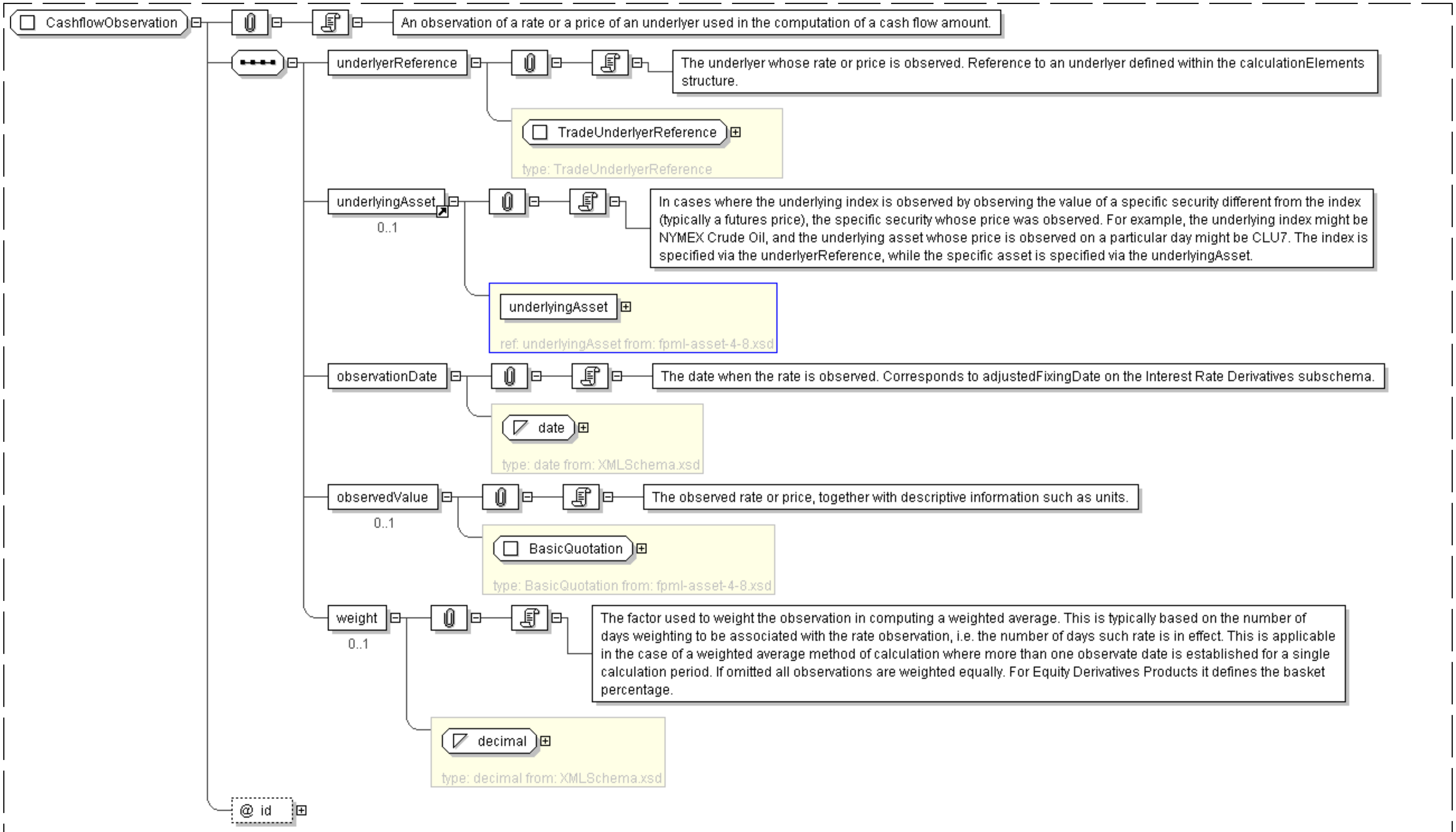
Name	CashflowObservation
Used by (from the same schema document)	Complex Type **CalculationDetails**
Abstract	no
Documentation	An observation of a rate or a price of an underlyer used in the computation of a cash flow amount.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <underlyerReference> TradeUnderlyerReference </underlyerReference> [1]
   'The underlyer whose rate or price is observed. Reference to an underlyer defined within
   the calculationElements structure.'

   <underlyingAsset> ... </underlyingAsset> [0..1]
   'In cases where the underlying index is observed by observing the value of a specific
   security different from the index (typically a futures price), the specific security
   whose price was observed. For example, the underlying index might be NYMEX Crude Oil, and
   the underlying asset whose price is observed on a particular day might be CLU7. The index
   is specified via the underlyerReference, while the specific asset is specified via
```

```
the underlyingAsset.'

<observationDate> xsd:date </observationDate> [1]
'The date when the rate is observed. Corresponds to adjustedFixingDate on the Interest
Rate Derivatives subschema.'

<observedValue> BasicQuotation </observedValue> [0..1]
'The observed rate or price, together with descriptive information such as units.'

<weight> xsd:decimal </weight> [0..1]
'The factor used to weight the observation in computing a weighted average. This is
typically based on the number of days weighting to be associated with the rate observation,
i.e. the number of days such rate is in effect. This is applicable in the case of a
weighted average method of calculation where more than one observate date is established for
a single calculation period. If omitted all observations are weighted equally. For
Equity Derivatives Products it defines the basket percentage.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowObservation">
   <xsd:sequence>
      <xsd:element name="underlyerReference" type=" TradeUnderlyerReference "/>
      <xsd:element ref=" underlyingAsset " minOccurs="0"/>
      <xsd:element name="observationDate" type=" xsd:date "/>
      <xsd:element name="observedValue" type=" BasicQuotation " minOccurs="0"/>
      <xsd:element name="weight" type=" xsd:decimal " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID " use="optional"/>
</xsd:complexType>
```

top

Complex Type: CashflowObservationReference

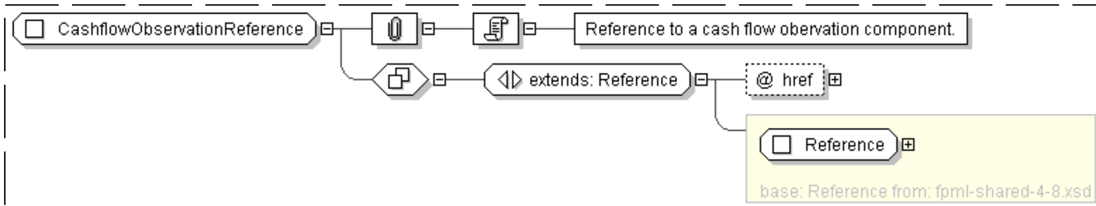
Super-types:	Reference < **CashflowObservationReference** (by extension)
Sub-types:	None

Name	CashflowObservationReference
Used by (from the same schema document)	Complex Type **CashflowFixing**
Abstract	no
Documentation	Reference to a cash flow obervation component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="CashflowObservationReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="CashflowObservation"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DefinePosition

Super-types:	Position < **DefinePosition** (by extension)
Sub-types:	None

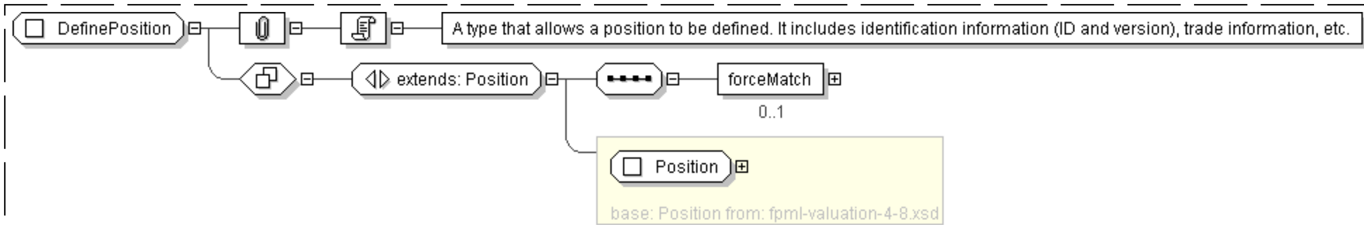
Name	DefinePosition
Used by (from the same schema document)	Complex Type **PositionsAsserted** , Complex Type **PositionsAsserted**

Abstract	no
Documentation	A type that allows a position to be defined. It includes identification information (ID and version), trade information, etc.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <positionId> PositionId </positionId> [1]
   'A version-independent identifier for the position, possibly based on trade identifier.'

   <version> xsd:positiveInteger </version> [0..1]
   'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
   newer versions. There is no requirement that version identifiers for a position be
   sequential or small, so for example timestamp-based version identifiers could be used.'

   <reportingRoles> ReportingRoles </reportingRoles> [0..1]
   'Information about the roles of the parties with respect to reporting the positions.'

   <constituent> PositionConstituent </constituent> [1]
   'The components that create this position.'

   <scheduledDate> ScheduledDate </scheduledDate> [0..*]
   'Position level schedule date, such as final payment dates, in a simple and flexible format.'

   <valuation> AssetValuation </valuation> [0..*]
   'Valuation reported for the position, such as NPV or accrued interest. The asset/
   object references in the valuations should refer to the deal or components of the deal in
   the position, e.g. legs, streams, or underlyers.'

   <forceMatch> PositionReference </forceMatch> [0..1]
   'An optional reference to a position supplied by the matching party that is known to match
   this one.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DefinePosition">
   <xsd:complexContent>
      <xsd:extension base=" Position ">
         <xsd:sequence>
            <xsd:element name="forceMatch" type=" PositionReference " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: GrossCashflow

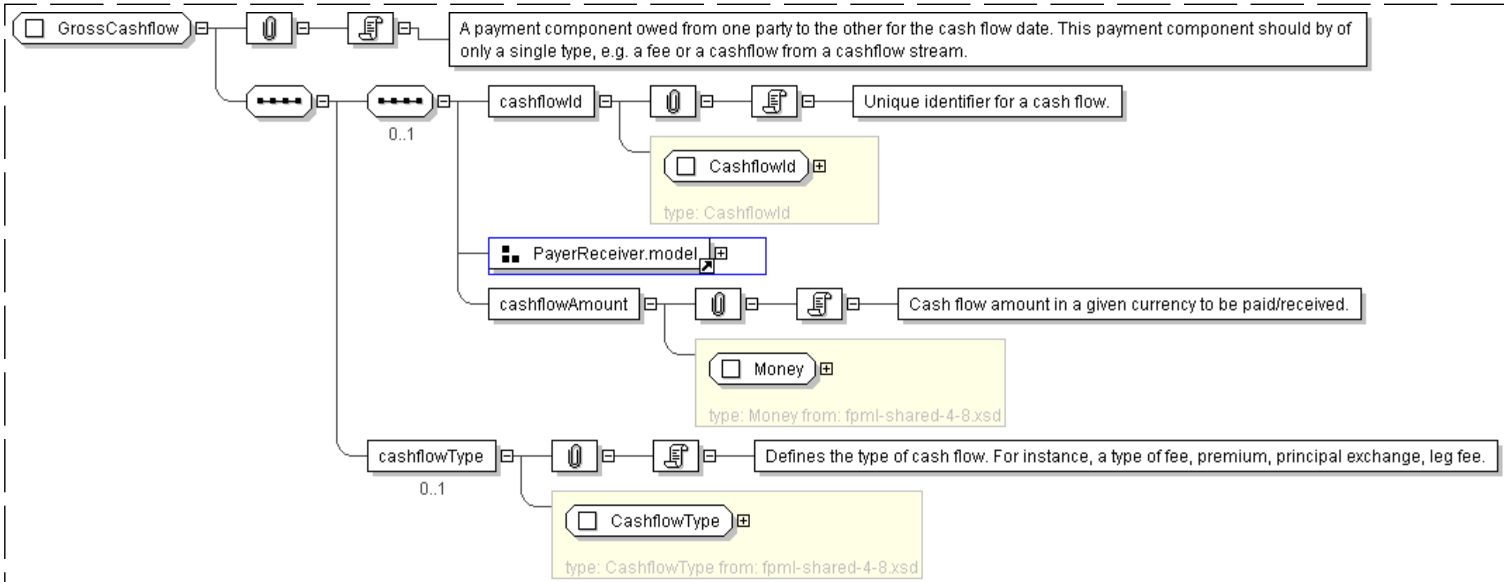
Super-types:	None
Sub-types:	None

Name	GrossCashflow
Used by (from the same schema document)	Complex Type **CalculationDetails** , Complex Type **PaymentDetails**
Abstract	no
Documentation	A payment component owed from one party to the other for the cash flow date. This payment component should by of only a single type, e.g. a fee or a cashflow from a cashflow stream.

XML Instance Representation

```
<...>
Start Sequence [0..1]
      <cashflowId> CashflowId </cashflowId> [1]
      'Unique identifier for a cash flow.'

      <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
      'A reference to the party responsible for making the payments defined by this structure.'

      <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
      'A reference to the party that receives the payments corresponding to this structure.'

      <cashflowAmount> Money </cashflowAmount> [1]
      'Cash flow amount in a given currency to be paid/received.'

End Sequence
   <cashflowType> CashflowType </cashflowType> [0..1]
   'Defines the type of cash flow. For instance, a type of fee, premium, principal exchange,
   leg fee.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GrossCashflow">
   <xsd:sequence>
      <xsd:sequence minOccurs="0">
```

```
        <xsd:element name="cashflowId" type=" CashflowId "/>
        <xsd:group ref=" PayerReceiver.model "/>
        <xsd:element name="cashflowAmount" type=" Money "/>
     </xsd:sequence>
     <xsd:element name="cashflowType" type=" CashflowType " minOccurs="0"/>
  </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: InitialPortfolioDefinition

Super-types:	PortfolioDefinition < **InitialPortfolioDefinition** (by extension)
Sub-types:	None

Name	InitialPortfolioDefinition
Used by (from the same schema document)	Complex Type **PositionsAsserted**
Abstract	no

XML Instance Representation

```
<...>
  <portfolioName> xsd:normalizedString </portfolioName> [1]
  <asOfDate> xsd:date </asOfDate> [1]
  <definingParty> PartyReference </definingParty> [1]
  <matchingParty> PartyReference </matchingParty> [0..1]
  <newPortfolioDefinition> xsd:boolean </newPortfolioDefinition> [1]
  'Indicates whether it\'s a definition of a new portfolio (true) or an update to an existing
  one (false).'
</...>
```

Diagram

Schema Component Representation

```
<xsd:complexType name="InitialPortfolioDefinition">
  <xsd:complexContent>
     <xsd:extension base=" PortfolioDefinition ">
        <xsd:sequence>
           <xsd:element name="newPortfolioDefinition" type=" xsd:boolean "/>
        </xsd:sequence>
     </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: MatchId

Super-types:	Scheme < **MatchId** (by extension)
Sub-types:	None

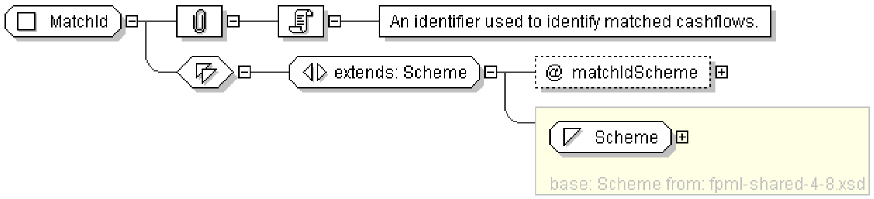
Name	MatchId

Used by (from the same schema document)	Complex Type **CancelTradeCashflows** , Complex Type **PositionProposedMatch** , Complex Type **TradeCashflowsAsserted** , Complex Type **TradeCashflowsProposedMatch**
Abstract	no
Documentation	An identifier used to identify matched cashflows.

XML Instance Representation

```
<...
matchIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MatchId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="matchIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PaymentDetails

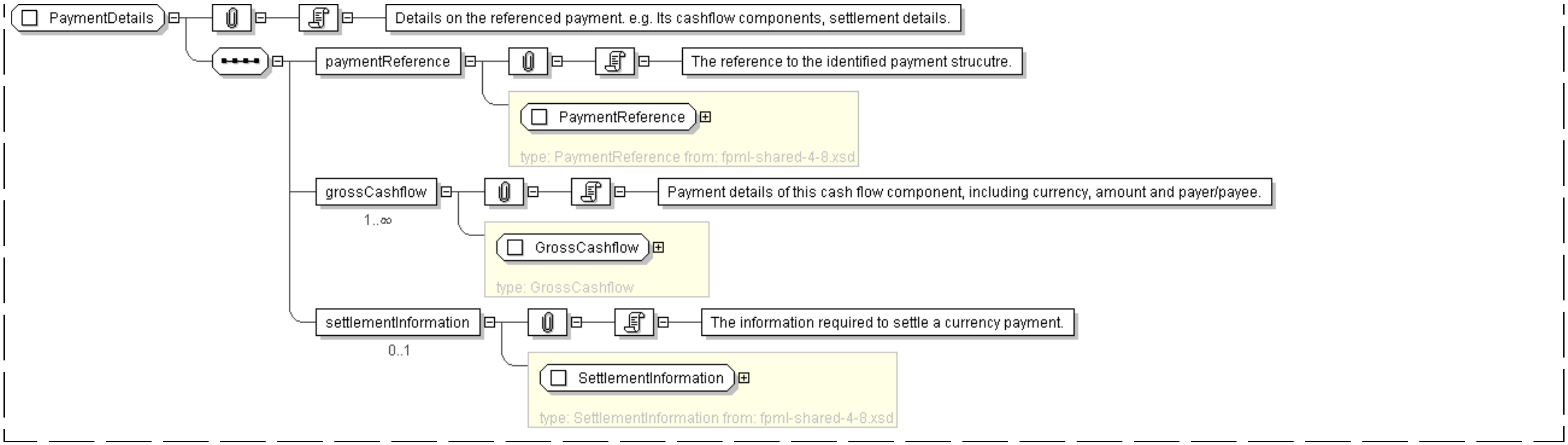
Super-types:	None
Sub-types:	None

Name	PaymentDetails
Abstract	no
Documentation	Details on the referenced payment. e.g. Its cashflow components, settlement details.

XML Instance Representation

```
<...>
   <paymentReference> PaymentReference </paymentReference> [1]
   'The reference to the identified payment strucutre.'

   <grossCashflow> GrossCashflow </grossCashflow> [1..*]
   'Payment details of this cash flow component, including currency, amount and payer/payee.'

   <settlementInformation> SettlementInformation </settlementInformation> [0..1]
   'The information required to settle a currency payment.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentDetails">
   <xsd:sequence>
      <xsd:element name="paymentReference" type=" PaymentReference "/>
      <xsd:element name="grossCashflow" type=" GrossCashflow " maxOccurs="unbounded"/>
      <xsd:element name="settlementInformation" type=" SettlementInformation " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PaymentId

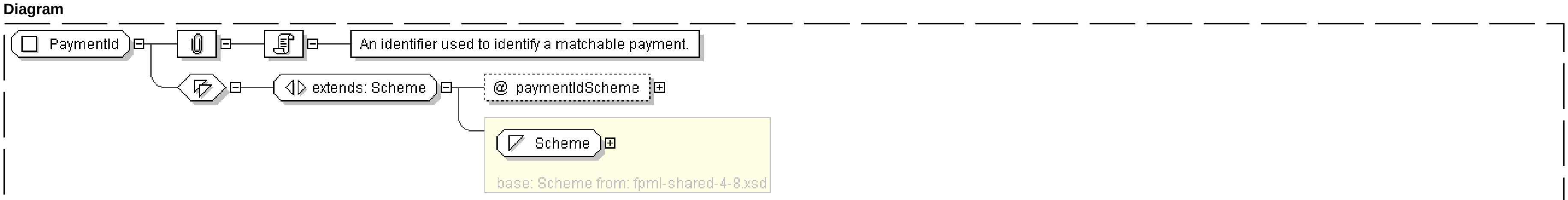
Super-types:	Scheme < **PaymentId** (by extension)
Sub-types:	None

Name	PaymentId
Used by (from the same schema document)	Complex Type **PaymentMatching**
Abstract	no
Documentation	An identifier used to identify a matchable payment.

XML Instance Representation

```
<...
paymentIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="paymentIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PaymentMatching

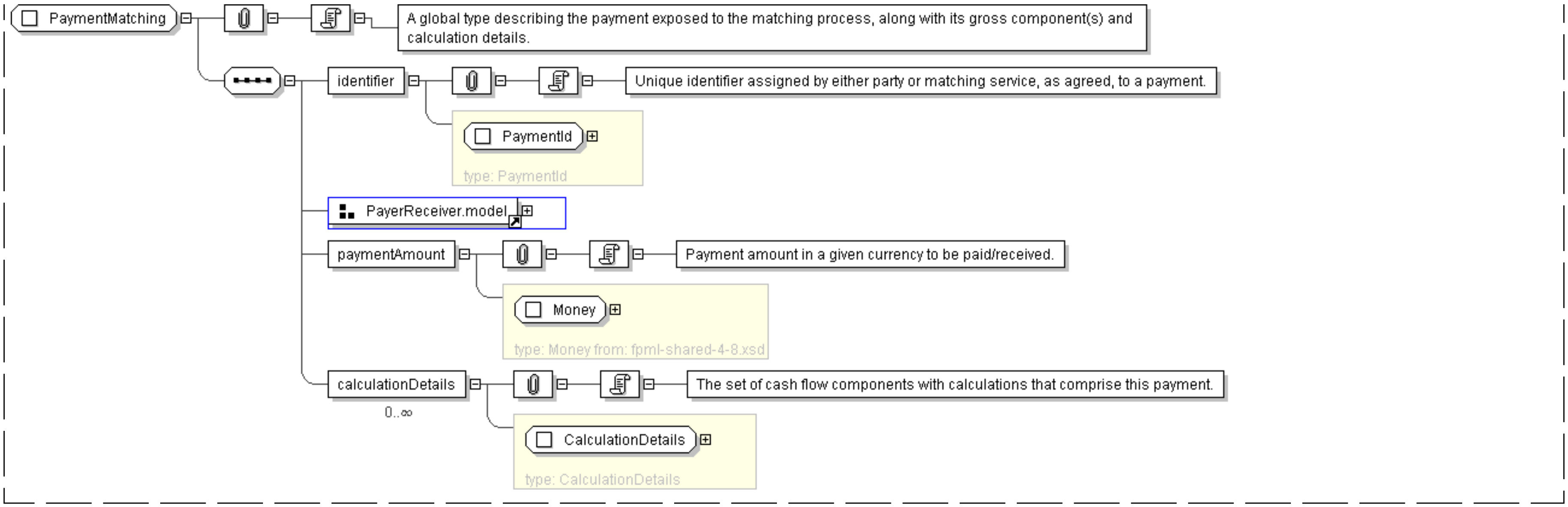
Super-types:	None
Sub-types:	None

Name	PaymentMatching
Used by (from the same schema document)	Model Group **TradeCashflows.model**
Abstract	no
Documentation	A global type describing the payment exposed to the matching process, along with its gross component(s) and calculation details.

XML Instance Representation

```
<...>
   <identifier> PaymentId </identifier> [1]
   'Unique identifier assigned by either party or matching service, as agreed, to a payment.'

   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentAmount> Money </paymentAmount> [1]
   'Payment amount in a given currency to be paid/received.'

   <calculationDetails> CalculationDetails </calculationDetails> [0..*]
   'The set of cash flow components with calculations that comprise this payment.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PaymentMatching">
   <xsd:sequence>
      <xsd:element name="identifier" type=" PaymentId "/>
      <xsd:group ref=" PayerReceiver.model "/>
      <xsd:element name="paymentAmount" type=" Money "/>
      <xsd:element name="calculationDetails" type=" CalculationDetails "
      minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PortfolioDefinition

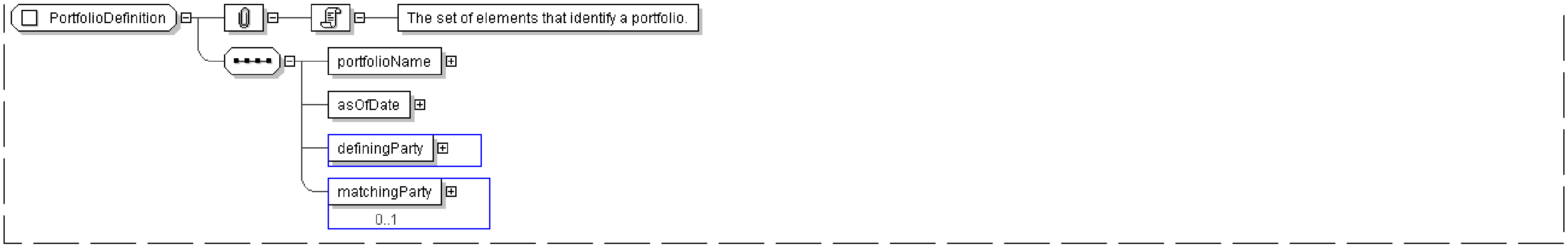
Super-types:	None
Sub-types:	• InitialPortfolioDefinition (by extension)

Name	PortfolioDefinition
Used by (from the same schema document)	Complex Type **PositionsAcknowledged** , Complex Type **PositionsMatchResults**
Abstract	no
Documentation	The set of elements that identify a portfolio.

XML Instance Representation

```
<...>
   <portfolioName> xsd:normalizedString </portfolioName> [1]
   <asOfDate> xsd:date </asOfDate> [1]
   <definingParty> PartyReference </definingParty> [1]
   <matchingParty> PartyReference </matchingParty> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PortfolioDefinition">
   <xsd:sequence>
      <xsd:element name="portfolioName" type=" xsd:normalizedString "/>
      <xsd:element name="asOfDate" type=" xsd:date "/>
      <xsd:element name="definingParty" type=" PartyReference "/>
      <xsd:element name="matchingParty" type=" PartyReference " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PositionMatchResult

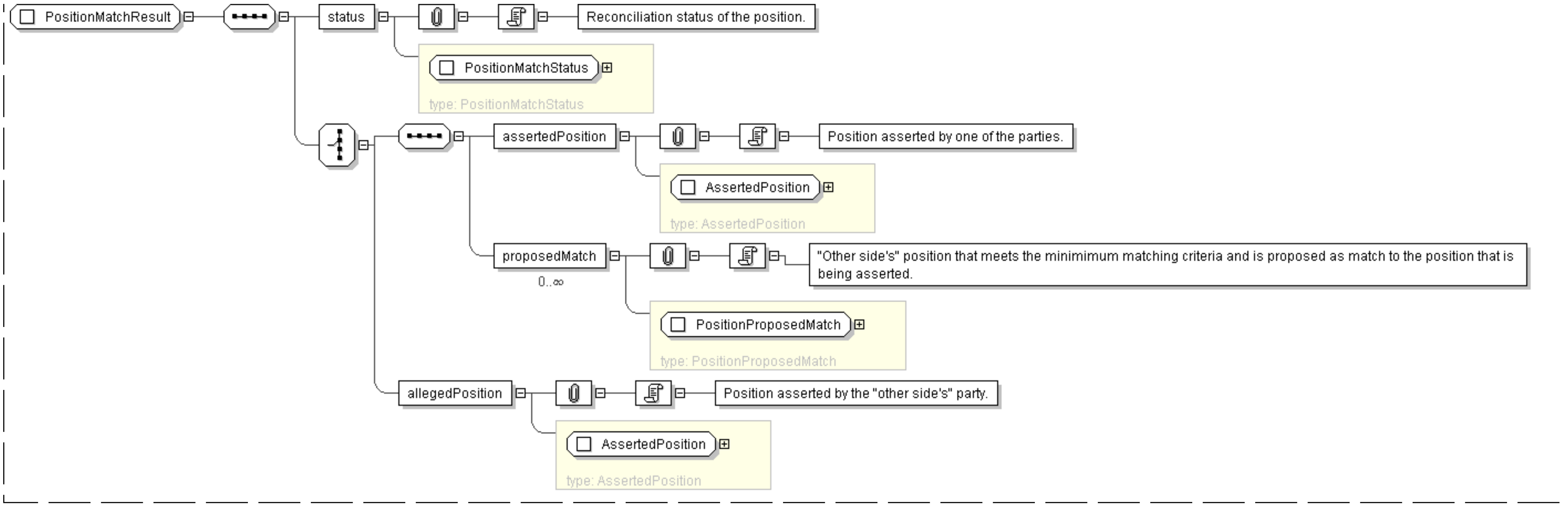
Super-types:	None
Sub-types:	None

Name	PositionMatchResult
Used by (from the same schema document)	Complex Type **PositionsMatchResults**
Abstract	no

XML Instance Representation

```
<...>
   <status> PositionMatchStatus </status> [1]
   'Reconciliation status of the position.'

Start Choice [1]
      <assertedPosition> AssertedPosition </assertedPosition> [1]
      'Position asserted by one of the parties.'

      <proposedMatch> PositionProposedMatch </proposedMatch> [0..*]
      '"Other side\'s" position that meets the minimimum matching criteria and is proposed as
      match to the position that is being asserted.'

      <allegedPosition> AssertedPosition </allegedPosition> [1]
      'Position asserted by the \"other side\'s\" party.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionMatchResult">
   <xsd:sequence>
      <xsd:element name="status" type=" PositionMatchStatus "/>
      <xsd:choice>
         <xsd:sequence>
            <xsd:element name="assertedPosition" type=" AssertedPosition "/>
            <xsd:element name="proposedMatch" type=" PositionProposedMatch "
            minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
         <xsd:element name="allegedPosition" type=" AssertedPosition "/>
      </xsd:choice>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PositionMatchStatus

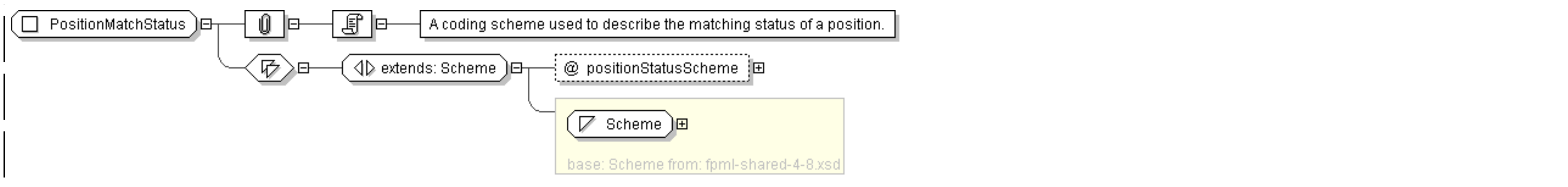
Super-types:	Scheme < **PositionMatchStatus** (by extension)
Sub-types:	None

Name	PositionMatchStatus
Used by (from the same schema document)	Complex Type **PositionMatchResult**
Abstract	no
Documentation	A coding scheme used to describe the matching status of a position.

XML Instance Representation

```
<...
positionStatusScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionMatchStatus">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="positionStatusScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/position-status"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PositionProposedMatch

Super-types:	None
Sub-types:	None

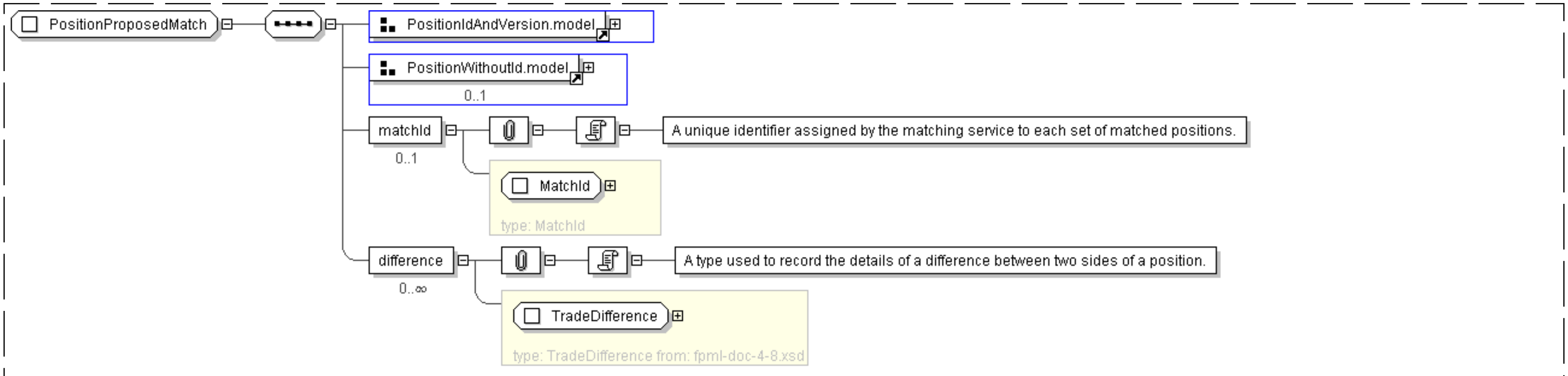
Name	PositionProposedMatch
Used by (from the same schema document)	Complex Type **PositionMatchResult**
Abstract	no

XML Instance Representation

```
<...>
   <positionId> PositionId </positionId> [1]
   'A version-independent identifier for the position, possibly based on trade identifier.'

   <version> xsd:positiveInteger </version> [0..1]
   'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
   newer versions. There is no requirement that version identifiers for a position be
   sequential or small, so for example timestamp-based version identifiers could be used.'

Start Group: PositionWithoutId.model [0..1]
      <reportingRoles> ReportingRoles </reportingRoles> [0..1]
      'Information about the roles of the parties with respect to reporting the positions.'

      <constituent> PositionConstituent </constituent> [1]
      'The components that create this position.'

      <scheduledDate> ScheduledDate </scheduledDate> [0..*]
      'Position level schedule date, such as final payment dates, in a simple and flexible format.'

      <valuation> AssetValuation </valuation> [0..*]
      'Valuation reported for the position, such as NPV or accrued interest. The asset/
      object references in the valuations should refer to the deal or components of the deal in
      the position, e.g. legs, streams, or underlyers.'

End Group: PositionWithoutId.model
   <matchId> MatchId </matchId> [0..1]
   'A unique identifier assigned by the matching service to each set of matched positions.'
```

```
    <difference> TradeDifference </difference> [0..*]
    'A type used to record the details of a difference between two sides of a position.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionProposedMatch">
   <xsd:sequence>
      <xsd:group ref=" PositionIdAndVersion.model "/>
      <xsd:group ref=" PositionWithoutId.model " minOccurs="0"/>
      <xsd:element name="matchId" type=" MatchId " minOccurs="0"/>
      <xsd:element name="difference" type=" TradeDifference " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PositionReference

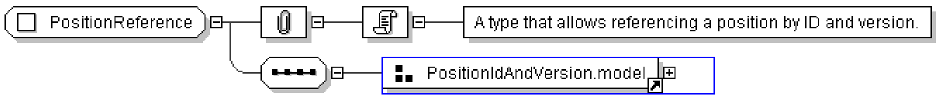
Super-types:	None
Sub-types:	None

Name	PositionReference
Used by (from the same schema document)	Complex Type **DefinePosition** , Complex Type **PositionsAcknowledged** , Complex Type **PositionsAcknowledged** , Complex Type **PositionsAsserted**
Abstract	no
Documentation	A type that allows referencing a position by ID and version.

XML Instance Representation

```
<...>
    <positionId> PositionId </positionId> [1]
    'A version-independent identifier for the position, possibly based on trade identifier.'

    <version> xsd:positiveInteger </version> [0..1]
    'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
    newer versions. There is no requirement that version identifiers for a position be
    sequential or small, so for example timestamp-based version identifiers could be used.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionReference">
   <xsd:sequence>
      <xsd:group ref=" PositionIdAndVersion.model "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PositionsAcknowledged

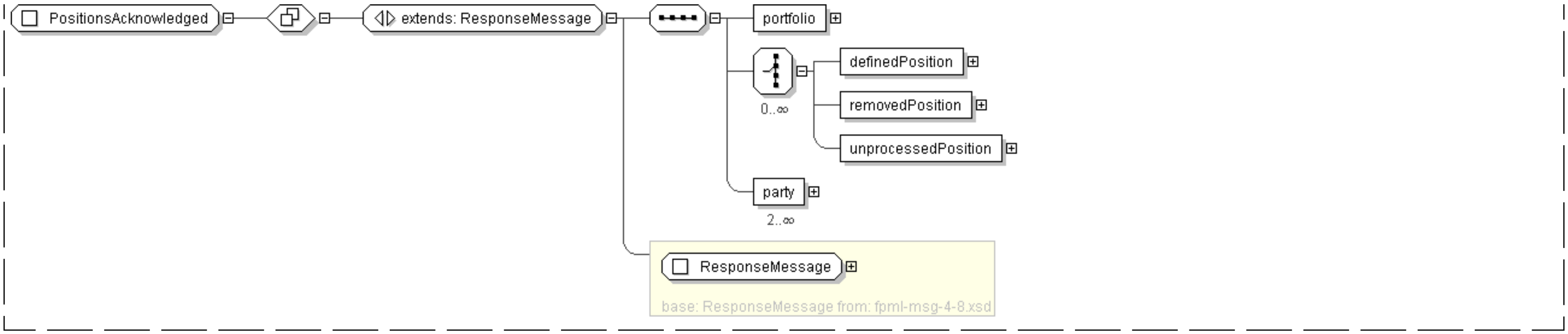
Super-types:	ResponseMessage < **PositionsAcknowledged** (by extension)
Sub-types:	None

Name	PositionsAcknowledged
Abstract	no

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <portfolio> PortfolioDefinition </portfolio> [1]
   'Contains the portfolio definition.'

Start Choice [0..*]
      <definedPosition> PositionReference </definedPosition> [1]
      <removedPosition> PositionReference </removedPosition> [1]
      <unprocessedPosition> UnprocessedPosition </unprocessedPosition> [1]
End Choice
   <party> Party </party> [2..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionsAcknowledged">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="portfolio" type=" PortfolioDefinition "/>
            <xsd:choice minOccurs="0" maxOccurs="unbounded">
               <xsd:element name="definedPosition" type=" PositionReference "/>
               <xsd:element name="removedPosition" type=" PositionReference "/>
               <xsd:element name="unprocessedPosition" type=" UnprocessedPosition "/>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PositionsAsserted

Super-types:	RequestMessage < **PositionsAsserted** (by extension)
Sub-types:	None

Name	PositionsAsserted
Abstract	no
Documentation	Request that a portfolio be defined, either by replacing any pre-existing definition, or by updating or removing individual positions.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
```

(e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> RequestMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<portfolio> InitialPortfolioDefinition **</portfolio>** [1]

'Contains the portfolio definition.'

<submissionsComplete> xsd:boolean **</submissionsComplete>** [1]

'Indicates whether all portfolio updates have been submitted for this as-of date'

Start Choice [1]

'Either start from scratch and define new positions, or just update and remove positions'

<replaceAllPositions> Empty **</replaceAllPositions>** [1]

'Indicates that this message replaces all previous positions for this portfolio.'

<definePosition> DefinePosition **</definePosition>** [1..*]

'Used to specify a new position.'

Start Choice [0..*]
<definePosition> DefinePosition **</definePosition>** [1]

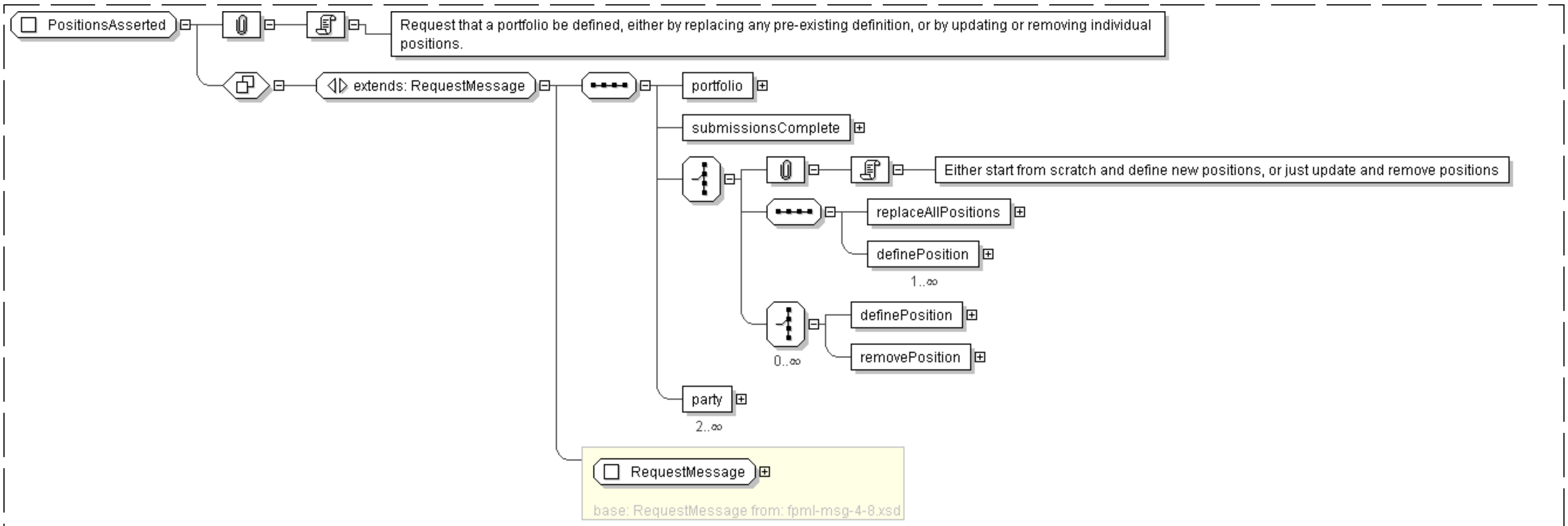
'Used to specify a position, whether it is a new or updated position.'

<removePosition> PositionReference **</removePosition>** [1]

'Used to remove a position from the portfolio.'

End Choice
End Choice
<party> Party **</party>** [2..*]
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionsAsserted">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="portfolio" type=" InitialPortfolioDefinition "/>
            <xsd:element name="submissionsComplete" type=" xsd:boolean "/>
            <xsd:choice>
               <xsd:sequence>
                  <xsd:element name="replaceAllPositions" type=" Empty "/>
                  <xsd:element name="definePosition" type=" DefinePosition " maxOccurs="unbounded"/>
               </xsd:sequence>
               <xsd:choice minOccurs="0" maxOccurs="unbounded">
                  <xsd:element name="definePosition" type=" DefinePosition "/>
                  <xsd:element name="removePosition" type=" PositionReference "/>
               </xsd:choice>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PositionsMatchResults

Super-types:	ResponseMessage < **PositionsMatchResults** (by extension)
Sub-types:	None

Name	PositionsMatchResults
Abstract	no
Documentation	Reports the results of the portfolio reconciliation operation. It states the matching results for multiple positions, supporting the match, mismatched, unmatched and alleged position results.

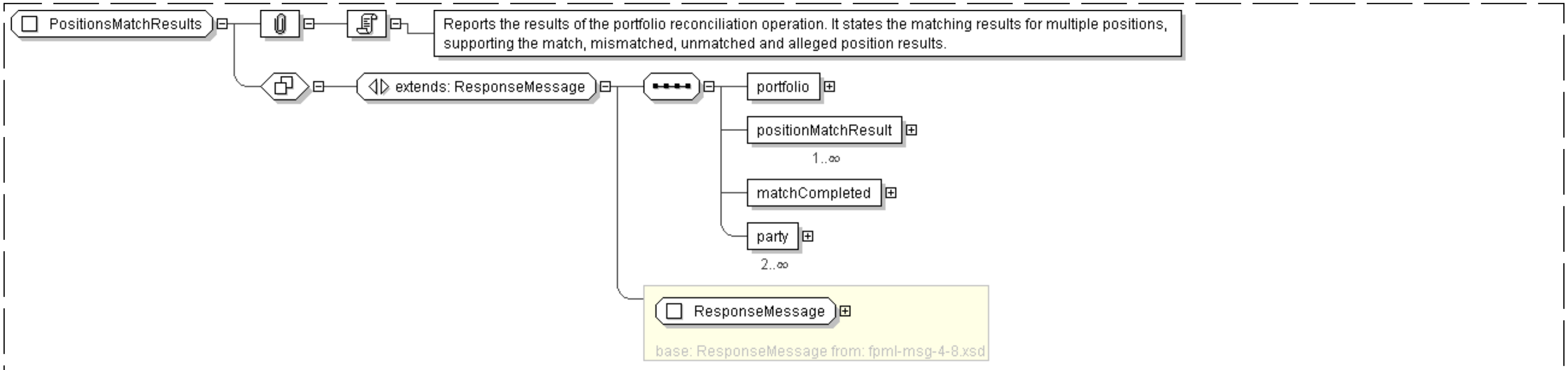
XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <portfolio> PortfolioDefinition </portfolio> [1]
   'Contains the portfolio definition.'
```

```
<positionMatchResult> PositionMatchResult </positionMatchResult> [1..*]
<matchCompleted> xsd:boolean </matchCompleted> [1]
```
'Flag indicating whether the Matching Service has finished sending all matching results.'

```
<party> Party </party> [2..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionsMatchResults">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="portfolio" type=" PortfolioDefinition "/>
            <xsd:element name="positionMatchResult" type=" PositionMatchResult " maxOccurs="unbounded"/>
            <xsd:element name="matchCompleted" type=" xsd:boolean "/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestPortfolio

Super-types:	RequestMessage < **RequestPortfolio** (by extension)
Sub-types:	None

Name	RequestPortfolio
Abstract	no
Documentation	A type defining the content model for a message requesting a portfolio (for reconciliation purposes).

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
```
'Indicate which version of the FpML Schema an FpML message adheres to.'

```
"
expectedBuild=" xsd:positiveInteger [0..1]
```
'This optional attribute can be supplied by a message creator in an FpML instance to

specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> RequestMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<asOfDate> ... </asOfDate> [0..1]

'The date for which this request desires positions and valuations.'

Start Choice [1]
<portfolioName> xsd:normalizedString **</portfolioName>** [1]

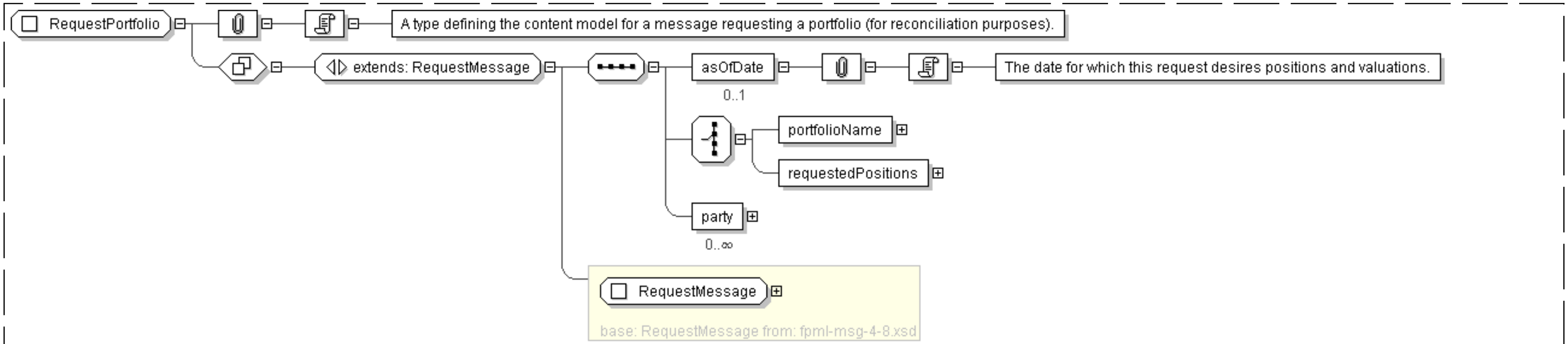
'The name of the portfolio that is requested.'

<requestedPositions> RequestedPositions **</requestedPositions>** [1]

'The name of the data set (portfolio, product type, etc.) that this request corresponds to. Describes the desired report.'

End Choice
<party> Party **</party>** [0..*]
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestPortfolio">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="asOfDate" minOccurs="0"/>
            <xsd:choice>
               <xsd:element name="portfolioName" type=" xsd:normalizedString "/>
               <xsd:element name="requestedPositions" type=" RequestedPositions "/>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: StepReference

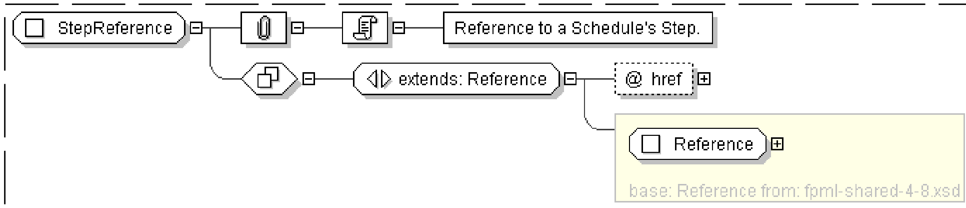
Super-types:	Reference < **StepReference** (by extension)
Sub-types:	None

Name	StepReference
Used by (from the same schema document)	Complex Type **CashflowCalculationPeriod**
Abstract	no
Documentation	Reference to a Schedule's Step.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="StepReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="Step"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeCashflowsAsserted

Super-types:	NotificationMessage < **TradeCashflowsAsserted** (by extension)
Sub-types:	None

Name	TradeCashflowsAsserted
Abstract	no
Documentation	Message for assertion of payments to be reconciled. Notification message that submits cashflows that need to be reconciled per payment date at the trade level.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'
```

"
actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">
<header> NotificationMessageHeader </header> [1]
<validation> Validation </validation> [0..*]
<asOfDate> xsd:dateTime **</asOfDate>** [0..1]

'The date and time at which the set of cashflows was defined.'

<tradeCashflowsId> TradeCashflowsId **</tradeCashflowsId>** [1]

'Unique identifier assigned by the party asserting the set of cashflows to be reconciled.'

<tradeIdentifyingItems> TradeIdentifyingItems **</tradeIdentifyingItems>** [1]

'Structure that holds reference to the trade through the tradeId and optionally some trade-specific elements for identifying the trade in the case of trades that have not been negotiated through electronic platforms and for which the counterparty\'s trade ID has not been captured.'

<adjustedPaymentDate> xsd:date **</adjustedPaymentDate>** [1]

'The adjusted date in which the payments are being paid/received.'

<payment> PaymentMatching **</payment>** [1..*]

'Specifies the payment that is exposed to the matching process. Usually there will be a single payment but for cross-currency swaps a different payment per currency shall be provided.'

<matchId> MatchId **</matchId>** [0..1]

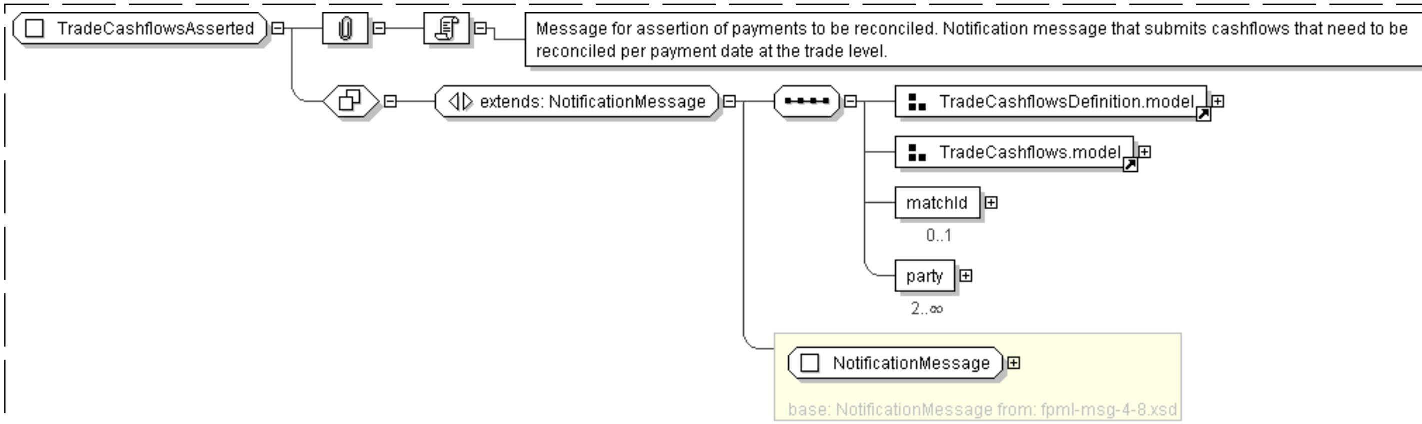
'A unique identifier assigned by either party, or matching service, as agreed, to each set of matched cashflows.'

<party> Party **</party>** [2..*]

'One party element for each of the principal parties and any other party that is referenced.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeCashflowsAsserted">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:group ref=" TradeCashflowsDefinition.model "/>
            <xsd:group ref=" TradeCashflows.model "/>
            <xsd:element name="matchId" type=" MatchId " minOccurs="0"/>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeCashflowsId

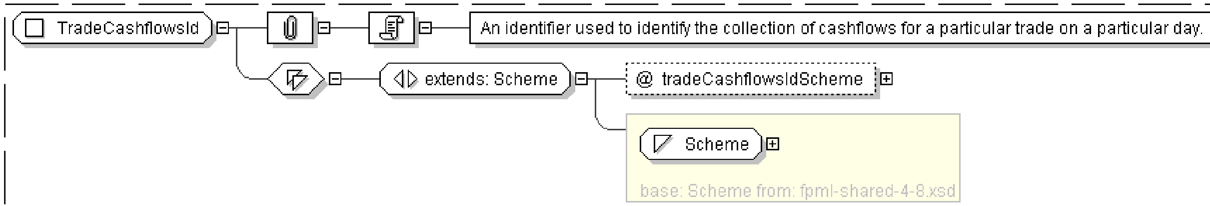
Super-types:	Scheme < **TradeCashflowsId** (by extension)
Sub-types:	None

Name	TradeCashflowsId
Used by (from the same schema document)	Model Group **IdAndTradeCashflows.model** , Model Group **TradeCashflowsDefinition.model**
Abstract	no
Documentation	An identifier used to identify the collection of cashflows for a particular trade on a particular day.

XML Instance Representation

```
<...
tradeCashflowsIdScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeCashflowsId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="tradeCashflowsIdScheme" type=" xsd:anyURI "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: TradeCashflowsMatchResult

Super-types:	ResponseMessage < **TradeCashflowsMatchResult** (by extension)
Sub-types:	None

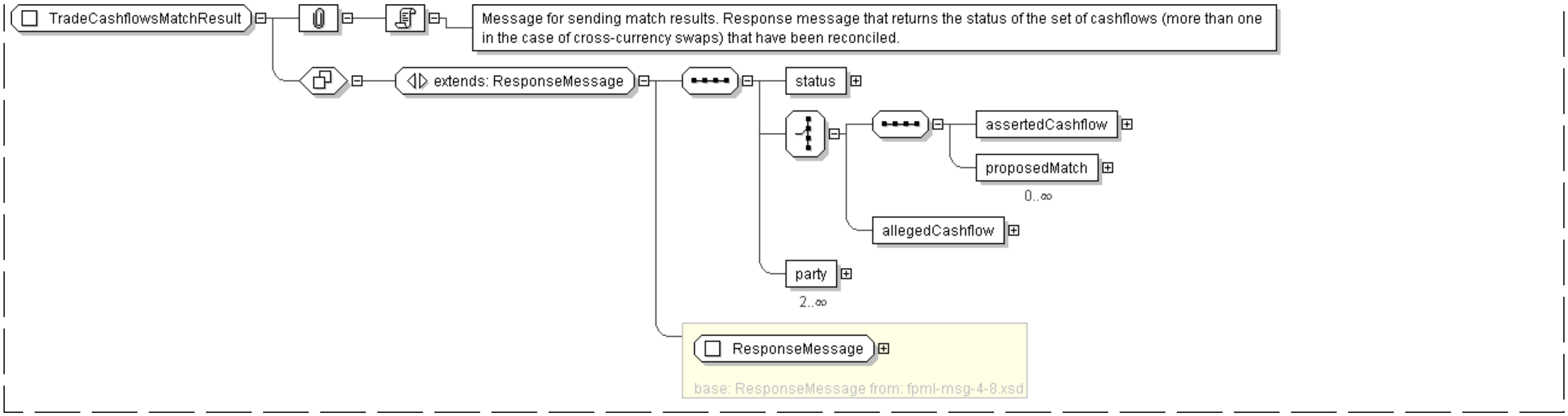
Name	TradeCashflowsMatchResult

Abstract	no
Documentation	Message for sending match results. Response message that returns the status of the set of cashflows (more than one in the case of cross-currency swaps) that have been reconciled.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> ResponseMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <status> TradeCashflowsStatus </status> [1]
   'Reconciliation status of the set of cashflows.'

Start Choice [1]
      <assertedCashflow> AssertedCashflow </assertedCashflow> [1]
      'Cashflow (or set of cashflows for cross-currency swap) asserted by one of the parties.'

      <proposedMatch> TradeCashflowsProposedMatch </proposedMatch> [0..*]
      '"Other side\'s" cashflow that meets the minimimum matching criteria and is proposed as
      match to the cashflow that is being asserted.'

      <allegedCashflow> AllegedCashflow </allegedCashflow> [1]
      'Cashflow (or set of cashflows for cross-currency swap) asserted by the \"other side\'s
      \" party.'

End Choice
   <party> Party </party> [2..*]
   'One party element for each of the principal parties and any other party that is referenced.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeCashflowsMatchResult">
   <xsd:complexContent>
      <xsd:extension base=" ResponseMessage ">
         <xsd:sequence>
            <xsd:element name="status" type=" TradeCashflowsStatus "/>
            <xsd:choice>
               <xsd:sequence>
                  <xsd:element name="assertedCashflow" type=" AssertedCashflow "/>
                  <xsd:element name="proposedMatch" type=" TradeCashflowsProposedMatch "
                  minOccurs="0" maxOccurs="unbounded"/>
               </xsd:sequence>
               <xsd:element name="allegedCashflow" type=" AllegedCashflow "/>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="2" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TradeCashflowsProposedMatch

Super-types:	None
Sub-types:	None

Name	TradeCashflowsProposedMatch
Used by (from the same schema document)	Complex Type **TradeCashflowsMatchResult**
Abstract	no
Documentation	"Other side's" cashflow that meets the minimimum matching criteria and is proposed as match to the cash flow that is being asserted.

XML Instance Representation

```
<...>
   <tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
   'Unique identifier assigned by either party to a set of cashflows.'

Start Group: TradeCashflows.model [0..1]
      <tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
      'Structure that holds reference to the trade through the tradeId and optionally some
      trade-specific elements for identifying the trade in the case of trades that have not
```

been negotiated through electronic platforms and for which the counterparty\'s trade ID has not been captured.'

<adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]

'The adjusted date in which the payments are being paid/received.'

<payment> PaymentMatching </payment> [1..*]

'Specifies the payment that is exposed to the matching process. Usually there will be a single payment but for cross-currency swaps a different payment per currency shall be provided.'

End Group: TradeCashflows.model

<matchId> MatchId </matchId> [1]

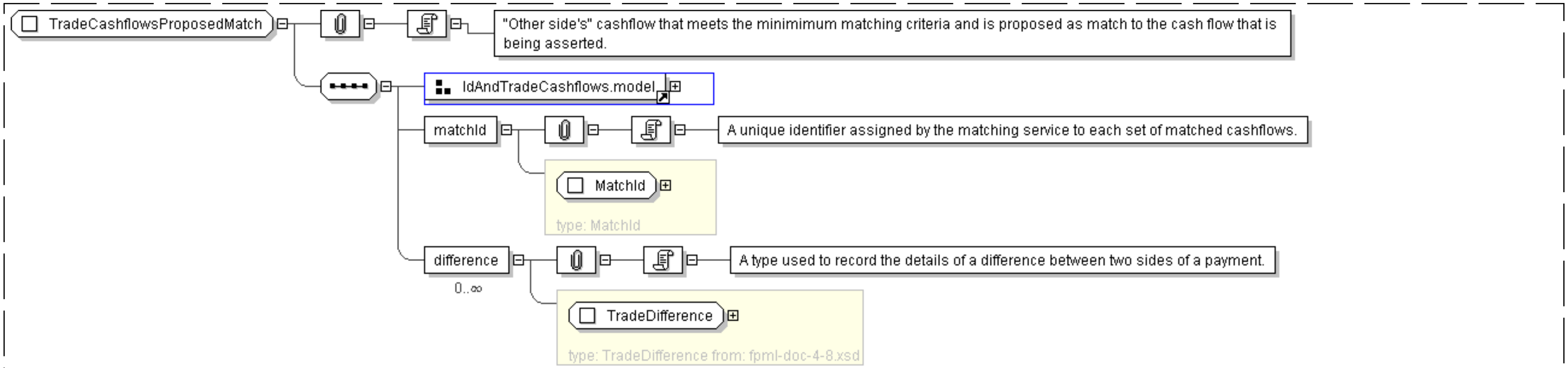
'A unique identifier assigned by the matching service to each set of matched cashflows.'

<difference> TradeDifference </difference> [0..*]

'A type used to record the details of a difference between two sides of a payment.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeCashflowsProposedMatch">
   <xsd:sequence>
      <xsd:group ref=" IdAndTradeCashflows.model "/>
      <xsd:element name="matchId" type=" MatchId "/>
      <xsd:element name="difference" type=" TradeDifference " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TradeCashflowsStatus

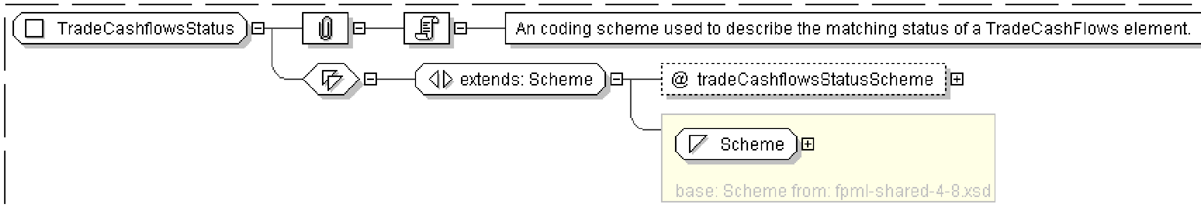
Super-types:	Scheme < **TradeCashflowsStatus** (by extension)
Sub-types:	None

Name	TradeCashflowsStatus
Used by (from the same schema document)	Complex Type **TradeCashflowsMatchResult**
Abstract	no
Documentation	An coding scheme used to describe the matching status of a TradeCashFlows element.

XML Instance Representation

```
<...
tradeCashflowsStatusScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeCashflowsStatus">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="tradeCashflowsStatusScheme" type=" xsd:anyURI " default="http://www.
         fpml.org/coding-scheme/trade-cashflows-status"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

[top](#)

Complex Type: TradeDetails

Super-types:	None
Sub-types:	None

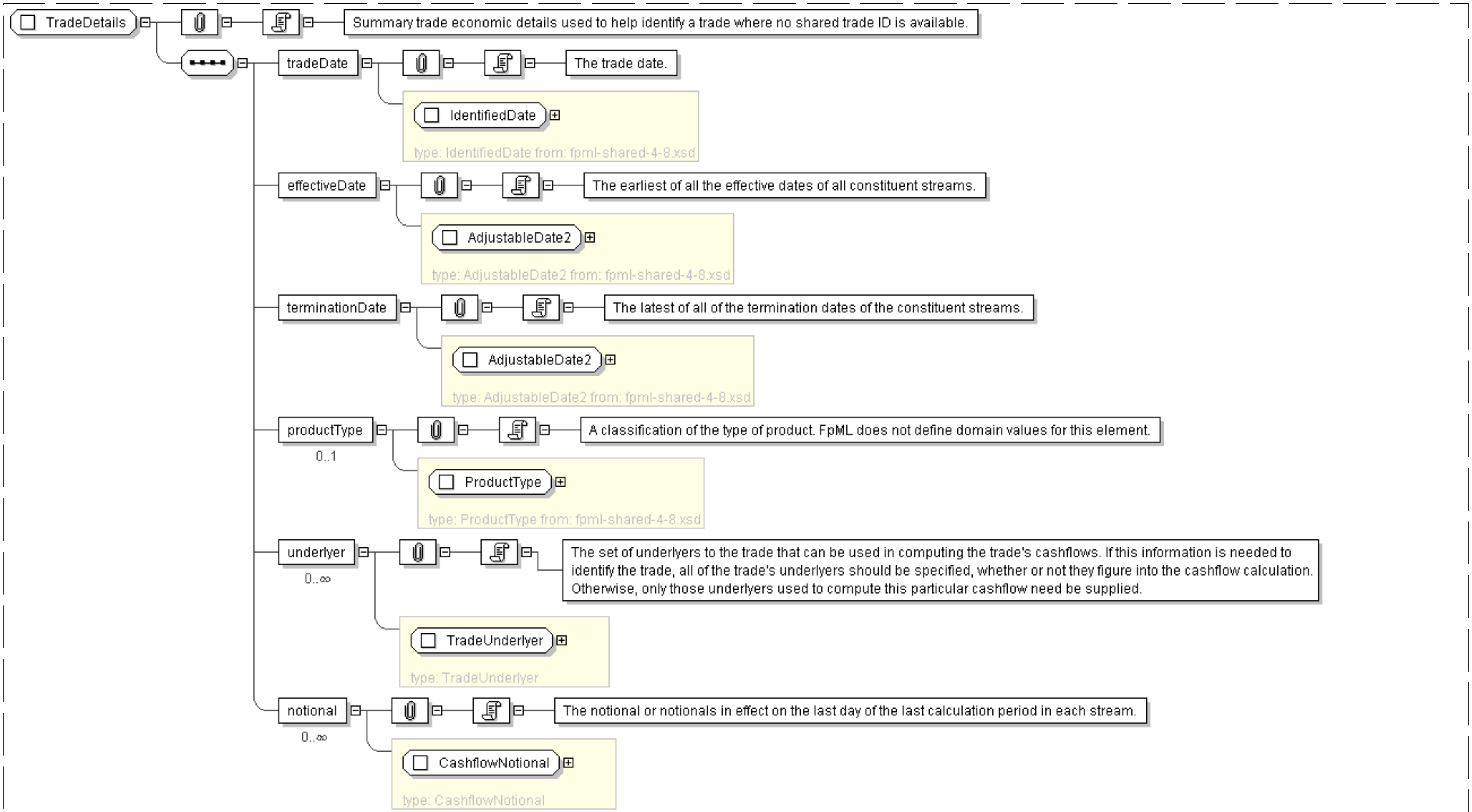
Name	TradeDetails
Used by (from the same schema document)	Complex Type **TradeIdentifyingItems**
Abstract	no
Documentation	Summary trade economic details used to help identify a trade where no shared trade ID is available.

XML Instance Representation

```
<...>
   <tradeDate> IdentifiedDate </tradeDate> [1]
   'The trade date.'

   <effectiveDate> AdjustableDate2 </effectiveDate> [1]
   'The earliest of all the effective dates of all constituent streams.'

   <terminationDate> AdjustableDate2 </terminationDate> [1]
   'The latest of all of the termination dates of the constituent streams.'

   <productType> ProductType </productType> [0..1]
   'A classification of the type of product. FpML does not define domain values for this element.'

   <underlyer> TradeUnderlyer </underlyer> [0..*]
   'The set of underlyers to the trade that can be used in computing the trade\'s cashflows.
   If this information is needed to identify the trade, all of the trade\'s underlyers should
   be specified, whether or not they figure into the cashflow calculation. Otherwise, only
   those underlyers used to compute this particular cashflow need be supplied.'

   <notional> CashflowNotional </notional> [0..*]
```

```
'The notional or notionals in effect on the last day of the last calculation period in
each stream.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeDetails">
   <xsd:sequence>
      <xsd:element name="tradeDate" type=" IdentifiedDate "/>
      <xsd:element name="effectiveDate" type=" AdjustableDate2 "/>
      <xsd:element name="terminationDate" type=" AdjustableDate2 "/>
      <xsd:element name="productType" type=" ProductType " minOccurs="0"/>
      <xsd:element name="underlyer" type=" TradeUnderlyer " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="notional" type=" CashflowNotional " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TradeIdentifyingItems

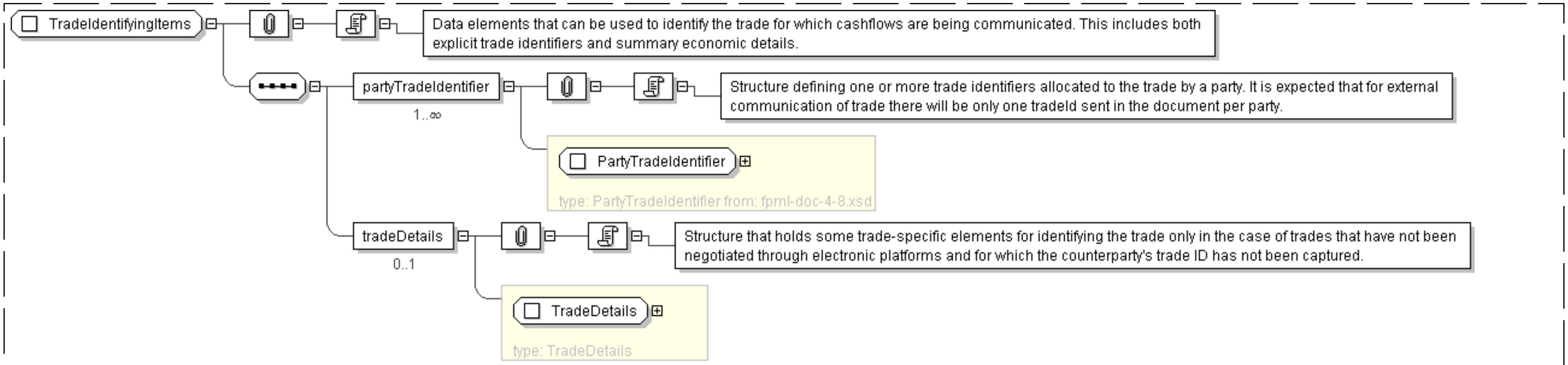
Super-types:	None
Sub-types:	None

Name	TradeIdentifyingItems
Used by (from the same schema document)	Model Group **TradeCashflows.model**
Abstract	no
Documentation	Data elements that can be used to identify the trade for which cashflows are being communicated. This includes both explicit trade identifiers and summary economic details.

XML Instance Representation

```
<...>
   <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1..*]
   'Structure defining one or more trade identifiers allocated to the trade by a party. It
   is expected that for external communication of trade there will be only one tradeId sent in
   the document per party.'

   <tradeDetails> TradeDetails </tradeDetails> [0..1]
   'Structure that holds some trade-specific elements for identifying the trade only in the
   case of trades that have not been negotiated through electronic platforms and for which
   the counterparty\'s trade ID has not been captured.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeIdentifyingItems">
   <xsd:sequence>
      <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier " maxOccurs="unbounded"/>
      <xsd:element name="tradeDetails" type=" TradeDetails " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: TradeUnderlyer

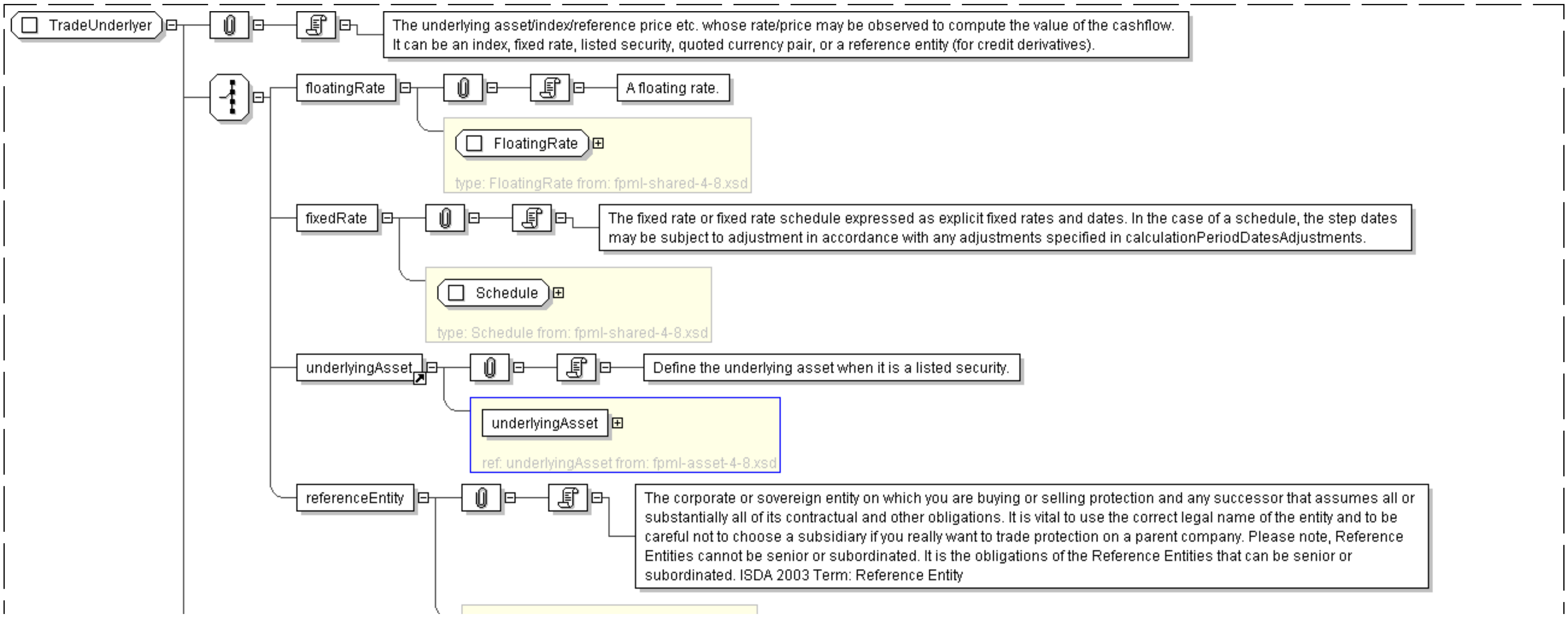
Super-types:	None
Sub-types:	None

Name	TradeUnderlyer
Used by (from the same schema document)	Complex Type **CashflowCalculationElements** , Complex Type **TradeDetails**
Abstract	no
Documentation	The underlying asset/index/reference price etc. whose rate/price may be observed to compute the value of the cashflow. It can be an index, fixed rate, listed security, quoted currency pair, or a reference entity (for credit derivatives).

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Choice [1]
      <floatingRate> FloatingRate </floatingRate> [1]
      'A floating rate.'

      <fixedRate> Schedule </fixedRate> [1]
      'The fixed rate or fixed rate schedule expressed as explicit fixed rates and dates. In the
      case of a schedule, the step dates may be subject to adjustment in accordance with
      any adjustments specified in calculationPeriodDatesAdjustments.'

      <underlyingAsset> ... </underlyingAsset> [1]
      'Define the underlying asset when it is a listed security.'

      <referenceEntity> LegalEntity </referenceEntity> [1]
      'The corporate or sovereign entity on which you are buying or selling protection and
      any successor that assumes all or substantially all of its contractual and other
      obligations. It is vital to use the correct legal name of the entity and to be careful not
      to choose a subsidiary if you really want to trade protection on a parent company. Please
      note, Reference Entities cannot be senior or subordinated. It is the obligations of
      the Reference Entities that can be senior or subordinated. ISDA 2003 Term: Reference Entity'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeUnderlyer">
   <xsd:choice>
      <xsd:element name="floatingRate" type=" FloatingRate "/>
      <xsd:element name="fixedRate" type=" Schedule "/>
      <xsd:element ref=" underlyingAsset "/>
      <xsd:element name="referenceEntity" type=" LegalEntity "/>
   </xsd:choice>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: TradeUnderlyerReference

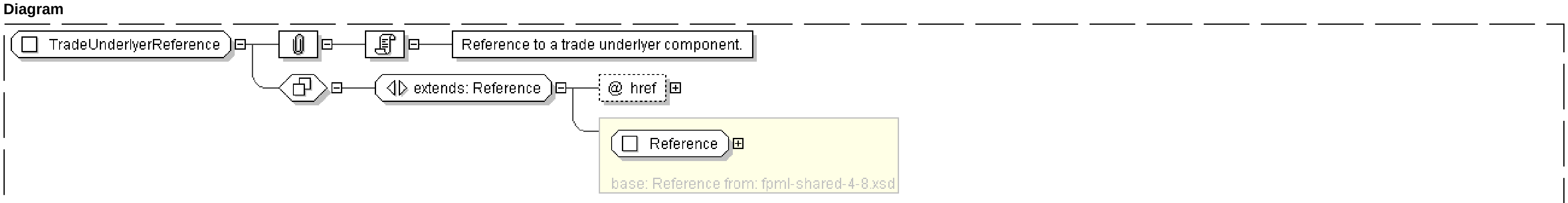
Super-types:	Reference < **TradeUnderlyerReference** (by extension)
Sub-types:	None

Name	TradeUnderlyerReference
Used by (from the same schema document)	Complex Type **CashflowObservation** , Complex Type **UnderlyerReferenceUnits**
Abstract	no
Documentation	Reference to a trade underlyer component.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeUnderlyerReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="TradeUnderlyer"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: UnderlyerReferenceUnits

Super-types:	None

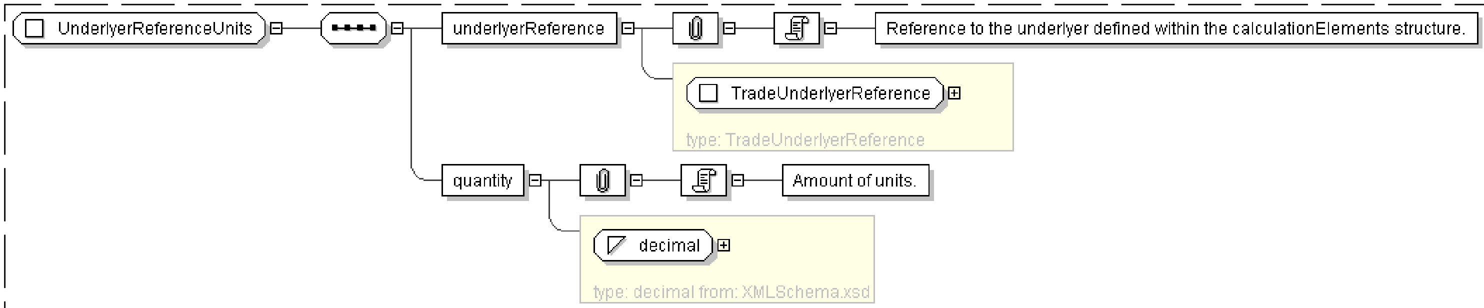
Sub-types:	None

Name	UnderlyerReferenceUnits
Used by (from the same schema document)	Complex Type **CashflowCalculationElements**
Abstract	no

XML Instance Representation

```
<...>
   <underlyerReference> TradeUnderlyerReference </underlyerReference> [1]
   'Reference to the underlyer defined within the calculationElements structure.'

   <quantity> xsd:decimal </quantity> [1]
   'Amount of units.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="UnderlyerReferenceUnits">
   <xsd:sequence>
      <xsd:element name="underlyerReference" type=" TradeUnderlyerReference "/>
      <xsd:element name="quantity" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: UnprocessedPosition

Super-types:	None
Sub-types:	None

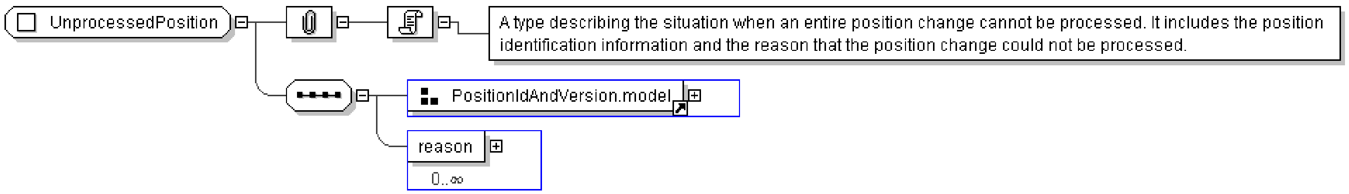
Name	UnprocessedPosition
Used by (from the same schema document)	Complex Type **PositionsAcknowledged**
Abstract	no
Documentation	A type describing the situation when an entire position change cannot be processed. It includes the position identification information and the reason that the position change could not be processed.

XML Instance Representation

```
<...>
   <positionId> PositionId </positionId> [1]
   'A version-independent identifier for the position, possibly based on trade identifier.'

   <version> xsd:positiveInteger </version> [0..1]
   'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
```

```
   newer versions. There is no requirement that version identifiers for a position be
   sequential or small, so for example timestamp-based version identifiers could be used.'

   <reason> Reason </reason> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="UnprocessedPosition">
   <xsd:sequence>
      <xsd:group ref=" PositionIdAndVersion.model "/>
      <xsd:element name="reason" type=" Reason " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

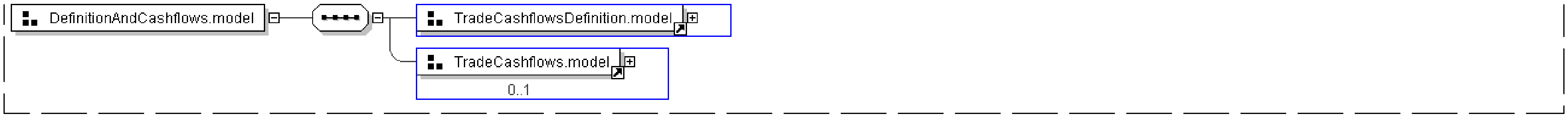
Model Group: DefinitionAndCashflows.model

Name	DefinitionAndCashflows.model
Used by (from the same schema document)	Complex Type **AllegedCashflow** , Complex Type **AssertedCashflow**

XML Instance Representation

```
<asOfDate> xsd:dateTime </asOfDate> [0..1]
'The date and time at which the set of cashflows was defined.'

<tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
'Unique identifier assigned by the party asserting the set of cashflows to be reconciled.'

Start Group: TradeCashflows.model [0..1]
   <tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
   'Structure that holds reference to the trade through the tradeId and optionally some
   trade-specific elements for identifying the trade in the case of trades that have not
   been negotiated through electronic platforms and for which the counterparty\'s trade ID has
   not been captured.'

   <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
   'The adjusted date in which the payments are being paid/received.'

   <payment> PaymentMatching </payment> [1..*]
   'Specifies the payment that is exposed to the matching process. Usually there will be a
   single payment but for cross-currency swaps a different payment per currency shall be provided.'

End Group: TradeCashflows.model
```

Diagram



Schema Component Representation

```
<xsd:group name="DefinitionAndCashflows.model">
   <xsd:sequence>
      <xsd:group ref=" TradeCashflowsDefinition.model "/>
      <xsd:group ref=" TradeCashflows.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

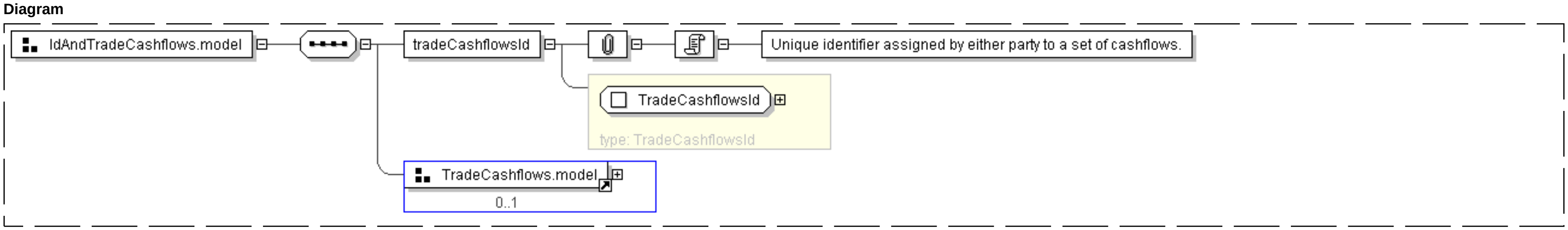
Model Group: IdAndTradeCashflows.model

Name	IdAndTradeCashflows.model
Used by (from the same schema document)	Complex Type **CancelTradeCashflows** , Complex Type **TradeCashflowsProposedMatch**

XML Instance Representation

```
<tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
'Unique identifier assigned by either party to a set of cashflows.'

Start Group: TradeCashflows.model [0..1]
   <tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
   'Structure that holds reference to the trade through the tradeId and optionally some
   trade-specific elements for identifying the trade in the case of trades that have not
   been negotiated through electronic platforms and for which the counterparty\'s trade ID has
   not been captured.'

   <adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
   'The adjusted date in which the payments are being paid/received.'

   <payment> PaymentMatching </payment> [1..*]
   'Specifies the payment that is exposed to the matching process. Usually there will be a
   single payment but for cross-currency swaps a different payment per currency shall be provided.'
End Group: TradeCashflows.model
```

Diagram



Schema Component Representation

```
<xsd:group name="IdAndTradeCashflows.model">
   <xsd:sequence>
      <xsd:element name="tradeCashflowsId" type=" TradeCashflowsId "/>
      <xsd:group ref=" TradeCashflows.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

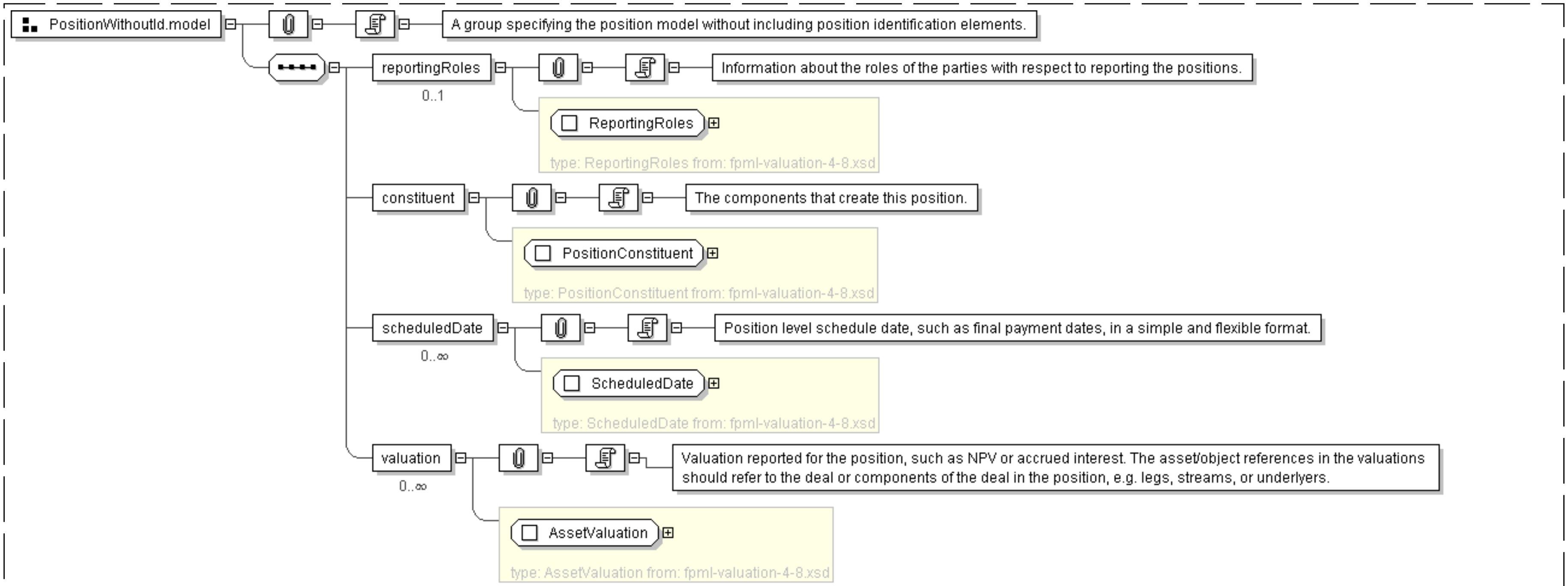
Model Group: PositionWithoutId.model

Name	PositionWithoutId.model
Used by (from the same schema document)	Complex Type **AssertedPosition** , Complex Type **PositionProposedMatch**
Documentation	A group specifying the position model without including position identification elements.

XML Instance Representation

```
<reportingRoles> ReportingRoles </reportingRoles> [0..1]
'Information about the roles of the parties with respect to reporting the positions.'

<constituent> PositionConstituent </constituent> [1]
'The components that create this position.'

<scheduledDate> ScheduledDate </scheduledDate> [0..*]
'Position level schedule date, such as final payment dates, in a simple and flexible format.'

<valuation> AssetValuation </valuation> [0..*]
'Valuation reported for the position, such as NPV or accrued interest. The asset/
object references in the valuations should refer to the deal or components of the deal in
the position, e.g. legs, streams, or underlyers.'
```

Diagram



Schema Component Representation

```
<xsd:group name="PositionWithoutId.model">
   <xsd:sequence>
      <xsd:element name="reportingRoles" type=" ReportingRoles " minOccurs="0"/>
      <xsd:element name="constituent" type=" PositionConstituent "/>
      <xsd:element name="scheduledDate" type=" ScheduledDate " minOccurs="0" maxOccurs="unbounded"/>
```

```
        <xsd:element name="valuation" type=" AssetValuation " minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:group>
```

top

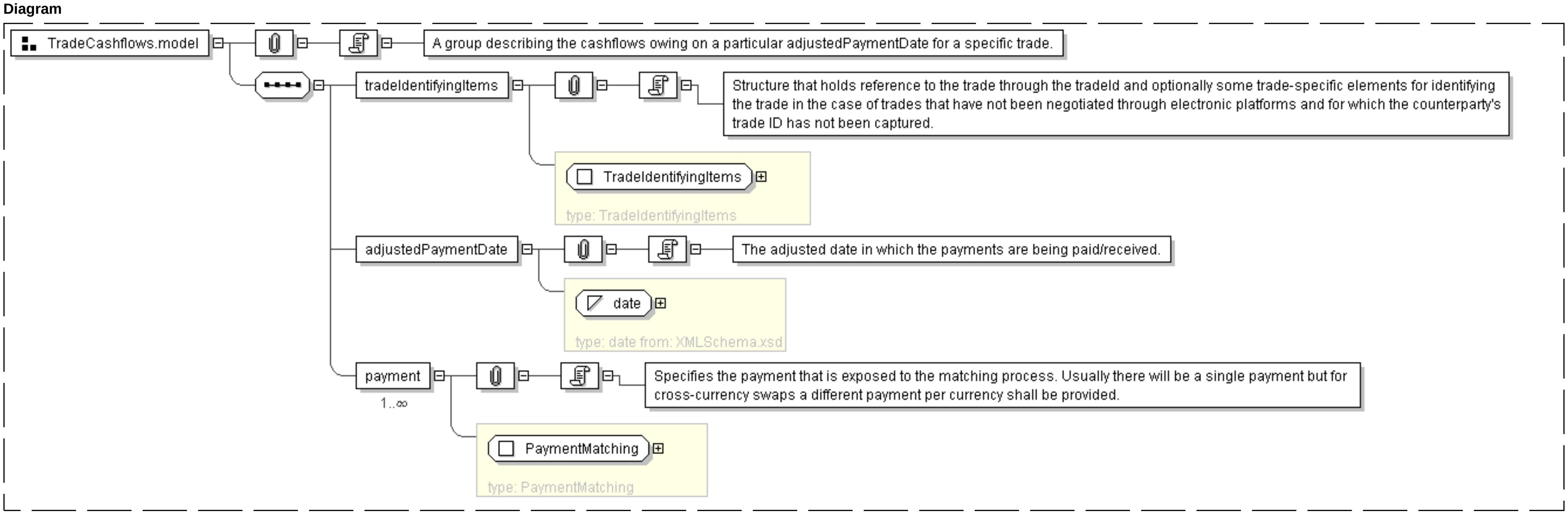
Model Group: TradeCashflows.model

Name	TradeCashflows.model
Used by (from the same schema document)	Complex Type **TradeCashflowsAsserted** , Model Group **DefinitionAndCashflows.model** , Model Group **IdAndTradeCashflows.model**
Documentation	A group describing the cashflows owing on a particular adjustedPaymentDate for a specific trade.

XML Instance Representation

```
<tradeIdentifyingItems> TradeIdentifyingItems </tradeIdentifyingItems> [1]
'Structure that holds reference to the trade through the tradeId and optionally some
trade-specific elements for identifying the trade in the case of trades that have not
been negotiated through electronic platforms and for which the counterparty\'s trade ID has
not been captured.'

<adjustedPaymentDate> xsd:date </adjustedPaymentDate> [1]
'The adjusted date in which the payments are being paid/received.'

<payment> PaymentMatching </payment> [1..*]
'Specifies the payment that is exposed to the matching process. Usually there will be a
single payment but for cross-currency swaps a different payment per currency shall be provided.'
```

Diagram



Schema Component Representation

```
<xsd:group name="TradeCashflows.model">
    <xsd:sequence>
        <xsd:element name="tradeIdentifyingItems" type=" TradeIdentifyingItems "/>
        <xsd:element name="adjustedPaymentDate" type=" xsd:date "/>
        <xsd:element name="payment" type=" PaymentMatching " maxOccurs="unbounded"/>
    </xsd:sequence>
```

```
</xsd:group>
```

top

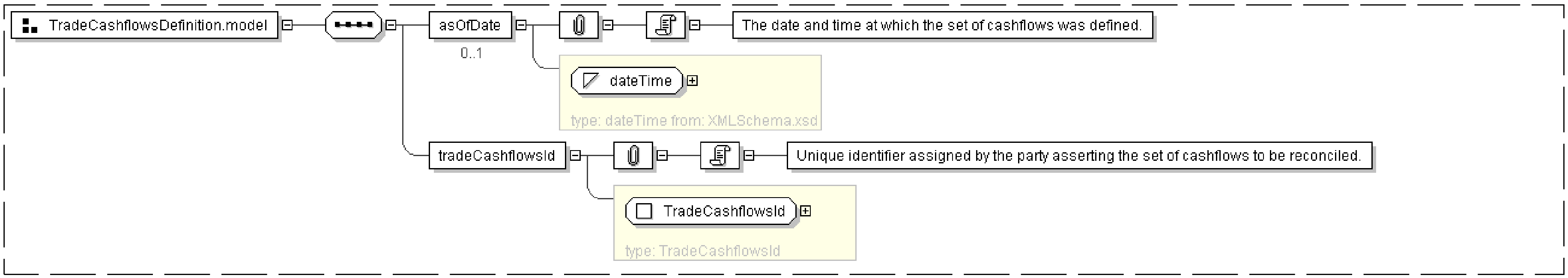
Model Group: TradeCashflowsDefinition.model

Name	TradeCashflowsDefinition.model
Used by (from the same schema document)	Complex Type **TradeCashflowsAsserted** , Model Group **DefinitionAndCashflows.model**

XML Instance Representation

```
<asOfDate> xsd:dateTime </asOfDate> [0..1]
'The date and time at which the set of cashflows was defined.'

<tradeCashflowsId> TradeCashflowsId </tradeCashflowsId> [1]
'Unique identifier assigned by the party asserting the set of cashflows to be reconciled.'
```

Diagram



Schema Component Representation

```
<xsd:group name="TradeCashflowsDefinition.model">
   <xsd:sequence>
      <xsd:element name="asOfDate" type=" xsd:dateTime " minOccurs="0"/>
      <xsd:element name="tradeCashflowsId" type=" TradeCashflowsId "/>
   </xsd:sequence>
</xsd:group>
```

top

Legend

Complex Type: AusAddress

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Schema Composition	• This schema includes components from the following schema document(s):
	  ◦ fpml-msg-4-8.xsd
	  ◦ fpml-valuation-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
xml	http://www.w3.org/XML/1998/namespace
ecore	http://www.eclipse.org/emf/2002/Ecore
fpml	**http://www.fpml.org/2010/FpML-4-8**
dsig	http://www.w3.org/2000/09/xmldsig#
xsd	http://www.w3.org/2001/XMLSchema

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-msg-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-valuation-4-8.xsd"/>
   ...
</xsd:schema>
```

top

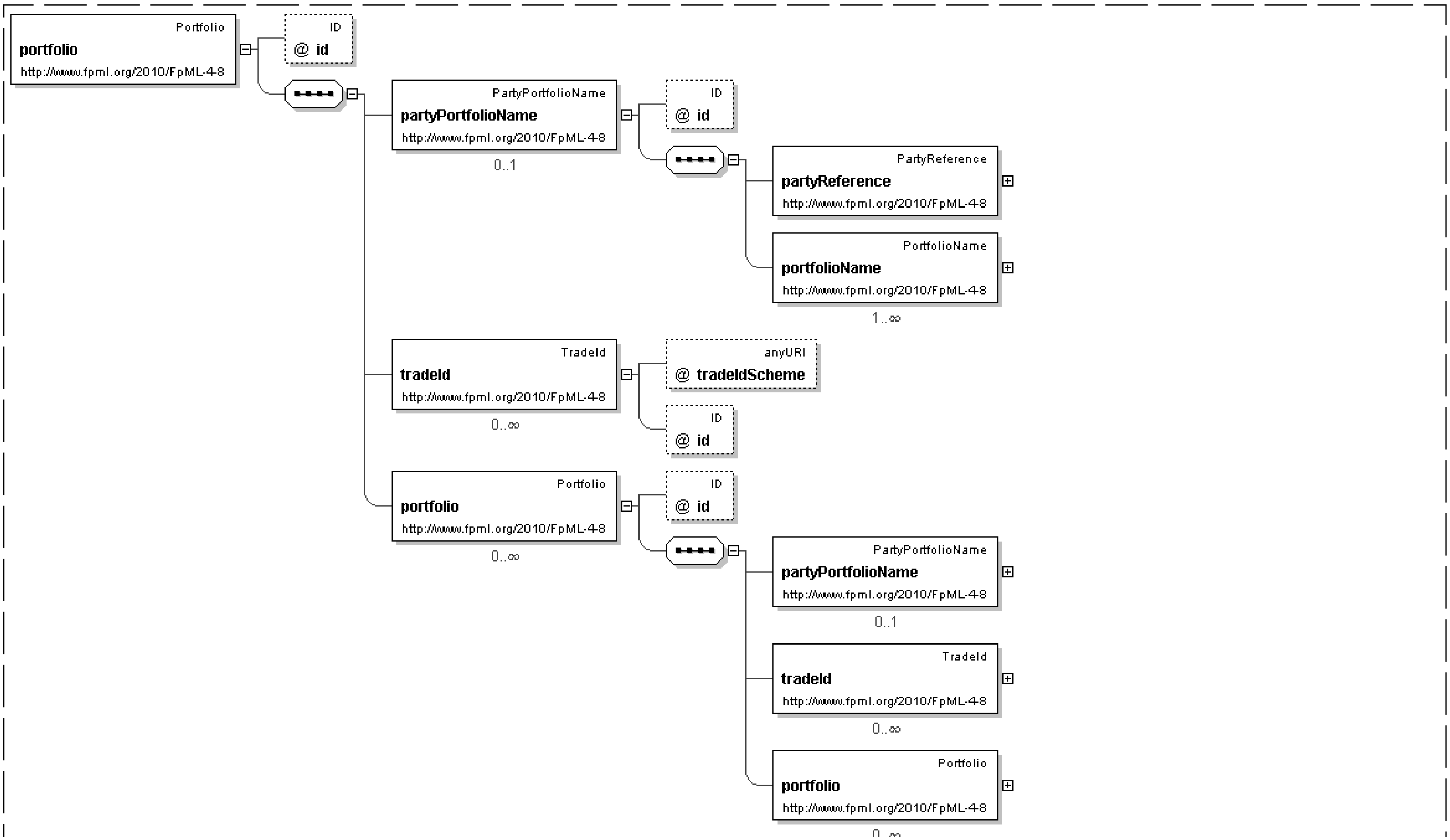
Global Declarations

Element: portfolio

- *The following elements can be used wherever this element is referenced:*
  - queryPortfolio

Name	portfolio
Used by (from the same schema document)	Complex Type **PortfolioValuationItem**
Type	Portfolio
Nillable	no
Abstract	no
Documentation	Global portfolio element used as a basis for a substitution group.

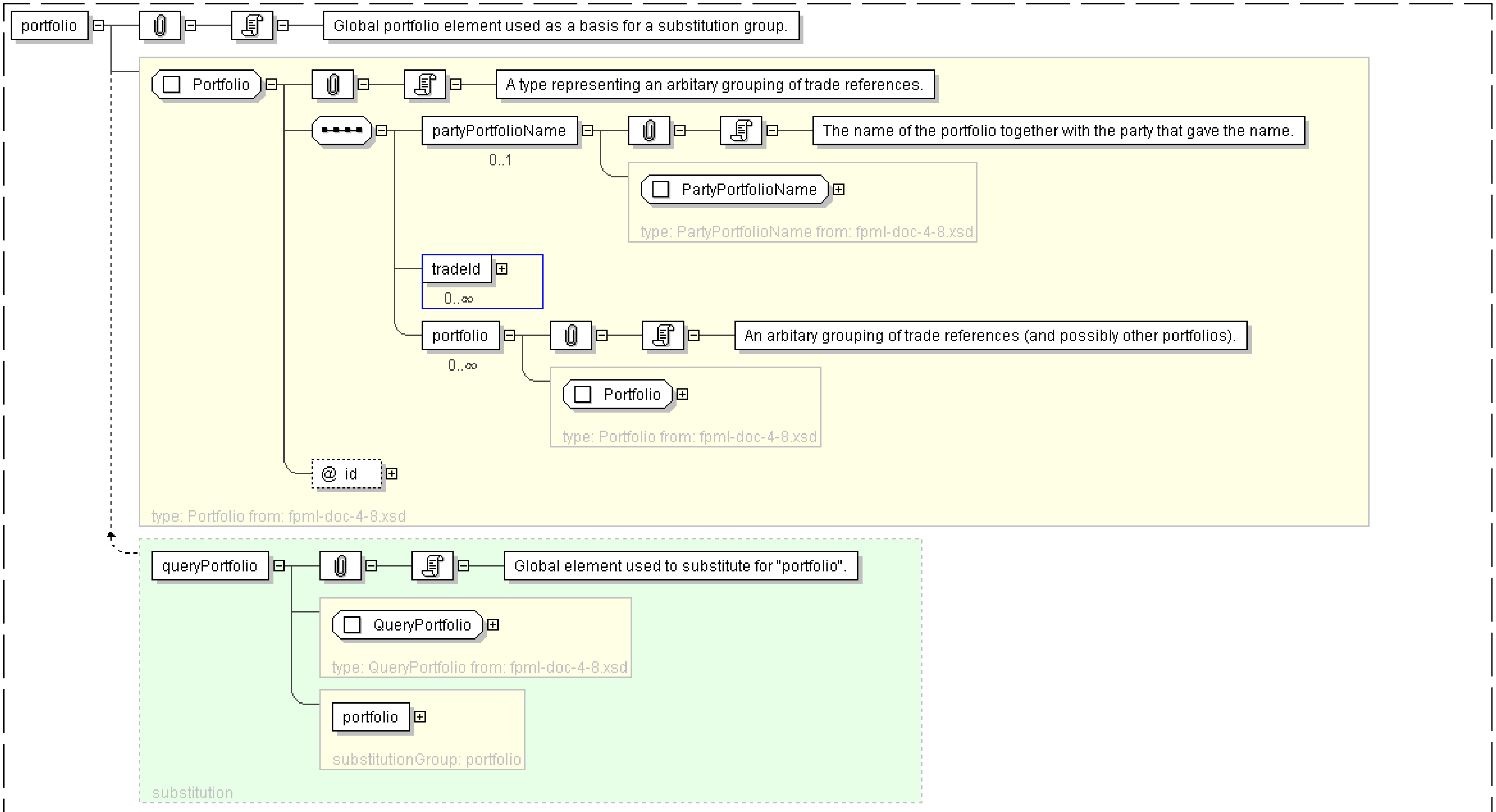
Logical Diagram



XML Instance Representation

```
<portfolio
id=" xsd:ID [0..1]">
   <partyPortfolioName> PartyPortfolioName </partyPortfolioName> [0..1]
   'The name of the portfolio together with the party that gave the name.'

   <tradeId> TradeId </tradeId> [0..*]
   <portfolio> Portfolio </portfolio> [0..*]
   'An arbitary grouping of trade references (and possibly other portfolios).'

</portfolio>
```

Diagram



Schema Component Representation

```
<xsd:element name="portfolio" type=" Portfolio "/>
```

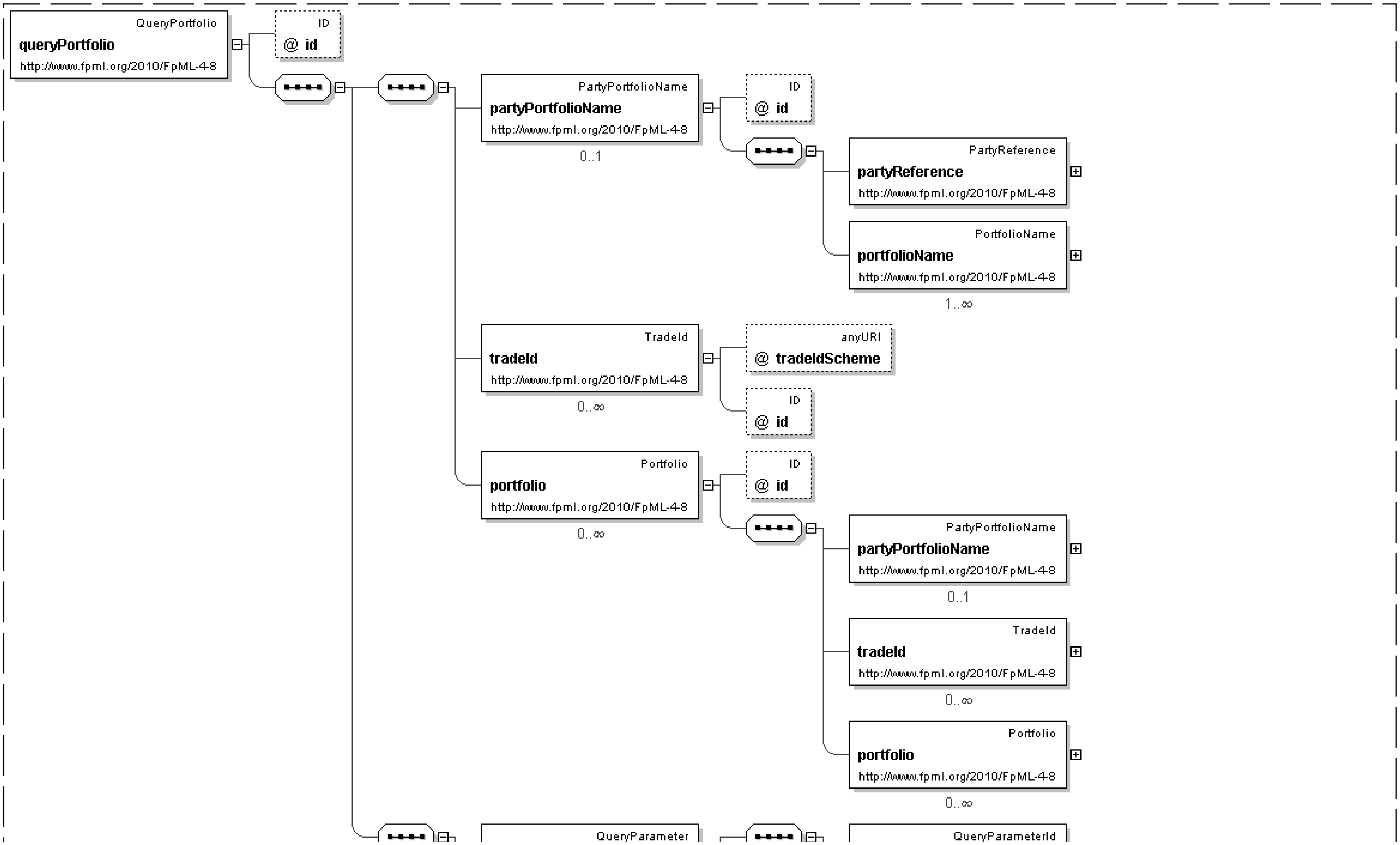
top

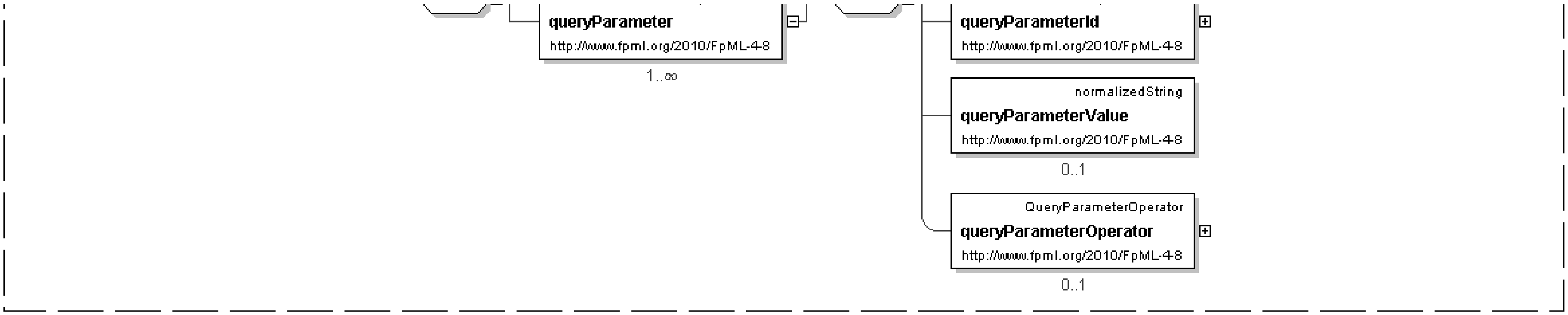
Element: queryPortfolio

- *This element can be used wherever the following element is referenced:*
  - portfolio

Name	queryPortfolio
Type	QueryPortfolio
Nillable	no
Abstract	no
Documentation	Global element used to substitute for "portfolio".

Logical Diagram

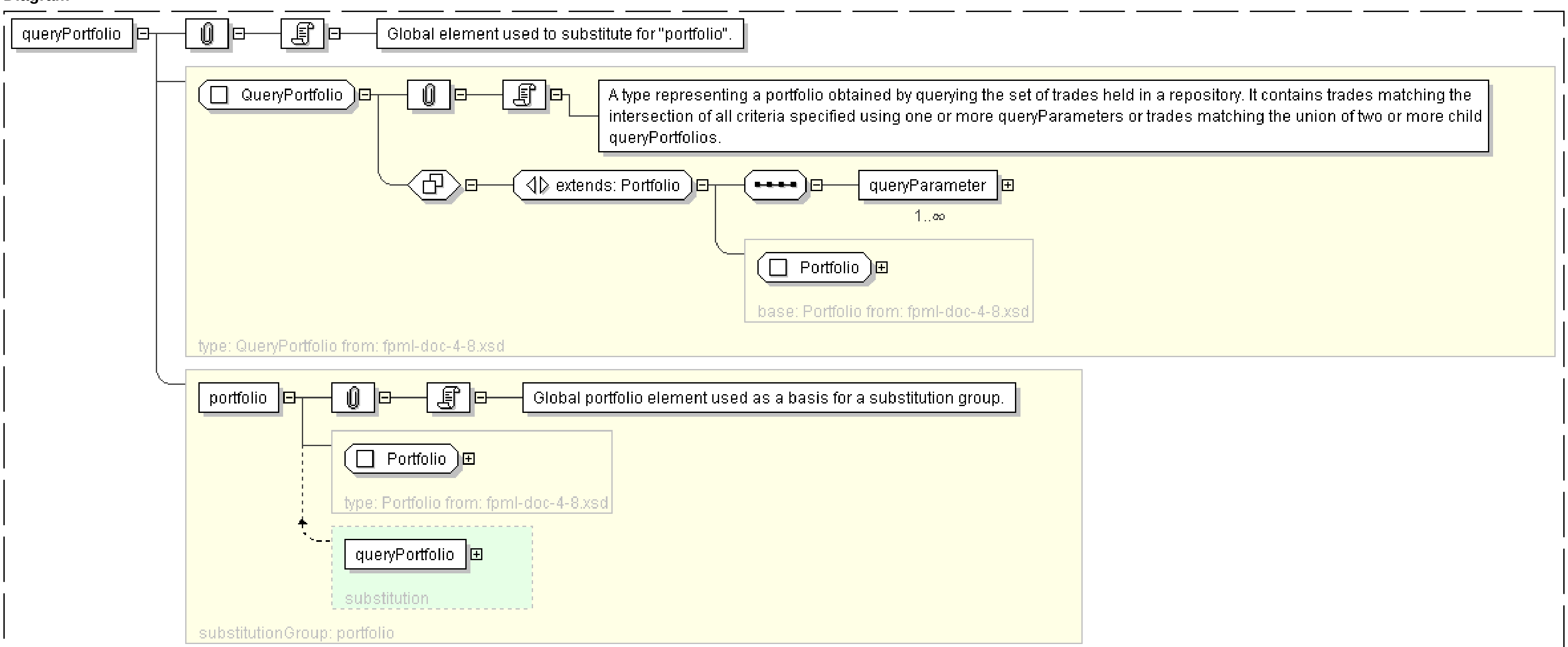




XML Instance Representation

```
<queryPortfolio
id=" xsd:ID [0..1]">
   <partyPortfolioName> PartyPortfolioName </partyPortfolioName> [0..1]
   'The name of the portfolio together with the party that gave the name.'

   <tradeId> TradeId </tradeId> [0..*]
   <portfolio> Portfolio </portfolio> [0..*]
   'An arbitary grouping of trade references (and possibly other portfolios).'

   <queryParameter> QueryParameter </queryParameter> [1..*]
</queryPortfolio>
```

Diagram



Schema Component Representation

```
<xsd:element name="queryPortfolio" type=" QueryPortfolio " substitutionGroup="portfolio"/>
```

top

Global Definitions

Complex Type: PortfolioValuationItem

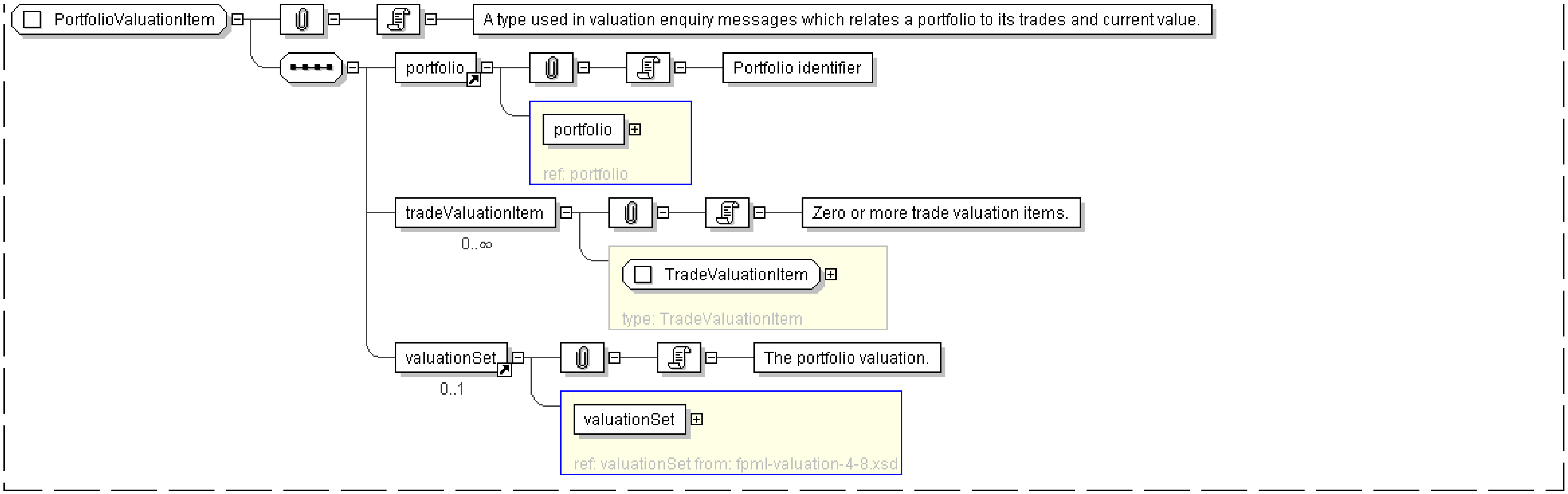
Super-types:	None
Sub-types:	None

Name	PortfolioValuationItem
Used by (from the same schema document)	Complex Type **RequestValuationReport** , Complex Type **ValuationReport**
Abstract	no
Documentation	A type used in valuation enquiry messages which relates a portfolio to its trades and current value.

XML Instance Representation

```
<...>
    <portfolio> ... </portfolio> [1]
    'Portfolio identifier'

    <tradeValuationItem> TradeValuationItem </tradeValuationItem> [0..*]
    'Zero or more trade valuation items.'

    <valuationSet> ... </valuationSet> [0..1]
    'The portfolio valuation.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PortfolioValuationItem">
   <xsd:sequence>
      <xsd:element ref=" portfolio "/>
      <xsd:element name="tradeValuationItem" type=" TradeValuationItem "
      minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element ref=" valuationSet " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PositionReport

Super-types:	NotificationMessage < **PositionReport** (by extension)
Sub-types:	None

Name	PositionReport
Abstract	no
Documentation	A type defining the content model for a message allowing one party to send a report consisting of positions.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
```

actualBuild="**1** [0..1]

'The specific build number of this schema version. This attribute is not included in an instance document. Instead, it is supplied by the XML parser when the document is validated against the FpML schema and indicates the build number of the schema file. Every time FpML publishes a change to the schema, validation rules, or examples within a version (e.g., version 4.2) the actual build number is incremented. If no changes have been made between releases within a version (i.e. from Trial Recommendation to Recommendation) the actual build number stays the same.'

">

<header> NotificationMessageHeader </header> [1]

<validation> Validation </validation> [0..*]

<asOfDate> IdentifiedDate </asOfDate> [0..1]

'The date for which this document reports positions and valuations.'

<dataSetName> xsd:string </dataSetName> [0..1]

'The name of the data set (portfolio, product type, etc.) that this report corresponds to. Used to help document the contents of the report.'

<quotationCharacteristics> QuotationCharacteristics </quotationCharacteristics> [0..1]

'The default quotation characteristics for this document (e.g. currency, location). Currency must be specified; other fields may be specified.'

<position> Position </position> [1..*]

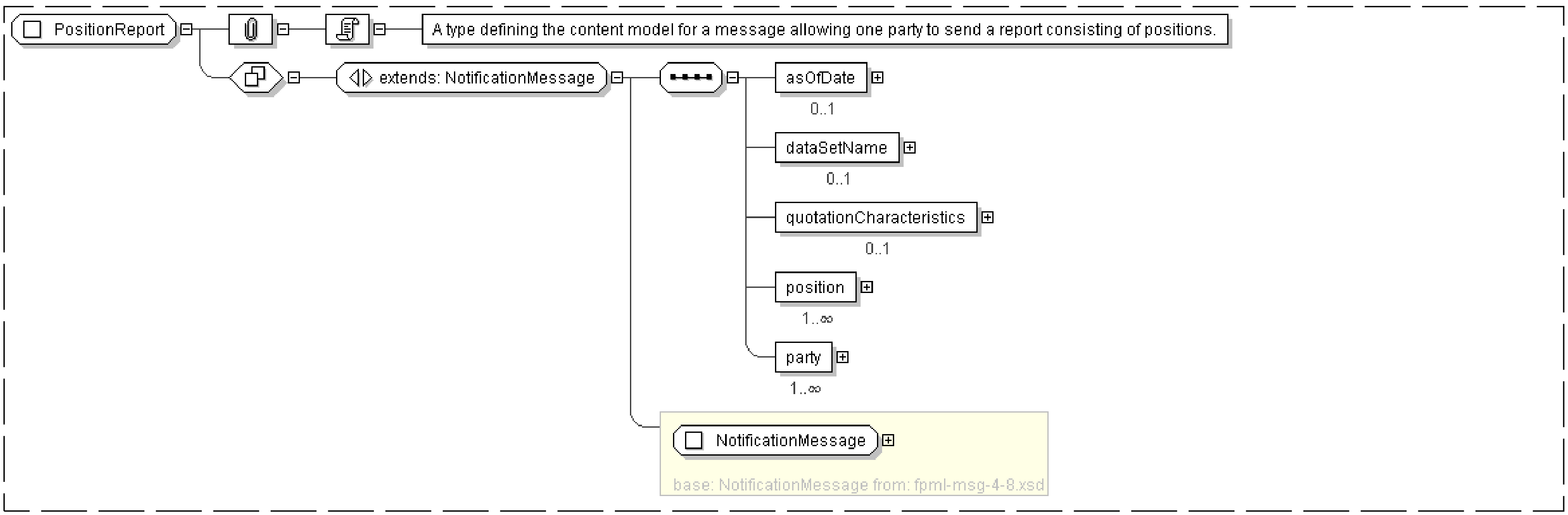
'The positions included in the position report.'

<party> Party </party> [1..*]

'The parties whose trades are included included in this position report.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionReport">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="asOfDate" type=" IdentifiedDate " minOccurs="0"/>
            <xsd:element name="dataSetName" type=" xsd:string " minOccurs="0"/>
            <xsd:element name="quotationCharacteristics" type=" QuotationCharacteristics " minOccurs="0"/>
            <xsd:element name="position" type=" Position " maxOccurs="unbounded"/>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestPositionReport

Super-types:	RequestMessage < **RequestPositionReport** (by extension)
Sub-types:	None

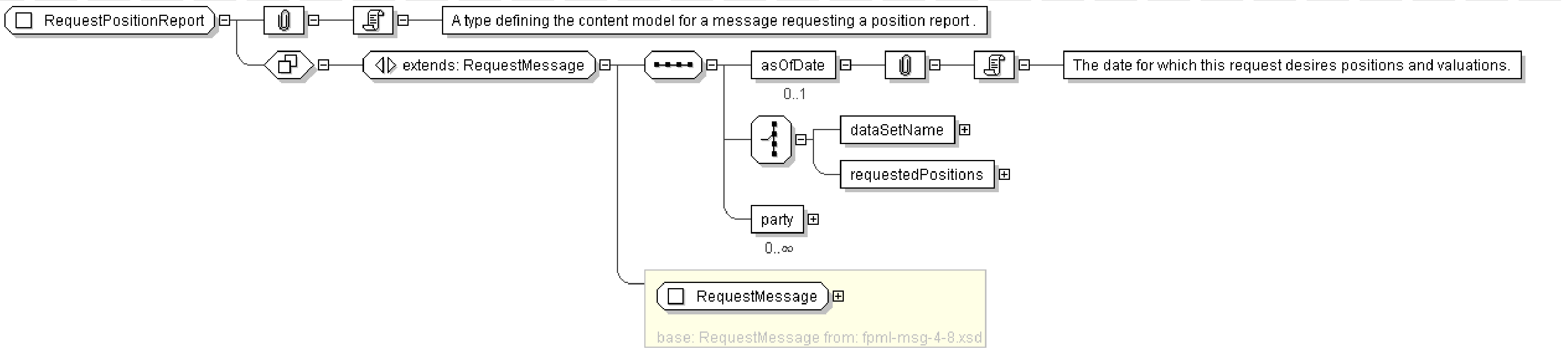
Name	RequestPositionReport
Abstract	no
Documentation	A type defining the content model for a message requesting a position report .

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <asOfDate> ... </asOfDate> [0..1]
   'The date for which this request desires positions and valuations.'

Start Choice [1]
      <dataSetName> xsd:normalizedString </dataSetName> [1]
      'The name of the data set (portfolio, product type, etc.) that this request corresponds
      to. Describes the desired report.'
```

```
        <requestedPositions> RequestedPositions </requestedPositions> [1]
        'The name of the data set (portfolio, product type, etc.) that this request corresponds
        to. Describes the desired report.'

End Choice
    <party> Party </party> [0..*]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestPositionReport">
   <xsd:complexContent>
      <xsd:extension base=" RequestMessage ">
         <xsd:sequence>
            <xsd:element name="asOfDate" minOccurs="0"/>
            <xsd:choice>
               <xsd:element name="dataSetName" type=" xsd:normalizedString "/>
               <xsd:element name="requestedPositions" type=" RequestedPositions "/>
            </xsd:choice>
            <xsd:element name="party" type=" Party " minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestValuationReport

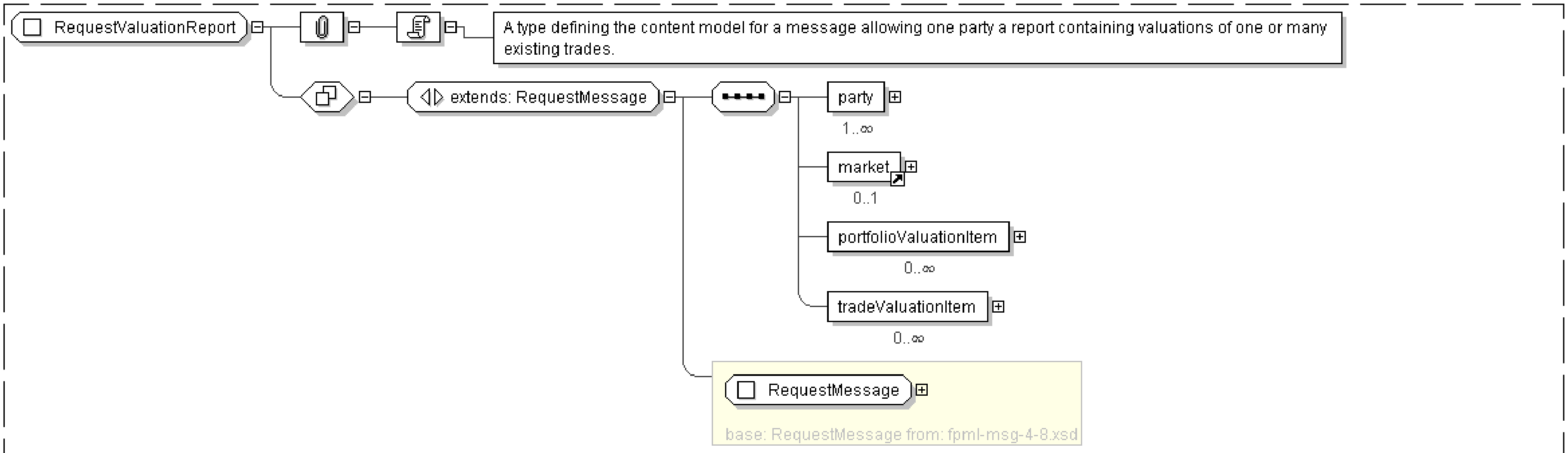
Super-types:	RequestMessage < **RequestValuationReport** (by extension)
Sub-types:	None

Name	RequestValuationReport
Abstract	no
Documentation	A type defining the content model for a message allowing one party a report containing valuations of one or many existing trades.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'

"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> RequestMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <party> Party </party> [1..*]
   <market> ... </market> [0..1]
   <portfolioValuationItem> PortfolioValuationItem </portfolioValuationItem> [0..*]
   'An instance of a unique portfolio valuation.'

   <tradeValuationItem> TradeValuationItem </tradeValuationItem> [0..*]
   'An instance of a unique trade valuation.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestValuationReport">
```

```
    <xsd:complexContent>
        <xsd:extension base=" RequestMessage ">
            <xsd:sequence>
                <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
                <xsd:element ref=" market " minOccurs="0"/>
                <xsd:element name="portfolioValuationItem" type=" PortfolioValuationItem "
                minOccurs="0" maxOccurs="unbounded"/>
                <xsd:element name="tradeValuationItem" type=" TradeValuationItem "
                minOccurs="0" maxOccurs="unbounded"/>
            </xsd:sequence>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: RequestedPositions

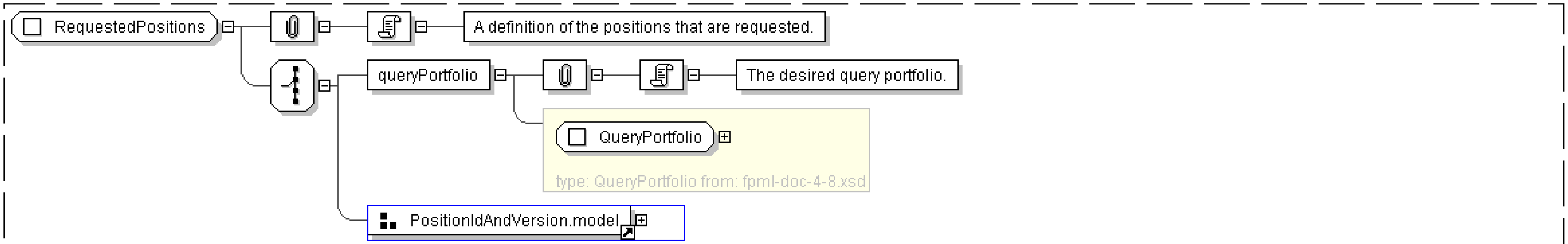
Super-types:	None
Sub-types:	None

Name	RequestedPositions
Used by (from the same schema document)	Complex Type **RequestPositionReport**
Abstract	no
Documentation	A definition of the positions that are requested.

XML Instance Representation

```
<...>
Start Choice [1]
      <queryPortfolio> QueryPortfolio </queryPortfolio> [1]
      'The desired query portfolio.'

      <positionId> PositionId </positionId> [1]
      'A version-independent identifier for the position, possibly based on trade identifier.'

      <version> xsd:positiveInteger </version> [0..1]
      'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
      newer versions. There is no requirement that version identifiers for a position be
      sequential or small, so for example timestamp-based version identifiers could be used.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="RequestedPositions">
   <xsd:choice>
      <xsd:element name="queryPortfolio" type=" QueryPortfolio "/>
      <xsd:group ref=" PositionIdAndVersion.model "/>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: TradeValuationItem

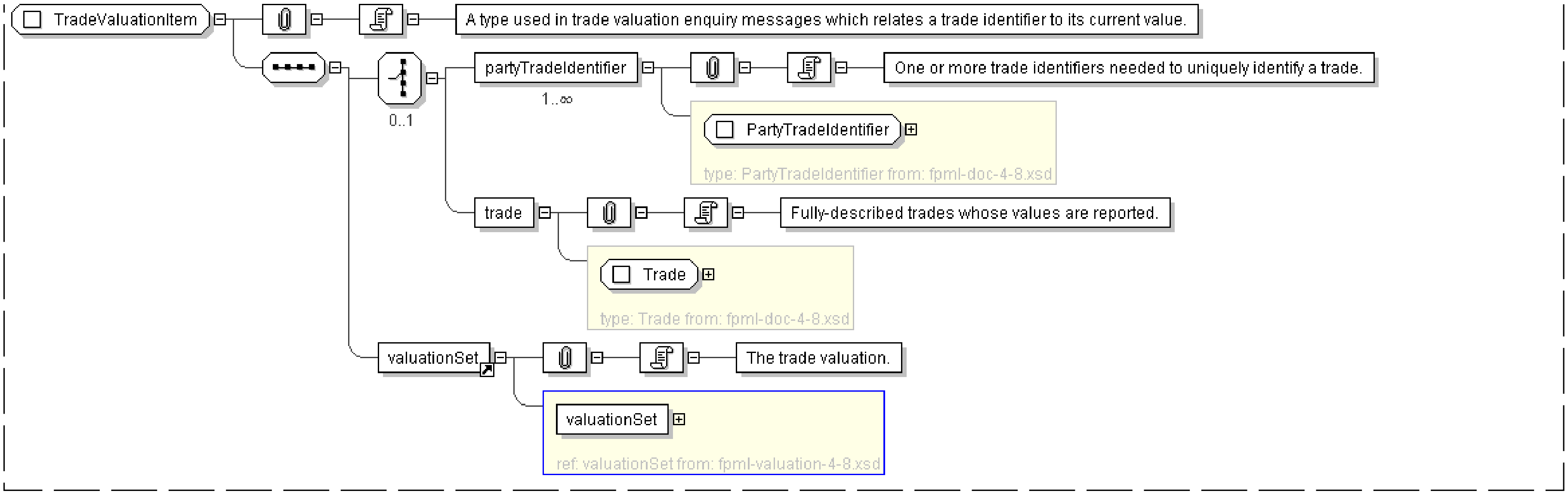
Super-types:	None
Sub-types:	None

Name	TradeValuationItem
Used by (from the same schema document)	Complex Type **PortfolioValuationItem** , Complex Type **RequestValuationReport** , Complex Type **ValuationReport**
Abstract	no
Documentation	A type used in trade valuation enquiry messages which relates a trade identifier to its current value.

XML Instance Representation

```
<...>
Start Choice [0..1]
      <partyTradeIdentifier> PartyTradeIdentifier </partyTradeIdentifier> [1..*]
      'One or more trade identifiers needed to uniquely identify a trade.'

      <trade> Trade </trade> [1]
      'Fully-described trades whose values are reported.'

End Choice
   <valuationSet> ... </valuationSet> [1]
   'The trade valuation.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TradeValuationItem">
   <xsd:sequence>
      <xsd:choice minOccurs="0">
         <xsd:element name="partyTradeIdentifier" type=" PartyTradeIdentifier " maxOccurs="unbounded"/>
         <xsd:element name="trade" type=" Trade "/>
      </xsd:choice>
      <xsd:element ref=" valuationSet "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: ValuationReport

Super-types:	NotificationMessage < **ValuationReport** (by extension)
Sub-types:	None

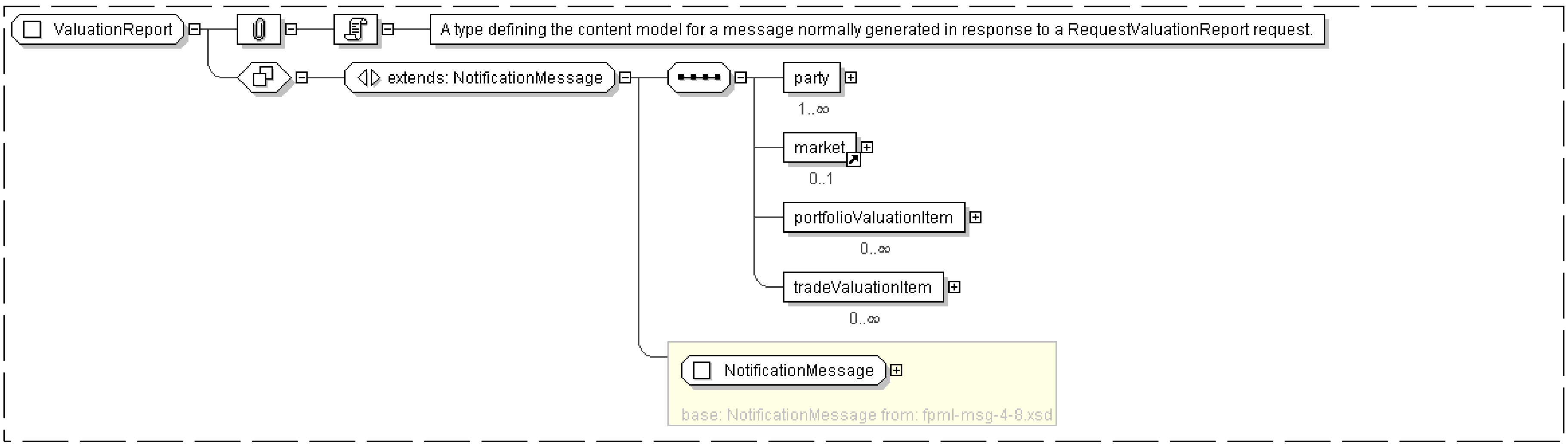
Name	ValuationReport
Abstract	no
Documentation	A type defining the content model for a message normally generated in response to a RequestValuationReport request.

XML Instance Representation

```
<...
version=" xsd:token (value comes from list: {'4-0'|'4-1'|'4-2'|'4-3'|'4-4'|'4-5'|'4-6'|'4-
7'|'4-8'}) [1]
'Indicate which version of the FpML Schema an FpML message adheres to.'

"
expectedBuild=" xsd:positiveInteger [0..1]
'This optional attribute can be supplied by a message creator in an FpML instance to
specify which build number of the schema was used to define the message when it was generated.'
```

```
"
actualBuild="1 [0..1]
'The specific build number of this schema version. This attribute is not included in
an instance document. Instead, it is supplied by the XML parser when the document is
validated against the FpML schema and indicates the build number of the schema file. Every
time FpML publishes a change to the schema, validation rules, or examples within a version
(e.g., version 4.2) the actual build number is incremented. If no changes have been
made between releases within a version (i.e. from Trial Recommendation to Recommendation)
the actual build number stays the same.'

">
   <header> NotificationMessageHeader </header> [1]
   <validation> Validation </validation> [0..*]
   <party> Party </party> [1..*]
   <market> ... </market> [0..1]
   <portfolioValuationItem> PortfolioValuationItem </portfolioValuationItem> [0..*]
   'An instance of a unique portfolio valuation.'

   <tradeValuationItem> TradeValuationItem </tradeValuationItem> [0..*]
   'A collection of data values describing the state of the given trade.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationReport">
   <xsd:complexContent>
      <xsd:extension base=" NotificationMessage ">
         <xsd:sequence>
            <xsd:element name="party" type=" Party " maxOccurs="unbounded"/>
            <xsd:element ref=" market " minOccurs="0"/>
            <xsd:element name="portfolioValuationItem" type=" PortfolioValuationItem "
            minOccurs="0" maxOccurs="unbounded"/>
            <xsd:element name="tradeValuationItem" type=" TradeValuationItem "
            minOccurs="0" maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
```

```
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
```

```
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.

Schema Composition	• This schema includes components from the following schema document(s):
	  ○ fpml-ird-4-8.xsd
	  ○ fpml-eq-shared-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
fpml-annotation	http://www.fpml.org/annotation
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-ird-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-eq-shared-4-8.xsd"/>
   ...
</xsd:schema>
```

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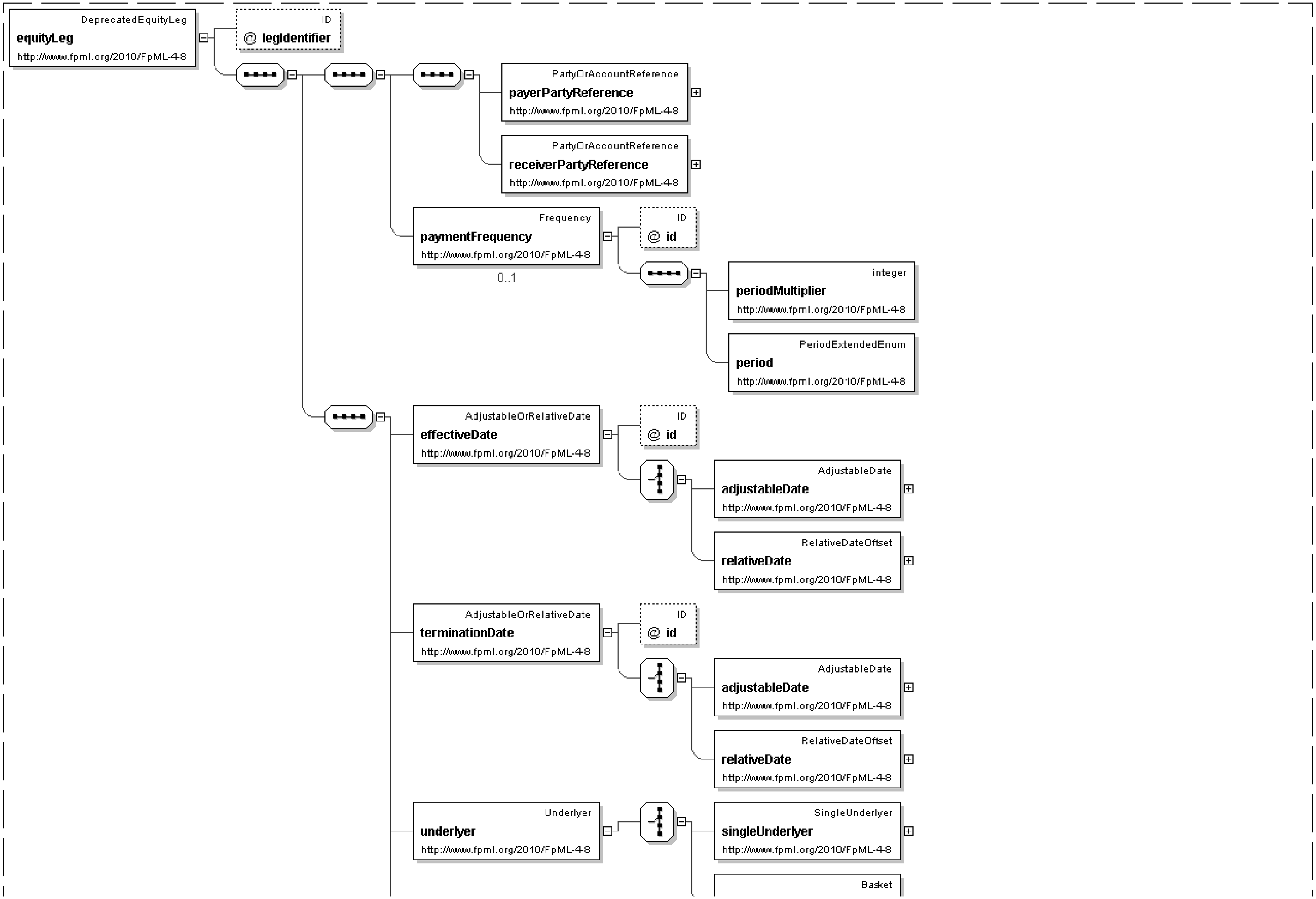
Global Declarations

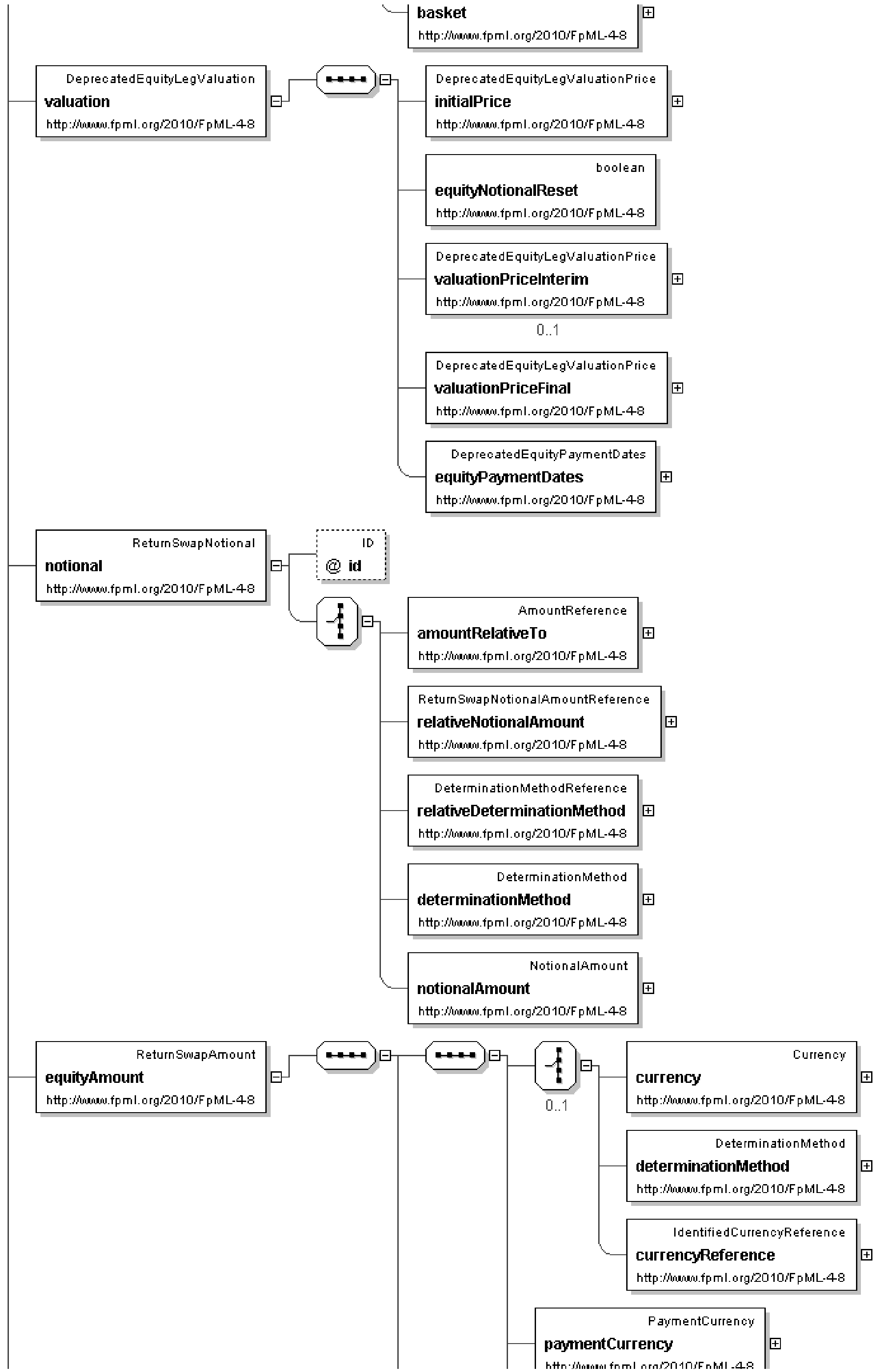
Element: equityLeg

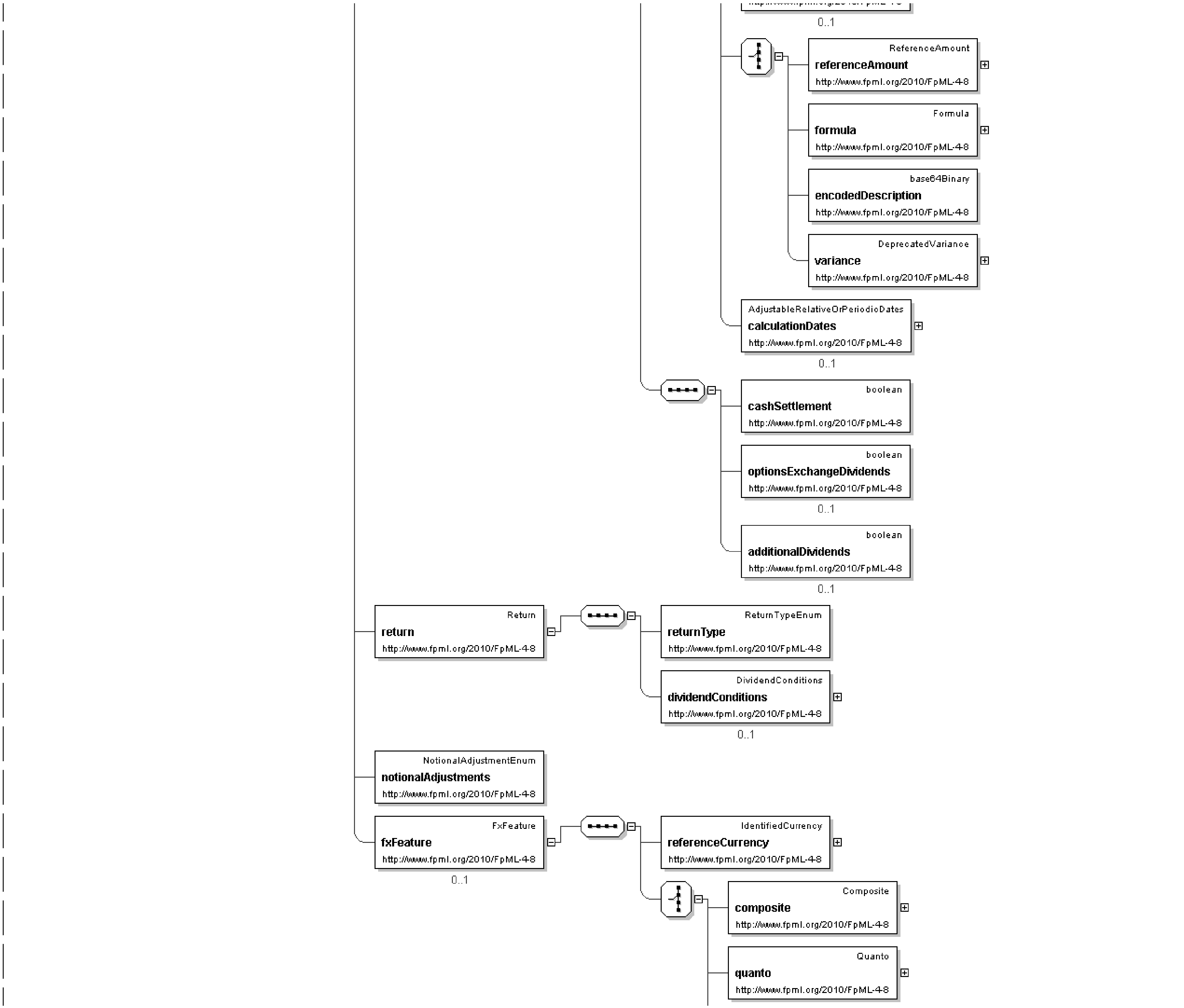
- *This element can be used wherever the following element is referenced:*
  - returnSwapLeg

Name	equityLeg
Type	DeprecatedEquityLeg
Nillable	no
Abstract	no
Documentation	This element has been DEPRECATED and it will be removed in the next FpML major version (5.0) - please use returnLeg element to represent long form equity swaps, total return swaps. The equity amounts of the equity swap.

Logical Diagram




basket
http://www.fpml.org/2010/FpML-4-8
DeprecatedEquityLegValuation
valuation
http://www.fpml.org/2010/FpML-4-8
DeprecatedEquityLegValuationPrice
initialPrice
http://www.fpml.org/2010/FpML-4-8
boolean
equityNotionalReset
http://www.fpml.org/2010/FpML-4-8
DeprecatedEquityLegValuationPrice
valuationPriceInterim
http://www.fpml.org/2010/FpML-4-8
0..1
DeprecatedEquityLegValuationPrice
valuationPriceFinal
http://www.fpml.org/2010/FpML-4-8
DeprecatedEquityPaymentDates
equityPaymentDates
http://www.fpml.org/2010/FpML-4-8
ReturnSwapNotional
notional
http://www.fpml.org/2010/FpML-4-8
ID
@ id
AmountReference
amountRelativeTo
http://www.fpml.org/2010/FpML-4-8
ReturnSwapNotionalAmountReference
relativeNotionalAmount
http://www.fpml.org/2010/FpML-4-8
DeterminationMethodReference
relativeDeterminationMethod
http://www.fpml.org/2010/FpML-4-8
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8
NotionalAmount
notionalAmount
http://www.fpml.org/2010/FpML-4-8
ReturnSwapAmount
equityAmount
http://www.fpml.org/2010/FpML-4-8
0..1
Currency
currency
http://www.fpml.org/2010/FpML-4-8
DeterminationMethod
determinationMethod
http://www.fpml.org/2010/FpML-4-8
IdentifiedCurrencyReference
currencyReference
http://www.fpml.org/2010/FpML-4-8
PaymentCurrency
paymentCurrency

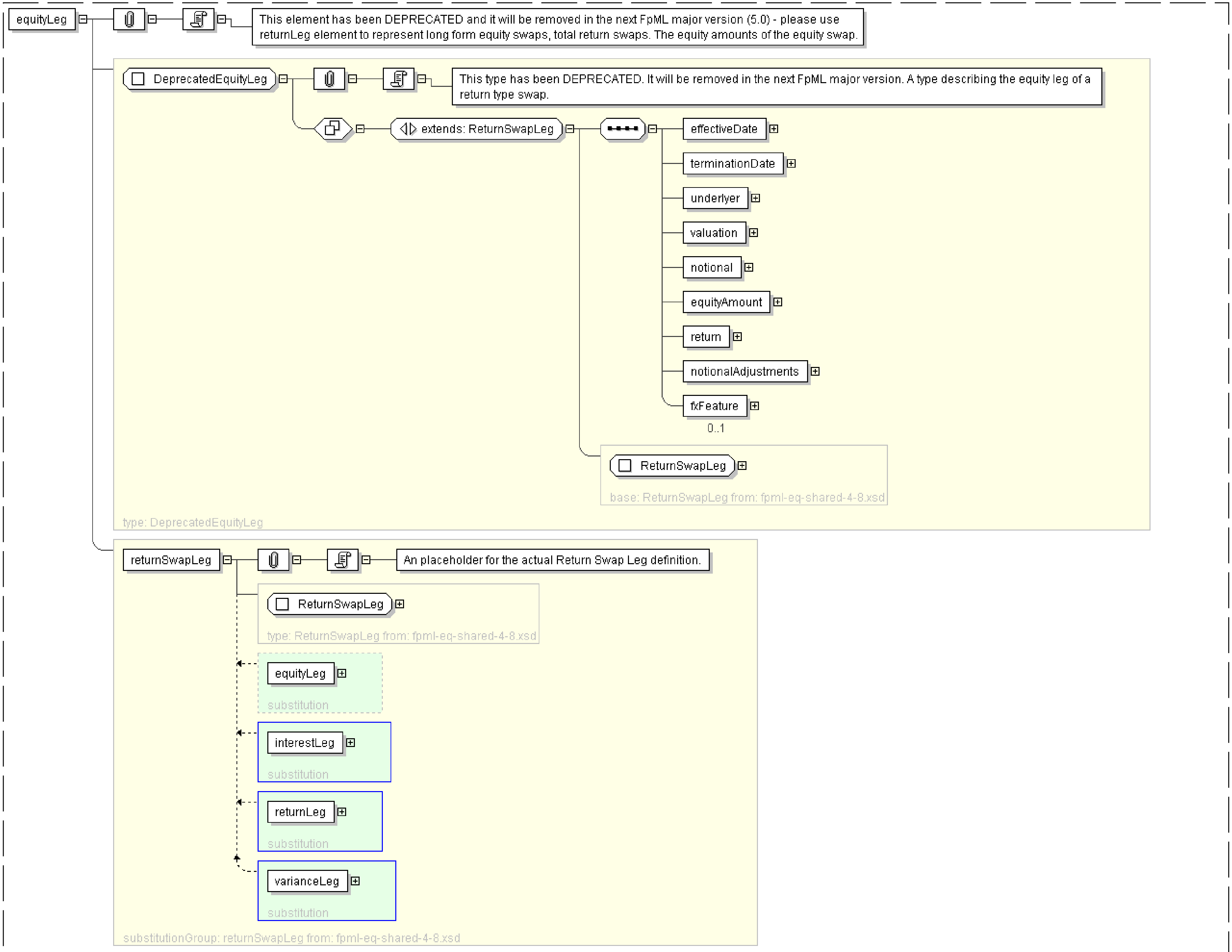

0..1
ReferenceAmount
referenceAmount
http://www.fpml.org/2010/FpML-4-8
Formula
formula
http://www.fpml.org/2010/FpML-4-8
base64Binary
encodedDescription
http://www.fpml.org/2010/FpML-4-8
DeprecatedVariance
variance
http://www.fpml.org/2010/FpML-4-8
AdjustableRelativeOrPeriodicDates
calculationDates
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
cashSettlement
http://www.fpml.org/2010/FpML-4-8
boolean
optionsExchangeDividends
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
additionalDividends
http://www.fpml.org/2010/FpML-4-8
0..1
Return
return
http://www.fpml.org/2010/FpML-4-8
ReturnTypeEnum
returnType
http://www.fpml.org/2010/FpML-4-8
DividendConditions
dividendConditions
http://www.fpml.org/2010/FpML-4-8
0..1
NotionalAdjustmentEnum
notionalAdjustments
http://www.fpml.org/2010/FpML-4-8
FxFeature
fxFeature
http://www.fpml.org/2010/FpML-4-8
0..1
IdentifiedCurrency
referenceCurrency
http://www.fpml.org/2010/FpML-4-8
Composite
composite
http://www.fpml.org/2010/FpML-4-8
Quanto
quanto
http://www.fpml.org/2010/FpML-4-8

XML Instance Representation

```
<equityLeg
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'
">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of the equity leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
   'Specifies the termination date of the equity leg of the swap. When defined in relation to
   a date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlying component of the return type swap, which can be either one or
   many and consists in either equity, index or convertible bond component, or a combination
   of these.'

   <valuation> DeprecatedEquityLegValuation </valuation> [1]
   'Specifies the terms of the initial price of the return type swap and of the
   subsequent valuations of the equity underlyer.'

   <notional> ReturnSwapNotional </notional> [1]
   'Specifies the notional of a return type swap. When used in the equity leg, the definition
   will typically combine the actual amount (using the notional component defined by the
   FpML industry group) and the determination method. When used in the interest leg,
   the definition will typically point to the definition of the equity leg.'

   <equityAmount> ReturnSwapAmount </equityAmount> [1]
   'Specifies, in relation to each Equity Payment Date, the amount to which the Equity
   Payment Date relates. Unless otherwise specified, this term has the meaning defined in the
   ISDA 2002 Equity Derivatives Definitions.'

   <return> Return </return> [1]
   'Specifies the conditions under which dividend affecting the underlyer will be paid to
   the receiver of the equity amounts.'

   <notionalAdjustments> NotionalAdjustmentEnum </notionalAdjustments> [1]
   'Specifies the conditions that govern the adjustment to the number of units of the equity swap.'

   <fxFeature> FxFeature </fxFeature> [0..1]
   'A quanto or composite FX feature.'
```

```
</equityLeg>
```

Diagram



Schema Component Representation

```
<xsd:element name="equityLeg" type=" DeprecatedEquityLeg "
substitutionGroup="returnSwapLeg" deprecated="true" deprecatedReason="It has been made
more generic as returnLeg to cover return swap type products."/>
```

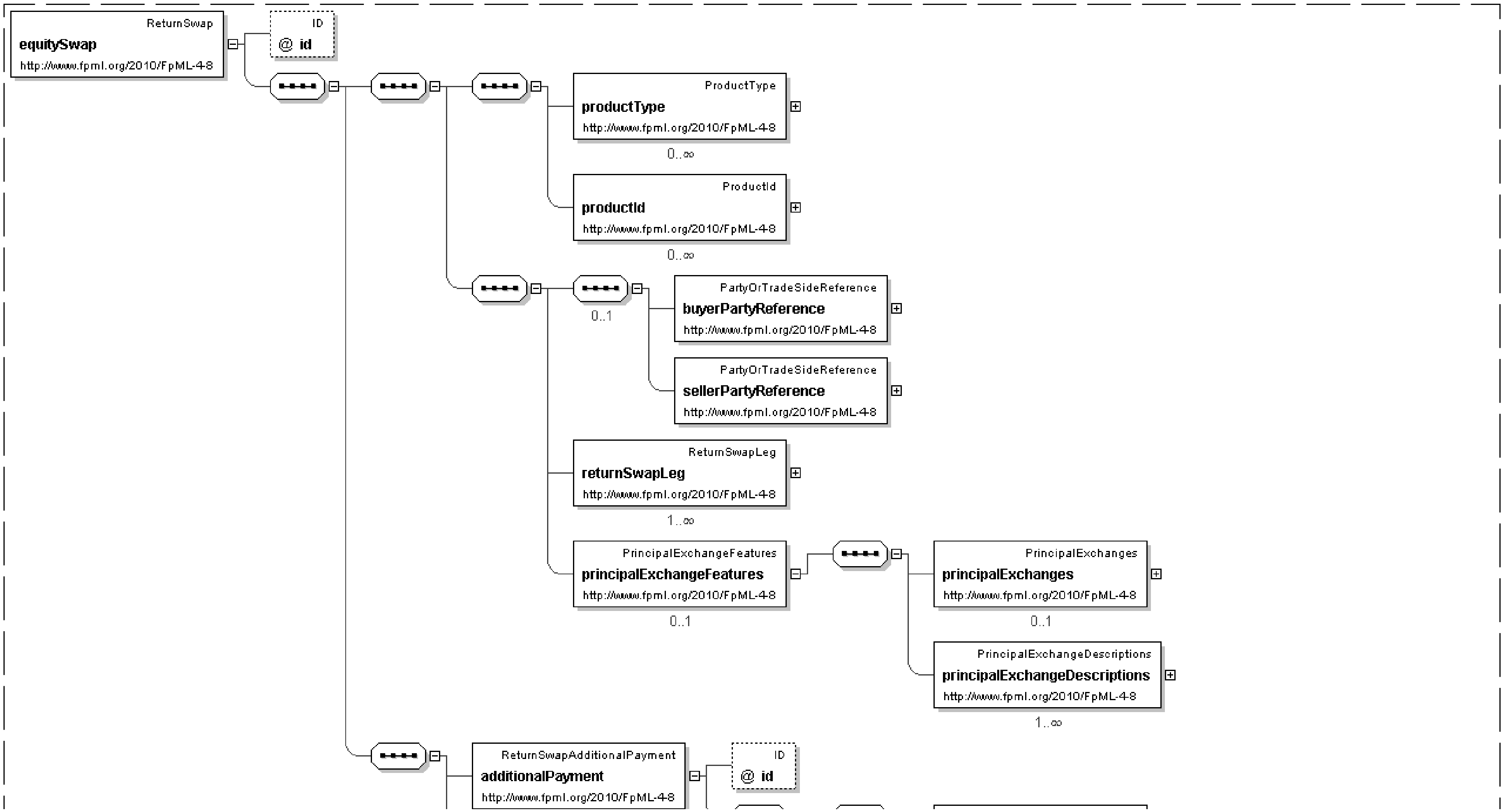
top

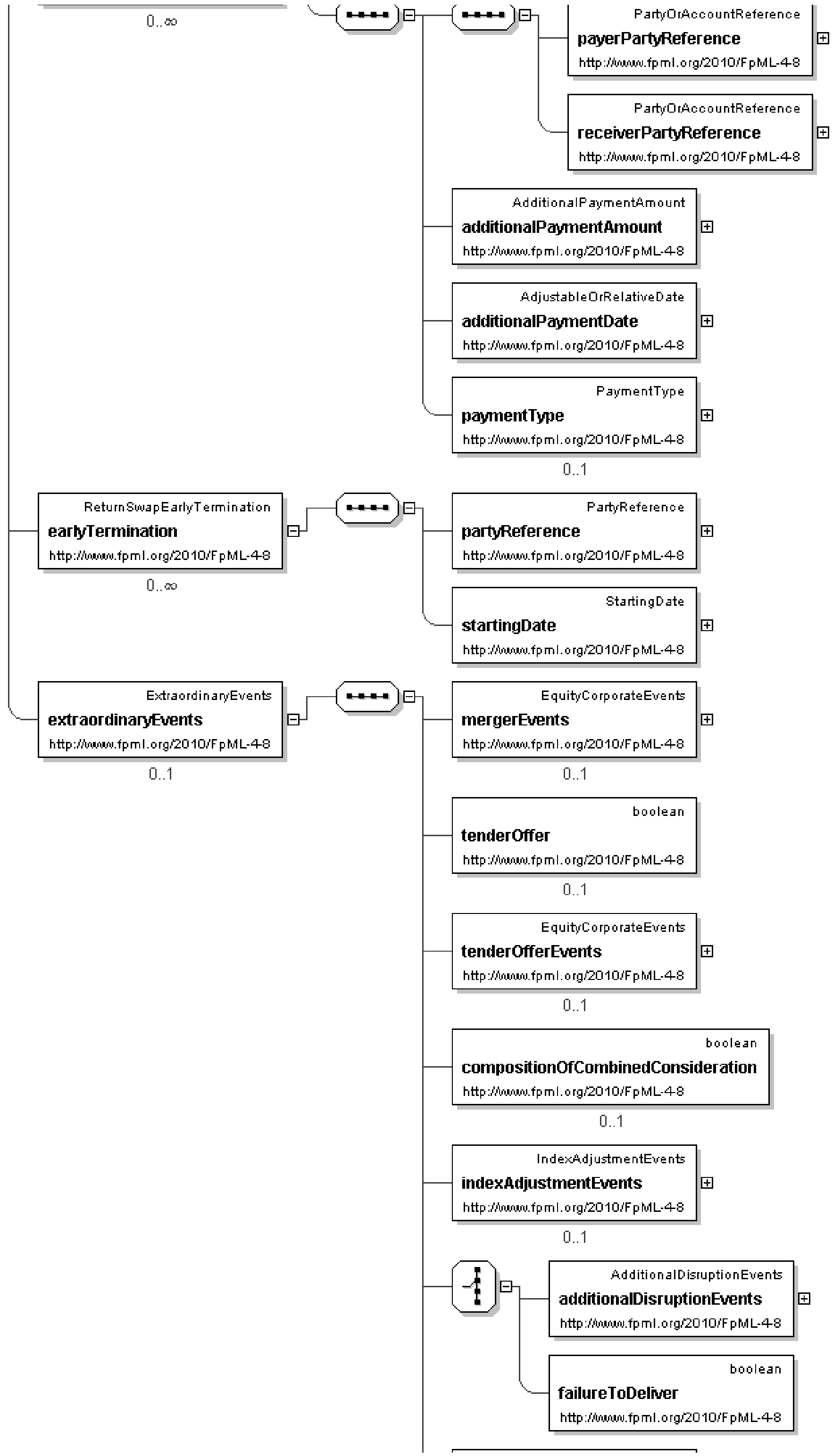
Element: equitySwap

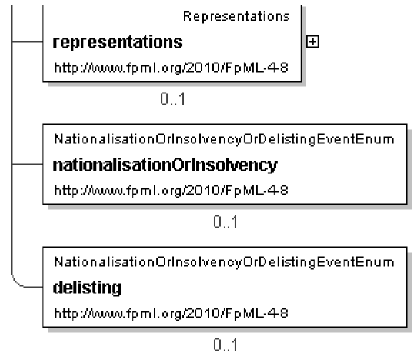
- *This element can be used wherever the following element is referenced:*
  - product

Name	equitySwap
Type	ReturnSwap
Nillable	no
Abstract	no
Documentation	This element has been DEPRECATED and it will be removed in the next FpML major version (5.0) - please use returnSwap element to represent long form equity swaps, total return swaps, and variance swaps.

Logical Diagram




0..∞
PartyOrAccountReference
payerPartyReference
http://www.fpml.org/2010/FpML-4-8
PartyOrAccountReference
receiverPartyReference
http://www.fpml.org/2010/FpML-4-8
AdditionalPaymentAmount
additionalPaymentAmount
http://www.fpml.org/2010/FpML-4-8
AdjustableOrRelativeDate
additionalPaymentDate
http://www.fpml.org/2010/FpML-4-8
PaymentType
paymentType
http://www.fpml.org/2010/FpML-4-8
0..1
ReturnSwapEarlyTermination
earlyTermination
http://www.fpml.org/2010/FpML-4-8
0..∞
PartyReference
partyReference
http://www.fpml.org/2010/FpML-4-8
StartingDate
startingDate
http://www.fpml.org/2010/FpML-4-8
ExtraordinaryEvents
extraordinaryEvents
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
mergerEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
tenderOffer
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
tenderOfferEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
compositionOfCombinedConsideration
http://www.fpml.org/2010/FpML-4-8
0..1
IndexAdjustmentEvents
indexAdjustmentEvents
http://www.fpml.org/2010/FpML-4-8
0..1
AdditionalDisruptionEvents
additionalDisruptionEvents
http://www.fpml.org/2010/FpML-4-8
boolean
failureToDeliver
http://www.fpml.org/2010/FpML-4-8

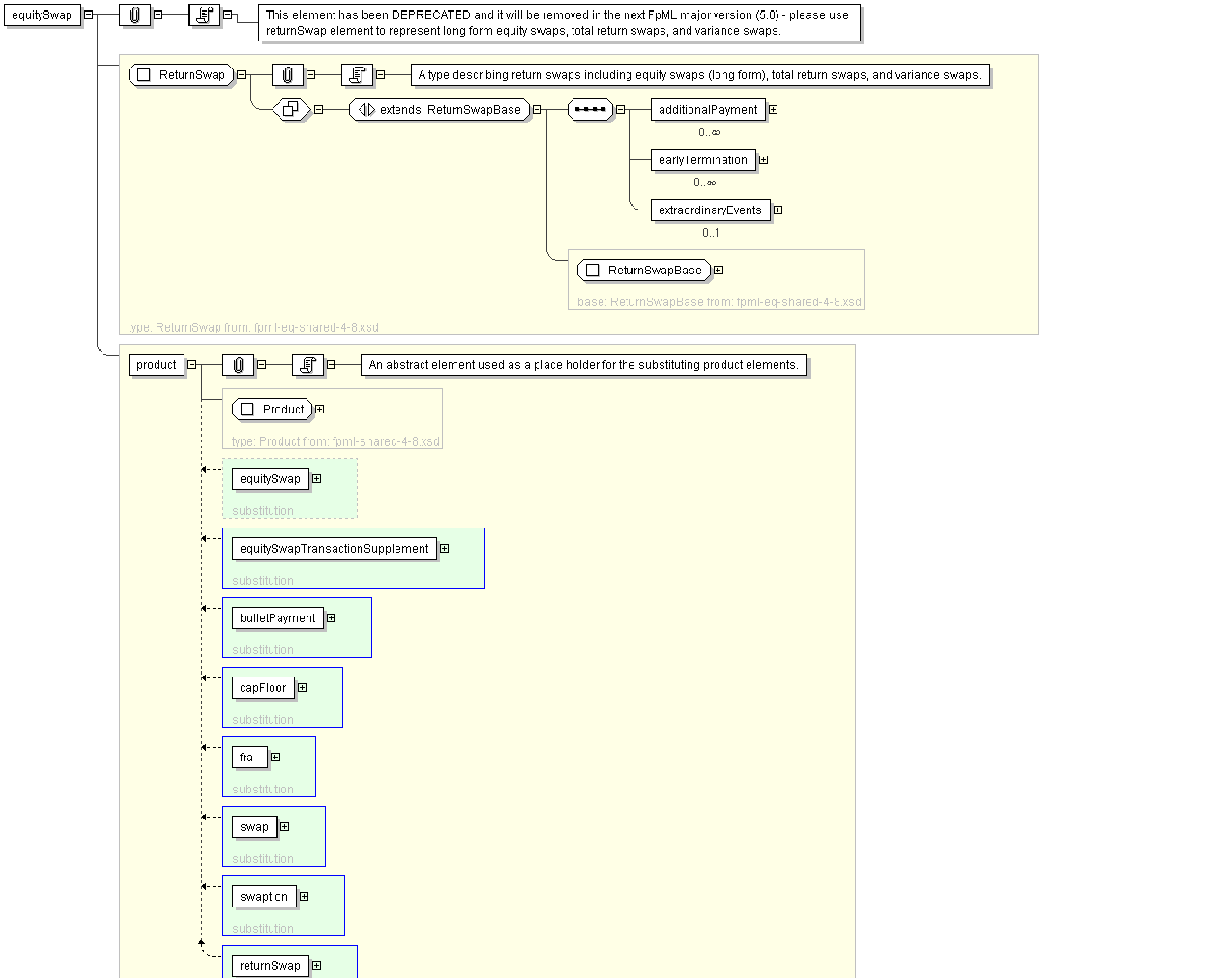


XML Instance Representation

```
<equitySwap
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

Start Group: BuyerSeller.model [0..1]
'BuyerSeller.model has been included as an optional child of ReturnSwapBase to support
the situation where an implementor wishes to indicate who has manufactured the Swap
through representing them as the Seller. It may be removed in future major revisions.'


      <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
      'A reference to the party that buys this instrument, ie. pays for this instrument and
      receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
      of FRAs this the fixed rate payer.'

      <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
      'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
      rights defined by this instrument and in return receives a payment for it. See 2000
      ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

End Group: BuyerSeller.model
   <returnSwapLeg> ... </returnSwapLeg> [1..*]
   <principalExchangeFeatures> PrincipalExchangeFeatures </principalExchangeFeatures> [0..1]
   'This is used to document a Fully Funded Return Swap.'

   <additionalPayment> ReturnSwapAdditionalPayment </additionalPayment> [0..*]
   'Specifies additional payment(s) between the principal parties to the trade. This
   component extends some of the features of the additionalPayment component developed by the
   FpML industry group. Appropriate discussions will determine whether it would be appropriate
   to extend the shared component in order to meet the further requirements of equity swaps.'

   <earlyTermination> ReturnSwapEarlyTermination </earlyTermination> [0..*]
   'Specifies, for one or for both the parties to the trade, the date from which it can
   early terminate it.'

   <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]
   'Where the underlying is shares, specifies events affecting the issuer of those shares that
   may require the terms of the transaction to be adjusted.'
```

</equitySwap>

Diagram



Schema Component Representation

```
<xsd:element name="equitySwap" type=" ReturnSwap "
substitutionGroup="product" deprecated="true" deprecatedReason="It has been made more
generic as returnSwap to cover return swap type products."/>
```

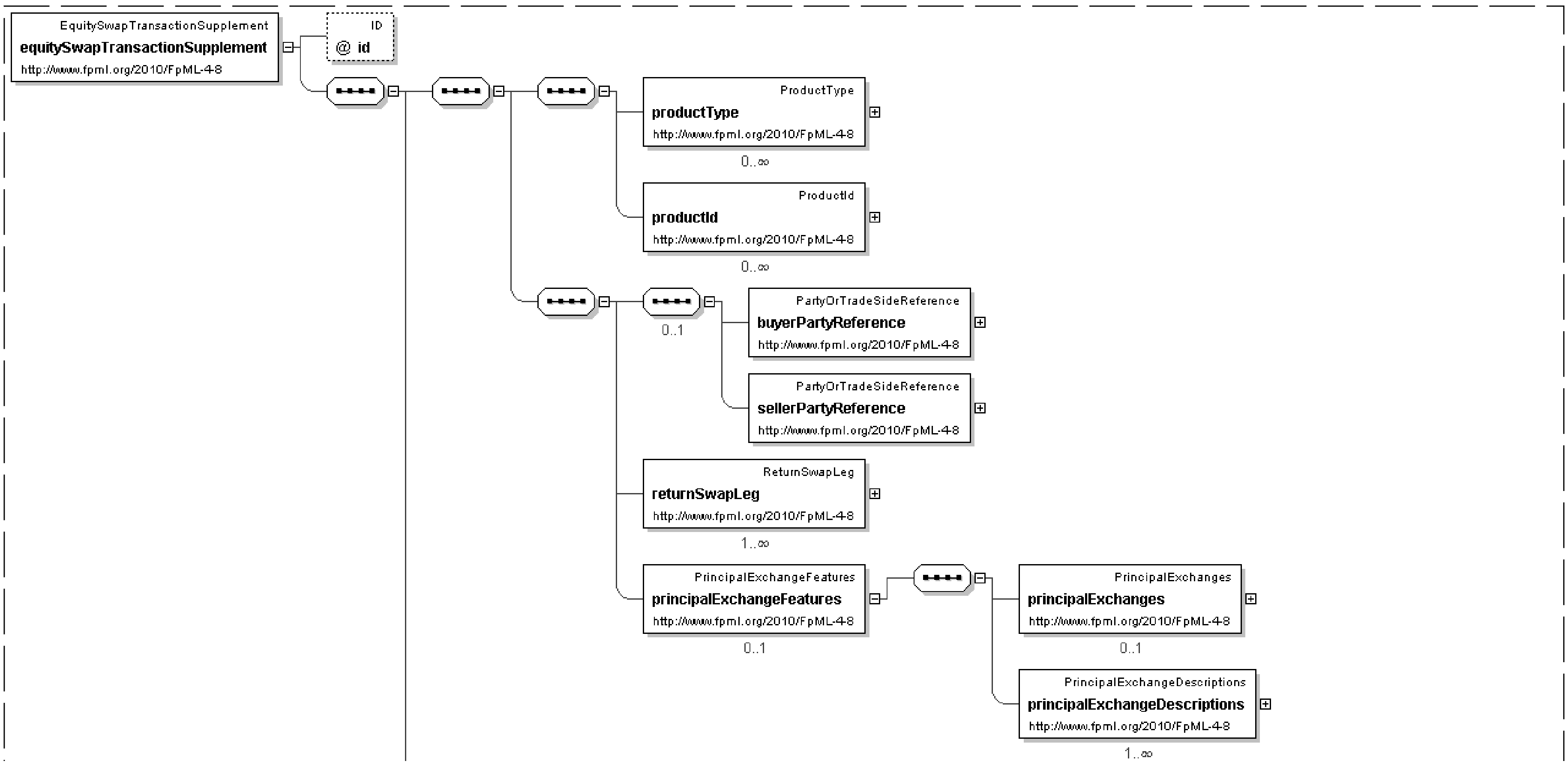
top

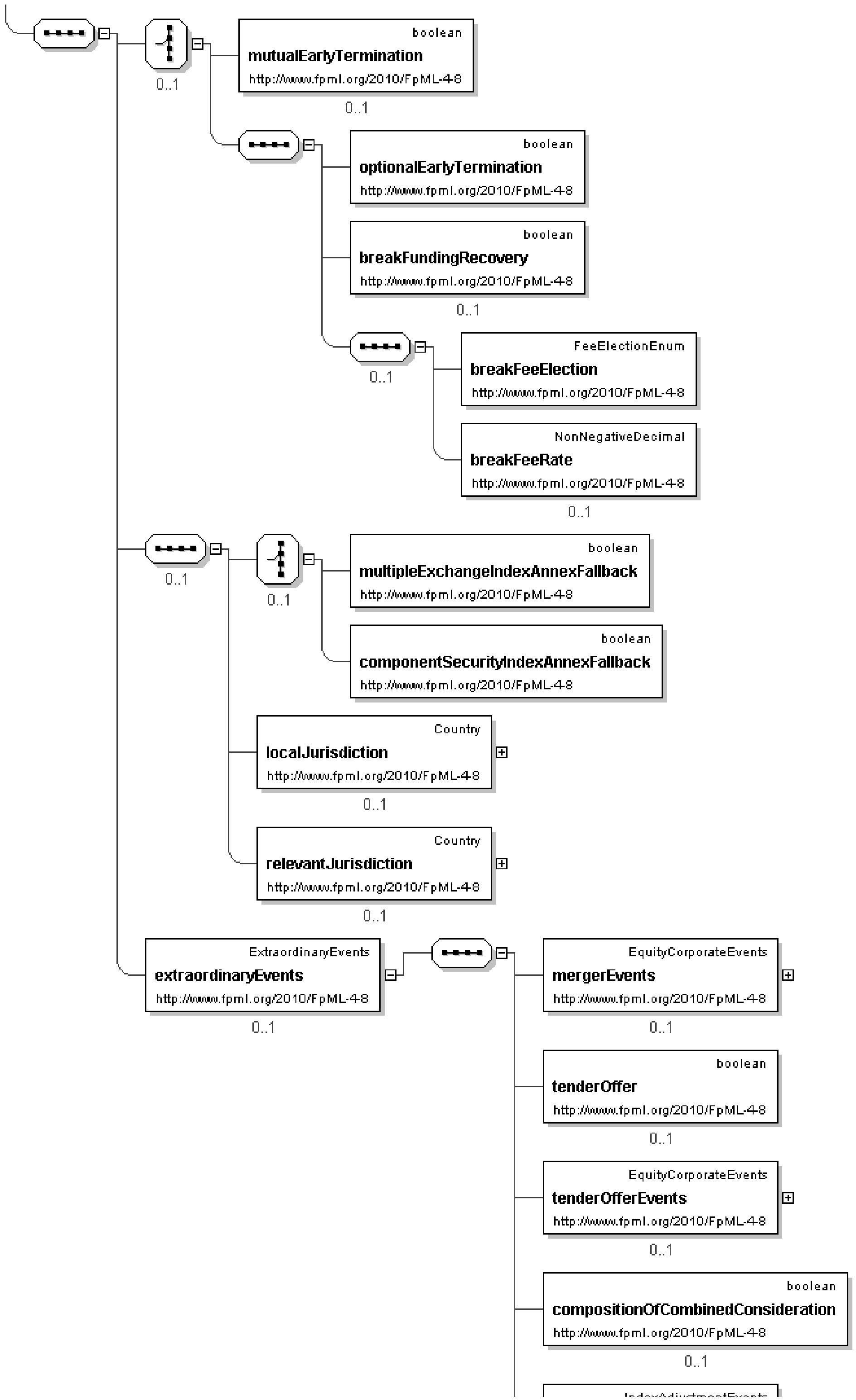
Element: equitySwapTransactionSupplement

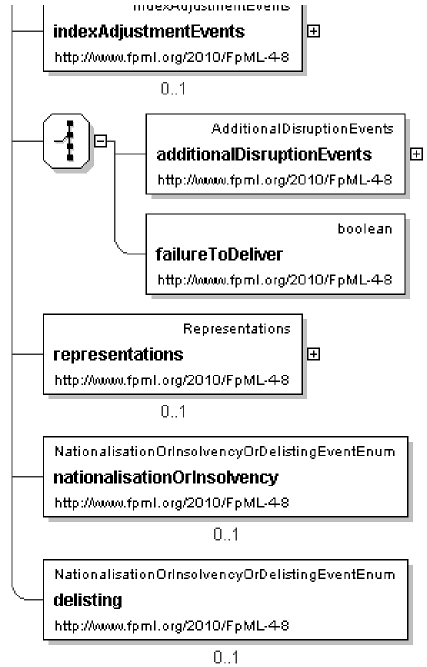
- *This element can be used wherever the following element is referenced:*
  - product

Name	equitySwapTransactionSupplement
Type	EquitySwapTransactionSupplement
Nillable	no
Abstract	no
Documentation	Specifies the structure of the equity swap transaction supplement.

Logical Diagram




boolean
mutualEarlyTermination
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
boolean
optionalEarlyTermination
http://www.fpml.org/2010/FpML-4-8
boolean
breakFundingRecovery
http://www.fpml.org/2010/FpML-4-8
0..1
FeeElectionEnum
breakFeeElection
http://www.fpml.org/2010/FpML-4-8
0..1
NonNegativeDecimal
breakFeeRate
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
multipleExchangeIndexAnnexFallback
http://www.fpml.org/2010/FpML-4-8
0..1
0..1
boolean
componentSecurityIndexAnnexFallback
http://www.fpml.org/2010/FpML-4-8
Country
localJurisdiction
http://www.fpml.org/2010/FpML-4-8
0..1
Country
relevantJurisdiction
http://www.fpml.org/2010/FpML-4-8
0..1
ExtraordinaryEvents
extraordinaryEvents
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
mergerEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
tenderOffer
http://www.fpml.org/2010/FpML-4-8
0..1
EquityCorporateEvents
tenderOfferEvents
http://www.fpml.org/2010/FpML-4-8
0..1
boolean
compositionOfCombinedConsideration
http://www.fpml.org/2010/FpML-4-8
0..1



XML Instance Representation

```
<equitySwapTransactionSupplement
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

Start Group: BuyerSeller.model [0..1]
'BuyerSeller.model has been included as an optional child of ReturnSwapBase to support
the situation where an implementor wishes to indicate who has manufactured the Swap
through representing them as the Seller. It may be removed in future major revisions.'


      <buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]
      'A reference to the party that buys this instrument, ie. pays for this instrument and
      receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case
      of FRAs this the fixed rate payer.'

      <sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]
      'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the
      rights defined by this instrument and in return receives a payment for it. See 2000
      ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

End Group: BuyerSeller.model
   <returnSwapLeg> ... </returnSwapLeg> [1..*]
   <principalExchangeFeatures> PrincipalExchangeFeatures </principalExchangeFeatures> [0..1]
   'This is used to document a Fully Funded Return Swap.'

Start Group: MutualOrOptionalEarlyTermination.model [0..1]
```

Start Choice [1]
<mutualEarlyTermination> xsd:boolean </mutualEarlyTermination> [0..1]

'Used for specifying whether the Mutual Early Termination Right that is detailed in the Master Confirmation will apply.'

<optionalEarlyTermination> xsd:boolean </optionalEarlyTermination> [1]

'A Boolean element used for specifying whether the Optional Early Termination clause detailed in the agreement will apply.'

<breakFundingRecovery> xsd:boolean </breakFundingRecovery> [0..1]

'A Boolean element used for specifying whether the Break Funding Recovery detailed in the agreement will apply.'

Start Sequence [0..1]
<breakFeeElection> FeeElectionEnum </breakFeeElection> [1]

'Defines the fee type.'

<breakFeeRate> NonNegativeDecimal </breakFeeRate> [0..1]
End Sequence
End Choice
End Group: MutualOrOptionalEarlyTermination.model
Start Group: EquityUnderlyerProvisions.model [0..1]
Start Group: IndexAnnexFallback.model [0..1]
Start Choice [1]
<multipleExchangeIndexAnnexFallback> xsd:boolean </multipleExchangeIndexAnnexFallback> [1]

'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange Index Annex is applicable to the transaction. This annex defines additional provisions which are applicable where an index is comprised of component securities that are traded on multiple exchanges.'

<componentSecurityIndexAnnexFallback> xsd:boolean </componentSecurityIndexAnnexFallback> [1]

'For an index option transaction, a flag to indicate whether a relevant Component Security Index Annex is applicable to the transaction.'

End Choice
End Group: IndexAnnexFallback.model
<localJurisdiction> Country </localJurisdiction> [0..1]

'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties, and similar charges imposed by the taxing authority of the Local Jurisdiction If this element is not present Local Jurisdiction is Not Applicable.'

<relevantJurisdiction> Country </relevantJurisdiction> [0..1]

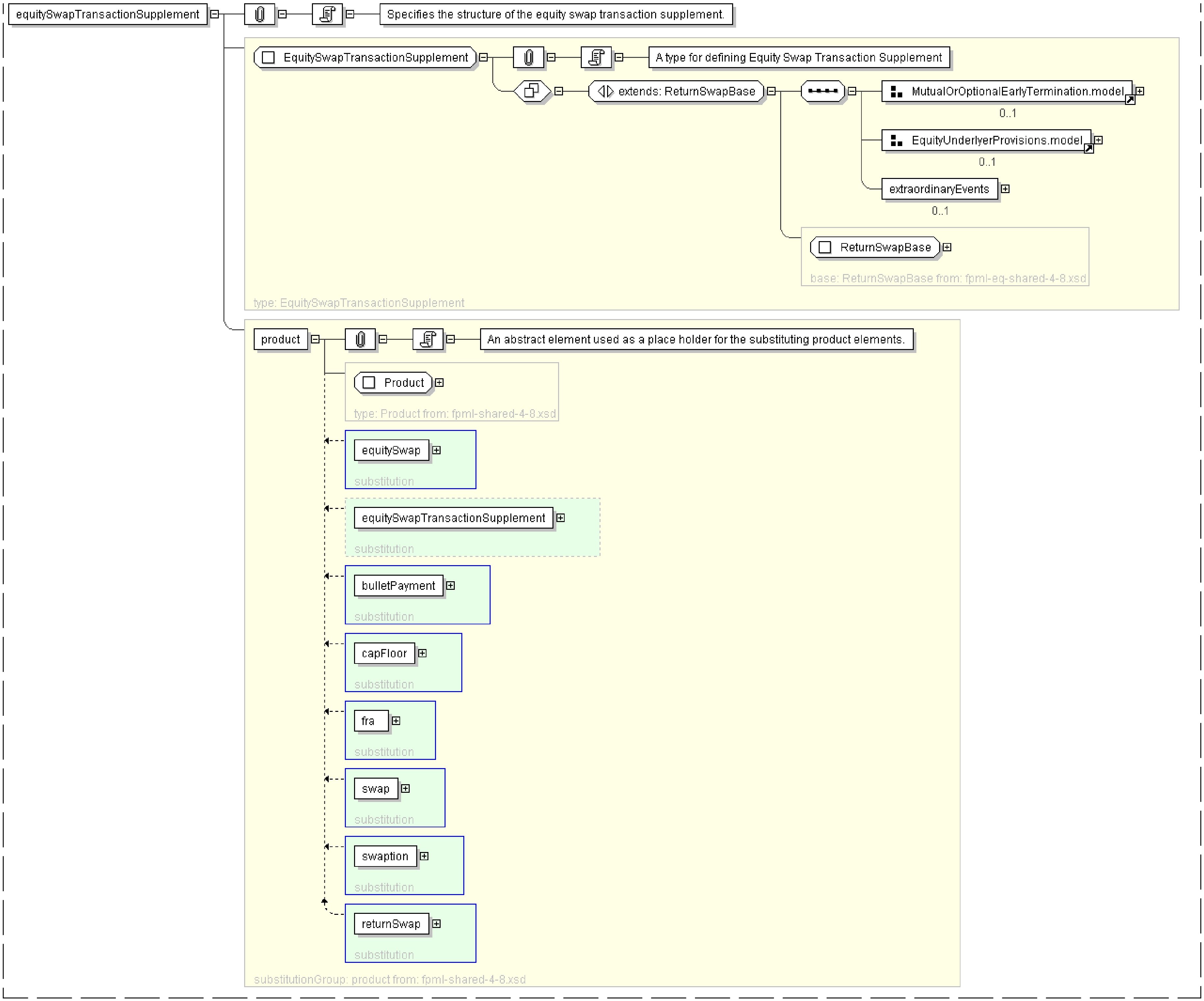
'Relevent Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties and similar charges that would be imposed by the taxing authority of the Country of Underlyer on a Hypothetical Broker Dealer assuming the Applicable Hedge Positions are held by its office in the Relevant Jurisdiction. If this element is not present Relevant Jurisdiction is Not Applicable.'

End Group: EquityUnderlyerProvisions.model
<extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]

'Where the underlying is shares, specifies events affecting the issuer of those shares that may require the terms of the transaction to be adjusted.'

</equitySwapTransactionSupplement>

Diagram



equitySwapTransactionSupplement
Specifies the structure of the equity swap transaction supplement.
EquitySwapTransactionSupplement
A type for defining Equity Swap Transaction Supplement
extends: ReturnSwapBase
MutualOrOptionalEarlyTermination.model
0..1
EquityUnderlyerProvisions.model
0..1
extraordinaryEvents
0..1
ReturnSwapBase
base: ReturnSwapBase from: fpml-eq-shared-4-8.xsd
type: EquitySwapTransactionSupplement
product
An abstract element used as a place holder for the substituting product elements.
Product
type: Product from: fpml-shared-4-8.xsd
equitySwap
substitution
equitySwapTransactionSupplement
substitution
bulletPayment
substitution
capFloor
substitution
fra
substitution
swap
substitution
swaption
substitution
returnSwap
substitution
substitutionGroup: product from: fpml-shared-4-8.xsd

Schema Component Representation

```
<xsd:element name="equitySwapTransactionSupplement" type=" EquitySwapTransactionSupplement
" substitutionGroup="product"/>
```

top

Global Definitions

Complex Type: DeprecatedEquityLeg

Super-types:	ReturnSwapLeg < **DeprecatedEquityLeg** (by extension)
Sub-types:	None

Name	DeprecatedEquityLeg
Used by (from the same schema document)	Element **equityLeg**
Abstract	no
Documentation	This type has been DEPRECATED. It will be removed in the next FpML major version. A type describing the equity leg of a return type swap.

XML Instance Representation

```
<...
legIdentifier=" xsd:ID [0..1]
'DEPRECATED This element will be renamed to id in the next major FpML version.'

">
   <payerPartyReference> PartyOrAccountReference </payerPartyReference> [1]
   'A reference to the party responsible for making the payments defined by this structure.'

   <receiverPartyReference> PartyOrAccountReference </receiverPartyReference> [1]
   'A reference to the party that receives the payments corresponding to this structure.'

   <paymentFrequency> Frequency </paymentFrequency> [0..1]
   'DEPRECATED This element will be removed in the next FpML major version. Frequency at
   which this leg pays.'

   <effectiveDate> AdjustableOrRelativeDate </effectiveDate> [1]
   'Specifies the effective date of the equity leg of the swap. When defined in relation to a
   date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the effective date of the other leg of the swap.'

   <terminationDate> AdjustableOrRelativeDate </terminationDate> [1]
   'Specifies the termination date of the equity leg of the swap. When defined in relation to
   a date specified somewhere else in the document (through the relativeDate component),
   this element will typically point to the termination date of the other leg of the swap.'

   <underlyer> Underlyer </underlyer> [1]
   'Specifies the underlying component of the return type swap, which can be either one or
   many and consists in either equity, index or convertible bond component, or a combination
   of these.'

   <valuation> DeprecatedEquityLegValuation </valuation> [1]
   'Specifies the terms of the initial price of the return type swap and of the
   subsequent valuations of the equity underlyer.'

   <notional> ReturnSwapNotional </notional> [1]
   'Specifies the notional of a return type swap. When used in the equity leg, the definition
   will typically combine the actual amount (using the notional component defined by the
   FpML industry group) and the determination method. When used in the interest leg,
   the definition will typically point to the definition of the equity leg.'
```

<equityAmount> ReturnSwapAmount **</equityAmount>** [1]

'Specifies, in relation to each Equity Payment Date, the amount to which the Equity Payment Date relates. Unless otherwise specified, this term has the meaning defined in the ISDA 2002 Equity Derivatives Definitions.'

<return> Return **</return>** [1]

'Specifies the conditions under which dividend affecting the underlyer will be paid to the receiver of the equity amounts.'

<notionalAdjustments> NotionalAdjustmentEnum **</notionalAdjustments>** [1]

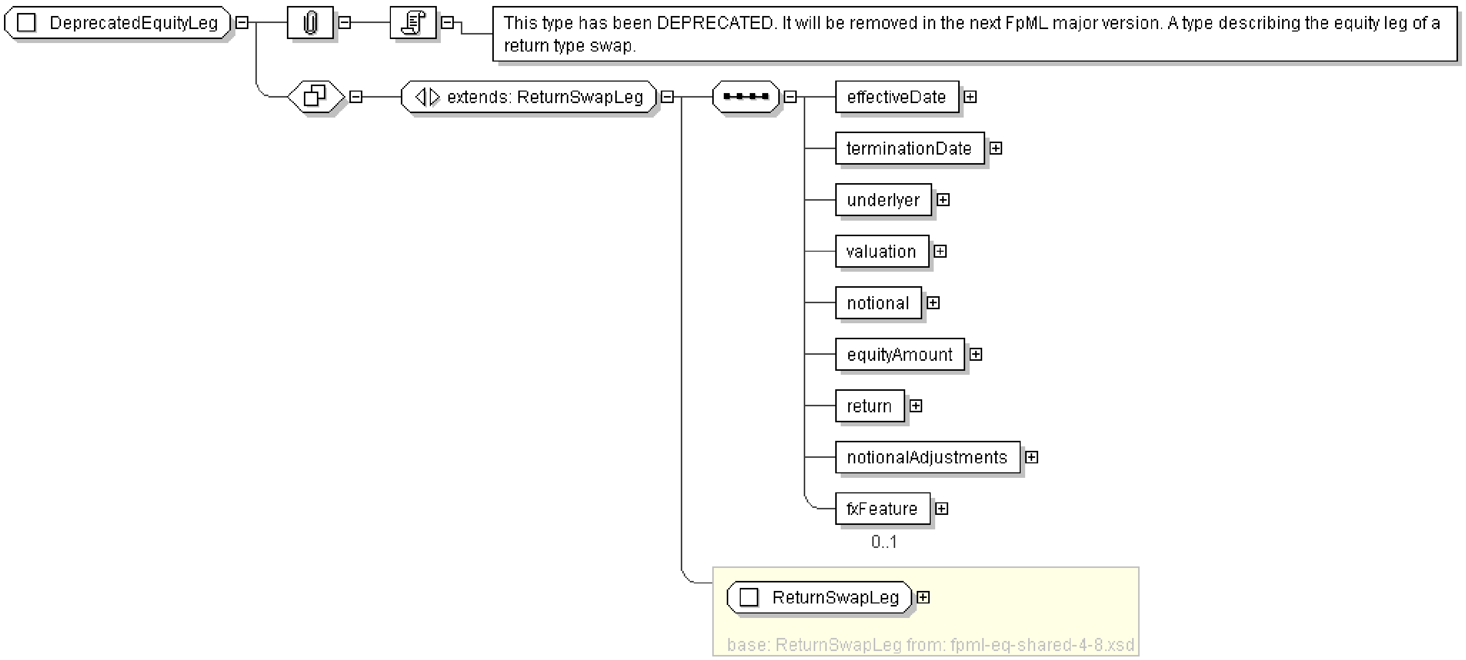
'Specifies the conditions that govern the adjustment to the number of units of the equity swap.'

<fxFeature> FxFeature **</fxFeature>** [0..1]

'A quanto or composite FX feature.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedEquityLeg" deprecated="true" deprecatedReason="It has
been made more generic as ReturnLeg to cover return swap type products.">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapLeg ">
         <xsd:sequence>
            <xsd:element name="effectiveDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="terminationDate" type=" AdjustableOrRelativeDate "/>
            <xsd:element name="underlyer" type=" Underlyer "/>
            <xsd:element name="valuation" type=" DeprecatedEquityLegValuation "/>
            <xsd:element name="notional" type=" ReturnSwapNotional "/>
            <xsd:element name="equityAmount" type=" ReturnSwapAmount "/>
            <xsd:element name="return" type=" Return "/>
            <xsd:element name="notionalAdjustments" type=" NotionalAdjustmentEnum "/>
            <xsd:element name="fxFeature" type=" FxFeature " minOccurs="0"/>
```

```
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DeprecatedEquityLegValuation

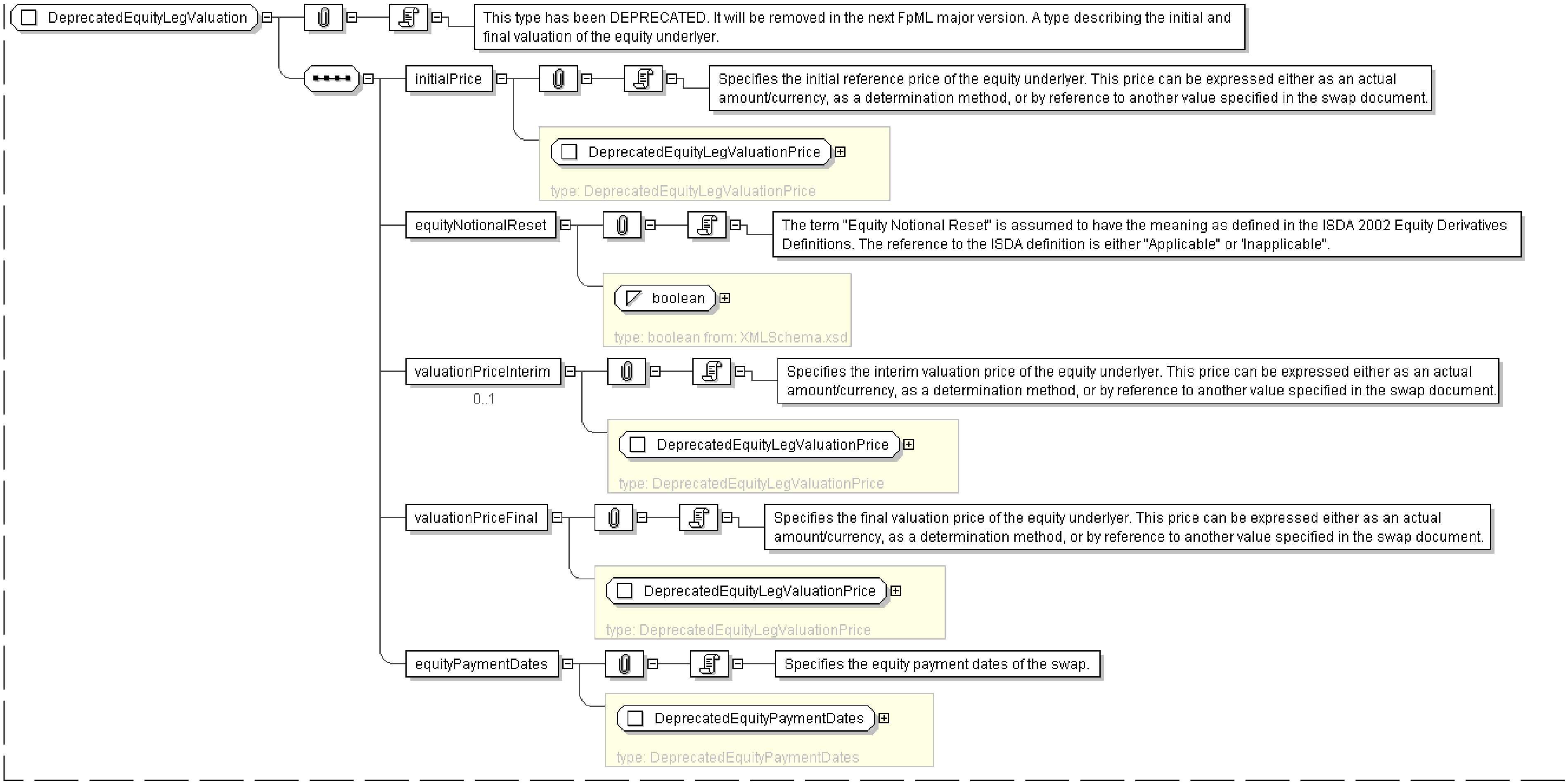
Super-types:	None
Sub-types:	None

Name	DeprecatedEquityLegValuation
Used by (from the same schema document)	Complex Type **DeprecatedEquityLeg**
Abstract	no
Documentation	This type has been DEPRECATED. It will be removed in the next FpML major version. A type describing the initial and final valuation of the equity underlyer.

XML Instance Representation

```
<...>
   <initialPrice> DeprecatedEquityLegValuationPrice </initialPrice> [1]
   'Specifies the initial reference price of the equity underlyer. This price can be
   expressed either as an actual amount/currency, as a determination method, or by reference
   to another value specified in the swap document.'

   <equityNotionalReset> xsd:boolean </equityNotionalReset> [1]
   'The term \"Equity Notional Reset\" is assumed to have the meaning as defined in the ISDA
   2002 Equity Derivatives Definitions. The reference to the ISDA definition is either
   \"Applicable\" or \'Inapplicable\".'

   <valuationPriceInterim> DeprecatedEquityLegValuationPrice </valuationPriceInterim> [0..1]
   'Specifies the interim valuation price of the equity underlyer. This price can be
   expressed either as an actual amount/currency, as a determination method, or by reference
   to another value specified in the swap document.'

   <valuationPriceFinal> DeprecatedEquityLegValuationPrice </valuationPriceFinal> [1]
   'Specifies the final valuation price of the equity underlyer. This price can be
   expressed either as an actual amount/currency, as a determination method, or by reference
   to another value specified in the swap document.'

   <equityPaymentDates> DeprecatedEquityPaymentDates </equityPaymentDates> [1]
   'Specifies the equity payment dates of the swap.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedEquityLegValuation" deprecated="true" deprecatedReason="It
has been made more generic as ReturnLegValuation to cover return swap type products.">
   <xsd:sequence>
      <xsd:element name="initialPrice" type=" DeprecatedEquityLegValuationPrice "/>
      <xsd:element name="equityNotionalReset" type=" xsd:boolean "/>
      <xsd:element name="valuationPriceInterim" type=" DeprecatedEquityLegValuationPrice
      " minOccurs="0"/>
      <xsd:element name="valuationPriceFinal" type=" DeprecatedEquityLegValuationPrice "/>
      <xsd:element name="equityPaymentDates" type=" DeprecatedEquityPaymentDates "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DeprecatedEquityLegValuationPrice

Super-types:	Price < **DeprecatedEquityLegValuationPrice** (by extension)
Sub-types:	None

Name	DeprecatedEquityLegValuationPrice

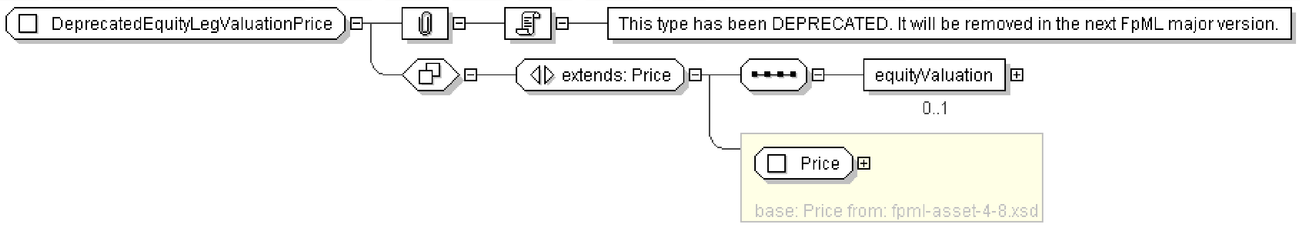
Used by (from the same schema document)	Complex Type **DeprecatedEquityLegValuation** , Complex Type **DeprecatedEquityLegValuation** , Complex Type **DeprecatedEquityLegValuation**
Abstract	no
Documentation	This type has been DEPRECATED. It will be removed in the next FpML major version.

XML Instance Representation

```
<...>
   <commission> Commission </commission> [0..1]
   'This optional component specifies the commission to be charged for executing the
   hedge transactions.'
Start Choice [1]
      <determinationMethod> DeterminationMethod </determinationMethod> [1]
      'Specifies the method according to which an amount or a date is determined.'
Start Group: EquityPrice.model [0..1]
         <grossPrice> ActualPrice </grossPrice> [0..1]
         'Specifies the price of the underlyer, before commissions.'
         <netPrice> ActualPrice </netPrice> [1]
         'Specifies the price of the underlyer, net of commissions.'
         <accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]
         'Specifies the accrued interest that are part of the dirty price in the case of a fixed
         income security or a convertible bond. Expressed in percentage of the notional.'
         <fxConversion> FxConversion </fxConversion> [0..1]
         'Specifies the currency conversion rate that applies to an amount. This rate can either
         be defined elsewhere in the document (case of a quanto swap), or explicitly described
         through this component.'
End Group: EquityPrice.model
      <amountRelativeTo> AmountReference </amountRelativeTo> [1]
      'The href attribute value will be a pointer style reference to the element or
      component elsewhere in the document where the anchor amount is defined.'
      <grossPrice> ActualPrice </grossPrice> [0..1]
      'Specifies the price of the underlyer, before commissions.'
      <netPrice> ActualPrice </netPrice> [1]
      'Specifies the price of the underlyer, net of commissions.'
      <accruedInterestPrice> xsd:decimal </accruedInterestPrice> [0..1]
      'Specifies the accrued interest that are part of the dirty price in the case of a fixed
      income security or a convertible bond. Expressed in percentage of the notional.'
      <fxConversion> FxConversion </fxConversion> [0..1]
      'Specifies the currency conversion rate that applies to an amount. This rate can either
      be defined elsewhere in the document (case of a quanto swap), or explicitly described
      through this component.'
End Choice
   <cleanNetPrice> xsd:decimal </cleanNetPrice> [0..1]
   'The net price excluding accrued interest. The \"Dirty Price\" for bonds is put in
   the \"netPrice\" element, which includes accrued interest. Thus netPrice - cleanNetPrice
   = accruedInterest. The currency and price expression for this field are the same as those
   for the (dirty) netPrice.'
   <quotationCharacteristics> QuotationCharacteristics </quotationCharacteristics> [0..1]
   'Allows information about how the price was quoted to be provided.'
```

```
    <equityValuation> EquityValuation </equityValuation> [0..1]
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedEquityLegValuationPrice"
deprecated="true" deprecatedReason="It has been made more generic as ReturnLegValuationPrice
to cover return swap type products.">
   <xsd:complexContent>
      <xsd:extension base=" Price ">
         <xsd:sequence>
            <xsd:element name="equityValuation" type=" EquityValuation " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DeprecatedEquityPaymentDates

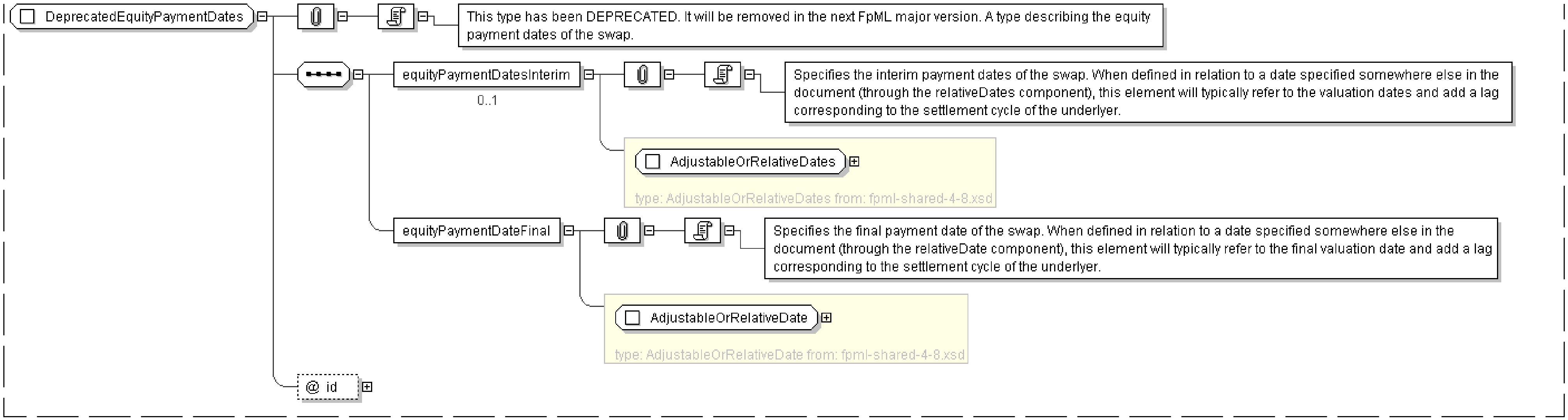
Super-types:	None
Sub-types:	None

Name	DeprecatedEquityPaymentDates
Used by (from the same schema document)	Complex Type **DeprecatedEquityLegValuation**
Abstract	no
Documentation	This type has been DEPRECATED. It will be removed in the next FpML major version. A type describing the equity payment dates of the swap.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <equityPaymentDatesInterim> AdjustableOrRelativeDates </equityPaymentDatesInterim> [0..1]
   'Specifies the interim payment dates of the swap. When defined in relation to a date
   specified somewhere else in the document (through the relativeDates component), this
   element will typically refer to the valuation dates and add a lag corresponding to
   the settlement cycle of the underlyer.'

   <equityPaymentDateFinal> AdjustableOrRelativeDate </equityPaymentDateFinal> [1]
   'Specifies the final payment date of the swap. When defined in relation to a date
   specified somewhere else in the document (through the relativeDate component), this
   element will typically refer to the final valuation date and add a lag corresponding to
   the settlement cycle of the underlyer.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DeprecatedEquityPaymentDates" deprecated="true" deprecatedReason="It
has been made more generic as ReturnLegPaymentDates to cover return swap type products.">
   <xsd:sequence>
      <xsd:element name="equityPaymentDatesInterim" type=" AdjustableOrRelativeDates " minOccurs="0"/>
      <xsd:element name="equityPaymentDateFinal" type=" AdjustableOrRelativeDate "/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: EquitySwapTransactionSupplement

Super-types:	ReturnSwapBase < **EquitySwapTransactionSupplement** (by extension)
Sub-types:	None

Name	EquitySwapTransactionSupplement
Used by (from the same schema document)	Element **equitySwapTransactionSupplement**
Abstract	no
Documentation	A type for defining Equity Swap Transaction Supplement

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <productType> ProductType </productType> [0..*]
   'A classification of the type of product. FpML defines a simple product categorization using
   a coding scheme.'

   <productId> ProductId </productId> [0..*]
   'A product reference identifier allocated by a party. FpML does not define the domain
   values associated with this element. Note that the domain values for this element are
   not strictly an enumerated list.'

Start Group: BuyerSeller.model [0..1]
'BuyerSeller.model has been included as an optional child of ReturnSwapBase to support
the situation where an implementor wishes to indicate who has manufactured the Swap
```

through representing them as the Seller. It may be removed in future major revisions.'

<buyerPartyReference> PartyOrTradeSideReference </buyerPartyReference> [1]

'A reference to the party that buys this instrument, ie. pays for this instrument and receives the rights defined by it. See 2000 ISDA definitions Article 11.1 (b). In the case of FRAs this the fixed rate payer.'

<sellerPartyReference> PartyOrTradeSideReference </sellerPartyReference> [1]

'A reference to the party that sells (\"writes\") this instrument, i.e. that grants the rights defined by this instrument and in return receives a payment for it. See 2000 ISDA definitions Article 11.1 (a). In the case of FRAs this is the floating rate payer.'

End Group: BuyerSeller.model
<returnSwapLeg> ... </returnSwapLeg> [1..*]
<principalExchangeFeatures> PrincipalExchangeFeatures </principalExchangeFeatures> [0..1]

'This is used to document a Fully Funded Return Swap.'

Start Group: MutualOrOptionalEarlyTermination.model [0..1]
Start Choice [1]
<mutualEarlyTermination> xsd:boolean **</mutualEarlyTermination>** [0..1]

'Used for specifying whether the Mutual Early Termination Right that is detailed in the Master Confirmation will apply.'

<optionalEarlyTermination> xsd:boolean **</optionalEarlyTermination>** [1]

'A Boolean element used for specifying whether the Optional Early Termination clause detailed in the agreement will apply.'

<breakFundingRecovery> xsd:boolean **</breakFundingRecovery>** [0..1]

'A Boolean element used for specifying whether the Break Funding Recovery detailed in the agreement will apply.'

Start Sequence [0..1]
<breakFeeElection> FeeElectionEnum **</breakFeeElection>** [1]

'Defines the fee type.'

<breakFeeRate> NonNegativeDecimal **</breakFeeRate>** [0..1]
End Sequence
End Choice
End Group: MutualOrOptionalEarlyTermination.model
Start Group: EquityUnderlyerProvisions.model [0..1]
Start Group: IndexAnnexFallback.model [0..1]
Start Choice [1]
<multipleExchangeIndexAnnexFallback> xsd:boolean **</multipleExchangeIndexAnnexFallback>** [1]

'For an index option transaction, a flag to indicate whether a relevant Multiple Exchange Index Annex is applicable to the transaction. This annex defines additional provisions which are applicable where an index is comprised of component securities that are traded on multiple exchanges.'

<componentSecurityIndexAnnexFallback> xsd:boolean **</componentSecurityIndexAnnexFallback>** [1]

'For an index option transaction, a flag to indicate whether a relevant Component Security Index Annex is applicable to the transaction.'

End Choice
End Group: IndexAnnexFallback.model
<localJurisdiction> Country **</localJurisdiction>** [0..1]

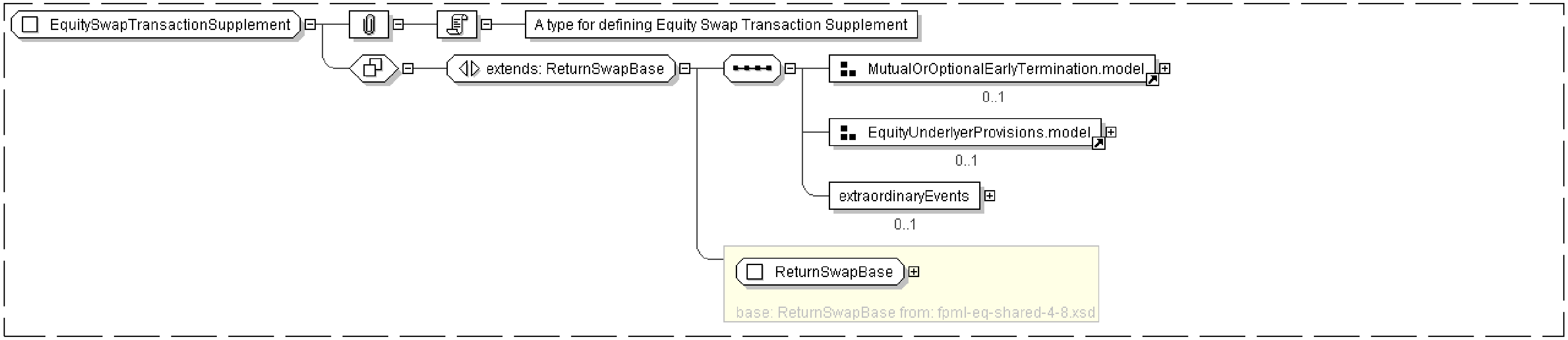
'Local Jurisdiction is a term used in the AEJ Master Confirmation, which is used to determine local taxes, which shall mean taxes, duties, and similar charges imposed by the taxing authority of the Local Jurisdiction If this element is not present Local Jurisdiction is Not Applicable.'

<relevantJurisdiction> Country **</relevantJurisdiction>** [0..1]

'Relevent Jurisdiction is a term used in the AEJ Master Confirmation, which is used

```
    to determine local taxes, which shall mean taxes, duties and similar charges that would
    be imposed by the taxing authority of the Country of Underlyer on a Hypothetical Broker
    Dealer assuming the Applicable Hedge Positions are held by its office in the
    Relevant Jurisdiction. If this element is not present Relevant Jurisdiction is Not Applicable.'

End Group: EquityUnderlyerProvisions.model
  <extraordinaryEvents> ExtraordinaryEvents </extraordinaryEvents> [0..1]
  'Where the underlying is shares, specifies events affecting the issuer of those shares that
  may require the terms of the transaction to be adjusted.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="EquitySwapTransactionSupplement">
   <xsd:complexContent>
      <xsd:extension base=" ReturnSwapBase ">
         <xsd:sequence>
            <xsd:group ref=" MutualOrOptionalEarlyTermination.model " minOccurs="0"/>
            <xsd:group ref=" EquityUnderlyerProvisions.model " minOccurs="0"/>
            <xsd:element name="extraordinaryEvents" type=" ExtraordinaryEvents " minOccurs="0"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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XML Schema Documentation

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Schema Document Properties

Target Namespace	**http://www.fpml.org/2010/FpML-4-8**
Version	$Revision: 6991 $
Element and Attribute Namespaces	• Global element and attribute declarations belong to this schema's target namespace. • By default, local element declarations belong to this schema's target namespace. • By default, local attribute declarations have no namespace.
Schema Composition	• This schema includes components from the following schema document(s): ○ fpml-doc-4-8.xsd ○ fpml-asset-4-8.xsd

Declared Namespaces

Prefix	Namespace
Default namespace	**http://www.fpml.org/2010/FpML-4-8**
ecore	http://www.eclipse.org/emf/2002/Ecore
xml	http://www.w3.org/XML/1998/namespace
xsd	http://www.w3.org/2001/XMLSchema
fpml	**http://www.fpml.org/2010/FpML-4-8**

Schema Component Representation

```
<xsd:schema nsPrefix="fpml" package="org.fpml" documentRoot="FpML" targetNamespace="http://
www.fpml.org/2010/FpML-4-8" version="$Revision: 6991 $"
attributeFormDefault="unqualified" elementFormDefault="qualified">
   <xsd:include schemaLocation="fpml-doc-4-8.xsd"/>
   <xsd:include schemaLocation="fpml-asset-4-8.xsd"/>
   ...
</xsd:schema>
```

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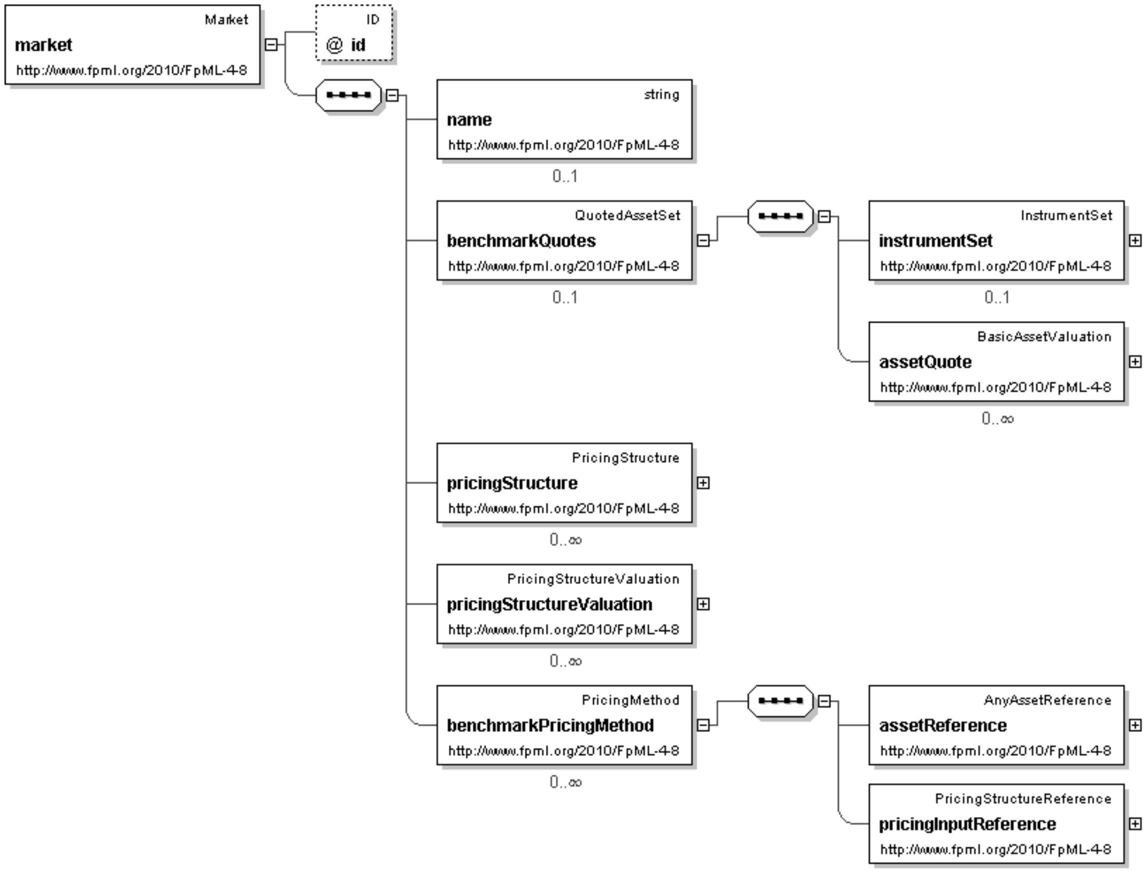
Global Declarations

Element: market

Name	market
Type	Market
Nillable	no
Abstract	no
Documentation	This is a global element used for creating global types. It holds Market information, e.g. curves, surfaces, quotes, etc.

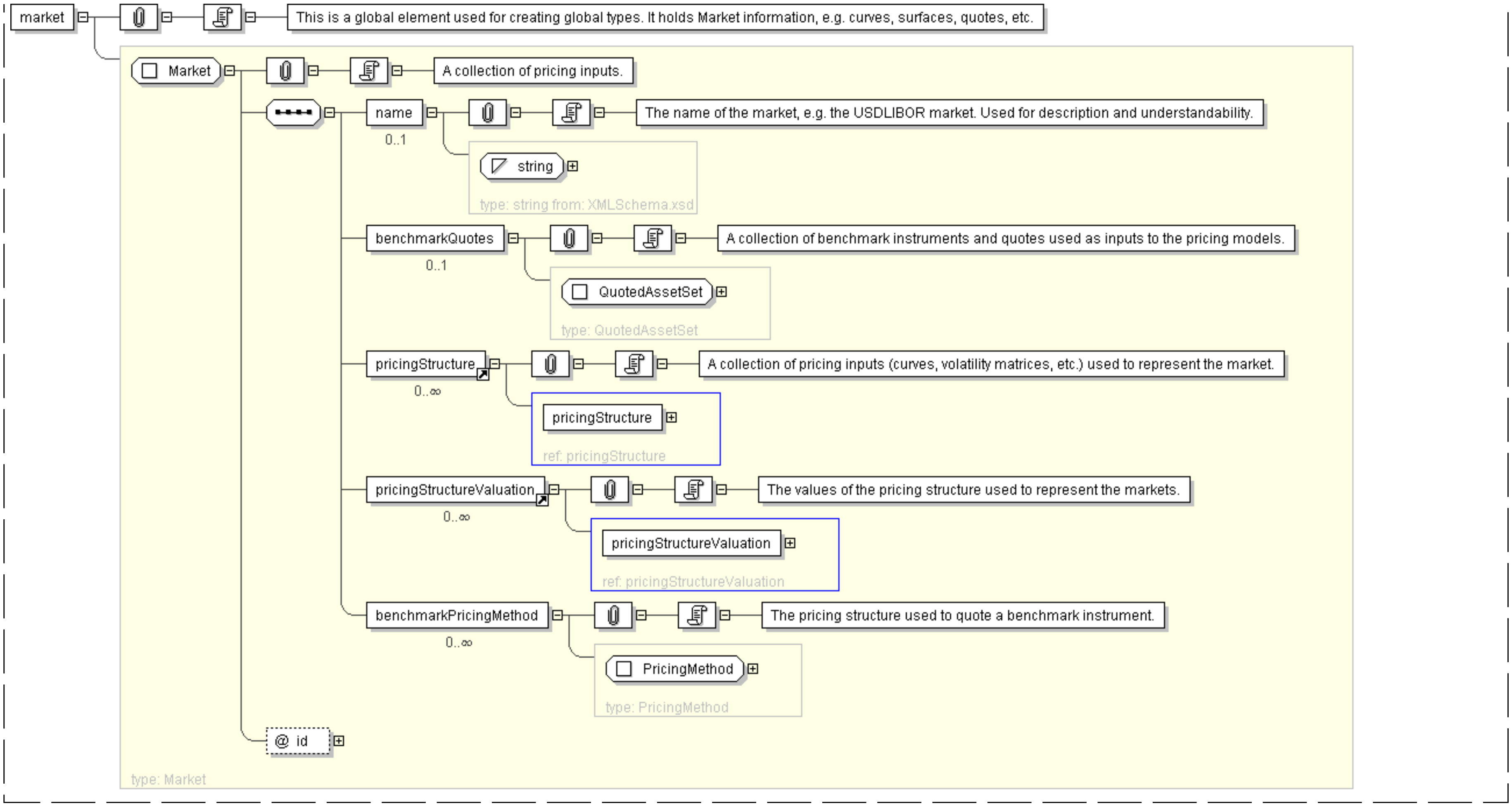
Logical Diagram



XML Instance Representation

```
<market
id=" xsd:ID [0..1]">
   <name> xsd:string </name> [0..1]
   'The name of the market, e.g. the USDLIBOR market. Used for description and understandability.'

   <benchmarkQuotes> QuotedAssetSet </benchmarkQuotes> [0..1]
   'A collection of benchmark instruments and quotes used as inputs to the pricing models.'

   <pricingStructure> ... </pricingStructure> [0..*]
   'A collection of pricing inputs (curves, volatility matrices, etc.) used to represent
   the market.'

   <pricingStructureValuation> ... </pricingStructureValuation> [0..*]
   'The values of the pricing structure used to represent the markets.'

   <benchmarkPricingMethod> PricingMethod </benchmarkPricingMethod> [0..*]
   'The pricing structure used to quote a benchmark instrument.'

</market>
```

Diagram



Schema Component Representation

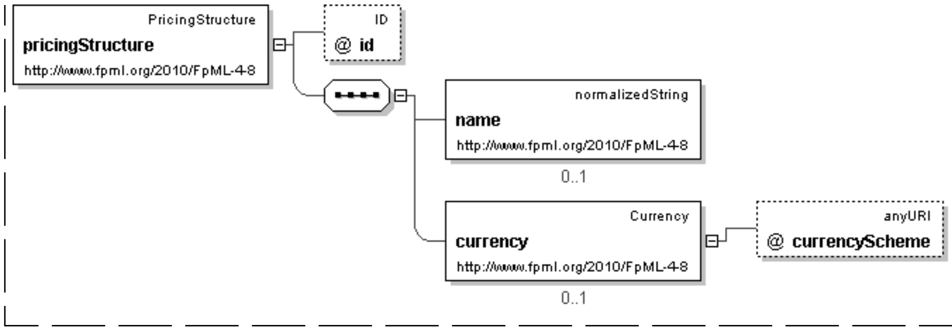
```
<xsd:element name="market" type=" Market "/>
```

top

Element: pricingStructure

Name	pricingStructure
Used by (from the same schema document)	Complex Type **Market**
Type	PricingStructure
Nillable	no
Abstract	yes

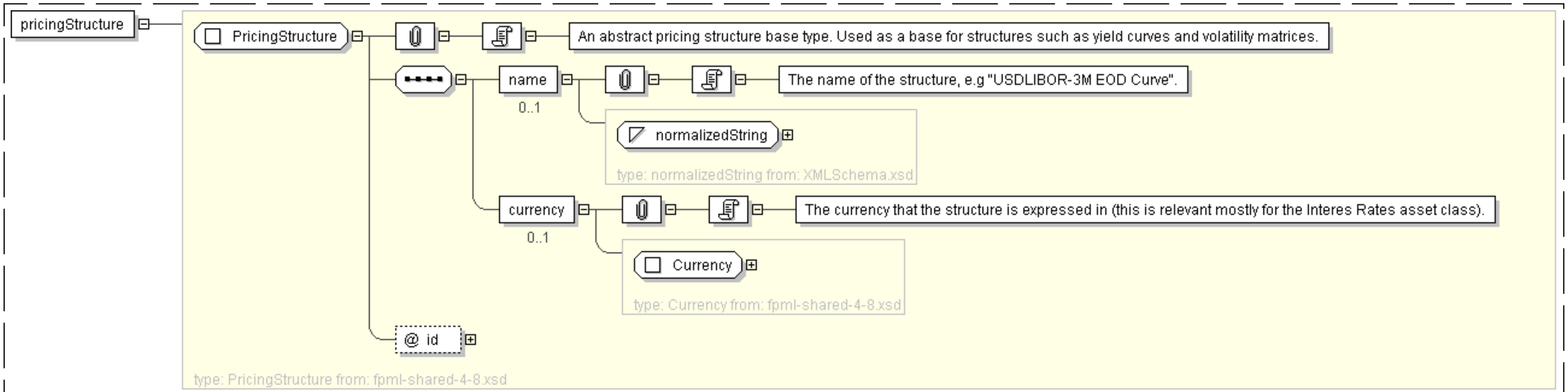
Logical Diagram



XML Instance Representation

```
<pricingStructure
id=" xsd:ID [0..1]">
   <name> xsd:normalizedString </name> [0..1]
   'The name of the structure, e.g \"USDLIBOR-3M EOD Curve\".'

   <currency> Currency </currency> [0..1]
   'The currency that the structure is expressed in (this is relevant mostly for the Interes
   Rates asset class).'

</pricingStructure>
```

Diagram



Schema Component Representation

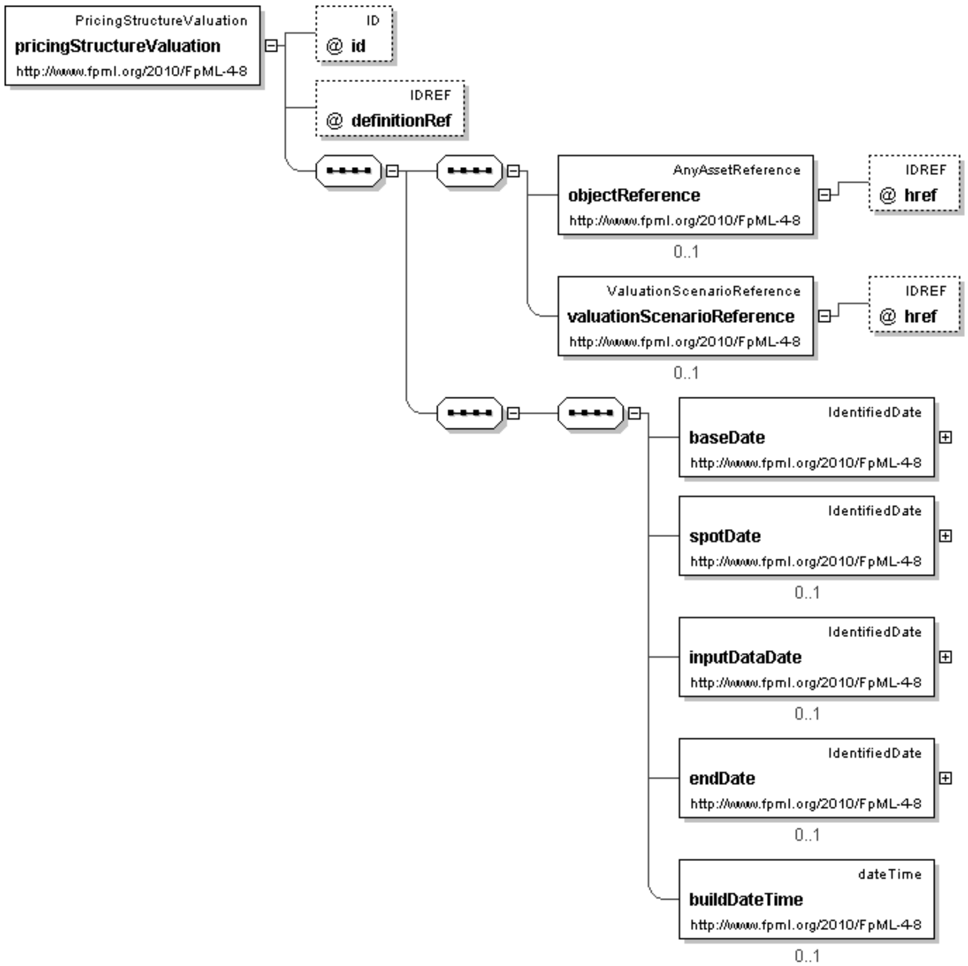
```
<xsd:element name="pricingStructure" type=" PricingStructure " abstract="true"/>
```

top

Element: pricingStructureValuation

Name	pricingStructureValuation
Used by (from the same schema document)	Complex Type **Market**
Type	PricingStructureValuation
Nillable	no
Abstract	yes

Logical Diagram

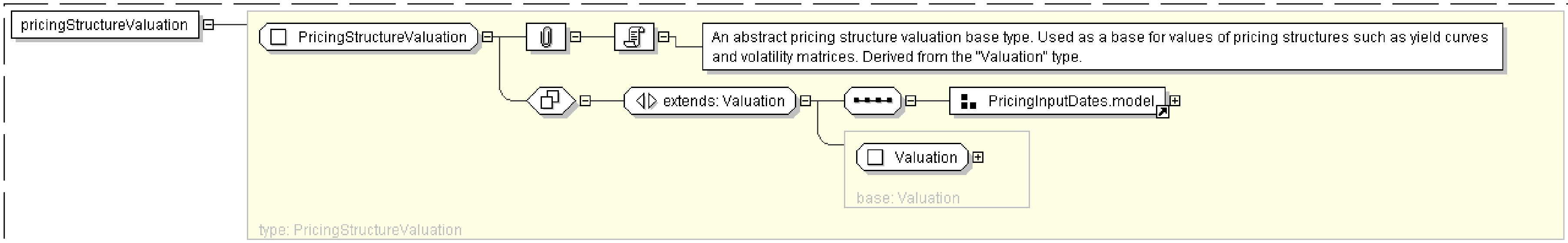


XML Instance Representation

```
<pricingStructureValuation
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

   <baseDate> IdentifiedDate </baseDate> [1]
   'The base date for which the structure applies, i.e. the curve date. Normally this will
   align with the valuation date.'
```

```
    <spotDate> IdentifiedDate </spotDate> [0..1]
    'The spot settlement date for which the structure applies, normally 0-2 days after the
    base date. The difference between the baseDate and the spotDate is termed the settlement
    lag, and is sometimes called \"days to spot\".'

    <inputDataDate> IdentifiedDate </inputDataDate> [0..1]
    'The date from which the input data used to construct the pricing input was obtained. Often
    the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in
    which input data from one date is used to generate a curve for a later date.'

    <endDate> IdentifiedDate </endDate> [0..1]
    'The last date for which data is supplied in this pricing input.'

    <buildDateTime> xsd:dateTime </buildDateTime> [0..1]
    'The date and time when the pricing input was generated.'

</pricingStructureValuation>
```

Diagram



Schema Component Representation

```
<xsd:element name="pricingStructureValuation" type=" PricingStructureValuation
" abstract="true"/>
```

top

Global Definitions

Complex Type: AssetOrTermPointOrPricingStructureReference

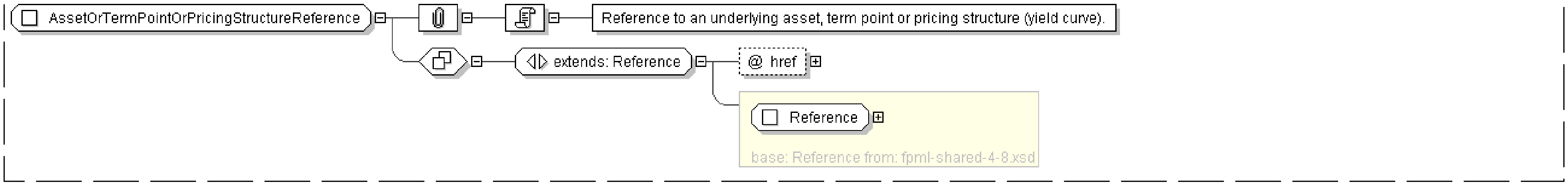
Super-types:	Reference < **AssetOrTermPointOrPricingStructureReference** (by extension)
Sub-types:	None

Name	AssetOrTermPointOrPricingStructureReference
Used by (from the same schema document)	Complex Type **PricingParameterDerivative** , Complex Type **PricingParameterShift**
Abstract	no
Documentation	Reference to an underlying asset, term point or pricing structure (yield curve).

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="AssetOrTermPointOrPricingStructureReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: BasicAssetValuation

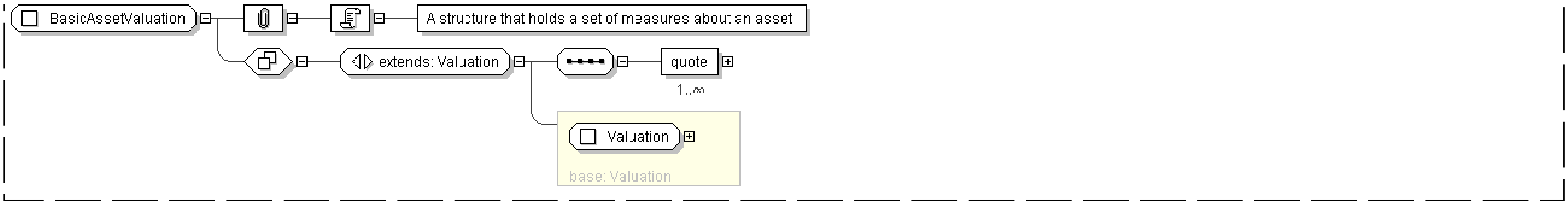
Super-types:	Valuation < **BasicAssetValuation** (by extension)
Sub-types:	None

Name	BasicAssetValuation
Used by (from the same schema document)	Complex Type **QuotedAssetSet**
Abstract	no
Documentation	A structure that holds a set of measures about an asset.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]"
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

   <quote> BasicQuotation </quote> [1..*]
   'One or more numerical measures relating to the asset, possibly together with sensitivities
   of that measure to pricing inputs'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="BasicAssetValuation">
   <xsd:complexContent>
      <xsd:extension base=" Valuation ">
         <xsd:sequence>
            <xsd:element name="quote" type=" BasicQuotation " maxOccurs="unbounded"/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: DenominatorTerm

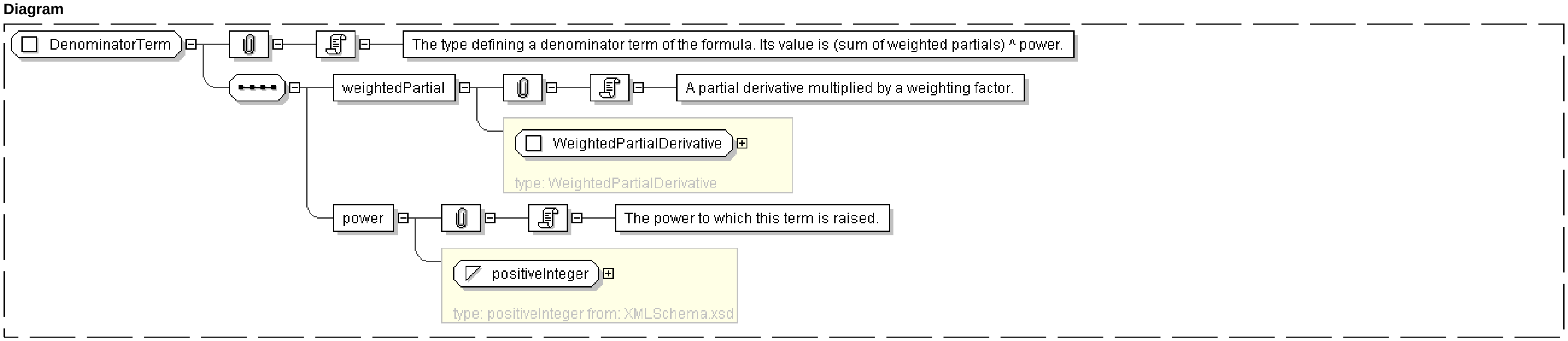
Super-types:	None
Sub-types:	None

Name	DenominatorTerm
Used by (from the same schema document)	Complex Type **DerivativeFormula**
Abstract	no
Documentation	The type defining a denominator term of the formula. Its value is (sum of weighted partials) ^ power.

XML Instance Representation

```
<...>
   <weightedPartial> WeightedPartialDerivative </weightedPartial> [1]
   'A partial derivative multiplied by a weighting factor.'

   <power> xsd:positiveInteger </power> [1]
   'The power to which this term is raised.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DenominatorTerm">
   <xsd:sequence>
      <xsd:element name="weightedPartial" type=" WeightedPartialDerivative "/>
      <xsd:element name="power" type=" xsd:positiveInteger "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DerivativeCalculationMethod

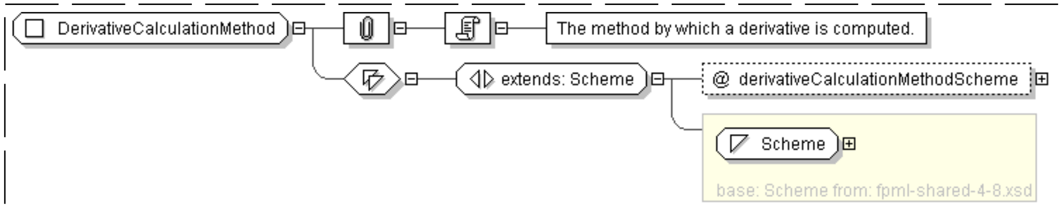
Super-types:	Scheme < **DerivativeCalculationMethod** (by extension)
Sub-types:	None

Name	DerivativeCalculationMethod
Used by (from the same schema document)	Complex Type **DerivativeCalculationProcedure**
Abstract	no
Documentation	The method by which a derivative is computed.

XML Instance Representation

```
<...
derivativeCalculationMethodScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DerivativeCalculationMethod">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="derivativeCalculationMethodScheme" type=" xsd:anyURI " default="http://
         www.fpml.org/coding-scheme/derivative-calculation-method"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: DerivativeCalculationProcedure

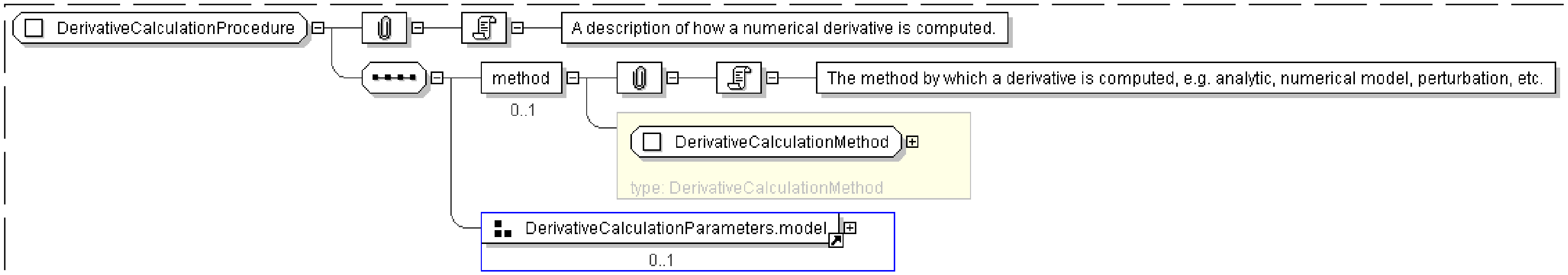
Super-types:	None
Sub-types:	None

Name	DerivativeCalculationProcedure
Used by (from the same schema document)	Complex Type **PricingParameterDerivative** , Complex Type **SensitivitySetDefinition**
Abstract	no
Documentation	A description of how a numerical derivative is computed.

XML Instance Representation

```
<...>
   <method> DerivativeCalculationMethod </method> [0..1]
   'The method by which a derivative is computed, e.g. analytic, numerical model,
   perturbation, etc.'

Start Group: DerivativeCalculationParameters.model [0..1]
Start Choice [1]
         <perturbationAmount> xsd:decimal </perturbationAmount> [0..1]
         'The size and direction of the perturbation used to compute the derivative, e.g. 0.0001 = 1 bp.'

         <averaged> xsd:boolean </averaged> [1]
         'The value is calculated by perturbing by the perturbationAmount and then the negative of
         the perturbationAmount and then averaging the two values (i.e. the value is half of
         the difference between perturbing up and perturbing down).'

         <perturbationType> PerturbationType </perturbationType> [0..1]
         'The type of perturbation, if any, used to compute the derivative (Absolute vs Relative).'

         <derivativeFormula> xsd:string </derivativeFormula> [0..1]
         'The formula used to compute the derivative (perhaps could be updated to use the Formula
         type in EQS.).'

         <replacementMarketInput> PricingStructureReference </replacementMarketInput> [1]
         'A reference to the replacement version of the market input, e.g. a bumped yield curve.'

End Choice
End Group: DerivativeCalculationParameters.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DerivativeCalculationProcedure">
   <xsd:sequence>
      <xsd:element name="method" type=" DerivativeCalculationMethod " minOccurs="0"/>
      <xsd:group ref=" DerivativeCalculationParameters.model " minOccurs="0"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: DerivativeFormula

Super-types:	None
Sub-types:	None

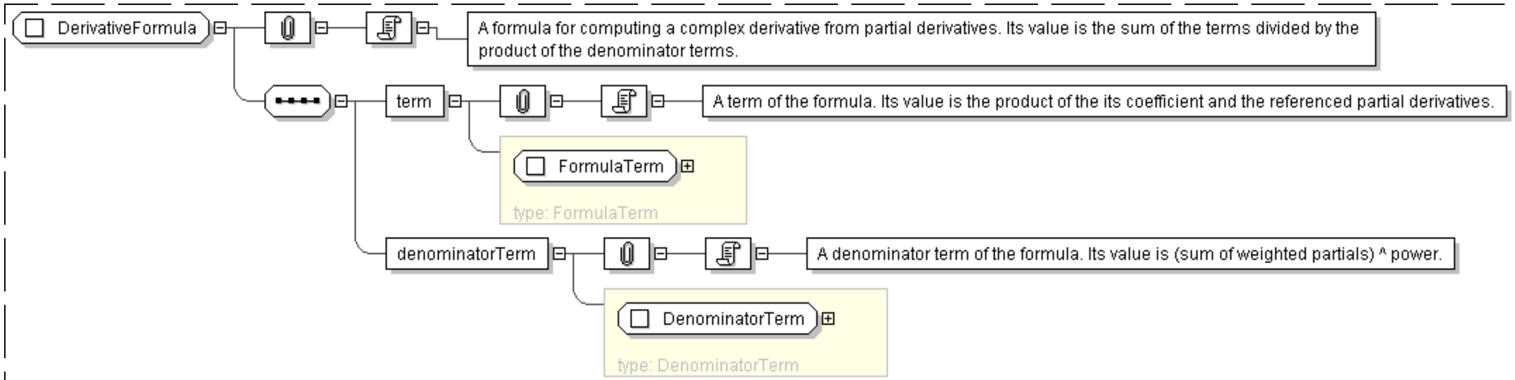
Name	DerivativeFormula

Used by (from the same schema document)	Model Group **ComputedDerivative.model**
Abstract	no
Documentation	A formula for computing a complex derivative from partial derivatives. Its value is the sum of the terms divided by the product of the denominator terms.

XML Instance Representation

```
<...>
   <term> FormulaTerm </term> [1]
   'A term of the formula. Its value is the product of the its coefficient and the
   referenced partial derivatives.'

   <denominatorTerm> DenominatorTerm </denominatorTerm> [1]
   'A denominator term of the formula. Its value is (sum of weighted partials) ^ power.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="DerivativeFormula">
   <xsd:sequence>
      <xsd:element name="term" type=" FormulaTerm "/>
      <xsd:element name="denominatorTerm" type=" DenominatorTerm "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: FormulaTerm

Super-types:	None
Sub-types:	None

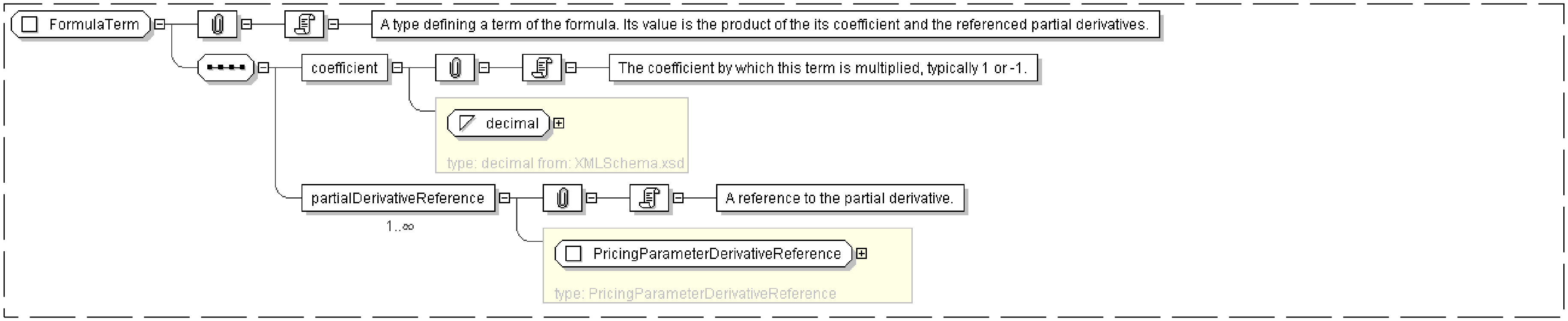
Name	FormulaTerm
Used by (from the same schema document)	Complex Type **DerivativeFormula**
Abstract	no
Documentation	A type defining a term of the formula. Its value is the product of the its coefficient and the referenced partial derivatives.

XML Instance Representation

```
<...>
   <coefficient> xsd:decimal </coefficient> [1]
   'The coefficient by which this term is multiplied, typically 1 or -1.'

   <partialDerivativeReference> PricingParameterDerivativeReference </
```

```
    partialDerivativeReference> [1..*]
    'A reference to the partial derivative.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="FormulaTerm">
   <xsd:sequence>
      <xsd:element name="coefficient" type=" xsd:decimal "/>
      <xsd:element name="partialDerivativeReference" type=" PricingParameterDerivativeReference
      " maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

[top](#top)

Complex Type: GenericDimension

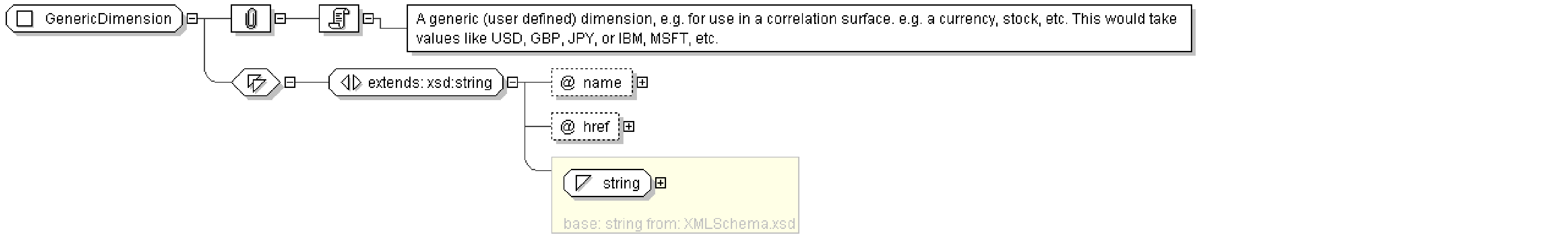
Super-types:	xsd:string < **GenericDimension** (by extension)
Sub-types:	None

Name	GenericDimension
Used by (from the same schema document)	Model Group **PricingStructureIndex.model**
Abstract	no
Documentation	A generic (user defined) dimension, e.g. for use in a correlation surface. e.g. a currency, stock, etc. This would take values like USD, GBP, JPY, or IBM, MSFT, etc.

XML Instance Representation

```
<...
name=" xsd:normalizedString [1]
'The name of the dimension. E.g.: \"Currency\", \"Stock\", \"Issuer\", etc.'

"
href=" xsd:IDREF [0..1]
'A reference to an instrument (e.g. currency) that this value represents.'

">
xsd:string
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="GenericDimension">
   <xsd:simpleContent>
      <xsd:extension base=" xsd:string ">
         <xsd:attribute name="name" type=" xsd:normalizedString " use="required"/>
         <xsd:attribute name="href" type=" xsd:IDREF " reference="Asset"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: InstrumentSet

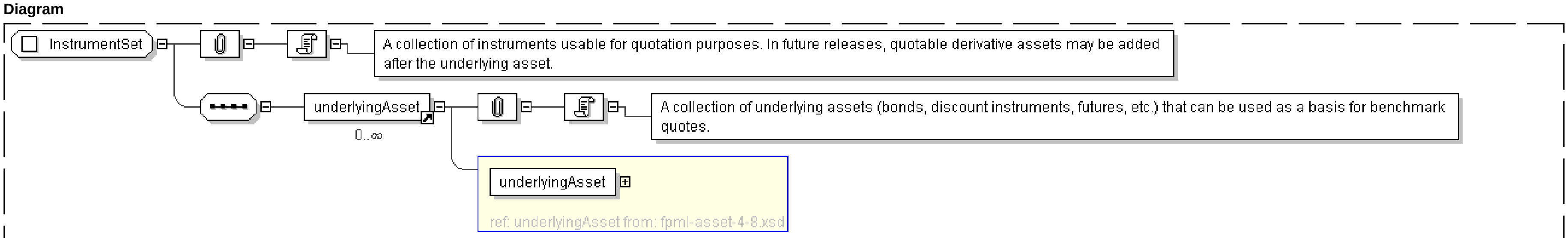
Super-types:	None
Sub-types:	None

Name	InstrumentSet
Used by (from the same schema document)	Complex Type **QuotedAssetSet**
Abstract	no
Documentation	A collection of instruments usable for quotation purposes. In future releases, quotable derivative assets may be added after the underlying asset.

XML Instance Representation

```
<...>
   <underlyingAsset> ... </underlyingAsset> [0..*]
   'A collection of underlying assets (bonds, discount instruments, futures, etc.) that can
   be used as a basis for benchmark quotes.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="InstrumentSet">
   <xsd:sequence>
      <xsd:element ref=" underlyingAsset " minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
```

```
</xsd:complexType>
```

top

Complex Type: Market

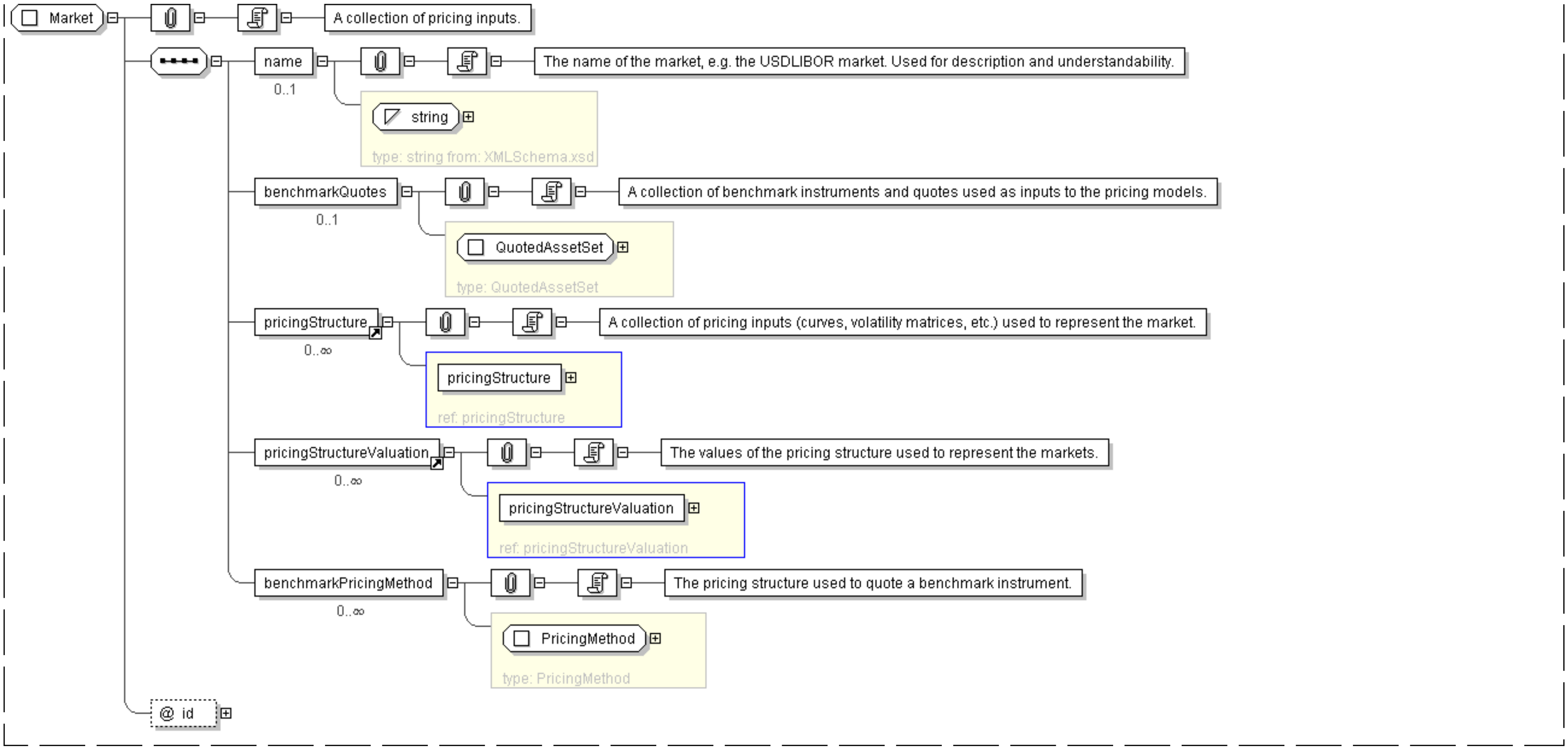
Super-types:	None
Sub-types:	None

Name	Market
Used by (from the same schema document)	Element **market**
Abstract	no
Documentation	A collection of pricing inputs.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
    <name> xsd:string </name> [0..1]
    'The name of the market, e.g. the USDLIBOR market. Used for description and understandability.'

    <benchmarkQuotes> QuotedAssetSet </benchmarkQuotes> [0..1]
    'A collection of benchmark instruments and quotes used as inputs to the pricing models.'

    <pricingStructure> ... </pricingStructure> [0..*]
    'A collection of pricing inputs (curves, volatility matrices, etc.) used to represent
    the market.'

    <pricingStructureValuation> ... </pricingStructureValuation> [0..*]
    'The values of the pricing structure used to represent the markets.'

    <benchmarkPricingMethod> PricingMethod </benchmarkPricingMethod> [0..*]
    'The pricing structure used to quote a benchmark instrument.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Market">
   <xsd:sequence>
      <xsd:element name="name" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="benchmarkQuotes" type=" QuotedAssetSet " minOccurs="0"/>
      <xsd:element ref=" pricingStructure " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element ref=" pricingStructureValuation " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="benchmarkPricingMethod" type=" PricingMethod "
      minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: MarketReference

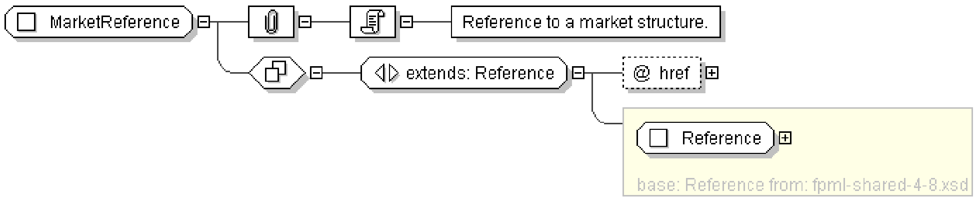
Super-types:	Reference < **MarketReference** (by extension)
Sub-types:	None

Name	MarketReference
Used by (from the same schema document)	Complex Type **ValuationScenario**
Abstract	no
Documentation	Reference to a market structure.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="MarketReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="Market"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PerturbationType

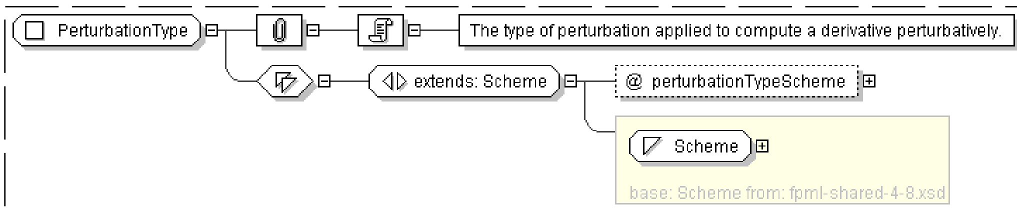
Super-types:	Scheme < **PerturbationType** (by extension)
Sub-types:	None

Name	PerturbationType
Used by (from the same schema document)	Model Group **FiniteDifferenceDerivativeParameters.model**
Abstract	no
Documentation	The type of perturbation applied to compute a derivative perturbatively.

XML Instance Representation

```
<...
perturbationTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PerturbationType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="perturbationTypeScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/perturbation-type"/>
      </xsd:extension>
```

```
    </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PositionId

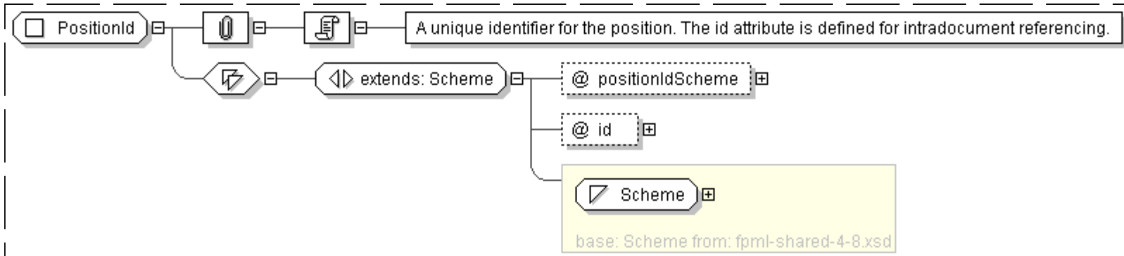
Super-types:	Scheme < **PositionId** (by extension)
Sub-types:	None

Name	PositionId
Used by (from the same schema document)	Model Group **PositionIdAndVersion.model**
Abstract	no
Documentation	A unique identifier for the position. The id attribute is defined for intradocument referencing.

XML Instance Representation

```
<...
positionIdScheme=" xsd:anyURI [0..1]"
id=" xsd:ID [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PositionId">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="positionIdScheme" type=" xsd:anyURI "/>
         <xsd:attribute name="id" type=" xsd:ID "/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PricingDataPointCoordinate

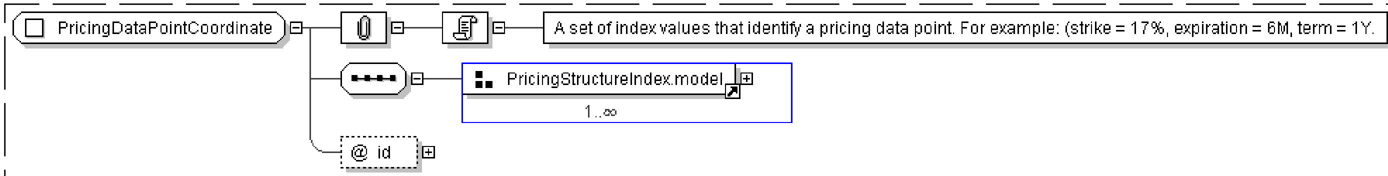
Super-types:	None
Sub-types:	None

Name	PricingDataPointCoordinate
Used by (from the same schema document)	Model Group **PricingCoordinateOrReference.model**
Abstract	no
Documentation	A set of index values that identify a pricing data point. For example: (strike = 17%, expiration = 6M, term = 1Y.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
Start Group: PricingStructureIndex.model [1..*]
Start Choice [1]
        <term> TimeDimension </term> [1]
        'A time dimension that represents the term of a financial instrument, e.g. of a zero-
        coupon bond on a curve, or of an underlying caplet or swap for an option.'

        <expiration> TimeDimension </expiration> [1]
        'A time dimension that represents the time to expiration of an option.'

        <strike> xsd:decimal </strike> [1]
        'A numerical dimension that represents the strike rate or price of an option.'

        <generic> GenericDimension </generic> [1]
End Choice
End Group: PricingStructureIndex.model
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingDataPointCoordinate">
   <xsd:sequence>
      <xsd:group ref=" PricingStructureIndex.model " maxOccurs="unbounded"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: PricingDataPointCoordinateReference

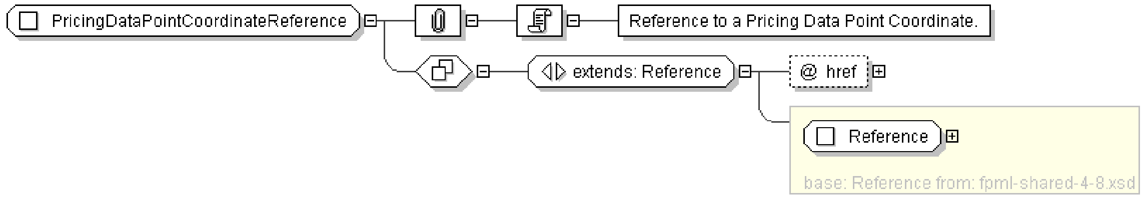
Super-types:	Reference < **PricingDataPointCoordinateReference** (by extension)
Sub-types:	None

Name	PricingDataPointCoordinateReference
Used by (from the same schema document)	Model Group **PricingCoordinateOrReference.model**
Abstract	no
Documentation	Reference to a Pricing Data Point Coordinate.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingDataPointCoordinateReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="PricingDataPointCoordinate"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PricingInputReplacement

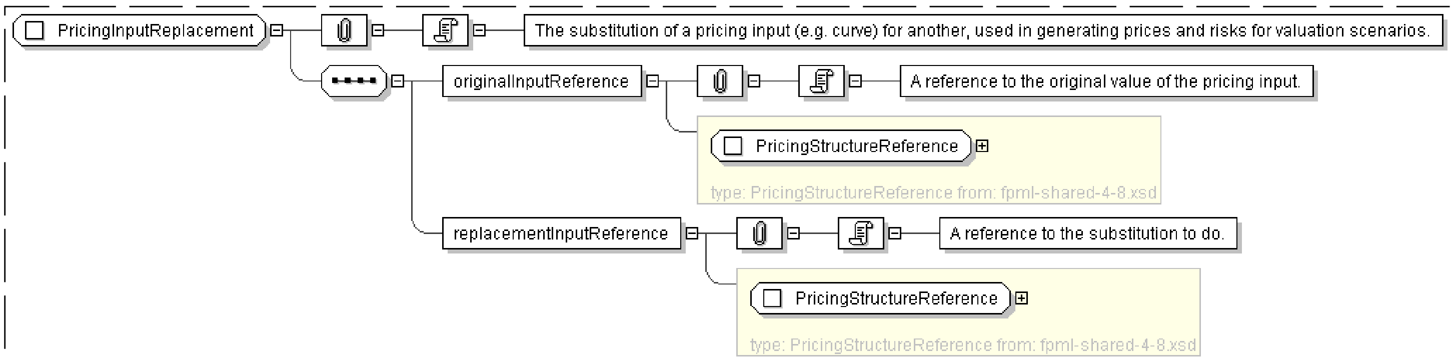
Super-types:	None
Sub-types:	None

Name	PricingInputReplacement
Used by (from the same schema document)	Complex Type **ValuationScenario**
Abstract	no
Documentation	The substitution of a pricing input (e.g. curve) for another, used in generating prices and risks for valuation scenarios.

XML Instance Representation

```
<...>
   <originalInputReference> PricingStructureReference </originalInputReference> [1]
   'A reference to the original value of the pricing input.'

   <replacementInputReference> PricingStructureReference </replacementInputReference> [1]
   'A reference to the substitution to do.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingInputReplacement">
   <xsd:sequence>
      <xsd:element name="originalInputReference" type=" PricingStructureReference "/>
      <xsd:element name="replacementInputReference" type=" PricingStructureReference "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PricingInputType

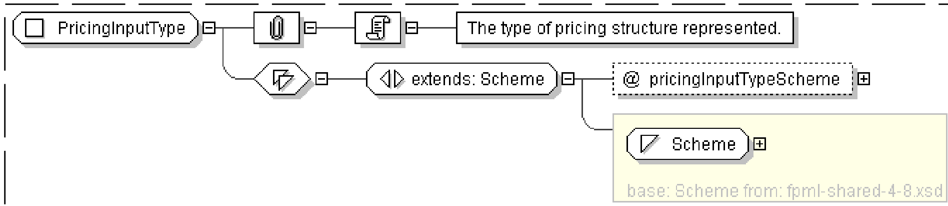
Super-types:	Scheme < **PricingInputType** (by extension)
Sub-types:	None

Name	PricingInputType
Used by (from the same schema document)	Complex Type **SensitivitySetDefinition**
Abstract	no
Documentation	The type of pricing structure represented.

XML Instance Representation

```
<...
pricingInputTypeScheme=" xsd:anyURI [0..1]">
Scheme
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingInputType">
   <xsd:simpleContent>
      <xsd:extension base=" Scheme ">
         <xsd:attribute name="pricingInputTypeScheme" type=" xsd:anyURI " default="http://www.fpml.
         org/coding-scheme/pricing-input-type"/>
      </xsd:extension>
   </xsd:simpleContent>
</xsd:complexType>
```

top

Complex Type: PricingMethod

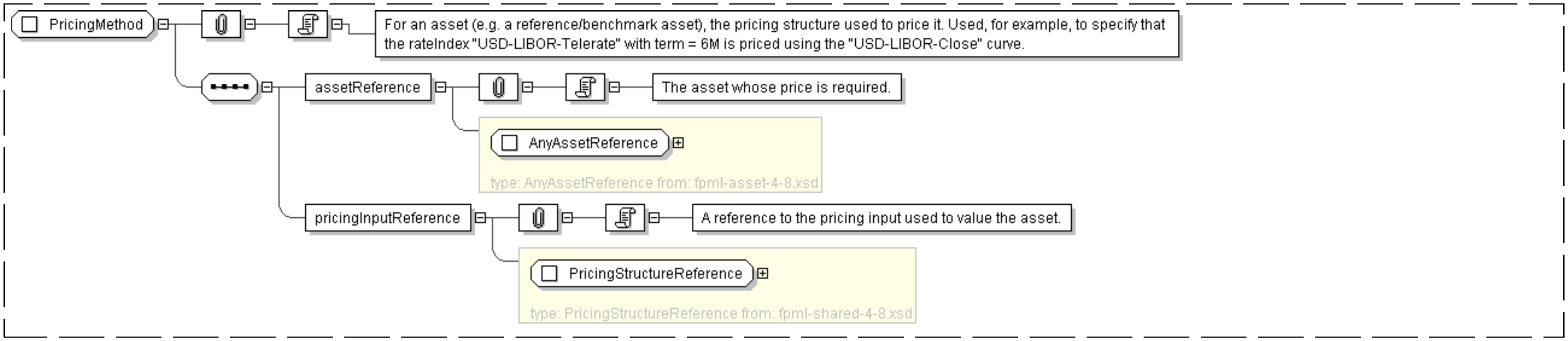
Super-types:	None
Sub-types:	None

Name	PricingMethod
Used by (from the same schema document)	Complex Type **Market**
Abstract	no
Documentation	For an asset (e.g. a reference/benchmark asset), the pricing structure used to price it. Used, for example, to specify that the rateIndex "USD-LIBOR-Telerate" with term = 6M is priced using the "USD-LIBOR-Close" curve.

XML Instance Representation

```
<...>
   <assetReference> AnyAssetReference </assetReference> [1]
   'The asset whose price is required.'

   <pricingInputReference> PricingStructureReference </pricingInputReference> [1]
   'A reference to the pricing input used to value the asset.'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingMethod">
   <xsd:sequence>
      <xsd:element name="assetReference" type=" AnyAssetReference "/>
      <xsd:element name="pricingInputReference" type=" PricingStructureReference "/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: PricingParameterDerivative

Super-types:	None
Sub-types:	None

Name	PricingParameterDerivative
Used by (from the same schema document)	Model Group **ComputedDerivative.model**
Abstract	no
Documentation	A definition of the mathematical derivative with respect to a specific pricing parameter.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <description> xsd:string </description> [0..1]
   'A description, if needed, of how the derivative is computed.'

Start Choice [1]
      <parameterReference> AssetOrTermPointOrPricingStructureReference </parameterReference> [0..1]
      'A reference to the pricing input parameter to which the sensitivity is computed. If it
      is omitted, the derivative definition is generic, and applies to any input point in
      the valuation set.'
```

<inputDateReference> ValuationReference </inputDateReference> [1..*]

'Reference(s) to the pricing input dates that are shifted when the sensitivity is computed. Depending on the time advance method used, this list could vary. Used for describing time-advance derivatives (theta, carry, etc.)'

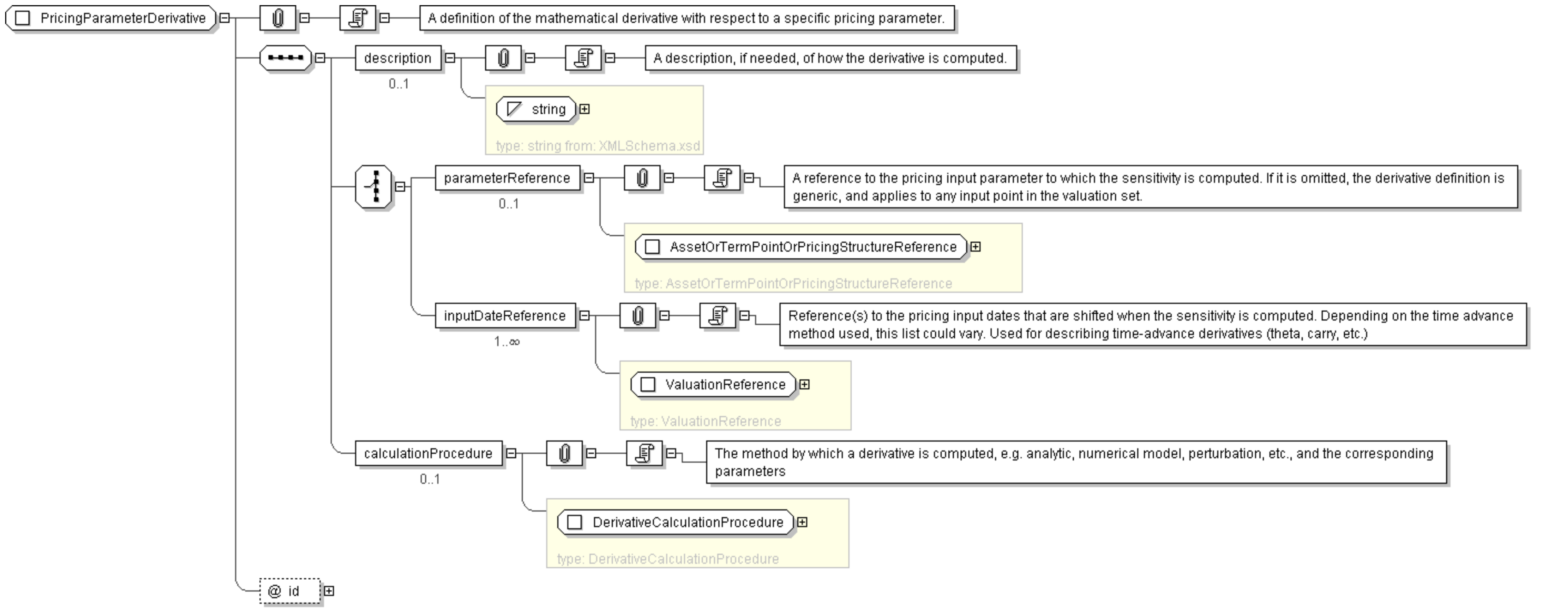
End Choice

<calculationProcedure> DerivativeCalculationProcedure </calculationProcedure> [0..1]

'The method by which a derivative is computed, e.g. analytic, numerical model, perturbation, etc., and the corresponding parameters'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingParameterDerivative">
   <xsd:sequence>
      <xsd:element name="description" type=" xsd:string " minOccurs="0"/>
      <xsd:choice>
         <xsd:element name="parameterReference" type=" AssetOrTermPointOrPricingStructureReference
         " minOccurs="0"/>
         <xsd:element name="inputDateReference" type=" ValuationReference " maxOccurs="unbounded"/>
      </xsd:choice>
      <xsd:element name="calculationProcedure" type=" DerivativeCalculationProcedure " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: PricingParameterDerivativeReference

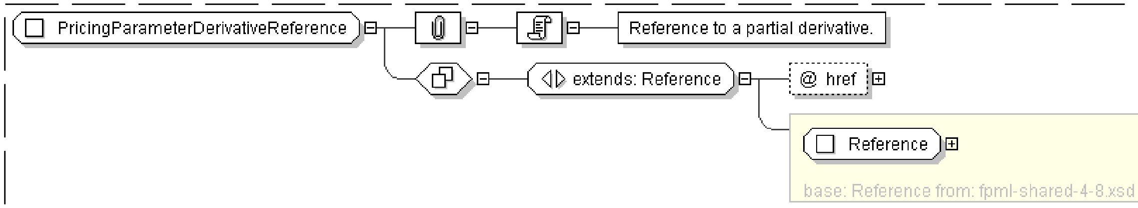
Super-types:	Reference < **PricingParameterDerivativeReference** (by extension)
Sub-types:	None

Name	PricingParameterDerivativeReference
Used by (from the same schema document)	Complex Type **FormulaTerm**
Abstract	no
Documentation	Reference to a partial derivative.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingParameterDerivativeReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF "
         use="required" reference="PricingParameterDerivative"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: PricingParameterShift

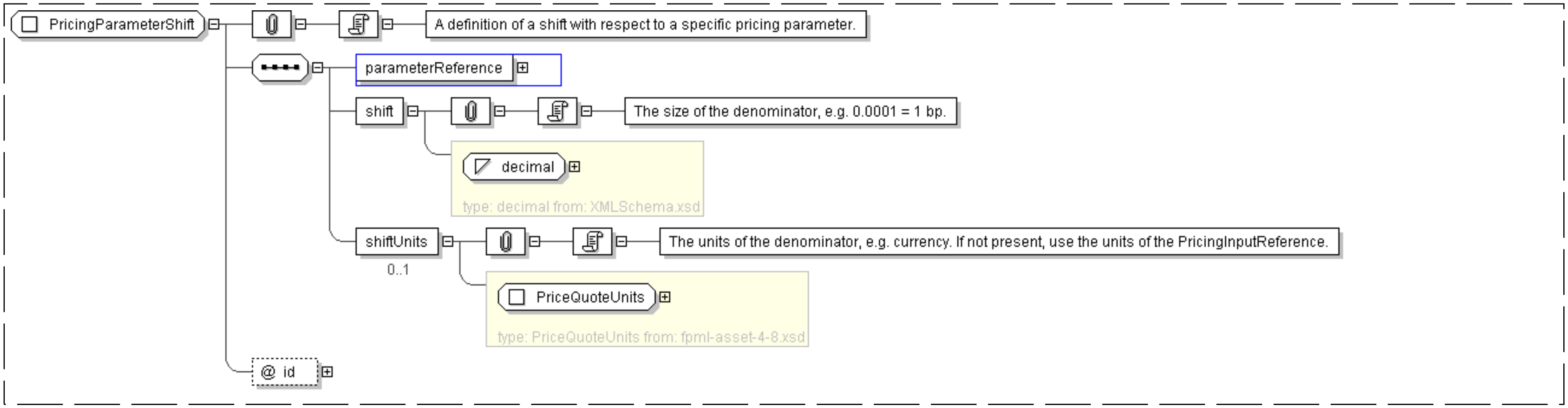
Super-types:	None
Sub-types:	None

Name	PricingParameterShift
Used by (from the same schema document)	Complex Type **ValuationScenario**
Abstract	no
Documentation	A definition of a shift with respect to a specific pricing parameter.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <parameterReference> AssetOrTermPointOrPricingStructureReference </parameterReference> [1]
   <shift> xsd:decimal </shift> [1]
   'The size of the denominator, e.g. 0.0001 = 1 bp.'

   <shiftUnits> PriceQuoteUnits </shiftUnits> [0..1]
   'The units of the denominator, e.g. currency. If not present, use the units of
   the PricingInputReference.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingParameterShift">
   <xsd:sequence>
      <xsd:element name="parameterReference" type=" AssetOrTermPointOrPricingStructureReference "/>
      <xsd:element name="shift" type=" xsd:decimal "/>
      <xsd:element name="shiftUnits" type=" PriceQuoteUnits " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: PricingStructureValuation

Super-types:	Valuation < **PricingStructureValuation** (by extension)
Sub-types:	None

Name	PricingStructureValuation
Used by (from the same schema document)	Element **pricingStructureValuation**
Abstract	no
Documentation	An abstract pricing structure valuation base type. Used as a base for values of pricing structures such as yield curves and volatility matrices. Derived from the "Valuation" type.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'
```

<baseDate> IdentifiedDate </baseDate> [1]

'The base date for which the structure applies, i.e. the curve date. Normally this will align with the valuation date.'

<spotDate> IdentifiedDate </spotDate> [0..1]

'The spot settlement date for which the structure applies, normally 0-2 days after the base date. The difference between the baseDate and the spotDate is termed the settlement lag, and is sometimes called \"days to spot\".'

<inputDataDate> IdentifiedDate </inputDataDate> [0..1]

'The date from which the input data used to construct the pricing input was obtained. Often the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]

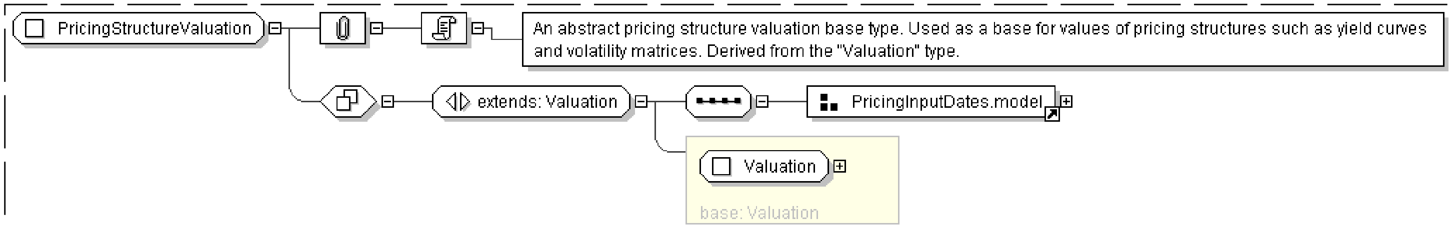
'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]

'The date and time when the pricing input was generated.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="PricingStructureValuation">
   <xsd:complexContent>
      <xsd:extension base=" Valuation ">
         <xsd:sequence>
            <xsd:group ref=" PricingInputDates.model "/>
         </xsd:sequence>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: QuotedAssetSet

Super-types:	None
Sub-types:	None

Name	QuotedAssetSet
Used by (from the same schema document)	Complex Type **Market**
Abstract	no
Documentation	A collection of quoted assets.

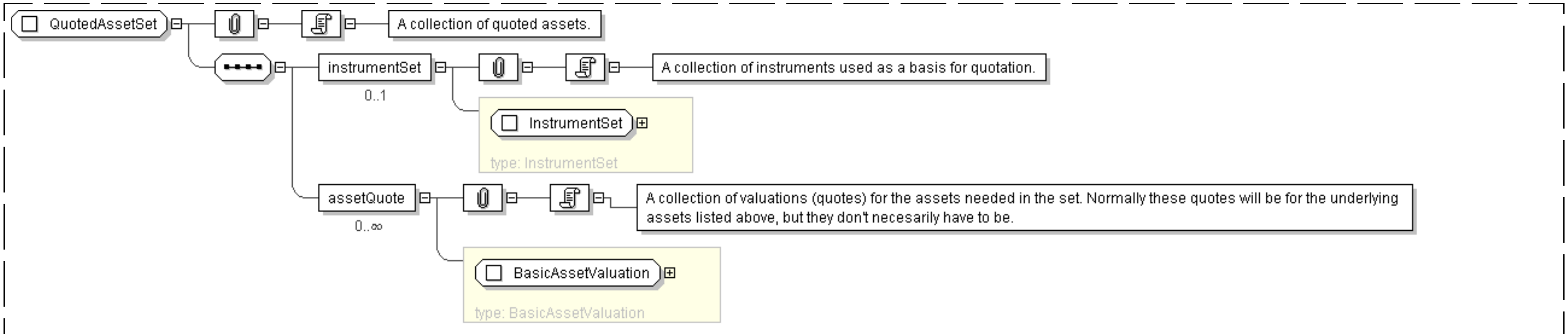
XML Instance Representation

<...>

<instrumentSet> InstrumentSet </instrumentSet> [0..1]

```
   'A collection of instruments used as a basis for quotation.'

   <assetQuote> BasicAssetValuation </assetQuote> [0..*]
   'A collection of valuations (quotes) for the assets needed in the set. Normally these
   quotes will be for the underlying assets listed above, but they don\'t necesarily have to be.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="QuotedAssetSet">
   <xsd:sequence>
      <xsd:element name="instrumentSet" type=" InstrumentSet " minOccurs="0"/>
      <xsd:element name="assetQuote" type=" BasicAssetValuation " minOccurs="0"
      maxOccurs="unbounded"/>
   </xsd:sequence>
</xsd:complexType>
```

top

Complex Type: SensitivityDefinition

Super-types:	None
Sub-types:	None

Name	SensitivityDefinition
Used by (from the same schema document)	Complex Type **SensitivitySetDefinition**
Abstract	no
Documentation	A set of characteristics describing a sensitivity.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:string </name> [0..1]
   'The name of the derivative, e.g. first derivative, Hessian, etc. Typically not required,
   but may be used to explain more complex derivative calculations.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'Reference to the valuation scenario to which this sensitivity definition applies. If
   the SensitivityDefinition occurs within a SensitivitySetDefinition, this is not required
   and normally not used. In this case, if it is supplied it overrides
   the valuationScenarioReference in the SensitivitySetDefinition.'
```

Start Choice [1]
<partialDerivative> PricingParameterDerivative </partialDerivative> [1..*]

'A partial derivative of the measure with respect to an input.'

<formula> DerivativeFormula </formula> [0..1]

'A formula defining how to compute the derivative from the partial derivatives. If absent, the derivative is just the product of the partial derivatives. Normally only required for more higher-order derivatives, e.g. Hessians.'

Start Choice [1]
<term> TimeDimension </term> [1]

'The time dimension of the sensitivity point (tenor and/or date).'

Start Group: PricingCoordinateOrReference.model [1..*]

'The input coordinates, or references to them (e.g. expiration, strike, tenor).'

Start Choice [1]
<coordinate> PricingDataPointCoordinate </coordinate> [1]

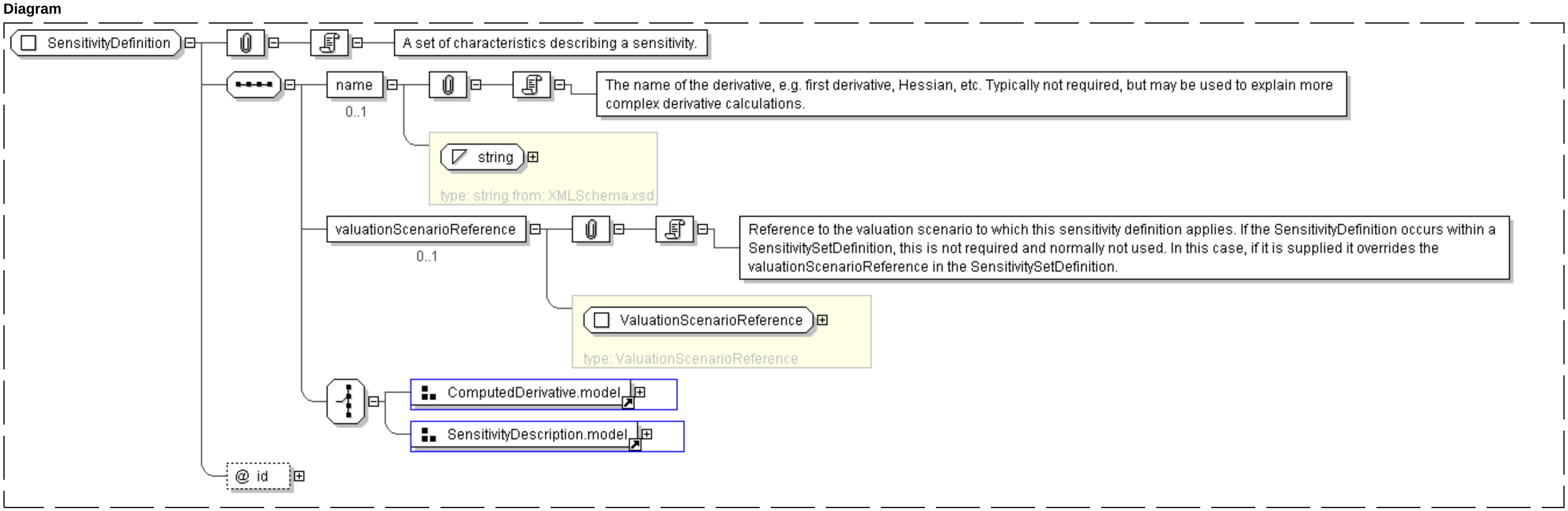
'An explicit, filled in data point coordinate. This might specify expiration, strike, etc.'

<coordinateReference> PricingDataPointCoordinateReference </coordinateReference> [1]

'A reference to a pricing data point coordinate within this document.'

End Choice
End Group: PricingCoordinateOrReference.model
End Choice
End Choice
</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="SensitivityDefinition">
   <xsd:sequence>
      <xsd:element name="name" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="valuationScenarioReference" type=" ValuationScenarioReference
      " minOccurs="0"/>
      <xsd:choice>
```

```
        <xsd:group ref=" ComputedDerivative.model "/>
        <xsd:group ref=" SensitivityDescription.model "/>
     </xsd:choice>
  </xsd:sequence>
  <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: SensitivitySetDefinition

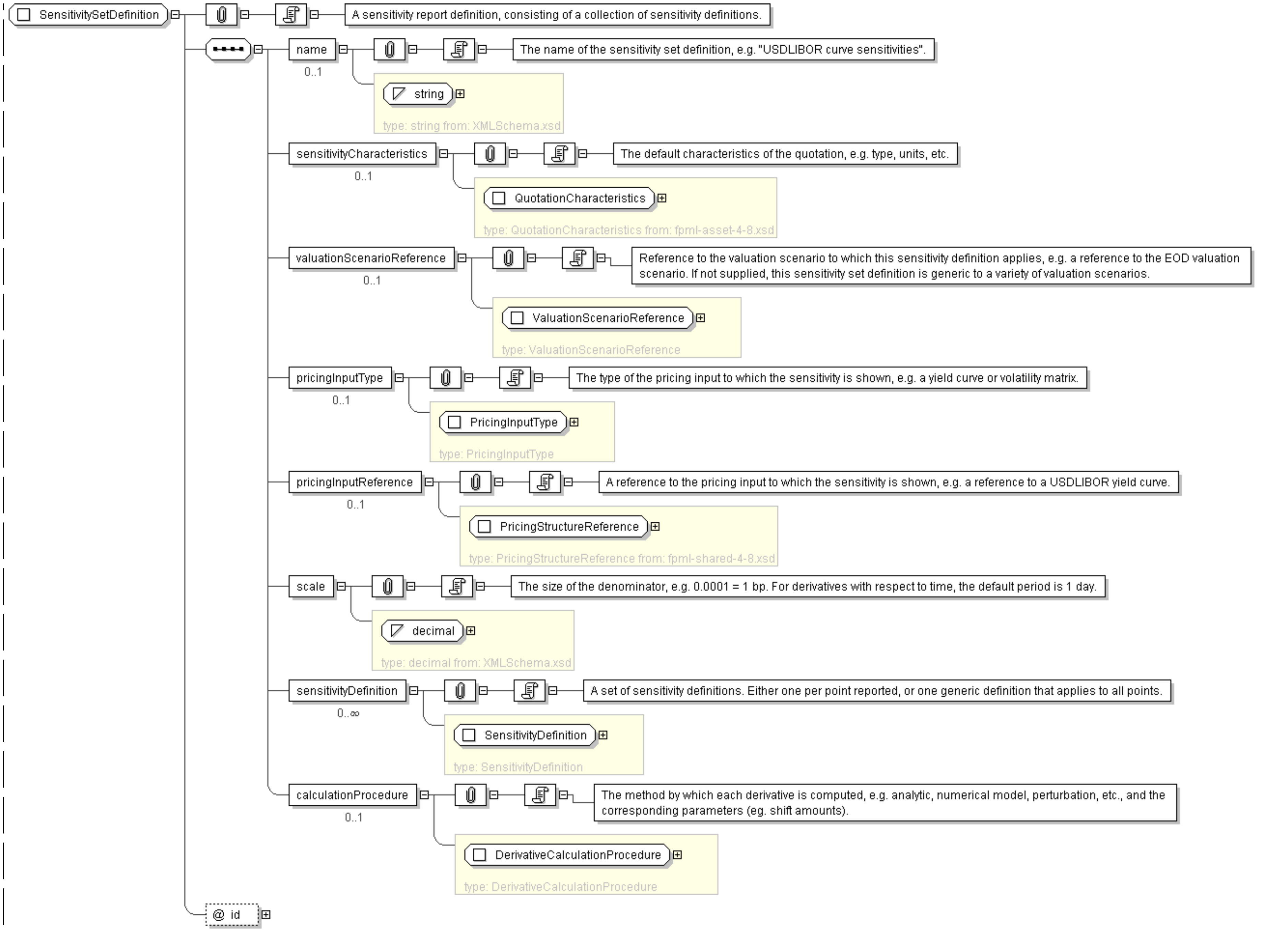
Super-types:	None
Sub-types:	None

Name	SensitivitySetDefinition
Abstract	no
Documentation	A sensitivity report definition, consisting of a collection of sensitivity definitions.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:string </name> [0..1]
   'The name of the sensitivity set definition, e.g. \"USDLIBOR curve sensitivities\".'

   <sensitivityCharacteristics> QuotationCharacteristics </sensitivityCharacteristics> [0..1]
   'The default characteristics of the quotation, e.g. type, units, etc.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'Reference to the valuation scenario to which this sensitivity definition applies, e.g.
   a reference to the EOD valuation scenario. If not supplied, this sensitivity set definition
   is generic to a variety of valuation scenarios.'

   <pricingInputType> PricingInputType </pricingInputType> [0..1]
   'The type of the pricing input to which the sensitivity is shown, e.g. a yield curve
   or volatility matrix.'

   <pricingInputReference> PricingStructureReference </pricingInputReference> [0..1]
   'A reference to the pricing input to which the sensitivity is shown, e.g. a reference to
   a USDLIBOR yield curve.'

   <scale> xsd:decimal </scale> [1]
   'The size of the denominator, e.g. 0.0001 = 1 bp. For derivatives with respect to time,
   the default period is 1 day.'

   <sensitivityDefinition> SensitivityDefinition </sensitivityDefinition> [0..*]
   'A set of sensitivity definitions. Either one per point reported, or one generic
   definition that applies to all points.'

   <calculationProcedure> DerivativeCalculationProcedure </calculationProcedure> [0..1]
   'The method by which each derivative is computed, e.g. analytic, numerical model,
   perturbation, etc., and the corresponding parameters (eg. shift amounts).'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SensitivitySetDefinition">
   <xsd:sequence>
      <xsd:element name="name" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="sensitivityCharacteristics" type=" QuotationCharacteristics " minOccurs="0"/>
      <xsd:element name="valuationScenarioReference" type=" ValuationScenarioReference
```

```
    " minOccurs="0"/>
    <xsd:element name="pricingInputType" type=" PricingInputType " minOccurs="0"/>
    <xsd:element name="pricingInputReference" type=" PricingStructureReference " minOccurs="0"/>
    <xsd:element name="scale" type=" xsd:decimal "/>
    <xsd:element name="sensitivityDefinition" type=" SensitivityDefinition "
    minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element name="calculationProcedure" type=" DerivativeCalculationProcedure " minOccurs="0"/>
  </xsd:sequence>
  <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: SensitivitySetDefinitionReference

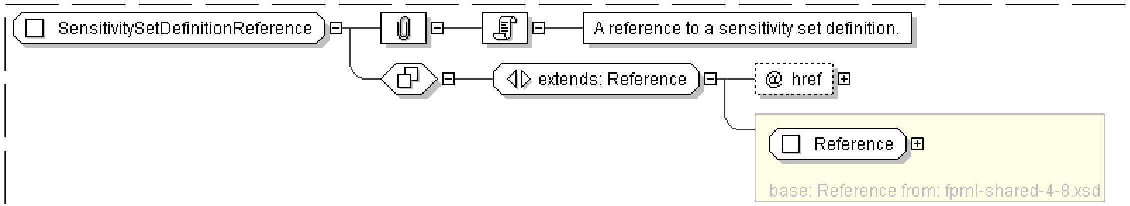
Super-types:	Reference < **SensitivitySetDefinitionReference** (by extension)
Sub-types:	None

Name	SensitivitySetDefinitionReference
Abstract	no
Documentation	A reference to a sensitivity set definition.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="SensitivitySetDefinitionReference">
  <xsd:complexContent>
    <xsd:extension base=" Reference ">
      <xsd:attribute name="href" type=" xsd:IDREF "
      use="required" reference="SensitivitySetDefinition"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: TimeDimension

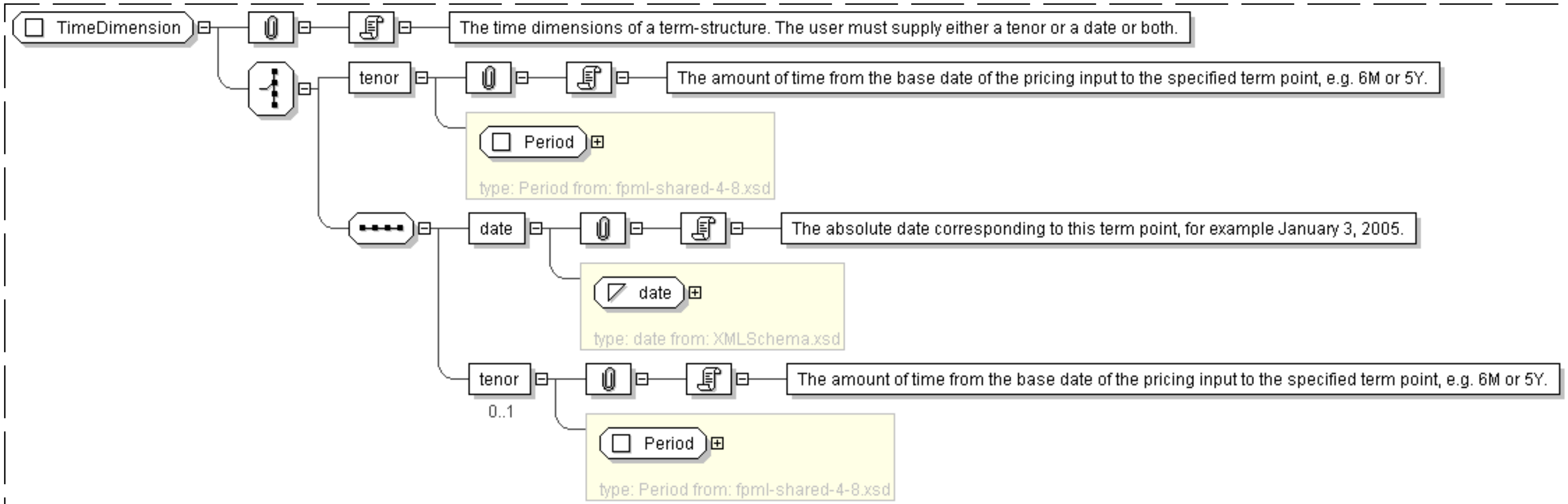
Super-types:	None
Sub-types:	None

Name	TimeDimension
Used by (from the same schema document)	Model Group **PricingStructureIndex.model** , Model Group **PricingStructureIndex.model** , Model Group **SensitivityDescription.model**
Abstract	no
Documentation	The time dimensions of a term-structure. The user must supply either a tenor or a date or both.

XML Instance Representation

```
<...>
Start Choice [1]
      <tenor> Period </tenor> [1]
      'The amount of time from the base date of the pricing input to the specified term point, e.
      g. 6M or 5Y.'

      <date> xsd:date </date> [1]
      'The absolute date corresponding to this term point, for example January 3, 2005.'

      <tenor> Period </tenor> [0..1]
      'The amount of time from the base date of the pricing input to the specified term point, e.
      g. 6M or 5Y.'

End Choice
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="TimeDimension">
   <xsd:choice>
      <xsd:element name="tenor" type=" Period "/>
      <xsd:sequence>
         <xsd:element name="date" type=" xsd:date "/>
         <xsd:element name="tenor" type=" Period " minOccurs="0"/>
      </xsd:sequence>
   </xsd:choice>
</xsd:complexType>
```

top

Complex Type: Valuation

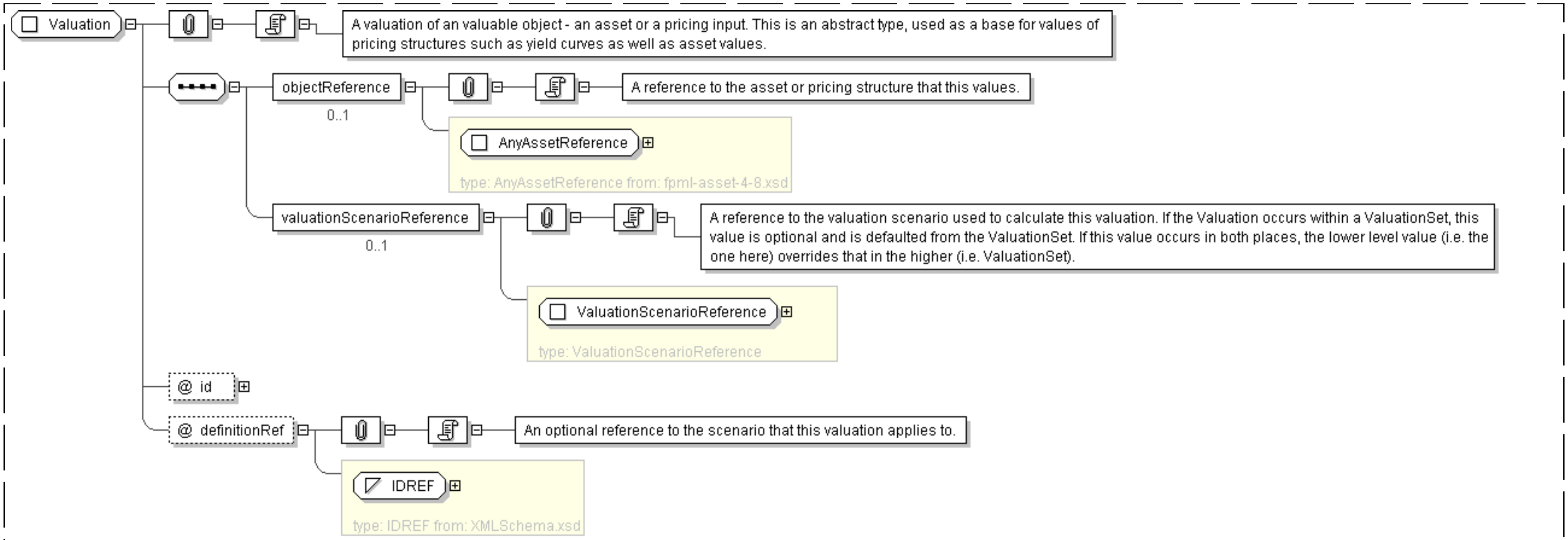
Super-types:	None
Sub-types:	• BasicAssetValuation (by extension) • PricingStructureValuation (by extension)

Name	Valuation
Abstract	no
Documentation	A valuation of an valuable object - an asset or a pricing input. This is an abstract type, used as a base for values of pricing structures such as yield curves as well as asset values.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]"
definitionRef=" xsd:IDREF [0..1]
'An optional reference to the scenario that this valuation applies to.'

">
   <objectReference> AnyAssetReference </objectReference> [0..1]
   'A reference to the asset or pricing structure that this values.'

   <valuationScenarioReference> ValuationScenarioReference </valuationScenarioReference> [0..1]
   'A reference to the valuation scenario used to calculate this valuation. If the
   Valuation occurs within a ValuationSet, this value is optional and is defaulted from
   the ValuationSet. If this value occurs in both places, the lower level value (i.e. the
   one here) overrides that in the higher (i.e. ValuationSet).'

</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="Valuation">
   <xsd:sequence>
      <xsd:element name="objectReference" type=" AnyAssetReference " minOccurs="0"/>
      <xsd:element name="valuationScenarioReference" type=" ValuationScenarioReference
      " minOccurs="0"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
   <xsd:attribute name="definitionRef" type=" xsd:IDREF " reference="ValuationScenario"/>
</xsd:complexType>
```

top

Complex Type: ValuationReference

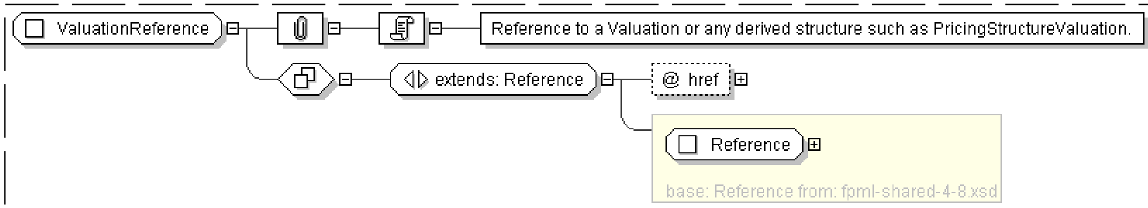
Super-types:	Reference < **ValuationReference** (by extension)
Sub-types:	None

Name	ValuationReference
Used by (from the same schema document)	Complex Type **PricingParameterDerivative**
Abstract	no
Documentation	Reference to a Valuation or any derived structure such as PricingStructureValuation.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="Valuation"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: ValuationScenario

Super-types:	None
Sub-types:	None

Name	ValuationScenario
Abstract	no
Documentation	A set of rules for generating a valuation.

XML Instance Representation

```
<...
id=" xsd:ID [0..1]">
   <name> xsd:string </name> [0..1]
   'The (optional) name for this valuation scenario, used for understandability. For example
   \"EOD Valuations\".'

   <valuationDate> IdentifiedDate </valuationDate> [1]
   'The date for which the assets are valued.'

   <marketReference> MarketReference </marketReference> [0..1]
```

'A reference to the market environment used to price the asset.'

<shift> PricingParameterShift </shift> [0..*]

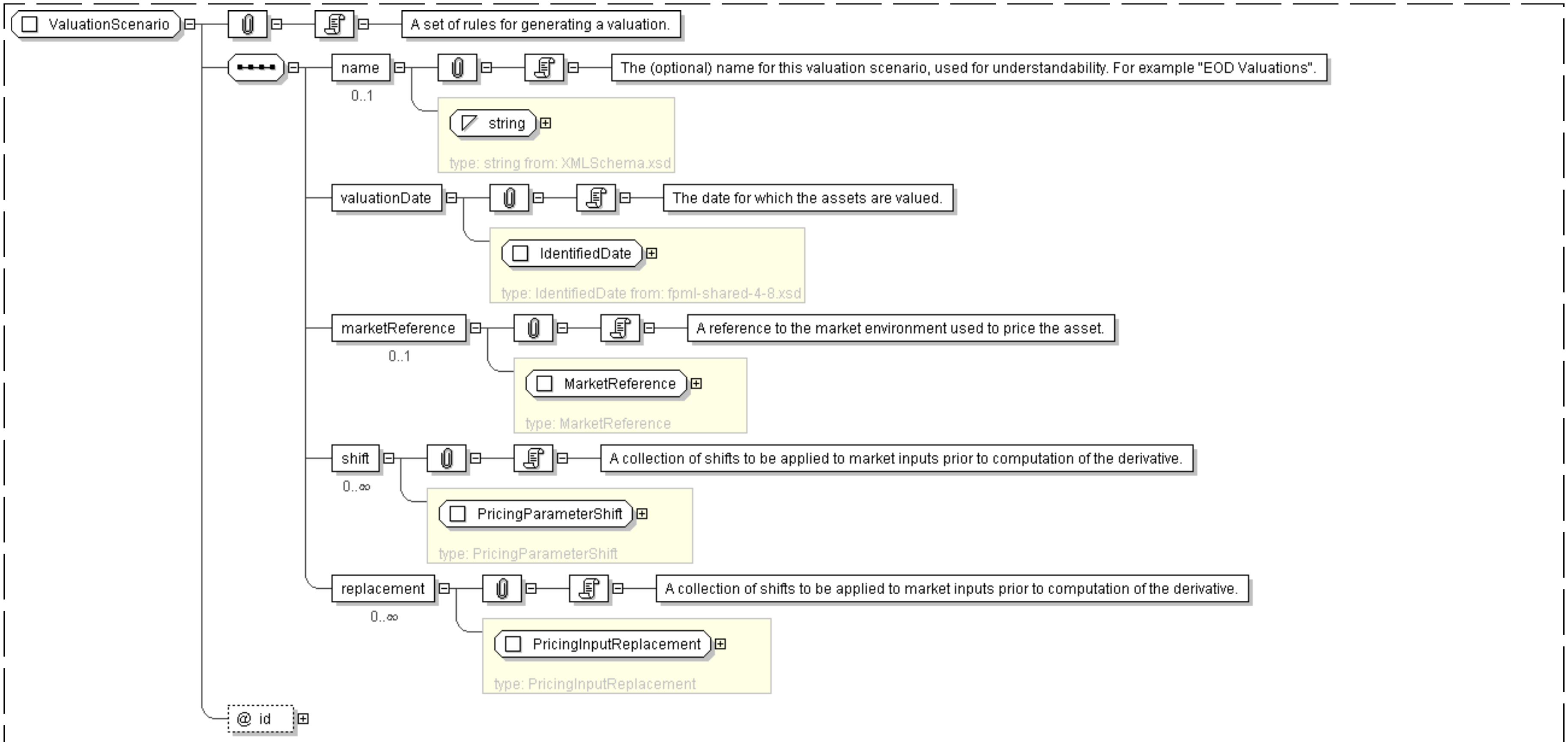
'A collection of shifts to be applied to market inputs prior to computation of the derivative.'

<replacement> PricingInputReplacement </replacement> [0..*]

'A collection of shifts to be applied to market inputs prior to computation of the derivative.'

</...>

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationScenario">
   <xsd:sequence>
      <xsd:element name="name" type=" xsd:string " minOccurs="0"/>
      <xsd:element name="valuationDate" type=" IdentifiedDate "/>
      <xsd:element name="marketReference" type=" MarketReference " minOccurs="0"/>
      <xsd:element name="shift" type=" PricingParameterShift " minOccurs="0" maxOccurs="unbounded"/>
      <xsd:element name="replacement" type=" PricingInputReplacement "
      minOccurs="0" maxOccurs="unbounded"/>
   </xsd:sequence>
   <xsd:attribute name="id" type=" xsd:ID "/>
</xsd:complexType>
```

top

Complex Type: ValuationScenarioReference

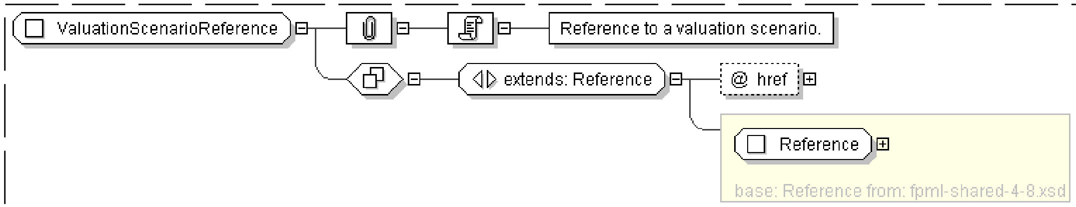
Super-types:	Reference < **ValuationScenarioReference** (by extension)
Sub-types:	None

Name	ValuationScenarioReference
Used by (from the same schema document)	Complex Type **SensitivityDefinition** , Complex Type **SensitivitySetDefinition** , Complex Type **Valuation**
Abstract	no
Documentation	Reference to a valuation scenario.

XML Instance Representation

```
<...
href=" xsd:IDREF [1]"/>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="ValuationScenarioReference">
   <xsd:complexContent>
      <xsd:extension base=" Reference ">
         <xsd:attribute name="href" type=" xsd:IDREF " use="required" reference="ValuationScenario"/>
      </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

top

Complex Type: WeightedPartialDerivative

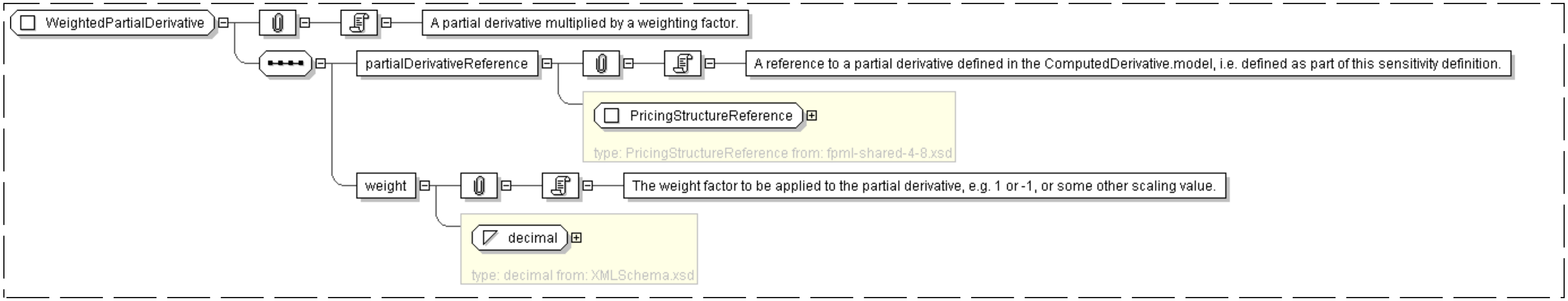
Super-types:	None
Sub-types:	None

Name	WeightedPartialDerivative
Used by (from the same schema document)	Complex Type **DenominatorTerm**
Abstract	no
Documentation	A partial derivative multiplied by a weighting factor.

XML Instance Representation

```
<...>
   <partialDerivativeReference> PricingStructureReference </partialDerivativeReference> [1]
   'A reference to a partial derivative defined in the ComputedDerivative.model, i.e. defined
   as part of this sensitivity definition.'

   <weight> xsd:decimal </weight> [1]
   'The weight factor to be applied to the partial derivative, e.g. 1 or -1, or some other
   scaling value.'
</...>
```

Diagram



Schema Component Representation

```
<xsd:complexType name="WeightedPartialDerivative">
   <xsd:sequence>
      <xsd:element name="partialDerivativeReference" type=" PricingStructureReference "/>
      <xsd:element name="weight" type=" xsd:decimal "/>
   </xsd:sequence>
</xsd:complexType>
```

top

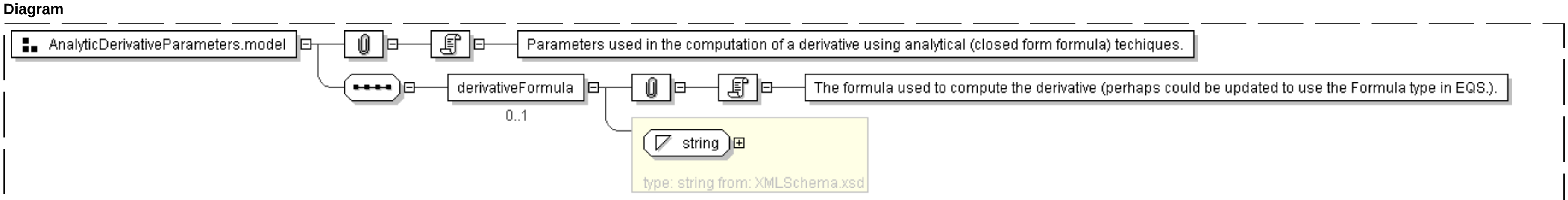
Model Group: AnalyticDerivativeParameters.model

Name	AnalyticDerivativeParameters.model
Used by (from the same schema document)	Model Group DerivativeCalculationParameters.model
Documentation	Parameters used in the computation of a derivative using analytical (closed form formula) techiques.

XML Instance Representation

```
<derivativeFormula> xsd:string </derivativeFormula> [0..1]
'The formula used to compute the derivative (perhaps could be updated to use the Formula
type in EQS.).'
```

Diagram



Schema Component Representation

```
<xsd:group name="AnalyticDerivativeParameters.model">
   <xsd:sequence>
      <xsd:element name="derivativeFormula" type=" xsd:string " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

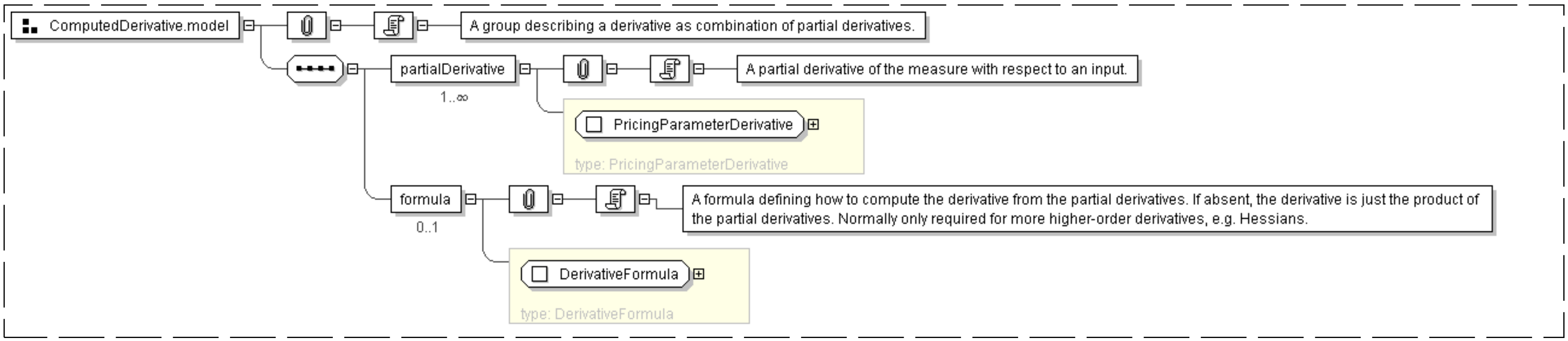
Model Group: ComputedDerivative.model

Name	ComputedDerivative.model
Used by (from the same schema document)	Complex Type **SensitivityDefinition**
Documentation	A group describing a derivative as combination of partial derivatives.

XML Instance Representation

```
<partialDerivative> PricingParameterDerivative </partialDerivative> [1..*]
'A partial derivative of the measure with respect to an input.'

<formula> DerivativeFormula </formula> [0..1]
'A formula defining how to compute the derivative from the partial derivatives. If absent,
the derivative is just the product of the partial derivatives. Normally only required for
more higher-order derivatives, e.g. Hessians.'
```

Diagram



Schema Component Representation

```
<xsd:group name="ComputedDerivative.model">
   <xsd:sequence>
      <xsd:element name="partialDerivative" type=" PricingParameterDerivative "
      maxOccurs="unbounded"/>
      <xsd:element name="formula" type=" DerivativeFormula " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: DerivativeCalculationParameters.model

Name	DerivativeCalculationParameters.model
Used by (from the same schema document)	Complex Type **DerivativeCalculationProcedure**
Documentation	Parameters used in the computation of a derivative.

XML Instance Representation

```
Start Choice [1]
   <perturbationAmount> xsd:decimal </perturbationAmount> [0..1]
   'The size and direction of the perturbation used to compute the derivative, e.g. 0.0001 = 1 bp.'

   <averaged> xsd:boolean </averaged> [1]
   'The value is calculated by perturbing by the perturbationAmount and then the negative of
   the perturbationAmount and then averaging the two values (i.e. the value is half of
   the difference between perturbing up and perturbing down).'
```

<perturbationType> PerturbationType </perturbationType> [0..1]

'The type of perturbation, if any, used to compute the derivative (Absolute vs Relative).'

<derivativeFormula> xsd:string </derivativeFormula> [0..1]

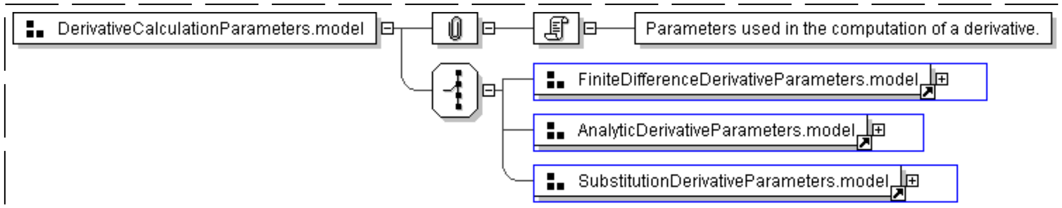
'The formula used to compute the derivative (perhaps could be updated to use the Formula type in EQS.).'

<replacementMarketInput> PricingStructureReference </replacementMarketInput> [1]

'A reference to the replacement version of the market input, e.g. a bumped yield curve.'

End Choice

Diagram



Schema Component Representation

```
<xsd:group name="DerivativeCalculationParameters.model">
   <xsd:choice>
      <xsd:group ref=" FiniteDifferenceDerivativeParameters.model "/>
      <xsd:group ref=" AnalyticDerivativeParameters.model "/>
      <xsd:group ref=" SubstitutionDerivativeParameters.model "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: FiniteDifferenceDerivativeParameters.model

Name	FiniteDifferenceDerivativeParameters.model
Used by (from the same schema document)	Model Group **DerivativeCalculationParameters.model**
Documentation	Parameters used in the computation of a derivative using numerical (finite difference) techniques.

XML Instance Representation

<perturbationAmount> xsd:decimal </perturbationAmount> [0..1]

'The size and direction of the perturbation used to compute the derivative, e.g. 0.0001 = 1 bp.'

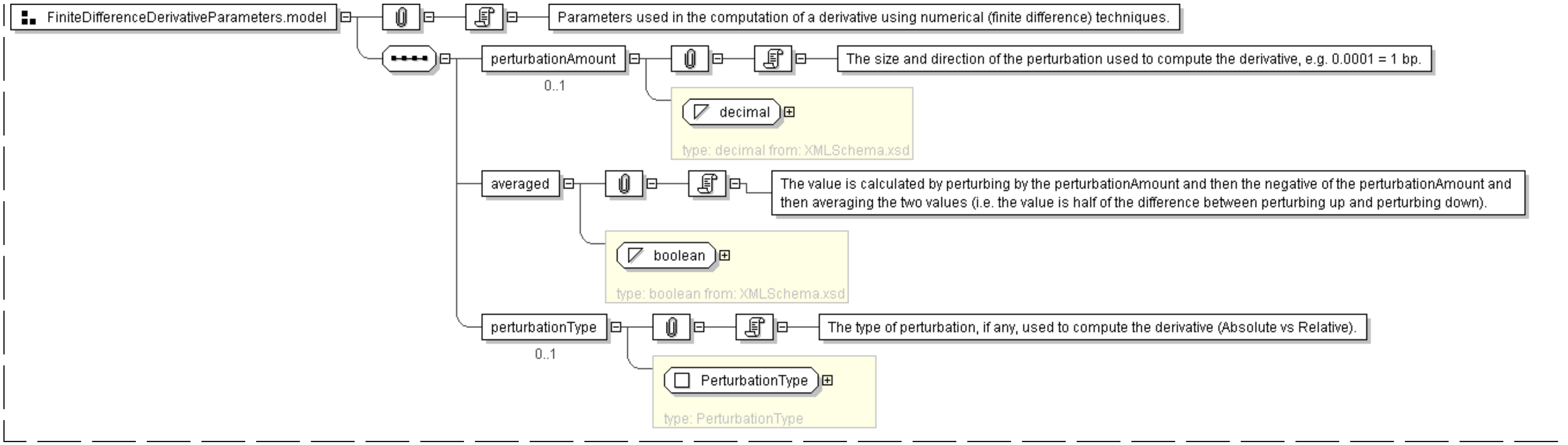
<averaged> xsd:boolean </averaged> [1]

'The value is calculated by perturbing by the perturbationAmount and then the negative of the perturbationAmount and then averaging the two values (i.e. the value is half of the difference between perturbing up and perturbing down).'

<perturbationType> PerturbationType </perturbationType> [0..1]

'The type of perturbation, if any, used to compute the derivative (Absolute vs Relative).'

Diagram



Schema Component Representation

```
<xsd:group name="FiniteDifferenceDerivativeParameters.model">
   <xsd:sequence>
      <xsd:element name="perturbationAmount" type=" xsd:decimal " minOccurs="0"/>
      <xsd:element name="averaged" type=" xsd:boolean "/>
      <xsd:element name="perturbationType" type=" PerturbationType " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

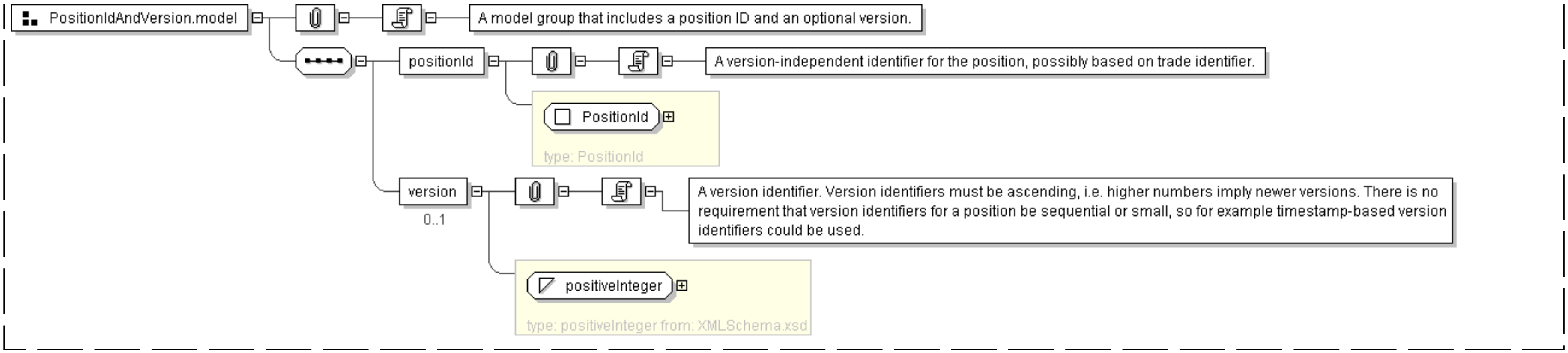
Model Group: PositionIdAndVersion.model

Name	PositionIdAndVersion.model
Documentation	A model group that includes a position ID and an optional version.

XML Instance Representation

```
<positionId> PositionId </positionId> [1]
'A version-independent identifier for the position, possibly based on trade identifier.'

<version> xsd:positiveInteger </version> [0..1]
'A version identifier. Version identifiers must be ascending, i.e. higher numbers imply
newer versions. There is no requirement that version identifiers for a position be
sequential or small, so for example timestamp-based version identifiers could be used.'
```

Diagram



Schema Component Representation

```
<xsd:group name="PositionIdAndVersion.model">
   <xsd:sequence>
      <xsd:element name="positionId" type=" PositionId "/>
      <xsd:element name="version" type=" xsd:positiveInteger " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

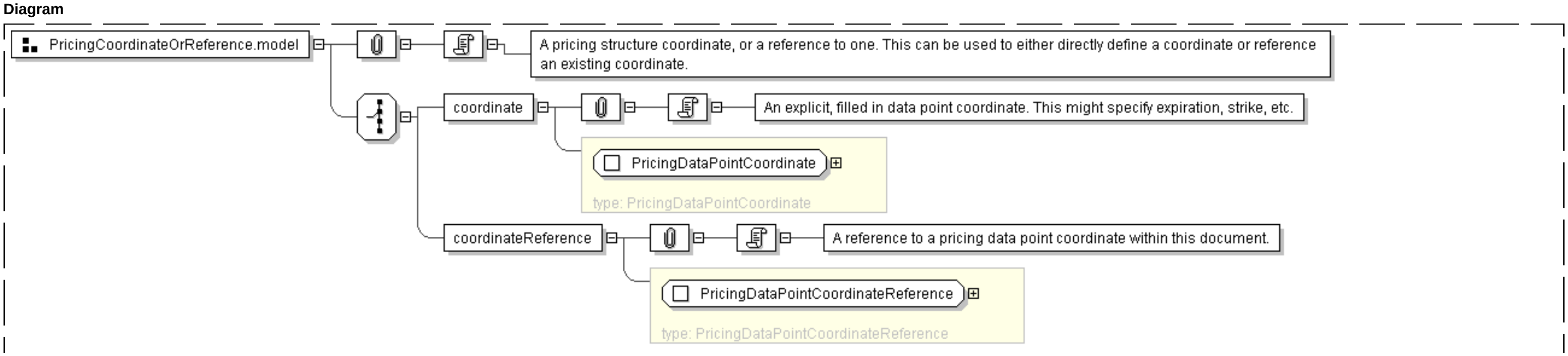
Model Group: PricingCoordinateOrReference.model

Name	PricingCoordinateOrReference.model
Used by (from the same schema document)	Model Group **SensitivityDescription.model**
Documentation	A pricing structure coordinate, or a reference to one. This can be used to either directly define a coordinate or reference an existing coordinate.

XML Instance Representation

```
Start Choice [1]
   <coordinate> PricingDataPointCoordinate </coordinate> [1]
   'An explicit, filled in data point coordinate. This might specify expiration, strike, etc.'

   <coordinateReference> PricingDataPointCoordinateReference </coordinateReference> [1]
   'A reference to a pricing data point coordinate within this document.'

End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="PricingCoordinateOrReference.model">
   <xsd:choice>
      <xsd:element name="coordinate" type=" PricingDataPointCoordinate "/>
      <xsd:element name="coordinateReference" type=" PricingDataPointCoordinateReference "/>
   </xsd:choice>
</xsd:group>
```

top

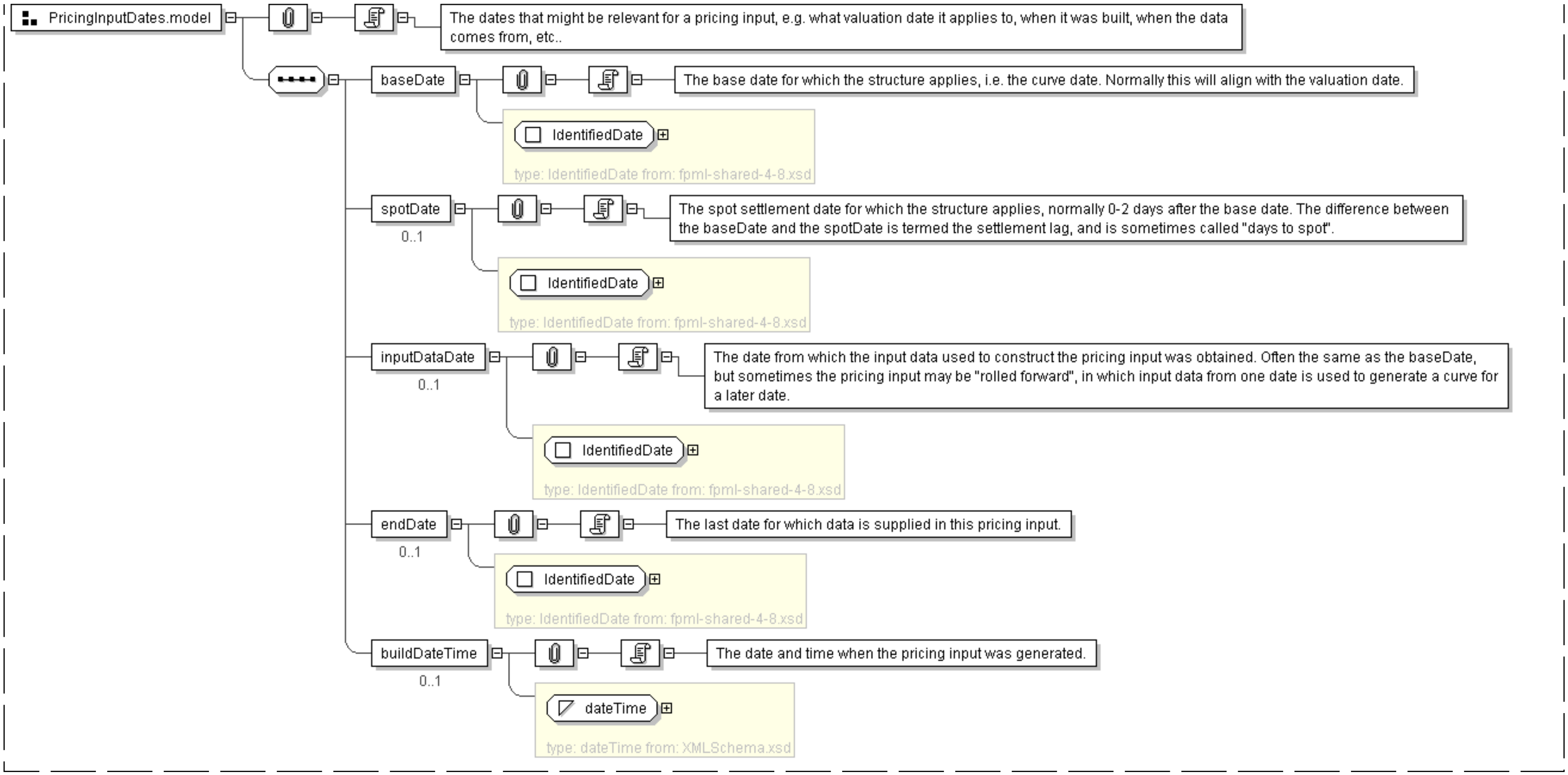
Model Group: PricingInputDates.model

Name	PricingInputDates.model
Used by (from the same schema document)	Complex Type **PricingStructureValuation**
Documentation	The dates that might be relevant for a pricing input, e.g. what valuation date it applies to, when it was built, when the data comes from, etc..

XML Instance Representation

```
<baseDate> IdentifiedDate </baseDate> [1]
'The base date for which the structure applies, i.e. the curve date. Normally this will
align with the valuation date.'

<spotDate> IdentifiedDate </spotDate> [0..1]
'The spot settlement date for which the structure applies, normally 0-2 days after the
base date. The difference between the baseDate and the spotDate is termed the settlement
lag, and is sometimes called \"days to spot\".'

<inputDataDate> IdentifiedDate </inputDataDate> [0..1]
'The date from which the input data used to construct the pricing input was obtained. Often
the same as the baseDate, but sometimes the pricing input may be \"rolled forward\", in
which input data from one date is used to generate a curve for a later date.'

<endDate> IdentifiedDate </endDate> [0..1]
'The last date for which data is supplied in this pricing input.'

<buildDateTime> xsd:dateTime </buildDateTime> [0..1]
'The date and time when the pricing input was generated.'
```

Diagram



Schema Component Representation

```
<xsd:group name="PricingInputDates.model">
   <xsd:sequence>
      <xsd:element name="baseDate" type=" IdentifiedDate "/>
      <xsd:element name="spotDate" type=" IdentifiedDate " minOccurs="0"/>
      <xsd:element name="inputDataDate" type=" IdentifiedDate " minOccurs="0"/>
      <xsd:element name="endDate" type=" IdentifiedDate " minOccurs="0"/>
      <xsd:element name="buildDateTime" type=" xsd:dateTime " minOccurs="0"/>
   </xsd:sequence>
</xsd:group>
```

top

Model Group: PricingStructureIndex.model

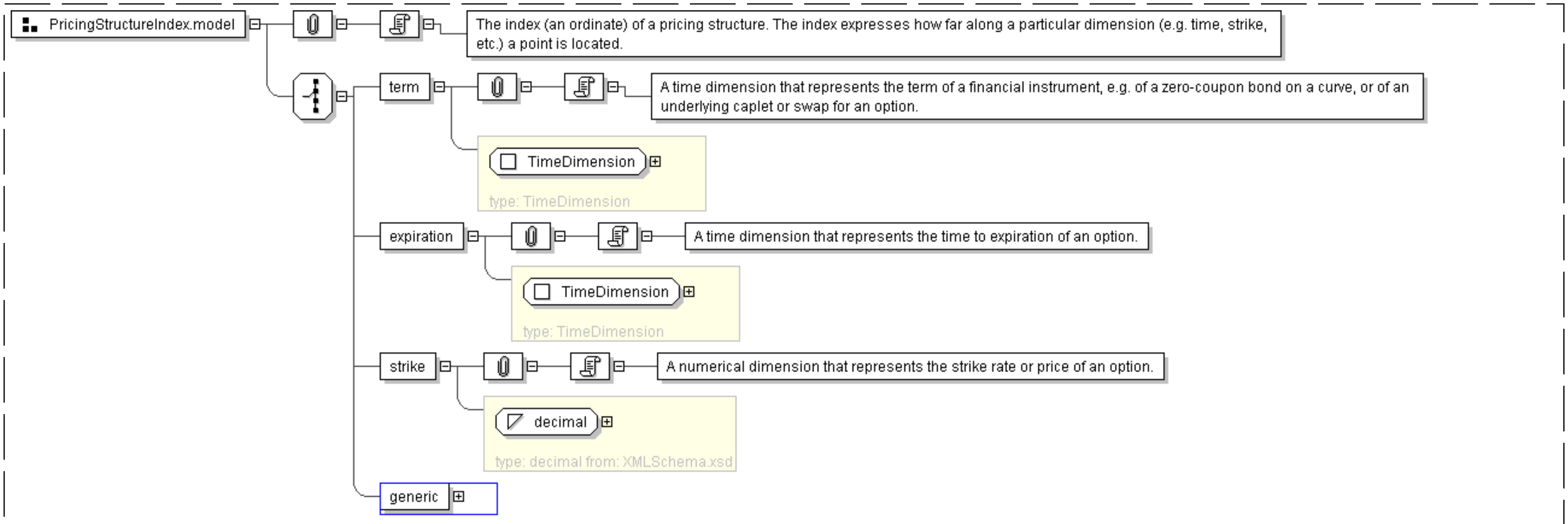
Name	PricingStructureIndex.model
Used by (from the same schema document)	Complex Type **PricingDataPointCoordinate**
Documentation	The index (an ordinate) of a pricing structure. The index expresses how far along a particular dimension (e.g. time, strike, etc.) a point is located.

XML Instance Representation

```
Start Choice [1]
   <term> TimeDimension </term> [1]
```

```
'A time dimension that represents the term of a financial instrument, e.g. of a zero-
coupon bond on a curve, or of an underlying caplet or swap for an option.'

<expiration> TimeDimension </expiration> [1]
'A time dimension that represents the time to expiration of an option.'

<strike> xsd:decimal </strike> [1]
'A numerical dimension that represents the strike rate or price of an option.'

<generic> GenericDimension </generic> [1]
End Choice
```

Diagram



Schema Component Representation

```
<xsd:group name="PricingStructureIndex.model">
   <xsd:choice>
      <xsd:element name="term" type=" TimeDimension "/>
      <xsd:element name="expiration" type=" TimeDimension "/>
      <xsd:element name="strike" type=" xsd:decimal "/>
      <xsd:element name="generic" type=" GenericDimension "/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: SensitivityDescription.model

Name	SensitivityDescription.model
Used by (from the same schema document)	Complex Type **SensitivityDefinition**
Documentation	A group describing a specific sensitivity without an explicity reference to the market data input point.

XML Instance Representation

```
Start Choice [1]
   <term> TimeDimension </term> [1]
```

'The time dimension of the sensitivity point (tenor and/or date).'

Start Group: PricingCoordinateOrReference.model [1..*]

'The input coordinates, or references to them (e.g. expiration, strike, tenor).'

Start Choice [1]

<coordinate> PricingDataPointCoordinate </coordinate> [1]

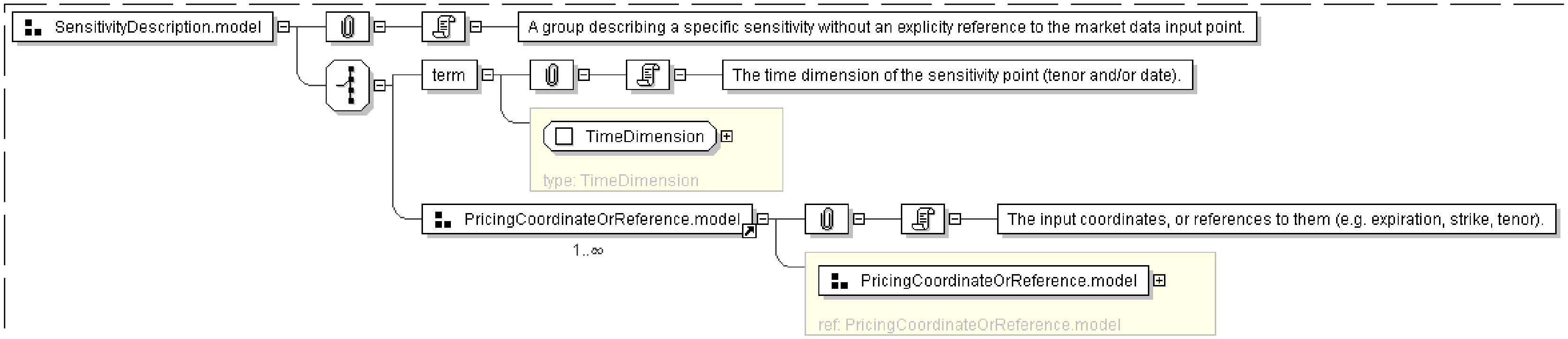
'An explicit, filled in data point coordinate. This might specify expiration, strike, etc.'

<coordinateReference> PricingDataPointCoordinateReference </coordinateReference> [1]

'A reference to a pricing data point coordinate within this document.'

End Choice
End Group: PricingCoordinateOrReference.model
End Choice

Diagram



Schema Component Representation

```
<xsd:group name="SensitivityDescription.model">
   <xsd:choice>
      <xsd:element name="term" type=" TimeDimension "/>
      <xsd:group ref=" PricingCoordinateOrReference.model " maxOccurs="unbounded"/>
   </xsd:choice>
</xsd:group>
```

top

Model Group: SubstitutionDerivativeParameters.model

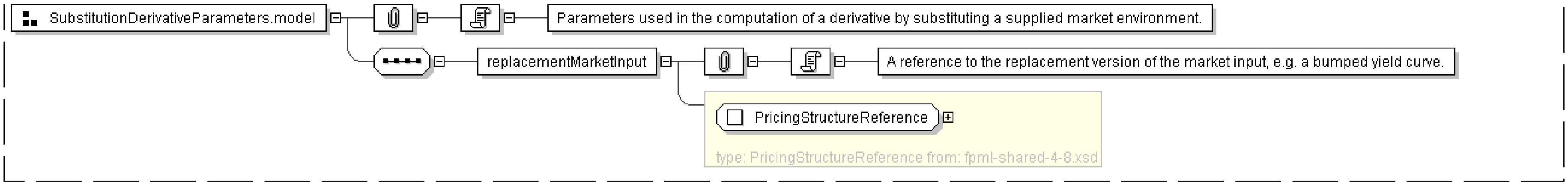
Name	SubstitutionDerivativeParameters.model
Used by (from the same schema document)	Model Group **DerivativeCalculationParameters.model**
Documentation	Parameters used in the computation of a derivative by substituting a supplied market environment.

XML Instance Representation

<replacementMarketInput> PricingStructureReference </replacementMarketInput> [1]

'A reference to the replacement version of the market input, e.g. a bumped yield curve.'

Diagram



Schema Component Representation

```
<xsd:group name="SubstitutionDerivativeParameters.model">
   <xsd:sequence>
      <xsd:element name="replacementMarketInput" type=" PricingStructureReference "/>
   </xsd:sequence>
</xsd:group>
```

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Legend

Complex Type: **AusAddress**

Schema Component Type — Schema Component Name

Super-types:	Address < AusAddress (by extension)
Sub-types:	• QLDAddress (by restriction)

If this schema component is a type definition, its type hierarchy is shown in a gray-bordered box.

Name	AusAddress
Abstract	no

The table above displays the properties of this schema component.

XML Instance Representation

```
<... country="Australia" >
<unitNo> string </unitNo> [0..1]
<houseNo> string </houseNo> [1]
<street> string </street> [1]
Start Choice [1]
<city> string </city> [1]
<town> string </town> [1]
End Choice
<state> AusStates </state> [1]
<postcode> string <<pattern = [1-9][0-9]{3}>> </postcode> [1]
</...>
```

The XML Instance Representation table above shows the schema component's content as an XML instance.

- The minimum and maximum occurrence of elements and attributes are provided in square brackets, e.g. [0..1].
- Model group information are shown in gray, e.g. Start Choice ... End Choice.
- For type derivations, the elements and attributes that have been added to or changed from the base type's content are shown in **bold**.
- If an element/attribute has a fixed value, the fixed value is shown in green, e.g. country="Australia".
- Otherwise, the type of the element/attribute is displayed.
  - If the element/attribute's type is in the schema, a link is provided to it.
  - For local simple type definitions, the constraints are displayed in angle brackets, e.g. <<*pattern* = [1-9][0-9]{3}>>.

Schema Component Representation

```
<complexType name="AusAddress">
<complexContent>
```

```
<extension base=" Address ">
<sequence>
<element name="state" type=" AusStates "/>
<element name="postcode">
<simpleType>
<restriction base=" string ">
<pattern value="[1-9][0-9]{3}"/>
</restriction>
</simpleType>
</element>
</sequence>
<attribute name="country" type=" string " fixed="Australia"/>
</extension>
</complexContent>
</complexType>
```

The Schema Component Representation table above displays the underlying XML representation of the schema component. (Annotations are not shown.)

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Glossary

Abstract (Applies to complex type definitions and element declarations). An abstract element or complex type cannot used to validate an element instance. If there is a reference to an abstract element, only element declarations that can substitute the abstract element can be used to validate the instance. For references to abstract type definitions, only derived types can be used.

All Model Group Child elements can be provided *in any order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-all.

Choice Model Group *Only one* from the list of child elements and model groups can be provided in instances. See: http://www.w3.org/TR/xmlschema-1/#element-choice.

Collapse Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32). Then, collapse contiguous sequences of space characters into single space character, and remove leading and trailing space characters.

Disallowed Substitutions (Applies to element declarations). If *substitution* is specified, then substitution group members cannot be used in place of the given element declaration to validate element instances. If *derivation methods*, e.g. extension, restriction, are specified, then the given element declaration will not validate element instances that have types derived from the element declaration's type using the specified derivation methods. Normally, element instances can override their declaration's type by specifying an `xsi:type` attribute.

Key Constraint Like Uniqueness Constraint, but additionally requires that the specified value(s) must be provided. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Key Reference Constraint Ensures that the specified value(s) must match value(s) from a Key Constraint or Uniqueness Constraint. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

Model Group Groups together element content, specifying the order in which the element content can occur and the number of times the group of element content may be repeated. See: http://www.w3.org/TR/xmlschema-1/#Model_Groups.

Nillable (Applies to element declarations). If an element declaration is nillable, instances can use the `xsi:nil` attribute. The `xsi:nil` attribute is the boolean attribute, *nil*, from the *http://www.w3.org/2001/XMLSchema-instance* namespace. If an element instance has an `xsi:nil` attribute set to true, it can be left empty, even though its element declaration may have required content.

Notation A notation is used to identify the format of a piece of data. Values of elements and attributes that are of type, NOTATION, must come from the names of declared notations. See: http://www.w3.org/TR/xmlschema-1/#cNotation_Declarations.

Preserve Whitespace Policy Preserve whitespaces exactly as they appear in instances.

Prohibited Derivations (Applies to type definitions). Derivation methods that cannot be used to create sub-types from a given type definition.

Prohibited Substitutions (Applies to complex type definitions). Prevents sub-types that have been derived using the specified derivation methods from validating element instances in place of the given type definition.

Replace Whitespace Policy Replace tab, line feed, and carriage return characters with space character (Unicode character 32).

Sequence Model Group Child elements and model groups must be provided *in the specified order* in instances. See: http://www.w3.org/TR/xmlschema-1/#element-sequence.

Substitution Group Elements that are *members* of a substitution group can be used wherever the *head* element of the substitution group is referenced.

Substitution Group Exclusions (Applies to element declarations). Prohibits element declarations from nominating themselves as being able to substitute a given element declaration, if they have types that are derived from the original element's type using the specified derivation methods.

Target Namespace The target namespace identifies the namespace that components in this schema belongs to. If no target namespace is provided, then the schema components do not belong to any namespace.

Uniqueness Constraint Ensures uniqueness of an element/attribute value, or a combination of values, within a specified scope. See: http://www.w3.org/TR/xmlschema-1/#cIdentity-constraint_Definitions.

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