



**Financial products Markup Language**

## **FpML - Valuation Component Definitions**

## ***Version: 4.3***

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### **Document built**

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## ***1 Global Complex Types***

## 1.1 AssetValuation

### 1.1.1 Description:

A structure that holds a set of measures about an asset, including possibly their sensitivities.

### 1.1.2 Contents:

Inherited element(s): (This definition inherits the content defined by the type Valuation)

- 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.

**quote** (one or more occurrences; of the type Quotation) One or more numerical measures relating to the asset, possibly together with sensitivities of that measure to pricing inputs.

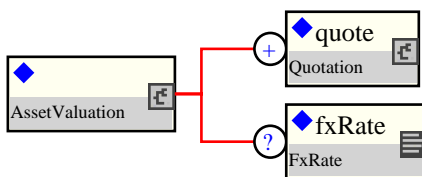
**fxRate** (zero or one occurrence; of the type FxRate) Indicates the rate of a currency conversion that may have been used to compute valuations.

### 1.1.3 Used by:

- Complex type: Position
- Complex type: ValuationSet

### 1.1.4 Derived Types:

### 1.1.5 Figure:



### 1.1.6 Schema Fragment:

```
<xsd:complexType name="AssetValuation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A structure that holds a set of measures about an asset,
      including possibly their sensitivities.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Valuation">
      <xsd:sequence>
        <xsd:element name="quote" type="Quotation" maxOccurs="unbounded">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              One or more numerical measures relating to the asset,
              possibly together with sensitivities of that measure to
              pricing inputs.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="fxRate" type="FxRate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Indicates the rate of a currency conversion that may have
              been used to compute valuations.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```



```
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

## 1.2 DerivedValuationScenario

### 1.2.1 Description:

A valuation scenario that is derived from another valuation scenario.

### 1.2.2 Contents:

**name** (zero or one occurrence; of the type xsd:string) The (optional) name for this valuation scenario, used for understandability. For example "EOD Valuations".

**baseValuationScenario** (exactly one occurrence; of the type ValuationScenarioReference) An (optional) reference to a valuation scenario from which this one is derived.

**valuationDate** (zero or one occurrence; of the type IdentifiedDate) The (optional) date for which the assets are valued. If not present, the valuation date will be that of the base valuation scenario.

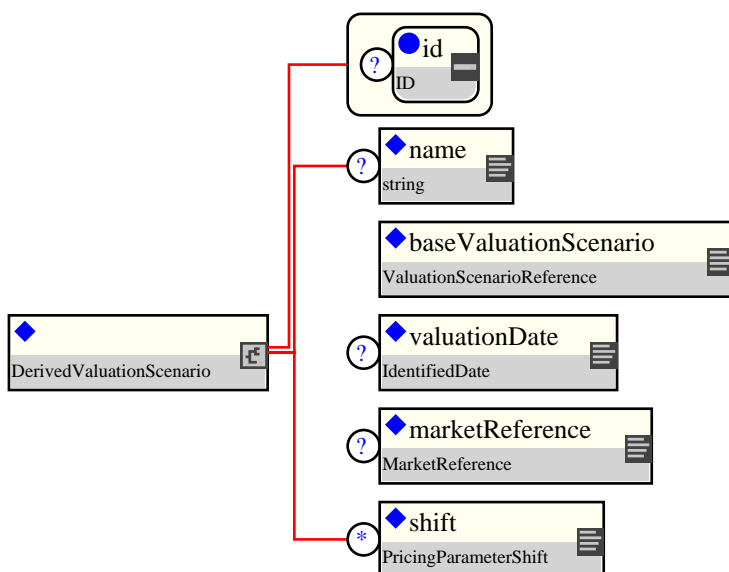
**marketReference** (zero or one occurrence; of the type MarketReference) A reference to the market environment used to price the asset. If not present, the market will be that of the base valuation scenario.

**shift** (zero or more occurrences; of the type PricingParameterShift) A collection of shifts to be applied to market inputs prior to computation of the derivative.

### 1.2.3 Used by:

### 1.2.4 Derived Types:

### 1.2.5 Figure:



### 1.2.6 Schema Fragment:

```
<xsd:complexType name="DerivedValuationScenario">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A valuation scenario that is derived from another valuation
      scenario.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="name" type="xsd:string" minOccurs="0">
      <xsd:annotation>
```

```

    <xsd:documentation xml:lang="en">
      The (optional) name for this valuation scenario, used for
      understandability. For example "EOD Valuations".
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="baseValuationScenario" type="ValuationScenarioReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An (optional) reference to a valuation scenario from which
      this one is derived.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="valuationDate" type="IdentifiedDate" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The (optional) date for which the assets are valued. If not
      present, the valuation date will be that of the base
      valuation scenario.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="marketReference" type="MarketReference" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A reference to the market environment used to price the
      asset. If not present, the market will be that of the base
      valuation scenario.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="shift" type="PricingParameterShift" minOccurs="0" maxOccurs="unbounded">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A collection of shifts to be applied to market inputs prior
      to computation of the derivative.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
</xsd:sequence>
<xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>

```

## 1.3 Position

### 1.3.1 Description:

A collection of related trades or positions and the corresponding aggregate exposures generated by these.

### 1.3.2 Contents:

**positionId** (exactly one occurrence; of the type PositionId) A version-independent identifier for the position, possibly based on trade identifier.

**version** (zero or one occurrence; of the type xsd:positiveInteger) 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** (zero or one occurrence; of the type ReportingRoles) Information about the roles of the parties with respect to reporting the positions.

**constituent** (exactly one occurrence; of the type PositionConstituent) The components that create this position.

**scheduledDate** (zero or more occurrences; of the type ScheduledDate) Position level schedule date, such as final payment dates, in a simple and flexible format.

**valuation** (zero or more occurrences; of the type AssetValuation) 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.

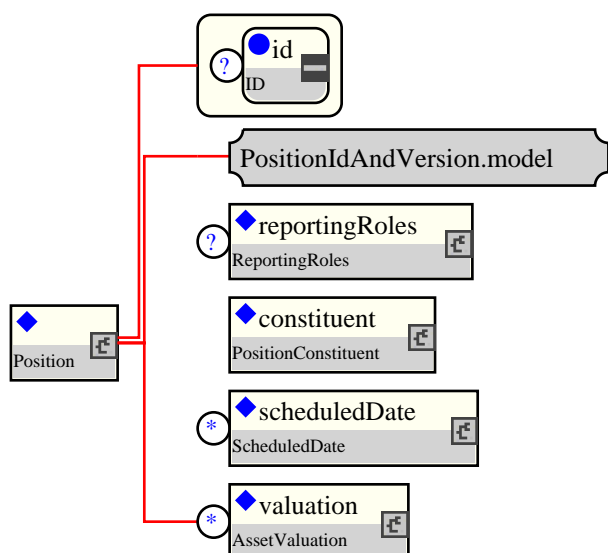
### 1.3.3 Used by:

- Complex type: DefinePosition
- Complex type: PositionReport

### 1.3.4 Derived Types:

- Complex type: DefinePosition

### 1.3.5 Figure:



### 1.3.6 Schema Fragment:

```

<xsd:complexType name="Position">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A collection of related trades or positions and the corresponding
      aggregate exposures generated by these.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PositionIdAndVersion.model"/>
    <xsd:element name="reportingRoles" type="ReportingRoles" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Information about the roles of the parties with respect to
          reporting the positions.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="constituent" type="PositionConstituent">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The components that create this position.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="scheduledDate" type="ScheduledDate" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Position level schedule date, such as final payment dates, in
          a simple and flexible format.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuation" type="AssetValuation" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>

```

## 1.4 PositionConstituent

### 1.4.1 Description:

The items (trades, trade references, holdings, other positions) that comprise this position. Currently a position may consist only of a single trade, a reference to a previously submitted position, or a reference to the trade. The choice structure is optional to allow extensions to be placed within this container.

### 1.4.2 Contents:

Either

**trade** (exactly one occurrence; of the type Trade) 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.

Or

**positionVersionReference** (exactly one occurrence; of the type xsd:positiveInteger) A previously submitted version of the position.

Or

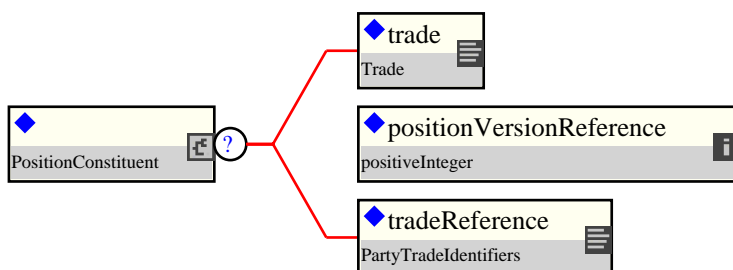
**tradeReference** (exactly one occurrence; of the type PartyTradeIdentifiers) The trade reference identifier(s) allocated to the trade by the parties involved.

### 1.4.3 Used by:

- Complex type: Position

### 1.4.4 Derived Types:

### 1.4.5 Figure:



### 1.4.6 Schema Fragment:

```
<xsd:complexType name="PositionConstituent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The items (trades, trade references, holdings, other positions)
      that comprise this position. Currently a position may consist
      only of a single trade, a reference to a previously submitted
      position, or a reference to the trade. The choice structure is
      optional to allow extensions to be placed within this container.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice minOccurs="0">
    <xsd:element name="trade" type="Trade">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="positionVersionReference" type="xsd:positiveInteger">
```

```
<xsd:annotation>
  <xsd:documentation xml:lang="en">
    A previously submitted version of the position.
  </xsd:documentation>
</xsd:annotation>
</xsd:element>
<xsd:element name="tradeReference" type="PartyTradeIdentifiers">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The trade reference identifier(s) allocated to the trade by
      the parties involved.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
</xsd:choice>
</xsd:complexType>
```

## 1.5 Quotation

### 1.5.1 Description:

Some kind of numerical measure about an asset, eg. its NPV, together with characteristics of that measure, together with optional sensitivities.

### 1.5.2 Contents:

**value** (zero or one occurrence; of the type xsd:decimal) The value of the the quotation.

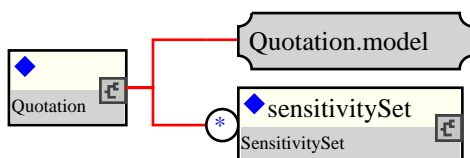
**sensitivitySet** (zero or more occurrences; of the type SensitivitySet) Zero or more sets of sensitivities of this measure to various input parameters.

### 1.5.3 Used by:

- Complex type: AssetValuation

### 1.5.4 Derived Types:

### 1.5.5 Figure:



### 1.5.6 Schema Fragment:

```
<xsd:complexType name="Quotation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Some kind of numerical measure about an asset, eg. its NPV,
      together with characteristics of that measure, together with
      optional sensitivities.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="Quotation.model"/>
    <xsd:element name="sensitivitySet" type="SensitivitySet" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Zero or more sets of sensitivities of this measure to various
          input parameters.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```



## 1.6 ReportingRoles

### 1.6.1 Description:

The roles of the parties in reporting information such as positions.

### 1.6.2 Contents:

**baseParty** (exactly one occurrence; of the type PartyReference) A reference to the party from whose perspective the position is valued, ie. the owner or holder of the position.

**activityProvider** (zero or one occurrence; of the type PartyReference) A reference to the party responsible for reporting trading activities.

**positionProvider** (zero or one occurrence; of the type PartyReference) A reference to the party responsible for reporting the position itself and its constituents.

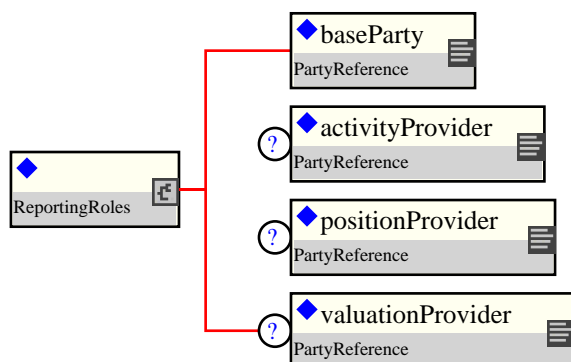
**valuationProvider** (zero or one occurrence; of the type PartyReference) A reference to the party responsible for calculating and reporting the valuations of the positions.

### 1.6.3 Used by:

- Complex type: Position

### 1.6.4 Derived Types:

### 1.6.5 Figure:



### 1.6.6 Schema Fragment:

```
<xsd:complexType name="ReportingRoles">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The roles of the parties in reporting information such as
      positions.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="baseParty" type="PartyReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party from whose perspective the position
          is valued, ie. the owner or holder of the position.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="activityProvider" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party responsible for reporting trading
          activities.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="positionProvider" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party responsible for reporting the position itself and its constituents.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuationProvider" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party responsible for calculating and reporting the valuations of the positions.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

```

        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
<xsd:element name="positionProvider" type="PartyReference" minOccurs="0">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A reference to the party responsible for reporting the
            position itself and its constituents.
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
<xsd:element name="valuationProvider" type="PartyReference" minOccurs="0">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A reference to the party responsible for calculating and
            reporting the valuations of the positions.
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
</xsd:sequence>
</xsd:complexType>

```

## 1.7 ScheduledDate

### 1.7.1 Description:

An servicing date relevant for a trade structure, such as a payment or a reset.

### 1.7.2 Contents:

Either

**adjustedDate** (exactly one occurrence; of the type xsd:date)

**type** (exactly one occurrence; of the type ScheduledDateType) The type of the date, e.g. next or previous payment.

**assetReference** (zero or one occurrence; of the type AnyAssetReference) A reference to the leg (or other product component) for which these dates occur.

Either

**associatedValue** (exactly one occurrence; of the type AssetValuation) The value that is associated with the scheduled date.

Or

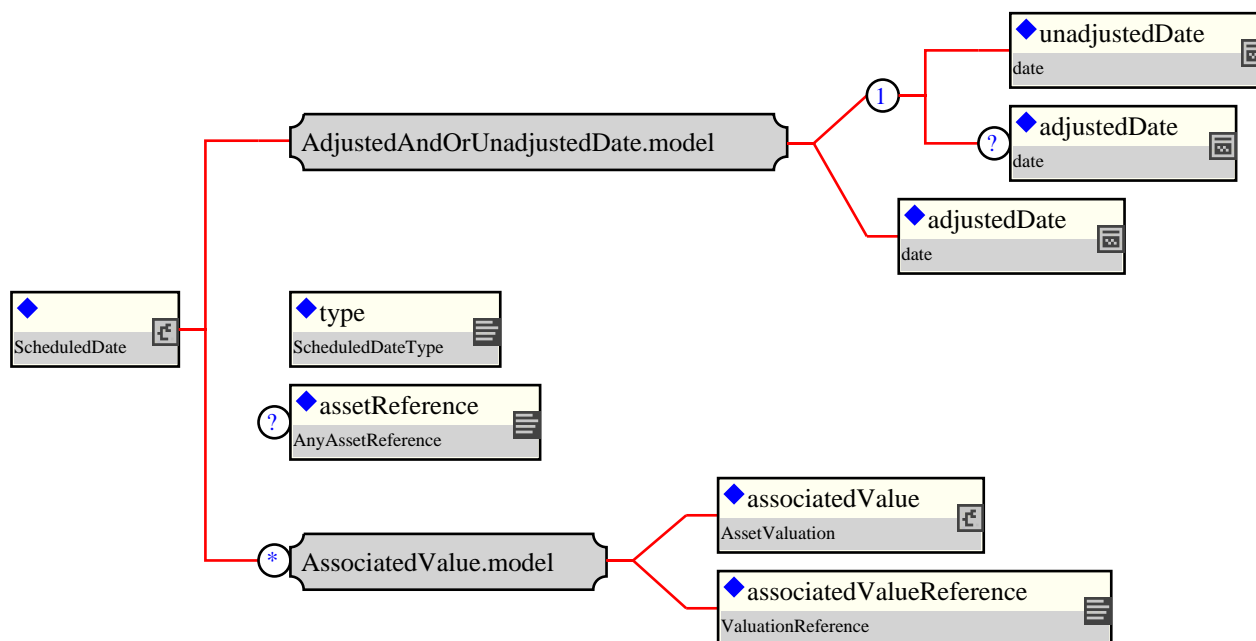
**associatedValueReference** (exactly one occurrence; of the type ValuationReference) A reference to the value associated with this scheduled date.

### 1.7.3 Used by:

- Complex type: Position
- Complex type: ScheduledDates

### 1.7.4 Derived Types:

### 1.7.5 Figure:



### 1.7.6 Schema Fragment:

```

<xsd:complexType name="ScheduledDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An servicing date relevant for a trade structure, such as a
      payment or a reset.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="AdjustedAndOrUnadjustedDate.model"/>
    <xsd:element name="type" type="ScheduledDateType">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The type of the date, e.g. next or previous payment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="assetReference" type="AnyAssetReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the leg (or other product component) for which
          these dates occur.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:group ref="AssociatedValue.model" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>

```

## 1.8 ScheduledDates

### 1.8.1 Description:

A list of dates (cash flows, resets, etc.) that are relevant for this structure, e.g. next cash flow, last reset, etc. Provides a way to list upcoming or recent servicing dates related to this trade stream in a way that is simpler and more flexible than the FpML "cashflows" structure.

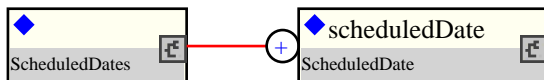
### 1.8.2 Contents:

**scheduledDate** (one or more occurrences; of the type ScheduledDate) A single stream level scheduled servicing date.

### 1.8.3 Used by:

### 1.8.4 Derived Types:

### 1.8.5 Figure:



### 1.8.6 Schema Fragment:

```
<xsd:complexType name="ScheduledDates">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A list of dates (cash flows, resets, etc.) that are relevant for
      this structure, e.g. next cash flow, last reset, etc. Provides a
      way to list upcoming or recent servicing dates related to this
      trade stream in a way that is simpler and more flexible than the
      FpML "cashflows" structure.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="scheduledDate" type="ScheduledDate" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A single stream level scheduled servicing date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

## 1.9 ScheduledDateType

### 1.9.1 Description:

A scheme used to identify the type of a stream scheduled servicing date.

### 1.9.2 Contents:

Inherited element(s): (This definition inherits the content defined by the type xsd:normalizedString)

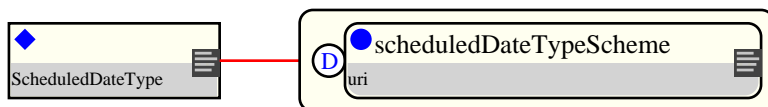
•

### 1.9.3 Used by:

- Complex type: ScheduledDate

### 1.9.4 Derived Types:

### 1.9.5 Figure:



### 1.9.6 Schema Fragment:

```
<xsd:complexType name="ScheduledDateType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A scheme used to identify the type of a stream scheduled
      servicing date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="scheduledDateTypeScheme" type="xsd:anyURI" default="http://www.fpml
    </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
```

## 1.10 Sensitivity

### 1.10.1 Description:

The sensitivity of a value to a defined change in input parameters.

### 1.10.2 Contents:

Inherited element(s): (This definition inherits the content defined by the type `xsd:decimal`)

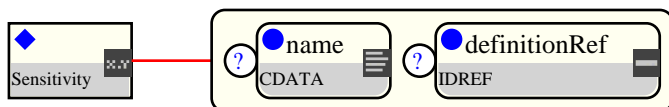
- 

### 1.10.3 Used by:

- Complex type: `SensitivitySet`

### 1.10.4 Derived Types:

### 1.10.5 Figure:



### 1.10.6 Schema Fragment:

```
<xsd:complexType name="Sensitivity">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The sensitivity of a value to a defined change in input
      parameters.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:decimal">
      <xsd:attribute name="name" type="xsd:normalizedString">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A optional name for this sensitivity. This is primarily
            intended for display purposes.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="definitionRef" type="xsd:IDREF">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A optional (but normally supplied) reference to the
            definition of this sensitivity.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

## 1.11 SensitivitySet

### 1.11.1 Description:

A collection of sensitivities. References a definition that explains the meaning/type of the sensitivities.

### 1.11.2 Contents:

**name** (zero or one occurrence; of the type xsd:string)

**definitionReference** (zero or one occurrence; of the type SensitivitySetReference) A reference to a sensitivity set definition.

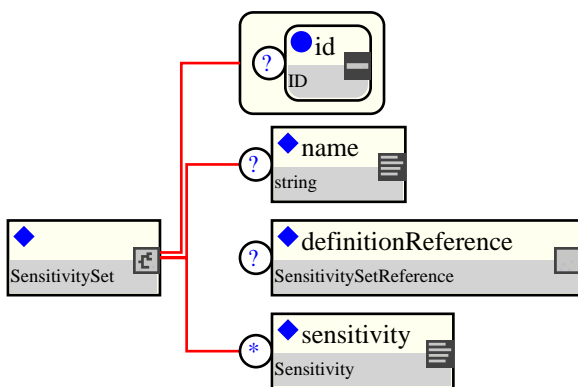
**sensitivity** (zero or more occurrences; of the type Sensitivity)

### 1.11.3 Used by:

- Complex type: Quotation

### 1.11.4 Derived Types:

### 1.11.5 Figure:



### 1.11.6 Schema Fragment:

```
<xsd:complexType name="SensitivitySet">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A collection of sensitivities. References a definition that
      explains the meaning/type of the sensitivities.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="name" type="xsd:string" minOccurs="0"/>
    <xsd:element name="definitionReference" type="SensitivitySetReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to a sensitivity set definition.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="sensitivity" type="Sensitivity" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```



## 1.12 SensitivitySetReference

### 1.12.1 Description:

Reference to a sensitivity set.

### 1.12.2 Contents:

Inherited element(s): (This definition inherits the content defined by the type Reference)

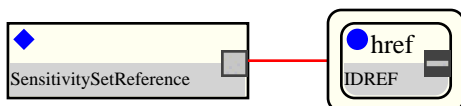
- The abstract base class for all types which define intra-document pointers.

### 1.12.3 Used by:

- Complex type: SensitivitySet

### 1.12.4 Derived Types:

### 1.12.5 Figure:



### 1.12.6 Schema Fragment:

```
<xsd:complexType name="SensitivitySetReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a sensitivity set.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="SensitivitySetReference"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

## 1.13 Valuations

### 1.13.1 Description:

A set of valuation.

### 1.13.2 Contents:

Either

**valuation** (exactly one occurrence; of the type AssetValuation)

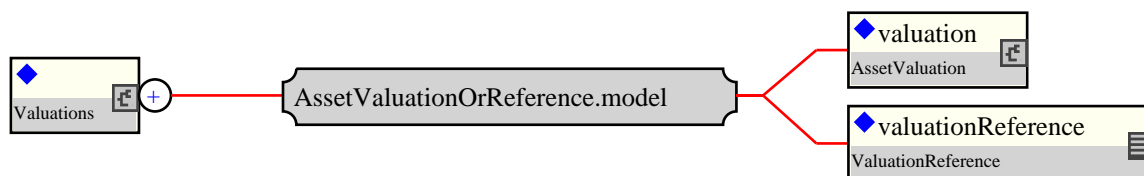
Or

**valuationReference** (exactly one occurrence; of the type ValuationReference) A reference to a quotation

### 1.13.3 Used by:

### 1.13.4 Derived Types:

### 1.13.5 Figure:



### 1.13.6 Schema Fragment:

```
<xsd:complexType name="Valuations">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A set of valuation.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="AssetValuationOrReference.model" maxOccurs="unbounded" />
  </xsd:sequence>
</xsd:complexType>
```

## 1.14 ValuationSet

### 1.14.1 Description:

A set of valuation inputs and results. This structure can be used for requesting valuations, or for reporting them. In general, the request fills in fewer elements.

### 1.14.2 Contents:

**name** (zero or one occurrence; of the type xsd:string) The name of the valuation set, used to understand what it means. E.g., "EOD Values and Risks for Party A".

**valuationScenario** (zero or more occurrences; of the type ValuationScenario) Valuation scenarios used (requested/reported) in this valuation set. E.g., the EOD valuation scenario for a particular value date. Used for the first occurrence of a valuation scenario in a document.

**valuationScenarioReference** (zero or more occurrences; of the type ValuationScenarioReference) References to valuation scenarios used (requested/reported) in this valuation set. E.g., a reference to the EOD valuation scenario for a particular value date. Used for subsequent occurrences of a valuation set in an FpML document.

**baseParty** (zero or one occurrence; of the type PartyReference) Reference to the party from whose point of view the assets are valued.

**quotationCharacteristics** (zero or more occurrences; of the type QuotationCharacteristics) Characteristics (measure types, units, sides, etc.) of the quotes used (requested/reported) in the valuation set.

**sensitivitySetDefinition** (zero or more occurrences; of the type SensitivitySetDefinition) Definition(s) of sensitivity sets used (requested or reported) in this valuation set.

**detail** (zero or one occurrence; of the type ValuationSetDetail) Does this valuation set include a market environment?

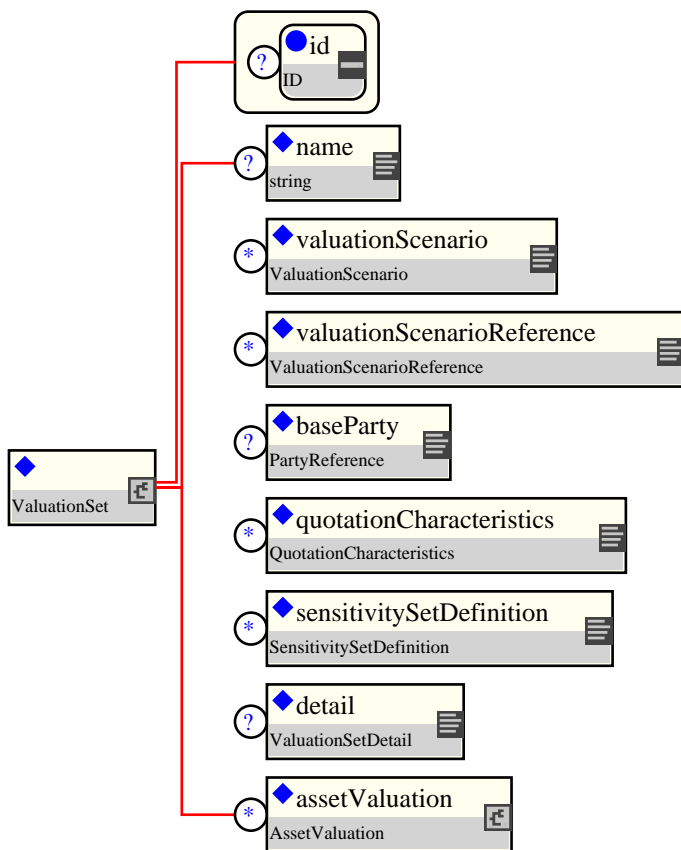
**assetValuation** (zero or more occurrences; of the type AssetValuation) Valuations reported in this valuation set. These values can be values (NPVs, prices, etc.) or risks (DAR, etc.) and can include sensitivities.

### 1.14.3 Used by:

- Element: valuationSet

### 1.14.4 Derived Types:

### 1.14.5 Figure:



### 1.14.6 Schema Fragment:

```

<xsd:complexType name="ValuationSet">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A set of valuation inputs and results. This structure can be used
      for requesting valuations, or for reporting them. In general, the
      request fills in fewer elements.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="name" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The name of the valuation set, used to understand what it
          means. E.g., "EOD Values and Risks for Party A".
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuationScenario" type="ValuationScenario" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Valuation scenarios used (requested/reported) in this
          valuation set. E.g., the EOD valuation scenario for a
          particular value date. Used for the first occurrence of a
          valuation scenario in a document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuationScenarioReference" type="ValuationScenarioReference" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          References to valuation scenarios used (requested/reported)
          in this valuation set. E.g., a reference to the EOD valuation
          scenario for a particular value date. Used for subsequent
          occurrences of a valuation set in an FpML document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>

```

```

<xsd:element name="baseParty" type="PartyReference" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to the party from whose point of view the assets
      are valued.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="quotationCharacteristics" type="QuotationCharacteristics" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Characteristics (measure types, units, sides, etc.) of the
      quotes used (requested/reported) in the valuation set.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="sensitivitySetDefinition" type="SensitivitySetDefinition" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Definition(s) of sensitivity sets used (requested or
      reported) in this valuation set.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="detail" type="ValuationSetDetail" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Does this valuation set include a market environment?
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="assetValuation" type="AssetValuation" minOccurs="0" maxOccurs="unbounded">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Valuations reported in this valuation set. These values can
      be values (NPVs, prices, etc.) or risks (DAR, etc.) and can
      include sensitivities.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
</xsd:sequence>
<xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>

```

## 1.15 ValuationSetDetail

### 1.15.1 Description:

The amount of detail provided in the valuation set, e.g. is market environment data provided, are risk definitions provided, etc.

### 1.15.2 Contents:

Inherited element(s): (This definition inherits the content defined by the type `xsd:normalizedString`)

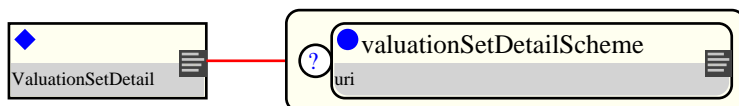
•

### 1.15.3 Used by:

- Complex type: ValuationSet

### 1.15.4 Derived Types:

### 1.15.5 Figure:



### 1.15.6 Schema Fragment:

```
<xsd:complexType name="ValuationSetDetail">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The amount of detail provided in the valuation set, e.g. is
      market environment data provided, are risk definitions provided,
      etc.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="valuationSetDetailScheme" type="xsd:anyURI" />
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

## ***2 Global Elements***

## 2.1 valuationSet

### 2.1.1 Description:

### 2.1.2 Contents:

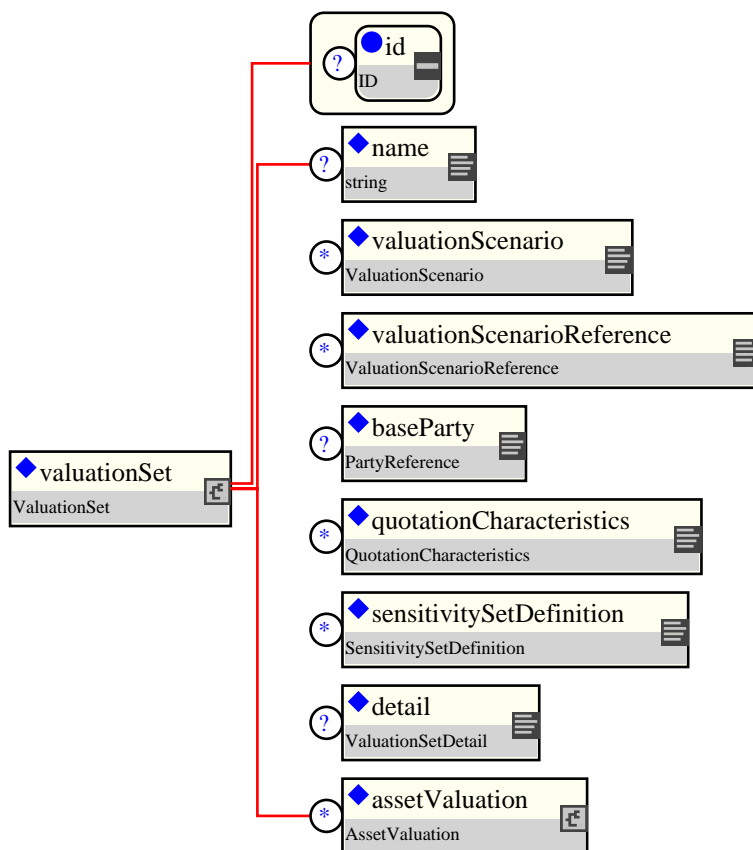
Element valuationSet is defined by the complex type ValuationSet

### 2.1.3 Used by:

- Complex type: PortfolioValuationItem
- Complex type: TradeValuationItem
- Complex type: ValuationDocument

### 2.1.4 Substituted by:

### 2.1.5 Figure:



### 2.1.6 Schema Fragment:

```
<xsd:element name="valuationSet" type="ValuationSet"/>
```



**3 Groups**

## 3.1 AdjustedAndOrUnadjustedDate.model

### 3.1.1 Description:

Contains at least one of an adjusted date and and unadjusted date, using the usual meanings of those terms.

### 3.1.2 Contents:

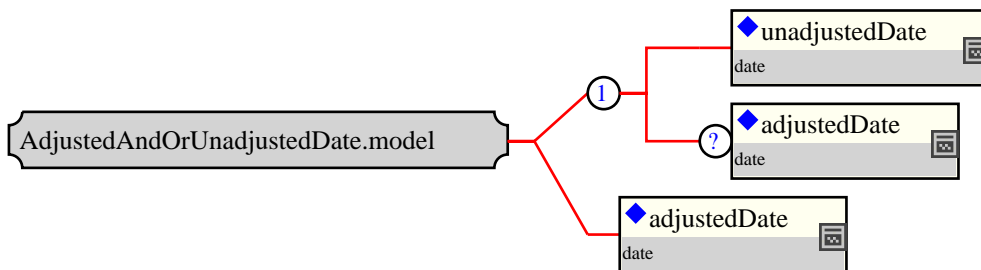
Either

**adjustedDate** (exactly one occurrence; of the type xsd:date)

### 3.1.3 Used by:

- Complex type: ScheduledDate

### 3.1.4 Figure:



### 3.1.5 Schema Fragment:

```
<xsd:group name="AdjustedAndOrUnadjustedDate.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Contains at least one of an adjusted date and and unadjusted
      date, using the usual meanings of those terms.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:sequence>
      <xsd:element name="unadjustedDate" type="xsd:date"/>
      <xsd:element name="adjustedDate" type="xsd:date" minOccurs="0"/>
    </xsd:sequence>
    <xsd:element name="adjustedDate" type="xsd:date"/>
  </xsd:choice>
</xsd:group>
```

## 3.2 AssetValuationOrReference.model

### 3.2.1 Description:

A quotation or a reference to a quotation.

### 3.2.2 Contents:

Either

**valuation** (exactly one occurrence; of the type AssetValuation)

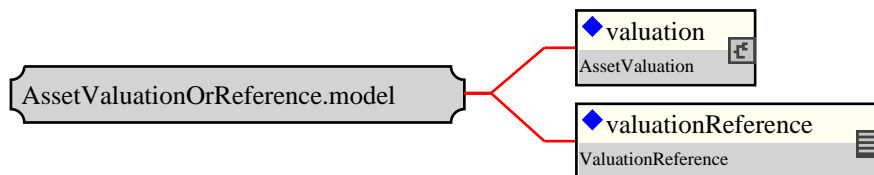
Or

**valuationReference** (exactly one occurrence; of the type ValuationReference) A reference to a quotation

### 3.2.3 Used by:

- Complex type: Valuations

### 3.2.4 Figure:



### 3.2.5 Schema Fragment:

```
<xsd:group name="AssetValuationOrReference.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A quotation or a reference to a quotation.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="valuation" type="AssetValuation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en"/>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuationReference" type="ValuationReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to a quotation
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:group>
```

## 3.3 AssociatedValue.model

### 3.3.1 Description:

An associated value or reference for a scheduled date.

### 3.3.2 Contents:

Either

**associatedValue** (exactly one occurrence; of the type AssetValuation) The value that is associated with the scheduled date.

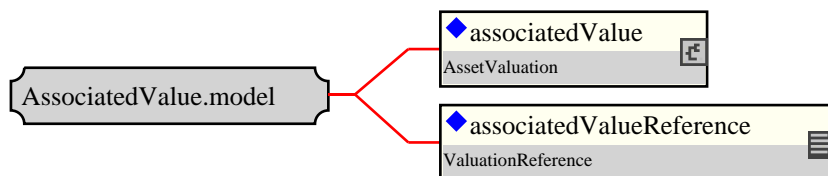
Or

**associatedValueReference** (exactly one occurrence; of the type ValuationReference) A reference to the value associated with this scheduled date.

### 3.3.3 Used by:

- Complex type: ScheduledDate

### 3.3.4 Figure:



### 3.3.5 Schema Fragment:

```
<xsd:group name="AssociatedValue.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An associated value or reference for a scheduled date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="associatedValue" type="AssetValuation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The value that is associated with the scheduled date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="associatedValueReference" type="ValuationReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the value associated with this scheduled date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:group>
```

## 4 Schema listing

```
<xsd:schema ecore:nsPrefix="fpml" ecore:package="org.fpml" ecore:documentRoot="FpML" targetNameSpace="http://www.fpml.org/FpML-4" >
  <xsd:include schemaLocation="fpml-riskdef-4-3.xsd"/>
  <xsd:complexType name="AssetValuation">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A structure that holds a set of measures about an asset,
        including possibly their sensitivities.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Valuation">
        <xsd:sequence>
          <xsd:element name="quote" type="Quotation" maxOccurs="unbounded">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                One or more numerical measures relating to the asset,
                possibly together with sensitivities of that measure to
                pricing inputs.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="fxRate" type="FxRate" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Indicates the rate of a currency conversion that may
                have been used to compute valuations.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="DerivedValuationScenario">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A valuation scenario that is derived from another valuation
        scenario.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="name" type="xsd:string" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The (optional) name for this valuation scenario, used for
            understandability. For example "EOD Valuations".
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="baseValuationScenario" type="ValuationScenarioReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            An (optional) reference to a valuation scenario from which
            this one is derived.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="valuationDate" type="IdentifiedDate" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The (optional) date for which the assets are valued. If not
            present, the valuation date will be that of the base
            valuation scenario.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="marketReference" type="MarketReference" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A reference to the market environment used to price the
            asset. If not present, the market will be that of the base
            valuation scenario.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="shift" type="PricingParameterShift" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A collection of shifts to be applied to market inputs prior
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
</xsd:schema>
```

```

        to computation of the derivative.
    </xsd:documentation>
</xsd:annotation>
</xsd:element>
</xsd:sequence>
<xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="Position">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A collection of related trades or positions and the
            corresponding aggregate exposures generated by these.
        </xsd:documentation>
    </xsd:annotation>
</xsd:sequence>
    <xsd:group ref="PositionIdAndVersion.model"/>
    <xsd:element name="reportingRoles" type="ReportingRoles" minOccurs="0">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                Information about the roles of the parties with respect to
                reporting the positions.
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>
    <xsd:element name="constituent" type="PositionConstituent">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                The components that create this position.
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>
    <xsd:element name="scheduledDate" type="ScheduledDate" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                Position level schedule date, such as final payment dates,
                in a simple and flexible format.
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuation" type="AssetValuation" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                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.
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>
</xsd:sequence>
<xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="PositionConstituent">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            The items (trades, trade references, holdings, other positions)
            that comprise this position. Currently a position may consist
            only of a single trade, a reference to a previously submitted
            position, or a reference to the trade. The choice structure is
            optional to allow extensions to be placed within this
            container.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:choice minOccurs="0">
        <xsd:element name="trade" type="Trade">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="positionVersionReference" type="xsd:positiveInteger">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A previously submitted version of the position.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="tradeReference" type="PartyTradeIdentifiers">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">

```

```

        The trade reference identifier(s) allocated to the trade by
        the parties involved.
    </xsd:documentation>
</xsd:annotation>
</xsd:element>
</xsd:choice>
</xsd:complexType>
<xsd:complexType name="Quotation">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            Some kind of numerical measure about an asset, eg. its NPV,
            together with characteristics of that measure, together with
            optional sensitivities.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:group ref="Quotation.model"/>
        <xsd:element name="sensitivitySet" type="SensitivitySet" minOccurs="0" maxOccurs="unbound">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    Zero or more sets of sensitivities of this measure to
                    various input parameters.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="ReportingRoles">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            The roles of the parties in reporting information such as
            positions.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="baseParty" type="PartyReference">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A reference to the party from whose perspective the
                    position is valued, ie. the owner or holder of the
                    position.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="activityProvider" type="PartyReference" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A reference to the party responsible for reporting trading
                    activities.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="positionProvider" type="PartyReference" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A reference to the party responsible for reporting the
                    position itself and its constituents.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="valuationProvider" type="PartyReference" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A reference to the party responsible for calculating and
                    reporting the valuations of the positions.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="ScheduledDate">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            An servicing date relevant for a trade structure, such as a
            payment or a reset.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:group ref="AdjustedAndOrUnadjustedDate.model"/>
        <xsd:element name="type" type="ScheduledDateType">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    The type of the date, e.g. next or previous payment.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>

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        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
<xsd:element name="assetReference" type="AnyAssetReference" minOccurs="0">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A reference to the leg (or other product component) for
            which these dates occur.
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
<xsd:group ref="AssociatedValue.model" minOccurs="0" maxOccurs="unbounded"/>
</xsd:sequence>
</xsd:complexType>
<xsd:complexType name="ScheduledDates">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A list of dates (cash flows, resets, etc.) that are relevant
            for this structure, e.g. next cash flow, last reset, etc.
            Provides a way to list upcoming or recent servicing dates
            related to this trade stream in a way that is simpler and more
            flexible than the FpML "cashflows" structure.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="scheduledDate" type="ScheduledDate" maxOccurs="unbounded">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A single stream level scheduled servicing date.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="ScheduledDateType">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A scheme used to identify the type of a stream scheduled
            servicing date.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="scheduledDateTypeScheme" type="xsd:anyURI" default="http://www.fpr
            </xsd:extension>
        </xsd:simpleContent>
    </xsd:complexType>
<xsd:complexType name="Sensitivity">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            The sensitivity of a value to a defined change in input
            parameters.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
        <xsd:extension base="xsd:decimal">
            <xsd:attribute name="name" type="xsd:normalizedString">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A optional name for this sensitivity. This is primarily
                        intended for display purposes.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:attribute>
            <xsd:attribute name="definitionRef" type="xsd:IDREF">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A optional (but normally supplied) reference to the
                        definition of this sensitivity.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:attribute>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
<xsd:complexType name="SensitivitySet">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A collection of sensitivities. References a definition that
            explains the meaning/type of the sensitivities.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>

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<xsd:element name="name" type="xsd:string" minOccurs="0"/>
<xsd:element name="definitionReference" type="SensitivitySetReference" minOccurs="0">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A reference to a sensitivity set definition.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
<xsd:element name="sensitivity" type="Sensitivity" minOccurs="0" maxOccurs="unbounded"/>
</xsd:sequence>
<xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="SensitivitySetReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a sensitivity set.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Sensitivity
    </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
<xsd:complexType name="Valuations">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A set of valuation.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="AssetValuationOrReference.model" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="ValuationSet">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A set of valuation inputs and results. This structure can be
      used for requesting valuations, or for reporting them. In
      general, the request fills in fewer elements.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="name" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The name of the valuation set, used to understand what it
          means. E.g., "EOD Values and Risks for Party A".
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuationScenario" type="ValuationScenario" minOccurs="0" maxOccurs="u
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Valuation scenerios used (requested/reported) in this
          valuation set. E.g., the EOD valuation scenario for a
          particular value date. Used for the first occurrence of a
          valuation scenario in a document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="valuationScenarioReference" type="ValuationScenarioReference" minOccurs="0" maxOccurs="u
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          References to valuation scenarios used (requested/reported)
          in this valuation set. E.g., a reference to the EOD
          valuation scenario for a particular value date. Used for
          subsequence occurrences of a valuation set in an FpML
          document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="baseParty" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Reference to the party from whose point of view the assets
          are valued.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="quotationCharacteristics" type="QuotationCharacteristics" minOccurs="0" maxOccurs="u
      <xsd:annotation>
        <xsd:documentation xml:lang="en">

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        Characteristics (measure types, units, sides, etc.) of the
        quotes used (requested/reported) in the valuation set.
    </xsd:documentation>
</xsd:annotation>
</xsd:element>
<xsd:element name="sensitivitySetDefinition" type="SensitivitySetDefinition" minOccurs="0">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            Definition(s) of sensitivity sets used (requested or
            reported) in this valuation set.
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
<xsd:element name="detail" type="ValuationSetDetail" minOccurs="0">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            Does this valuation set include a market environment?
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
<xsd:element name="assetValuation" type="AssetValuation" minOccurs="0" maxOccurs="unbounded">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            Valuations reported in this valuation set. These values can
            be values (NPVs, prices, etc.) or risks (DAR, etc.) and can
            include sensitivities.
        </xsd:documentation>
    </xsd:annotation>
</xsd:element>
</xsd:sequence>
<xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="ValuationSetDetail">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            The amount of detail provided in the valuation set, e.g. is
            market environment data provided, are risk definitions
            provided, etc.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="valuationSetDetailScheme" type="xsd:anyURI"/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>
<xsd:element name="valuationSet" type="ValuationSet"/>
<xsd:group name="AdjustedAndOrUnadjustedDate.model">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            Contains at least one of an adjusted date and and unadjusted
            date, using the usual meanings of those terms.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
        <xsd:sequence>
            <xsd:element name="unadjustedDate" type="xsd:date"/>
            <xsd:element name="adjustedDate" type="xsd:date" minOccurs="0"/>
        </xsd:sequence>
        <xsd:element name="adjustedDate" type="xsd:date"/>
    </xsd:choice>
</xsd:group>
<xsd:group name="AssetValuationOrReference.model">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A quotation or a reference to a quotation.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
        <xsd:element name="valuation" type="AssetValuation">
            <xsd:annotation>
                <xsd:documentation xml:lang="en"/>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="valuationReference" type="ValuationReference">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A reference to a quotation
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:choice>
</xsd:group>

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<xsd:group name="AssociatedValue.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An associated value or reference for a scheduled date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="associatedValue" type="AssetValuation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The value that is associated with the scheduled date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="associatedValueReference" type="ValuationReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the value associated with this scheduled
          date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:group>
</xsd:schema>
```