FpML - Shared Component Definitions

Version: 4.3

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Errata For This Version:

http://www.fpml.org/spec/fpml-4-3-13-rec-2/html/fpml-4-3-errata.html

Document built

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1 Global Simple Types

1.1 CorrelationValue

1.1.1 Description:

A type defining a number specified as a decimal between -1 and 1 inclusive.

1.1.2 Contents:

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

1.1.3 Used by:

1.1.4 Derived Types:

1.1.5 Schema Fragment:

```xsd
<xsd:simpleType name="CorrelationValue">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a number specified as a decimal between -1 and 1
      inclusive.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="xsd:decimal">
    <xsd:minInclusive value="-1"/>
    <xsd:maxInclusive value="1"/>
  </xsd:restriction>
</xsd:simpleType>
```

1.2 HourMinuteTime

1.2.1 Description:

A type defining a time specified in hh:mm:ss format where the second component must be '00', e.g. 11am would be represented as 11:00:00.

1.2.2 Contents:

Inherited element(s): (This definition restricts the content defined by the type xsd:time)

1.2.3 Used by:

1.2.4 Derived Types:

1.2.5 Schema Fragment:

```
<xsd:simpleType name="HourMinuteTime">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a time specified in hh:mm:ss format where the
      second component must be '00', e.g. 11am would be represented as
      11:00:00.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="xsd:time">
    <xsd:pattern value="[0-2][0-9]:[0-5][0-9]:00"/>
  </xsd:restriction>
</xsd:simpleType>
```

1.3 NonNegativeDecimal

1.3.1 Description:

A type defining a number specified as non negative decimal greater than 0 inclusive.

1.3.2 Contents:

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

1.3.3 Used by:

1.3.4 Derived Types:

1.3.5 Schema Fragment:

```
<xsd:simpleType name="NonNegativeDecimal">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a number specified as non negative decimal
      greater than 0 inclusive.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="xsd:decimal">
    <xsd:minInclusive value="0"/>
  </xsd:restriction>
</xsd:simpleType>
```

1.4 PositiveDecimal

1.4.1 Description:

A type defining a number specified as positive decimal greater than 0 exclusive.

1.4.2 Contents:

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

1.4.3 Used by:

1.4.4 Derived Types:

1.4.5 Schema Fragment:

```xsd
<xsd:simpleType name="PositiveDecimal">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a number specified as positive decimal greater
      than 0 exclusive.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="xsd:decimal">
    <xsd:minExclusive value="0"/>
  </xsd:restriction>
</xsd:simpleType>
```

1.5 RestrictedPercentage

1.5.1 Description:

A type defining a percentage specified as decimal from 0 to 1. A percentage of 5% would be represented as 0.05.

1.5.2 Contents:

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

1.5.3 Used by:

1.5.4 Derived Types:

1.5.5 Schema Fragment:

```
<xsd:simpleType name="RestrictedPercentage">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a percentage specified as decimal from 0 to 1. A
      percentage of 5% would be represented as 0.05.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="xsd:decimal">
    <xsd:minInclusive value="0"/>
    <xsd:maxInclusive value="1"/>
  </xsd:restriction>
</xsd:simpleType>
```

2 Global Complex Types

2.1 Account

2.1.1 Description:

A generic account that represents any party's account at another party. Parties may be identified by the account at another party.

2.1.2 Contents:

accountBeneficiary (zero or one occurrence; of the type PartyReference) A reference to the party beneficiary of the account.

2.1.3 Used by:

* Complex type: Party

2.1.4 Derived Types:

2.1.5 Figure:

2.1.6 Schema Fragment:

```
<xsd:complexType name="Account">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A generic account that represents any party's account at another
      party. Parties may be identified by the account at another party.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:sequence maxOccurs="unbounded">
      <xsd:element name="accountId" type="AccountId">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            An account identifier. For example an Account number.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="accountName" type="xsd:normalizedString" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The name by which the account is known.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
    <xsd:element name="accountBeneficiary" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party beneficiary of the account.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID" use="required">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The unique identifier for the account within the document.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:attribute>
</xsd:complexType>
```

2.2 AccountId

2.2.1 Description:

The data type used for party identifiers.

2.2.2 Contents:

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

-

2.2.3 Used by:

- Complex type: Account

2.2.4 Derived Types:

2.2.5 Figure:

2.2.6 Schema Fragment:

```xml
<xsd:complexType name="AccountId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The data type used for party identifiers.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="accountIdScheme" type="xsd:anyURI">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The identifier scheme used with this accountId. A unique
            URI to determine the authoritative issuer of these
            identifiers.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.3 AccountReference

2.3.1 Description:

Reference to an account.

2.3.2 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.

2.3.3 Used by:

- Complex type: PartyRole

2.3.4 Derived Types:

2.3.5 Figure:

2.3.6 Schema Fragment:

```
<xsd:complexType name="AccountReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to an account.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Account"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.4 Address

2.4.1 Description:

A type that represents a physical postal address.

2.4.2 Contents:

streetAddress (zero or one occurrence; of the type StreetAddress) The set of street and building number information that identifies a postal address within a city.

city (zero or one occurrence; of the type xsd:string) The city component of a postal address.

state (zero or one occurrence; of the type xsd:string) A country subdivision used in postal addresses in some countries. For example, US states, Canadian provinces, Swiss cantons.

country (zero or one occurrence; of the type Country) The ISO 3166 standard code for the country within which the postal address is located.

postalCode (zero or one occurrence; of the type xsd:string) The code, required for computerised mail sorting systems, that is allocated to a physical address by a national postal authority.

2.4.3 Used by:

2.4.4 Derived Types:

2.4.5 Figure:

2.4.6 Schema Fragment:

```
<xsd:complexType name="Address">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that represents a physical postal address.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="streetAddress" type="StreetAddress" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The set of street and building number information that
          identifies a postal address within a city.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="city" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The city component of a postal address.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="state" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A country subdivision used in postal addresses in some
          countries. For example, US states, Canadian provinces, Swiss
          cantons.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="country" type="Country" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The ISO 3166 standard code for the country within which the
          postal address is located.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="postalCode" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The code, required for computerised mail sorting systems,
          that is allocated to a physical address by a national postal
          authority.
```

```
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:sequence>
    </xsd:complexType>
```

2.5 AdjustableDate

2.5.1 Description:

A type for defining 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.

2.5.2 Contents:

unadjustedDate (exactly one occurrence; of the type IdentifiedDate) A date subject to adjustment.

dateAdjustments (exactly one occurrence; of the type BusinessDayAdjustments) The business day convention and financial business centers used for adjusting the date if it would otherwise fall on a day that is not a business date in the specified business centers.

2.5.3 Used by:

- Complex type: AdjustableDateOrRelativeDateSequence
- Complex type: AdjustableOrRelativeDate
- Complex type: CalculationPeriodDates
- Complex type: DividendPaymentDate
- Complex type: EquityOptionTermination
- Complex type: EquityPremium
- Complex type: Fra
- Complex type: MandatoryEarlyTermination
- Complex type: Payment
- Complex type: PrePayment
- Complex type: QuotablePayment
- Complex type: StartingDate

2.5.4 Derived Types:

2.5.5 Figure:

2.5.6 Schema Fragment:

```
<xsd:complexType name="AdjustableDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type for defining 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.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="unadjustedDate" type="IdentifiedDate">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A date subject to adjustment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="dateAdjustments" type="BusinessDayAdjustments">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The business day convention and financial business centers
          used for adjusting the date if it would otherwise fall on a
          day that is not a business date in the specified business
          centers.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.6 AdjustableDate2

2.6.1 Description:

A type that is different from AdjustableDate in two regards. First, date adjustments can be specified with either a dateAdjustments element or a reference to an existing dateAdjustments element. Second, it does not require the specification of date adjustments.

2.6.2 Contents:

unadjustedDate (exactly one occurrence; of the type IdentifiedDate) A date subject to adjustment.

Either

dateAdjustments (exactly one occurrence; of the type BusinessDayAdjustments) The business day convention and financial business centers used for adjusting the date if it would otherwise fall on a day that is not a business dat in the specified business centers.

Or

dateAdjustmentsReference (exactly one occurrence; of the type BusinessDayAdjustmentsReference) A pointer style reference to date adjustments defined elsewhere in the document.

2.6.3 Used by:

- Complex type: DeprecatedScheduledTerminationDate
- Complex type: GeneralTerms
- Complex type: PaymentDetail
- Complex type: ScheduledTerminationDate
- Complex type: TradeDetails

2.6.4 Derived Types:

2.6.5 Figure:

2.6.6 Schema Fragment:

```
<xsd:complexType name="AdjustableDate2">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that is different from AdjustableDate in two regards.
      First, date adjustments can be specified with either a
      dateAdjustments element or a reference to an existing
      dateAdjustments element. Second, it does not require the
      specification of date adjustments.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="unadjustedDate" type="IdentifiedDate">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A date subject to adjustment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:choice minOccurs="0">
      <xsd:element name="dateAdjustments" type="BusinessDayAdjustments">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The business day convention and financial business centers
            used for adjusting the date if it would otherwise fall on a
            day that is not a business dat in the specified business
            centers.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="dateAdjustmentsReference" type="BusinessDayAdjustmentsReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A pointer style reference to date adjustments defined
            elsewhere in the document.
          </xsd:documentation>
        </xsd:annotation>
```

```
            </xsd:element>
          </xsd:choice>
        </xsd:sequence>
        <xsd:attribute name="id" type="xsd:ID"/>
      </xsd:complexType>
```

2.7 AdjustableDates

2.7.1 Description:

A type for defining 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 dates.

2.7.2 Contents:

unadjustedDate (one or more occurrences; of the type IdentifiedDate) A date subject to adjustment.

dateAdjustments (exactly one occurrence; of the type BusinessDayAdjustments) The business day convention and financial business centers used for adjusting the date if it would otherwise fall on a day that is not a business dat in the specified business centers.

2.7.3 Used by:

- Complex type: AdjustableDatesOrRelativeDateOffset
- Complex type: AdjustableOrRelativeDates
- Complex type: AdjustableRelativeOrPeriodicDates
- Complex type: CashSettlementPaymentDate

2.7.4 Derived Types:

2.7.5 Figure:

2.7.6 Schema Fragment:

```
<xsd:complexType name="AdjustableDates">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type for defining 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 dates.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="unadjustedDate" type="IdentifiedDate" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A date subject to adjustment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="dateAdjustments" type="BusinessDayAdjustments">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The business day convention and financial business centers
          used for adjusting the date if it would otherwise fall on a
          day that is not a business dat in the specified business
          centers.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.8 AdjustableDatesOrRelativeDateOffset

2.8.1 Description:

A type for defining a series of dates, either as a list of adjustable dates, or a as a repeating sequence from a base date

2.8.2 Contents:

Either

adjustableDates (exactly one occurrence; of the type AdjustableDates) A series of adjustable dates

Or

relativeDate (exactly one occurrence; of the type RelativeDateOffset) A series of dates specified as a repeating sequence from a base date

2.8.3 Used by:

• Complex type: InterestLegResetDates

2.8.4 Derived Types:

2.8.5 Figure:

2.8.6 Schema Fragment:

```
<xsd:complexType name="AdjustableDatesOrRelativeDateOffset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type for defining a series of dates, either as a list of
      adjustable dates, or a as a repeating sequence from a base date
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="adjustableDates" type="AdjustableDates">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A series of adjustable dates
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="relativeDate" type="RelativeDateOffset">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A series of dates specified as a repeating sequence from a
          base date
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
```

2.9 AdjustableOrRelativeAndAdjustedDate

2.9.1 Description:

An adjustable or relative date with the option to provide the adjusted date.

2.9.2 Contents:

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

- A type giving the choice between defining a date as an explicit date together with applicable adjustments or as relative to some other (anchor) date.

adjustedDate (zero or one occurrence; of the type IdentifiedDate) The adjusted 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).

2.9.3 Used by:

- Complex type: SimplePayment

2.9.4 Derived Types:

2.9.5 Figure:

2.9.6 Schema Fragment:

```
<xsd:complexType name="AdjustableOrRelativeAndAdjustedDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An adjustable or relative date with the option to provide the
      adjusted date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="AdjustableOrRelativeDate">
      <xsd:sequence>
        <xsd:element name="adjustedDate" type="IdentifiedDate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The adjusted 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).
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.10 AdjustableOrRelativeDate

2.10.1 Description:

A type giving the choice between defining a date as an explicit date together with applicable adjustments or as relative to some other (anchor) date.

2.10.2 Contents:

Either

adjustableDate (exactly one occurrence; of the type AdjustableDate) 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.

Or

relativeDate (exactly one occurrence; of the type RelativeDateOffset) A date specified as some offset to another date (the anchor date).

2.10.3 Used by:

- Complex type: AdjustableOrRelativeAndAdjustedDate
- Complex type: AmericanExercise
- Complex type: CalculatedAmount
- Complex type: CalendarSpread
- Complex type: DeprecatedEquityLeg
- Complex type: DeprecatedEquityPaymentDates
- Complex type: DeprecatedVarianceAmount
- Complex type: DirectionalLeg
- Complex type: DividendPeriodPayment
- Complex type: EquityEuropeanExercise
- Complex type: EquityExerciseValuationSettlement
- Complex type: EquityStrike
- Complex type: EuropeanExercise
- Complex type: ExchangeTradedContract
- Complex type: FeaturePayment
- Complex type: InterestLegCalculationPeriodDates
- Complex type: PaymentDetail
- Complex type: PeriodicDates
- Complex type: PrincipalExchangeDescriptions
- Complex type: ReturnSwapAdditionalPayment
- Complex type: ReturnSwapLegUnderlyer
- Complex type: ReturnSwapPaymentDates
- Complex type: SharedAmericanExercise
- Complex type: Stub

2.10.4 Derived Types:

- Complex type: AdjustableOrRelativeAndAdjustedDate

2.10.5 Figure:

2.10.6 Schema Fragment:

```
<xsd:complexType name="AdjustableOrRelativeDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type giving the choice between defining a date as an explicit
```

```
               date together with applicable adjustments or as relative to some
               other (anchor) date.
            </xsd:documentation>
         </xsd:annotation>
         <xsd:choice>
            <xsd:element name="adjustableDate" type="AdjustableDate">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                     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.
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:element>
            <xsd:element name="relativeDate" type="RelativeDateOffset">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                     A date specified as some offset to another date (the anchor
                     date).
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:element>
         </xsd:choice>
         <xsd:attribute name="id" type="xsd:ID"/>
      </xsd:complexType>
```

2.11 AdjustableOrRelativeDates

2.11.1 Description:

A type giving the choice between defining a series of dates as an explicit list of dates together with applicable adjustments or as relative to some other series of (anchor) dates.

2.11.2 Contents:

Either

adjustableDates (exactly one occurrence; of the type AdjustableDates) 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.

Or

relativeDates (exactly one occurrence; of the type RelativeDates) A series of dates specified as some offset to another series of dates (the anchor dates).

2.11.3 Used by:

- Complex type: AmericanExercise
- Complex type: BermudaExercise
- Complex type: DeprecatedEquityPaymentDates
- Complex type: EuropeanExercise
- Complex type: InterestLegCalculationPeriodDates
- Complex type: ReturnSwapPaymentDates

2.11.4 Derived Types:

2.11.5 Figure:

2.11.6 Schema Fragment:

```
<xsd:complexType name="AdjustableOrRelativeDates">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type giving the choice between defining a series of dates as an
      explicit list of dates together with applicable adjustments or as
      relative to some other series of (anchor) dates.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="adjustableDates" type="AdjustableDates">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="relativeDates" type="RelativeDates">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A series of dates specified as some offset to another series
          of dates (the anchor dates).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.12 AdjustableRelativeOrPeriodicDates

2.12.1 Description:

2.12.2 Contents:

Either

adjustableDates (exactly one occurrence; of the type AdjustableDates) 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.

Or

relativeDateSequence (exactly one occurrence; of the type RelativeDateSequence) A series of dates specified as some offset to other dates (the anchor dates) which can

Or

periodicDates (exactly one occurrence; of the type PeriodicDates)

2.12.3 Used by:

- Complex type: CalculatedAmount
- Complex type: EquityValuation
- Complex type: LegAmount

2.12.4 Derived Types:

2.12.5 Figure:

2.12.6 Schema Fragment:

```
<xsd:complexType name="AdjustableRelativeOrPeriodicDates">
  <xsd:choice>
    <xsd:element name="adjustableDates" type="AdjustableDates">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="relativeDateSequence" type="RelativeDateSequence">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A series of dates specified as some offset to other dates
          (the anchor dates) which can
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="periodicDates" type="PeriodicDates"/>
  </xsd:choice>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.13 AdjustedRelativeDateOffset

2.13.1 Description:

A type defining a date (referred to as the derived date) as a relative offset from another date (referred to as the anchor date) plus optional date adjustments.

2.13.2 Contents:

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

- A type defining a date (referred to as the derived date) as a relative offset from another date (referred to as the anchor date). If the anchor date is itself an adjustable date then the offset is assumed to be calculated from the adjusted anchor date. A number of different scenarios can be supported, namely; 1) the derived date may simply be a number of calendar periods (days, weeks, months or years) preceding or following the anchor date; 2) the unadjusted derived date may be a number of calendar periods(days, weeks, months or years) preceding or following the anchor date with the resulting unadjusted derived date subject to adjustment in accordance with a specified business day convention, i.e. the derived date must fall on a good business day; 3) the derived date may be a number of business days preceding or following the anchor date. Note that the businessDayConvention specifies any required adjustment to the unadjusted derived date. A negative or positive value in the periodMultiplier indicates whether the unadjusted derived precedes or follows the anchor date. The businessDayConvention should contain a value NONE if the day type element contains a value of Business (since specifying a negative or positive business days offset would already guarantee that the derived date would fall on a good business day in the specified business centers).

relativeDateAdjustments (zero or one occurrence; of the type BusinessDayAdjustments) The business day convention and financial business centers used for adjusting the relative date if it would otherwise fall on a day that is not a business date in the specified business centers.

2.13.3 Used by:

- Complex type: CalculationPeriodDates

2.13.4 Derived Types:

2.13.5 Figure:

2.13.6 Schema Fragment:

```
<xsd:complexType name="AdjustedRelativeDateOffset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a date (referred to as the derived date) as a
      relative offset from another date (referred to as the anchor
      date) plus optional date adjustments.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="RelativeDateOffset">
      <xsd:sequence>
        <xsd:element name="relativeDateAdjustments" type="BusinessDayAdjustments" minOccurs="0'
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The business day convention and financial business
              centers used for adjusting the relative date if it would
              otherwise fall on a day that is not a business date in
              the specified business centers.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
```

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

2.14 AmericanExercise

2.14.1 Description:

A type defining the exercise period for an American style option together with any rules governing the notional amount of the underlying which can be exercised on any given exercise date and any associated exercise fees.

2.14.2 Contents:

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

- The abstract base class for all types which define way in which options may be exercised.

commencementDate (exactly one occurrence; of the type AdjustableOrRelativeDate) The first day of the exercise period for an American style option.

expirationDate (exactly one occurrence; of the type AdjustableOrRelativeDate) 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.

relevantUnderlyingDate (zero or one occurrence; of the type AdjustableOrRelativeDates) The daye on the underlying set by the exercise of an option. What this date is depends on the option (e.g. in a swaption it is the effective date, in an extendible/cancelable provision it is the termination date).

earliestExerciseTime (exactly one occurrence; of the type BusinessCenterTime) The earliest time at which notice of exercise can be given by the buyer to the seller (or seller's agent) i) on the expriation date, in the case of a European style option, (ii) on each bermuda option exercise date and the expiration date, in the case of a Bermuda style option the commencement date to, and including, the expiration date , in the case of an American option.

latestExerciseTime (zero or one occurrence; of the type BusinessCenterTime) 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 (exactly one occurrence; of the type BusinessCenterTime) The latest time for exercise on expirationDate.

multipleExercise (zero or one occurrence; of the type MultipleExercise) As defined in the 2000 ISDA Definitions, Section 12.4. Multiple Exercise, the buyer of the option has the right to exercise all or less than all the unexercised notional amount of the underlying swap on one or more days in the exercise period, but on any such day may not exercise less than the minimum notional amount or more that the maximum notional amount, and if an integral multiple amount is specified, the notional amount exercised must be equal to, or be an intergral multiple of, the integral multiple amount.

exerciseFeeSchedule (zero or one occurrence; of the type ExerciseFeeSchedule) The fees associated with an exercise date. The fees are conditional on the exercise occuring. The fees can be specified as actual currency amounts or as percentages of the notional amount being exercised.

2.14.3 Used by:

- Element: americanExercise

2.14.4 Derived Types:

2.14.5 Figure:

2.14.6 Schema Fragment:

```
<xsd:complexType name="AmericanExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the exercise period for an American style option
      together with any rules governing the notional amount of the
      underlying which can be exercised on any given exercise date and
      any associated exercise fees.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
```

```xsd
<xsd:extension base="Exercise">
  <xsd:sequence>
    <xsd:element name="commencementDate" type="AdjustableOrRelativeDate">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The first day of the exercise period for an American
          style option.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="expirationDate" type="AdjustableOrRelativeDate">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="relevantUnderlyingDate" type="AdjustableOrRelativeDates" minOccurs='
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The daye on the underlying set by the exercise of an
          option. What this date is depends on the option (e.g. in
          a swaption it is the effective date, in an
          extendible/cancelable provision it is the termination
          date).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="earliestExerciseTime" type="BusinessCenterTime">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The earliest time at which notice of exercise can be
          given by the buyer to the seller (or seller's agent) i)
          on the expriation date, in the case of a European style
          option, (ii) on each bermuda option exercise date and the
          expiration date, in the case of a Bermuda style option
          the commencement date to, and including, the expiration
          date , in the case of an American option.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="latestExerciseTime" type="BusinessCenterTime" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="expirationTime" type="BusinessCenterTime">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The latest time for exercise on expirationDate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="multipleExercise" type="MultipleExercise" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          As defined in the 2000 ISDA Definitions, Section 12.4.
          Multiple Exercise, the buyer of the option has the right
          to exercise all or less than all the unexercised notional
          amount of the underlying swap on one or more days in the
          exercise period, but on any such day may not exercise
          less than the minimum notional amount or more that the
          maximum notional amount, and if an integral multiple
          amount is specified, the notional amount exercised must
          be equal to, or be an intergral multiple of, the integral
          multiple amount.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="exerciseFeeSchedule" type="ExerciseFeeSchedule" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The fees associated with an exercise date. The fees are
          conditional on the exercise occuring. The fees can be
```

```
                    specified as actual currency amounts or as percentages of
                    the notional amount being exercised.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
            </xsd:sequence>
          </xsd:extension>
        </xsd:complexContent>
      </xsd:complexType>
```

2.15 AmountReference

2.15.1 Description:

Specifies a reference to a monetary amount.

2.15.2 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.

2.15.3 Used by:

- Complex type: FxConversion
- Complex type: Price
- Complex type: PrincipalExchangeAmount
- Complex type: ReturnSwapNotional

2.15.4 Derived Types:

2.15.5 Figure:

2.15.6 Schema Fragment:

```xml
<xsd:complexType name="AmountReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Specifies a reference to a monetary amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.16 AmountSchedule

2.16.1 Description:

A type defining a currency amount or a currency amount schedule.

2.16.2 Contents:

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

- A type defining a schedule of rates or amounts in terms of an initial value and then a series of step date and value pairs. On each step date the rate or amount changes to the new step value. The series of step date and value pairs are optional. If not specified, this implies that the initial value remains unchanged over time.

currency (exactly one occurrence; of the type Currency) The currency in which an amount is denominated.

2.16.3 Used by:

- Complex type: CalculationPeriodAmount
- Complex type: ExerciseFeeSchedule
- Complex type: Notional

2.16.4 Derived Types:

2.16.5 Figure:

2.16.6 Schema Fragment:

```
<xsd:complexType name="AmountSchedule">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a currency amount or a currency amount schedule.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Schedule">
      <xsd:sequence>
        <xsd:element name="currency" type="Currency">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The currency in which an amount is denominated.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.17 AutomaticExercise

2.17.1 Description:

A type to define automatic exercise of a swaption. With automatic exercise the option is deemed to have exercised if it is in the money by more than the threshold amount on the exercise date.

2.17.2 Contents:

thresholdRate (exactly one occurrence; of the type xsd:decimal) A threshold rate. The threshold of 0.10% would be represented as 0.001

2.17.3 Used by:

- Complex type: ExerciseProcedure

2.17.4 Derived Types:

2.17.5 Figure:

2.17.6 Schema Fragment:

```
<xsd:complexType name="AutomaticExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type to define automatic exercise of a swaption. With automatic
      exercise the option is deemed to have exercised if it is in the
      money by more than the threshold amount on the exercise date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="thresholdRate" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A threshold rate. The threshold of 0.10% would be represented
          as 0.001
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.18 BenchmarkRate

2.18.1 Description:

The data type used for a benchmark rate (e.g. agreed discount rate or collateral interest rate).

2.18.2 Contents:

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

-

2.18.3 Used by:

- Complex type: CollateralizedCashPriceMethod
- Complex type: MidMarketValuationMethod
- Complex type: SwaptionPhysicalSettlement

2.18.4 Derived Types:

2.18.5 Figure:

2.18.6 Schema Fragment:

```
<xsd:complexType name="BenchmarkRate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The data type used for a benchmark rate (e.g. agreed discount
      rate or collateral interest rate).
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="benchmarkRateScheme" type="xsd:anyURI" default="http://www.fpml.org/
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The identifier scheme used for this benchmark. This will be
            defaulted to an ISDA benchmark scheme.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.19 Beneficiary

2.19.1 Description:

A type defining the beneficiary of the funds.

2.19.2 Contents:

Either

routingIds (exactly one occurrence; of the type RoutingIds) A set of unique identifiers for a party, eachone identifying the party within a payment system. The assumption is that each party will not have more than one identifier within the same payment system.

Or

routingExplicitDetails (exactly one occurrence; of the type RoutingExplicitDetails) A set of details that is used to identify a party involved in the routing of a payment when the party does not have a code that identifies it within one of the recognized payment systems.

Or

routingIdsAndExplicitDetails (exactly one occurrence; of the type RoutingIdsAndExplicitDetails) A combination of coded payment system identifiers and details for physical addressing for a party involved in the routing of a payment.

beneficiaryPartyReference (zero or one occurrence; of the type PartyReference) Link to the party acting as beneficiary. This element can only appear within the beneficiary container element.

2.19.3 Used by:

- Complex type: SettlementInstruction

2.19.4 Derived Types:

2.19.5 Figure:

2.19.6 Schema Fragment:

```
<xsd:complexType name="Beneficiary">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining the beneficiary of the funds.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="RoutingIdentification.model"/>
    <xsd:element name="beneficiaryPartyReference" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         Link to the party acting as beneficiary. This element can
         only appear within the beneficiary container element.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.20 BermudaExercise

2.20.1 Description:

A type defining the Bermuda option exercise dates and the expiration date together with any rules govenerning the notional amount of the underlying which can be exercised on any given exercise date and any associated exercise fee.

2.20.2 Contents:

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

- The abstract base class for all types which define way in which options may be exercised.

bermudaExerciseDates (exactly one occurrence; of the type AdjustableOrRelativeDates) The dates the define the Bermuda option exercise dates and the expiration date. The last specified date is assumed to be the expiration date. The dates can either be specified as a series of explicit dates and associated adjustments or as a series of dates defined relative to another schedule of dates, for example, the calculation period start dates. Where a relative series of dates are defined the first and last possible exercise dates can be separately specified.

relevantUnderlyingDate (zero or one occurrence; of the type AdjustableOrRelativeDates) The daye on the underlying set by the exercise of an option. What this date is depends on the option (e.g. in a swaption it is the effective date, in an extendible/cancelable provision it is the termination date).

earliestExerciseTime (exactly one occurrence; of the type BusinessCenterTime) The earliest time at which notice of exercise can be given by the buyer to the seller (or seller's agent) i) on the expriation date, in the case of a European style option, (ii) on each bermuda option exercise date and the expiration date, in the case of a Bermuda style option the commencement date to, and including, the expiration date , in the case of an American option.

latestExerciseTime (zero or one occurrence; of the type BusinessCenterTime) 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 (exactly one occurrence; of the type BusinessCenterTime) The latest time for exercise on expirationDate.

multipleExercise (zero or one occurrence; of the type MultipleExercise) As defined in the 2000 ISDA Definitions, Section 12.4. Multiple Exercise, the buyer of the option has the right to exercise all or less than all the unexercised notional amount of the underlying swap on one or more days in the exercise period, but on any such day may not exercise less than the minimum notional amount or more that the maximum notional amount, and if an integral multiple amount is specified, the notional amount exercised must be equal to, or be an intergral multiple of, the integral multiple amount.

exerciseFeeSchedule (zero or one occurrence; of the type ExerciseFeeSchedule) The fees associated with an exercise date. The fees are conditional on the exercise occuring. The fees can be specified as actual currency amounts or as percentages of the notional amount being exercised.

2.20.3 Used by:

- Element: bermudaExercise

2.20.4 Derived Types:

2.20.5 Figure:

2.20.6 Schema Fragment:

```
<xsd:complexType name="BermudaExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the Bermuda option exercise dates and the
      expiration date together with any rules govenerning the notional
      amount of the underlying which can be exercised on any given
      exercise date and any associated exercise fee.
    </xsd:documentation>
  </xsd:annotation>
```

```xsd
<xsd:complexContent>
  <xsd:extension base="Exercise">
    <xsd:sequence>
      <xsd:element name="bermudaExerciseDates" type="AdjustableOrRelativeDates">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The dates the define the Bermuda option exercise dates
            and the expiration date. The last specified date is
            assumed to be the expiration date. The dates can either
            be specified as a series of explicit dates and associated
            adjustments or as a series of dates defined relative to
            another schedule of dates, for example, the calculation
            period start dates. Where a relative series of dates are
            defined the first and last possible exercise dates can be
            separately specified.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="relevantUnderlyingDate" type="AdjustableOrRelativeDates" minOccurs='
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The daye on the underlying set by the exercise of an
            option. What this date is depends on the option (e.g. in
            a swaption it is the effective date, in an
            extendible/cancelable provision it is the termination
            date).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="earliestExerciseTime" type="BusinessCenterTime">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The earliest time at which notice of exercise can be
            given by the buyer to the seller (or seller's agent) i)
            on the expriation date, in the case of a European style
            option, (ii) on each bermuda option exercise date and the
            expiration date, in the case of a Bermuda style option
            the commencement date to, and including, the expiration
            date , in the case of an American option.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="latestExerciseTime" type="BusinessCenterTime" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="expirationTime" type="BusinessCenterTime">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The latest time for exercise on expirationDate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="multipleExercise" type="MultipleExercise" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            As defined in the 2000 ISDA Definitions, Section 12.4.
            Multiple Exercise, the buyer of the option has the right
            to exercise all or less than all the unexercised notional
            amount of the underlying swap on one or more days in the
            exercise period, but on any such day may not exercise
            less than the minimum notional amount or more that the
            maximum notional amount, and if an integral multiple
            amount is specified, the notional amount exercised must
            be equal to, or be an intergral multiple of, the integral
            multiple amount.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="exerciseFeeSchedule" type="ExerciseFeeSchedule" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The fees associated with an exercise date. The fees are
            conditional on the exercise occuring. The fees can be
            specified as actual currency amounts or as percentages of
```

```
                the notional amount being exercised.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.21 BrokerConfirmation

2.21.1 Description:

Identifies the market sector in which the trade has been arranged.

2.21.2 Contents:

brokerConfirmationType (exactly one occurrence; of the type BrokerConfirmationType) The type of broker confirmation executed between the parties.

2.21.3 Used by:

- Complex type: Documentation

2.21.4 Derived Types:

2.21.5 Figure:

2.21.6 Schema Fragment:

```xsd
<xsd:complexType name="BrokerConfirmation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Identifies the market sector in which the trade has been
      arranged.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="brokerConfirmationType" type="BrokerConfirmationType">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The type of broker confirmation executed between the parties.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.22 BrokerConfirmationType

2.22.1 Description:

Identifies the market sector in which the trade has been arranged.

2.22.2 Contents:

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

*

2.22.3 Used by:

* Complex type: BrokerConfirmation

2.22.4 Derived Types:

2.22.5 Figure:

2.22.6 Schema Fragment:

```
<xsd:complexType name="BrokerConfirmationType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Identifies the market sector in which the trade has been
      arranged.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="brokerConfirmationTypeScheme" type="xsd:anyURI" default="http://www.
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.23 BusinessCenter

2.23.1 Description:

A code identifying a financial business center location. A business center is drawn from the list identified by the business center scheme.

2.23.2 Contents:

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

*

2.23.3 Used by:

* Complex type: BusinessCenters
* Complex type: BusinessCenterTime
* Complex type: CreditEventNotice
* Complex type: ExerciseNotice

2.23.4 Derived Types:

2.23.5 Figure:

2.23.6 Schema Fragment:

```
<xsd:complexType name="BusinessCenter">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A code identifying a financial business center location. A
      business center is drawn from the list identified by the business
      center scheme.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="businessCenterScheme" type="xsd:anyURI" default="http://www.fpml.org
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.24 BusinessCenters

2.24.1 Description:

A type for defining financial business centers used in determining whether a day is a business day or not. A list of business centers may be ordered in the document alphabetically based on business center code. An FpML document containing an unordered business center list is still regarded as a conformant document.

2.24.2 Contents:

businessCenter (one or more occurrences; of the type BusinessCenter)

2.24.3 Used by:

2.24.4 Derived Types:

2.24.5 Figure:

2.24.6 Schema Fragment:

```
<xsd:complexType name="BusinessCenters">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type for defining financial business centers used in
      determining whether a day is a business day or not. A list of
      business centers may be ordered in the document alphabetically
      based on business center code. An FpML document containing an
      unordered business center list is still regarded as a conformant
      document.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="businessCenter" type="BusinessCenter" maxOccurs="unbounded"/>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.25 BusinessCentersOrReference

2.25.1 Description:

A pointer style reference to a set of business day calendar defined elsewhere in the document.

2.25.2 Contents:

Either

businessCentersReference (exactly one occurrence; of the type BusinessCentersReference) 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.

Or

businessCenters (exactly one occurrence; of the type BusinessCenters)

2.25.3 Used by:

- Complex type: CalculationParameters
- Complex type: ObservationShiftParameters

2.25.4 Derived Types:

2.25.5 Figure:

2.25.6 Schema Fragment:

```
<xsd:complexType name="BusinessCentersOrReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A pointer style reference to a set of business day calendar
      defined elsewhere in the document.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="BusinessCentersOrReference.model"/>
  </xsd:sequence>
</xsd:complexType>
```

2.26 BusinessCentersReference

2.26.1 Description:

A pointer style reference to a set of financial business centers defined elsewhere in the document.

2.26.2 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.

2.26.3 Used by:

2.26.4 Derived Types:

2.26.5 Figure:

2.26.6 Schema Fragment:

```
<xsd:complexType name="BusinessCentersReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A pointer style reference to a set of financial business centers
      defined elsewhere in the document.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="BusinessCente
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.27 BusinessCenterTime

2.27.1 Description:

A type for defining a time with respect to a business center location. For example, 11:00am London time.

2.27.2 Contents:

hourMinuteTime (exactly one occurrence; of the type HourMinuteTime) A time specified in hh:mm:ss format where the second component must be '00', e.g. 11am would be represented as 11:00:00.

businessCenter (exactly one occurrence; of the type BusinessCenter)

2.27.3 Used by:

- Complex type: AmericanExercise
- Complex type: BermudaExercise
- Complex type: CashSettlement
- Complex type: CashSettlementTerms
- Complex type: EquityAmericanExercise
- Complex type: EquityBermudaExercise
- Complex type: EquityEuropeanExercise
- Complex type: EquityValuation
- Complex type: EuropeanExercise
- Complex type: ExpiryDateTime
- Complex type: FxAverageRateOption
- Complex type: FxSpotRateSource
- Complex type: SharedAmericanExercise

2.27.4 Derived Types:

2.27.5 Figure:

2.27.6 Schema Fragment:

```
<xsd:complexType name="BusinessCenterTime">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type for defining a time with respect to a business center
      location. For example, 11:00am London time.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="hourMinuteTime" type="HourMinuteTime">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A time specified in hh:mm:ss format where the second
          component must be '00', e.g. 11am would be represented as
          11:00:00.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="businessCenter" type="BusinessCenter"/>
  </xsd:sequence>
</xsd:complexType>
```

2.28 BusinessDateRange

2.28.1 Description:

A type defining a range of contiguous business days by defining an unadjusted first date, an unadjusted last date and a business day convention and business centers for adjusting the first and last dates if they would otherwise fall on a non business day in the specified business centers. The days between the first and last date must also be good business days in the specified centers to be counted in the range.

2.28.2 Contents:

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

- A type defining a contiguous series of calendar dates. The date range is defined as all the dates between and including the first and the last date. The first date must fall before the last date.

businessDayConvention (exactly one occurrence; of the type BusinessDayConventionEnum) The convention for adjusting a date if it would otherwise fall on a day that is not a business day.

Either

businessCentersReference (exactly one occurrence; of the type BusinessCentersReference) 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.

Or

businessCenters (exactly one occurrence; of the type BusinessCenters)

2.28.3 Used by:

- Complex type: CashSettlementPaymentDate

2.28.4 Derived Types:

2.28.5 Figure:

2.28.6 Schema Fragment:

```
<xsd:complexType name="BusinessDateRange">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a range of contiguous business days by defining
      an unadjusted first date, an unadjusted last date and a business
      day convention and business centers for adjusting the first and
      last dates if they would otherwise fall on a non business day in
      the specified business centers. The days between the first and
      last date must also be good business days in the specified
      centers to be counted in the range.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="DateRange">
      <xsd:sequence>
        <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The convention for adjusting a date if it would otherwise
              fall on a day that is not a business day.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.29 BusinessDayAdjustments

2.29.1 Description:

A type defining the business day convention and financial business centers used for adjusting any relevant date if it would otherwise fall on a day that is not a business day in the specified business centers.

2.29.2 Contents:

businessDayConvention (exactly one occurrence; of the type BusinessDayConventionEnum) The convention for adjusting a date if it would otherwise fall on a day that is not a business day.

Either

businessCentersReference (exactly one occurrence; of the type BusinessCentersReference) 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.

Or

businessCenters (exactly one occurrence; of the type BusinessCenters)

2.29.3 Used by:

- Complex type: AdjustableDate
- Complex type: AdjustableDate2
- Complex type: AdjustableDates
- Complex type: AdjustedRelativeDateOffset
- Complex type: CalculationPeriodDates
- Complex type: DividendPeriod
- Complex type: GeneralTerms
- Complex type: PaymentDates
- Complex type: PeriodicDates
- Complex type: ResetDates

2.29.4 Derived Types:

2.29.5 Figure:

2.29.6 Schema Fragment:

```
<xsd:complexType name="BusinessDayAdjustments">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the business day convention and financial
      business centers used for adjusting any relevant date if it would
      otherwise fall on a day that is not a business day in the
      specified business centers.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The convention for adjusting a date if it would otherwise
          fall on a day that is not a business day.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.30 BusinessDayAdjustmentsReference

2.30.1 Description:

Reference to a business day adjustments structure.

2.30.2 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.

2.30.3 Used by:

- Complex type: AdjustableDate2

2.30.4 Derived Types:

2.30.5 Figure:

2.30.6 Schema Fragment:

```
<xsd:complexType name="BusinessDayAdjustmentsReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a business day adjustments structure.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="BusinessDayAd
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.31 CalculationAgent

2.31.1 Description:

A type defining the ISDA calcuation agent responsible for performing duties as defined in the applicable product definitions.

2.31.2 Contents:

Either

calculationAgentPartyReference (one or more occurrences; of the type PartyReference) A pointer style reference to a party identifier defined elsewhere in the document. The party referenced is the ISDA Calculation Agent for the trade. If more than one party is referenced then the parties are assumed to be co-calculation agents, i.e. they have joint responsibility.

Or

calculationAgentParty (exactly one occurrence; of the type CalculationAgentPartyEnum) The ISDA Calculation Agent where the actual party responsible for performing the duties associated with an optional early termination provision will be determined at exercise. For example, the Calculation Agent may be defined as being the Non-exercising Party.

2.31.3 Used by:

- Complex type: FallbackReferencePrice
- Complex type: MandatoryEarlyTermination
- Complex type: OptionalEarlyTermination
- Complex type: Swaption

2.31.4 Derived Types:

2.31.5 Figure:

2.31.6 Schema Fragment:

```
<xsd:complexType name="CalculationAgent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining the ISDA calcuation agent responsible for
     performing duties as defined in the applicable product
     definitions.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="calculationAgentPartyReference" type="PartyReference" maxOccurs="unbound
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A pointer style reference to a party identifier defined
         elsewhere in the document. The party referenced is the ISDA
         Calculation Agent for the trade. If more than one party is
         referenced then the parties are assumed to be co-calculation
         agents, i.e. they have joint responsibility.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="calculationAgentParty" type="CalculationAgentPartyEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         The ISDA Calculation Agent where the actual party responsible
         for performing the duties associated with an optional early
         termination provision will be determined at exercise. For
         example, the Calculation Agent may be defined as being the
         Non-exercising Party.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
```

2.32 CalculationParameters

2.32.1 Description:

A type defining a rate that is calculated based on a number of observations of an underlying rate that are averaged or compounded using a specified method. These are sometimes called modular calculated rates. These are described in the 2021 ISDA Definitions in Section 7.

2.32.2 Contents:

calculationMethod (exactly one occurrence; of the type CalculationMethodEnum) Specifies the type of calculation, e.g. whether the calculation is a compounding or an averaging calculation. This element distinguishes between the applicable subsections of Section 7 (7.3, 7.4, and 7.7). If the calculationMethod is Componding or Averaging, this implies that a daily compounded calculation will be done, i.e. that the underlying rate will be observed eacy applicalbe business day during the observation period and then compounded or averaged. If it is CompoundedIndex, this means that the rate administrator is doing the compounding each day and publishing the resulting index value. In this case the calculation agent is responsible for observing the index and the start and at the end of the observation period, and then backing out the implied rate by following the formula in section 7.7. (This formula divides the index value at the end by the index value at the beginning, subtracts 1, and then scales the resulting value based on the year fraction to annualize the rate.) In other words, for CompoundedIndex the observation frequency is effectively 1T, where for Compounding and Averaging, it is 1D.

applicableBusinessDays (zero or one occurrence; of the type BusinessCentersOrReference) Specifies the applicable business days to be used for this calculation. If omitted, the business days should be defaulted from the FRO Matrix, as represented in the FRO metadata. Failing that, it should be defaulted from the default business center for the relevant currency. See the ISDA 2021 Definitions Section 7.2.1.

Either

lookback (exactly one occurrence; of the type ObservationOffset) Specifies that lookback calculation is in effect, and supplies parameters needed to support that. See the ISDA 2021 Definitions Section 7.3.2 and 7.4.2. This should not be used when the calculationMethod is CompoundedIndex.

Or

observationShift (exactly one occurrence; of the type ObservationShiftParameters) Specifies that observation shift calculation is in effect, and supplies parameters needed to support that. See the ISDA 2021 Definitions Section 7.3.3 and 7.4.3 and 7.7.3.

Or

lockout (exactly one occurrence; of the type ObservationOffset) Specifies that lockout calculation is in effect, and supplies parameters needed to support that. See the ISDA 2021 Definitions Section 7.3.4 and 7.4.4. This should not be used when the calculationMethod is CompoundedIndex.

observationCapRate (zero or one occurrence; of the type xsd:decimal)

observationFloorRate (zero or one occurrence; of the type xsd:decimal)

2.32.3 Used by:

- Complex type: FallbackRate
- Complex type: FloatingRate

2.32.4 Derived Types:

2.32.5 Figure:

2.32.6 Schema Fragment:

```
<xsd:complexType name="CalculationParameters">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a rate that is calculated based on a number of
      observations of an underlying rate that are averaged or
      compounded using a specified method. These are sometimes called
      modular calculated rates. These are described in the 2021 ISDA
      Definitions in Section 7.
    </xsd:documentation>
```

```xsd
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="calculationMethod" type="CalculationMethodEnum">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies the type of calculation, e.g. whether the
                calculation is a compounding or an averaging calculation.
                This element distinguishes between the applicable subsections
                of Section 7 (7.3, 7.4, and 7.7). If the calculationMethod is
                Componding or Averaging, this implies that a daily compounded
                calculation will be done, i.e. that the underlying rate will
                be observed eacy applicalbe business day during the
                observation period and then compounded or averaged. If it is
                CompoundedIndex, this means that the rate administrator is
                doing the compounding each day and publishing the resulting
                index value. In this case the calculation agent is
                responsible for observing the index and the start and at the
                end of the observation period, and then backing out the
                implied rate by following the formula in section 7.7. (This
                formula divides the index value at the end by the index value
                at the beginning, subtracts 1, and then scales the resulting
                value based on the year fraction to annualize the rate.) In
                other words, for CompoundedIndex the observation frequency is
                effectively 1T, where for Compounding and Averaging, it is
                1D.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="applicableBusinessDays" minOccurs="0" type="BusinessCentersOrReference">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies the applicable business days to be used for this
                calculation. If omitted, the business days should be
                defaulted from the FRO Matrix, as represented in the FRO
                metadata. Failing that, it should be defaulted from the
                default business center for the relevant currency. See the
                ISDA 2021 Definitions Section 7.2.1.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:choice minOccurs="0">
            <xsd:element name="lookback" type="ObservationOffset">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  Specifies that lookback calculation is in effect, and
                  supplies parameters needed to support that. See the ISDA
                  2021 Definitions Section 7.3.2 and 7.4.2. This should not
                  be used when the calculationMethod is CompoundedIndex.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="observationShift" type="ObservationShiftParameters">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  Specifies that observation shift calculation is in effect,
                  and supplies parameters needed to support that. See the
                  ISDA 2021 Definitions Section 7.3.3 and 7.4.3 and 7.7.3.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="lockout" type="ObservationOffset">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  Specifies that lockout calculation is in effect, and
                  supplies parameters needed to support that. See the ISDA
                  2021 Definitions Section 7.3.4 and 7.4.4. This should not
                  be used when the calculationMethod is CompoundedIndex.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:choice>
          <xsd:group ref="ObservationParameters.model" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies any parameters to be applied to each individual
                observation, such as caps or floors. This should not be used
                when the calculationMethod is CompoundedIndex.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:group>
        </xsd:sequence>
</xsd:complexType>
```

2.33 CalculationPeriodFrequency

2.33.1 Description:

A type defining the frequency at which calculation period end dates occur within the regular part of the calculation period schedule and thier roll date convention.

2.33.2 Contents:

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

- A type defining a time interval or offset, e.g. one day, three months. Used for specifying frequencies at which events occur, the tenor of a floating rate or an offset relative to another date.

rollConvention (exactly one occurrence; of the type RollConventionEnum) Used in conjunction with a frequency and the regular period start date of a calculation period, determines each calculation period end date within the regular part of a calculation period schedule.

2.33.3 Used by:

- Complex type: CalculationPeriodDates
- Complex type: FxAverageRateObservationSchedule
- Complex type: PeriodicDates

2.33.4 Derived Types:

2.33.5 Figure:

2.33.6 Schema Fragment:

```
<xsd:complexType name="CalculationPeriodFrequency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the frequency at which calculation period end
      dates occur within the regular part of the calculation period
      schedule and thier roll date convention.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Interval">
      <xsd:sequence>
        <xsd:element name="rollConvention" type="RollConventionEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Used in conjunction with a frequency and the regular
              period start date of a calculation period, determines
              each calculation period end date within the regular part
              of a calculation period schedule.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.34 CashflowType

2.34.1 Description:

A coding scheme used to describe the type or purpose of a cash flow or cash flow component.

2.34.2 Contents:

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

•

2.34.3 Used by:

• Complex type: GrossCashflow

2.34.4 Derived Types:

2.34.5 Figure:

2.34.6 Schema Fragment:

```
<xsd:complexType name="CashflowType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A coding scheme used to describe the type or purpose of a cash
      flow or cash flow component.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="cashflowTypeScheme" default="http://www.fpml.org/coding-scheme/cashf
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.35 CashSettlementReferenceBanks

2.35.1 Description:

A type defining the list of reference institutions polled for relevant rates or prices when determining the cash settlement amount for a product where cash settlement is applicable.

2.35.2 Contents:

referenceBank (one or more occurrences; of the type ReferenceBank) An institution (party) identified by means of a coding scheme and an optional name.

2.35.3 Used by:

- Complex type: CashPriceMethod
- Complex type: CrossCurrencyMethod
- Complex type: MidMarketValuationMethod
- Complex type: ReplacementValueMethodBase
- Complex type: SettlementRateSource

2.35.4 Derived Types:

2.35.5 Figure:

2.35.6 Schema Fragment:

```
<xsd:complexType name="CashSettlementReferenceBanks">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the list of reference institutions polled for
      relevant rates or prices when determining the cash settlement
      amount for a product where cash settlement is applicable.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="referenceBank" type="ReferenceBank" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An institution (party) identified by means of a coding scheme
          and an optional name.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.36 ClearanceSystem

2.36.1 Description:

Unless otherwise specified, the principal clearance system customarily used for settling trades in the relevant underlying.

2.36.2 Contents:

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

●

2.36.3 Used by:

● Complex type: UnderlyingAsset

2.36.4 Derived Types:

2.36.5 Figure:

2.36.6 Schema Fragment:

```
<xsd:complexType name="ClearanceSystem">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Unless otherwise specified, the principal clearance system
      customarily used for settling trades in the relevant underlying.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="clearanceSystemScheme" type="xsd:anyURI" default="http://www.fpml.or
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.37 ContractualDefinitions

2.37.1 Description:

The definitions, such as those published by ISDA, that will define the terms of the trade.

2.37.2 Contents:

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

-

2.37.3 Used by:

- Complex type: Documentation

2.37.4 Derived Types:

2.37.5 Figure:

2.37.6 Schema Fragment:

```
<xsd:complexType name="ContractualDefinitions">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The definitions, such as those published by ISDA, that will
      define the terms of the trade.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="contractualDefinitionsScheme" type="xsd:anyURI" default="http://www.
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.38 ContractualMatrix

2.38.1 Description:

2.38.2 Contents:

matrixType (exactly one occurrence; of the type MatrixType) Identifies the form of applicable matrix.

publicationDate (zero or one occurrence; of the type xsd:date) Specifies the publication date of the applicable version of the matrix. When this element is omitted, the ISDA supplemental language for incorporation of the relevant matrix will generally define rules for which version of the matrix is applicable.

matrixTerm (zero or one occurrence; of the type MatrixTerm) Defines any applicable key into the relevant matrix. For example, the Transaction Type would be the single term required for the Credit Derivatives Physical Settlement Matrix. This element should be omitted in the case of the 2000 ISDA Definitions Settlement Matrix for Early Termination and Swaptions.

2.38.3 Used by:

- Complex type: Documentation

2.38.4 Derived Types:

2.38.5 Figure:

2.38.6 Schema Fragment:

```xsd
<xsd:complexType name="ContractualMatrix">
  <xsd:sequence>
    <xsd:element name="matrixType" type="MatrixType">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Identifies the form of applicable matrix.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="publicationDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the publication date of the applicable version of
          the matrix. When this element is omitted, the ISDA
          supplemental language for incorporation of the relevant
          matrix will generally define rules for which version of the
          matrix is applicable.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="matrixTerm" type="MatrixTerm" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Defines any applicable key into the relevant matrix. For
          example, the Transaction Type would be the single term
          required for the Credit Derivatives Physical Settlement
          Matrix. This element should be omitted in the case of the
          2000 ISDA Definitions Settlement Matrix for Early Termination
          and Swaptions.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.39 ContractualSupplement

2.39.1 Description:

A contractual supplement (such as those published by ISDA) that will apply to the trade.

2.39.2 Contents:

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

-

2.39.3 Used by:

- Complex type: ContractualTermsSupplement
- Complex type: Documentation

2.39.4 Derived Types:

2.39.5 Figure:

2.39.6 Schema Fragment:

```
<xsd:complexType name="ContractualSupplement">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A contractual supplement (such as those published by ISDA) that
      will apply to the trade.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="contractualSupplementScheme" type="xsd:anyURI" default="http://www.f
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.40 ContractualTermsSupplement

2.40.1 Description:

A contractual supplement (such as those published by ISDA) and its publication date that will apply to the trade.

2.40.2 Contents:

type (exactly one occurrence; of the type ContractualSupplement) Identifies the form of applicable contractual supplement.

publicationDate (zero or one occurrence; of the type xsd:date) Specifies the publication date of the applicable version of the contractual supplement.

2.40.3 Used by:

- Complex type: Documentation

2.40.4 Derived Types:

2.40.5 Figure:

2.40.6 Schema Fragment:

```
<xsd:complexType name="ContractualTermsSupplement">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A contractual supplement (such as those published by ISDA) and
      its publication date that will apply to the trade.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="type" type="ContractualSupplement">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Identifies the form of applicable contractual supplement.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="publicationDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the publication date of the applicable version of
          the contractual supplement.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.41 CorrespondentInformation

2.41.1 Description:

A type that describes the information to identify a correspondent bank that will make delivery of the funds on the paying bank's behalf in the country where the payment is to be made.

2.41.2 Contents:

Either

routingIds (exactly one occurrence; of the type RoutingIds) A set of unique identifiers for a party, eachone identifying the party within a payment system. The assumption is that each party will not have more than one identifier within the same payment system.

Or

routingExplicitDetails (exactly one occurrence; of the type RoutingExplicitDetails) A set of details that is used to identify a party involved in the routing of a payment when the party does not have a code that identifies it within one of the recognized payment systems.

Or

routingIdsAndExplicitDetails (exactly one occurrence; of the type RoutingIdsAndExplicitDetails) A combination of coded payment system identifiers and details for physical addressing for a party involved in the routing of a payment.

correspondentPartyReference (zero or one occurrence; of the type PartyReference) Link to the party acting as correspondent. This element can only appear within the correspondentInformation container element.

2.41.3 Used by:

* Complex type: SettlementInstruction

2.41.4 Derived Types:

2.41.5 Figure:

2.41.6 Schema Fragment:

```
<xsd:complexType name="CorrespondentInformation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that describes the information to identify a correspondent
      bank that will make delivery of the funds on the paying bank's
      behalf in the country where the payment is to be made.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="RoutingIdentification.model"/>
    <xsd:element name="correspondentPartyReference" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Link to the party acting as correspondent. This element can
          only appear within the correspondentInformation container
          element.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.42 Country

2.42.1 Description:

2.42.2 Contents:

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

•
2.42.3 Used by:

- Complex type: Address
- Complex type: EquityOptionTransactionSupplement
- Complex type: EquitySwapTransactionSupplement

2.42.4 Derived Types:

2.42.5 Figure:

2.42.6 Schema Fragment:

```
<xsd:complexType name="Country">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="countryScheme" type="xsd:anyURI" default="http://www.fpml.org/ext/is
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.43 CreditSeniority

2.43.1 Description:

The repayment precedence of a debt instrument.

2.43.2 Contents:

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

-

2.43.3 Used by:

2.43.4 Derived Types:

2.43.5 Figure:

2.43.6 Schema Fragment:

```
<xsd:complexType name="CreditSeniority">
  <xsd:annotation>
    <xsd:documentation source="http://www.FpML.org" xml:lang="en">
      The repayment precedence of a debt instrument.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="creditSeniorityScheme" type="xsd:anyURI" default="http://www.fpml.or
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            creditSeniorityTradingScheme overrides
            creditSeniorityScheme when the underlyer defines the
            reference obligation used in a single name credit default
            swap trade.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.44 Currency

2.44.1 Description:

2.44.2 Contents:

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

•

2.44.3 Used by:

- Complex type: IdentifiedCurrency
- Complex type: ActualPrice
- Complex type: AmountSchedule
- Complex type: Basket
- Complex type: Cash
- Complex type: CashflowNotional
- Complex type: CashPriceMethod
- Complex type: CollateralizedCashPriceMethod
- Complex type: Commission
- Complex type: CrossCurrencyMethod
- Complex type: DividendConditions
- Complex type: EquityExerciseValuationSettlement
- Complex type: EquityStrike
- Complex type: FeaturePayment
- Complex type: FxAverageRateOption
- Complex type: FxCashSettlement
- Complex type: FxLinkedNotionalSchedule
- Complex type: LegAmount
- Complex type: MidMarketValuationMethod
- Complex type: Money
- Complex type: NonDeliverableSettlement
- Complex type: NotDomesticCurrency
- Complex type: OptionStrike
- Complex type: PaymentCurrency
- Complex type: PricingStructure
- Complex type: QuotedAs
- Complex type: QuotedCurrencyPair
- Complex type: ReplacementValueMethodBase
- Complex type: SettlementProvision
- Complex type: SettlementTerms
- Complex type: SideRate
- Complex type: SideRates
- Complex type: SpecifiedCurrency
- Complex type: UnderlyingAsset

2.44.4 Derived Types:

- Complex type: IdentifiedCurrency

2.44.5 Figure:

2.44.6 Schema Fragment:

```
<xsd:complexType name="Currency">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="currencyScheme" type="xsd:anyURI" default="http://www.fpml.org/ext/i
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.45 DateList

2.45.1 Description:

List of Dates

2.45.2 Contents:

date (one or more occurrences; of the type xsd:date)

2.45.3 Used by:

- Complex type: EquityBermudaExercise
- Complex type: TriggerEvent

2.45.4 Derived Types:

2.45.5 Figure:

2.45.6 Schema Fragment:

```
<xsd:complexType name="DateList">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      List of Dates
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="date" type="xsd:date" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```

2.46 DateOffset

2.46.1 Description:

A type defining an offset used in calculating a date when this date is defined in reference to another date through a date offset. The type includes the convention for adjusting the date and an optional sequence element to indicate the order in a sequence of multiple date offsets.

2.46.2 Contents:

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

- A type defining an offset used in calculating a new date relative to a reference date. Currently, the only offsets defined are expected to be expressed as either calendar or business day offsets.

businessDayConvention (exactly one occurrence; of the type BusinessDayConventionEnum) The convention for adjusting a date if it would otherwise fall on a day that is not a business day.

sequence (zero or one occurrence; of the type xsd:positiveInteger) Sequence in which the reference to the time period multiplier should be applied.

2.46.3 Used by:

- Complex type: RelativeDateSequence

2.46.4 Derived Types:

2.46.5 Figure:

2.46.6 Schema Fragment:

```
<xsd:complexType name="DateOffset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining an offset used in calculating a date when this
      date is defined in reference to another date through a date
      offset. The type includes the convention for adjusting the date
      and an optional sequence element to indicate the order in a
      sequence of multiple date offsets.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Offset">
      <xsd:sequence>
        <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The convention for adjusting a date if it would otherwise
              fall on a day that is not a business day.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="sequence" type="xsd:positiveInteger" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Sequence in which the reference to the time period
              multiplier should be applied.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.47 DateRange

2.47.1 Description:

A type defining a contiguous series of calendar dates. The date range is defined as all the dates between and including the first and the last date. The first date must fall before the last date.

2.47.2 Contents:

unadjustedFirstDate (exactly one occurrence; of the type xsd:date) The first date of a date range.

unadjustedLastDate (exactly one occurrence; of the type xsd:date) The last date of a date range.

2.47.3 Used by:

- Complex type: BusinessDateRange
- Complex type: RelativeDates

2.47.4 Derived Types:

- Complex type: BusinessDateRange

2.47.5 Figure:

2.47.6 Schema Fragment:

```
<xsd:complexType name="DateRange">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a contiguous series of calendar dates. The date
      range is defined as all the dates between and including the first
      and the last date. The first date must fall before the last date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="unadjustedFirstDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The first date of a date range.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="unadjustedLastDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The last date of a date range.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.48 DateReference

2.48.1 Description:

Reference to an identified date or a complex date structure.

2.48.2 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.

2.48.3 Used by:

- Complex type: DividendConditions
- Complex type: RelativeDateOffset
- Complex type: RelativeDateSequence
- Complex type: StartingDate

2.48.4 Derived Types:

2.48.5 Figure:

2.48.6 Schema Fragment:

```
<xsd:complexType name="DateReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to an identified date or a complex date structure.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.49 DateTimeList

2.49.1 Description:

List of DateTimes

2.49.2 Contents:

dateTime (one or more occurrences; of the type xsd:dateTime)

2.49.3 Used by:

- Complex type: AveragingPeriod

2.49.4 Derived Types:

2.49.5 Figure:

2.49.6 Schema Fragment:

```
<xsd:complexType name="DateTimeList">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      List of DateTimes
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="dateTime" type="xsd:dateTime" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```

2.50 DayCountFraction

2.50.1 Description:

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.

2.50.2 Contents:

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

•

2.50.3 Used by:

- Complex type: Calculation
- Complex type: CashflowCalculationPeriod
- Complex type: Deposit
- Complex type: Discounting
- Complex type: FixedAmountCalculation
- Complex type: Fra
- Complex type: InterestCalculation
- Complex type: RateIndex
- Complex type: SimpleFra
- Complex type: SimpleIRSwap
- Complex type: TermDeposit

2.50.4 Derived Types:

2.50.5 Figure:

2.50.6 Schema Fragment:

```
<xsd:complexType name="DayCountFraction">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      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.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="dayCountFractionScheme" type="xsd:anyURI" default="http://www.fpml.c
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.51 DeterminationMethod

2.51.1 Description:

Coding scheme that specifies the method according to which an amount or a date is determined.

2.51.2 Contents:

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

-
2.51.3 Used by:

- Complex type: Composite
- Complex type: DividendConditions
- Complex type: LegAmount
- Complex type: PaymentCurrency
- Complex type: Price
- Complex type: PrincipalExchangeAmount
- Complex type: ReturnSwapNotional

2.51.4 Derived Types:

2.51.5 Figure:

2.51.6 Schema Fragment:

```
<xsd:complexType name="DeterminationMethod">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Coding scheme that specifies the method according to which an
      amount or a date is determined.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="determinationMethodScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.52 DividendConditions

2.52.1 Description:

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.

2.52.2 Contents:

dividendReinvestment (zero or one occurrence; of the type xsd:boolean) Boolean element that defines whether the dividend will be reinvested or not.

dividendEntitlement (zero or one occurrence; of the type DividendEntitlementEnum) Defines the date on which the receiver on the equity return is entitled to the dividend.

dividendAmount (zero or one occurrence; of the type DividendAmountTypeEnum)

dividendPaymentDate (zero or one occurrence; of the type DividendPaymentDate) 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.

Either

dividendPeriod (exactly one occurrence; of the type DividendPeriodEnum) Defines the First Period or the Second Period, as defined in the 2002 ISDA Equity Derivatives Definitions.

extraOrdinaryDividends (zero or one occurrence; of the type PartyReference) Reference to the party which determines if dividends are extraordinary in relation to normal levels.

excessDividendAmount (zero or one occurrence; of the type DividendAmountTypeEnum) Determination of Gross Cash Dividend per Share

Either

currency (exactly one occurrence; of the type Currency) The currency in which an amount is denominated.

Or

determinationMethod (exactly one occurrence; of the type DeterminationMethod) Specifies the method according to which an amount or a date is determined.

Or

currencyReference (exactly one occurrence; of the type IdentifiedCurrencyReference) The currency in which an amount is denominated.

paymentCurrency (zero or one occurrence; of the type PaymentCurrency) Currency in which the payment relating to the leg amount (equity amount or interest amount) or the dividend will be denominated.

dividendFxTriggerDate (zero or one occurrence; of the type DividendPaymentDate) Specifies the date on which the FX rate will be considered in the case of a Composite FX swap.

interestAccrualsMethod (zero or one occurrence; of the type InterestAccrualsCompoundingMethod) Defines the way in which interests are accrued: the applicable rate (fixed or floating reference) and the compounding method.

2.52.3 Used by:

- Complex type: EquityDerivativeLongFormBase
- Complex type: Return

2.52.4 Derived Types:

2.52.5 Figure:

2.52.6 Schema Fragment:

```
<xsd:complexType name="DividendConditions">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      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
```

```xml
            of the underlying components.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:element name="dividendReinvestment" type="xsd:boolean" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    Boolean element that defines whether the dividend will be
                    reinvested or not.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="dividendEntitlement" type="DividendEntitlementEnum" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    Defines the date on which the receiver on the equity return
                    is entitled to the dividend.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="dividendAmount" type="DividendAmountTypeEnum" minOccurs="0"/>
        <xsd:element name="dividendPaymentDate" type="DividendPaymentDate" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:choice>
            <xsd:sequence>
                <xsd:element name="dividendPeriodEffectiveDate" type="DateReference" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                            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.
                        </xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="dividendPeriodEndDate" type="DateReference" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                            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.
                        </xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
            </xsd:sequence>
            <xsd:element name="dividendPeriod" type="DividendPeriodEnum">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        Defines the First Period or the Second Period, as defined
                        in the 2002 ISDA Equity Derivatives Definitions.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:choice>
        <xsd:element name="extraOrdinaryDividends" type="PartyReference" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    Reference to the party which determines if dividends are
                    extraordinary in relation to normal levels.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="excessDividendAmount" type="DividendAmountTypeEnum" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    Determination of Gross Cash Dividend per Share
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:choice minOccurs="0">
            <xsd:element name="currency" type="Currency">
                <xsd:annotation>
```

```xsd
          <xsd:documentation xml:lang="en">
            The currency in which an amount is denominated.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="determinationMethod" type="DeterminationMethod">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies the method according to which an amount or a date
            is determined.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="currencyReference" type="IdentifiedCurrencyReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The currency in which an amount is denominated.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
    <xsd:element name="paymentCurrency" type="PaymentCurrency" minOccurs="0" fpml-annotation:de
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Currency in which the payment relating to the leg amount
          (equity amount or interest amount) or the dividend will be
          denominated.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="dividendFxTriggerDate" type="DividendPaymentDate" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the date on which the FX rate will be considered in
          the case of a Composite FX swap.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="interestAccrualsMethod" type="InterestAccrualsCompoundingMethod" minOccu
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Defines the way in which interests are accrued: the
          applicable rate (fixed or floating reference) and the
          compounding method.
        </xsd:documentation>
        <xsd:documentation xml:lang="en">
          FpML entity
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.53 DividendPaymentDate

2.53.1 Description:

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.

2.53.2 Contents:

Either

adjustableDate (exactly one occurrence; of the type AdjustableDate) 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.

2.53.3 Used by:

- Complex type: DividendConditions

2.53.4 Derived Types:

2.53.5 Figure:

2.53.6 Schema Fragment:

```
<xsd:complexType name="DividendPaymentDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      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.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:choice>
      <xsd:sequence>
        <xsd:element name="dividendDateReference" type="DividendDateReferenceEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Specification of the dividend date using an enumeration,
              with values such as the pay date, the ex date or the
              record date.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="paymentDateOffset" type="Offset" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:element name="adjustableDate" type="AdjustableDate">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
  </xsd:sequence>
</xsd:complexType>
```

2.54 Documentation

2.54.1 Description:

An entity for defining 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.

2.54.2 Contents:

masterAgreement (zero or one occurrence; of the type MasterAgreement) The agreement executed between the parties and intended to govern all OTC derivatives transactions between those parties.

Either

masterConfirmation (exactly one occurrence; of the type MasterConfirmation) The agreement executed between the parties and intended to govern all OTC derivatives transactions between those parties.

Or

brokerConfirmation (exactly one occurrence; of the type BrokerConfirmation) Specifies the deails for a broker confirm.

contractualDefinitions (zero or more occurrences; of the type ContractualDefinitions) The definitions such as those published by ISDA that will define the terms of the trade.

Either

contractualSupplement (zero or more occurrences; of the type ContractualSupplement) 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.

Or

contractualTermsSupplement (zero or more occurrences; of the type ContractualTermsSupplement) A contractual supplement (such as those published by ISDA) that will apply to the trade.

contractualMatrix (zero or more occurrences; of the type ContractualMatrix) A reference to a contractual matrix of elected terms/values (such as those published by ISDA) that shall be deemed to apply to the trade. The applicable matrix is identified by reference to a name and optionally a publication date. Depending on the structure of the matrix, an additional term (specified in the matrixTerm element) may be required to further identify a subset of applicable terms/values within the matrix.

creditSupportDocument (zero or one occurrence; of the type xsd:normalizedString) The agreement executed between the parties and intended to govern collateral arrangement for all OTC derivatives transactions between those parties.

2.54.3 Used by:

- Complex type: Contract
- Complex type: Trade

2.54.4 Derived Types:

2.54.5 Figure:

2.54.6 Schema Fragment:

```
<xsd:complexType name="Documentation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An entity for defining 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.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="masterAgreement" type="MasterAgreement" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
```

```xml
                    The agreement executed between the parties and intended to
                    govern all OTC derivatives transactions between those
                    parties.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:choice minOccurs="0">
            <xsd:element name="masterConfirmation" type="MasterConfirmation">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        The agreement executed between the parties and intended to
                        govern all OTC derivatives transactions between those
                        parties.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="brokerConfirmation" type="BrokerConfirmation">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        Specifies the deails for a broker confirm.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:choice>
        <xsd:element name="contractualDefinitions" type="ContractualDefinitions" minOccurs="0" maxO
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    The definitions such as those published by ISDA that will
                    define the terms of the trade.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:choice>
            <xsd:element name="contractualSupplement" type="ContractualSupplement" minOccurs="0" maxO
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        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.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="contractualTermsSupplement" type="ContractualTermsSupplement" minOccu
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A contractual supplement (such as those published by ISDA)
                        that will apply to the trade.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:choice>
        <xsd:element name="contractualMatrix" type="ContractualMatrix" minOccurs="0" maxOccurs="unk
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A reference to a contractual matrix of elected terms/values
                    (such as those published by ISDA) that shall be deemed to
                    apply to the trade. The applicable matrix is identified by
                    reference to a name and optionally a publication date.
                    Depending on the structure of the matrix, an additional term
                    (specified in the matrixTerm element) may be required to
                    further identify a subset of applicable terms/values within
                    the matrix.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="creditSupportDocument" type="xsd:normalizedString" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    The agreement executed between the parties and intended to
                    govern collateral arrangement for all OTC derivatives
                    transactions between those parties.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
```

2.55 Empty

2.55.1 Description:

A special type meant to be used for elements with no content and no attributes.

2.55.2 Contents:

2.55.3 Used by:

- Complex type: AdditionalFixedPayments
- Complex type: CreditEvents
- Complex type: DeliverableObligations
- Complex type: FallbackReferencePrice
- Complex type: FloatingAmountEvents
- Complex type: FloatingAmountProvisions
- Complex type: GeneralTerms
- Complex type: Obligations
- Complex type: PCDeliverableObligationCharac
- Complex type: PhysicalSettlementPeriod
- Complex type: PositionsAsserted
- Complex type: PubliclyAvailableInformation
- Complex type: ReferenceInformation
- Complex type: ReferencePair
- Complex type: Restructuring

2.55.4 Derived Types:

2.55.5 Figure:

2.55.6 Schema Fragment:

```
<xsd:complexType name="Empty">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A special type meant to be used for elements with no content and
      no attributes.
    </xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
```

2.56 EntityId

2.56.1 Description:

A legal entity identifier (e.g. RED entity code).

2.56.2 Contents:

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

●

2.56.3 Used by:

● Complex type: LegalEntity

2.56.4 Derived Types:

2.56.5 Figure:

2.56.6 Schema Fragment:

```
<xsd:complexType name="EntityId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A legal entity identifier (e.g. RED entity code).
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="entityIdScheme" type="xsd:anyURI" default="http://www.fpml.org/spec/
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.57 EntityName

2.57.1 Description:

The name of the reference entity. A free format string. FpML does not define usage rules for this element.

2.57.2 Contents:

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

-

2.57.3 Used by:

- Complex type: LegalEntity

2.57.4 Derived Types:

2.57.5 Figure:

2.57.6 Schema Fragment:

```
<xsd:complexType name="EntityName">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The name of the reference entity. A free format string. FpML does
      not define usage rules for this element.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="entityNameScheme" type="xsd:anyURI" default="http://www.fpml.org/spe
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.58 EuropeanExercise

2.58.1 Description:

A type defining the exercise period for a European style option together with any rules governing the notional amount of the underlying which can be exercised on any given exercise date and any associated exercise fees.

2.58.2 Contents:

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

• The abstract base class for all types which define way in which options may be exercised.

expirationDate (exactly one occurrence; of the type AdjustableOrRelativeDate) 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.

relevantUnderlyingDate (zero or one occurrence; of the type AdjustableOrRelativeDates) The daye on the underlying set by the exercise of an option. What this date is depends on the option (e.g. in a swaption it is the effective date, in an extendible/cancelable provision it is the termination date).

earliestExerciseTime (exactly one occurrence; of the type BusinessCenterTime) The earliest time at which notice of exercise can be given by the buyer to the seller (or seller's agent) i) on the expriation date, in the case of a European style option, (ii) on each bermuda option exercise date and the expiration date, in the case of a Bermuda style option the commencement date to, and including, the expiration date , in the case of an American option.

expirationTime (exactly one occurrence; of the type BusinessCenterTime) The latest time for exercise on expirationDate.

partialExercise (zero or one occurrence; of the type PartialExercise) As defined in the 2000 ISDA Definitions, Section 12.3. Partial Exercise, the buyer of the option has the right to exercise all or less than all the notional amount of the underlying swap on the expiration date, but may not exercise less than the minimum notional amount, and if an integral multiple amount is specified, the notional amount exercised must be equal to, or be an integral multiple of, the integral multiple amount.

exerciseFee (zero or one occurrence; of the type ExerciseFee) A fee to be paid on exercise. This could be represented as an amount or a rate and notional reference on which to apply the rate.

2.58.3 Used by:

• Element: europeanExercise

2.58.4 Derived Types:

2.58.5 Figure:

2.58.6 Schema Fragment:

```
<xsd:complexType name="EuropeanExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the exercise period for a European style option
      together with any rules governing the notional amount of the
      underlying which can be exercised on any given exercise date and
      any associated exercise fees.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Exercise">
      <xsd:sequence>
        <xsd:element name="expirationDate" type="AdjustableOrRelativeDate">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
```

```xsd
            <xsd:element name="relevantUnderlyingDate" type="AdjustableOrRelativeDates" minOccurs='
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The daye on the underlying set by the exercise of an
                  option. What this date is depends on the option (e.g. in
                  a swaption it is the effective date, in an
                  extendible/cancelable provision it is the termination
                  date).
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="earliestExerciseTime" type="BusinessCenterTime">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The earliest time at which notice of exercise can be
                  given by the buyer to the seller (or seller's agent) i)
                  on the expriation date, in the case of a European style
                  option, (ii) on each bermuda option exercise date and the
                  expiration date, in the case of a Bermuda style option
                  the commencement date to, and including, the expiration
                  date , in the case of an American option.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="expirationTime" type="BusinessCenterTime">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The latest time for exercise on expirationDate.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="partialExercise" type="PartialExercise" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  As defined in the 2000 ISDA Definitions, Section 12.3.
                  Partial Exercise, the buyer of the option has the right
                  to exercise all or less than all the notional amount of
                  the underlying swap on the expiration date, but may not
                  exercise less than the minimum notional amount, and if an
                  integral multiple amount is specified, the notional
                  amount exercised must be equal to, or be an integral
                  multiple of, the integral multiple amount.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="exerciseFee" type="ExerciseFee" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  A fee to be paid on exercise. This could be represented
                  as an amount or a rate and notional reference on which to
                  apply the rate.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:extension>
      </xsd:complexContent>
</xsd:complexType>
```

2.59 ExchangeId

2.59.1 Description:

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

2.59.2 Contents:

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

•

2.59.3 Used by:

• Complex type: UnderlyingAsset

2.59.4 Derived Types:

2.59.5 Figure:

2.59.6 Schema Fragment:

```
<xsd:complexType name="ExchangeId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A short form unique identifier for an exchange. If the element is
      not present then the exchange shall be the primary exchange on
      which the underlying is listed. The term "Exchange" is assumed to
      have the meaning as defined in the ISDA 2002 Equity Derivatives
      Definitions.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="exchangeIdScheme" type="xsd:anyURI" default="http://www.fpml.org/spe
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.60 Exercise

2.60.1 Description:

The abstract base class for all types which define way in which options may be exercised.

2.60.2 Contents:

2.60.3 Used by:

- Element: exercise
- Complex type: AmericanExercise
- Complex type: BermudaExercise
- Complex type: EquityEuropeanExercise
- Complex type: EuropeanExercise
- Complex type: SharedAmericanExercise

2.60.4 Derived Types:

- Complex type: AmericanExercise
- Complex type: BermudaExercise
- Complex type: EquityEuropeanExercise
- Complex type: EuropeanExercise
- Complex type: SharedAmericanExercise

2.60.5 Figure:

2.60.6 Schema Fragment:

```
<xsd:complexType name="Exercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The abstract base class for all types which define way in which
      options may be exercised.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.61 ExerciseFee

2.61.1 Description:

A type defining the fee payable on exercise of an option. This fee may be defined as an amount or a percentage of the notional exercised.

2.61.2 Contents:

payerPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party responsible for making the payments defined by this structure.

receiverPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party that receives the payments corresponding to this structure.

notionalReference (exactly one occurrence; of the type ScheduleReference) A pointer style reference to the associated notional schedule defined elsewhere in the document.

Either

feeAmount (exactly one occurrence; of the type xsd:decimal) The amount of fee to be paid on exercise. The fee currency is that of the referenced notional.

Or

feeRate (exactly one occurrence; of the type xsd:decimal) A fee represented as a percentage of some referenced notional. A percentage of 5% would be represented as 0.05.

feePaymentDate (exactly one occurrence; of the type RelativeDateOffset) The date on which exercise fee(s) will be paid. It is specified as a relative date.

2.61.3 Used by:

• Complex type: EuropeanExercise

2.61.4 Derived Types:

2.61.5 Figure:

2.61.6 Schema Fragment:

```
<xsd:complexType name="ExerciseFee">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the fee payable on exercise of an option. This
      fee may be defined as an amount or a percentage of the notional
      exercised.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PayerReceiver.model"/>
    <xsd:element name="notionalReference" type="ScheduleReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A pointer style reference to the associated notional schedule
          defined elsewhere in the document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:choice>
      <xsd:element name="feeAmount" type="xsd:decimal">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The amount of fee to be paid on exercise. The fee currency
            is that of the referenced notional.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="feeRate" type="xsd:decimal">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A fee represented as a percentage of some referenced
            notional. A percentage of 5% would be represented as 0.05.
          </xsd:documentation>
        </xsd:annotation>
```

```
            </xsd:element>
        </xsd:choice>
        <xsd:element name="feePaymentDate" type="RelativeDateOffset">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    The date on which exercise fee(s) will be paid. It is
                    specified as a relative date.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
```

2.62 ExerciseFeeSchedule

2.62.1 Description:

A type to define a fee or schedule of fees to be payable on the exercise of an option. This fee may be defined as an amount or a percentage of the notional exercised.

2.62.2 Contents:

payerPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party responsible for making the payments defined by this structure.

receiverPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party that receives the payments corresponding to this structure.

notionalReference (exactly one occurrence; of the type ScheduleReference) A pointer style reference to the associated notional schedule defined elsewhere in the document.

Either

feeAmountSchedule (exactly one occurrence; of the type AmountSchedule) The exercise fee amount schedule. The fees are expressed as currency amounts. The currency of the fee is assumed to be that of the notional schedule referenced.

Or

feeRateSchedule (exactly one occurrence; of the type Schedule) The exercise free rate schedule. The fees are expressed as percentage rates of the notional being exercised. The currency of the fee is assumed to be that of the notional schedule referenced.

feePaymentDate (exactly one occurrence; of the type RelativeDateOffset) The date on which exercise fee(s) will be paid. It is specified as a relative date.

2.62.3 Used by:

- Complex type: AmericanExercise
- Complex type: BermudaExercise

2.62.4 Derived Types:

2.62.5 Figure:

2.62.6 Schema Fragment:

```
<xsd:complexType name="ExerciseFeeSchedule">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type to define a fee or schedule of fees to be payable on the
      exercise of an option. This fee may be defined as an amount or a
      percentage of the notional exercised.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PayerReceiver.model"/>
    <xsd:element name="notionalReference" type="ScheduleReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A pointer style reference to the associated notional schedule
          defined elsewhere in the document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:choice>
      <xsd:element name="feeAmountSchedule" type="AmountSchedule">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The exercise fee amount schedule. The fees are expressed as
            currency amounts. The currency of the fee is assumed to be
            that of the notional schedule referenced.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="feeRateSchedule" type="Schedule">
        <xsd:annotation>
```

```xml
            <xsd:documentation xml:lang="en">
              The exercise free rate schedule. The fees are expressed as
              percentage rates of the notional being exercised. The
              currency of the fee is assumed to be that of the notional
              schedule referenced.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:choice>
      <xsd:element name="feePaymentDate" type="RelativeDateOffset">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The date on which exercise fee(s) will be paid. It is
            specified as a relative date.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
</xsd:complexType>
```

2.63 ExerciseNotice

2.63.1 Description:

A type defining to whom and where notice of execution should be given. The partyReference refers to one of the principal parties of the trade. If present the exerciseNoticePartyReference refers to a party, other than the principal party, to whome notice should be given.

2.63.2 Contents:

partyReference (exactly one occurrence; of the type PartyReference) The party referenced has allocated the trade identifier.

exerciseNoticePartyReference (zero or one occurrence; of the type PartyReference) The party referenced is the party to which notice of exercise should be given by the buyer.

businessCenter (exactly one occurrence; of the type BusinessCenter)

2.63.3 Used by:

- Complex type: CancelableProvision
- Complex type: ExtendibleProvision
- Complex type: ManualExercise
- Complex type: OptionalEarlyTermination

2.63.4 Derived Types:

2.63.5 Figure:

2.63.6 Schema Fragment:

```
<xsd:complexType name="ExerciseNotice">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining to whom and where notice of execution should be
      given. The partyReference refers to one of the principal parties
      of the trade. If present the exerciseNoticePartyReference refers
      to a party, other than the principal party, to whome notice
      should be given.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="partyReference" type="PartyReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The party referenced has allocated the trade identifier.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="exerciseNoticePartyReference" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The party referenced is the party to which notice of exercise
          should be given by the buyer.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="businessCenter" type="BusinessCenter"/>
  </xsd:sequence>
</xsd:complexType>
```

2.64 ExerciseProcedure

2.64.1 Description:

A type describing how notice of exercise should be given. This can be either manual or automatic.

2.64.2 Contents:

Either

manualExercise (exactly one occurrence; of the type ManualExercise) Specifies that the notice of exercise must be given by the buyer to the seller or seller's agent.

Or

automaticExercise (exactly one occurrence; of the type AutomaticExercise) If automatic is specified then the notional amount of the underlying swap, not previously exercised under the swaption will be automatically exercised at the expriration time on the expiration date if at such time the buyer is in-the-money, provided that the difference between the settlement rate and the fixed rate under the relevant underlying swap is not less than the specified threshold rate. The term in-the-money is assumed to have the meaning defining in the 2000 ISDA Definitions, Section 17.4 In-the-money.

followUpConfirmation (exactly one occurrence; of the type xsd:boolean) 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.

limitedRightToConfirm (zero or one occurrence; of the type xsd:boolean) Has the meaning defined as part of the 1997 ISDA Government Bond Option Definitions, section 4.5 Limited Right to Confirm Exercise. If present, (i) the Seller may request the Buyer to confirm its intent if not done on or before the expiration time on the Expiration date (ii) specific rules will apply in relation to the settlement mode.

splitTicket (zero or one occurrence; of the type xsd:boolean) Typically applicable to the physical settlement of bond and convertible bond options. If present, means that the Party required to deliver the bonds will divide those to be delivered as notifying party desires to facilitate delivery obligations.

2.64.3 Used by:

- Complex type: OptionBaseExtended
- Complex type: Swaption

2.64.4 Derived Types:

2.64.5 Figure:

2.64.6 Schema Fragment:

```
<xsd:complexType name="ExerciseProcedure">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing how notice of exercise should be given. This
      can be either manual or automatic.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:choice>
      <xsd:element name="manualExercise" type="ManualExercise">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies that the notice of exercise must be given by the
            buyer to the seller or seller's agent.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="automaticExercise" type="AutomaticExercise">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            If automatic is specified then the notional amount of the
            underlying swap, not previously exercised under the
            swaption will be automatically exercised at the expriration
            time on the expiration date if at such time the buyer is
            in-the-money, provided that the difference between the
            settlement rate and the fixed rate under the relevant
            underlying swap is not less than the specified threshold
```

```
                  rate. The term in-the-money is assumed to have the meaning
                  defining in the 2000 ISDA Definitions, Section 17.4
                  In-the-money.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:choice>
      <xsd:element name="followUpConfirmation" type="xsd:boolean">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               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.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="limitedRightToConfirm" type="xsd:boolean" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               Has the meaning defined as part of the 1997 ISDA Government
               Bond Option Definitions, section 4.5 Limited Right to Confirm
               Exercise. If present, (i) the Seller may request the Buyer to
               confirm its intent if not done on or before the expiration
               time on the Expiration date (ii) specific rules will apply in
               relation to the settlement mode.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="splitTicket" type="xsd:boolean" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               Typically applicable to the physical settlement of bond and
               convertible bond options. If present, means that the Party
               required to deliver the bonds will divide those to be
               delivered as notifying party desires to facilitate delivery
               obligations.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
   </xsd:sequence>
</xsd:complexType>
```

2.65 FallbackRate

2.65.1 Description:

Defines a fallback rate, which is a rate to be used in place of a publish term rate (such as an ibor rate) when that term rate ceases to be usable, whether because it ceases to be published or is deemed non-representative by regulator.

2.65.2 Contents:

Either

effectiveDate (exactly one occurrence; of the type xsd:date) The date upon which the fallback rate becomes effective. This means that any rate observation for that date or for any subsequent date would use the fallback rate rather than the originally defined rate. This date will typically immediately follow the cessation of publication of the original term rate but could occur before that (e.g. if the original rate is deemed non-representative prior to cessation of publication). If the effective date occurs within a calculation period with multiple rate observations (because of averaging), observations prior to the effective date will use the original floating rate index, and observations on or after the effective date will use the fallback rate.

2.65.3 Used by:

- Complex type: FloatingRate
- Complex type: StubFloatingRate

2.65.4 Derived Types:

2.65.5 Figure:

2.65.6 Schema Fragment:

```
<xsd:complexType name="FallbackRate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Defines a fallback rate, which is a rate to be used in place of a
      publish term rate (such as an ibor rate) when that term rate
      ceases to be usable, whether because it ceases to be published or
      is deemed non-representative by regulator.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="effectiveDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date upon which the fallback rate becomes effective. This
          means that any rate observation for that date or for any
          subsequent date would use the fallback rate rather than the
          originally defined rate. This date will typically immediately
          follow the cessation of publication of the original term rate
          but could occur before that (e.g. if the original rate is
          deemed non-representative prior to cessation of publication).
          If the effective date occurs within a calculation period with
          multiple rate observations (because of averaging),
          observations prior to the effective date will use the
          original floating rate index, and observations on or after
          the effective date will use the fallback rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:sequence>
      <xsd:element name="floatingRateIndex" type="FloatingRateIndex">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The benchmark rate used for computing the fallback rate.
            Typically this will be a risk-free overnight rate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="effectiveDate" type="xsd:date" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The date upon which the fallback rate becomes effective.
            This means that any rate observation for that date or for
            any subsequent date would use the fallback rate rather than
```

```
                  the originally defined rate. This date will typically
                  immediately follow the cessation of publication of the
                  original term rate but could occur before that (e.g. if the
                  original rate is deemed non-representative prior to
                  cessation of publication). If the effective date occurs
                  within a calculation period with multiple rate observations
                  (because of averaging), observations prior to the effective
                  date will use the original floating rate index, and
                  observations on or after the effective date will use the
                  fallback rate.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="calculationParameters" type="CalculationParameters" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  This provides a representation of the approximate value of
                  the fallback rate, i.e. a calculated rate that quite
                  closely mimics the value anticipated to be published by the
                  fallback rate administrator (once the spread adjustment is
                  added).
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="spreadAdjustment" type="xsd:decimal" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  An amount to be added to the calculated value before
                  subsequent use, in order to more closely replicate the
                  original term rate, by adjusting for the economic or credit
                  spread between risk-free rates and risky term rates.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:sequence>
   </xsd:choice>
   <xsd:attribute name="id" type="xsd:ID" use="optional"/>
</xsd:complexType>
```

2.66 FallbackRateObservation

2.66.1 Description:

A type defining parameters associated with a fallback observation, i.e. a rate observation where the original published rate is not available and instead a fallback rate must be used.

2.66.2 Contents:

observationDate (exactly one occurrence; of the type xsd:date) The date which is the Fallback Observation Date, as defined in the ISDA 2006/2021 Definitions (typically 2 days prior to the relevant Payment/calculation date.

availableRecordDate (zero or one occurrence; of the type xsd:date) The original record date from the fallback publication source that was available at the time that fallback rate was observed. This may be before the original fixing date depending on publication schedules

2.66.3 Used by:

- Complex type: RateObservation

2.66.4 Derived Types:

2.66.5 Figure:

2.66.6 Schema Fragment:

```xsd
<xsd:complexType name="FallbackRateObservation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining parameters associated with a fallback
      observation, i.e. a rate observation where the original published
      rate is not available and instead a fallback rate must be used.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="observationDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date which is the Fallback Observation Date, as defined
          in the ISDA 2006/2021 Definitions (typically 2 days prior to
          the relevant Payment/calculation date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="availableRecordDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The original record date from the fallback publication source
          that was available at the time that fallback rate was
          observed. This may be before the original fixing date
          depending on publication schedules
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.67 FloatingRate

2.67.1 Description:

A type defining a floating rate.

2.67.2 Contents:

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

- The abstract base class for all types which define interest rate streams.

floatingRateIndex (exactly one occurrence; of the type FloatingRateIndex) The ISDA Floating Rate Option, i.e. the name of the floating rate.

indexTenor (zero or one occurrence; of the type Interval) The ISDA Designated Maturity, i.e. the tenor of the floating rate.

calculationParameters (zero or one occurrence; of the type CalculationParameters) Parameters to specify a rate calculated using an averaging or compounding formula, as described in the 2021 ISDA Defintions, section 7. Please note that when this structure is used, the "resetDates" structure will not be used. Instead, the observation rules for the calculated rate are defined within the structure.

fallbackRate (zero or one occurrence; of the type FallbackRate) A fallback rate calculated using an averaging or compounding formula to be used in case of the cessation of the original term rate. This structure is provided to 1) allow a message sender to report that a fallback is effect, and/or 2) allow an approximate representation to be created for published fallback rates to allow operations such as valuation, accrual calculation, and risk calculation.

floatingRateMultiplierSchedule (zero or one occurrence; of the type Schedule) 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 (zero or more occurrences; of the type SpreadSchedule) 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 (zero or one occurrence; of the type RateTreatmentEnum) 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 (zero or more occurrences; of the type StrikeSchedule) 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 (zero or more occurrences; of the type StrikeSchedule) 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.

2.67.3 Used by:

- Complex type: FloatingRateCalculation
- Complex type: TradeUnderlyer

2.67.4 Derived Types:

- Complex type: FloatingRateCalculation

2.67.5 Figure:

2.67.6 Schema Fragment:

```
<xsd:complexType name="FloatingRate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining a floating rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Rate">
      <xsd:sequence>
        <xsd:group ref="FloatingRateIndex.model"/>
        <xsd:element name="calculationParameters" type="CalculationParameters" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
             Parameters to specify a rate calculated using an
             averaging or compounding formula, as described in the
             2021 ISDA Defintions, section 7. Please note that when
             this structure is used, the "resetDates" structure will
             not be used. Instead, the observation rules for the
             calculated rate are defined within the structure.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="fallbackRate" type="FallbackRate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
             A fallback rate calculated using an averaging or
             compounding formula to be used in case of the cessation
             of the original term rate. This structure is provided to
             1) allow a message sender to report that a fallback is
             effect, and/or 2) allow an approximate representation to
             be created for published fallback rates to allow
             operations such as valuation, accrual calculation, and
             risk calculation.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:group ref="FloatingRate.model"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.68 FloatingRateCalculation

2.68.1 Description:

A type defining the floating rate and definitions relating to the calculation of floating rate amounts.

2.68.2 Contents:

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

- A type defining a floating rate.

initialRate (zero or one occurrence; of the type xsd:decimal) 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 (zero or one occurrence; of the type Rounding) The rounding convention to apply to the final rate used in determination of a calculation period amount.

averagingMethod (zero or one occurrence; of the type AveragingMethodEnum) 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 (zero or one occurrence; of the type NegativeInterestRateTreatmentEnum) 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).

2.68.3 Used by:

- Element: floatingRateCalculation
- Complex type: InterestAccrualsMethod

2.68.4 Derived Types:

2.68.5 Figure:

2.68.6 Schema Fragment:

```
<xsd:complexType name="FloatingRateCalculation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the floating rate and definitions relating to the
      calculation of floating rate amounts.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="FloatingRate">
      <xsd:sequence>
        <xsd:group ref="FloatingRateCalculation.model"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.69 FloatingRateIndex

2.69.1 Description:

The ISDA Floating Rate Option, i.e. the floating rate index.

2.69.2 Contents:

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

•

2.69.3 Used by:

- Complex type: FallbackRate
- Complex type: ForecastRateIndex
- Complex type: Fra
- Complex type: InterestShortFall
- Complex type: RateIndex

2.69.4 Derived Types:

2.69.5 Figure:

2.69.6 Schema Fragment:

```
<xsd:complexType name="FloatingRateIndex">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The ISDA Floating Rate Option, i.e. the floating rate index.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="floatingRateIndexScheme" type="xsd:anyURI" default="http://www.fpml.
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.70 ForecastRateIndex

2.70.1 Description:

A type defining a rate index.

2.70.2 Contents:

floatingRateIndex (exactly one occurrence; of the type FloatingRateIndex) The ISDA Floating Rate Option, i.e. the floating rate index.

indexTenor (exactly one occurrence; of the type Interval) The ISDA Designated Maturity, i.e. the tenor of the floating rate.

2.70.3 Used by:

2.70.4 Derived Types:

2.70.5 Figure:

2.70.6 Schema Fragment:

```
<xsd:complexType name="ForecastRateIndex">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining a rate index.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="floatingRateIndex" type="FloatingRateIndex">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         The ISDA Floating Rate Option, i.e. the floating rate index.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="indexTenor" type="Interval">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         The ISDA Designated Maturity, i.e. the tenor of the floating
         rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.71 Formula

2.71.1 Description:

A type describing a financial formula, with its description and components.

2.71.2 Contents:

formulaDescription (zero or one occurrence; of the type xsd:string) Text description of the formula

math (zero or one occurrence; of the type Math) An element for containing an XML representation of the formula. Defined using xsd:any currently for flexibility in choice of language (MathML, OpenMath)

formulaComponent (zero or more occurrences; of the type FormulaComponent) Elements describing the components of the formula. The name attribute points to a value used in the math element. The href attribute points to a value elsewhere in the document

2.71.3 Used by:

- Complex type: AdditionalPaymentAmount
- Complex type: FormulaComponent
- Complex type: InterestRateStream
- Complex type: LegAmount

2.71.4 Derived Types:

2.71.5 Figure:

2.71.6 Schema Fragment:

```
<xsd:complexType name="Formula">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing a financial formula, with its description and
      components.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="formulaDescription" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Text description of the formula
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="math" type="Math" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An element for containing an XML representation of the
          formula. Defined using xsd:any currently for flexibility in
          choice of language (MathML, OpenMath)
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="formulaComponent" type="FormulaComponent" minOccurs="0" maxOccurs="unbou
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Elements describing the components of the formula. The name
          attribute points to a value used in the math element. The
          href attribute points to a value elsewhere in the document
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.72 FormulaComponent

2.72.1 Description:

Elements describing the components of the formula. The name attribute points to a value used in the math element. The href attribute points to a numeric value defined elsewhere in the document that is used by the formula component.

2.72.2 Contents:

componentDescription (exactly one occurrence; of the type xsd:string) Text description of the component

formula (zero or one occurrence; of the type Formula) Additional formulas required to describe this component

2.72.3 Used by:

• Complex type: Formula

2.72.4 Derived Types:

2.72.5 Figure:

2.72.6 Schema Fragment:

```
<xsd:complexType name="FormulaComponent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Elements describing the components of the formula. The name
      attribute points to a value used in the math element. The href
      attribute points to a numeric value defined elsewhere in the
      document that is used by the formula component.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="componentDescription" type="xsd:string">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Text description of the component
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="formula" type="Formula" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Additional formulas required to describe this component
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="name" type="xsd:normalizedString"/>
  <xsd:attribute name="href" type="xsd:IDREF" fpml-annotation:deprecated="true" fpml-annotation
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        This attribute has been DEPRECATED. It will be removed in the
        next FpML major version. Pointer to a numeric value defined
        elsewhere in the document that is used by the formula
        component.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:attribute>
</xsd:complexType>
```

2.73 FxCashSettlement

2.73.1 Description:

A type that is used for describing cash settlement of an option / non deliverable forward. It includes the currency to settle into together with the fixings required to calculate the currency amount.

2.73.2 Contents:

settlementCurrency (exactly one occurrence; of the type Currency) The currency in which a cash settlement for non-deliverable forward and non-deliverable options.

fixing (one or more occurrences; of the type FxFixing) Specifies the source for and timing of a fixing of an exchange rate. This is used in the agreement of non-deliverable forward trades as well as various types of FX OTC options that require observations against a particular rate.

2.73.3 Used by:

- Complex type: FxLeg
- Complex type: FxOptionLeg
- Complex type: QuotableFxLeg

2.73.4 Derived Types:

2.73.5 Figure:

2.73.6 Schema Fragment:

```xsd
<xsd:complexType name="FxCashSettlement">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that is used for describing cash settlement of an option /
      non deliverable forward. It includes the currency to settle into
      together with the fixings required to calculate the currency
      amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="settlementCurrency" type="Currency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The currency in which a cash settlement for non-deliverable
          forward and non-deliverable options.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="fixing" type="FxFixing" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the source for and timing of a fixing of an
          exchange rate. This is used in the agreement of
          non-deliverable forward trades as well as various types of FX
          OTC options that require observations against a particular
          rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.74 FxFixing

2.74.1 Description:

A type that specifies the source for and timing of a fixing of an exchange rate. This is used in the agreement of non-deliverable forward trades as well as various types of FX OTC options that require observations against a particular rate.

2.74.2 Contents:

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

- A type defining the source and time for an fx rate.

quotedCurrencyPair (exactly one occurrence; of the type QuotedCurrencyPair) Defines the two currencies for an FX trade and the quotation relationship between the two currencies.

fixingDate (exactly one occurrence; of the type xsd:date) Describes the specific date when a non-deliverable forward or non-deliverable option will "fix" against a particular rate, which will be used to compute the ultimate cash settlement.

2.74.3 Used by:

- Complex type: FxCashSettlement

2.74.4 Derived Types:

2.74.5 Figure:

2.74.6 Schema Fragment:

```
<xsd:complexType name="FxFixing">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that specifies the source for and timing of a fixing of an
      exchange rate. This is used in the agreement of non-deliverable
      forward trades as well as various types of FX OTC options that
      require observations against a particular rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="FxSpotRateSource">
      <xsd:sequence>
        <xsd:element name="quotedCurrencyPair" type="QuotedCurrencyPair">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Defines the two currencies for an FX trade and the
              quotation relationship between the two currencies.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="fixingDate" type="xsd:date">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Describes the specific date when a non-deliverable
              forward or non-deliverable option will "fix" against a
              particular rate, which will be used to compute the
              ultimate cash settlement.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.75 FxRate

2.75.1 Description:

A type describing the rate of a currency conversion: pair of currency, quotation mode and exchange rate.

2.75.2 Contents:

quotedCurrencyPair (exactly one occurrence; of the type QuotedCurrencyPair) Defines the two currencies for an FX trade and the quotation relationship between the two currencies.

rate (exactly one occurrence; of the type xsd:decimal) The rate of exchange between the two currencies of the leg of a deal. Must be specified with a quote basis.

2.75.3 Used by:

- Complex type: ExchangeRate
- Complex type: AssetValuation
- Complex type: Commission
- Complex type: FxConversion
- Complex type: Quanto

2.75.4 Derived Types:

- Complex type: ExchangeRate

2.75.5 Figure:

2.75.6 Schema Fragment:

```
<xsd:complexType name="FxRate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing the rate of a currency conversion: pair of
      currency, quotation mode and exchange rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="quotedCurrencyPair" type="QuotedCurrencyPair">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Defines the two currencies for an FX trade and the quotation
          relationship between the two currencies.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="rate" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The rate of exchange between the two currencies of the leg of
          a deal. Must be specified with a quote basis.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.76 FxSpotRateSource

2.76.1 Description:

A type defining the source and time for an fx rate.

2.76.2 Contents:

primaryRateSource (exactly one occurrence; of the type InformationSource) The primary source for where the rate observation will occur. Will typically be either a page or a reference bank published rate.

secondaryRateSource (zero or one occurrence; of the type InformationSource) 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 (exactly one occurrence; of the type BusinessCenterTime) 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.

2.76.3 Used by:

- Complex type: FxFixing
- Complex type: Composite
- Complex type: FxLinkedNotionalSchedule
- Complex type: FxRateAsset
- Complex type: Quanto

2.76.4 Derived Types:

- Complex type: FxFixing

2.76.5 Figure:

2.76.6 Schema Fragment:

```
<xsd:complexType name="FxSpotRateSource">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the source and time for an fx rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="primaryRateSource" type="InformationSource">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The primary source for where the rate observation will occur.
          Will typically be either a page or a reference bank published
          rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="secondaryRateSource" type="InformationSource" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An alternative, or secondary, source for where the rate
          observation will occur. Will typically be either a page or a
          reference bank published rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="fixingTime" type="BusinessCenterTime">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.77 GoverningLaw

2.77.1 Description:

Identification of the law governing the transaction.

2.77.2 Contents:

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

-

2.77.3 Used by:

- Complex type: Contract
- Complex type: Trade

2.77.4 Derived Types:

2.77.5 Figure:

2.77.6 Schema Fragment:

```
<xsd:complexType name="GoverningLaw">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Identification of the law governing the transaction.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="governingLawScheme" type="xsd:anyURI" default="http://www.fpml.org/c
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.78 IdentifiedCurrency

2.78.1 Description:

Specifies Currency with ID attribute.

2.78.2 Contents:

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

•

2.78.3 Used by:

• Complex type: FxFeature

2.78.4 Derived Types:

2.78.5 Figure:

2.78.6 Schema Fragment:

```
<xsd:complexType name="IdentifiedCurrency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Specifies Currency with ID attribute.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="Currency">
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.79 IdentifiedCurrencyReference

2.79.1 Description:

Reference to a currency with ID attribute

2.79.2 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.

2.79.3 Used by:

- Complex type: DividendConditions
- Complex type: LegAmount

2.79.4 Derived Types:

2.79.5 Figure:

2.79.6 Schema Fragment:

```
<xsd:complexType name="IdentifiedCurrencyReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a currency with ID attribute
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="IdentifiedCu
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.80 IdentifiedDate

2.80.1 Description:

A date which can be referenced elsewhere.

2.80.2 Contents:

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

•

2.80.3 Used by:

- Complex type: AdjustableDate
- Complex type: AdjustableDate2
- Complex type: AdjustableDates
- Complex type: AdjustableOrRelativeAndAdjustedDate
- Complex type: ContractHeader
- Complex type: DerivedValuationScenario
- Complex type: DividendPeriod
- Complex type: MakeWholeAmount
- Complex type: Payment
- Complex type: PositionReport
- Complex type: TradeDetails
- Complex type: TradeHeader
- Complex type: ValuationScenario

2.80.4 Derived Types:

2.80.5 Figure:

2.80.6 Schema Fragment:

```
<xsd:complexType name="IdentifiedDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A date which can be referenced elsewhere.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:date">
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.81 IdentifiedPayerReceiver

2.81.1 Description:

A type extending the PayerReceiverEnum type wih an id attribute.

2.81.2 Contents:

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

*

2.81.3 Used by:

* Complex type: Strike
* Complex type: StrikeSchedule

2.81.4 Derived Types:

2.81.5 Figure:

2.81.6 Schema Fragment:

```
<xsd:complexType name="IdentifiedPayerReceiver">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type extending the PayerReceiverEnum type wih an id attribute.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="PayerReceiverEnum">
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.82 InflationRateCalculationBase

2.82.1 Description:

A type defining the floating rate and definitions relating to the calculation of floating rate amounts. This type mimics the "FloatingRateCalculation" type but excludes the option of defining modular calculated rates and fallback rates. It provides an extension point for the InflationRateCalculation which does not require those features.

2.82.2 Contents:

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

- The abstract base class for all types which define interest rate streams.

floatingRateIndex (exactly one occurrence; of the type FloatingRateIndex) The ISDA Floating Rate Option, i.e. the name of the floating rate.

indexTenor (zero or one occurrence; of the type Interval) The ISDA Designated Maturity, i.e. the tenor of the floating rate.

floatingRateMultiplierSchedule (zero or one occurrence; of the type Schedule) 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 (zero or more occurrences; of the type SpreadSchedule) 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 (zero or one occurrence; of the type RateTreatmentEnum) 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 (zero or more occurrences; of the type StrikeSchedule) 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 (zero or more occurrences; of the type StrikeSchedule) 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 (zero or one occurrence; of the type xsd:decimal) 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 (zero or one occurrence; of the type Rounding) The rounding convention to apply to the final rate used in determination of a calculation period amount.

averagingMethod (zero or one occurrence; of the type AveragingMethodEnum) 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 (zero or one occurrence; of the type NegativeInterestRateTreatmentEnum) 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).

2.82.3 Used by:

- Complex type: InflationRateCalculation

2.82.4 Derived Types:

- Complex type: InflationRateCalculation

2.82.5 Figure:

2.82.6 Schema Fragment:

```
<xsd:complexType name="InflationRateCalculationBase">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the floating rate and definitions relating to the
      calculation of floating rate amounts. This type mimics the
      "FloatingRateCalculation" type but excludes the option of
      defining modular calculated rates and fallback rates. It provides
      an extension point for the InflationRateCalculation which does
      not require those features.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Rate">
      <xsd:sequence>
        <xsd:group ref="FloatingRateIndex.model"/>
        <xsd:group ref="FloatingRate.model"/>
        <xsd:group ref="FloatingRateCalculation.model"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.83 InformationProvider

2.83.1 Description:

2.83.2 Contents:

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

•

2.83.3 Used by:

• Complex type: InformationSource

2.83.4 Derived Types:

2.83.5 Figure:

2.83.6 Schema Fragment:

```
<xsd:complexType name="InformationProvider">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="informationProviderScheme" type="xsd:anyURI" default="http://www.fpr
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.84 InformationSource

2.84.1 Description:

A type defining the source for a piece of information (e.g. a rate refix or an fx fixing).

2.84.2 Contents:

rateSource (exactly one occurrence; of the type InformationProvider) An information source for obtaining a market rate. For example Bloomberg, Reuters, Telerate etc.

rateSourcePage (zero or one occurrence; of the type RateSourcePage) A specific page for the rate source for obtaining a market rate.

rateSourcePageHeading (zero or one occurrence; of the type xsd:string) The heading for the rate source on a given rate source page.

2.84.3 Used by:

- Complex type: FxAmericanTrigger
- Complex type: FxAverageRateOption
- Complex type: FxBarrier
- Complex type: FxEuropeanTrigger
- Complex type: FxSpotRateSource
- Complex type: SettlementRateSource

2.84.4 Derived Types:

2.84.5 Figure:

2.84.6 Schema Fragment:

```
<xsd:complexType name="InformationSource">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the source for a piece of information (e.g. a
      rate refix or an fx fixing).
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="rateSource" type="InformationProvider">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An information source for obtaining a market rate. For
          example Bloomberg, Reuters, Telerate etc.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="rateSourcePage" type="RateSourcePage" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A specific page for the rate source for obtaining a market
          rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="rateSourcePageHeading" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The heading for the rate source on a given rate source page.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.85 InstrumentId

2.85.1 Description:

A short form unique identifier for a security.

2.85.2 Contents:

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

-

2.85.3 Used by:

- Complex type: Asset

2.85.4 Derived Types:

2.85.5 Figure:

2.85.6 Schema Fragment:

```
<xsd:complexType name="InstrumentId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A short form unique identifier for a security.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="instrumentIdScheme" type="xsd:anyURI" use="required"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.86 InterestAccrualsCompoundingMethod

2.86.1 Description:

A type defining the way in which interests are accrued: the applicable rate (fixed or floating reference) and the compounding method.

2.86.2 Contents:

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

- A type describing the method for accruing interests on dividends. Can be either a fixed rate reference or a floating rate reference.

compoundingMethod (exactly one occurrence; of the type CompoundingMethodEnum) 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.

2.86.3 Used by:

- Complex type: DividendConditions

2.86.4 Derived Types:

2.86.5 Figure:

2.86.6 Schema Fragment:

```
<xsd:complexType name="InterestAccrualsCompoundingMethod">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the way in which interests are accrued: the
      applicable rate (fixed or floating reference) and the compounding
      method.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="InterestAccrualsMethod">
      <xsd:sequence minOccurs="0">
        <xsd:element name="compoundingMethod" type="CompoundingMethodEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.87 InterestAccrualsMethod

2.87.1 Description:

A type describing the method for accruing interests on dividends. Can be either a fixed rate reference or a floating rate reference.

2.87.2 Contents:

Either

floatingRateCalculation (exactly one occurrence; of the type FloatingRateCalculation) The floating rate calculation definitions

Or

fixedRate (exactly one occurrence; of the type xsd:decimal) The calculation period fixed rate. A per annum rate, expressed as a decimal. A fixed rate of 5% would be represented as 0.05.

2.87.3 Used by:

- Complex type: InterestAccrualsCompoundingMethod
- Complex type: InterestCalculation
- Complex type: CompoundingRate

2.87.4 Derived Types:

- Complex type: InterestAccrualsCompoundingMethod
- Complex type: InterestCalculation

2.87.5 Figure:

2.87.6 Schema Fragment:

```
<xsd:complexType name="InterestAccrualsMethod">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing the method for accruing interests on dividends.
      Can be either a fixed rate reference or a floating rate
      reference.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="floatingRateCalculation" type="FloatingRateCalculation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The floating rate calculation definitions
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="fixedRate" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The calculation period fixed rate. A per annum rate,
          expressed as a decimal. A fixed rate of 5% would be
          represented as 0.05.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
```

2.88 IntermediaryInformation

2.88.1 Description:

A type that describes the information to identify an intermediary through which payment will be made by the correspondent bank to the ultimate beneficiary of the funds.

2.88.2 Contents:

Either

routingIds (exactly one occurrence; of the type RoutingIds) A set of unique identifiers for a party, eachone identifying the party within a payment system. The assumption is that each party will not have more than one identifier within the same payment system.

Or

routingExplicitDetails (exactly one occurrence; of the type RoutingExplicitDetails) A set of details that is used to identify a party involved in the routing of a payment when the party does not have a code that identifies it within one of the recognized payment systems.

Or

routingIdsAndExplicitDetails (exactly one occurrence; of the type RoutingIdsAndExplicitDetails) A combination of coded payment system identifiers and details for physical addressing for a party involved in the routing of a payment.

intermediarySequenceNumber (exactly one occurrence; of the type xsd:positiveInteger) A sequence number that gives the position of the current intermediary in the chain of payment intermediaries. The assumed domain value set is an ascending sequence of integers starting from 1.

intermediaryPartyReference (zero or one occurrence; of the type PartyReference) Reference to the party acting as intermediary.

2.88.3 Used by:

- Complex type: SettlementInstruction

2.88.4 Derived Types:

2.88.5 Figure:

2.88.6 Schema Fragment:

```
<xsd:complexType name="IntermediaryInformation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that describes the information to identify an intermediary
      through which payment will be made by the correspondent bank to
      the ultimate beneficiary of the funds.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="RoutingIdentification.model"/>
    <xsd:element name="intermediarySequenceNumber" type="xsd:positiveInteger">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A sequence number that gives the position of the current
          intermediary in the chain of payment intermediaries. The
          assumed domain value set is an ascending sequence of integers
          starting from 1.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="intermediaryPartyReference" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Reference to the party acting as intermediary.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.89 Interval

2.89.1 Description:

A type defining a time interval or offset, e.g. one day, three months. Used for specifying frequencies at which events occur, the tenor of a floating rate or an offset relative to another date.

2.89.2 Contents:

periodMultiplier (exactly one occurrence; of the type xsd:integer) 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 (exactly one occurrence; of the type PeriodEnum) 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).

2.89.3 Used by:

- Complex type: CalculationPeriodFrequency
- Complex type: Offset
- Complex type: ResetFrequency
- Complex type: DeliverableObligations
- Complex type: Deposit
- Complex type: ExercisePeriod
- Complex type: ForecastRateIndex
- Complex type: Fra
- Complex type: NotionalStepRule
- Complex type: PaymentDates
- Complex type: PeriodicPayment
- Complex type: QuotedAs
- Complex type: RateIndex
- Complex type: ReturnSwapLeg
- Complex type: ScheduledTerminationDate
- Complex type: SimpleCreditDefaultSwap
- Complex type: SimpleFra
- Complex type: SimpleIRSwap
- Complex type: TimeDimension

2.89.4 Derived Types:

- Complex type: CalculationPeriodFrequency
- Complex type: Offset
- Complex type: ResetFrequency

2.89.5 Figure:

2.89.6 Schema Fragment:

```
<xsd:complexType name="Interval">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a time interval or offset, e.g. one day, three
      months. Used for specifying frequencies at which events occur,
      the tenor of a floating rate or an offset relative to another
      date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="periodMultiplier" type="xsd:integer">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
```

```
            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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="period" type="PeriodEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
            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).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.90 Leg

2.90.1 Description:

A supertype of leg. All swap legs extend this type.

2.90.2 Contents:

2.90.3 Used by:

- Complex type: DirectionalLeg
- Complex type: FeeLeg
- Complex type: InterestRateStream
- Complex type: ReturnSwapLeg

2.90.4 Derived Types:

- Complex type: DirectionalLeg
- Complex type: FeeLeg
- Complex type: InterestRateStream
- Complex type: ReturnSwapLeg

2.90.5 Figure:

2.90.6 Schema Fragment:

```
<xsd:complexType name="Leg" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A supertype of leg. All swap legs extend this type.
    </xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
```

2.91 LegalEntity

2.91.1 Description:

A type defining a legal entity.

2.91.2 Contents:

Either

entityId (one or more occurrences; of the type EntityId) A legal entity identifier (e.g. RED entity code)..

2.91.3 Used by:

- Complex type: CreditEventNoticeDocument
- Complex type: IndexReferenceInformation
- Complex type: Loan
- Complex type: Mortgage
- Complex type: ReferenceInformation
- Complex type: ReferenceObligation
- Complex type: ReferencePair
- Complex type: TradeUnderlyer

2.91.4 Derived Types:

2.91.5 Figure:

2.91.6 Schema Fragment:

```
<xsd:complexType name="LegalEntity">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining a legal entity.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:sequence>
      <xsd:element name="entityName" type="EntityName">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The name of the reference entity. A free format string.
            FpML does not define usage rules for this element.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="entityId" type="EntityId" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A legal entity identifier (e.g. RED entity code).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
    <xsd:element name="entityId" type="EntityId" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A legal entity identifier (e.g. RED entity code)..
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.92 LegalEntityReference

2.92.1 Description:

References a credit entity defined elsewhere in the document.

2.92.2 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.

2.92.3 Used by:

- Complex type: Loan
- Complex type: Mortgage
- Complex type: ReferenceObligation

2.92.4 Derived Types:

2.92.5 Figure:

2.92.6 Schema Fragment:

```
<xsd:complexType name="LegalEntityReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      References a credit entity defined elsewhere in the document.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="LegalEntity",
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.93 MainPublication

2.93.1 Description:

A type to define the main publication source.

2.93.2 Contents:

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

-

2.93.3 Used by:

- Complex type: InflationRateCalculation

2.93.4 Derived Types:

2.93.5 Figure:

2.93.6 Schema Fragment:

```
<xsd:complexType name="MainPublication">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type to define the main publication source.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="mainPublicationScheme" type="xsd:anyURI" default="http://www.fpml.or
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.94 ManualExercise

2.94.1 Description:

A type defining manual exercise, i.e. that the option buyer counterparty must give notice to the option seller of exercise.

2.94.2 Contents:

exerciseNotice (zero or one occurrence; of the type ExerciseNotice) Definition of the party to whom notice of exercise should be given.

fallbackExercise (zero or one occurrence; of the type xsd:boolean) If fallback exercise is specified then the notional amount of the underlying swap, not previously exercised under the swaption, will be automatically exercised at the expiration time on the expiration date if at such time the buyer is in-the-money, provided that the difference between the settlement rate and the fixed rate under the relevant underlying swap is not less than one tenth of a percentage point (0.10% or 0.001). The term in-the-money is assumed to have the meaning defined in the 2000 ISDA Definitions, Section 17.4. In-the-money.

2.94.3 Used by:

- Complex type: ExerciseProcedure

2.94.4 Derived Types:

2.94.5 Figure:

2.94.6 Schema Fragment:

```
<xsd:complexType name="ManualExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining manual exercise, i.e. that the option buyer
      counterparty must give notice to the option seller of exercise.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="exerciseNotice" type="ExerciseNotice" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Definition of the party to whom notice of exercise should be
          given.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="fallbackExercise" type="xsd:boolean" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          If fallback exercise is specified then the notional amount of
          the underlying swap, not previously exercised under the
          swaption, will be automatically exercised at the expiration
          time on the expiration date if at such time the buyer is
          in-the-money, provided that the difference between the
          settlement rate and the fixed rate under the relevant
          underlying swap is not less than one tenth of a percentage
          point (0.10% or 0.001). The term in-the-money is assumed to
          have the meaning defined in the 2000 ISDA Definitions,
          Section 17.4. In-the-money.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.95 MasterAgreement

2.95.1 Description:

An entity for defining the agreement executed between the parties and intended to govern all OTC derivatives transactions between those parties.

2.95.2 Contents:

masterAgreementType (exactly one occurrence; of the type MasterAgreementType) The agreement executed between the parties and intended to govern product-specific derivatives transactions between those parties.

masterAgreementDate (zero or one occurrence; of the type xsd:date) The date on which the master agreement was signed.

2.95.3 Used by:

- Complex type: Documentation

2.95.4 Derived Types:

2.95.5 Figure:

2.95.6 Schema Fragment:

```
<xsd:complexType name="MasterAgreement">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An entity for defining the agreement executed between the parties
      and intended to govern all OTC derivatives transactions between
      those parties.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="masterAgreementType" type="MasterAgreementType">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The agreement executed between the parties and intended to
          govern product-specific derivatives transactions between
          those parties.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="masterAgreementDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date on which the master agreement was signed.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.96 MasterAgreementType

2.96.1 Description:

2.96.2 Contents:

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

•

2.96.3 Used by:

• Complex type: MasterAgreement

2.96.4 Derived Types:

2.96.5 Figure:

2.96.6 Schema Fragment:

```
<xsd:complexType name="MasterAgreementType">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="masterAgreementTypeScheme" type="xsd:anyURI" default="http://www.fpr
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.97 MasterConfirmation

2.97.1 Description:

An entity for defining the master confirmation agreement executed between the parties.

2.97.2 Contents:

masterConfirmationType (exactly one occurrence; of the type MasterConfirmationType) The type of master confirmation executed between the parties.

masterConfirmationDate (exactly one occurrence; of the type xsd:date) The date of the confirmation executed between the parties and intended to govern all relevant transactions between those parties.

masterConfirmationAnnexDate (zero or one occurrence; of the type xsd:date) The date that an annex to the master confirmation was executed between the parties.

2.97.3 Used by:

• Complex type: Documentation

2.97.4 Derived Types:

2.97.5 Figure:

2.97.6 Schema Fragment:

```
<xsd:complexType name="MasterConfirmation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An entity for defining the master confirmation agreement executed
      between the parties.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="masterConfirmationType" type="MasterConfirmationType">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The type of master confirmation executed between the parties.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="masterConfirmationDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date of the confirmation executed between the parties and
          intended to govern all relevant transactions between those
          parties.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="masterConfirmationAnnexDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date that an annex to the master confirmation was
          executed between the parties.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.98 MasterConfirmationType

2.98.1 Description:

2.98.2 Contents:

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

-
2.98.3 Used by:

- Complex type: MasterConfirmation

2.98.4 Derived Types:

2.98.5 Figure:

2.98.6 Schema Fragment:

```
<xsd:complexType name="MasterConfirmationType">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="masterConfirmationTypeScheme" type="xsd:anyURI" default="http://www.
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.99 Math

2.99.1 Description:

A type defining a mathematical expression.

2.99.2 Contents:

2.99.3 Used by:

- Complex type: Formula

2.99.4 Derived Types:

2.99.5 Figure:

2.99.6 Schema Fragment:

```
<xsd:complexType name="Math" mixed="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a mathematical expression.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:any namespace="##any" processContents="skip" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```

2.100 MatrixTerm

2.100.1 Description:

2.100.2 Contents:

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

•

2.100.3 Used by:

• Complex type: ContractualMatrix

2.100.4 Derived Types:

2.100.5 Figure:

2.100.6 Schema Fragment:

```
<xsd:complexType name="MatrixTerm">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="matrixTermScheme" type="xsd:anyURI" default="http://www.fpml.org/co
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.101 MatrixType

2.101.1 Description:

2.101.2 Contents:

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

-
2.101.3 Used by:

- Complex type: ContractualMatrix

2.101.4 Derived Types:

2.101.5 Figure:

2.101.6 Schema Fragment:

```
<xsd:complexType name="MatrixType">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="matrixTypeScheme" type="xsd:anyURI" default="http://www.fpml.org/coc
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.102 MimeType

2.102.1 Description:

The type that 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.

2.102.2 Contents:

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

*

2.102.3 Used by:

* Complex type: Resource

2.102.4 Derived Types:

2.102.5 Figure:

2.102.6 Schema Fragment:

```
<xsd:complexType name="MimeType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The type that 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.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="mimeTypeScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.103 Money

2.103.1 Description:

A type defining a currency amount.

2.103.2 Contents:

currency (exactly one occurrence; of the type Currency) The currency in which an amount is denominated.
amount (exactly one occurrence; of the type xsd:decimal) The monetary quantity in currency units.

2.103.3 Used by:

- Complex type: CalculationAmount
- Complex type: FxOptionPayout
- Complex type: AdditionalPaymentAmount
- Complex type: AdjustedPaymentDates
- Complex type: Allocation
- Complex type: BasketConstituent
- Complex type: BrokerEquityOption
- Complex type: CalculationPeriod
- Complex type: CashSettlementTerms
- Complex type: ChangeContractSize
- Complex type: ConstituentWeight
- Complex type: Correlation
- Complex type: CreditEvents
- Complex type: DeprecatedVariance
- Complex type: DividendPeriodDividend
- Complex type: EquityDerivativeBase
- Complex type: EquityForward
- Complex type: EquityOptionTermination
- Complex type: EquityPremium
- Complex type: FailureToPay
- Complex type: FixedPaymentAmount
- Complex type: Fra
- Complex type: FxAverageRateOption
- Complex type: FxOptionLeg
- Complex type: FxOptionPremium
- Complex type: GrossCashflow
- Complex type: InitialPayment
- Complex type: OptionBaseExtended
- Complex type: PartialTerminationAmount
- Complex type: Payment
- Complex type: PaymentCalculationPeriod
- Complex type: PaymentDetail
- Complex type: PaymentMatching
- Complex type: PendingPayment
- Complex type: PeriodicPayment
- Complex type: PrePayment
- Complex type: PrincipalExchange
- Complex type: PrincipalExchangeAmount
- Complex type: ProtectionTerms

- Complex type: QuotablePayment
- Complex type: RestructuringEvent
- Complex type: ReturnSwapNotional
- Complex type: SimplePayment
- Complex type: SinglePayment
- Complex type: SplitSettlement
- Complex type: Stub
- Complex type: TermDeposit
- Complex type: Variance

2.103.4 Derived Types:

- Complex type: CalculationAmount
- Complex type: FxOptionPayout

2.103.5 Figure:

2.103.6 Schema Fragment:

```
<xsd:complexType name="Money">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining a currency amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="currency" type="Currency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The currency in which an amount is denominated.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="amount" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The monetary quantity in currency units.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.104 MultipleExercise

2.104.1 Description:

A type defining multiple exercises. As defining in the 2000 ISDA Definitions, Section 12.4. Multiple Exercise, the buyer of the option has the right to exercise all or less than all the unexercised notional amount of the underlying swap on one or more days in the exercise period, but on any such day may not exercise less than the minimum notional amount or more than the maximum notional amount, and if an integral multiple amount is specified, the notional exercised must be equal to or, be an integral multiple of, the integral multiple amount.

2.104.2 Contents:

notionalReference (zero or more occurrences; of the type ScheduleReference) A pointer style reference to the associated notional schedule defined elsewhere in the document. This element has been made optional as part of its integration in the OptionBaseExtended, because not required for the options on securities.

integralMultipleAmount (zero or one occurrence; of the type xsd:decimal) A notional amount which restricts the amount of notional that can be exercised when partial exercise or multiple exercise is applicable. The integral multiple amount defines a lower limit of notional that can be exercised and also defines a unit multiple of notional that can be exercised, i.e. only integer multiples of this amount can be exercised.

Either

minimumNotionalAmount (exactly one occurrence; of the type xsd:decimal) The minimum notional amount that can be exercised on a given exercise date. See multipleExercise.

Or

minimumNumberOfOptions (exactly one occurrence; of the type xsd:nonNegativeInteger)

Either

maximumNotionalAmount (exactly one occurrence; of the type xsd:decimal) The maximum notional amount that can be exercised on a given exercise date.

Or

maximumNumberOfOptions (exactly one occurrence; of the type xsd:nonNegativeInteger)

2.104.3 Used by:

- Complex type: AmericanExercise
- Complex type: BermudaExercise

2.104.4 Derived Types:

2.104.5 Figure:

2.104.6 Schema Fragment:

```
<xsd:complexType name="MultipleExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining multiple exercises. As defining in the 2000 ISDA
      Definitions, Section 12.4. Multiple Exercise, the buyer of the
      option has the right to exercise all or less than all the
      unexercised notional amount of the underlying swap on one or more
      days in the exercise period, but on any such day may not exercise
      less than the minimum notional amount or more than the maximum
      notional amount, and if an integral multiple amount is specified,
      the notional exercised must be equal to or, be an integral
      multiple of, the integral multiple amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PartialExercise.model"/>
    <xsd:choice minOccurs="0">
      <xsd:element name="maximumNotionalAmount" type="xsd:decimal">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The maximum notional amount that can be exercised on a
            given exercise date.
          </xsd:documentation>
```

```
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="maximumNumberOfOptions" type="xsd:nonNegativeInteger">
            <xsd:annotation>
                <xsd:documentation>
                    The maximum number of options that can be exercised on a
                    given exercise date. If the number is not specified, it
                    means that the maximum number of options corresponds to the
                    remaining unexercised options.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:choice>
  </xsd:sequence>
</xsd:complexType>
```

2.105 MutuallyAgreedClearinghouse

2.105.1 Description:

2.105.2 Contents:

Either

partyReference (exactly one occurrence; of the type PartyReference) A reference to the party structure for the clearinghouse

Or

identifier (exactly one occurrence; of the type OrganizationIdentifier) A string that identifies the clearinghouse

2.105.3 Used by:

- Complex type: CollateralizedCashPriceMethod
- Complex type: SwaptionPhysicalSettlement

2.105.4 Derived Types:

2.105.5 Figure:

2.105.6 Schema Fragment:

```
<xsd:complexType name="MutuallyAgreedClearinghouse">
  <xsd:choice>
    <xsd:element name="partyReference" type="PartyReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party structure for the clearinghouse
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="identifier" type="OrganizationIdentifier">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A string that identifies the clearinghouse
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
```

2.106 NotionalAmountReference

2.106.1 Description:

A reference to the notional amount.

2.106.2 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.

2.106.3 Used by:

• Complex type: OptionBaseExtended
• Complex type: PercentageRule

2.106.4 Derived Types:

2.106.5 Figure:

2.106.6 Schema Fragment:

```
<xsd:complexType name="NotionalAmountReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A reference to the notional amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.107 ObservationOffset

2.107.1 Description:

A type that allows an offset specified in business days to be applied for an observation shift, lookback, or lockout provision.

2.107.2 Contents:

offsetDays (zero or one occurrence; of the type xsd:nonNegativeInteger) The number of business days before the base date that the observations are to be shifted. If this element is omitted, the number of offset days will be as specified in the 2021 ISDA Definitions, which is typically 5.

2.107.3 Used by:

- Complex type: ObservationShiftParameters
- Complex type: CalculationParameters

2.107.4 Derived Types:

- Complex type: ObservationShiftParameters

2.107.5 Figure:

2.107.6 Schema Fragment:

```xsd
<xsd:complexType name="ObservationOffset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that allows an offset specified in business days to be
      applied for an observation shift, lookback, or lockout provision.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="offsetDays" type="xsd:nonNegativeInteger" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The number of business days before the base date that the
          observations are to be shifted. If this element is omitted,
          the number of offset days will be as specified in the 2021
          ISDA Definitions, which is typically 5.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.108 ObservationShiftParameters

2.108.1 Description:

Specifies parameters specific to the observation shift method of compounding/averaging.

2.108.2 Contents:

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

- A type that allows an offset specified in business days to be applied for an observation shift, lookback, or lockout provision.

observationPeriodDates (exactly one occurrence; of the type ObservationPeriodDatesEnum) Specifies how the observation period is to be determined relative to the basic calculation period. Options include "standard" (observation period aligns with the calculation period except for any shifts/lookbacks/lockouts, i.e. it is set in arrears), "InAdvance" (observation period is based on the prior or deemed prior calculation period plus any shifts), or "FixingDate" (observation period is based on a fixing date defined the the FpML resetDates structure; this is used only for fallback rate definitions that reference existing resetDates structures.).

additionalBusinessDays (zero or one occurrence; of the type BusinessCentersOrReference) Any additional business centers that are applicable to the observation shift calculation, in addition to the regular "applicableBusinessDays".

2.108.3 Used by:

- Complex type: CalculationParameters

2.108.4 Derived Types:

2.108.5 Figure:

2.108.6 Schema Fragment:

```
<xsd:complexType name="ObservationShiftParameters">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Specifies parameters specific to the observation shift method of
      compounding/averaging.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="ObservationOffset">
      <xsd:sequence>
        <xsd:element name="observationPeriodDates" type="ObservationPeriodDatesEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Specifies how the observation period is to be determined
              relative to the basic calculation period. Options include
              "standard" (observation period aligns with the
              calculation period except for any
              shifts/lookbacks/lockouts, i.e. it is set in arrears),
              "InAdvance" (observation period is based on the prior or
              deemed prior calculation period plus any shifts), or
              "FixingDate" (observation period is based on a fixing
              date defined the the FpML resetDates structure; this is
              used only for fallback rate definitions that reference
              existing resetDates structures.).
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="additionalBusinessDays" minOccurs="0" type="BusinessCentersOrReferen
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Any additional business centers that are applicable to
              the observation shift calculation, in addition to the
              regular "applicableBusinessDays".
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
```

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

2.109 Offset

2.109.1 Description:

A type defining an offset used in calculating a new date relative to a reference date. Currently, the only offsets defined are expected to be expressed as either calendar or business day offsets.

2.109.2 Contents:

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

- A type defining a time interval or offset, e.g. one day, three months. Used for specifying frequencies at which events occur, the tenor of a floating rate or an offset relative to another date.

dayType (zero or one occurrence; of the type DayTypeEnum) 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.

2.109.3 Used by:

- Complex type: DateOffset
- Complex type: FxFixingDate
- Complex type: RelativeDateOffset
- Complex type: DividendPaymentDate
- Complex type: GracePeriodExtension
- Complex type: InflationRateCalculation
- Complex type: PaymentDates
- Complex type: ResetDates

2.109.4 Derived Types:

- Complex type: DateOffset
- Complex type: FxFixingDate
- Complex type: RelativeDateOffset

2.109.5 Figure:

2.109.6 Schema Fragment:

```
<xsd:complexType name="Offset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining an offset used in calculating a new date relative
      to a reference date. Currently, the only offsets defined are
      expected to be expressed as either calendar or business day
      offsets.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Interval">
      <xsd:sequence>
        <xsd:element name="dayType" type="DayTypeEnum" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
                   </xsd:documentation>
               </xsd:annotation>
           </xsd:element>
       </xsd:sequence>
     </xsd:extension>
   </xsd:complexContent>
</xsd:complexType>
```

2.110 OrganizationIdentifier

2.110.1 Description:

The data type used for a generic, user-defined identifier for an organization, where a full party structure is not desired or required.

2.110.2 Contents:

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

-

2.110.3 Used by:

- Complex type: MutuallyAgreedClearinghouse

2.110.4 Derived Types:

2.110.5 Figure:

2.110.6 Schema Fragment:

```
<xsd:complexType name="OrganizationIdentifier">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The data type used for a generic, user-defined identifier for an
      organization, where a full party structure is not desired or
      required.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="idScheme" type="xsd:anyURI" use="optional">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The identifier scheme used with this generic identifier.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.111 PartialExercise

2.111.1 Description:

A type defining partial exercise. As defined in the 2000 ISDA Definitions, Section 12.3 Partial Exercise, the buyer of the option may exercise all or less than all the notional amount of the underlying swap but may not be less than the minimum notional amount (if specified) and must be an integral multiple of the integral multiple amount if specified.

2.111.2 Contents:

notionalReference (zero or more occurrences; of the type ScheduleReference) A pointer style reference to the associated notional schedule defined elsewhere in the document. This element has been made optional as part of its integration in the OptionBaseExtended, because not required for the options on securities.

integralMultipleAmount (zero or one occurrence; of the type xsd:decimal) A notional amount which restricts the amount of notional that can be exercised when partial exercise or multiple exercise is applicable. The integral multiple amount defines a lower limit of notional that can be exercised and also defines a unit multiple of notional that can be exercised, i.e. only integer multiples of this amount can be exercised.

Either

minimumNotionalAmount (exactly one occurrence; of the type xsd:decimal) The minimum notional amount that can be exercised on a given exercise date. See multipleExercise.

Or

minimumNumberOfOptions (exactly one occurrence; of the type xsd:nonNegativeInteger)

2.111.3 Used by:

- Complex type: EuropeanExercise

2.111.4 Derived Types:

2.111.5 Figure:

2.111.6 Schema Fragment:

```
<xsd:complexType name="PartialExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining partial exercise. As defined in the 2000 ISDA
      Definitions, Section 12.3 Partial Exercise, the buyer of the
      option may exercise all or less than all the notional amount of
      the underlying swap but may not be less than the minimum notional
      amount (if specified) and must be an integral multiple of the
      integral multiple amount if specified.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PartialExercise.model"/>
  </xsd:sequence>
</xsd:complexType>
```

2.112 Party

2.112.1 Description:

A type defining a legal entity or a subdivision of a legal entity.

2.112.2 Contents:

partyId (one or more occurrences; of the type PartyId) A party identifier, e.g. a S.W.I.F.T. bank identifier code (BIC).

partyName (zero or one occurrence; of the type xsd:normalizedString) The name of the party. A free format string. FpML does not define usage rules for this element.

account (zero or more occurrences; of the type Account) Accounts serviced by this party. These are not accounts where this party is beneficiary, but instead where services are provided by this party to the beneficiary party.

2.112.3 Used by:

- Complex type: AcceptQuote
- Complex type: AllocationAmended
- Complex type: AllocationCancelled
- Complex type: AllocationCreated
- Complex type: AmendmentConfirmed
- Complex type: CancelTradeCashflows
- Complex type: CancelTradeConfirmation
- Complex type: CancelTradeMatch
- Complex type: ConfirmationCancelled
- Complex type: ConfirmTrade
- Complex type: ContractCreated
- Complex type: ContractFullTermination
- Complex type: ContractIncreased
- Complex type: ContractNovated
- Complex type: ContractPartialTermination
- Complex type: ContractReferenceMessage
- Complex type: CreditEventNotification
- Complex type: DataDocument
- Complex type: IncreaseConfirmed
- Complex type: ModifyTradeConfirmation
- Complex type: ModifyTradeMatch
- Complex type: PositionReport
- Complex type: PositionsAcknowledged
- Complex type: PositionsAsserted
- Complex type: PositionsMatchResults
- Complex type: QuoteAcceptanceConfirmed
- Complex type: QuoteUpdated
- Complex type: RequestAllocation
- Complex type: RequestAmendmentConfirmation
- Complex type: RequestIncreaseConfirmation
- Complex type: RequestPortfolio
- Complex type: RequestPositionReport
- Complex type: RequestQuote
- Complex type: RequestQuoteResponse
- Complex type: RequestTerminationConfirmation

- Complex type: RequestTradeConfirmation
- Complex type: RequestTradeMatch
- Complex type: RequestTradeStatus
- Complex type: RequestValuationReport
- Complex type: TerminationConfirmed
- Complex type: TradeAffirmation
- Complex type: TradeAffirmed
- Complex type: TradeAlleged
- Complex type: TradeAlreadyMatched
- Complex type: TradeAlreadySubmitted
- Complex type: TradeAmended
- Complex type: TradeAmendmentRequest
- Complex type: TradeAmendmentResponse
- Complex type: TradeCancelled
- Complex type: TradeCashflowsAsserted
- Complex type: TradeCashflowsMatchResult
- Complex type: TradeConfirmed
- Complex type: TradeCreated
- Complex type: TradeErrorResponse
- Complex type: TradeIncreaseRequest
- Complex type: TradeIncreaseResponse
- Complex type: TradeMatched
- Complex type: TradeMismatched
- Complex type: TradeNotFound
- Complex type: TradeStatus
- Complex type: TradeTerminationRequest
- Complex type: TradeTerminationResponse
- Complex type: TradeUnmatched
- Complex type: ValuationReport

2.112.4 Derived Types:

2.112.5 Figure:

2.112.6 Schema Fragment:

```
<xsd:complexType name="Party">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type defining a legal entity or a subdivision of a legal
     entity.
    </xsd:documentation>
    <xsd:documentation xml:lang="en">
     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.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="partyId" type="PartyId" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A party identifier, e.g. a S.W.I.F.T. bank identifier code
         (BIC).
        </xsd:documentation>
      </xsd:annotation>
```

```xml
        </xsd:element>
        <xsd:element name="partyName" type="xsd:normalizedString" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The name of the party. A free format string. FpML does not
              define usage rules for this element.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="account" type="Account" minOccurs="0" maxOccurs="unbounded">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Accounts serviced by this party. These are not accounts where
              this party is beneficiary, but instead where services are
              provided by this party to the beneficiary party.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:attribute name="id" type="xsd:ID" use="required">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The id uniquely identifying the Party within the document.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
    </xsd:complexType>
```

2.113 PartyId

2.113.1 Description:

The data type used for party identifiers.

2.113.2 Contents:

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

-

2.113.3 Used by:

- Complex type: Party

2.113.4 Derived Types:

2.113.5 Figure:

2.113.6 Schema Fragment:

```
<xsd:complexType name="PartyId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The data type used for party identifiers.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="partyIdScheme" type="xsd:anyURI" default="http://www.fpml.org/ext/is
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.114 PartyOrAccountReference

2.114.1 Description:

A reference to a party or an account.

2.114.2 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.

2.114.3 Used by:

2.114.4 Derived Types:

2.114.5 Figure:

2.114.6 Schema Fragment:

```
<xsd:complexType name="PartyOrAccountReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A reference to a party or an account.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.115 PartyOrTradeSideReference

2.115.1 Description:

A reference to a party or tradeSide.

2.115.2 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.

2.115.3 Used by:

• Complex type: GeneralTerms

2.115.4 Derived Types:

2.115.5 Figure:

2.115.6 Schema Fragment:

```
<xsd:complexType name="PartyOrTradeSideReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A reference to a party or tradeSide.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.116 PartyReference

2.116.1 Description:

Reference to a party.

2.116.2 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.

2.116.3 Used by:

- Complex type: Account
- Complex type: AdditionalDisruptionEvents
- Complex type: Beneficiary
- Complex type: CalculationAgent
- Complex type: ContractIdentifier
- Complex type: ContractInformation
- Complex type: CorrespondentInformation
- Complex type: CreditEventNoticeDocument
- Complex type: DividendConditions
- Complex type: EquityExerciseValuationSettlement
- Complex type: ExerciseNotice
- Complex type: FxLeg
- Complex type: IntermediaryInformation
- Complex type: MutuallyAgreedClearinghouse
- Complex type: NotifyingParty
- Complex type: PartyMessageInformation
- Complex type: PartyPortfolioName
- Complex type: PartyRole
- Complex type: PartySelector
- Complex type: PartyTradeInformation
- Complex type: PortfolioDefinition
- Complex type: ReportingRoles
- Complex type: ReturnSwapEarlyTermination
- Complex type: SettlementInstruction
- Complex type: TermDeposit
- Complex type: Trade
- Complex type: TradeIdentifier
- Complex type: ValuationSet

2.116.4 Derived Types:

2.116.5 Figure:

2.116.6 Schema Fragment:

```
<xsd:complexType name="PartyReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a party.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
```

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

2.117 Payment

2.117.1 Description:

A type for defining payments

2.117.2 Contents:

payerPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party responsible for making the payments defined by this structure.

receiverPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party that receives the payments corresponding to this structure.

paymentAmount (exactly one occurrence; of the type Money) The currency amount of the payment.

paymentDate (zero or one occurrence; of the type AdjustableDate) The payment date. This date is subject to adjustment in accordance with any applicable business day convention.

adjustedPaymentDate (zero or one occurrence; of the type IdentifiedDate) 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).

paymentType (zero or one occurrence; of the type PaymentType) A classification of the type of fee or additional payment, e.g. brokerage, upfront fee etc. FpML does not define domain values for this element.

settlementInformation (zero or one occurrence; of the type SettlementInformation) The information required to settle a currency payment that results from a trade.

discountFactor (zero or one occurrence; of the type xsd:decimal) The value representing the discount factor used to calculate the present value of the cash flow.

presentValueAmount (zero or one occurrence; of the type Money) The amount representing the present value of the forecast payment.

2.117.3 Used by:

- Complex type: Amendment
- Complex type: BulletPayment
- Complex type: CapFloor
- Complex type: ChangeContract
- Complex type: Contract
- Complex type: ContractNovation
- Complex type: FxLeg
- Complex type: Increase
- Complex type: Novation
- Complex type: Swap
- Complex type: Swaption
- Complex type: TermDeposit
- Complex type: Termination
- Complex type: Trade

2.117.4 Derived Types:

2.117.5 Figure:

2.117.6 Schema Fragment:

```
<xsd:complexType name="Payment">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type for defining payments
    </xsd:documentation>
  </xsd:annotation>
```

```xml
<xsd:sequence>
  <xsd:group ref="PayerReceiver.model"/>
  <xsd:element name="paymentAmount" type="Money">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The currency amount of the payment.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
  <xsd:element name="paymentDate" type="AdjustableDate" minOccurs="0">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The payment date. This date is subject to adjustment in
        accordance with any applicable business day convention.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
  <xsd:element name="adjustedPaymentDate" type="IdentifiedDate" minOccurs="0">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        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).
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
  <xsd:element name="paymentType" type="PaymentType" minOccurs="0">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A classification of the type of fee or additional payment,
        e.g. brokerage, upfront fee etc. FpML does not define domain
        values for this element.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
  <xsd:element name="settlementInformation" type="SettlementInformation" minOccurs="0">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The information required to settle a currency payment that
        results from a trade.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
  <xsd:element name="discountFactor" type="xsd:decimal" minOccurs="0">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The value representing the discount factor used to calculate
        the present value of the cash flow.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
  <xsd:element name="presentValueAmount" type="Money" minOccurs="0">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The amount representing the present value of the forecast
        payment.
      </xsd:documentation>
    </xsd:annotation>
  </xsd:element>
</xsd:sequence>
<xsd:attribute name="href" type="xsd:IDREF" ecore:reference="PricingStructure">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Can be used to reference the yield curve used to estimate the
      discount factor
    </xsd:documentation>
  </xsd:annotation>
</xsd:attribute>
</xsd:complexType>
```

2.118 PaymentCurrency

2.118.1 Description:

A type describing the currency in which the payment relating to the leg amount (equity amount or interest amount) or the dividend will be denominated.

2.118.2 Contents:

Either

currency (exactly one occurrence; of the type Currency) The currency in which an amount is denominated.

Or

determinationMethod (exactly one occurrence; of the type DeterminationMethod) Specifies the method according to which an amount or a date is determined.

2.118.3 Used by:

- Complex type: DividendConditions
- Complex type: LegAmount

2.118.4 Derived Types:

2.118.5 Figure:

2.118.6 Schema Fragment:

```
<xsd:complexType name="PaymentCurrency" fpml-annotation:deprecated="true" fpml-annotation:depre
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing the currency in which the payment relating to
      the leg amount (equity amount or interest amount) or the dividend
      will be denominated.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice minOccurs="0">
    <xsd:element name="currency" type="Currency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The currency in which an amount is denominated.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="determinationMethod" type="DeterminationMethod">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the method according to which an amount or a date
          is determined.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
  <xsd:attribute name="id" type="xsd:ID"/>
  <xsd:attribute name="href" type="xsd:IDREF"/>
</xsd:complexType>
```

2.119 PaymentType

2.119.1 Description:

2.119.2 Contents:

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

•
2.119.3 Used by:

- Complex type: ClassifiedPayment
- Complex type: Payment
- Complex type: ReturnSwapAdditionalPayment

2.119.4 Derived Types:

2.119.5 Figure:

2.119.6 Schema Fragment:

```
<xsd:complexType name="PaymentType">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="paymentTypeScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.120 PeriodicDates

2.120.1 Description:

2.120.2 Contents:

calculationStartDate (exactly one occurrence; of the type AdjustableOrRelativeDate)

calculationEndDate (zero or one occurrence; of the type AdjustableOrRelativeDate)

calculationPeriodFrequency (exactly one occurrence; of the type CalculationPeriodFrequency) The frequency at which calculation period end dates occur with the regular part of the calculation period schedule and their roll date convention.

calculationPeriodDatesAdjustments (exactly one occurrence; of the type BusinessDayAdjustments) 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.

2.120.3 Used by:

- Complex type: AdjustableRelativeOrPeriodicDates

2.120.4 Derived Types:

2.120.5 Figure:

2.120.6 Schema Fragment:

```
<xsd:complexType name="PeriodicDates">
  <xsd:sequence>
    <xsd:element name="calculationStartDate" type="AdjustableOrRelativeDate"/>
    <xsd:element name="calculationEndDate" type="AdjustableOrRelativeDate" minOccurs="0"/>
    <xsd:element name="calculationPeriodFrequency" type="CalculationPeriodFrequency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The frequency at which calculation period end dates occur
          with the regular part of the calculation period schedule and
          their roll date convention.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="calculationPeriodDatesAdjustments" type="BusinessDayAdjustments">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.121 PricingStructure

2.121.1 Description:

An abstract pricing structure base type. Used as a base for structures such as yield curves and volatility matrices..

2.121.2 Contents:

name (zero or one occurrence; of the type xsd:normalizedString) The name of the structure, e.g "USDLIBOR-3M EOD Curve".

currency (zero or one occurrence; of the type Currency) The currency that the structure is expressed in (this is relevant mostly for the Interes Rates asset class).

2.121.3 Used by:

- Element: pricingStructure
- Complex type: CreditCurve
- Complex type: FxCurve
- Complex type: VolatilityRepresentation
- Complex type: YieldCurve

2.121.4 Derived Types:

- Complex type: CreditCurve
- Complex type: FxCurve
- Complex type: VolatilityRepresentation
- Complex type: YieldCurve

2.121.5 Figure:

2.121.6 Schema Fragment:

```
<xsd:complexType name="PricingStructure" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An abstract pricing structure base type. Used as a base for
      structures such as yield curves and volatility matrices..
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="name" type="xsd:normalizedString" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The name of the structure, e.g "USDLIBOR-3M EOD Curve".
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="currency" type="Currency" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The currency that the structure is expressed in (this is
          relevant mostly for the Interes Rates asset class).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.122 PricingStructureReference

2.122.1 Description:

Reference to a pricing structure or any derived components (i.e. yield curve).

2.122.2 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.

2.122.3 Used by:

- Complex type: DefaultProbabilityCurve
- Complex type: FxCurveValuation
- Complex type: PricingInputReplacement
- Complex type: PricingMethod
- Complex type: SensitivitySetDefinition
- Complex type: WeightedPartialDerivative

2.122.4 Derived Types:

2.122.5 Figure:

2.122.6 Schema Fragment:

```
<xsd:complexType name="PricingStructureReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a pricing structure or any derived components (i.e.
      yield curve).
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="PricingStruct
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.123 PrincipalExchanges

2.123.1 Description:

A type defining which principal exchanges occur for the stream.

2.123.2 Contents:

initialExchange (exactly one occurrence; of the type xsd:boolean) A true/false flag to indicate whether there is an initial exchange of principal on the effective date.

finalExchange (exactly one occurrence; of the type xsd:boolean) A true/false flag to indicate whether there is a final exchange of principal on the termination date.

intermediateExchange (exactly one occurrence; of the type xsd:boolean) A true/false flag to indicate whether there are intermediate or interim exchanges of principal during the term of the swap.

2.123.3 Used by:

- Complex type: InterestRateStream
- Complex type: PrincipalExchangeFeatures

2.123.4 Derived Types:

2.123.5 Figure:

2.123.6 Schema Fragment:

```
<xsd:complexType name="PrincipalExchanges">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining which principal exchanges occur for the stream.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="initialExchange" type="xsd:boolean">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A true/false flag to indicate whether there is an initial
          exchange of principal on the effective date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="finalExchange" type="xsd:boolean">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A true/false flag to indicate whether there is a final
          exchange of principal on the termination date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="intermediateExchange" type="xsd:boolean">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A true/false flag to indicate whether there are intermediate
          or interim exchanges of principal during the term of the
          swap.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID" use="optional"/>
</xsd:complexType>
```

2.124 Product

2.124.1 Description:

The base type which all FpML products extend.

2.124.2 Contents:

productType (zero or more occurrences; of the type ProductType) A classification of the type of product. FpML defines a simple product categorization using a coding scheme.

productId (zero or more occurrences; of the type ProductId) 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.

2.124.3 Used by:

- Element: product
- Complex type: BulletPayment
- Complex type: CapFloor
- Complex type: CreditDefaultSwap
- Complex type: DividendSwapTransactionSupplement
- Complex type: EquityDerivativeBase
- Complex type: Fra
- Complex type: FxAverageRateOption
- Complex type: FxDigitalOption
- Complex type: FxLeg
- Complex type: FxOptionLeg
- Complex type: FxSwap
- Complex type: NettedSwapBase
- Complex type: OptionBase
- Complex type: ReturnSwapBase
- Complex type: Strategy
- Complex type: Swap
- Complex type: Swaption
- Complex type: TermDeposit

2.124.4 Derived Types:

- Complex type: BulletPayment
- Complex type: CapFloor
- Complex type: CreditDefaultSwap
- Complex type: DividendSwapTransactionSupplement
- Complex type: EquityDerivativeBase
- Complex type: Fra
- Complex type: FxAverageRateOption
- Complex type: FxDigitalOption
- Complex type: FxLeg
- Complex type: FxOptionLeg
- Complex type: FxSwap
- Complex type: NettedSwapBase
- Complex type: OptionBase
- Complex type: ReturnSwapBase
- Complex type: Strategy
- Complex type: Swap

- Complex type: Swaption
- Complex type: TermDeposit

2.124.5 Figure:

2.124.6 Schema Fragment:

```
<xsd:complexType name="Product" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The base type which all FpML products extend.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:group ref="Product.model"/>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.125 ProductId

2.125.1 Description:

2.125.2 Contents:

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

-
2.125.3 Used by:

2.125.4 Derived Types:

2.125.5 Figure:

2.125.6 Schema Fragment:

```
<xsd:complexType name="ProductId">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="productIdScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.126 ProductReference

2.126.1 Description:

Reference to a full FpML product.

2.126.2 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.

2.126.3 Used by:

- Complex type: Strategy
- Complex type: UnderlyingAsset

2.126.4 Derived Types:

2.126.5 Figure:

2.126.6 Schema Fragment:

```
<xsd:complexType name="ProductReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a full FpML product.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Product"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.127 ProductType

2.127.1 Description:

2.127.2 Contents:

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

-

2.127.3 Used by:

- Complex type: TradeDetails

2.127.4 Derived Types:

2.127.5 Figure:

2.127.6 Schema Fragment:

```
<xsd:complexType name="ProductType">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="productTypeScheme" type="xsd:anyURI" default="http://www.fpml.org/co
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.128 QuotedCurrencyPair

2.128.1 Description:

A type that describes the composition of a rate that has been quoted or is to be quoted. This includes the two currencies and the quotation relationship between the two currencies and is used as a building block throughout the FX specification.

2.128.2 Contents:

currency1 (exactly one occurrence; of the type Currency) The first currency specified when a pair of currencies is to be evaluated.

currency2 (exactly one occurrence; of the type Currency) The second currency specified when a pair of currencies is to be evaluated.

quoteBasis (exactly one occurrence; of the type QuoteBasisEnum) The method by which the exchange rate is quoted.

2.128.3 Used by:

- Complex type: FxAmericanTrigger
- Complex type: FxBarrier
- Complex type: FxDigitalOption
- Complex type: FxEuropeanTrigger
- Complex type: FxFixing
- Complex type: FxRate
- Complex type: FxRateAsset
- Complex type: QuotableFxRate

2.128.4 Derived Types:

2.128.5 Figure:

2.128.6 Schema Fragment:

```
<xsd:complexType name="QuotedCurrencyPair">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that describes the composition of a rate that has been
      quoted or is to be quoted. This includes the two currencies and
      the quotation relationship between the two currencies and is used
      as a building block throughout the FX specification.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="currency1" type="Currency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The first currency specified when a pair of currencies is to
          be evaluated.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="currency2" type="Currency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The second currency specified when a pair of currencies is to
          be evaluated.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="quoteBasis" type="QuoteBasisEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The method by which the exchange rate is quoted.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
```

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

2.129 Rate

2.129.1 Description:

The abstract base class for all types which define interest rate streams.

2.129.2 Contents:

2.129.3 Used by:

- Element: rateCalculation
- Complex type: FloatingRate
- Complex type: InflationRateCalculationBase
- Complex type: StubFloatingRate

2.129.4 Derived Types:

- Complex type: FloatingRate
- Complex type: InflationRateCalculationBase
- Complex type: StubFloatingRate

2.129.5 Figure:

2.129.6 Schema Fragment:

```
<xsd:complexType name="Rate" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The abstract base class for all types which define interest rate
      streams.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.130 RateObservation

2.130.1 Description:

A type defining parameters associated with an individual observation or fixing. This type forms part of the cashflow representation of a stream.

2.130.2 Contents:

resetDate (zero or one occurrence; of the type xsd:date) The reset date.

adjustedFixingDate (zero or one occurrence; of the type xsd:date) The adjusted fixing date, i.e. the actual date the rate is observed. The date should already be adjusted for any applicable business day convention.

observedRate (zero or one occurrence; of the type xsd:decimal) 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.

treatedRate (zero or one occurrence; of the type xsd:decimal) The observed rate after any required rate treatment is applied. A treated rate of 5% would be represented as 0.05.

observationWeight (exactly one occurrence; of the type xsd:positiveInteger) 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 reset date is established for a single calculation period.

rateReference (zero or one occurrence; of the type RateReference) A pointer style reference to a floating rate component defined as part of a stub calculation period amount component. It is only required when it is necessary to distinguish two rate observations for the same fixing date which could occur when linear interpolation of two different rates occurs for a stub calculation period.

forecastRate (zero or one occurrence; of the type xsd:decimal) The value representing the forecast rate used to calculate the forecast future value of the accrual period.A value of 1% should be represented as 0.01

treatedForecastRate (zero or one occurrence; of the type xsd:decimal) The value representing the forecast rate after applying rate treatment rules. A value of 1% should be represented as 0.01

fallback (zero or one occurrence; of the type FallbackRateObservation) Observation Parameters for IBOR fallback rates. These allow recording information about how the fallback rate was

2.130.3 Used by:

- Complex type: FloatingRateDefinition

2.130.4 Derived Types:

2.130.5 Figure:

2.130.6 Schema Fragment:

```
<xsd:complexType name="RateObservation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining parameters associated with an individual
      observation or fixing. This type forms part of the cashflow
      representation of a stream.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="resetDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The reset date.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="adjustedFixingDate" type="xsd:date" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The adjusted fixing date, i.e. the actual date the rate is
          observed. The date should already be adjusted for any
          applicable business day convention.
        </xsd:documentation>
```

```xml
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="observedRate" type="xsd:decimal" minOccurs="0">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                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.
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="treatedRate" type="xsd:decimal" minOccurs="0">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The observed rate after any required rate treatment is
                applied. A treated rate of 5% would be represented as 0.05.
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="observationWeight" type="xsd:positiveInteger">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                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 reset date is established
                for a single calculation period.
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="rateReference" type="RateReference" minOccurs="0">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A pointer style reference to a floating rate component
                defined as part of a stub calculation period amount
                component. It is only required when it is necessary to
                distinguish two rate observations for the same fixing date
                which could occur when linear interpolation of two different
                rates occurs for a stub calculation period.
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="forecastRate" type="xsd:decimal" minOccurs="0">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The value representing the forecast rate used to calculate
                the forecast future value of the accrual period.A value of 1%
                should be represented as 0.01
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="treatedForecastRate" type="xsd:decimal" minOccurs="0">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The value representing the forecast rate after applying rate
                treatment rules. A value of 1% should be represented as 0.01
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
      <xsd:element name="fallback" type="FallbackRateObservation" minOccurs="0">
          <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Observation Parameters for IBOR fallback rates. These allow
                recording information about how the fallback rate was
              </xsd:documentation>
          </xsd:annotation>
      </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.131 RateReference

2.131.1 Description:

Reference to any rate (floating, inflation) derived from the abstract Rate component.

2.131.2 Contents:

2.131.3 Used by:

* Complex type: RateObservation

2.131.4 Derived Types:

2.131.5 Figure:

2.131.6 Schema Fragment:

```
<xsd:complexType name="RateReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to any rate (floating, inflation) derived from the
      abstract Rate component.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Rate"/>
</xsd:complexType>
```

2.132 RateSourcePage

2.132.1 Description:

2.132.2 Contents:

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

•

2.132.3 Used by:

- Complex type: InflationRateCalculation
- Complex type: InformationSource

2.132.4 Derived Types:

2.132.5 Figure:

2.132.6 Schema Fragment:

```
<xsd:complexType name="RateSourcePage">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="rateSourcePageScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.133 Reference

2.133.1 Description:

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

2.133.2 Contents:

2.133.3 Used by:

- Complex type: AccountReference
- Complex type: AmountReference
- Complex type: AnyAssetReference
- Complex type: AssetOrTermPointOrPricingStructureReference
- Complex type: AssetReference
- Complex type: BusinessCentersReference
- Complex type: BusinessDayAdjustmentsReference
- Complex type: CalculationPeriodDatesReference
- Complex type: CashflowFixingReference
- Complex type: CashflowObservationReference
- Complex type: CreditEventsReference
- Complex type: DateReference
- Complex type: FixedRateReference
- Complex type: IdentifiedCurrencyReference
- Complex type: InterestCalculationReference
- Complex type: InterestLegCalculationPeriodDatesReference
- Complex type: InterestRateStreamReference
- Complex type: LegalEntityReference
- Complex type: MarketReference
- Complex type: NotionalAmountReference
- Complex type: PartyOrAccountReference
- Complex type: PartyOrTradeSideReference
- Complex type: PartyReference
- Complex type: PaymentDatesReference
- Complex type: PricingDataPointCoordinateReference
- Complex type: PricingParameterDerivativeReference
- Complex type: PricingStructureReference
- Complex type: ProductReference
- Complex type: ProtectionTermsReference
- Complex type: RelevantUnderlyingDateReference
- Complex type: ResetDatesReference
- Complex type: ScheduleReference
- Complex type: SensitivitySetReference
- Complex type: SettlementTermsReference
- Complex type: SpreadScheduleReference
- Complex type: StepReference
- Complex type: TradeUnderlyerReference
- Complex type: ValuationReference
- Complex type: ValuationScenarioReference

2.133.4 Derived Types:

- Complex type: AccountReference
- Complex type: AmountReference
- Complex type: AnyAssetReference
- Complex type: AssetOrTermPointOrPricingStructureReference
- Complex type: AssetReference
- Complex type: BusinessCentersReference
- Complex type: BusinessDayAdjustmentsReference
- Complex type: CalculationPeriodDatesReference
- Complex type: CashflowFixingReference
- Complex type: CashflowObservationReference
- Complex type: CreditEventsReference
- Complex type: DateReference
- Complex type: FixedRateReference
- Complex type: IdentifiedCurrencyReference
- Complex type: InterestCalculationReference
- Complex type: InterestLegCalculationPeriodDatesReference
- Complex type: InterestRateStreamReference
- Complex type: LegalEntityReference
- Complex type: MarketReference
- Complex type: NotionalAmountReference
- Complex type: PartyOrAccountReference
- Complex type: PartyOrTradeSideReference
- Complex type: PartyReference
- Complex type: PaymentDatesReference
- Complex type: PricingDataPointCoordinateReference
- Complex type: PricingParameterDerivativeReference
- Complex type: PricingStructureReference
- Complex type: ProductReference
- Complex type: ProtectionTermsReference
- Complex type: RelevantUnderlyingDateReference
- Complex type: ResetDatesReference
- Complex type: ScheduleReference
- Complex type: SensitivitySetReference
- Complex type: SettlementTermsReference
- Complex type: SpreadScheduleReference
- Complex type: StepReference
- Complex type: TradeUnderlyerReference
- Complex type: ValuationReference
- Complex type: ValuationScenarioReference

2.133.5 Figure:

2.133.6 Schema Fragment:

```
<xsd:complexType name="Reference" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The abstract base class for all types which define intra-document
      pointers.
    </xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
```

2.134 ReferenceAmount

2.134.1 Description:

Specifies the reference amount using a scheme.

2.134.2 Contents:

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

-

2.134.3 Used by:

- Complex type: LegAmount

2.134.4 Derived Types:

2.134.5 Figure:

2.134.6 Schema Fragment:

```
<xsd:complexType name="ReferenceAmount">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Specifies the reference amount using a scheme.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="referenceAmountScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.135 ReferenceBank

2.135.1 Description:

A type to describe an institution (party) identified by means of a coding scheme and an optional name.

2.135.2 Contents:

referenceBankId (exactly one occurrence; of the type ReferenceBankId) An institution (party) identifier, e.g. a bank identifier code (BIC).

referenceBankName (zero or one occurrence; of the type xsd:string) The name of the institution (party). A free format string. FpML does not define usage rules for the element.

2.135.3 Used by:

- Complex type: CashSettlementReferenceBanks

2.135.4 Derived Types:

2.135.5 Figure:

2.135.6 Schema Fragment:

```
<xsd:complexType name="ReferenceBank">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type to describe an institution (party) identified by means of
      a coding scheme and an optional name.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="referenceBankId" type="ReferenceBankId">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An institution (party) identifier, e.g. a bank identifier
          code (BIC).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="referenceBankName" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The name of the institution (party). A free format string.
          FpML does not define usage rules for the element.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.136 ReferenceBankId

2.136.1 Description:

2.136.2 Contents:

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

-
2.136.3 Used by:

- Complex type: ReferenceBank

2.136.4 Derived Types:

2.136.5 Figure:

2.136.6 Schema Fragment:

```
<xsd:complexType name="ReferenceBankId">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="referenceBankIdScheme" type="xsd:anyURI"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.137 RelativeDateOffset

2.137.1 Description:

A type defining a date (referred to as the derived date) as a relative offset from another date (referred to as the anchor date). If the anchor date is itself an adjustable date then the offset is assumed to be calculated from the adjusted anchor date. A number of different scenarios can be supported, namely; 1) the derived date may simply be a number of calendar periods (days, weeks, months or years) preceding or following the anchor date; 2) the unadjusted derived date may be a number of calendar periods(days, weeks, months or years) preceding or following the anchor date with the resulting unadjusted derived date subject to adjustment in accordance with a specified business day convention, i.e. the derived date must fall on a good business day; 3) the derived date may be a number of business days preceding or following the anchor date. Note that the businessDayConvention specifies any required adjustment to the unadjusted derived date. A negative or positive value in the periodMultiplier indicates whether the unadjusted derived precedes or follows the anchor date. The businessDayConvention should contain a value NONE if the day type element contains a value of Business (since specifying a negative or positive business days offset would already guarantee that the derived date would fall on a good business day in the specified business centers).

2.137.2 Contents:

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

- A type defining an offset used in calculating a new date relative to a reference date. Currently, the only offsets defined are expected to be expressed as either calendar or business day offsets.

businessDayConvention (exactly one occurrence; of the type BusinessDayConventionEnum) The convention for adjusting a date if it would otherwise fall on a day that is not a business day.

Either

businessCentersReference (exactly one occurrence; of the type BusinessCentersReference) 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.

Or

businessCenters (exactly one occurrence; of the type BusinessCenters)

dateRelativeTo (exactly one occurrence; of the type DateReference) Specifies the anchor as an href attribute. The href attribute value is a pointer style reference to the element or component elsewhere in the document where the anchor date is defined.

2.137.3 Used by:

- Complex type: AdjustedRelativeDateOffset
- Complex type: RelativeDates
- Complex type: AdjustableDatesOrRelativeDateOffset
- Complex type: AdjustableOrRelativeDate
- Complex type: CalculationPeriodDates
- Complex type: CashSettlement
- Complex type: CashSettlementPaymentDate
- Complex type: Composite
- Complex type: ExerciseFee
- Complex type: ExerciseFeeSchedule
- Complex type: FixedPaymentAmount
- Complex type: Fra
- Complex type: FxLinkedNotionalSchedule
- Complex type: InterestLegResetDates
- Complex type: ResetDates

2.137.4 Derived Types:

- Complex type: AdjustedRelativeDateOffset

- Complex type: RelativeDates

2.137.5 Figure:

2.137.6 Schema Fragment:

```
<xsd:complexType name="RelativeDateOffset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a date (referred to as the derived date) as a
      relative offset from another date (referred to as the anchor
      date). If the anchor date is itself an adjustable date then the
      offset is assumed to be calculated from the adjusted anchor date.
      A number of different scenarios can be supported, namely; 1) the
      derived date may simply be a number of calendar periods (days,
      weeks, months or years) preceding or following the anchor date;
      2) the unadjusted derived date may be a number of calendar
      periods(days, weeks, months or years) preceding or following the
      anchor date with the resulting unadjusted derived date subject to
      adjustment in accordance with a specified business day
      convention, i.e. the derived date must fall on a good business
      day; 3) the derived date may be a number of business days
      preceding or following the anchor date. Note that the
      businessDayConvention specifies any required adjustment to the
      unadjusted derived date. A negative or positive value in the
      periodMultiplier indicates whether the unadjusted derived
      precedes or follows the anchor date. The businessDayConvention
      should contain a value NONE if the day type element contains a
      value of Business (since specifying a negative or positive
      business days offset would already guarantee that the derived
      date would fall on a good business day in the specified business
      centers).
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Offset">
      <xsd:sequence>
        <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The convention for adjusting a date if it would otherwise
              fall on a day that is not a business day.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
        <xsd:element name="dateRelativeTo" type="DateReference">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Specifies the anchor as an href attribute. The href
              attribute value is a pointer style reference to the
              element or component elsewhere in the document where the
              anchor date is defined.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.138 RelativeDates

2.138.1 Description:

A type describing a set of dates defined as relative to another set of dates.

2.138.2 Contents:

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

- A type defining a date (referred to as the derived date) as a relative offset from another date (referred to as the anchor date). If the anchor date is itself an adjustable date then the offset is assumed to be calculated from the adjusted anchor date. A number of different scenarios can be supported, namely; 1) the derived date may simply be a number of calendar periods (days, weeks, months or years) preceding or following the anchor date; 2) the unadjusted derived date may be a number of calendar periods(days, weeks, months or years) preceding or following the anchor date with the resulting unadjusted derived date subject to adjustment in accordance with a specified business day convention, i.e. the derived date must fall on a good business day; 3) the derived date may be a number of business days preceding or following the anchor date. Note that the businessDayConvention specifies any required adjustment to the unadjusted derived date. A negative or positive value in the periodMultiplier indicates whether the unadjusted derived precedes or follows the anchor date. The businessDayConvention should contain a value NONE if the day type element contains a value of Business (since specifying a negative or positive business days offset would already guarantee that the derived date would fall on a good business day in the specified business centers).

periodSkip (zero or one occurrence; of the type xsd:positiveInteger) The number of periods in the referenced date schedule that are between each date in the relative date schedule. Thus a skip of 2 would mean that dates are relative to every second date in the referenced schedule. If present this should have a value greater than 1.

scheduleBounds (zero or one occurrence; of the type DateRange) The first and last dates of a schedule. This can be used to restrict the range of values in a reference series of dates.

2.138.3 Used by:

- Complex type: AdjustableOrRelativeDates

2.138.4 Derived Types:

2.138.5 Figure:

2.138.6 Schema Fragment:

```
<xsd:complexType name="RelativeDates">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing a set of dates defined as relative to another
      set of dates.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="RelativeDateOffset">
      <xsd:sequence>
        <xsd:element name="periodSkip" type="xsd:positiveInteger" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The number of periods in the referenced date schedule
              that are between each date in the relative date schedule.
              Thus a skip of 2 would mean that dates are relative to
              every second date in the referenced schedule. If present
              this should have a value greater than 1.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
```

```xsd
            <xsd:element name="scheduleBounds" type="DateRange" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The first and last dates of a schedule. This can be used
                  to restrict the range of values in a reference series of
                  dates.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:extension>
      </xsd:complexContent>
</xsd:complexType>
```

2.139 RelativeDateSequence

2.139.1 Description:

A type describing a date when this date is defined in reference to another date through one or several date offsets.

2.139.2 Contents:

dateRelativeTo (exactly one occurrence; of the type DateReference) Specifies the anchor as an href attribute. The href attribute value is a pointer style reference to the element or component elsewhere in the document where the anchor date is defined.

dateOffset (one or more occurrences; of the type DateOffset)

Either

businessCentersReference (exactly one occurrence; of the type BusinessCentersReference) 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.

Or

businessCenters (exactly one occurrence; of the type BusinessCenters)

2.139.3 Used by:

- Complex type: AdjustableDateOrRelativeDateSequence
- Complex type: AdjustableRelativeOrPeriodicDates

2.139.4 Derived Types:

2.139.5 Figure:

2.139.6 Schema Fragment:

```
<xsd:complexType name="RelativeDateSequence">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing a date when this date is defined in reference
      to another date through one or several date offsets.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="dateRelativeTo" type="DateReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the anchor as an href attribute. The href attribute
          value is a pointer style reference to the element or
          component elsewhere in the document where the anchor date is
          defined.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="dateOffset" type="DateOffset" maxOccurs="unbounded"/>
    <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
  </xsd:sequence>
</xsd:complexType>
```

2.140 RequiredIdentifierDate

2.140.1 Description:

A date with a required identifier which can be referenced elsewhere.

2.140.2 Contents:

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

●

2.140.3 Used by:

● Complex type: Fra

2.140.4 Derived Types:

2.140.5 Figure:

2.140.6 Schema Fragment:

```
<xsd:complexType name="RequiredIdentifierDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A date with a required identifier which can be referenced
      elsewhere.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:date">
      <xsd:attribute name="id" type="xsd:ID" use="required"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.141 ResetFrequency

2.141.1 Description:

A type defining the reset frequency. In the case of a weekly reset, also specifies the day of the week that the reset occurs. If the reset frequency is greater than the calculation period frequency the this implies that more or more reset dates is established for each calculation period and some form of rate averaginhg is applicable. The specific averaging method of calculation is specified in FloatingRateCalculation.

2.141.2 Contents:

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

* A type defining a time interval or offset, e.g. one day, three months. Used for specifying frequencies at which events occur, the tenor of a floating rate or an offset relative to another date.

weeklyRollConvention (zero or one occurrence; of the type WeeklyRollConventionEnum) The day of the week on which a weekly reset date occurs. This element must be included if the reset frequency is defined as weekly and not otherwise.

2.141.3 Used by:

* Complex type: InterestLegResetDates
* Complex type: ResetDates

2.141.4 Derived Types:

2.141.5 Figure:

2.141.6 Schema Fragment:

```
<xsd:complexType name="ResetFrequency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining the reset frequency. In the case of a weekly
      reset, also specifies the day of the week that the reset occurs.
      If the reset frequency is greater than the calculation period
      frequency the this implies that more or more reset dates is
      established for each calculation period and some form of rate
      averaginhg is applicable. The specific averaging method of
      calculation is specified in FloatingRateCalculation.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Interval">
      <xsd:sequence>
        <xsd:element name="weeklyRollConvention" type="WeeklyRollConventionEnum" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The day of the week on which a weekly reset date occurs.
              This element must be included if the reset frequency is
              defined as weekly and not otherwise.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.142 Rounding

2.142.1 Description:

A type defining a rounding direction and precision to be used in the rounding of a rate.

2.142.2 Contents:

roundingDirection (exactly one occurrence; of the type RoundingDirectionEnum) Specifies the rounding direction.

precision (exactly one occurrence; of the type xsd:nonNegativeInteger) 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).

2.142.3 Used by:

2.142.4 Derived Types:

2.142.5 Figure:

2.142.6 Schema Fragment:

```
<xsd:complexType name="Rounding">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a rounding direction and precision to be used in
      the rounding of a rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="roundingDirection" type="RoundingDirectionEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the rounding direction.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="precision" type="xsd:nonNegativeInteger">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.143 Routing

2.143.1 Description:

A type that provides three alternative ways of identifying a party involved in the routing of a payment. The identification may use payment system identifiers only; actual name, address and other reference information; or a combination of both.

2.143.2 Contents:

Either

routingIds (exactly one occurrence; of the type RoutingIds) A set of unique identifiers for a party, eachone identifying the party within a payment system. The assumption is that each party will not have more than one identifier within the same payment system.

Or

routingExplicitDetails (exactly one occurrence; of the type RoutingExplicitDetails) A set of details that is used to identify a party involved in the routing of a payment when the party does not have a code that identifies it within one of the recognized payment systems.

Or

routingIdsAndExplicitDetails (exactly one occurrence; of the type RoutingIdsAndExplicitDetails) A combination of coded payment system identifiers and details for physical addressing for a party involved in the routing of a payment.

2.143.3 Used by:

* Complex type: SplitSettlement

2.143.4 Derived Types:

2.143.5 Figure:

2.143.6 Schema Fragment:

```
<xsd:complexType name="Routing">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that provides three alternative ways of identifying a
      party involved in the routing of a payment. The identification
      may use payment system identifiers only; actual name, address and
      other reference information; or a combination of both.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:group ref="RoutingIdentification.model"/>
</xsd:complexType>
```

2.144 RoutingExplicitDetails

2.144.1 Description:

A type that models name, address and supplementary textual information for the purposes of identifying a party involved in the routing of a payment.

2.144.2 Contents:

routingName (exactly one occurrence; of the type xsd:string) A real name that is used to identify a party involved in the routing of a payment.

routingAddress (zero or one occurrence; of the type Address) A physical postal address via which a payment can be routed.

routingAccountNumber (zero or one occurrence; of the type xsd:string) An account number via which a payment can be routed.

routingReferenceText (zero or more occurrences; of the type xsd:string) A piece of free-format text used to assist the identification of a party involved in the routing of a payment.

2.144.3 Used by:

2.144.4 Derived Types:

2.144.5 Figure:

2.144.6 Schema Fragment:

```
<xsd:complexType name="RoutingExplicitDetails">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that models name, address and supplementary textual
      information for the purposes of identifying a party involved in
      the routing of a payment.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:group ref="RoutingExplicitDetails.model"/>
</xsd:complexType>
```

2.145 RoutingId

2.145.1 Description:

2.145.2 Contents:

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

•
2.145.3 Used by:

• Complex type: RoutingIds

2.145.4 Derived Types:

2.145.5 Figure:

2.145.6 Schema Fragment:

```
<xsd:complexType name="RoutingId">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="routingIdCodeScheme" type="xsd:anyURI" default="http://www.fpml.org/
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.146 RoutingIds

2.146.1 Description:

A type that provides for identifying a party involved in the routing of a payment by means of one or more standard identification codes. For example, both a SWIFT BIC code and a national bank identifier may be required.

2.146.2 Contents:

routingId (one or more occurrences; of the type RoutingId) A unique identifier for party that is a participant in a recognized payment system.

2.146.3 Used by:

* Complex type: RoutingIdsAndExplicitDetails

2.146.4 Derived Types:

2.146.5 Figure:

2.146.6 Schema Fragment:

```
<xsd:complexType name="RoutingIds">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that provides for identifying a party involved in the
      routing of a payment by means of one or more standard
      identification codes. For example, both a SWIFT BIC code and a
      national bank identifier may be required.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="routingId" type="RoutingId" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A unique identifier for party that is a participant in a
          recognized payment system.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.147 RoutingIdsAndExplicitDetails

2.147.1 Description:

A type that provides a combination of payment system identification codes with physical postal address details, for the purposes of identifying a party involved in the routing of a payment.

2.147.2 Contents:

routingIds (one or more occurrences; of the type RoutingIds) A set of unique identifiers for a party, eachone identifying the party within a payment system. The assumption is that each party will not have more than one identifier within the same payment system.

routingName (exactly one occurrence; of the type xsd:string) A real name that is used to identify a party involved in the routing of a payment.

routingAddress (zero or one occurrence; of the type Address) A physical postal address via which a payment can be routed.

routingAccountNumber (zero or one occurrence; of the type xsd:string) An account number via which a payment can be routed.

routingReferenceText (zero or more occurrences; of the type xsd:string) A piece of free-format text used to assist the identification of a party involved in the routing of a payment.

2.147.3 Used by:

2.147.4 Derived Types:

2.147.5 Figure:

2.147.6 Schema Fragment:

```
<xsd:complexType name="RoutingIdsAndExplicitDetails">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that provides a combination of payment system
      identification codes with physical postal address details, for
      the purposes of identifying a party involved in the routing of a
      payment.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="routingIds" type="RoutingIds" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A set of unique identifiers for a party, eachone identifying
          the party within a payment system. The assumption is that
          each party will not have more than one identifier within the
          same payment system.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:group ref="RoutingExplicitDetails.model"/>
  </xsd:sequence>
</xsd:complexType>
```

2.148 Schedule

2.148.1 Description:

A type defining a schedule of rates or amounts in terms of an initial value and then a series of step date and value pairs. On each step date the rate or amount changes to the new step value. The series of step date and value pairs are optional. If not specified, this implies that the initial value remains unchanged over time.

2.148.2 Contents:

initialValue (exactly one occurrence; of the type xsd:decimal) The initial rate or amount, as the case may be. An initial rate of 5% would be represented as 0.05.

step (zero or more occurrences; of the type Step) The 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.

2.148.3 Used by:

- Complex type: AmountSchedule
- Complex type: SpreadSchedule
- Complex type: StrikeSchedule
- Complex type: Calculation
- Complex type: ExerciseFeeSchedule
- Complex type: TradeUnderlyer

2.148.4 Derived Types:

- Complex type: AmountSchedule
- Complex type: SpreadSchedule
- Complex type: StrikeSchedule

2.148.5 Figure:

2.148.6 Schema Fragment:

```
<xsd:complexType name="Schedule">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a schedule of rates or amounts in terms of an
      initial value and then a series of step date and value pairs. On
      each step date the rate or amount changes to the new step value.
      The series of step date and value pairs are optional. If not
      specified, this implies that the initial value remains unchanged
      over time.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="initialValue" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The initial rate or amount, as the case may be. An initial
          rate of 5% would be represented as 0.05.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="step" type="Step" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The 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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
```

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

2.149 ScheduleReference

2.149.1 Description:

Reference to a schedule of rates or amounts.

2.149.2 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.

2.149.3 Used by:

- Complex type: ExerciseFee
- Complex type: ExerciseFeeSchedule
- Complex type: FxLinkedNotionalSchedule

2.149.4 Derived Types:

2.149.5 Figure:

2.149.6 Schema Fragment:

```
<xsd:complexType name="ScheduleReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a schedule of rates or amounts.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Schedule"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.150 SettlementInformation

2.150.1 Description:

A type that represents the choice of methods for settling a potential currency payment resulting from a trade: by means of a standard settlement instruction, by netting it out with other payments, or with an explicit settlement instruction.

2.150.2 Contents:

Either

standardSettlementStyle (exactly one occurrence; of the type StandardSettlementStyleEnum) An optional element used to describe how a trade will settle. This defines a scheme and is used for identifying trades that are identified as settling standard and/or flagged for settlement netting.

Or

settlementInstruction (exactly one occurrence; of the type SettlementInstruction) An explicit specification of how a currency payment is to be made, when the payment is not netted and the route is other than the recipient's standard settlement instruction.

2.150.3 Used by:

- Complex type: FxOptionPayout
- Complex type: FxOptionPremium
- Complex type: Payment

2.150.4 Derived Types:

2.150.5 Figure:

2.150.6 Schema Fragment:

```
<xsd:complexType name="SettlementInformation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that represents the choice of methods for settling a
      potential currency payment resulting from a trade: by means of a
      standard settlement instruction, by netting it out with other
      payments, or with an explicit settlement instruction.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="standardSettlementStyle" type="StandardSettlementStyleEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An optional element used to describe how a trade will settle.
          This defines a scheme and is used for identifying trades that
          are identified as settling standard and/or flagged for
          settlement netting.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="settlementInstruction" type="SettlementInstruction">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An explicit specification of how a currency payment is to be
          made, when the payment is not netted and the route is other
          than the recipient's standard settlement instruction.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
```

2.151 SettlementInstruction

2.151.1 Description:

A type that models a complete instruction for settling a currency payment, including the settlement method to be used, the correspondent bank, any intermediary banks and the ultimate beneficary.

2.151.2 Contents:

settlementMethod (zero or one occurrence; of the type SettlementMethod) The mechanism by which settlement is to be made. The scheme of domain values will include standard mechanisms such as CLS, Fedwire, Chips ABA, Chips UID, SWIFT, CHAPS and DDA.

correspondentInformation (zero or one occurrence; of the type CorrespondentInformation) The information required to identify the correspondent bank that will make delivery of the funds on the paying bank's behalf in the country where the payment is to be made

intermediaryInformation (zero or more occurrences; of the type IntermediaryInformation) Information to identify an intermediary through which payment will be made by the correspondent bank to the ultimate beneficiary of the funds.

beneficiaryBank (zero or one occurrence; of the type Beneficiary) The bank that acts for the ultimate beneficiary of the funds in receiving payments.

beneficiary (exactly one occurrence; of the type Beneficiary) The ultimate beneficiary of the funds. The beneficiary can be identified either by an account at the beneficiaryBank (qv) or by explicit routingInformation. This element provides for the latter.

depositoryPartyReference (zero or one occurrence; of the type PartyReference) Reference to the depository of the settlement.

splitSettlement (zero or more occurrences; of the type SplitSettlement) The set of individual payments that are to be made when a currency payment settling a trade needs to be split between a number of ultimate beneficiaries. Each split payment may need to have its own routing information.

2.151.3 Used by:

- Complex type: SettlementInformation

2.151.4 Derived Types:

2.151.5 Figure:

2.151.6 Schema Fragment:

```
<xsd:complexType name="SettlementInstruction">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that models a complete instruction for settling a currency
      payment, including the settlement method to be used, the
      correspondent bank, any intermediary banks and the ultimate
      beneficary.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="settlementMethod" type="SettlementMethod" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The mechanism by which settlement is to be made. The scheme
          of domain values will include standard mechanisms such as
          CLS, Fedwire, Chips ABA, Chips UID, SWIFT, CHAPS and DDA.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="correspondentInformation" type="CorrespondentInformation" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The information required to identify the correspondent bank
          that will make delivery of the funds on the paying bank's
          behalf in the country where the payment is to be made
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
```

```
            <xsd:element name="intermediaryInformation" type="IntermediaryInformation" minOccurs="0" ma
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  Information to identify an intermediary through which payment
                  will be made by the correspondent bank to the ultimate
                  beneficiary of the funds.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="beneficiaryBank" type="Beneficiary" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The bank that acts for the ultimate beneficiary of the funds
                  in receiving payments.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="beneficiary" type="Beneficiary">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The ultimate beneficiary of the funds. The beneficiary can be
                  identified either by an account at the beneficiaryBank (qv)
                  or by explicit routingInformation. This element provides for
                  the latter.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="depositoryPartyReference" type="PartyReference" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  Reference to the depository of the settlement.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="splitSettlement" type="SplitSettlement" minOccurs="0" maxOccurs="unbound
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The set of individual payments that are to be made when a
                  currency payment settling a trade needs to be split between a
                  number of ultimate beneficiaries. Each split payment may need
                  to have its own routing information.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:complexType>
```

2.152 SettlementMethod

2.152.1 Description:

2.152.2 Contents:

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

-
2.152.3 Used by:

- Complex type: SettlementInstruction

2.152.4 Derived Types:

2.152.5 Figure:

2.152.6 Schema Fragment:

```
<xsd:complexType name="SettlementMethod">
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="settlementMethodScheme" type="xsd:anyURI" default="http://www.fpml.c
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.153 SettlementPriceSource

2.153.1 Description:

The source from which the settlement price is to be obtained, e.g. a Reuters page, Prezzo di Riferimento, etc.

2.153.2 Contents:

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

•

2.153.3 Used by:

• Complex type: EquityExerciseValuationSettlement

2.153.4 Derived Types:

2.153.5 Figure:

2.153.6 Schema Fragment:

```
<xsd:complexType name="SettlementPriceSource">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The source from which the settlement price is to be obtained,
      e.g. a Reuters page, Prezzo di Riferimento, etc.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="settlementPriceSourceScheme" type="xsd:anyURI" default="http://www.f
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.154 SettlementRateSource

2.154.1 Description:

A type describing the method for obtaining a settlement rate.

2.154.2 Contents:

Either

informationSource (exactly one occurrence; of the type InformationSource) The information source where a published or displayed market rate will be obtained, e.g. Telerate Page 3750.

Or

cashSettlementReferenceBanks (exactly one occurrence; of the type CashSettlementReferenceBanks) 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.

2.154.3 Used by:

- Complex type: CollateralizedCashPriceMethod
- Complex type: SwaptionPhysicalSettlement
- Complex type: YieldCurveMethod

2.154.4 Derived Types:

2.154.5 Figure:

2.154.6 Schema Fragment:

```
<xsd:complexType name="SettlementRateSource">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing the method for obtaining a settlement rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="informationSource" type="InformationSource">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The information source where a published or displayed market
          rate will be obtained, e.g. Telerate Page 3750.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="cashSettlementReferenceBanks" type="CashSettlementReferenceBanks">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
```

2.155 SharedAmericanExercise

2.155.1 Description:

TBA

2.155.2 Contents:

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

- The abstract base class for all types which define way in which options may be exercised.

commencementDate (exactly one occurrence; of the type AdjustableOrRelativeDate) The first day of the exercise period for an American style option.

expirationDate (exactly one occurrence; of the type AdjustableOrRelativeDate) 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.

latestExerciseTime (zero or one occurrence; of the type BusinessCenterTime) 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.

2.155.3 Used by:

- Complex type: EquityAmericanExercise
- Complex type: EquityBermudaExercise

2.155.4 Derived Types:

- Complex type: EquityAmericanExercise
- Complex type: EquityBermudaExercise

2.155.5 Figure:

2.155.6 Schema Fragment:

```
<xsd:complexType name="SharedAmericanExercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      TBA
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Exercise">
      <xsd:sequence>
        <xsd:element name="commencementDate" type="AdjustableOrRelativeDate">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The first day of the exercise period for an American
              style option.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="expirationDate" type="AdjustableOrRelativeDate">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="latestExerciseTime" type="BusinessCenterTime" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
```

```
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:extension>
      </xsd:complexContent>
</xsd:complexType>
```

2.156 SimplePayment

2.156.1 Description:

A complex type to specified payments in a simpler fashion than the Payment type. This construct should be used from the version 4.3 onwards.

2.156.2 Contents:

payerPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party responsible for making the payments defined by this structure.

receiverPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party that receives the payments corresponding to this structure.

paymentAmount (exactly one occurrence; of the type Money)

paymentDate (exactly one occurrence; of the type AdjustableOrRelativeAndAdjustedDate) The payment date. This date is subject to adjustment in accordance with any applicable business day convention.

2.156.3 Used by:

- Complex type: ClassifiedPayment
- Complex type: Premium
- Complex type: CancelableProvision

2.156.4 Derived Types:

- Complex type: ClassifiedPayment
- Complex type: Premium

2.156.5 Figure:

2.156.6 Schema Fragment:

```
<xsd:complexType name="SimplePayment">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A complex type to specified payments in a simpler fashion than
      the Payment type. This construct should be used from the version
      4.3 onwards.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PayerReceiver.model"/>
    <xsd:element name="paymentAmount" type="Money"/>
    <xsd:element name="paymentDate" type="AdjustableOrRelativeAndAdjustedDate">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The payment date. This date is subject to adjustment in
          accordance with any applicable business day convention.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.157 SplitSettlement

2.157.1 Description:

A type that supports the division of a gross settlement amount into a number of split settlements, each requiring its own settlement instruction.

2.157.2 Contents:

splitSettlementAmount (exactly one occurrence; of the type Money) One of the monetary amounts in a split settlement payment.

beneficiaryBank (zero or one occurrence; of the type Routing) The bank that acts for the ultimate beneficiary of the funds in receiving payments.

beneficiary (exactly one occurrence; of the type Routing) The ultimate beneficiary of the funds. The beneficiary can be identified either by an account at the beneficiaryBank (qv) or by explicit routingInformation. This element provides for the latter.

2.157.3 Used by:

• Complex type: SettlementInstruction

2.157.4 Derived Types:

2.157.5 Figure:

2.157.6 Schema Fragment:

```
<xsd:complexType name="SplitSettlement">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that supports the division of a gross settlement amount
      into a number of split settlements, each requiring its own
      settlement instruction.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="splitSettlementAmount" type="Money">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          One of the monetary amounts in a split settlement payment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="beneficiaryBank" type="Routing" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The bank that acts for the ultimate beneficiary of the funds
          in receiving payments.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="beneficiary" type="Routing">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The ultimate beneficiary of the funds. The beneficiary can be
          identified either by an account at the beneficiaryBank (qv)
          or by explicit routingInformation. This element provides for
          the latter.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.158 SpreadSchedule

2.158.1 Description:

Adds an optional spread type element to the Schedule to identify a long or short spread value.

2.158.2 Contents:

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

- A type defining a schedule of rates or amounts in terms of an initial value and then a series of step date and value pairs. On each step date the rate or amount changes to the new step value. The series of step date and value pairs are optional. If not specified, this implies that the initial value remains unchanged over time.

type (zero or one occurrence; of the type SpreadScheduleType)

2.158.3 Used by:

2.158.4 Derived Types:

2.158.5 Figure:

2.158.6 Schema Fragment:

```
<xsd:complexType name="SpreadSchedule">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Adds an optional spread type element to the Schedule to identify
      a long or short spread value.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Schedule">
      <xsd:sequence>
        <xsd:element name="type" type="SpreadScheduleType" minOccurs="0"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.159 SpreadScheduleReference

2.159.1 Description:

Provides a reference to a spread schedule.

2.159.2 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.

2.159.3 Used by:

- Complex type: BasketConstituent

2.159.4 Derived Types:

2.159.5 Figure:

2.159.6 Schema Fragment:

```xsd
<xsd:complexType name="SpreadScheduleReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Provides a reference to a spread schedule.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="SpreadSchedul
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.160 SpreadScheduleType

2.160.1 Description:

Defines a Spread Type Scheme to identify a long or short spread value.

2.160.2 Contents:

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

-

2.160.3 Used by:

- Complex type: SpreadSchedule

2.160.4 Derived Types:

2.160.5 Figure:

2.160.6 Schema Fragment:

```
<xsd:complexType name="SpreadScheduleType">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Defines a Spread Type Scheme to identify a long or short spread
      value.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
      <xsd:attribute name="spreadScheduleTypeScheme" type="xsd:anyURI" default="http://www.fpml
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
```

2.161 Step

2.161.1 Description:

A type defining a step date and step value pair. This step definitions are used to define varying rate or amount schedules, e.g. a notional amortization or a step-up coupon schedule.

2.161.2 Contents:

stepDate (exactly one occurrence; of the type xsd:date) The date on which the associated stepValue becomes effective. This day may be subject to adjustment in accordance with a business day convention.

stepValue (exactly one occurrence; of the type xsd:decimal) The rate or amount which becomes effective on the associated stepDate. A rate of 5% would be represented as 0.05.

2.161.3 Used by:

- Complex type: CalculationAmount
- Complex type: Schedule

2.161.4 Derived Types:

2.161.5 Figure:

2.161.6 Schema Fragment:

```
<xsd:complexType name="Step">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a step date and step value pair. This step
      definitions are used to define varying rate or amount schedules,
      e.g. a notional amortization or a step-up coupon schedule.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="stepDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date on which the associated stepValue becomes effective.
          This day may be subject to adjustment in accordance with a
          business day convention.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="stepValue" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The rate or amount which becomes effective on the associated
          stepDate. A rate of 5% would be represented as 0.05.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.162 StreetAddress

2.162.1 Description:

A type that describes the set of street and building number information that identifies a postal address within a city.

2.162.2 Contents:

streetLine (one or more occurrences; of the type xsd:string) An individual line of street and building number information, forming part of a postal address.

2.162.3 Used by:

- Complex type: Address

2.162.4 Derived Types:

2.162.5 Figure:

2.162.6 Schema Fragment:

```
<xsd:complexType name="StreetAddress">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that describes the set of street and building number
      information that identifies a postal address within a city.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="streetLine" type="xsd:string" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An individual line of street and building number information,
          forming part of a postal address.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
```

2.163 Strike

2.163.1 Description:

A type describing a single cap or floor rate.

2.163.2 Contents:

strikeRate (exactly one occurrence; of the type xsd:decimal) The rate for a cap or floor.
buyer (zero or one occurrence; of the type IdentifiedPayerReceiver) The buyer of the option
seller (zero or one occurrence; of the type IdentifiedPayerReceiver) The party that has sold.

2.163.3 Used by:

- Complex type: CashflowFixing
- Complex type: FloatingRateDefinition

2.163.4 Derived Types:

2.163.5 Figure:

2.163.6 Schema Fragment:

```xsd
<xsd:complexType name="Strike">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing a single cap or floor rate.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="strikeRate" type="xsd:decimal">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The rate for a cap or floor.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="buyer" type="IdentifiedPayerReceiver" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The buyer of the option
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="seller" type="IdentifiedPayerReceiver" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The party that has sold.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
```

2.164 StrikeSchedule

2.164.1 Description:

A type describing a schedule of cap or floor rates.

2.164.2 Contents:

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

- A type defining a schedule of rates or amounts in terms of an initial value and then a series of step date and value pairs. On each step date the rate or amount changes to the new step value. The series of step date and value pairs are optional. If not specified, this implies that the initial value remains unchanged over time.

buyer (zero or one occurrence; of the type IdentifiedPayerReceiver) The buyer of the option
seller (zero or one occurrence; of the type IdentifiedPayerReceiver) The party that has sold.

2.164.3 Used by:

2.164.4 Derived Types:

2.164.5 Figure:

2.164.6 Schema Fragment:

```
<xsd:complexType name="StrikeSchedule">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type describing a schedule of cap or floor rates.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Schedule">
      <xsd:sequence>
        <xsd:element name="buyer" type="IdentifiedPayerReceiver" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The buyer of the option
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="seller" type="IdentifiedPayerReceiver" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The party that has sold.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
```

2.165 Stub

2.165.1 Description:

A type defining how a stub calculation period 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 rate tenors many 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.

2.165.2 Contents:

Either

floatingRate (one or more occurrences; of the type StubFloatingRate) The rates to be applied to the initial or final stub may be the linear interpolation of two different rates. While the majority of the time, the rate indices will be the same as that specified in the stream and only the tenor itself will be different, it is possible to specift two different rates. For example, a 2 month stub period may use the linear interpolation of a 1 month and 3 month rate. The different rates would be specified in this component. Note that a maximum of two rates can be specified. If a stub period uses the same floating rate index, including tenor, as the regular calculation periods then this should not be specified again within this component, i.e. the stub calculation period amount component may not need to be specified even if there is an initial or final stub period. If a stub period uses a different floating rate index compared to the regular calculation periods then this should be specified within this component. If specified here, they are likely to have id attributes, allowing them to be referenced from within the cashflows component.

Or

stubRate (exactly one occurrence; of the type xsd:decimal) An actual rate to apply for the initial or final stub period may have been agreed between the principal parties (in a similar way to how an initial rate may have been agreed for the first regular period). If an actual stub rate has been agreed then it would be included in this component. It will be a per annum rate, expressed as a decimal. A stub rate of 5% would be represented as 0.05.

Or

stubAmount (exactly one occurrence; of the type Money) An actual amount to apply for the initial or final stub period may have been agreed between th two parties. If an actual stub amount has been agreed then it would be included in this component.

stubStartDate (zero or one occurrence; of the type AdjustableOrRelativeDate) Start date of stub period. This was created to support use of the InterestRateStream within the Equity Derivative sphere, and this element is not expected to be produced in the representation of Interest Rate products.

stubEndDate (zero or one occurrence; of the type AdjustableOrRelativeDate) End date of stub period. This was created to support use of the InterestRateStream within the Equity Derivative sphere, and this element is not expected to be produced in the representation of Interest Rate products.

2.165.3 Used by:

- Complex type: StubCalculationPeriod
- Complex type: StubCalculationPeriodAmount

2.165.4 Derived Types:

2.165.5 Figure:

2.165.6 Schema Fragment:

```
<xsd:complexType name="Stub">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining how a stub calculation period 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 rate tenors many 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
```

```xml
              known stub rate or stub amount may be specified.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:choice>
          <xsd:element name="floatingRate" type="StubFloatingRate" maxOccurs="unbounded">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The rates to be applied to the initial or final stub may be
                the linear interpolation of two different rates. While the
                majority of the time, the rate indices will be the same as
                that specified in the stream and only the tenor itself will
                be different, it is possible to specift two different
                rates. For example, a 2 month stub period may use the
                linear interpolation of a 1 month and 3 month rate. The
                different rates would be specified in this component. Note
                that a maximum of two rates can be specified. If a stub
                period uses the same floating rate index, including tenor,
                as the regular calculation periods then this should not be
                specified again within this component, i.e. the stub
                calculation period amount component may not need to be
                specified even if there is an initial or final stub period.
                If a stub period uses a different floating rate index
                compared to the regular calculation periods then this
                should be specified within this component. If specified
                here, they are likely to have id attributes, allowing them
                to be referenced from within the cashflows component.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="stubRate" type="xsd:decimal">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An actual rate to apply for the initial or final stub
                period may have been agreed between the principal parties
                (in a similar way to how an initial rate may have been
                agreed for the first regular period). If an actual stub
                rate has been agreed then it would be included in this
                component. It will be a per annum rate, expressed as a
                decimal. A stub rate of 5% would be represented as 0.05.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="stubAmount" type="Money">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An actual amount to apply for the initial or final stub
                period may have been agreed between th two parties. If an
                actual stub amount has been agreed then it would be
                included in this component.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:choice>
        <xsd:element name="stubStartDate" type="AdjustableOrRelativeDate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Start date of stub period. This was created to support use of
              the InterestRateStream within the Equity Derivative sphere,
              and this element is not expected to be produced in the
              representation of Interest Rate products.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="stubEndDate" type="AdjustableOrRelativeDate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              End date of stub period. This was created to support use of
              the InterestRateStream within the Equity Derivative sphere,
              and this element is not expected to be produced in the
              representation of Interest Rate products.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
</xsd:complexType>
```

2.166 StubFloatingRate

2.166.1 Description:

A type defining a floating rate.

2.166.2 Contents:

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

- The abstract base class for all types which define interest rate streams.

floatingRateIndex (exactly one occurrence; of the type FloatingRateIndex) The ISDA Floating Rate Option, i.e. the name of the floating rate.

indexTenor (zero or one occurrence; of the type Interval) The ISDA Designated Maturity, i.e. the tenor of the floating rate.

fallbackRate (zero or one occurrence; of the type FallbackRate) A fallback rate calculated using an averaging or compounding formula to be used in case of the cessation of the original term rate. This structure is provided to allow an approximate representation to be created for published fallback rates to allow operations such as valuation, accrual calculation, and risk calculation.

floatingRateMultiplierSchedule (zero or one occurrence; of the type Schedule) 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 (zero or more occurrences; of the type SpreadSchedule) 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 (zero or one occurrence; of the type RateTreatmentEnum) 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 (zero or more occurrences; of the type StrikeSchedule) 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 (zero or more occurrences; of the type StrikeSchedule) 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.

2.166.3 Used by:

- Complex type: Stub

2.166.4 Derived Types:

2.166.5 Figure:

2.166.6 Schema Fragment:

```
<xsd:complexType name="StubFloatingRate">
```

```xml
<xsd:annotation>
  <xsd:documentation xml:lang="en">
    A type defining a floating rate.
  </xsd:documentation>
</xsd:annotation>
<xsd:complexContent>
  <xsd:extension base="Rate">
    <xsd:sequence>
      <xsd:group ref="FloatingRateIndex.model"/>
      <xsd:element name="fallbackRate" type="FallbackRate" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A fallback rate calculated using an averaging or
            compounding formula to be used in case of the cessation
            of the original term rate. This structure is provided to
            allow an approximate representation to be created for
            published fallback rates to allow operations such as
            valuation, accrual calculation, and risk calculation.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:group ref="FloatingRate.model" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            DEPRECATED - These conditioning parameters should never
            be applied to the stub rate, rather to the original rate.
            They are retained for backward compatibility with
            previous versions of the standard.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:group>
    </xsd:sequence>
  </xsd:extension>
</xsd:complexContent>
</xsd:complexType>
```

2.167 SwaptionPhysicalSettlement

2.167.1 Description:

2.167.2 Contents:

clearedPhysicalSettlement (exactly one occurrence; of the type xsd:boolean) Specifies whether the swap resulting from physical settlement of the swaption transaction will clear through a clearing house. The meaning of Cleared Physical Settlement is defined in the 2006 ISDA Definitions, Section 15.2 (published in Supplement number 28).

mutuallyAgreedClearinghouse (zero or one occurrence; of the type MutuallyAgreedClearinghouse) This may be used to specify a "mutually-agreed clearinghouse" for settlement.

agreedDiscountRate (zero or one occurrence; of the type BenchmarkRate) This may be used to indicate the discount rate to be used for cash collateral for cash settlement purposes.

settlementRateSource (zero or one occurrence; of the type SettlementRateSource) 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 (zero or one occurrence; of the type QuotationRateTypeEnum) 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)

2.167.3 Used by:

- Complex type: Swaption

2.167.4 Derived Types:

2.167.5 Figure:

2.167.6 Schema Fragment:

```
<xsd:complexType name="SwaptionPhysicalSettlement">
  <xsd:sequence>
    <xsd:element name="clearedPhysicalSettlement" type="xsd:boolean">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies whether the swap resulting from physical settlement
          of the swaption transaction will clear through a clearing
          house. The meaning of Cleared Physical Settlement is defined
          in the 2006 ISDA Definitions, Section 15.2 (published in
          Supplement number 28).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="mutuallyAgreedClearinghouse" type="MutuallyAgreedClearinghouse" minOccur
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          This may be used to specify a "mutually-agreed clearinghouse"
          for settlement.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="agreedDiscountRate" type="BenchmarkRate" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          This may be used to indicate the discount rate to be used for
          cash collateral for cash settlement purposes.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="settlementRateSource" type="SettlementRateSource" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The method for obtaining a settlement rate. This may be from
          some information source (e.g. Reuters) or from a set of
          reference banks.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="quotationRateType" type="QuotationRateTypeEnum" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
```

```
                    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)
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
```

2.168 ValuationScenarioReference

2.168.1 Description:

Reference to a valuation scenario.

2.168.2 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.

2.168.3 Used by:

• Complex type: DerivedValuationScenario
• Complex type: SensitivityDefinition
• Complex type: SensitivitySetDefinition
• Complex type: Valuation
• Complex type: ValuationSet

2.168.4 Derived Types:

2.168.5 Figure:

2.168.6 Schema Fragment:

```
<xsd:complexType name="ValuationScenarioReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Reference to a valuation scenario.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference"/>
  </xsd:complexContent>
</xsd:complexType>
```

3 Global Elements

3.1 americanExercise

3.1.1 Description:

The parameters for defining the exercise period for an American style option together with any rules governing the notional amount of the underlying which can be exercised on any given exercise date and any associated exercise fees.

3.1.2 Contents:

Element americanExercise is defined by the complex type AmericanExercise

3.1.3 Used by:

3.1.4 Substituted by:

3.1.5 Figure:

3.1.6 Schema Fragment:

```
<xsd:element name="americanExercise" type="AmericanExercise" substitutionGroup="exercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The parameters for defining the exercise period for an American
      style option together with any rules governing the notional
      amount of the underlying which can be exercised on any given
      exercise date and any associated exercise fees.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
```

3.2 bermudaExercise

3.2.1 Description:

The parameters for defining the exercise period for a Bermuda style option together with any rules governing the notional amount of the underlying which can be exercised on any given exercise date and any associated exercise fees.

3.2.2 Contents:

Element bermudaExercise is defined by the complex type BermudaExercise

3.2.3 Used by:

3.2.4 Substituted by:

3.2.5 Figure:

3.2.6 Schema Fragment:

```
<xsd:element name="bermudaExercise" type="BermudaExercise" substitutionGroup="exercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The parameters for defining the exercise period for a Bermuda
      style option together with any rules governing the notional
      amount of the underlying which can be exercised on any given
      exercise date and any associated exercise fees.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
```

3.3 europeanExercise

3.3.1 Description:

The parameters for defining the exercise period for a European style option together with any rules governing the notional amount of the underlying which can be exercised on any given exercise date and any associated exercise fees.

3.3.2 Contents:

Element europeanExercise is defined by the complex type EuropeanExercise

3.3.3 Used by:

3.3.4 Substituted by:

3.3.5 Figure:

3.3.6 Schema Fragment:

```
<xsd:element name="europeanExercise" type="EuropeanExercise" substitutionGroup="exercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      The parameters for defining the exercise period for a European
      style option together with any rules governing the notional
      amount of the underlying which can be exercised on any given
      exercise date and any associated exercise fees.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
```

3.4 exercise

3.4.1 Description:

An placeholder for the actual option exercise definitions.

3.4.2 Contents:

Element exercise is defined by the complex type Exercise

3.4.3 Used by:

- Complex type: CancelableProvision
- Complex type: ExtendibleProvision
- Complex type: OptionalEarlyTermination
- Complex type: OptionBaseExtended
- Complex type: Swaption

3.4.4 Substituted by:

- Element: americanExercise
- Element: bermudaExercise
- Element: europeanExercise

3.4.5 Figure:

3.4.6 Schema Fragment:

```
<xsd:element name="exercise" type="Exercise" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An placeholder for the actual option exercise definitions.
    </xsd:documentation>
  </xsd:annotation>
</xsd:element>
```

3.5 product

3.5.1 Description:

An abstract element used as a place holder for the substituting product elements.

3.5.2 Contents:

Element product is defined by the complex type Product

3.5.3 Used by:

- Complex type: Contract
- Complex type: RequestQuoteResponse
- Complex type: Strategy
- Complex type: Trade

3.5.4 Substituted by:

- Element: bondOption
- Element: brokerEquityOption
- Element: bulletPayment
- Element: capFloor
- Element: correlationSwap
- Element: creditDefaultSwap
- Element: creditDefaultSwapOption
- Element: dividendSwapTransactionSupplement
- Element: equityForward
- Element: equityOption
- Element: equityOptionTransactionSupplement
- Element: equitySwap
- Element: equitySwapTransactionSupplement
- Element: fra
- Element: fxAverageRateOption
- Element: fxBarrierOption
- Element: fxDigitalOption
- Element: fxSimpleOption
- Element: fxSingleLeg
- Element: fxSwap
- Element: returnSwap
- Element: strategy
- Element: swap
- Element: swaption
- Element: termDeposit
- Element: varianceSwap

3.5.5 Figure:

3.5.6 Schema Fragment:

```
<xsd:element name="product" type="Product" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      An abstract element used as a place holder for the substituting
      product elements.
    </xsd:documentation>
  </xsd:annotation>
```

```
</xsd:element>
```

4 Groups

4.1 BusinessCentersOrReference.model

4.1.1 Description:

4.1.2 Contents:

Either

businessCentersReference (exactly one occurrence; of the type BusinessCentersReference) 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.

Or

businessCenters (exactly one occurrence; of the type BusinessCenters)

4.1.3 Used by:

- Complex type: BusinessCentersOrReference
- Complex type: BusinessDateRange
- Complex type: BusinessDayAdjustments
- Complex type: FxFixingDate
- Complex type: RelativeDateOffset
- Complex type: RelativeDateSequence

4.1.4 Figure:

4.1.5 Schema Fragment:

```
<xsd:group name="BusinessCentersOrReference.model">
  <xsd:choice>
    <xsd:element name="businessCentersReference" type="BusinessCentersReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="businessCenters" type="BusinessCenters"/>
  </xsd:choice>
</xsd:group>
```

4.2 BuyerSeller.model

4.2.1 Description:

4.2.2 Contents:

buyerPartyReference (exactly one occurrence; of the type PartyOrTradeSideReference) 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 (exactly one occurrence; of the type PartyOrTradeSideReference) 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.

4.2.3 Used by:

- Complex type: CancelableProvision
- Complex type: EquityDerivativeBase
- Complex type: ExtendibleProvision
- Complex type: Fra
- Complex type: FxAverageRateOption
- Complex type: FxDigitalOption
- Complex type: FxOptionLeg
- Complex type: OptionBase
- Complex type: ReturnSwapBase
- Complex type: SinglePartyOption
- Complex type: Swaption

4.2.4 Figure:

4.2.5 Schema Fragment:

```
<xsd:group name="BuyerSeller.model">
  <xsd:sequence>
    <xsd:element name="buyerPartyReference" type="PartyOrTradeSideReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="sellerPartyReference" type="PartyOrTradeSideReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.3 FloatingRate.model

4.3.1 Description:

Elements representing the rate treatment and conditioning parameters that can be applied to a floating rate, such as spreads, multipliers, rate treatments, rate rounding, etc.

4.3.2 Contents:

floatingRateMultiplierSchedule (zero or one occurrence; of the type Schedule) 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 (zero or more occurrences; of the type SpreadSchedule) 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 (zero or one occurrence; of the type RateTreatmentEnum) 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 (zero or more occurrences; of the type StrikeSchedule) 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 (zero or more occurrences; of the type StrikeSchedule) 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.

4.3.3 Used by:

- Complex type: FloatingRate
- Complex type: InflationRateCalculationBase
- Complex type: StubFloatingRate

4.3.4 Figure:

4.3.5 Schema Fragment:

```
<xsd:group name="FloatingRate.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Elements representing the rate treatment and conditioning
      parameters that can be applied to a floating rate, such as
      spreads, multipliers, rate treatments, rate rounding, etc.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="floatingRateMultiplierSchedule" type="Schedule" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="spreadSchedule" type="SpreadSchedule" minOccurs="0" maxOccurs="unbounded
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="rateTreatment" type="RateTreatmentEnum" minOccurs="0">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="capRateSchedule" type="StrikeSchedule" minOccurs="0" maxOccurs="unbounde
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="floorRateSchedule" type="StrikeSchedule" minOccurs="0" maxOccurs="unboun
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:group>
```

4.4 FloatingRateCalculation.model

4.4.1 Description:

Elements representing the daily calculated rate and fallback rate definitions.

4.4.2 Contents:

initialRate (zero or one occurrence; of the type xsd:decimal) 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 (zero or one occurrence; of the type Rounding) The rounding convention to apply to the final rate used in determination of a calculation period amount.

averagingMethod (zero or one occurrence; of the type AveragingMethodEnum) 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 (zero or one occurrence; of the type NegativeInterestRateTreatmentEnum) 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).

4.4.3 Used by:

- Complex type: FloatingRateCalculation
- Complex type: InflationRateCalculationBase

4.4.4 Figure:

4.4.5 Schema Fragment:

```
<xsd:group name="FloatingRateCalculation.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Elements representing the daily calculated rate and fallback rate
      definitions.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="initialRate" type="xsd:decimal" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="finalRateRounding" type="Rounding" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The rounding convention to apply to the final rate used in
          determination of a calculation period amount.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="averagingMethod" type="AveragingMethodEnum" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="negativeInterestRateTreatment" type="NegativeInterestRateTreatmentEnum"
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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).
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:group>
```

4.5 FloatingRateIndex.model

4.5.1 Description:

4.5.2 Contents:

floatingRateIndex (exactly one occurrence; of the type FloatingRateIndex) The ISDA Floating Rate Option, i.e. the name of the floating rate.

indexTenor (zero or one occurrence; of the type Interval) The ISDA Designated Maturity, i.e. the tenor of the floating rate.

4.5.3 Used by:

- Complex type: FloatingRate
- Complex type: InflationRateCalculationBase
- Complex type: StubFloatingRate
- Complex type: SwapCurveValuation

4.5.4 Figure:

4.5.5 Schema Fragment:

```
<xsd:group name="FloatingRateIndex.model">
  <xsd:sequence>
    <xsd:element name="floatingRateIndex" type="FloatingRateIndex" minOccurs="1">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The ISDA Floating Rate Option, i.e. the name of the floating
          rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="indexTenor" type="Interval" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The ISDA Designated Maturity, i.e. the tenor of the floating
          rate.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.6 ObservationParameters.model

4.6.1 Description:

Definitions of daily cap and floor rates for floating rate indexes.

4.6.2 Contents:

observationCapRate (zero or one occurrence; of the type xsd:decimal)
observationFloorRate (zero or one occurrence; of the type xsd:decimal)

4.6.3 Used by:

- Complex type: CalculationParameters

4.6.4 Figure:

4.6.5 Schema Fragment:

```
<xsd:group name="ObservationParameters.model">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Definitions of daily cap and floor rates for floating rate
      indexes.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="observationCapRate" type="xsd:decimal" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation>
          A maximum rate for an rate observation; optionally applied
          for daily averaged rates. These are described in the 2021
          ISDA Definitions in Section 7.2.4
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="observationFloorRate" type="xsd:decimal" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation>
          A minimum rate for an rate observation; optionally applied
          for daily averaged rates. These are described in the 2021
          ISDA Definitions in Section 7.2.3
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.7 PartialExercise.model

4.7.1 Description:

4.7.2 Contents:

notionalReference (zero or more occurrences; of the type ScheduleReference) A pointer style reference to the associated notional schedule defined elsewhere in the document. This element has been made optional as part of its integration in the OptionBaseExtended, because not required for the options on securities.

integralMultipleAmount (zero or one occurrence; of the type xsd:decimal) A notional amount which restricts the amount of notional that can be exercised when partial exercise or multiple exercise is applicable. The integral multiple amount defines a lower limit of notional that can be exercised and also defines a unit multiple of notional that can be exercised, i.e. only integer multiples of this amount can be exercised.

Either

minimumNotionalAmount (exactly one occurrence; of the type xsd:decimal) The minimum notional amount that can be exercised on a given exercise date. See multipleExercise.

Or

minimumNumberOfOptions (exactly one occurrence; of the type xsd:nonNegativeInteger)

4.7.3 Used by:

- Complex type: MultipleExercise
- Complex type: PartialExercise

4.7.4 Figure:

4.7.5 Schema Fragment:

```
<xsd:group name="PartialExercise.model">
  <xsd:sequence>
    <xsd:element name="notionalReference" type="ScheduleReference" minOccurs="0" maxOccurs="unk
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A pointer style reference to the associated notional schedule
          defined elsewhere in the document. This element has been made
          optional as part of its integration in the
          OptionBaseExtended, because not required for the options on
          securities.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="integralMultipleAmount" type="xsd:decimal" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A notional amount which restricts the amount of notional that
          can be exercised when partial exercise or multiple exercise
          is applicable. The integral multiple amount defines a lower
          limit of notional that can be exercised and also defines a
          unit multiple of notional that can be exercised, i.e. only
          integer multiples of this amount can be exercised.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:choice>
      <xsd:element name="minimumNotionalAmount" type="xsd:decimal">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The minimum notional amount that can be exercised on a
            given exercise date. See multipleExercise.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="minimumNumberOfOptions" type="xsd:nonNegativeInteger">
        <xsd:annotation>
          <xsd:documentation>
            The minimum number of options that can be exercised on a
            given exercise date.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
```

```
    </xsd:sequence>
</xsd:group>
```

4.8 PayerReceiver.model

4.8.1 Description:

4.8.2 Contents:

payerPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party responsible for making the payments defined by this structure.

receiverPartyReference (exactly one occurrence; of the type PartyOrAccountReference) A reference to the party that receives the payments corresponding to this structure.

4.8.3 Used by:

- Complex type: DirectionalLeg
- Complex type: EquityPremium
- Complex type: ExerciseFee
- Complex type: ExerciseFeeSchedule
- Complex type: FeaturePayment
- Complex type: FxOptionPremium
- Complex type: GrossCashflow
- Complex type: IndependentAmount
- Complex type: InitialPayment
- Complex type: InterestRateStream
- Complex type: PassThroughItem
- Complex type: Payment
- Complex type: PaymentMatching
- Complex type: PrePayment
- Complex type: PrincipalExchangeDescriptions
- Complex type: QuotablePayment
- Complex type: ReturnSwapAdditionalPayment
- Complex type: ReturnSwapLeg
- Complex type: SimplePayment

4.8.4 Figure:

4.8.5 Schema Fragment:

```
<xsd:group name="PayerReceiver.model">
  <xsd:sequence>
    <xsd:element name="payerPartyReference" type="PartyOrAccountReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party responsible for making the payments
          defined by this structure.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="receiverPartyReference" type="PartyOrAccountReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to the party that receives the payments
          corresponding to this structure.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.9 PaymentDiscounting.model

4.9.1 Description:

4.9.2 Contents:

discountFactor (zero or one occurrence; of the type xsd:decimal) The value representing the discount factor used to calculate the present value of the cash flow.

presentValueAmount (zero or one occurrence; of the type Money) The amount representing the present value of the forecast payment.

4.9.3 Used by:

- Complex type: Premium

4.9.4 Figure:

4.9.5 Schema Fragment:

```
<xsd:group name="PaymentDiscounting.model">
  <xsd:annotation>
    <xsd:documentation>
      A model group for representing the discounting elements that can
      be associated with a payment.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="discountFactor" type="xsd:decimal" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The value representing the discount factor used to calculate
          the present value of the cash flow.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="presentValueAmount" type="Money" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The amount representing the present value of the forecast
          payment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.10 Premium.model

4.10.1 Description:

4.10.2 Contents:

premiumType (zero or one occurrence; of the type PremiumTypeEnum) Forward start Premium type

pricePerOption (zero or one occurrence; of the type Money) The amount of premium to be paid expressed as a function of the number of options.

percentageOfNotional (zero or one occurrence; of the type xsd:decimal) 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.

4.10.3 Used by:

- Complex type: Premium

4.10.4 Figure:

4.10.5 Schema Fragment:

```
<xsd:group name="Premium.model">
  <xsd:annotation>
    <xsd:documentation>
      A model group for representing the option premium when expressed
      in a way other than an amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="premiumType" type="PremiumTypeEnum" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Forward start Premium type
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="pricePerOption" type="Money" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The amount of premium to be paid expressed as a function of
          the number of options.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="percentageOfNotional" type="xsd:decimal" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.11 Product.model

4.11.1 Description:

4.11.2 Contents:

productType (zero or more occurrences; of the type ProductType) A classification of the type of product. FpML defines a simple product categorization using a coding scheme.

productId (zero or more occurrences; of the type ProductId) 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.

4.11.3 Used by:

- Complex type: Product
- Complex type: QuotableProduct

4.11.4 Figure:

4.11.5 Schema Fragment:

```
<xsd:group name="Product.model">
  <xsd:sequence>
    <xsd:element name="productType" type="ProductType" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A classification of the type of product. FpML defines a
          simple product categorization using a coding scheme.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="productId" type="ProductId" minOccurs="0" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.12 RoutingExplicitDetails.model

4.12.1 Description:

4.12.2 Contents:

routingName (exactly one occurrence; of the type xsd:string) A real name that is used to identify a party involved in the routing of a payment.

routingAddress (zero or one occurrence; of the type Address) A physical postal address via which a payment can be routed.

routingAccountNumber (zero or one occurrence; of the type xsd:string) An account number via which a payment can be routed.

routingReferenceText (zero or more occurrences; of the type xsd:string) A piece of free-format text used to assist the identification of a party involved in the routing of a payment.

4.12.3 Used by:

- Complex type: RoutingExplicitDetails
- Complex type: RoutingIdsAndExplicitDetails

4.12.4 Figure:

4.12.5 Schema Fragment:

```
<xsd:group name="RoutingExplicitDetails.model">
  <xsd:sequence>
    <xsd:element name="routingName" type="xsd:string">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A real name that is used to identify a party involved in the
          routing of a payment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="routingAddress" type="Address" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A physical postal address via which a payment can be routed.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="routingAccountNumber" type="xsd:string" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          An account number via which a payment can be routed.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="routingReferenceText" type="xsd:string" minOccurs="0" maxOccurs="unbound
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A piece of free-format text used to assist the identification
          of a party involved in the routing of a payment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

4.13 RoutingIdentification.model

4.13.1 Description:

4.13.2 Contents:

Either

routingIds (exactly one occurrence; of the type RoutingIds) A set of unique identifiers for a party, eachone identifying the party within a payment system. The assumption is that each party will not have more than one identifier within the same payment system.

Or

routingExplicitDetails (exactly one occurrence; of the type RoutingExplicitDetails) A set of details that is used to identify a party involved in the routing of a payment when the party does not have a code that identifies it within one of the recognized payment systems.

Or

routingIdsAndExplicitDetails (exactly one occurrence; of the type RoutingIdsAndExplicitDetails) A combination of coded payment system identifiers and details for physical addressing for a party involved in the routing of a payment.

4.13.3 Used by:

- Complex type: Beneficiary
- Complex type: CorrespondentInformation
- Complex type: IntermediaryInformation
- Complex type: Routing

4.13.4 Figure:

4.13.5 Schema Fragment:

```
<xsd:group name="RoutingIdentification.model">
  <xsd:choice>
    <xsd:element name="routingIds" type="RoutingIds">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A set of unique identifiers for a party, eachone identifying
          the party within a payment system. The assumption is that
          each party will not have more than one identifier within the
          same payment system.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="routingExplicitDetails" type="RoutingExplicitDetails">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A set of details that is used to identify a party involved in
          the routing of a payment when the party does not have a code
          that identifies it within one of the recognized payment
          systems.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="routingIdsAndExplicitDetails" type="RoutingIdsAndExplicitDetails">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A combination of coded payment system identifiers and details
          for physical addressing for a party involved in the routing
          of a payment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:group>
```

4.14 SettlementAmountOrCurrency.model

4.14.1 Description:

4.14.2 Contents:

Either

settlementAmount (exactly one occurrence; of the type Money) Settlement Amount

Or

settlementCurrency (exactly one occurrence; of the type Currency) Settlement Currency for use where the Settlement Amount cannot be known in advance

4.14.3 Used by:

4.14.4 Figure:

4.14.5 Schema Fragment:

```
<xsd:group name="SettlementAmountOrCurrency.model">
  <xsd:choice>
    <xsd:element name="settlementAmount" type="Money">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Settlement Amount
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="settlementCurrency" type="Currency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Settlement Currency for use where the Settlement Amount
          cannot be known in advance
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:group>
```

4.15 VersionHistory.model

4.15.1 Description:

4.15.2 Contents:

version (exactly one occurrence; of the type xsd:nonNegativeInteger) The version number

effectiveDate (zero or one occurrence; of the type IdentifiedDate) Optionally it is possible to specify a version effective date when a versionId is supplied.

4.15.3 Used by:

- Complex type: AssetPool
- Complex type: VersionedContractId
- Complex type: VersionedTradeId

4.15.4 Figure:

4.15.5 Schema Fragment:

```
<xsd:group name="VersionHistory.model">
  <xsd:sequence>
    <xsd:element name="version" type="xsd:nonNegativeInteger">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The version number
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="effectiveDate" type="IdentifiedDate" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Optionally it is possible to specify a version effective date
          when a versionId is supplied.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:group>
```

5 Schema listing

```xml
<xsd:schema ecore:nsPrefix="fpml" ecore:package="org.fpml" ecore:documentRoot="FpML" targetName
  <xsd:include schemaLocation="fpml-enum-4-3.xsd"/>
  <xsd:simpleType name="CorrelationValue">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a number specified as a decimal between -1 and
        1 inclusive.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:restriction base="xsd:decimal">
      <xsd:minInclusive value="-1"/>
      <xsd:maxInclusive value="1"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:simpleType name="HourMinuteTime">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a time specified in hh:mm:ss format where the
        second component must be '00', e.g. 11am would be represented
        as 11:00:00.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:restriction base="xsd:time">
      <xsd:pattern value="[0-2][0-9]:[0-5][0-9]:00"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:simpleType name="RestrictedPercentage">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a percentage specified as decimal from 0 to 1.
        A percentage of 5% would be represented as 0.05.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:restriction base="xsd:decimal">
      <xsd:minInclusive value="0"/>
      <xsd:maxInclusive value="1"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:complexType name="AccountReference">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        Reference to an account.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Reference">
        <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Account"/>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:simpleType name="PositiveDecimal">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a number specified as positive decimal greater
        than 0 exclusive.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:restriction base="xsd:decimal">
      <xsd:minExclusive value="0"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:simpleType name="NonNegativeDecimal">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a number specified as non negative decimal
        greater than 0 inclusive.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:restriction base="xsd:decimal">
      <xsd:minInclusive value="0"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:complexType name="Account">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A generic account that represents any party's account at
        another party. Parties may be identified by the account at
        another party.
      </xsd:documentation>
```

```
        </xsd:annotation>
        <xsd:sequence>
          <xsd:sequence maxOccurs="unbounded">
            <xsd:element name="accountId" type="AccountId">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  An account identifier. For example an Account number.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="accountName" type="xsd:normalizedString" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The name by which the account is known.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
          <xsd:element name="accountBeneficiary" type="PartyReference" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A reference to the party beneficiary of the account.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
        <xsd:attribute name="id" type="xsd:ID" use="required">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The unique identifier for the account within the document.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:attribute>
      </xsd:complexType>
      <xsd:complexType name="AccountId">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The data type used for party identifiers.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="accountIdScheme" type="xsd:anyURI">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The identifier scheme used with this accountId. A unique
                  URI to determine the authoritative issuer of these
                  identifiers.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:attribute>
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="Address">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type that represents a physical postal address.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="streetAddress" type="StreetAddress" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The set of street and building number information that
                identifies a postal address within a city.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="city" type="xsd:string" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The city component of a postal address.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="state" type="xsd:string" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A country subdivision used in postal addresses in some
                countries. For example, US states, Canadian provinces,
                Swiss cantons.
              </xsd:documentation>
```

```
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="country" type="Country" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The ISO 3166 standard code for the country within which the
              postal address is located.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="postalCode" type="xsd:string" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The code, required for computerised mail sorting systems,
              that is allocated to a physical address by a national
              postal authority.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="AdjustableDate">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type for defining 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.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="unadjustedDate" type="IdentifiedDate">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A date subject to adjustment.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="dateAdjustments" type="BusinessDayAdjustments">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The business day convention and financial business centers
            used for adjusting the date if it would otherwise fall on a
            day that is not a business date in the specified business
            centers.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
    <xsd:attribute name="id" type="xsd:ID"/>
  </xsd:complexType>
  <xsd:complexType name="AdjustableDate2">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type that is different from AdjustableDate in two regards.
        First, date adjustments can be specified with either a
        dateAdjustments element or a reference to an existing
        dateAdjustments element. Second, it does not require the
        specification of date adjustments.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="unadjustedDate" type="IdentifiedDate">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A date subject to adjustment.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:choice minOccurs="0">
        <xsd:element name="dateAdjustments" type="BusinessDayAdjustments">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The business day convention and financial business
              centers used for adjusting the date if it would otherwise
              fall on a day that is not a business dat in the specified
              business centers.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="dateAdjustmentsReference" type="BusinessDayAdjustmentsReference">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
```

```xml
                    A pointer style reference to date adjustments defined
                    elsewhere in the document.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:choice>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="AdjustableDates">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type for defining 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 dates.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="unadjustedDate" type="IdentifiedDate" maxOccurs="unbounded">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A date subject to adjustment.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="dateAdjustments" type="BusinessDayAdjustments">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         The business day convention and financial business centers
         used for adjusting the date if it would otherwise fall on a
         day that is not a business dat in the specified business
         centers.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="AdjustableDatesOrRelativeDateOffset">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     A type for defining a series of dates, either as a list of
     adjustable dates, or a as a repeating sequence from a base date
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:element name="adjustableDates" type="AdjustableDates">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A series of adjustable dates
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="relativeDate" type="RelativeDateOffset">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A series of dates specified as a repeating sequence from a
         base date
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:choice>
</xsd:complexType>
<xsd:complexType name="AdjustableOrRelativeAndAdjustedDate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
     An adjustable or relative date with the option to provide the
     adjusted date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="AdjustableOrRelativeDate">
      <xsd:sequence>
        <xsd:element name="adjustedDate" type="IdentifiedDate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
             The adjusted 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).
            </xsd:documentation>
```

```xsd
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="AdjustableOrRelativeDate">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
      A type giving the choice between defining a date as an explicit
      date together with applicable adjustments or as relative to
      some other (anchor) date.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
      <xsd:element name="adjustableDate" type="AdjustableDate">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="relativeDate" type="RelativeDateOffset">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          A date specified as some offset to another date (the anchor
          date).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
    <xsd:attribute name="id" type="xsd:ID"/>
  </xsd:complexType>
  <xsd:complexType name="AdjustableOrRelativeDates">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
      A type giving the choice between defining a series of dates as
      an explicit list of dates together with applicable adjustments
      or as relative to some other series of (anchor) dates.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
      <xsd:element name="adjustableDates" type="AdjustableDates">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="relativeDates" type="RelativeDates">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          A series of dates specified as some offset to another
          series of dates (the anchor dates).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
    <xsd:attribute name="id" type="xsd:ID"/>
  </xsd:complexType>
  <xsd:complexType name="AdjustableRelativeOrPeriodicDates">
    <xsd:choice>
      <xsd:element name="adjustableDates" type="AdjustableDates">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="relativeDateSequence" type="RelativeDateSequence">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          A series of dates specified as some offset to other dates
          (the anchor dates) which can
```

```xml
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="periodicDates" type="PeriodicDates"/>
      </xsd:choice>
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="AdjustedRelativeDateOffset">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining a date (referred to as the derived date) as a
          relative offset from another date (referred to as the anchor
          date) plus optional date adjustments.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="RelativeDateOffset">
          <xsd:sequence>
            <xsd:element name="relativeDateAdjustments" type="BusinessDayAdjustments" minOccurs='
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The business day convention and financial business
                  centers used for adjusting the relative date if it
                  would otherwise fall on a day that is not a business
                  date in the specified business centers.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="AmericanExercise">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining the exercise period for an American style
          option together with any rules governing the notional amount of
          the underlying which can be exercised on any given exercise
          date and any associated exercise fees.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="Exercise">
          <xsd:sequence>
            <xsd:element name="commencementDate" type="AdjustableOrRelativeDate">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The first day of the exercise period for an American
                  style option.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="expirationDate" type="AdjustableOrRelativeDate">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  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.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="relevantUnderlyingDate" type="AdjustableOrRelativeDates" minOccurs
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The daye on the underlying set by the exercise of an
                  option. What this date is depends on the option (e.g.
                  in a swaption it is the effective date, in an
                  extendible/cancelable provision it is the termination
                  date).
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="earliestExerciseTime" type="BusinessCenterTime">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The earliest time at which notice of exercise can be
                  given by the buyer to the seller (or seller's agent) i)
                  on the expiration date, in the case of a European style
                  option, (ii) on each bermuda option exercise date and
                  the expiration date, in the case of a Bermuda style
                  option the commencement date to, and including, the
                  expiration date , in the case of an American option.
                </xsd:documentation>
```

```xml
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="latestExerciseTime" type="BusinessCenterTime" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="expirationTime" type="BusinessCenterTime">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The latest time for exercise on expirationDate.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="multipleExercise" type="MultipleExercise" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              As defined in the 2000 ISDA Definitions, Section 12.4.
              Multiple Exercise, the buyer of the option has the
              right to exercise all or less than all the unexercised
              notional amount of the underlying swap on one or more
              days in the exercise period, but on any such day may
              not exercise less than the minimum notional amount or
              more that the maximum notional amount, and if an
              integral multiple amount is specified, the notional
              amount exercised must be equal to, or be an intergral
              multiple of, the integral multiple amount.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="exerciseFeeSchedule" type="ExerciseFeeSchedule" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The fees associated with an exercise date. The fees are
              conditional on the exercise occuring. The fees can be
              specified as actual currency amounts or as percentages
              of the notional amount being exercised.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
<xsd:complexType name="AmountReference">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      Specifies a reference to a monetary amount.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Reference">
      <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
<xsd:complexType name="AmountSchedule">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a currency amount or a currency amount
      schedule.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="Schedule">
      <xsd:sequence>
        <xsd:element name="currency" type="Currency">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The currency in which an amount is denominated.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
```

```xml
    </xsd:complexType>
    <xsd:complexType name="AutomaticExercise">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type to define automatic exercise of a swaption. With
          automatic exercise the option is deemed to have exercised if it
          is in the money by more than the threshold amount on the
          exercise date.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="thresholdRate" type="xsd:decimal">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              A threshold rate. The threshold of 0.10% would be
              represented as 0.001
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="BenchmarkRate">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The data type used for a benchmark rate (e.g. agreed discount
          rate or collateral interest rate).
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="benchmarkRateScheme" type="xsd:anyURI" default="http://www.fpml.or
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The identifier scheme used for this benchmark. This will
                be defaulted to an ISDA benchmark scheme.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:attribute>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="Beneficiary">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining the beneficiary of the funds.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:group ref="RoutingIdentification.model"/>
        <xsd:element name="beneficiaryPartyReference" type="PartyReference" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Link to the party acting as beneficiary. This element can
              only appear within the beneficiary container element.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="BermudaExercise">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining the Bermuda option exercise dates and the
          expiration date together with any rules govenerning the
          notional amount of the underlying which can be exercised on any
          given exercise date and any associated exercise fee.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="Exercise">
          <xsd:sequence>
            <xsd:element name="bermudaExerciseDates" type="AdjustableOrRelativeDates">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The dates the define the Bermuda option exercise dates
                  and the expiration date. The last specified date is
                  assumed to be the expiration date. The dates can either
                  be specified as a series of explicit dates and
                  associated adjustments or as a series of dates defined
                  relative to another schedule of dates, for example, the
                  calculation period start dates. Where a relative series
                  of dates are defined the first and last possible
                  exercise dates can be separately specified.
```

```xml
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="relevantUnderlyingDate" type="AdjustableOrRelativeDates" minOccurs
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The daye on the underlying set by the exercise of an
                  option. What this date is depends on the option (e.g.
                  in a swaption it is the effective date, in an
                  extendible/cancelable provision it is the termination
                  date).
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="earliestExerciseTime" type="BusinessCenterTime">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The earliest time at which notice of exercise can be
                  given by the buyer to the seller (or seller's agent) i)
                  on the expriation date, in the case of a European style
                  option, (ii) on each bermuda option exercise date and
                  the expiration date, in the case of a Bermuda style
                  option the commencement date to, and including, the
                  expiration date , in the case of an American option.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="latestExerciseTime" type="BusinessCenterTime" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  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.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="expirationTime" type="BusinessCenterTime">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The latest time for exercise on expirationDate.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="multipleExercise" type="MultipleExercise" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  As defined in the 2000 ISDA Definitions, Section 12.4.
                  Multiple Exercise, the buyer of the option has the
                  right to exercise all or less than all the unexercised
                  notional amount of the underlying swap on one or more
                  days in the exercise period, but on any such day may
                  not exercise less than the minimum notional amount or
                  more that the maximum notional amount, and if an
                  integral multiple amount is specified, the notional
                  amount exercised must be equal to, or be an intergral
                  multiple of, the integral multiple amount.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="exerciseFeeSchedule" type="ExerciseFeeSchedule" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The fees associated with an exercise date. The fees are
                  conditional on the exercise occuring. The fees can be
                  specified as actual currency amounts or as percentages
                  of the notional amount being exercised.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="BrokerConfirmation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Identifies the market sector in which the trade has been
          arranged.
        </xsd:documentation>
      </xsd:annotation>
```

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      <xsd:sequence>
        <xsd:element name="brokerConfirmationType" type="BrokerConfirmationType">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The type of broker confirmation executed between the
              parties.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="BrokerConfirmationType">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Identifies the market sector in which the trade has been
          arranged.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="brokerConfirmationTypeScheme" type="xsd:anyURI" default="http://ww
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="BusinessCenter">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A code identifying a financial business center location. A
          business center is drawn from the list identified by the
          business center scheme.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="businessCenterScheme" type="xsd:anyURI" default="http://www.fpml.c
          <xsd:attribute name="id" type="xsd:ID"/>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="BusinessCenters">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type for defining financial business centers used in
          determining whether a day is a business day or not. A list of
          business centers may be ordered in the document alphabetically
          based on business center code. An FpML document containing an
          unordered business center list is still regarded as a
          conformant document.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="businessCenter" type="BusinessCenter" maxOccurs="unbounded"/>
      </xsd:sequence>
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="BusinessCentersOrReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A pointer style reference to a set of business day calendar
          defined elsewhere in the document.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:group ref="BusinessCentersOrReference.model"/>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="BusinessCentersReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A pointer style reference to a set of financial business
          centers defined elsewhere in the document.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="Reference">
          <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="BusinessCen
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="BusinessCenterTime">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type for defining a time with respect to a business center
```

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                location. For example, 11:00am London time.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
            <xsd:element name="hourMinuteTime" type="HourMinuteTime">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A time specified in hh:mm:ss format where the second
                        component must be '00', e.g. 11am would be represented as
                        11:00:00.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="businessCenter" type="BusinessCenter"/>
        </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="BusinessDateRange">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A type defining a range of contiguous business days by defining
                an unadjusted first date, an unadjusted last date and a
                business day convention and business centers for adjusting the
                first and last dates if they would otherwise fall on a non
                business day in the specified business centers. The days
                between the first and last date must also be good business days
                in the specified centers to be counted in the range.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
            <xsd:extension base="DateRange">
                <xsd:sequence>
                    <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
                        <xsd:annotation>
                            <xsd:documentation xml:lang="en">
                                The convention for adjusting a date if it would
                                otherwise fall on a day that is not a business day.
                            </xsd:documentation>
                        </xsd:annotation>
                    </xsd:element>
                    <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
                </xsd:sequence>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="BusinessDayAdjustments">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A type defining the business day convention and financial
                business centers used for adjusting any relevant date if it
                would otherwise fall on a day that is not a business day in the
                specified business centers.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
            <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        The convention for adjusting a date if it would otherwise
                        fall on a day that is not a business day.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
        </xsd:sequence>
        <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="BusinessDayAdjustmentsReference">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                Reference to a business day adjustments structure.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
            <xsd:extension base="Reference">
                <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="BusinessDay
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="CalculationAgent">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A type defining the ISDA calcuation agent responsible for
                performing duties as defined in the applicable product
```

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          definitions.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:choice>
        <xsd:element name="calculationAgentPartyReference" type="PartyReference" maxOccurs="unbou
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              A pointer style reference to a party identifier defined
              elsewhere in the document. The party referenced is the ISDA
              Calculation Agent for the trade. If more than one party is
              referenced then the parties are assumed to be
              co-calculation agents, i.e. they have joint responsibility.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="calculationAgentParty" type="CalculationAgentPartyEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The ISDA Calculation Agent where the actual party
              responsible for performing the duties associated with an
              optional early termination provision will be determined at
              exercise. For example, the Calculation Agent may be defined
              as being the Non-exercising Party.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:choice>
    </xsd:complexType>
    <xsd:complexType name="CalculationParameters">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining a rate that is calculated based on a number of
          observations of an underlying rate that are averaged or
          compounded using a specified method. These are sometimes called
          modular calculated rates. These are described in the 2021 ISDA
          Definitions in Section 7.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="calculationMethod" type="CalculationMethodEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Specifies the type of calculation, e.g. whether the
              calculation is a compounding or an averaging calculation.
              This element distinguishes between the applicable
              subsections of Section 7 (7.3, 7.4, and 7.7). If the
              calculationMethod is Componding or Averaging, this implies
              that a daily compounded calculation will be done, i.e. that
              the underlying rate will be observed eacy applicalbe
              business day during the observation period and then
              compounded or averaged. If it is CompoundedIndex, this
              means that the rate administrator is doing the compounding
              each day and publishing the resulting index value. In this
              case the calculation agent is responsible for observing the
              index and the start and at the end of the observation
              period, and then backing out the implied rate by following
              the formula in section 7.7. (This formula divides the index
              value at the end by the index value at the beginning,
              subtracts 1, and then scales the resulting value based on
              the year fraction to annualize the rate.) In other words,
              for CompoundedIndex the observation frequency is
              effectively 1T, where for Compounding and Averaging, it is
              1D.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="applicableBusinessDays" minOccurs="0" type="BusinessCentersOrReference
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Specifies the applicable business days to be used for this
              calculation. If omitted, the business days should be
              defaulted from the FRO Matrix, as represented in the FRO
              metadata. Failing that, it should be defaulted from the
              default business center for the relevant currency. See the
              ISDA 2021 Definitions Section 7.2.1.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:choice minOccurs="0">
          <xsd:element name="lookback" type="ObservationOffset">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies that lookback calculation is in effect, and
```

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                        supplies parameters needed to support that. See the ISDA
                        2021 Definitions Section 7.3.2 and 7.4.2. This should not
                        be used when the calculationMethod is CompoundedIndex.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:element>
               <xsd:element name="observationShift" type="ObservationShiftParameters">
                  <xsd:annotation>
                     <xsd:documentation xml:lang="en">
                        Specifies that observation shift calculation is in
                        effect, and supplies parameters needed to support that.
                        See the ISDA 2021 Definitions Section 7.3.3 and 7.4.3 and
                        7.7.3.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:element>
               <xsd:element name="lockout" type="ObservationOffset">
                  <xsd:annotation>
                     <xsd:documentation xml:lang="en">
                        Specifies that lockout calculation is in effect, and
                        supplies parameters needed to support that. See the ISDA
                        2021 Definitions Section 7.3.4 and 7.4.4. This should not
                        be used when the calculationMethod is CompoundedIndex.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:element>
            </xsd:choice>
            <xsd:group ref="ObservationParameters.model" minOccurs="0">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                     Specifies any parameters to be applied to each individual
                     observation, such as caps or floors. This should not be
                     used when the calculationMethod is CompoundedIndex.
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:group>
         </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="CalculationPeriodFrequency">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               A type defining the frequency at which calculation period end
               dates occur within the regular part of the calculation period
               schedule and thier roll date convention.
            </xsd:documentation>
         </xsd:annotation>
         <xsd:complexContent>
            <xsd:extension base="Interval">
               <xsd:sequence>
                  <xsd:element name="rollConvention" type="RollConventionEnum">
                     <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                           Used in conjunction with a frequency and the regular
                           period start date of a calculation period, determines
                           each calculation period end date within the regular
                           part of a calculation period schedule.
                        </xsd:documentation>
                     </xsd:annotation>
                  </xsd:element>
               </xsd:sequence>
            </xsd:extension>
         </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="CashflowType">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               A coding scheme used to describe the type or purpose of a cash
               flow or cash flow component.
            </xsd:documentation>
         </xsd:annotation>
         <xsd:simpleContent>
            <xsd:extension base="xsd:normalizedString">
               <xsd:attribute name="cashflowTypeScheme" default="http://www.fpml.org/coding-scheme/cas
            </xsd:extension>
         </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="CashSettlementReferenceBanks">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               A type defining the list of reference institutions polled for
               relevant rates or prices when determining the cash settlement
               amount for a product where cash settlement is applicable.
            </xsd:documentation>
```

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        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="referenceBank" type="ReferenceBank" maxOccurs="unbounded">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An institution (party) identified by means of a coding
                scheme and an optional name.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
        <xsd:attribute name="id" type="xsd:ID"/>
      </xsd:complexType>
      <xsd:complexType name="ClearanceSystem">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Unless otherwise specified, the principal clearance system
            customarily used for settling trades in the relevant
            underlying.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="clearanceSystemScheme" type="xsd:anyURI" default="http://www.fpml.
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="ContractualDefinitions">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The definitions, such as those published by ISDA, that will
            define the terms of the trade.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="contractualDefinitionsScheme" type="xsd:anyURI" default="http://ww
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="ContractualMatrix">
        <xsd:sequence>
          <xsd:element name="matrixType" type="MatrixType">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Identifies the form of applicable matrix.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="publicationDate" type="xsd:date" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies the publication date of the applicable version of
                the matrix. When this element is omitted, the ISDA
                supplemental language for incorporation of the relevant
                matrix will generally define rules for which version of the
                matrix is applicable.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="matrixTerm" type="MatrixTerm" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Defines any applicable key into the relevant matrix. For
                example, the Transaction Type would be the single term
                required for the Credit Derivatives Physical Settlement
                Matrix. This element should be omitted in the case of the
                2000 ISDA Definitions Settlement Matrix for Early
                Termination and Swaptions.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="ContractualSupplement">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A contractual supplement (such as those published by ISDA) that
            will apply to the trade.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
```

```xsd
            <xsd:attribute name="contractualSupplementScheme" type="xsd:anyURI" default="http://www
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="ContractualTermsSupplement">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A contractual supplement (such as those published by ISDA) and
         its publication date that will apply to the trade.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="type" type="ContractualSupplement">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
             Identifies the form of applicable contractual supplement.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="publicationDate" type="xsd:date" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
             Specifies the publication date of the applicable version of
             the contractual supplement.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="CorrespondentInformation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
         A type that describes the information to identify a
         correspondent bank that will make delivery of the funds on the
         paying bank's behalf in the country where the payment is to be
         made.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:group ref="RoutingIdentification.model"/>
        <xsd:element name="correspondentPartyReference" type="PartyReference" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
             Link to the party acting as correspondent. This element can
             only appear within the correspondentInformation container
             element.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="Country">
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="countryScheme" type="xsd:anyURI" default="http://www.fpml.org/ext/
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="CreditSeniority">
      <xsd:annotation>
        <xsd:documentation source="http://www.FpML.org" xml:lang="en">
         The repayment precedence of a debt instrument.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="creditSeniorityScheme" type="xsd:anyURI" default="http://www.fpml.
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
               creditSeniorityTradingScheme overrides
               creditSeniorityScheme when the underlyer defines the
               reference obligation used in a single name credit default
               swap trade.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:attribute>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="Currency">
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="currencyScheme" type="xsd:anyURI" default="http://www.fpml.org/ext
```

```xsd
        </xsd:extension>
      </xsd:simpleContent>
   </xsd:complexType>
   <xsd:complexType name="DateList">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
            List of Dates
         </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
         <xsd:element name="date" type="xsd:date" maxOccurs="unbounded"/>
      </xsd:sequence>
   </xsd:complexType>
   <xsd:complexType name="DateOffset">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
            A type defining an offset used in calculating a date when this
            date is defined in reference to another date through a date
            offset. The type includes the convention for adjusting the date
            and an optional sequence element to indicate the order in a
            sequence of multiple date offsets.
         </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
         <xsd:extension base="Offset">
            <xsd:sequence>
               <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
                  <xsd:annotation>
                     <xsd:documentation xml:lang="en">
                        The convention for adjusting a date if it would
                        otherwise fall on a day that is not a business day.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:element>
               <xsd:element name="sequence" type="xsd:positiveInteger" minOccurs="0">
                  <xsd:annotation>
                     <xsd:documentation xml:lang="en">
                        Sequence in which the reference to the time period
                        multiplier should be applied.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:element>
            </xsd:sequence>
         </xsd:extension>
      </xsd:complexContent>
   </xsd:complexType>
   <xsd:complexType name="DateRange">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
            A type defining a contiguous series of calendar dates. The date
            range is defined as all the dates between and including the
            first and the last date. The first date must fall before the
            last date.
         </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
         <xsd:element name="unadjustedFirstDate" type="xsd:date">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  The first date of a date range.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="unadjustedLastDate" type="xsd:date">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  The last date of a date range.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:sequence>
   </xsd:complexType>
   <xsd:complexType name="DateReference">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
            Reference to an identified date or a complex date structure.
         </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
         <xsd:extension base="Reference">
            <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
         </xsd:extension>
      </xsd:complexContent>
```

```xsd
    </xsd:complexType>
    <xsd:complexType name="DateTimeList">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          List of DateTimes
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="dateTime" type="xsd:dateTime" maxOccurs="unbounded"/>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="DayCountFraction">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="dayCountFractionScheme" type="xsd:anyURI" default="http://www.fpml
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="DeterminationMethod">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Coding scheme that specifies the method according to which an
          amount or a date is determined.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="determinationMethodScheme" type="xsd:anyURI"/>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="DividendConditions">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="dividendReinvestment" type="xsd:boolean" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Boolean element that defines whether the dividend will be
              reinvested or not.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="dividendEntitlement" type="DividendEntitlementEnum" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Defines the date on which the receiver on the equity return
              is entitled to the dividend.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="dividendAmount" type="DividendAmountTypeEnum" minOccurs="0"/>
        <xsd:element name="dividendPaymentDate" type="DividendPaymentDate" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:choice>
          <xsd:sequence>
            <xsd:element name="dividendPeriodEffectiveDate" type="DateReference" minOccurs="0">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
```

```
                      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.
                   </xsd:documentation>
                </xsd:annotation>
             </xsd:element>
             <xsd:element name="dividendPeriodEndDate" type="DateReference" minOccurs="0">
                <xsd:annotation>
                   <xsd:documentation xml:lang="en">
                      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.
                   </xsd:documentation>
                </xsd:annotation>
             </xsd:element>
          </xsd:sequence>
          <xsd:element name="dividendPeriod" type="DividendPeriodEnum">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   Defines the First Period or the Second Period, as defined
                   in the 2002 ISDA Equity Derivatives Definitions.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
       </xsd:choice>
       <xsd:element name="extraOrdinaryDividends" type="PartyReference" minOccurs="0">
          <xsd:annotation>
             <xsd:documentation xml:lang="en">
                Reference to the party which determines if dividends are
                extraordinary in relation to normal levels.
             </xsd:documentation>
          </xsd:annotation>
       </xsd:element>
       <xsd:element name="excessDividendAmount" type="DividendAmountTypeEnum" minOccurs="0">
          <xsd:annotation>
             <xsd:documentation xml:lang="en">
                Determination of Gross Cash Dividend per Share
             </xsd:documentation>
          </xsd:annotation>
       </xsd:element>
       <xsd:choice minOccurs="0">
          <xsd:element name="currency" type="Currency">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The currency in which an amount is denominated.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
          <xsd:element name="determinationMethod" type="DeterminationMethod">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   Specifies the method according to which an amount or a
                   date is determined.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
          <xsd:element name="currencyReference" type="IdentifiedCurrencyReference">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The currency in which an amount is denominated.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
       </xsd:choice>
       <xsd:element name="paymentCurrency" type="PaymentCurrency" minOccurs="0" fpml-annotation:
          <xsd:annotation>
             <xsd:documentation xml:lang="en">
                Currency in which the payment relating to the leg amount
                (equity amount or interest amount) or the dividend will be
                denominated.
             </xsd:documentation>
          </xsd:annotation>
       </xsd:element>
       <xsd:element name="dividendFxTriggerDate" type="DividendPaymentDate" minOccurs="0">
          <xsd:annotation>
             <xsd:documentation xml:lang="en">
                Specifies the date on which the FX rate will be considered
                in the case of a Composite FX swap.
             </xsd:documentation>
```

```
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="interestAccrualsMethod" type="InterestAccrualsCompoundingMethod" minOc
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Defines the way in which interests are accrued: the
                applicable rate (fixed or floating reference) and the
                compounding method.
              </xsd:documentation>
              <xsd:documentation xml:lang="en">
                FpML entity
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="DividendPaymentDate">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          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.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:choice>
            <xsd:sequence>
              <xsd:element name="dividendDateReference" type="DividendDateReferenceEnum">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    Specification of the dividend date using an
                    enumeration, with values such as the pay date, the ex
                    date or the record date.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="paymentDateOffset" type="Offset" minOccurs="0">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    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.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
            </xsd:sequence>
            <xsd:element name="adjustableDate" type="AdjustableDate">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  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.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:choice>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="Documentation">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          An entity for defining 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.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="masterAgreement" type="MasterAgreement" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The agreement executed between the parties and intended to
                govern all OTC derivatives transactions between those
                parties.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:choice minOccurs="0">
            <xsd:element name="masterConfirmation" type="MasterConfirmation">
              <xsd:annotation
```

```xml
          <xsd:documentation xml:lang="en">
            The agreement executed between the parties and intended
            to govern all OTC derivatives transactions between those
            parties.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="brokerConfirmation" type="BrokerConfirmation">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies the deails for a broker confirm.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
    <xsd:element name="contractualDefinitions" type="ContractualDefinitions" minOccurs="0" ma
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The definitions such as those published by ISDA that will
          define the terms of the trade.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:choice>
      <xsd:element name="contractualSupplement" type="ContractualSupplement" minOccurs="0" ma
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="contractualTermsSupplement" type="ContractualTermsSupplement" minOcc
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A contractual supplement (such as those published by
            ISDA) that will apply to the trade.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
    <xsd:element name="contractualMatrix" type="ContractualMatrix" minOccurs="0" maxOccurs="u
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A reference to a contractual matrix of elected terms/values
          (such as those published by ISDA) that shall be deemed to
          apply to the trade. The applicable matrix is identified by
          reference to a name and optionally a publication date.
          Depending on the structure of the matrix, an additional
          term (specified in the matrixTerm element) may be required
          to further identify a subset of applicable terms/values
          within the matrix.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="creditSupportDocument" type="xsd:normalizedString" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The agreement executed between the parties and intended to
          govern collateral arrangement for all OTC derivatives
          transactions between those parties.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="Empty">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A special type meant to be used for elements with no content
      and no attributes.
    </xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
<xsd:complexType name="EntityId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A legal entity identifier (e.g. RED entity code).
    </xsd:documentation>
  </xsd:annotation>
```

```xml
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="entityIdScheme" type="xsd:anyURI" default="http://www.fpml.org/spe
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="EntityName">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The name of the reference entity. A free format string. FpML
            does not define usage rules for this element.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="entityNameScheme" type="xsd:anyURI" default="http://www.fpml.org/s
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="EuropeanExercise">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type defining the exercise period for a European style option
            together with any rules governing the notional amount of the
            underlying which can be exercised on any given exercise date
            and any associated exercise fees.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
          <xsd:extension base="Exercise">
            <xsd:sequence>
              <xsd:element name="expirationDate" type="AdjustableOrRelativeDate">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    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.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="relevantUnderlyingDate" type="AdjustableOrRelativeDates" minOccurs
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    The daye on the underlying set by the exercise of an
                    option. What this date is depends on the option (e.g.
                    in a swaption it is the effective date, in an
                    extendible/cancelable provision it is the termination
                    date).
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="earliestExerciseTime" type="BusinessCenterTime">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    The earliest time at which notice of exercise can be
                    given by the buyer to the seller (or seller's agent) i)
                    on the expriation date, in the case of a European style
                    option, (ii) on each bermuda option exercise date and
                    the expiration date, in the case of a Bermuda style
                    option the commencement date to, and including, the
                    expiration date , in the case of an American option.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="expirationTime" type="BusinessCenterTime">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    The latest time for exercise on expirationDate.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="partialExercise" type="PartialExercise" minOccurs="0">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    As defined in the 2000 ISDA Definitions, Section 12.3.
                    Partial Exercise, the buyer of the option has the right
                    to exercise all or less than all the notional amount of
                    the underlying swap on the expiration date, but may not
                    exercise less than the minimum notional amount, and if
                    an integral multiple amount is specified, the notional
                    amount exercised must be equal to, or be an integral
                    multiple of, the integral multiple amount.
                  </xsd:documentation>
```

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                </xsd:annotation>
            </xsd:element>
            <xsd:element name="exerciseFee" type="ExerciseFee" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A fee to be paid on exercise. This could be represented
                        as an amount or a rate and notional reference on which
                        to apply the rate.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
<xsd:complexType name="ExchangeId">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
        A short form unique identifier for an exchange. If the element
        is not present then the exchange shall be the primary exchange
        on which the underlying is listed. The term "Exchange" is
        assumed to have the meaning as defined in the ISDA 2002 Equity
        Derivatives Definitions.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:simpleContent>
    <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="exchangeIdScheme" type="xsd:anyURI" default="http://www.fpml.org/s
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>
<xsd:complexType name="Exercise">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
        The abstract base class for all types which define way in which
        options may be exercised.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="ExerciseFee">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
        A type defining the fee payable on exercise of an option. This
        fee may be defined as an amount or a percentage of the notional
        exercised.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="PayerReceiver.model"/>
    <xsd:element name="notionalReference" type="ScheduleReference">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A pointer style reference to the associated notional
                schedule defined elsewhere in the document.
            </xsd:documentation>
        </xsd:annotation>
    </xsd:element>
    <xsd:choice>
        <xsd:element name="feeAmount" type="xsd:decimal">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    The amount of fee to be paid on exercise. The fee
                    currency is that of the referenced notional.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
        <xsd:element name="feeRate" type="xsd:decimal">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    A fee represented as a percentage of some referenced
                    notional. A percentage of 5% would be represented as
                    0.05.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:choice>
    <xsd:element name="feePaymentDate" type="RelativeDateOffset">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                The date on which exercise fee(s) will be paid. It is
                specified as a relative date.
            </xsd:documentation>
```

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          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="ExerciseFeeSchedule">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type to define a fee or schedule of fees to be payable on the
        exercise of an option. This fee may be defined as an amount or
        a percentage of the notional exercised.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:group ref="PayerReceiver.model"/>
      <xsd:element name="notionalReference" type="ScheduleReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A pointer style reference to the associated notional
            schedule defined elsewhere in the document.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:choice>
        <xsd:element name="feeAmountSchedule" type="AmountSchedule">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The exercise fee amount schedule. The fees are expressed
              as currency amounts. The currency of the fee is assumed
              to be that of the notional schedule referenced.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="feeRateSchedule" type="Schedule">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The exercise free rate schedule. The fees are expressed
              as percentage rates of the notional being exercised. The
              currency of the fee is assumed to be that of the notional
              schedule referenced.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:choice>
      <xsd:element name="feePaymentDate" type="RelativeDateOffset">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The date on which exercise fee(s) will be paid. It is
            specified as a relative date.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="ExerciseNotice">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining to whom and where notice of execution should be
        given. The partyReference refers to one of the principal
        parties of the trade. If present the
        exerciseNoticePartyReference refers to a party, other than the
        principal party, to whome notice should be given.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="partyReference" type="PartyReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The party referenced has allocated the trade identifier.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="exerciseNoticePartyReference" type="PartyReference" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The party referenced is the party to which notice of
            exercise should be given by the buyer.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="businessCenter" type="BusinessCenter"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="ExerciseProcedure">
```

```xml
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type describing how notice of exercise should be given. This
            can be either manual or automatic.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:choice>
          <xsd:element name="manualExercise" type="ManualExercise">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies that the notice of exercise must be given by
                the buyer to the seller or seller's agent.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="automaticExercise" type="AutomaticExercise">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                If automatic is specified then the notional amount of the
                underlying swap, not previously exercised under the
                swaption will be automatically exercised at the
                expiration time on the expiration date if at such time
                the buyer is in-the-money, provided that the difference
                between the settlement rate and the fixed rate under the
                relevant underlying swap is not less than the specified
                threshold rate. The term in-the-money is assumed to have
                the meaning defining in the 2000 ISDA Definitions,
                Section 17.4 In-the-money.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:choice>
        <xsd:element name="followUpConfirmation" type="xsd:boolean">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="limitedRightToConfirm" type="xsd:boolean" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Has the meaning defined as part of the 1997 ISDA Government
              Bond Option Definitions, section 4.5 Limited Right to
              Confirm Exercise. If present, (i) the Seller may request
              the Buyer to confirm its intent if not done on or before
              the expiration time on the Expiration date (ii) specific
              rules will apply in relation to the settlement mode.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="splitTicket" type="xsd:boolean" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Typically applicable to the physical settlement of bond and
              convertible bond options. If present, means that the Party
              required to deliver the bonds will divide those to be
              delivered as notifying party desires to facilitate delivery
              obligations.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="FallbackRate">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        Defines a fallback rate, which is a rate to be used in place of
        a publish term rate (such as an ibor rate) when that term rate
        ceases to be usable, whether because it ceases to be published
        or is deemed non-representative by regulator.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
      <xsd:element name="effectiveDate" type="xsd:date">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The date upon which the fallback rate becomes effective.
            This means that any rate observation for that date or for
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            any subsequent date would use the fallback rate rather than
            the originally defined rate. This date will typically
            immediately follow the cessation of publication of the
            original term rate but could occur before that (e.g. if the
            original rate is deemed non-representative prior to
            cessation of publication). If the effective date occurs
            within a calculation period with multiple rate observations
            (because of averaging), observations prior to the effective
            date will use the original floating rate index, and
            observations on or after the effective date will use the
            fallback rate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    <xsd:sequence>
      <xsd:element name="floatingRateIndex" type="FloatingRateIndex">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The benchmark rate used for computing the fallback rate.
            Typically this will be a risk-free overnight rate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="effectiveDate" type="xsd:date" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The date upon which the fallback rate becomes effective.
            This means that any rate observation for that date or for
            any subsequent date would use the fallback rate rather
            than the originally defined rate. This date will
            typically immediately follow the cessation of publication
            of the original term rate but could occur before that
            (e.g. if the original rate is deemed non-representative
            prior to cessation of publication). If the effective date
            occurs within a calculation period with multiple rate
            observations (because of averaging), observations prior
            to the effective date will use the original floating rate
            index, and observations on or after the effective date
            will use the fallback rate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="calculationParameters" type="CalculationParameters" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            This provides a representation of the approximate value
            of the fallback rate, i.e. a calculated rate that quite
            closely mimics the value anticipated to be published by
            the fallback rate administrator (once the spread
            adjustment is added).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="spreadAdjustment" type="xsd:decimal" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            An amount to be added to the calculated value before
            subsequent use, in order to more closely replicate the
            original term rate, by adjusting for the economic or
            credit spread between risk-free rates and risky term
            rates.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:choice>
  <xsd:attribute name="id" type="xsd:ID" use="optional"/>
</xsd:complexType>
<xsd:complexType name="FallbackRateObservation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining parameters associated with a fallback
      observation, i.e. a rate observation where the original
      published rate is not available and instead a fallback rate
      must be used.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="observationDate" type="xsd:date">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The date which is the Fallback Observation Date, as defined
          in the ISDA 2006/2021 Definitions (typically 2 days prior
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```xml
                            to the relevant Payment/calculation date.
                         </xsd:documentation>
                      </xsd:annotation>
                   </xsd:element>
                   <xsd:element name="availableRecordDate" type="xsd:date" minOccurs="0">
                      <xsd:annotation>
                         <xsd:documentation xml:lang="en">
                            The original record date from the fallback publication
                            source that was available at the time that fallback rate
                            was observed. This may be before the original fixing date
                            depending on publication schedules
                         </xsd:documentation>
                      </xsd:annotation>
                   </xsd:element>
                </xsd:sequence>
             </xsd:complexType>
             <xsd:complexType name="FloatingRate">
                <xsd:annotation>
                   <xsd:documentation xml:lang="en">
                      A type defining a floating rate.
                   </xsd:documentation>
                </xsd:annotation>
                <xsd:complexContent>
                   <xsd:extension base="Rate">
                      <xsd:sequence>
                         <xsd:group ref="FloatingRateIndex.model"/>
                         <xsd:element name="calculationParameters" type="CalculationParameters" minOccurs="0">
                            <xsd:annotation>
                               <xsd:documentation xml:lang="en">
                                  Parameters to specify a rate calculated using an
                                  averaging or compounding formula, as described in the
                                  2021 ISDA Defintions, section 7. Please note that when
                                  this structure is used, the "resetDates" structure will
                                  not be used. Instead, the observation rules for the
                                  calculated rate are defined within the structure.
                               </xsd:documentation>
                            </xsd:annotation>
                         </xsd:element>
                         <xsd:element name="fallbackRate" type="FallbackRate" minOccurs="0">
                            <xsd:annotation>
                               <xsd:documentation xml:lang="en">
                                  A fallback rate calculated using an averaging or
                                  compounding formula to be used in case of the cessation
                                  of the original term rate. This structure is provided
                                  to 1) allow a message sender to report that a fallback
                                  is effect, and/or 2) allow an approximate
                                  representation to be created for published fallback
                                  rates to allow operations such as valuation, accrual
                                  calculation, and risk calculation.
                               </xsd:documentation>
                            </xsd:annotation>
                         </xsd:element>
                         <xsd:group ref="FloatingRate.model"/>
                      </xsd:sequence>
                   </xsd:extension>
                </xsd:complexContent>
             </xsd:complexType>
             <xsd:complexType name="FloatingRateCalculation">
                <xsd:annotation>
                   <xsd:documentation xml:lang="en">
                      A type defining the floating rate and definitions relating to
                      the calculation of floating rate amounts.
                   </xsd:documentation>
                </xsd:annotation>
                <xsd:complexContent>
                   <xsd:extension base="FloatingRate">
                      <xsd:sequence>
                         <xsd:group ref="FloatingRateCalculation.model"/>
                      </xsd:sequence>
                   </xsd:extension>
                </xsd:complexContent>
             </xsd:complexType>
             <xsd:complexType name="FloatingRateIndex">
                <xsd:annotation>
                   <xsd:documentation xml:lang="en">
                      The ISDA Floating Rate Option, i.e. the floating rate index.
                   </xsd:documentation>
                </xsd:annotation>
                <xsd:simpleContent>
                   <xsd:extension base="xsd:normalizedString">
                      <xsd:attribute name="floatingRateIndexScheme" type="xsd:anyURI" default="http://www.fp
                   </xsd:extension>
                </xsd:simpleContent>
```

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      </xsd:complexType>
      <xsd:complexType name="ForecastRateIndex">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type defining a rate index.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="floatingRateIndex" type="FloatingRateIndex">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The ISDA Floating Rate Option, i.e. the floating rate
                index.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="indexTenor" type="Interval">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The ISDA Designated Maturity, i.e. the tenor of the
                floating rate.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="Formula">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type describing a financial formula, with its description and
            components.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="formulaDescription" type="xsd:string" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Text description of the formula
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="math" type="Math" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An element for containing an XML representation of the
                formula. Defined using xsd:any currently for flexibility in
                choice of language (MathML, OpenMath)
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="formulaComponent" type="FormulaComponent" minOccurs="0" maxOccurs="unk
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Elements describing the components of the formula. The name
                attribute points to a value used in the math element. The
                href attribute points to a value elsewhere in the document
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="FormulaComponent">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Elements describing the components of the formula. The name
            attribute points to a value used in the math element. The href
            attribute points to a numeric value defined elsewhere in the
            document that is used by the formula component.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="componentDescription" type="xsd:string">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Text description of the component
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="formula" type="Formula" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Additional formulas required to describe this component
              </xsd:documentation>
```

```xml
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:attribute name="name" type="xsd:normalizedString"/>
      <xsd:attribute name="href" type="xsd:IDREF" fpml-annotation:deprecated="true" fpml-annotati
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            This attribute has been DEPRECATED. It will be removed in the
            next FpML major version. Pointer to a numeric value defined
            elsewhere in the document that is used by the formula
            component.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:attribute>
  </xsd:complexType>
  <xsd:complexType name="FxCashSettlement">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type that is used for describing cash settlement of an option
        / non deliverable forward. It includes the currency to settle
        into together with the fixings required to calculate the
        currency amount.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="settlementCurrency" type="Currency">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The currency in which a cash settlement for non-deliverable
            forward and non-deliverable options.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="fixing" type="FxFixing" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies the source for and timing of a fixing of an
            exchange rate. This is used in the agreement of
            non-deliverable forward trades as well as various types of
            FX OTC options that require observations against a
            particular rate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="FxFixing">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type that specifies the source for and timing of a fixing of
        an exchange rate. This is used in the agreement of
        non-deliverable forward trades as well as various types of FX
        OTC options that require observations against a particular
        rate.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="FxSpotRateSource">
        <xsd:sequence>
          <xsd:element name="quotedCurrencyPair" type="QuotedCurrencyPair">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Defines the two currencies for an FX trade and the
                quotation relationship between the two currencies.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="fixingDate" type="xsd:date">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Describes the specific date when a non-deliverable
                forward or non-deliverable option will "fix" against a
                particular rate, which will be used to compute the
                ultimate cash settlement.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="FxRate">
    <xsd:annotation>
```

```xml
          <xsd:documentation xml:lang="en">
            A type describing the rate of a currency conversion: pair of
            currency, quotation mode and exchange rate.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="quotedCurrencyPair" type="QuotedCurrencyPair">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Defines the two currencies for an FX trade and the
                quotation relationship between the two currencies.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="rate" type="xsd:decimal">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The rate of exchange between the two currencies of the leg
                of a deal. Must be specified with a quote basis.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="FxSpotRateSource">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type defining the source and time for an fx rate.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="primaryRateSource" type="InformationSource">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The primary source for where the rate observation will
                occur. Will typically be either a page or a reference bank
                published rate.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="secondaryRateSource" type="InformationSource" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An alternative, or secondary, source for where the rate
                observation will occur. Will typically be either a page or
                a reference bank published rate.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="fixingTime" type="BusinessCenterTime">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                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.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="GoverningLaw">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Identification of the law governing the transaction.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="governingLawScheme" type="xsd:anyURI" default="http://www.fpml.org
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="IdentifiedCurrency">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies Currency with ID attribute.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="Currency">
            <xsd:attribute name="id" type="xsd:ID"/>
          </xsd:extension>
        </xsd:simpleContent>
```

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      </xsd:complexType>
      <xsd:complexType name="IdentifiedCurrencyReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Reference to a currency with ID attribute
          </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
          <xsd:extension base="Reference">
            <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="IdentifiedC
          </xsd:extension>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="IdentifiedDate">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A date which can be referenced elsewhere.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:date">
            <xsd:attribute name="id" type="xsd:ID"/>
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="IdentifiedPayerReceiver">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type extending the PayerReceiverEnum type wih an id
            attribute.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="PayerReceiverEnum">
            <xsd:attribute name="id" type="xsd:ID"/>
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="InflationRateCalculationBase">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type defining the floating rate and definitions relating to
            the calculation of floating rate amounts. This type mimics the
            "FloatingRateCalculation" type but excludes the option of
            defining modular calculated rates and fallback rates. It
            provides an extension point for the InflationRateCalculation
            which does not require those features.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
          <xsd:extension base="Rate">
            <xsd:sequence>
              <xsd:group ref="FloatingRateIndex.model"/>
              <xsd:group ref="FloatingRate.model"/>
              <xsd:group ref="FloatingRateCalculation.model"/>
            </xsd:sequence>
          </xsd:extension>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="InformationProvider">
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="informationProviderScheme" type="xsd:anyURI" default="http://www.f
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="InformationSource">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type defining the source for a piece of information (e.g. a
            rate refix or an fx fixing).
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="rateSource" type="InformationProvider">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An information source for obtaining a market rate. For
                example Bloomberg, Reuters, Telerate etc.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="rateSourcePage" type="RateSourcePage" minOccurs="0">
```

```xml
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A specific page for the rate source for obtaining a market
            rate.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="rateSourcePageHeading" type="xsd:string" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The heading for the rate source on a given rate source
            page.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="InstrumentId">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A short form unique identifier for a security.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="instrumentIdScheme" type="xsd:anyURI" use="required"/>
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="InterestAccrualsCompoundingMethod">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining the way in which interests are accrued: the
        applicable rate (fixed or floating reference) and the
        compounding method.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="InterestAccrualsMethod">
        <xsd:sequence minOccurs="0">
          <xsd:element name="compoundingMethod" type="CompoundingMethodEnum">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                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.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="InterestAccrualsMethod">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type describing the method for accruing interests on
        dividends. Can be either a fixed rate reference or a floating
        rate reference.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:choice>
      <xsd:element name="floatingRateCalculation" type="FloatingRateCalculation">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The floating rate calculation definitions
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="fixedRate" type="xsd:decimal">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The calculation period fixed rate. A per annum rate,
            expressed as a decimal. A fixed rate of 5% would be
            represented as 0.05.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:choice>
  </xsd:complexType>
```

```
<xsd:complexType name="IntermediaryInformation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type that describes the information to identify an
      intermediary through which payment will be made by the
      correspondent bank to the ultimate beneficiary of the funds.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:group ref="RoutingIdentification.model"/>
    <xsd:element name="intermediarySequenceNumber" type="xsd:positiveInteger">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A sequence number that gives the position of the current
          intermediary in the chain of payment intermediaries. The
          assumed domain value set is an ascending sequence of
          integers starting from 1.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="intermediaryPartyReference" type="PartyReference" minOccurs="0">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Reference to the party acting as intermediary.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="Interval">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a time interval or offset, e.g. one day, three
      months. Used for specifying frequencies at which events occur,
      the tenor of a floating rate or an offset relative to another
      date.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="periodMultiplier" type="xsd:integer">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
    <xsd:element name="period" type="PeriodEnum">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          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).
        </xsd:documentation>
      </xsd:annotation>
    </xsd:element>
  </xsd:sequence>
  <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="Leg" abstract="true">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A supertype of leg. All swap legs extend this type.
    </xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
<xsd:complexType name="LegalEntity">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      A type defining a legal entity.
    </xsd:documentation>
  </xsd:annotation>
  <xsd:choice>
    <xsd:sequence>
      <xsd:element name="entityName" type="EntityName">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The name of the reference entity. A free format string.
            FpML does not define usage rules for this element.
          </xsd:documentation>
        </xsd:annotation>
```

```xml
            </xsd:element>
            <xsd:element name="entityId" type="EntityId" minOccurs="0" maxOccurs="unbounded">
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  A legal entity identifier (e.g. RED entity code).
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
          <xsd:element name="entityId" type="EntityId" maxOccurs="unbounded">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A legal entity identifier (e.g. RED entity code)..
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:choice>
        <xsd:attribute name="id" type="xsd:ID"/>
      </xsd:complexType>
      <xsd:complexType name="LegalEntityReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            References a credit entity defined elsewhere in the document.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
          <xsd:extension base="Reference">
            <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="LegalEntity
          </xsd:extension>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="MainPublication">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type to define the main publication source.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="mainPublicationScheme" type="xsd:anyURI" default="http://www.fpml.
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="ManualExercise">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type defining manual exercise, i.e. that the option buyer
            counterparty must give notice to the option seller of exercise.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="exerciseNotice" type="ExerciseNotice" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Definition of the party to whom notice of exercise should
                be given.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="fallbackExercise" type="xsd:boolean" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                If fallback exercise is specified then the notional amount
                of the underlying swap, not previously exercised under the
                swaption, will be automatically exercised at the expiration
                time on the expiration date if at such time the buyer is
                in-the-money, provided that the difference between the
                settlement rate and the fixed rate under the relevant
                underlying swap is not less than one tenth of a percentage
                point (0.10% or 0.001). The term in-the-money is assumed to
                have the meaning defined in the 2000 ISDA Definitions,
                Section 17.4. In-the-money.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="MasterAgreement">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            An entity for defining the agreement executed between the
            parties and intended to govern all OTC derivatives transactions
            between those parties.
```

```xml
          </xsd:documentation>
       </xsd:annotation>
       <xsd:sequence>
          <xsd:element name="masterAgreementType" type="MasterAgreementType">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The agreement executed between the parties and intended to
                   govern product-specific derivatives transactions between
                   those parties.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
          <xsd:element name="masterAgreementDate" type="xsd:date" minOccurs="0">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The date on which the master agreement was signed.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
       </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="MasterAgreementType">
       <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
             <xsd:attribute name="masterAgreementTypeScheme" type="xsd:anyURI" default="http://www.f
          </xsd:extension>
       </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="MasterConfirmation">
       <xsd:annotation>
          <xsd:documentation xml:lang="en">
             An entity for defining the master confirmation agreement
             executed between the parties.
          </xsd:documentation>
       </xsd:annotation>
       <xsd:sequence>
          <xsd:element name="masterConfirmationType" type="MasterConfirmationType">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The type of master confirmation executed between the
                   parties.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
          <xsd:element name="masterConfirmationDate" type="xsd:date">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The date of the confirmation executed between the parties
                   and intended to govern all relevant transactions between
                   those parties.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
          <xsd:element name="masterConfirmationAnnexDate" type="xsd:date" minOccurs="0">
             <xsd:annotation>
                <xsd:documentation xml:lang="en">
                   The date that an annex to the master confirmation was
                   executed between the parties.
                </xsd:documentation>
             </xsd:annotation>
          </xsd:element>
       </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="MasterConfirmationType">
       <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
             <xsd:attribute name="masterConfirmationTypeScheme" type="xsd:anyURI" default="http://ww
          </xsd:extension>
       </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="Math" mixed="true">
       <xsd:annotation>
          <xsd:documentation xml:lang="en">
             A type defining a mathematical expression.
          </xsd:documentation>
       </xsd:annotation>
       <xsd:sequence>
          <xsd:any namespace="##any" processContents="skip" maxOccurs="unbounded"/>
       </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="MatrixType">
       <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
```

```xml
        <xsd:attribute name="matrixTypeScheme" type="xsd:anyURI" default="http://www.fpml.org/c
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="MatrixTerm">
    <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="matrixTermScheme" type="xsd:anyURI" default="http://www.fpml.org/c
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="MimeType">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The type that 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.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="mimeTypeScheme" type="xsd:anyURI"/>
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="Money">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a currency amount.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="currency" type="Currency">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The currency in which an amount is denominated.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="amount" type="xsd:decimal">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The monetary quantity in currency units.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
    <xsd:attribute name="id" type="xsd:ID"/>
  </xsd:complexType>
  <xsd:complexType name="MultipleExercise">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining multiple exercises. As defining in the 2000
        ISDA Definitions, Section 12.4. Multiple Exercise, the buyer of
        the option has the right to exercise all or less than all the
        unexercised notional amount of the underlying swap on one or
        more days in the exercise period, but on any such day may not
        exercise less than the minimum notional amount or more than the
        maximum notional amount, and if an integral multiple amount is
        specified, the notional exercised must be equal to or, be an
        integral multiple of, the integral multiple amount.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:group ref="PartialExercise.model"/>
      <xsd:choice minOccurs="0">
        <xsd:element name="maximumNotionalAmount" type="xsd:decimal">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The maximum notional amount that can be exercised on a
              given exercise date.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="maximumNumberOfOptions" type="xsd:nonNegativeInteger">
          <xsd:annotation>
            <xsd:documentation>
              The maximum number of options that can be exercised on a
              given exercise date. If the number is not specified, it
              means that the maximum number of options corresponds to
              the remaining unexercised options.
            </xsd:documentation>
```

```xsd
              </xsd:annotation>
            </xsd:element>
          </xsd:choice>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="MutuallyAgreedClearinghouse">
        <xsd:choice>
          <xsd:element name="partyReference" type="PartyReference">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A reference to the party structure for the clearinghouse
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="identifier" type="OrganizationIdentifier">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A string that identifies the clearinghouse
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:choice>
      </xsd:complexType>
      <xsd:complexType name="NotionalAmountReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A reference to the notional amount.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
          <xsd:extension base="Reference">
            <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
          </xsd:extension>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="ObservationOffset">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type that allows an offset specified in business days to be
            applied for an observation shift, lookback, or lockout
            provision.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="offsetDays" type="xsd:nonNegativeInteger" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The number of business days before the base date that the
                observations are to be shifted. If this element is omitted,
                the number of offset days will be as specified in the 2021
                ISDA Definitions, which is typically 5.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="ObservationShiftParameters">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies parameters specific to the observation shift method
            of compounding/averaging.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
          <xsd:extension base="ObservationOffset">
            <xsd:sequence>
              <xsd:element name="observationPeriodDates" type="ObservationPeriodDatesEnum">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    Specifies how the observation period is to be
                    determined relative to the basic calculation period.
                    Options include "standard" (observation period aligns
                    with the calculation period except for any
                    shifts/lookbacks/lockouts, i.e. it is set in arrears),
                    "InAdvance" (observation period is based on the prior
                    or deemed prior calculation period plus any shifts), or
                    "FixingDate" (observation period is based on a fixing
                    date defined the the FpML resetDates structure; this is
                    used only for fallback rate definitions that reference
                    existing resetDates structures.).
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
```

```xml
                    <xsd:element name="additionalBusinessDays" minOccurs="0" type="BusinessCentersOrRefer
                       <xsd:annotation>
                          <xsd:documentation xml:lang="en">
                             Any additional business centers that are applicable to
                             the observation shift calculation, in addition to the
                             regular "applicableBusinessDays".
                          </xsd:documentation>
                       </xsd:annotation>
                    </xsd:element>
                 </xsd:sequence>
              </xsd:extension>
           </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="Offset">
           <xsd:annotation>
              <xsd:documentation xml:lang="en">
                 A type defining an offset used in calculating a new date
                 relative to a reference date. Currently, the only offsets
                 defined are expected to be expressed as either calendar or
                 business day offsets.
              </xsd:documentation>
           </xsd:annotation>
           <xsd:complexContent>
              <xsd:extension base="Interval">
                 <xsd:sequence>
                    <xsd:element name="dayType" type="DayTypeEnum" minOccurs="0">
                       <xsd:annotation>
                          <xsd:documentation xml:lang="en">
                             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.
                          </xsd:documentation>
                       </xsd:annotation>
                    </xsd:element>
                 </xsd:sequence>
              </xsd:extension>
           </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="OrganizationIdentifier">
           <xsd:annotation>
              <xsd:documentation xml:lang="en">
                 The data type used for a generic, user-defined identifier for
                 an organization, where a full party structure is not desired or
                 required.
              </xsd:documentation>
           </xsd:annotation>
           <xsd:simpleContent>
              <xsd:extension base="xsd:normalizedString">
                 <xsd:attribute name="idScheme" type="xsd:anyURI" use="optional">
                    <xsd:annotation>
                       <xsd:documentation xml:lang="en">
                          The identifier scheme used with this generic identifier.
                       </xsd:documentation>
                    </xsd:annotation>
                 </xsd:attribute>
              </xsd:extension>
           </xsd:simpleContent>
        </xsd:complexType>
        <xsd:complexType name="PartialExercise">
           <xsd:annotation>
              <xsd:documentation xml:lang="en">
                 A type defining partial exercise. As defined in the 2000 ISDA
                 Definitions, Section 12.3 Partial Exercise, the buyer of the
                 option may exercise all or less than all the notional amount of
                 the underlying swap but may not be less than the minimum
                 notional amount (if specified) and must be an integral multiple
                 of the integral multiple amount if specified.
              </xsd:documentation>
           </xsd:annotation>
           <xsd:sequence>
              <xsd:group ref="PartialExercise.model"/>
           </xsd:sequence>
        </xsd:complexType>
        <xsd:complexType name="Party">
           <xsd:annotation>
```

```
      <xsd:documentation xml:lang="en">
        A type defining a legal entity or a subdivision of a legal
        entity.
      </xsd:documentation>
      <xsd:documentation xml:lang="en">
        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.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="partyId" type="PartyId" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A party identifier, e.g. a S.W.I.F.T. bank identifier code
            (BIC).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="partyName" type="xsd:normalizedString" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The name of the party. A free format string. FpML does not
            define usage rules for this element.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="account" type="Account" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Accounts serviced by this party. These are not accounts
            where this party is beneficiary, but instead where services
            are provided by this party to the beneficiary party.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
    <xsd:attribute name="id" type="xsd:ID" use="required">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The id uniquely identifying the Party within the document.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:attribute>
  </xsd:complexType>
  <xsd:complexType name="PartyId">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        The data type used for party identifiers.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="partyIdScheme" type="xsd:anyURI" default="http://www.fpml.org/ext/
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="PartyOrAccountReference">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A reference to a party or an account.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Reference">
        <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="PartyOrTradeSideReference">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A reference to a party or tradeSide.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Reference">
        <xsd:attribute name="href" type="xsd:IDREF" use="required"/>
      </xsd:extension>
```

```xml
          </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="PartyReference">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Reference to a party.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
            <xsd:extension base="Reference">
                <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Party"/>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="Payment">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
              A type for defining payments
            </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
            <xsd:group ref="PayerReceiver.model"/>
            <xsd:element name="paymentAmount" type="Money">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      The currency amount of the payment.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="paymentDate" type="AdjustableDate" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      The payment date. This date is subject to adjustment in
                      accordance with any applicable business day convention.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="adjustedPaymentDate" type="IdentifiedDate" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      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).
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="paymentType" type="PaymentType" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      A classification of the type of fee or additional payment,
                      e.g. brokerage, upfront fee etc. FpML does not define
                      domain values for this element.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="settlementInformation" type="SettlementInformation" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      The information required to settle a currency payment that
                      results from a trade.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="discountFactor" type="xsd:decimal" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      The value representing the discount factor used to
                      calculate the present value of the cash flow.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="presentValueAmount" type="Money" minOccurs="0">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      The amount representing the present value of the forecast
                      payment.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:sequence>
```

```xml
        <xsd:attribute name="href" type="xsd:IDREF" ecore:reference="PricingStructure">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Can be used to reference the yield curve used to estimate the
              discount factor
            </xsd:documentation>
          </xsd:annotation>
        </xsd:attribute>
      </xsd:complexType>
      <xsd:complexType name="PaymentCurrency" fpml-annotation:deprecated="true" fpml-annotation:dep
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type describing the currency in which the payment relating to
            the leg amount (equity amount or interest amount) or the
            dividend will be denominated.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:choice minOccurs="0">
          <xsd:element name="currency" type="Currency">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The currency in which an amount is denominated.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="determinationMethod" type="DeterminationMethod">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies the method according to which an amount or a date
                is determined.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:choice>
        <xsd:attribute name="id" type="xsd:ID"/>
        <xsd:attribute name="href" type="xsd:IDREF"/>
      </xsd:complexType>
      <xsd:complexType name="PaymentType">
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="paymentTypeScheme" type="xsd:anyURI"/>
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="PeriodicDates">
        <xsd:sequence>
          <xsd:element name="calculationStartDate" type="AdjustableOrRelativeDate"/>
          <xsd:element name="calculationEndDate" type="AdjustableOrRelativeDate" minOccurs="0"/>
          <xsd:element name="calculationPeriodFrequency" type="CalculationPeriodFrequency">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The frequency at which calculation period end dates occur
                with the regular part of the calculation period schedule
                and their roll date convention.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="calculationPeriodDatesAdjustments" type="BusinessDayAdjustments">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                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.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="PricingStructure" abstract="true">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            An abstract pricing structure base type. Used as a base for
            structures such as yield curves and volatility matrices..
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="name" type="xsd:normalizedString" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The name of the structure, e.g "USDLIBOR-3M EOD Curve".
              </xsd:documentation>
            </xsd:annotation>
```

```xsd
        </xsd:element>
        <xsd:element name="currency" type="Currency" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The currency that the structure is expressed in (this is
              relevant mostly for the Interes Rates asset class).
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="PricingStructureReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Reference to a pricing structure or any derived components
          (i.e. yield curve).
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="Reference">
          <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="PricingStru
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="PrincipalExchanges">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining which principal exchanges occur for the stream.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="initialExchange" type="xsd:boolean">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              A true/false flag to indicate whether there is an initial
              exchange of principal on the effective date.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="finalExchange" type="xsd:boolean">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              A true/false flag to indicate whether there is a final
              exchange of principal on the termination date.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="intermediateExchange" type="xsd:boolean">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              A true/false flag to indicate whether there are
              intermediate or interim exchanges of principal during the
              term of the swap.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:attribute name="id" type="xsd:ID" use="optional"/>
    </xsd:complexType>
    <xsd:complexType name="Product" abstract="true">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The base type which all FpML products extend.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:group ref="Product.model"/>
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="ProductId">
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="productIdScheme" type="xsd:anyURI"/>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="ProductReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Reference to a full FpML product.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
```

```xml
      <xsd:extension base="Reference">
        <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Product"/>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="ProductType">
    <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="productTypeScheme" type="xsd:anyURI" default="http://www.fpml.org/
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="QuotedCurrencyPair">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
      A type that describes the composition of a rate that has been
      quoted or is to be quoted. This includes the two currencies and
      the quotation relationship between the two currencies and is
      used as a building block throughout the FX specification.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="currency1" type="Currency">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          The first currency specified when a pair of currencies is
          to be evaluated.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="currency2" type="Currency">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          The second currency specified when a pair of currencies is
          to be evaluated.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="quoteBasis" type="QuoteBasisEnum">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          The method by which the exchange rate is quoted.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="Rate" abstract="true">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
      The abstract base class for all types which define interest
      rate streams.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:attribute name="id" type="xsd:ID"/>
  </xsd:complexType>
  <xsd:complexType name="RateReference">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
      Reference to any rate (floating, inflation) derived from the
      abstract Rate component.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Rate"/>
  </xsd:complexType>
  <xsd:complexType name="RateObservation">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
      A type defining parameters associated with an individual
      observation or fixing. This type forms part of the cashflow
      representation of a stream.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="resetDate" type="xsd:date" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
          The reset date.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="adjustedFixingDate" type="xsd:date" minOccurs="0">
        <xsd:annotation>
```

```xml
            <xsd:documentation xml:lang="en">
               The adjusted fixing date, i.e. the actual date the rate is
               observed. The date should already be adjusted for any
               applicable business day convention.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="observedRate" type="xsd:decimal" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               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.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="treatedRate" type="xsd:decimal" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               The observed rate after any required rate treatment is
               applied. A treated rate of 5% would be represented as 0.05.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="observationWeight" type="xsd:positiveInteger">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               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 reset
               date is established for a single calculation period.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="rateReference" type="RateReference" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               A pointer style reference to a floating rate component
               defined as part of a stub calculation period amount
               component. It is only required when it is necessary to
               distinguish two rate observations for the same fixing date
               which could occur when linear interpolation of two
               different rates occurs for a stub calculation period.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="forecastRate" type="xsd:decimal" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               The value representing the forecast rate used to calculate
               the forecast future value of the accrual period.A value of
               1% should be represented as 0.01
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="treatedForecastRate" type="xsd:decimal" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               The value representing the forecast rate after applying
               rate treatment rules. A value of 1% should be represented
               as 0.01
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="fallback" type="FallbackRateObservation" minOccurs="0">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
               Observation Parameters for IBOR fallback rates. These allow
               recording information about how the fallback rate was
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
   </xsd:sequence>
   <xsd:attribute name="id" type="xsd:ID"/>
</xsd:complexType>
<xsd:complexType name="RateSourcePage">
   <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
         <xsd:attribute name="rateSourcePageScheme" type="xsd:anyURI"/>
      </xsd:extension>
   </xsd:simpleContent>
```

```xsd
    </xsd:complexType>
    <xsd:complexType name="Reference" abstract="true">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          The abstract base class for all types which define
          intra-document pointers.
        </xsd:documentation>
      </xsd:annotation>
    </xsd:complexType>
    <xsd:complexType name="ReferenceAmount">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Specifies the reference amount using a scheme.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="referenceAmountScheme" type="xsd:anyURI"/>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="ReferenceBank">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type to describe an institution (party) identified by means
          of a coding scheme and an optional name.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="referenceBankId" type="ReferenceBankId">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              An institution (party) identifier, e.g. a bank identifier
              code (BIC).
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="referenceBankName" type="xsd:string" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The name of the institution (party). A free format string.
              FpML does not define usage rules for the element.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="ReferenceBankId">
      <xsd:simpleContent>
        <xsd:extension base="xsd:normalizedString">
          <xsd:attribute name="referenceBankIdScheme" type="xsd:anyURI"/>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="RelativeDateOffset">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining a date (referred to as the derived date) as a
          relative offset from another date (referred to as the anchor
          date). If the anchor date is itself an adjustable date then the
          offset is assumed to be calculated from the adjusted anchor
          date. A number of different scenarios can be supported, namely;
          1) the derived date may simply be a number of calendar periods
          (days, weeks, months or years) preceding or following the
          anchor date; 2) the unadjusted derived date may be a number of
          calendar periods(days, weeks, months or years) preceding or
          following the anchor date with the resulting unadjusted derived
          date subject to adjustment in accordance with a specified
          business day convention, i.e. the derived date must fall on a
          good business day; 3) the derived date may be a number of
          business days preceding or following the anchor date. Note that
          the businessDayConvention specifies any required adjustment to
          the unadjusted derived date. A negative or positive value in
          the periodMultiplier indicates whether the unadjusted derived
          precedes or follows the anchor date. The businessDayConvention
          should contain a value NONE if the day type element contains a
          value of Business (since specifying a negative or positive
          business days offset would already guarantee that the derived
          date would fall on a good business day in the specified
          business centers).
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
```

```xml
      <xsd:extension base="Offset">
        <xsd:sequence>
          <xsd:element name="businessDayConvention" type="BusinessDayConventionEnum">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The convention for adjusting a date if it would
                otherwise fall on a day that is not a business day.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
          <xsd:element name="dateRelativeTo" type="DateReference">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Specifies the anchor as an href attribute. The href
                attribute value is a pointer style reference to the
                element or component elsewhere in the document where
                the anchor date is defined.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="RelativeDates">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type describing a set of dates defined as relative to another
        set of dates.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="RelativeDateOffset">
        <xsd:sequence>
          <xsd:element name="periodSkip" type="xsd:positiveInteger" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The number of periods in the referenced date schedule
                that are between each date in the relative date
                schedule. Thus a skip of 2 would mean that dates are
                relative to every second date in the referenced
                schedule. If present this should have a value greater
                than 1.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="scheduleBounds" type="DateRange" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The first and last dates of a schedule. This can be
                used to restrict the range of values in a reference
                series of dates.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="RelativeDateSequence">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type describing a date when this date is defined in reference
        to another date through one or several date offsets.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="dateRelativeTo" type="DateReference">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies the anchor as an href attribute. The href
            attribute value is a pointer style reference to the element
            or component elsewhere in the document where the anchor
            date is defined.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="dateOffset" type="DateOffset" maxOccurs="unbounded"/>
      <xsd:group ref="BusinessCentersOrReference.model" minOccurs="0"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="RequiredIdentifierDate">
```

```xml
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A date with a required identifier which can be referenced
          elsewhere.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:simpleContent>
        <xsd:extension base="xsd:date">
          <xsd:attribute name="id" type="xsd:ID" use="required"/>
        </xsd:extension>
      </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="ResetFrequency">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining the reset frequency. In the case of a weekly
          reset, also specifies the day of the week that the reset
          occurs. If the reset frequency is greater than the calculation
          period frequency the this implies that more or more reset dates
          is established for each calculation period and some form of
          rate averaginhg is applicable. The specific averaging method of
          calculation is specified in FloatingRateCalculation.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="Interval">
          <xsd:sequence>
            <xsd:element name="weeklyRollConvention" type="WeeklyRollConventionEnum" minOccurs="(
              <xsd:annotation>
                <xsd:documentation xml:lang="en">
                  The day of the week on which a weekly reset date
                  occurs. This element must be included if the reset
                  frequency is defined as weekly and not otherwise.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:sequence>
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="Rounding">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining a rounding direction and precision to be used
          in the rounding of a rate.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="roundingDirection" type="RoundingDirectionEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Specifies the rounding direction.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="precision" type="xsd:nonNegativeInteger">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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).
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="Routing">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type that provides three alternative ways of identifying a
          party involved in the routing of a payment. The identification
          may use payment system identifiers only; actual name, address
          and other reference information; or a combination of both.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:group ref="RoutingIdentification.model"/>
    </xsd:complexType>
    <xsd:complexType name="RoutingExplicitDetails">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
```

```xml
                A type that models name, address and supplementary textual
                information for the purposes of identifying a party involved in
                the routing of a payment.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:group ref="RoutingExplicitDetails.model"/>
    </xsd:complexType>
    <xsd:complexType name="RoutingId">
        <xsd:simpleContent>
            <xsd:extension base="xsd:normalizedString">
                <xsd:attribute name="routingIdCodeScheme" type="xsd:anyURI" default="http://www.fpml.or
            </xsd:extension>
        </xsd:simpleContent>
    </xsd:complexType>
    <xsd:complexType name="RoutingIds">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A type that provides for identifying a party involved in the
                routing of a payment by means of one or more standard
                identification codes. For example, both a SWIFT BIC code and a
                national bank identifier may be required.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
            <xsd:element name="routingId" type="RoutingId" maxOccurs="unbounded">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A unique identifier for party that is a participant in a
                        recognized payment system.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
        </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="RoutingIdsAndExplicitDetails">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A type that provides a combination of payment system
                identification codes with physical postal address details, for
                the purposes of identifying a party involved in the routing of
                a payment.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
            <xsd:element name="routingIds" type="RoutingIds" maxOccurs="unbounded">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        A set of unique identifiers for a party, eachone
                        identifying the party within a payment system. The
                        assumption is that each party will not have more than one
                        identifier within the same payment system.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:group ref="RoutingExplicitDetails.model"/>
        </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="Schedule">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
                A type defining a schedule of rates or amounts in terms of an
                initial value and then a series of step date and value pairs.
                On each step date the rate or amount changes to the new step
                value. The series of step date and value pairs are optional. If
                not specified, this implies that the initial value remains
                unchanged over time.
            </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
            <xsd:element name="initialValue" type="xsd:decimal">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        The initial rate or amount, as the case may be. An initial
                        rate of 5% would be represented as 0.05.
                    </xsd:documentation>
                </xsd:annotation>
            </xsd:element>
            <xsd:element name="step" type="Step" minOccurs="0" maxOccurs="unbounded">
                <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                        The 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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="ScheduleReference">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Reference to a schedule of rates or amounts.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
        <xsd:extension base="Reference">
          <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="Schedule"/>
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
    <xsd:complexType name="SettlementInformation">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type that represents the choice of methods for settling a
          potential currency payment resulting from a trade: by means of
          a standard settlement instruction, by netting it out with other
          payments, or with an explicit settlement instruction.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:choice>
        <xsd:element name="standardSettlementStyle" type="StandardSettlementStyleEnum">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              An optional element used to describe how a trade will
              settle. This defines a scheme and is used for identifying
              trades that are identified as settling standard and/or
              flagged for settlement netting.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="settlementInstruction" type="SettlementInstruction">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              An explicit specification of how a currency payment is to
              be made, when the payment is not netted and the route is
              other than the recipient's standard settlement instruction.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:choice>
    </xsd:complexType>
    <xsd:complexType name="SettlementInstruction">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type that models a complete instruction for settling a
          currency payment, including the settlement method to be used,
          the correspondent bank, any intermediary banks and the ultimate
          beneficary.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="settlementMethod" type="SettlementMethod" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The mechanism by which settlement is to be made. The scheme
              of domain values will include standard mechanisms such as
              CLS, Fedwire, Chips ABA, Chips UID, SWIFT, CHAPS and DDA.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="correspondentInformation" type="CorrespondentInformation" minOccurs="0
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The information required to identify the correspondent bank
              that will make delivery of the funds on the paying bank's
              behalf in the country where the payment is to be made
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="intermediaryInformation" type="IntermediaryInformation" minOccurs="0"
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Information to identify an intermediary through which
```

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                    payment will be made by the correspondent bank to the
                    ultimate beneficiary of the funds.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="beneficiaryBank" type="Beneficiary" minOccurs="0">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    The bank that acts for the ultimate beneficiary of the
                    funds in receiving payments.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="beneficiary" type="Beneficiary">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    The ultimate beneficiary of the funds. The beneficiary can
                    be identified either by an account at the beneficiaryBank
                    (qv) or by explicit routingInformation. This element
                    provides for the latter.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="depositoryPartyReference" type="PartyReference" minOccurs="0">
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    Reference to the depository of the settlement.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
              <xsd:element name="splitSettlement" type="SplitSettlement" minOccurs="0" maxOccurs="unbou
                <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    The set of individual payments that are to be made when a
                    currency payment settling a trade needs to be split between
                    a number of ultimate beneficiaries. Each split payment may
                    need to have its own routing information.
                  </xsd:documentation>
                </xsd:annotation>
              </xsd:element>
          </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="SettlementMethod">
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="settlementMethodScheme" type="xsd:anyURI" default="http://www.fpml
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="SettlementPriceSource">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The source from which the settlement price is to be obtained,
            e.g. a Reuters page, Prezzo di Riferimento, etc.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:simpleContent>
          <xsd:extension base="xsd:normalizedString">
            <xsd:attribute name="settlementPriceSourceScheme" type="xsd:anyURI" default="http://www
          </xsd:extension>
        </xsd:simpleContent>
      </xsd:complexType>
      <xsd:complexType name="SettlementRateSource">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A type describing the method for obtaining a settlement rate.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:choice>
          <xsd:element name="informationSource" type="InformationSource">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The information source where a published or displayed
                market rate will be obtained, e.g. Telerate Page 3750.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="cashSettlementReferenceBanks" type="CashSettlementReferenceBanks">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                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
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                    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.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:choice>
</xsd:complexType>
<xsd:complexType name="SharedAmericanExercise">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            TBA
        </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
        <xsd:extension base="Exercise">
            <xsd:sequence>
                <xsd:element name="commencementDate" type="AdjustableOrRelativeDate">
                    <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                            The first day of the exercise period for an American
                            style option.
                        </xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="expirationDate" type="AdjustableOrRelativeDate">
                    <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                            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.
                        </xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="latestExerciseTime" type="BusinessCenterTime" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation xml:lang="en">
                            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.
                        </xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
            </xsd:sequence>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
<xsd:complexType name="SimplePayment">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A complex type to specified payments in a simpler fashion than
            the Payment type. This construct should be used from the
            version 4.3 onwards.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
        <xsd:group ref="PayerReceiver.model"/>
        <xsd:element name="paymentAmount" type="Money"/>
        <xsd:element name="paymentDate" type="AdjustableOrRelativeAndAdjustedDate">
            <xsd:annotation>
                <xsd:documentation xml:lang="en">
                    The payment date. This date is subject to adjustment in
                    accordance with any applicable business day convention.
                </xsd:documentation>
            </xsd:annotation>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>
<xsd:complexType name="SplitSettlement">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">
            A type that supports the division of a gross settlement amount
            into a number of split settlements, each requiring its own
            settlement instruction.
        </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
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      <xsd:element name="splitSettlementAmount" type="Money">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            One of the monetary amounts in a split settlement payment.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="beneficiaryBank" type="Routing" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The bank that acts for the ultimate beneficiary of the
            funds in receiving payments.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="beneficiary" type="Routing">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The ultimate beneficiary of the funds. The beneficiary can
            be identified either by an account at the beneficiaryBank
            (qv) or by explicit routingInformation. This element
            provides for the latter.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="SpreadSchedule">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        Adds an optional spread type element to the Schedule to
        identify a long or short spread value.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Schedule">
        <xsd:sequence>
          <xsd:element name="type" type="SpreadScheduleType" minOccurs="0"/>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="SpreadScheduleReference">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        Provides a reference to a spread schedule.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Reference">
        <xsd:attribute name="href" type="xsd:IDREF" use="required" ecore:reference="SpreadSched
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="SpreadScheduleType">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        Defines a Spread Type Scheme to identify a long or short spread
        value.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:simpleContent>
      <xsd:extension base="xsd:normalizedString">
        <xsd:attribute name="spreadScheduleTypeScheme" type="xsd:anyURI" default="http://www.fp
      </xsd:extension>
    </xsd:simpleContent>
  </xsd:complexType>
  <xsd:complexType name="Step">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type defining a step date and step value pair. This step
        definitions are used to define varying rate or amount
        schedules, e.g. a notional amortization or a step-up coupon
        schedule.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element name="stepDate" type="xsd:date">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The date on which the associated stepValue becomes
            effective. This day may be subject to adjustment in
            accordance with a business day convention.
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            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="stepValue" type="xsd:decimal">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The rate or amount which becomes effective on the
              associated stepDate. A rate of 5% would be represented as
              0.05.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
      <xsd:attribute name="id" type="xsd:ID"/>
    </xsd:complexType>
    <xsd:complexType name="StreetAddress">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type that describes the set of street and building number
          information that identifies a postal address within a city.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="streetLine" type="xsd:string" maxOccurs="unbounded">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              An individual line of street and building number
              information, forming part of a postal address.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
    <xsd:complexType name="Stub">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          A type defining how a stub calculation period 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 rate tenors many 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.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:choice>
          <xsd:element name="floatingRate" type="StubFloatingRate" maxOccurs="unbounded">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The rates to be applied to the initial or final stub may
                be the linear interpolation of two different rates. While
                the majority of the time, the rate indices will be the
                same as that specified in the stream and only the tenor
                itself will be different, it is possible to specift two
                different rates. For example, a 2 month stub period may
                use the linear interpolation of a 1 month and 3 month
                rate. The different rates would be specified in this
                component. Note that a maximum of two rates can be
                specified. If a stub period uses the same floating rate
                index, including tenor, as the regular calculation
                periods then this should not be specified again within
                this component, i.e. the stub calculation period amount
                component may not need to be specified even if there is
                an initial or final stub period. If a stub period uses a
                different floating rate index compared to the regular
                calculation periods then this should be specified within
                this component. If specified here, they are likely to
                have id attributes, allowing them to be referenced from
                within the cashflows component.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="stubRate" type="xsd:decimal">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                An actual rate to apply for the initial or final stub
                period may have been agreed between the principal parties
                (in a similar way to how an initial rate may have been
                agreed for the first regular period). If an actual stub
                rate has been agreed then it would be included in this
                component. It will be a per annum rate, expressed as a
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                    decimal. A stub rate of 5% would be represented as 0.05.
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:element>
            <xsd:element name="stubAmount" type="Money">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    An actual amount to apply for the initial or final stub
                    period may have been agreed between th two parties. If an
                    actual stub amount has been agreed then it would be
                    included in this component.
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:element>
         </xsd:choice>
         <xsd:element name="stubStartDate" type="AdjustableOrRelativeDate" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                 Start date of stub period. This was created to support use
                 of the InterestRateStream within the Equity Derivative
                 sphere, and this element is not expected to be produced in
                 the representation of Interest Rate products.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="stubEndDate" type="AdjustableOrRelativeDate" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                 End date of stub period. This was created to support use of
                 the InterestRateStream within the Equity Derivative sphere,
                 and this element is not expected to be produced in the
                 representation of Interest Rate products.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:sequence>
   </xsd:complexType>
   <xsd:complexType name="StubFloatingRate">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
           A type defining a floating rate.
         </xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
         <xsd:extension base="Rate">
            <xsd:sequence>
               <xsd:group ref="FloatingRateIndex.model"/>
               <xsd:element name="fallbackRate" type="FallbackRate" minOccurs="0">
                  <xsd:annotation>
                     <xsd:documentation xml:lang="en">
                       A fallback rate calculated using an averaging or
                       compounding formula to be used in case of the cessation
                       of the original term rate. This structure is provided
                       to allow an approximate representation to be created
                       for published fallback rates to allow operations such
                       as valuation, accrual calculation, and risk
                       calculation.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:element>
               <xsd:group ref="FloatingRate.model" minOccurs="0">
                  <xsd:annotation>
                     <xsd:documentation xml:lang="en">
                       DEPRECATED - These conditioning parameters should never
                       be applied to the stub rate, rather to the original
                       rate. They are retained for backward compatibility with
                       previous versions of the standard.
                     </xsd:documentation>
                  </xsd:annotation>
               </xsd:group>
            </xsd:sequence>
         </xsd:extension>
      </xsd:complexContent>
   </xsd:complexType>
   <xsd:complexType name="Strike">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
           A type describing a single cap or floor rate.
         </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
         <xsd:element name="strikeRate" type="xsd:decimal">
            <xsd:annotation>
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          <xsd:documentation xml:lang="en">
            The rate for a cap or floor.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="buyer" type="IdentifiedPayerReceiver" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The buyer of the option
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="seller" type="IdentifiedPayerReceiver" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The party that has sold.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
    <xsd:attribute name="id" type="xsd:ID"/>
  </xsd:complexType>
  <xsd:complexType name="StrikeSchedule">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        A type describing a schedule of cap or floor rates.
      </xsd:documentation>
    </xsd:annotation>
    <xsd:complexContent>
      <xsd:extension base="Schedule">
        <xsd:sequence>
          <xsd:element name="buyer" type="IdentifiedPayerReceiver" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The buyer of the option
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="seller" type="IdentifiedPayerReceiver" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The party that has sold.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:extension>
    </xsd:complexContent>
  </xsd:complexType>
  <xsd:complexType name="SwaptionPhysicalSettlement">
    <xsd:sequence>
      <xsd:element name="clearedPhysicalSettlement" type="xsd:boolean">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            Specifies whether the swap resulting from physical
            settlement of the swaption transaction will clear through a
            clearing house. The meaning of Cleared Physical Settlement
            is defined in the 2006 ISDA Definitions, Section 15.2
            (published in Supplement number 28).
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="mutuallyAgreedClearinghouse" type="MutuallyAgreedClearinghouse" minOcc
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            This may be used to specify a "mutually-agreed
            clearinghouse" for settlement.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="agreedDiscountRate" type="BenchmarkRate" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            This may be used to indicate the discount rate to be used
            for cash collateral for cash settlement purposes.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="settlementRateSource" type="SettlementRateSource" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            The method for obtaining a settlement rate. This may be
            from some information source (e.g. Reuters) or from a set
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                    of reference banks.
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:element>
            <xsd:element name="quotationRateType" type="QuotationRateTypeEnum" minOccurs="0">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    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)
                  </xsd:documentation>
               </xsd:annotation>
            </xsd:element>
         </xsd:sequence>
      </xsd:complexType>
      <xsd:complexType name="ValuationScenarioReference">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
              Reference to a valuation scenario.
            </xsd:documentation>
         </xsd:annotation>
         <xsd:complexContent>
            <xsd:extension base="Reference"/>
         </xsd:complexContent>
      </xsd:complexType>
      <xsd:element name="americanExercise" type="AmericanExercise" substitutionGroup="exercise">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The parameters for defining the exercise period for an American
              style option together with any rules governing the notional
              amount of the underlying which can be exercised on any given
              exercise date and any associated exercise fees.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="bermudaExercise" type="BermudaExercise" substitutionGroup="exercise">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The parameters for defining the exercise period for a Bermuda
              style option together with any rules governing the notional
              amount of the underlying which can be exercised on any given
              exercise date and any associated exercise fees.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="europeanExercise" type="EuropeanExercise" substitutionGroup="exercise">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The parameters for defining the exercise period for a European
              style option together with any rules governing the notional
              amount of the underlying which can be exercised on any given
              exercise date and any associated exercise fees.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="exercise" type="Exercise" abstract="true">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
              An placeholder for the actual option exercise definitions.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:element name="product" type="Product" abstract="true">
         <xsd:annotation>
            <xsd:documentation xml:lang="en">
              An abstract element used as a place holder for the substituting
              product elements.
            </xsd:documentation>
         </xsd:annotation>
      </xsd:element>
      <xsd:group name="BusinessCentersOrReference.model">
         <xsd:choice>
            <xsd:element name="businessCentersReference" type="BusinessCentersReference">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                    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.
                  </xsd:documentation>
               </xsd:annotation>
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        </xsd:element>
        <xsd:element name="businessCenters" type="BusinessCenters"/>
      </xsd:choice>
    </xsd:group>
    <xsd:group name="BuyerSeller.model">
      <xsd:sequence>
        <xsd:element name="buyerPartyReference" type="PartyOrTradeSideReference">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="sellerPartyReference" type="PartyOrTradeSideReference">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:group>
    <xsd:group name="FloatingRate.model">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Elements representing the rate treatment and conditioning
          parameters that can be applied to a floating rate, such as
          spreads, multipliers, rate treatments, rate rounding, etc.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="floatingRateMultiplierSchedule" type="Schedule" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="spreadSchedule" type="SpreadSchedule" minOccurs="0" maxOccurs="unbound
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="rateTreatment" type="RateTreatmentEnum" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
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        </xsd:element>
        <xsd:element name="capRateSchedule" type="StrikeSchedule" minOccurs="0" maxOccurs="unbour
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="floorRateSchedule" type="StrikeSchedule" minOccurs="0" maxOccurs="unbc
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:group>
    <xsd:group name="FloatingRateCalculation.model">
      <xsd:annotation>
        <xsd:documentation xml:lang="en">
          Elements representing the daily calculated rate and fallback
          rate definitions.
        </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="initialRate" type="xsd:decimal" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="finalRateRounding" type="Rounding" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              The rounding convention to apply to the final rate used in
              determination of a calculation period amount.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="averagingMethod" type="AveragingMethodEnum" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="negativeInterestRateTreatment" type="NegativeInterestRateTreatmentEnur
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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).
            </xsd:documentation>
          </xsd:annotation>
```

```
            </xsd:element>
      </xsd:sequence>
   </xsd:group>
   <xsd:group name="FloatingRateIndex.model">
      <xsd:sequence>
         <xsd:element name="floatingRateIndex" type="FloatingRateIndex" minOccurs="1">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  The ISDA Floating Rate Option, i.e. the name of the
                  floating rate.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="indexTenor" type="Interval" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  The ISDA Designated Maturity, i.e. the tenor of the
                  floating rate.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:sequence>
   </xsd:group>
   <xsd:group name="ObservationParameters.model">
      <xsd:annotation>
         <xsd:documentation xml:lang="en">
            Definitions of daily cap and floor rates for floating rate
            indexes.
         </xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
         <xsd:element name="observationCapRate" type="xsd:decimal" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>
                  A maximum rate for an rate observation; optionally applied
                  for daily averaged rates. These are described in the 2021
                  ISDA Definitions in Section 7.2.4
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="observationFloorRate" type="xsd:decimal" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation>
                  A minimum rate for an rate observation; optionally applied
                  for daily averaged rates. These are described in the 2021
                  ISDA Definitions in Section 7.2.3
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
      </xsd:sequence>
   </xsd:group>
   <xsd:group name="PartialExercise.model">
      <xsd:sequence>
         <xsd:element name="notionalReference" type="ScheduleReference" minOccurs="0" maxOccurs="u
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  A pointer style reference to the associated notional
                  schedule defined elsewhere in the document. This element
                  has been made optional as part of its integration in the
                  OptionBaseExtended, because not required for the options on
                  securities.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:element name="integralMultipleAmount" type="xsd:decimal" minOccurs="0">
            <xsd:annotation>
               <xsd:documentation xml:lang="en">
                  A notional amount which restricts the amount of notional
                  that can be exercised when partial exercise or multiple
                  exercise is applicable. The integral multiple amount
                  defines a lower limit of notional that can be exercised and
                  also defines a unit multiple of notional that can be
                  exercised, i.e. only integer multiples of this amount can
                  be exercised.
               </xsd:documentation>
            </xsd:annotation>
         </xsd:element>
         <xsd:choice>
            <xsd:element name="minimumNotionalAmount" type="xsd:decimal">
               <xsd:annotation>
                  <xsd:documentation xml:lang="en">
                     The minimum notional amount that can be exercised on a
                     given exercise date. See multipleExercise.
```

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                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
            <xsd:element name="minimumNumberOfOptions" type="xsd:nonNegativeInteger">
              <xsd:annotation>
                <xsd:documentation>
                  The minimum number of options that can be exercised on a
                  given exercise date.
                </xsd:documentation>
              </xsd:annotation>
            </xsd:element>
          </xsd:choice>
        </xsd:sequence>
      </xsd:group>
      <xsd:group name="PayerReceiver.model">
        <xsd:sequence>
          <xsd:element name="payerPartyReference" type="PartyOrAccountReference">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A reference to the party responsible for making the
                payments defined by this structure.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="receiverPartyReference" type="PartyOrAccountReference">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                A reference to the party that receives the payments
                corresponding to this structure.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:group>
      <xsd:group name="PaymentDiscounting.model">
        <xsd:annotation>
          <xsd:documentation>
            A model group for representing the discounting elements that
            can be associated with a payment.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="discountFactor" type="xsd:decimal" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The value representing the discount factor used to
                calculate the present value of the cash flow.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="presentValueAmount" type="Money" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The amount representing the present value of the forecast
                payment.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
        </xsd:sequence>
      </xsd:group>
      <xsd:group name="Premium.model">
        <xsd:annotation>
          <xsd:documentation>
            A model group for representing the option premium when
            expressed in a way other than an amount.
          </xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
          <xsd:element name="premiumType" type="PremiumTypeEnum" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                Forward start Premium type
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
          <xsd:element name="pricePerOption" type="Money" minOccurs="0">
            <xsd:annotation>
              <xsd:documentation xml:lang="en">
                The amount of premium to be paid expressed as a function of
                the number of options.
              </xsd:documentation>
            </xsd:annotation>
          </xsd:element>
```

```xml
        <xsd:element name="percentageOfNotional" type="xsd:decimal" minOccurs="0">
          <xsd:annotation>
            <xsd:documentation xml:lang="en">
              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.
            </xsd:documentation>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
  </xsd:group>
  <xsd:group name="Product.model">
    <xsd:sequence>
      <xsd:element name="productType" type="ProductType" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A classification of the type of product. FpML defines a
            simple product categorization using a coding scheme.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="productId" type="ProductId" minOccurs="0" maxOccurs="unbounded">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            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.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:group>
  <xsd:group name="RoutingExplicitDetails.model">
    <xsd:sequence>
      <xsd:element name="routingName" type="xsd:string">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A real name that is used to identify a party involved in
            the routing of a payment.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="routingAddress" type="Address" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A physical postal address via which a payment can be
            routed.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="routingAccountNumber" type="xsd:string" minOccurs="0">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            An account number via which a payment can be routed.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="routingReferenceText" type="xsd:string" minOccurs="0" maxOccurs="unbou
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A piece of free-format text used to assist the
            identification of a party involved in the routing of a
            payment.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
    </xsd:sequence>
  </xsd:group>
  <xsd:group name="RoutingIdentification.model">
    <xsd:choice>
      <xsd:element name="routingIds" type="RoutingIds">
        <xsd:annotation>
          <xsd:documentation xml:lang="en">
            A set of unique identifiers for a party, eachone
            identifying the party within a payment system. The
            assumption is that each party will not have more than one
            identifier within the same payment system.
          </xsd:documentation>
        </xsd:annotation>
      </xsd:element>
      <xsd:element name="routingExplicitDetails" type="RoutingExplicitDetails">
        <xsd:annotation>
```

```xsd
                    <xsd:documentation xml:lang="en">
                      A set of details that is used to identify a party involved
                      in the routing of a payment when the party does not have a
                      code that identifies it within one of the recognized
                      payment systems.
                    </xsd:documentation>
                  </xsd:annotation>
                </xsd:element>
                <xsd:element name="routingIdsAndExplicitDetails" type="RoutingIdsAndExplicitDetails">
                  <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      A combination of coded payment system identifiers and
                      details for physical addressing for a party involved in the
                      routing of a payment.
                    </xsd:documentation>
                  </xsd:annotation>
                </xsd:element>
            </xsd:choice>
        </xsd:group>
        <xsd:group name="SettlementAmountOrCurrency.model">
            <xsd:choice>
                <xsd:element name="settlementAmount" type="Money">
                  <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      Settlement Amount
                    </xsd:documentation>
                  </xsd:annotation>
                </xsd:element>
                <xsd:element name="settlementCurrency" type="Currency">
                  <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      Settlement Currency for use where the Settlement Amount
                      cannot be known in advance
                    </xsd:documentation>
                  </xsd:annotation>
                </xsd:element>
            </xsd:choice>
        </xsd:group>
        <xsd:group name="VersionHistory.model">
            <xsd:sequence>
                <xsd:element name="version" type="xsd:nonNegativeInteger">
                  <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      The version number
                    </xsd:documentation>
                  </xsd:annotation>
                </xsd:element>
                <xsd:element name="effectiveDate" type="IdentifiedDate" minOccurs="0">
                  <xsd:annotation>
                    <xsd:documentation xml:lang="en">
                      Optionally it is possible to specify a version effective
                      date when a versionId is supplied.
                    </xsd:documentation>
                  </xsd:annotation>
                </xsd:element>
            </xsd:sequence>
        </xsd:group>
</xsd:schema>
```