Financial Products Markup Language

Components and Document Type Definitions

FpML Working Draft 1.0 b2

Abstract

The Financial Product Markup Language (FpML) is a business information exchange standard for electronic dealing and processing of Financial Derivative instruments. FpML is based on the Extensible Markup Language (XML) and initially focuses on Interest Rate Derivatives, FX Spot and FX Derivative Products. FpML has been designed to be modular, easy to use and in particular, intelligible to practitioners in the financial industry. This working draft is presented in three parts: (1) Overview, (2) DTDs and associated information components, and (3) Corresponding reference FpML for a representative set of Financial instruments in Interest Rate and FX markets. The overview includes business and design goals, the scope and architechtural framework of FpML.

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Status of this document:

This is the FpML Working Draft for review by the FpML Technical Committee. It is a draft document and may be updated, replaced, or made obsolete by other documents at any time. The FpML Standards committee will not allow early implementation to constrain its ability to make changes to this specification prior to final release. It is inappropriate to use the FpML working draft as reference material or to cite it as other than "work in progress".

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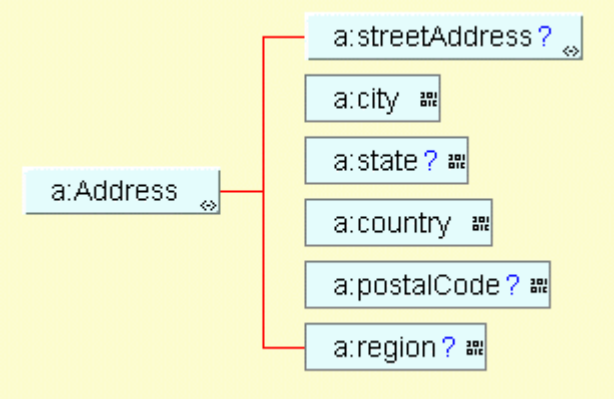
1 COMPONENT LIST

1.1 a:Address

Description:

Contains the details describing an address. Elements such as street address, city, state, etc. are contained in this element. It can be used to define a contact person's address, corporate address or wherever an address must be present.

Figure:



Contents:

a:streetAddress (optional, contains exactly one a:StreetAddress)

a:city (required, string)

- Free form text holding the part of the address that identifies the city, town, or similar municipality.

a:state (optional, string)

- Free form text holding the part of the address that identifies the state.

a:country (required, string)

- Free form text holding the part of the address that identifies the country.

a:postalCode (optional, string)

- Free form text holding the part of the address that identifies a specific postal delivery area in a form specified by the relevant Postal Authority.

a:region (optional, string)

- Country regional classification (continental, regional, etc.). Application defines regional classifications.

XML:

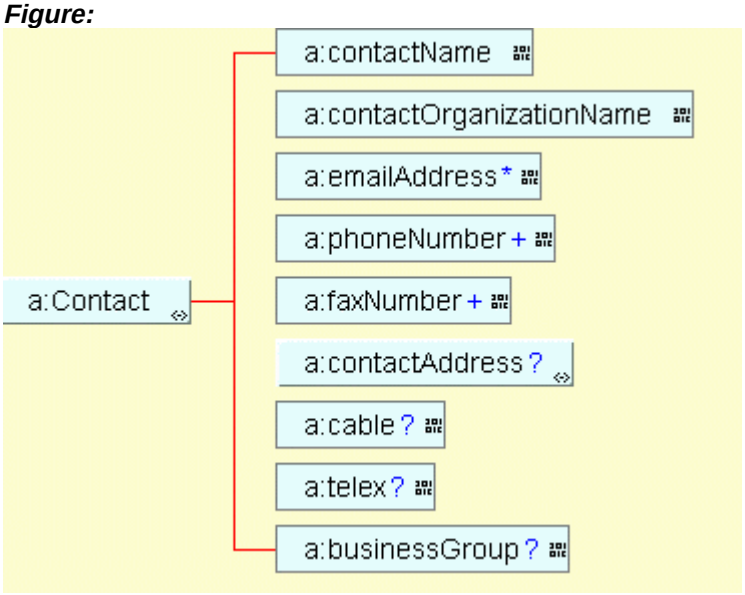
<!ELEMENT a:Address (a:streetAddress? , a:city , a:state? , a:country , a:postalCode? , a:region?)>

1.2 a:Contact

Description:

version 1.0b Contains information about a person who is acting as a point of correspondence for a party for various purposes (i.e. confirmations, settlement, etc.).

Figure:



Contents:

a:contactName (required, string)

- Name of a particular person designated to act as a Party's correspondent for a particular purpose.

a:contactOrganizationName(required, string)

- Organization in which the Party's contact person is employed

a:emailAddress (zero or more, string)

- Email address of a contact point or specific person.

a:phoneNumber (one or more, string)

- Telephone number of a contact point or specific person.

a:faxNumber (optional, string)

- Fax number of the a contact point or specific person.

a:contactAddress (optional, contains exactly one a:Address)
a:cable (optional, string)

- Contains a code for correspondence via cable.

a:telex (optional, string)

- Contains a code for correspondence via telex.

a:businessGroup (optional, string)

- Department/Group that the contact person works in

XML:

<!ELEMENT a:Contact (a:contactName , a:contactOrganizationName , a:emailAddress , a:phoneNumber+ , a:faxNumber? , a:contactAddress? , a:cable? , a:telex? , a:businessGroup?)>*

1.3 a:StreetAddress

Description:

The street portion of the address of a party, identifying the name of the street, the number of the building on the street, and if necessary an apartment in the building

Contents:

a:streetLine (one or more, string)

- Free form text holding the part of a streetAddress that identifies the street and the building within the street. It may also include an apartment number, floor identifier, etc.

XML:

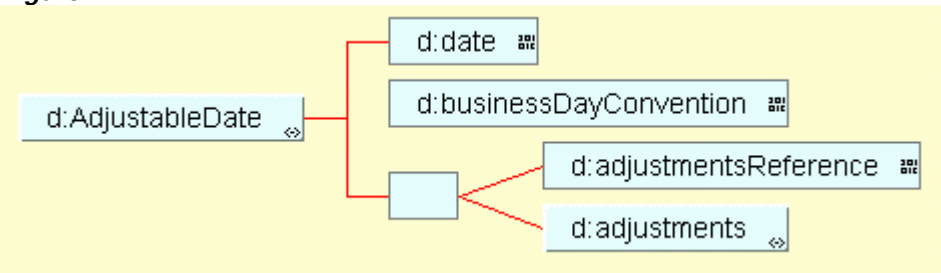
<!ELEMENT a:StreetAddress (a:streetLine+)>

1.4 d:AdjustableDate

Description:

Contains a date that may need to be adjusted to a valid business date and the associated adjustment parameters (Business Day convention and Business Centers).

Figure:



Contents:

d:date (required, date)

- A date that may need to be adjusted to a valid business day

d:businessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)

XML:

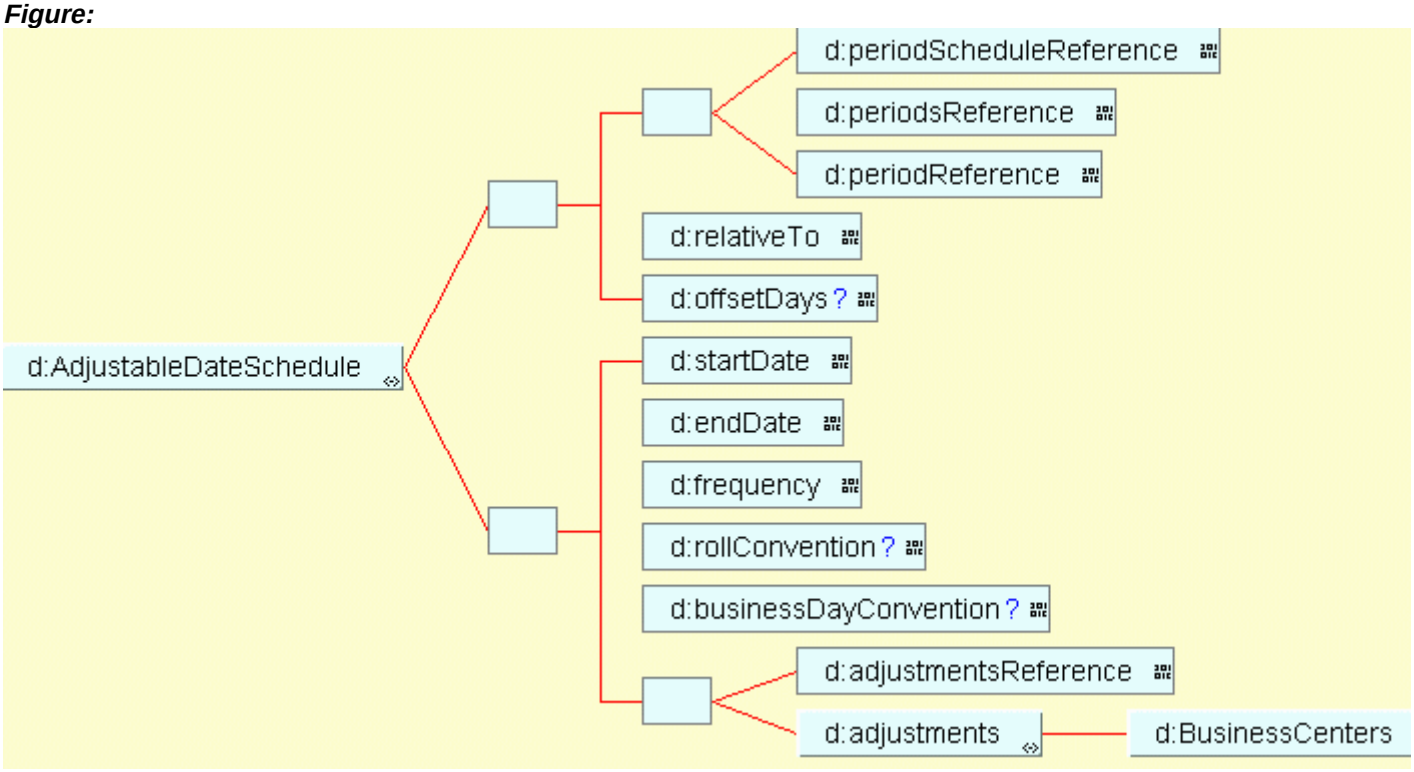
<!ELEMENT d:AdjustableDate (d:date , d:businessDayConvention , (d:adjustmentsReference | d:adjustments))>

1.5 d:AdjustableDateSchedule

Description:

Defines the set of parameters used to compute a specific schedule of dates over a specified period of time applying adjustments for Business Day Convention and Business Centers. Can reference a particular schedule of periods elsewhere in the document or specify the periods using detailed parameters.

Figure:



Contents:

d:relativeTo (required, value domain: 'periodStart periodEnd positionStart positionEnd')

- Indicates what a particular date is based on (i.e. a period start or end date)

d:endDate (required, date)

- The last unadjusted date of the specified time period. Is used for the calculation of future event dates (e.g. payment dates)

d:frequency (required, value domain: 'monthly quarterly semi-annual annual weekly daily')

- Periodic interval at which consequent repeating events occur (payment, reset, etc.)

d:rollConvention (optional, value domain: 'rollOnLast rollOnDay none')

- Specifies when payments should be made (e.g. EOM, regular, IMM)

d:businessDayConvention(optional, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:periodScheduleReference(one of set, string)
d:periodsReference (one of set, string)
d:periodReference (one of set, string)

- A reference to the specific period held elsewhere in the message

d:offsetDays (optional, string)

- The number of days prior to the reset date on which the rate is observed

d:startDate (one of set, date)

- The first unadjusted date of the specified time period. Is used for the calculation of future event dates (e.g. payment dates)

d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)

XML:

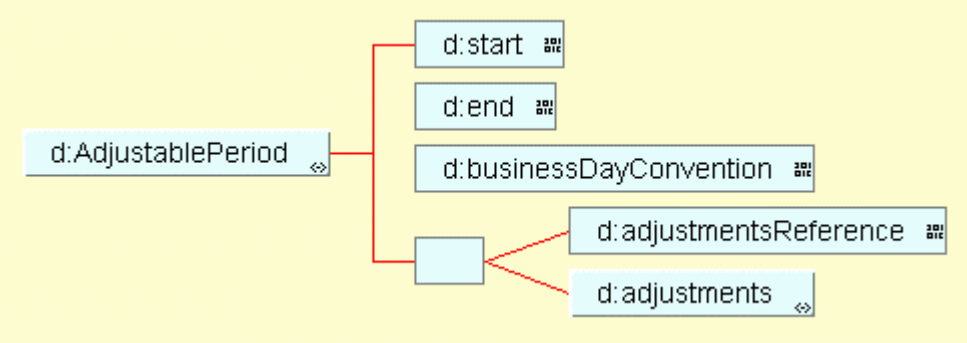
<!ELEMENT d:AdjustableDateSchedule (((d:periodScheduleReference | d:periodsReference | d:periodReference) , d:relativeTo , d:offsetDays?) | (d:startDate , d:endDate , d:frequency , d:rollConvention? , d:businessDayConvention? , (d:adjustmentsReference | d:adjustments)))>

1.6 d:AdjustablePeriod

Description:

Represents a single period for the interest rate calculation, for which the accrual dates will be adjusted, as necessary, in accordance with Business Day Convention and Business Centers. For example, this element is used for stubs where a single period is required rather than a schedule.

Figure:



Contents:

d:start (required, date)

- The first unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:end (required, date)

- The last unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:businessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)

XML:

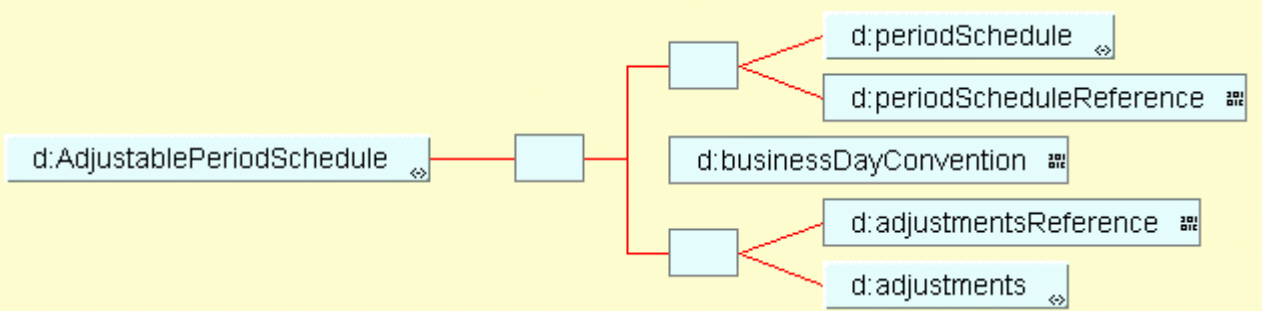
<!ELEMENT d:AdjustablePeriod (d:start , d:end , d:businessDayConvention , (d:adjustmentsReference | d:adjustments))>

1.7 d:AdjustablePeriodSchedule

Description:

Defines the set of parameters used to compute a schedule of periods applying adjustments for Business Day Convention and Business Centers. Can reference a particular basic/unadjusted schedule of periods elsewhere in the document or specify the periods using detailed parameters.

Figure:



Contents:

d:businessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:end (required, date)

- The last unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:frequency (required, value domain: 'monthly quarterly semi-annual annual weekly daily')

- Periodic interval at which consequent repeating events occur (payment, reset, etc.)

d:rollConvention (optional, value domain: 'rollOnLast rollOnDay none')

- Specifies when payments should be made (e.g. EOM, regular, IMM)

d:businessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:periodSchedule (one of set, contains exactly one d:BasicPeriodSchedule)
d:periodScheduleReference(one of set, string)
d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)
d:start (one of set, date)

- The first unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)

XML:

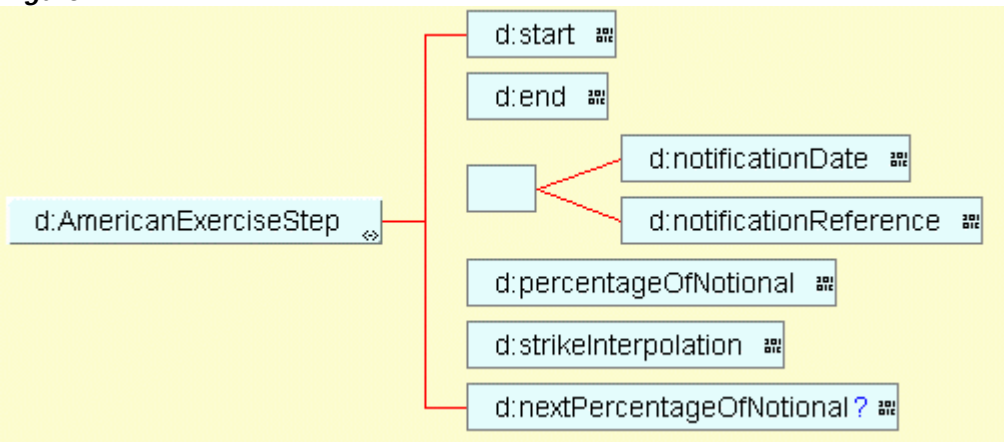
<!ELEMENT d:AdjustablePeriodSchedule (((d:periodSchedule | d:periodScheduleReference) , d:businessDayConvention , (d:adjustmentsReference | d:adjustments)) | (d:start , d:end , d:frequency , d:rollConvention? , d:businessDayConvention , (d:adjustmentsReference | d:adjustments)))>

1.8 d:AmericanExerciseStep

Description:

It defines the exercise period and the set of terms that apply upon exercising the American option

Figure:



Contents:

d:start (required, date)

- The first unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:end (required, date)

- The last unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:percentageOfNotional(required, integer)

- Expresses a percentage of the stated notional amount that will be effective upon the exercising of an option.

d:strikeInterpolation(required, value domain: 'linear minimum')

- The method of interpolation to be utilized in the calculation of a numeric value using at least two other values over a specified period of time.

d:nextPercentageOfNotional(optional, integer)
d:notificationDate (one of set, date)

- The date on which the party which bought option notify the counterparty that right will be exercised

d:notificationReference(one of set, string)

- Contains a reference to a NotificationOffset used to adjust the exercise date in determining the appropriate notification date.

XML:

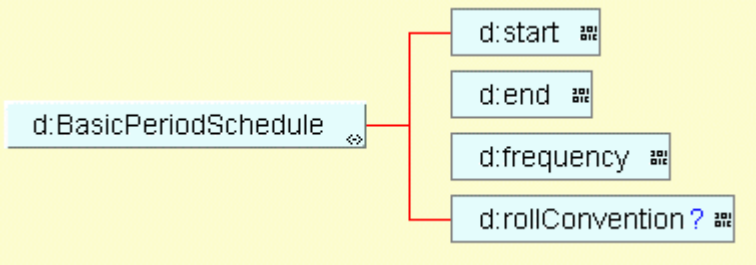
<!ELEMENT d:AmericanExerciseStep (d:start , d:end , (d:notificationDate | d:notificationReference) , d:percentageOfNotional , d:strikeInterpolation , d:nextPercentageOfNotional?)>

1.9 d:BasicPeriodSchedule

Description:

Defines the parameters used to compute different types of unadjusted date periods contained in a trade. These dates are only adjusted for Roll Day Convention (e.g. last day pf the month).

Figure:



Contents:

d:start (required, date)

- The first unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:end (required, date)

- The last unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)

d:frequency (required, value domain: 'monthly quarterly semi-annual annual weekly daily')

- Periodic interval at which consequent repeating events occur (payment, reset, etc.)

d:rollConvention (optional, value domain: 'rollOnLast rollOnDay none')

- Specifies when payments should be made (e.g. EOM, regular, IMM)

XML:

<!ELEMENT d:BasicPeriodSchedule (d:start , d:end , d:frequency , d:rollConvention?)>

1.10 d:BusinessCenters

Description:

version 1.0b Contains a list of financial centers that need to be referenced for particular purpose within the trade

Contents:

d:businessCenter (one or more, string)

- A name of a financial center that is referenced for a particular purpose. Currently used to define which calendar should be utilized in determining valid business days

XML:

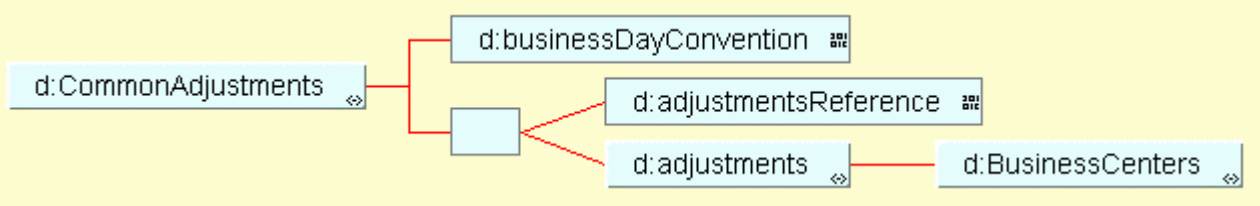
<!ELEMENT d:BusinessCenters (d:businessCenter+)>

1.11 d:CommonAdjustments

Description:

Combines the adjustment parameters which are constant for different adjustable dates. (e.g. used in defining a set of exercise steps where the steps all utilize the same Business Day Convention and Business Centers)

Figure:



Contents:

d:businessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)

XML:

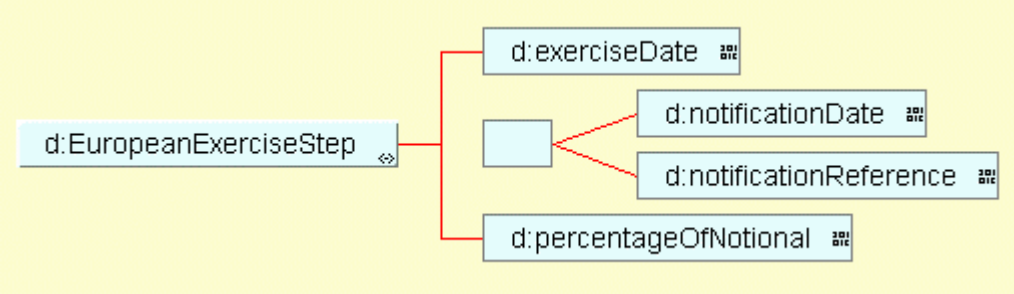
<!ELEMENT d:CommonAdjustments (d:businessDayConvention , (d:adjustmentsReference | d:adjustments))>

1.12 d:EuropeanExerciseStep

Description:

Defines the exercise date(s) and the set of terms that apply upon exercising the European option. Each step can have an explicit notification date or reference to an offset.

Figure:



Contents:

d:exerciseDate (required, date)

- The date on which the right to exercise the option becomes effective

d:percentageOfNotional(required, integer)

- Expresses a percentage of the stated notional amount that will be effective upon the exercising of an option.

d:notificationDate (one of set, date)

- The date on which the party which bought option notify the counterparty that right will be exercised

d:notificationReference(one of set, string)

- Contains a reference to a NotificationOffset used to adjust the exercise date in determining the appropriate notification date.

XML:

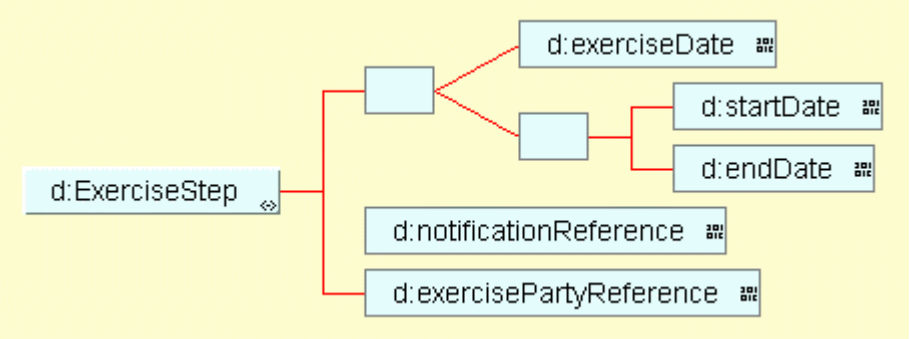
<!ELEMENT d:EuropeanExerciseStep (d:exerciseDate , (d:notificationDate | d:notificationReference) , d:percentageOfNotional)>

1.13 d:ExerciseStep

Description:

Generic set of parameters defining exercise periods and/or dates. This is used in a Cancelable Swap.

Figure:



Contents:

d:endDate (required, date)

- The last unadjusted date of the specified time period. Is used for the calculation of future event dates (e.g. payment dates)

d:notificationReference(one of set, string)

- Contains a reference to a NotificationOffset used to adjust the exercise date in determining the appropriate notification date.

d:exercisePartyReference(required, string)

- A reference to a Party held elsewhere in the message. Defines the Party that has the right to exercise its option.

d:exerciseDate (one of set, date)

- The date on which the right to exercise the option becomes effective

d:startDate (one of set, date)

- The first unadjusted date of the specified time period. Is used for the calculation of future event dates (e.g. payment dates)

XML:

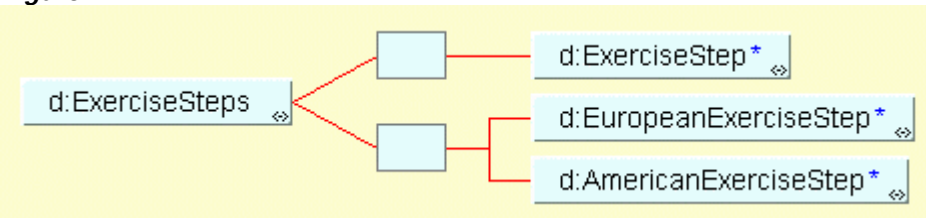
<!ELEMENT d:ExerciseStep ((d:exerciseDate | (d:startDate , d:endDate)) , d:notificationReference , d:exercisePartyReference)>

1.14 d:ExerciseSteps

Description:

Contains either a set of exercise steps or explicitly American/European steps, depending on the type of product.

Figure:



Contents:

d:AmericanExerciseStep(zero or more)

d:ExerciseStep(zero or more)

d:EuropeanExerciseStep(zero or more)

XML:

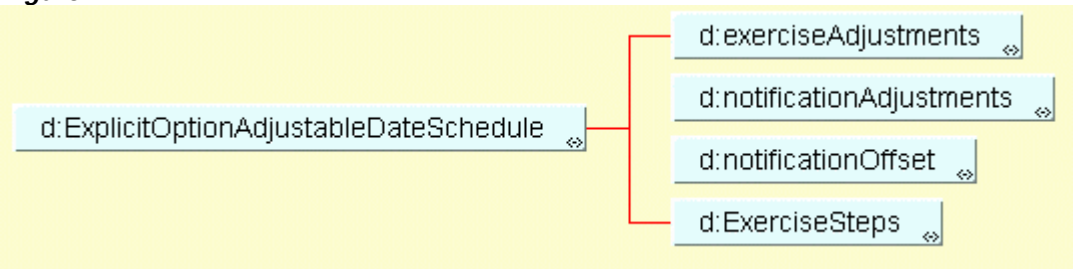
<!ELEMENT d:ExerciseSteps ((d:ExerciseStep) | (d:EuropeanExerciseStep* , d:AmericanExerciseStep*))>*

1.15 d:ExplicitOptionAdjustableDateSchedule

Description:

Set of exercise steps with explicit dates and/or periods and applicable adjustment parameters used to adjust exercise and notification dates.

Figure:



Contents:

d:exerciseAdjustments(required, contains exactly one d:CommonAdjustments)

d:notificationAdjustments(required, contains exactly one d:CommonAdjustments)

d:notificationOffset(required, contains exactly one d:NotificationOffset)

d:ExerciseSteps(required)

XML:

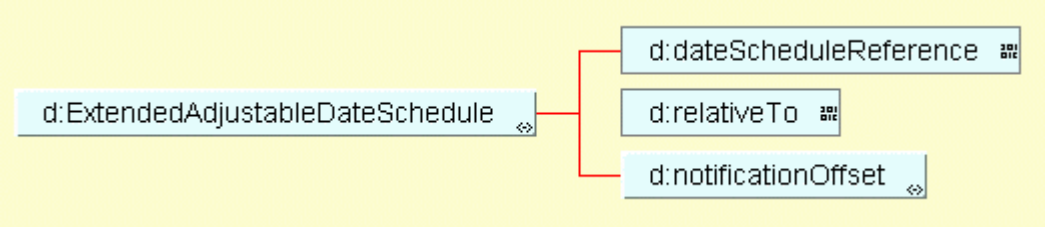
<!ELEMENT d:ExplicitOptionAdjustableDateSchedule (d:exerciseAdjustments , d:notificationAdjustments , d:notificationOffset , d:ExerciseSteps)>

1.16 d:ExtendedAdjustableDateSchedule

Description:

Defines the set of parameters used to calculate specific dates over period of time by referencing another date schedule and applying NotificationOffset parameters.

Figure:



Contents:

d:dateScheduleReference(required, string)

- Reference to an appropriate schedule elsewhere in the FpML, for example a schedule of exercise dates.

d:relativeTo (required, value domain: 'periodStart periodEnd positionStart positionEnd')

- Indicates what a particular date is based on (i.e. a period start or end date)

d:notificationOffset(required, contains exactly one d:NotificationOffset)

XML:

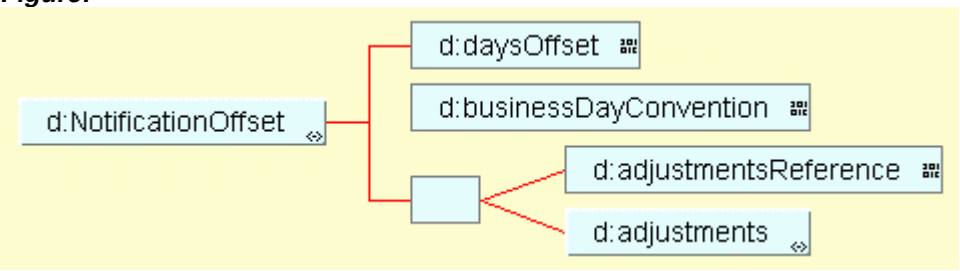
<!ELEMENT d:ExtendedAdjustableDateSchedule (d:dateScheduleReference , d:relativeTo , d:notificationOffset)>

1.17 d:NotificationOffset

Description:

Contains the information required to determine the date on which notification is required in order to exercise an option. This includes the number of days offset, Business Day Convention and Business Centers.

Figure:



Contents:

d:daysOffset (required, integer)

- See comments

d:businessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')

- The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day

d:adjustmentsReference(one of set, string)

- Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days

d:adjustments (one of set, contains exactly one d:BusinessCenters)

XML:

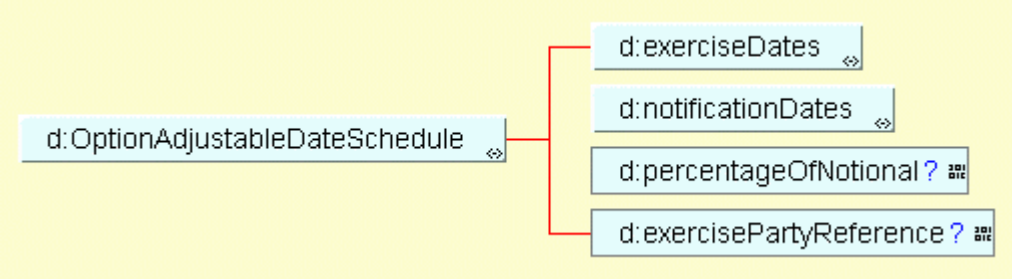
<!ELEMENT d:NotificationOffset (d:daysOffset , d:businessDayConvention , (d:adjustmentsReference | d:adjustments))>

1.18 d:OptionAdjustableDateSchedule

Description:

Expresses exercise and notification dates in the form of schedules using an AdjustableDateSchedule applied to option exercise dates and an ExtendedAdjustableDateSchedule applied to option notification dates

Figure:



Contents:

d:exerciseDates (required, contains exactly one d:AdjustableDateSchedule)

d:notificationDates(required, contains exactly one d:ExtendedAdjustableDateSchedule)

d:percentageOfNotional(optional, integer)

- Expresses a percentage of the stated notional amount that will be effective upon the exercising of an option.

d:exercisePartyReference(optional, string)

- A reference to a Party held elsewhere in the message. Defines the Party that has the right to exercise its option.

XML:

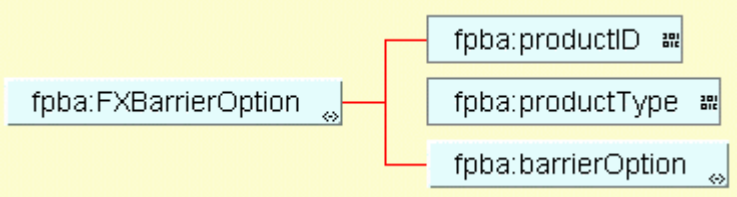
<!ELEMENT d:OptionAdjustableDateSchedule (d:exerciseDates , d:notificationDates , d:percentageOfNotional? , d:exercisePartyReference?)>

1.19 fpba:FXBarrierOption

Description:

A binary (digital) option is option with discontinuous payoffs

Figure:



Contents:

fpba:productID (required, string)

- A product identifier for a binary option

fpba:productType (required, string)

- Identifies the type of binary barrier option.

fpba:barrierOption (required, contains exactly one ftba:FXBarrierOptionTemplate)

XML:

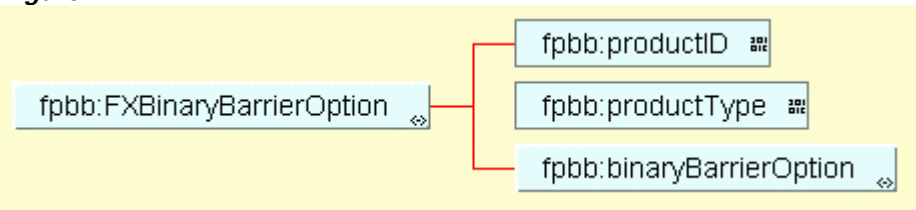
<!ELEMENT fpba:FXBarrierOption (fpba:productID , fpba:productType , fpba:barrierOption)>

1.20 fpbb:FXBinaryBarrierOption

Description:

Fx Option binary. Only a single currency payment is made if the option is exercised. A barrier will knock-in/out the option.

Figure:



Contents:

fpbb:productID (required, string)

- A product identifier for a binary barrier option.

fpbb:productType (required, string)

- Identifies the type of binary barrier option.

fpbb:binaryBarrierOption(required, contains exactly one ftbb:FXBinaryBarrierOptionTemplate)

XML:

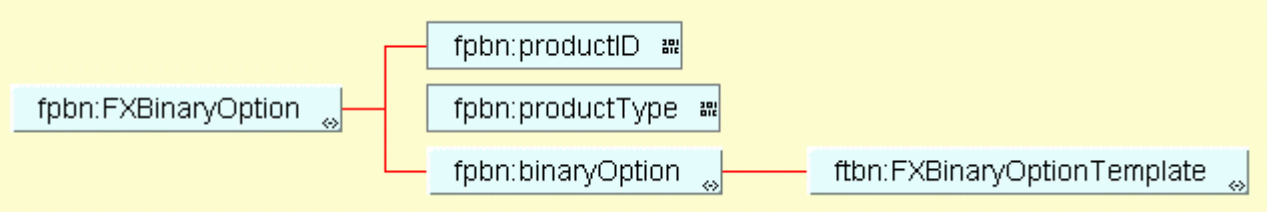
<!ELEMENT fpbb:FXBinaryBarrierOption (fpbb:productID , fpbb:productType , fpbb:binaryBarrierOption)>

1.21 fpbn:FXBinaryOption

Description:

Fx Option binary. Only a single currency payment is made if the option is exercised.

Figure:



Contents:

fpbn:productID (required, string)

- A product identifier for an Binary option.

fpbn:productType (required, string)

- Identifies the type of binary option: Binary, Digital.

fpbn:binaryOption (required, contains exactly one ftbn:FXBinaryOptionTemplate)

XML:

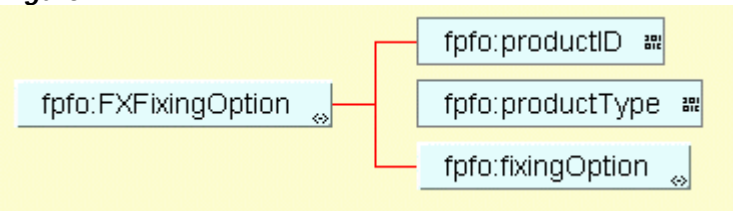
<!ELEMENT fpbn:FXBinaryOption (fpbn:productID , fpbn:productType , fpbn:binaryOption)>

1.22 fpfo:FXFixingOption

Description:

Any option whose parameters contain fixings.

Figure:



Contents:

fpfo:productID (required, string)

- A product identifier for a Fixing type option.

fpfo:productType (required, string)

- Identifies the type of fixing option. ASRO/Asian or Time Trigger.

fpfo:fixingOption (required, contains exactly one ftfo:FXFixingOptionTemplate)

XML:

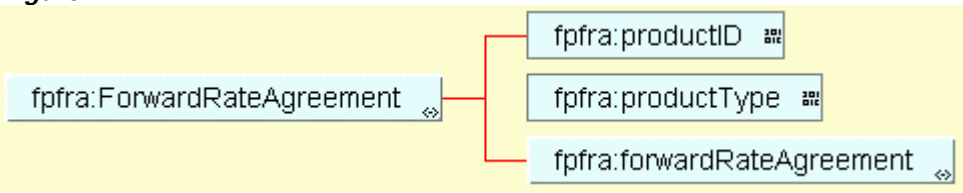
<!ELEMENT fpfo:FXFixingOption (fpfo:productID , fpfo:productType , fpfo:fixingOption)>

1.23 fpfra:ForwardRateAgreement

Description:

Not yet specified.

Figure:



Contents:

fpfra:productID (required, string)

- A product identifier for a forward rate agreement

fpfra:productType (required, string)

- Identifies the type of a forward rate agreement

fpfra:forwardRateAgreement(required, contains exactly one ftfra:ForwardRateAgreementTemplate)

XML:

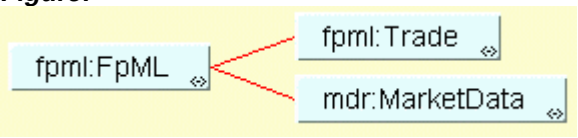
<!ELEMENT fpfra:ForwardRateAgreement (fpfra:productID , fpfra:productType , fpfra:forwardRateAgreement)>

1.24 fpml:FpML

Description:

Not yet specified.

Figure:



Contents:

fpml:Trade(one of set)

mdr:MarketData(one of set)

XML:

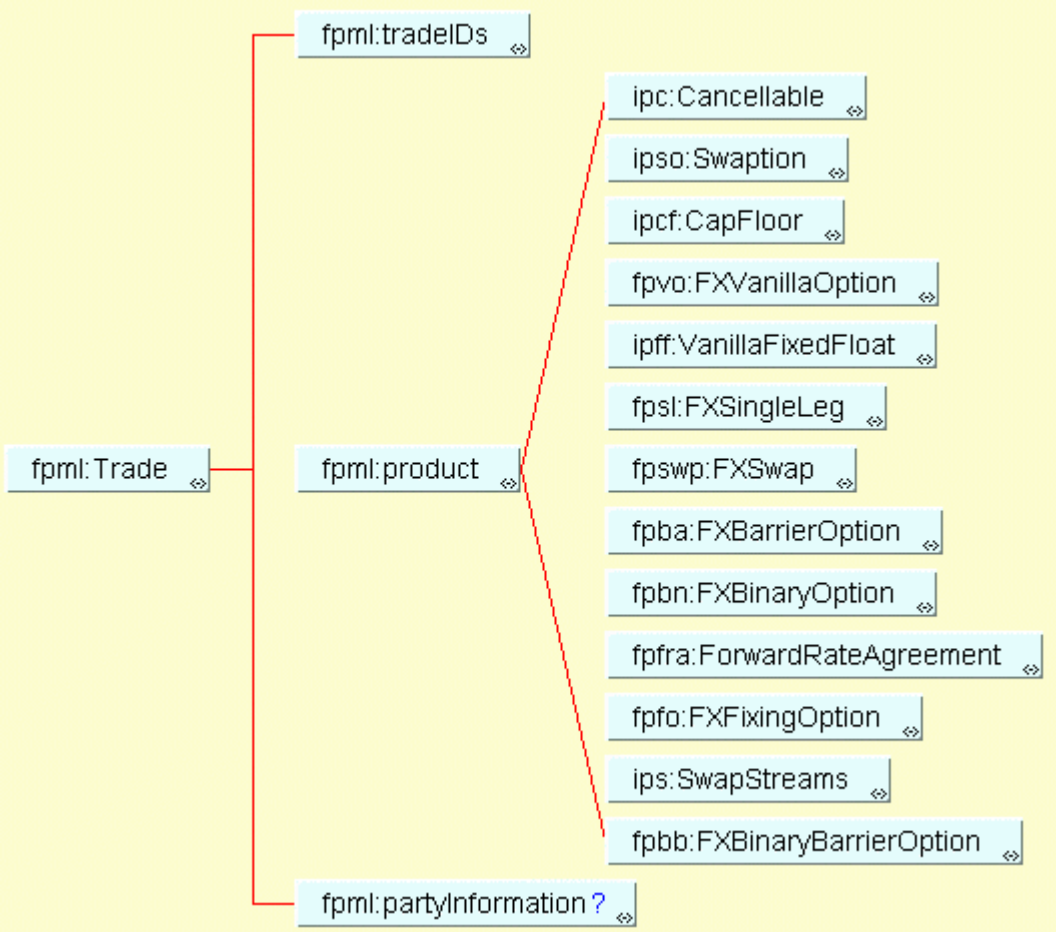
<!ELEMENT fpml:FpML (fpml:Trade | mdr:MarketData)>

1.25 fpml:Trade

Description:

Defines business context in which the embedded trade is to be processed. Contains processing specific details.

Figure:



Contents:

fpml:tradeIDs (required, contains exactly one tid:TradeIDs)

fpml:product (required, one of ipc:Cancellable, ipso:Swaption, ipcf:CapFloor, fpvo:FXVanillaOption, ipff:VanillaFixedFloat, fpsl:FXSingleLeg, fpswp:FXSwap, fpba:FXBarrierOption, fpbn:FXBinaryOption, fpfra:ForwardRateAgreement, fpfo:FXFixingOption, ips:SwapStreams, fpbb:FXBinaryBarrierOption)

fpml:partyInformation(optional, contains exactly one pty:PartyInformation)

XML:

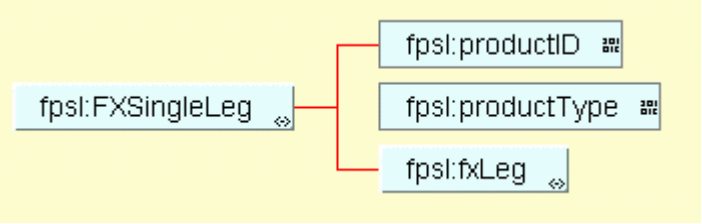
<!ELEMENT fpml:Trade (fpml:tradeIDs , fpml:product , fpml:partyInformation?)>

1.26 fpsl:FXSingleLeg

Description:

Not yet specified.

Figure:



Contents:

fpsl:productID (required, string)

- Used to identify each product when more than one product is contained within a trade.

fpsl:productType (required, string)

- Used to identify the type of single Fx Leg product. Currently this field can be either 'Spot' or 'Outright'.

fpsl:fxLeg (required, contains exactly one ftsl:FXLegTemplate)

XML:

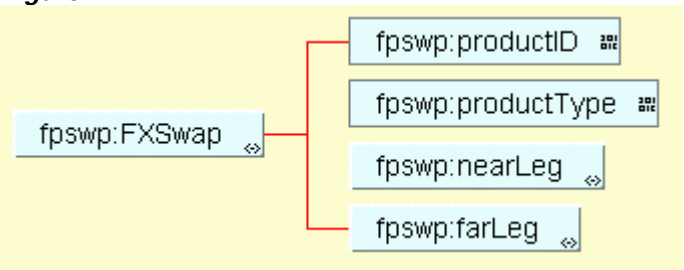
<!ELEMENT fpsl:FXSingleLeg (fpsl:productID , fpsl:productType , fpsl:fxLeg)>

1.27 fpswp:FXSwap

Description:

Not yet specified.

Figure:



Contents:

fpswp:productID (required, string)

- Used to identify each product when more than one product is contained within a trade.

fpswp:productType (required, string)

- Used to identify the type of Fx Swap product.

fpswp:nearLeg (required, contains exactly one ftsl:FXLegTemplate)
fpswp:farLeg (required, contains exactly one ftsl:FXLegTemplate)

XML:

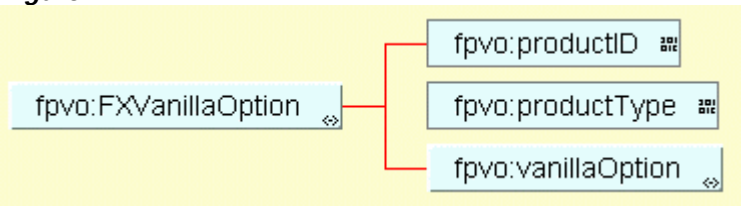
<!ELEMENT fpswp:FXSwap (fpswp:productID , fpswp:productType , fpswp:nearLeg , fpswp:farLeg)>

1.28 fpvo:FXVanillaOption

Description:

FX Vanilla option: American or European.

Figure:



Contents:

fpvo:productID (required, string)

- A product identifier for a vanilla option.

fpvo:productType (required, string)

- Identifies the type of vanilla option: American or European.

fpvo:vanillaOption (required, contains exactly one ftvo:FXVanillaOptionTemplate)

XML:

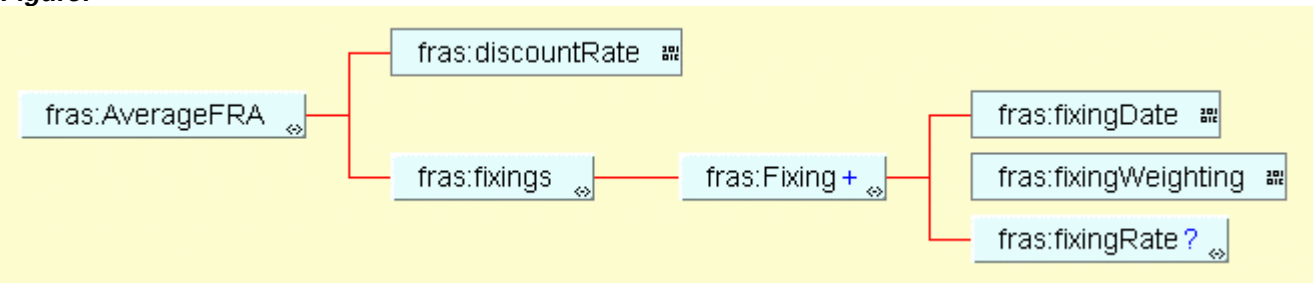
<!ELEMENT fpvo:FXVanillaOption (fpvo:productID , fpvo:productType , fpvo:vanillaOption)>

1.29 fras:AverageFRA

Description:

Not yet specified.

Figure:



Contents:

fras:discountRate (required, string)

fras:fixings (required, contains one or more fras:Fixing)

XML:

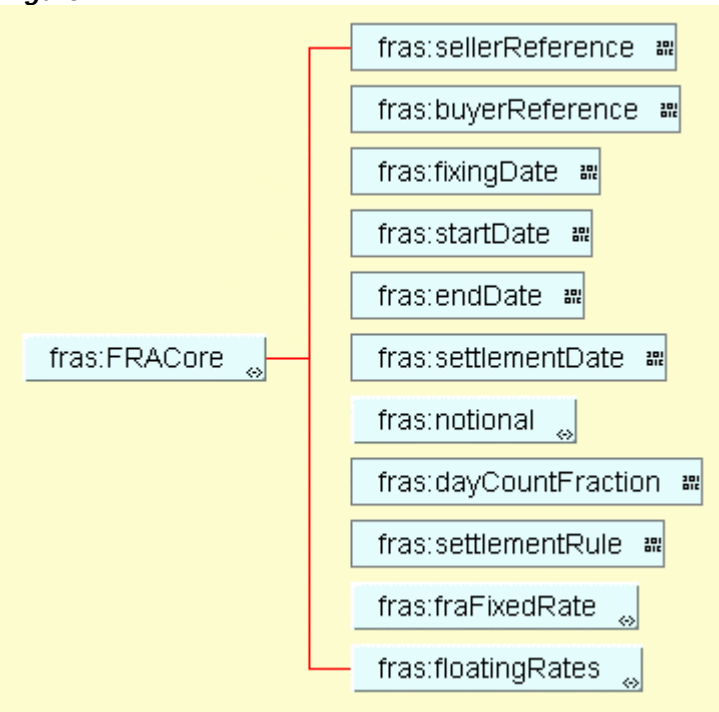
<!ELEMENT fras:AverageFRA (fras:discountRate , fras:fixings)>

1.30 fras:FRACore

Description:

Functionality common to all FRAs.

Figure:



Contents:

fras:sellerReference(required, string)

- A reference to the seller of the FRA. The seller agrees to receive the interest given by the deal's fixed rate, anticipating that interest rates will fall.

fras:buyerReference(required, string)
fras:fixingDate (required, date)

- date when floating rate is fixed.

fras:startDate (required, date)

- The start date of the interest period.

fras:endDate (required, date)

- The end date of the interest period.

fras:settlementDate(required, date)

- The date on which the net payment is exchanged between the two parties. Note the buyer does not necessarily pay the seller, it depends on the rate difference between the trade's fixed and floating rates.

fras:notional (required, contains exactly one m:Money)
fras:dayCountFraction(required, value domain: '30Per360 actual actualPer360 actualPer365 ')

- Related to a rate index. It is the year fraction, which together with the number of days, which is used to determine the compound interest for both the fixed and floating rate calculations.

fras:settlementRule(required, value domain: 'FRABBA')

- Recognised agreement used to determine the settlement amounts, dates , etc.

fras:fraFixedRate (required, contains exactly one fras:FRAFixedRate)
fras:floatingRates (required, contains one or more r:FloatingRate)

XML:

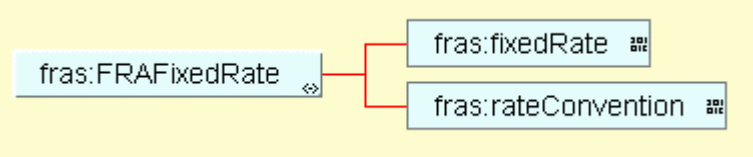
<!ELEMENT fras:FRACore (fras:sellerReference , fras:buyerReference , fras:fixingDate , fras:startDate , fras:endDate , fras:settlementDate , fras:notional , fras:dayCountFraction , fras:settlementRule , fras:fraFixedRate , fras:floatingRates)>

1.31 fras:FRAFixedRate

Description:

Not yet specified.

Figure:



Contents:

fras:fixedRate (required, float)

- The numerical value of constant rate

fras:rateConvention(required, string)

- Indicates whether the rate is 'yield' or 'discount'.

XML:

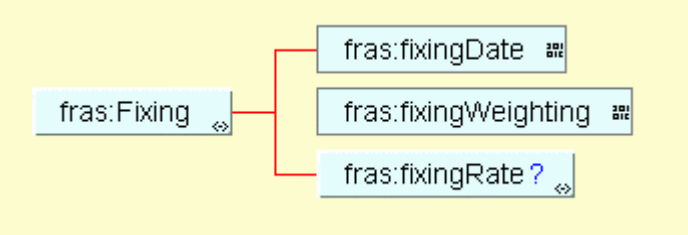
<!ELEMENT fras:FRAFixedRate (fras:fixedRate , fras:rateConvention)>

1.32 fras:Fixing

Description:

Fixing date, its weighting, and fixing rate(s)

Figure:



Contents:

fras:fixingDate (required, date)

- date when floating rate is fixed.

fras:fixingWeighting(required, integer)

- The multiplying factor applied to the fixing rate for this date when calculating the average rate.

fras:fixingRate (optional, contains exactly one r:Rate)

XML:

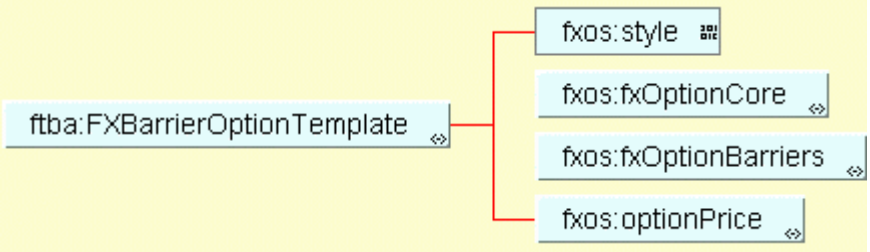
<!ELEMENT fras:Fixing (fras:fixingDate , fras:fixingWeighting , fras:fixingRate?)>

1.33 ftba:FXBarrierOptionTemplate

Description:

Not yet specified.

Figure:



Contents:

fxos:style (required, string)

- Style of option (American or European)

fxos:fxOptionCore (required, contains exactly one fxos:FXOptionCore)
fxos:fxOptionBarriers(required, contains one or more fxos:FXOptionBarrierCore)
fxos:optionPrice (required, contains exactly one fxos:OptionPremium)

XML:

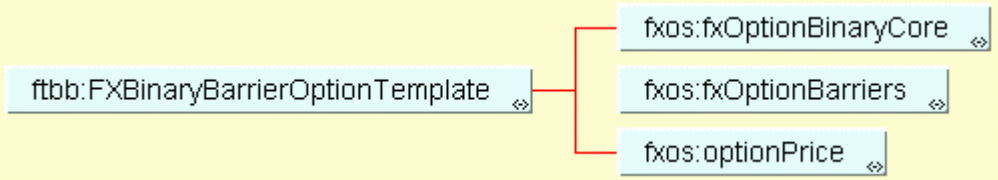
<!ELEMENT ftba:FXBarrierOptionTemplate (fxos:style , fxos:fxOptionCore , fxos:fxOptionBarriers , fxos:optionPrice)>

1.34 ftbb:FXBinaryBarrierOptionTemplate

Description:

Not yet specified.

Figure:



Contents:

fxos:fxOptionBinaryCore(required, contains exactly one fxos:FXOptionBinaryCore)

fxos:fxOptionBarriers(required, contains one or more fxos:FXOptionBarrierCore)

fxos:optionPrice (required, contains exactly one fxos:OptionPremium)

XML:

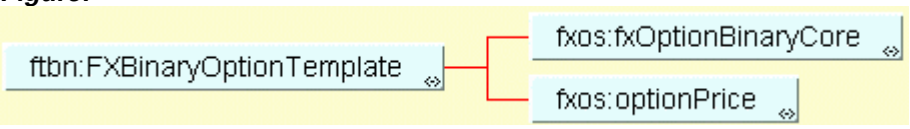
<!ELEMENT ftbb:FXBinaryBarrierOptionTemplate (fxos:fxOptionBinaryCore , fxos:fxOptionBarriers , fxos:optionPrice)>

1.35 ftbn:FXBinaryOptionTemplate

Description:

Not yet specified.

Figure:



Contents:

fxos:fxOptionBinaryCore(required, contains exactly one fxos:FXOptionBinaryCore)

fxos:optionPrice (required, contains exactly one fxos:OptionPremium)

XML:

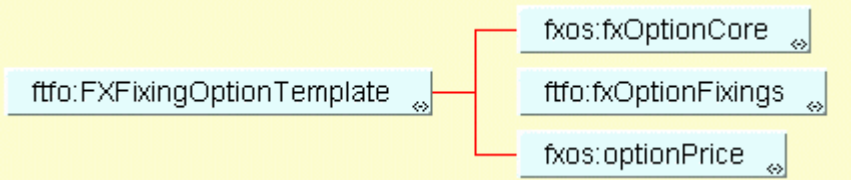
<!ELEMENT ftbn:FXBinaryOptionTemplate (fxos:fxOptionBinaryCore , fxos:optionPrice)>

1.36 ftfo:FXFixingOptionTemplate

Description:

Not yet specified.

Figure:



Contents:

fxos:fxOptionCore (required, contains exactly one fxos:FXOptionCore)

fttfo:fxOptionFixings(required, contains exactly one fttfo:FXOptionFixingRef)

fxos:optionPrice (required, contains exactly one fxos:OptionPremium)

XML:

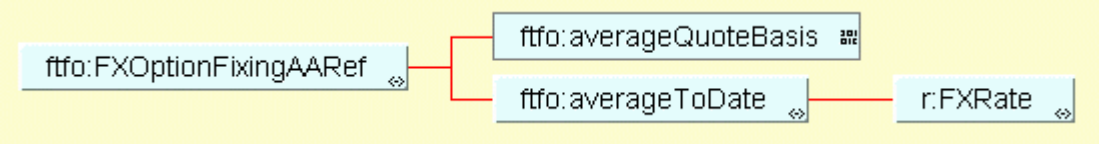
<!ELEMENT fttfo:FXFixingOptionTemplate (fxos:fxOptionCore , fttfo:fxOptionFixings , fxos:optionPrice)>

1.37 fttfo:FXOptionFixingAARef

Description:

Not yet specified.

Figure:



Contents:

fttfo:averageQuoteBasis(required, value domain: 'CCY1PERCCY2 CCY2PERCCY1')

- The method of quoting the rate when averaging.

fttfo:averageToDate (required, contains exactly one r:FXRate)

XML:

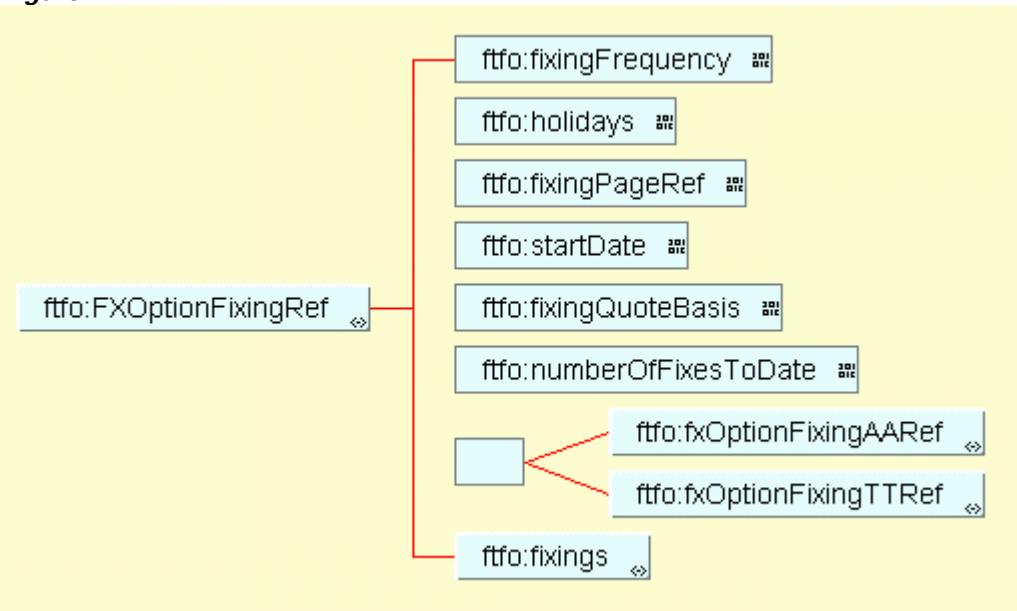
<!ELEMENT fttfo:FXOptionFixingAARef (fttfo:averageQuoteBasis , fttfo:averageToDate)>

1.38 fttfo:FXOptionFixingRef

Description:

Not yet specified.

Figure:



Contents:

ftfo:fixingFrequency(required, value domain: 'daily weekly monthly quarterly semi-annual annual')

- How often fixing takes occurs.

ftfo:holidays (required, value domain: 'CCY1 CCY2 BOTH NONE')

- The holiday calendar that the fixings adhere to.

ftfo:fixingPageRef (required, value domain: 'MGFX')

- The reference page where the fixing rate is obtained.

ftfo:startDate (required, date)

- The date of the first fixing.

ftfo:fixingQuoteBasis(required, value domain: 'CCY1PERCCY2 CCY2PERCCY1')

- The term in which the fixing rate is quoted.

ftfo:numberOfFixesToDate(required, integer)

- The number of fixes that have occurred to date.

ftfo:fixings (required, contains one or more ftfo:Fixing)
ftfo:fxOptionFixingAARef(one of set, contains exactly one ftfo:FXOptionFixingAARef)
ftfo:fxOptionFixingTTRef(one of set, contains exactly one ftfo:FXOptionFixingTTRef)

XML:

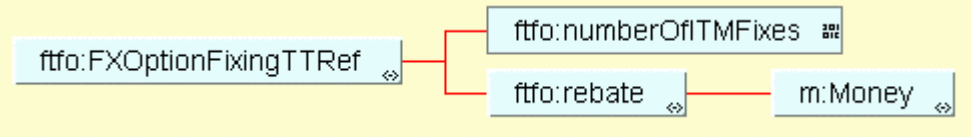
<!ELEMENT ftfo:FXOptionFixingRef (ftfo:fixingFrequency , ftfo:holidays , ftfo:fixingPageRef , ftfo:startDate , ftfo:fixingQuoteBasis , ftfo:numberOfFixesToDate , (ftfo:fxOptionFixingAARef | ftfo:fxOptionFixingTTRef) , ftfo:fixings)>

1.39 ftfo:FXOptionFixingTTRef

Description:

Not yet specified.

Figure:



Contents:

ftfo:numberOfITMFixes(required, integer)

ftfo:rebate (required, contains exactly one m:Money)

XML:

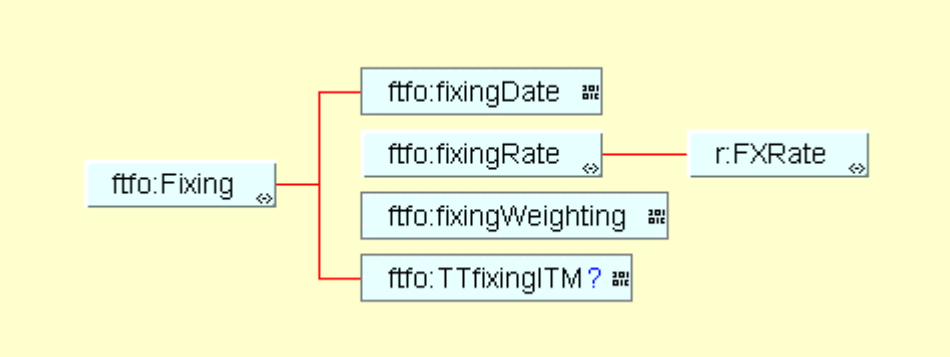
<!ELEMENT ftfo:FXOptionFixingTTRef (ftfo:numberOfITMFixes , ftfo:rebate)>

1.40 ftfo:Fixing

Description:

Fixing date, its weighting, and fixing rate(s)

Figure:



Contents:

ftfo:fixingDate (required, date)

- Date of fixing.

ftfo:fixingRate (required, contains exactly one r:FXRate)
ftfo:fixingWeighting(required, integer)

- Weighting applied to rate when determining a weighted average fixing rate.

ftfo:TTfixingITM (optional, string)

XML:

<!ELEMENT ftfo:Fixing (ftfo:fixingDate , ftfo:fixingRate , ftfo:fixingWeighting , ftfo:TTfixingITM?)>

1.41 ftfra:ForwardRateAgreementTemplate

Description:

A template class for FRA products.

Figure:

Contents:

fras:fraCore (required, contains exactly one fras:FRACore)

fras:averageFRA (optional, contains exactly one fras:AverageFRA)

XML:

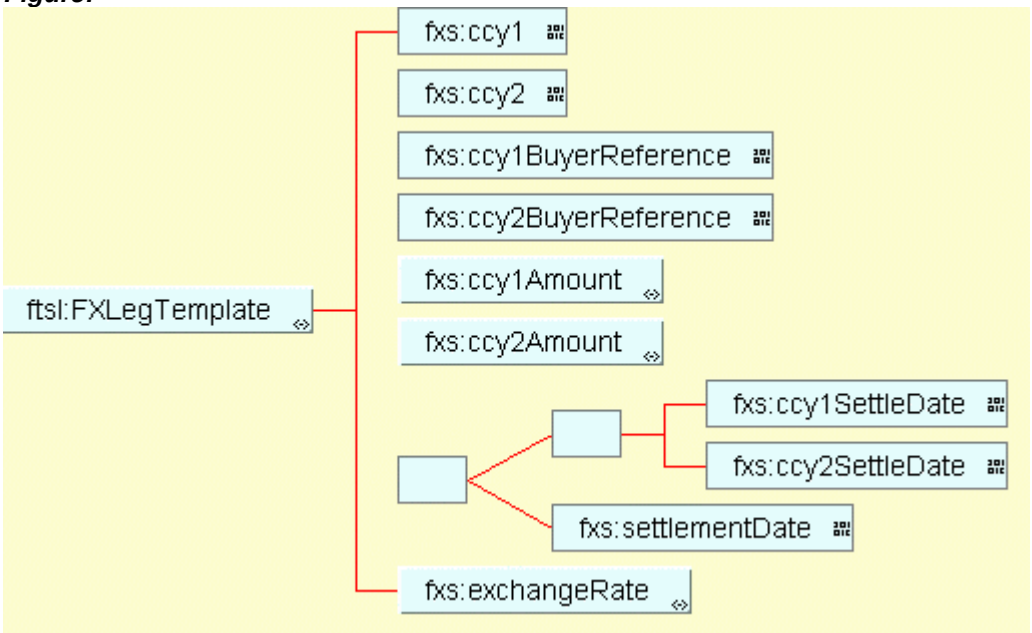
<!ELEMENT ftfra:ForwardRateAgreementTemplate (fras:fraCore , fras:averageFRA?)>

1.42 ftsl:FXLegTemplate

Description:

The FX Leg template class.

Figure:



Contents:

fxs:ccy1 (required, string)

- The ISO currency code identifying the first currency of this FX instrument.

fxs:ccy2 (required, string)

- The ISO currency code identifying the second currency of this FX instrument.

fxs:ccy1BuyerReference(required, string)

- A reference to the party who is the buyer of the ISO currency 1 within this FX leg.

fxs:ccy2BuyerReference(required, string)

- A reference to the party who is the buyer of the ISO currency 2 within this FX leg.

fxs:ccy1Amount (required, contains exactly one m:Money)
fxs:ccy2Amount (required, contains exactly one m:Money)
fxs:ccy1SettleDate (required, date)

- Settlement date for currency1.

fxs:exchangeRate (required, contains exactly one r:FXRate)
fxs:ccy2SettleDate (one of set, date)

- Settlement date for currency2.

fxs:settlementDate (one of set, date)

XML:

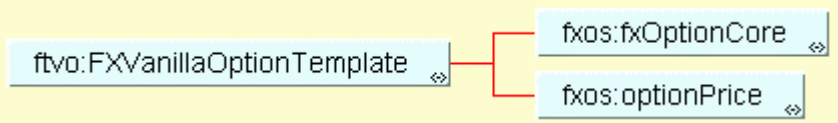
<!ELEMENT ftsl:FXLegTemplate (fxs:ccy1 , fxs:ccy2 , fxs:ccy1BuyerReference , fxs:ccy2BuyerReference , fxs:ccy1Amount , fxs:ccy2Amount , ((fxs:ccy1SettleDate , fxs:ccy2SettleDate) | fxs:settlementDate) , fxs:exchangeRate)>

1.43 ftvo:FXVanillaOptionTemplate

Description:

Not yet specified.

Figure:



Contents:

fxos:fxOptionCore (required, contains exactly one fxos:FXOptionCore)

fxos:optionPrice (required, contains exactly one fxos:OptionPremium)

XML:

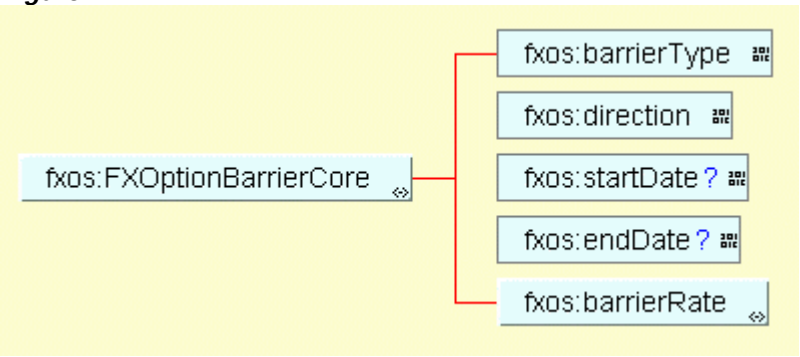
<!ELEMENT ftvo:FXVanillaOptionTemplate (fxos:fxOptionCore , fxos:optionPrice)>

1.44 fxos:FXOptionBarrierCore

Description:

fields common to all barrier options.

Figure:



Contents:

fxos:barrierType (required, string)

- knock-in or knock-out.

fxos:direction (required, string)
fxos:startDate (optional, date)

- start date of barrier (optional, for windowed barriers)

fxos:endDate (optional, date)

- end date of barrier (optional, for windowed barriers)

fxos:barrierRate (required, contains exactly one r:FXRate)

XML:

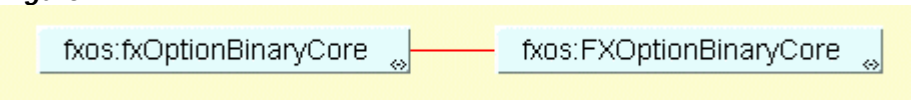
<!ELEMENT fxos:FXOptionBarrierCore (fxos:barrierType , fxos:direction , fxos:startDate? , fxos:endDate? , fxos:barrierRate)>

1.45 fxos:FXOptionBinaryCore

Description:

Not yet specified.

Figure:



Contents:

fxos:buyerReference(required, string)

- A reference to the party who is the purchaser.

fxos:sellerReference(required, string)

- A reference to the party who is selling.

fxos:ccy1 (required, string)
fxos:ccy2 (required, string)
fxos:putCall (required, contains exactly one fxos:PutCall)
fxos:binaryRate (required, contains exactly one r:FXRate)
fxos:optionMaturity(required, contains exactly one fxos:OptionMaturity)

fxos:binaryNotional(required, contains exactly one m:Money)
fxos:settlementDate(required, date)

XML:

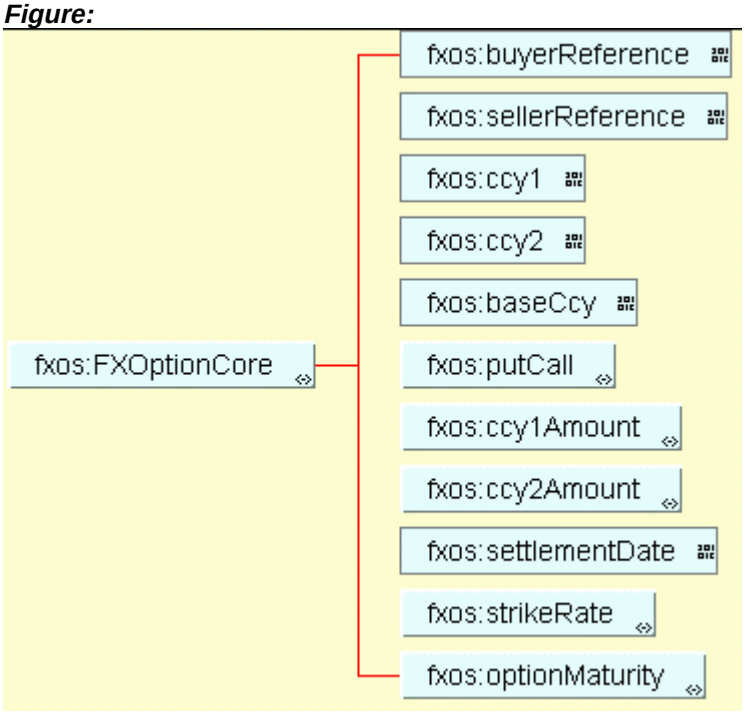
<!ELEMENT fxos:FXOptionBinaryCore (fxos:buyerReference , fxos:sellerReference , fxos:ccy1, fxos:ccy2, fxos:putCall , fxos:binaryRate , fxos:optionMaturity , fxos:binaryNotional , fxos:settlementDate)>

1.46 fxos:FXOptionCore

Description:

The class containing the common FX option fields.

Figure:



Contents:

fxos:buyerReference(required, string)

- A reference to the party who is the purchaser.

fxos:sellerReference(required, string)

- A reference to the party who is selling.

fxos:ccy1 (required, string)
fxos:ccy2 (required, string)
fxos:baseCcy (required, string)

- Used in FX Option instruments to indicate which of the two currencies is regarded as the base currency for this FX trade. In conjunction with the FXRate and its quoteBasis field, the baseCcy indicates the market convention being used: American ('base per term' or 'base per risk') or European ('term per base' or 'risk per base'). The 'baseCcy' must correspond to one of the two currencies involved in the trade.

fxos:putCall (required, contains exactly one fxos:PutCall)
fxos:ccy1Amount (required, contains exactly one m:Money)
fxos:ccy2Amount (required, contains exactly one m:Money)
fxos:settlementDate(required, date)
fxos:strikeRate (required, contains exactly one r:FXRate)
fxos:optionMaturity(required, contains exactly one fxos:OptionMaturity)

XML:

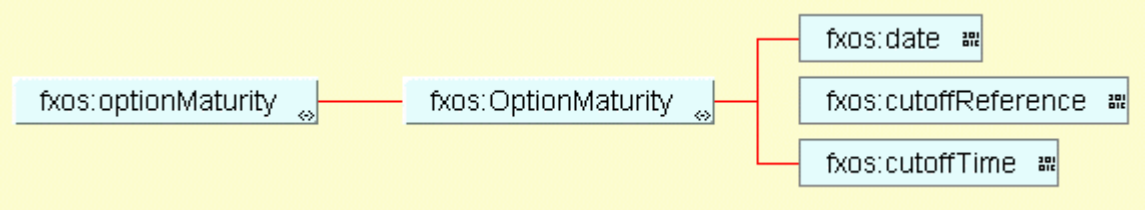
<!ELEMENT fxos:FXOptionCore (fxos:buyerReference , fxos:sellerReference , fxos:ccy1 , fxos:ccy2 , fxos:baseCcy , fxos:putCall , fxos:ccy1Amount , fxos:ccy2Amount , fxos:settlementDate , fxos:strikeRate , fxos:optionMaturity)>

1.47 fxos:OptionMaturity

Description:

The last date when the option can be exercised (ISDA)

Figure:



Contents:

fxos:date (required, date)

fxos:cutoffLocation(required, string)

fxos:cutoffTime (required, time)

XML:

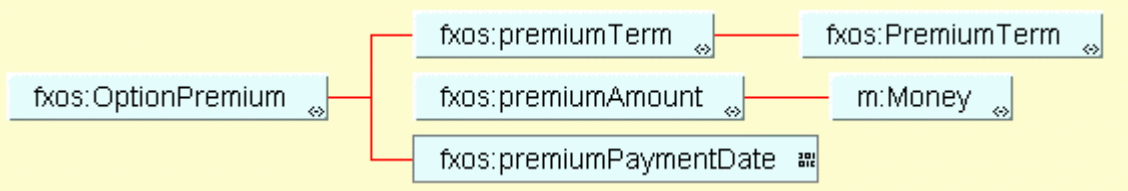
<!ELEMENT fxos:OptionMaturity (fxos:date , fxos:cutoffLocation , fxos:cutoffTime)>

1.48 fxos:OptionPremium

Description:

Price paid for option, contains terms of premium, amount and date. The amount payable in consideration for granting the currency option and payable by buyer to seller (ISDA)

Figure:



Contents:

fxos:premiumTerm (required, contains exactly one fxos:PremiumTerm)

fxos:premiumAmount (required, contains exactly one m:Money)

fxos:premiumPaymentDate(required, date)

XML:

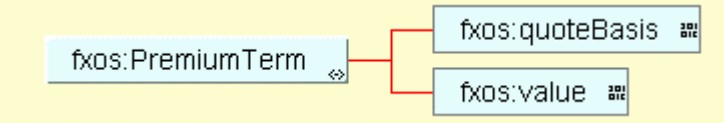
<!ELEMENT fxos:OptionPremium (fxos:premiumTerm , fxos:premiumAmount , fxos:premiumPaymentDate)>

1.49 fxos:PremiumTerm

Description:

Not yet specified.

Figure:



Contents:

fxos:quoteBasis (required, value domain: 'ccy1PerCcy2 ccy2PerCcy1 percentCcy1 percentCcy2')

fxos:value (required, string)

XML:

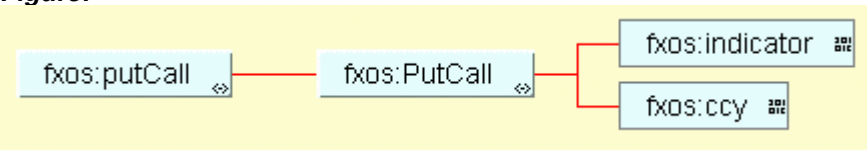
<!ELEMENT fxos:PremiumTerm (fxos:quoteBasis , fxos:value)>

1.50 fxos:PutCall

Description:

Not yet specified.

Figure:



Contents:

fxos:indicator (required, string)

- PUT or CALL indicator

fxos:ccy (required, string)

XML:

<!ELEMENT fxos:PutCall (fxos:indicator , fxos:ccy)>

1.51 ipc:Cancellable

Description:

Not yet specified.

Contents:

ipc:option (required, contains exactly one isos:OptionStream)

XML:

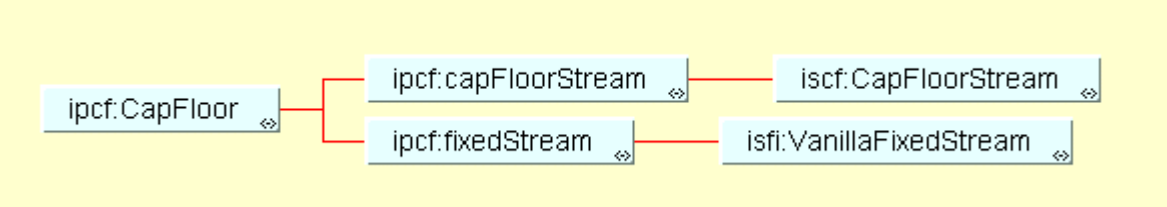
<!ELEMENT ipc:Cancellable (ipc:option)>

1.52 ipcf:CapFloor

Description:

Not yet specified.

Figure:



Contents:

ipcf:capFloorStream(required, contains exactly one iscf:CapFloorStream)

ipcf:fixedStream (required, contains exactly one isfi:VanillaFixedStream)

XML:

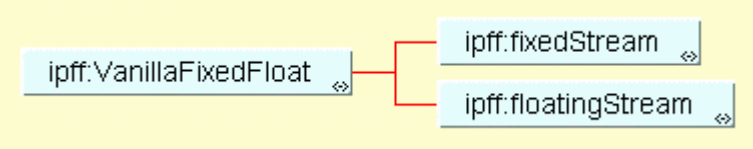
<!ELEMENT ipcf:CapFloor (ipcf:capFloorStream , ipcf:fixedStream)>

1.53 ipff:VanillaFixedFloat

Description:

Not yet specified.

Figure:



Contents:

ipff:fixedStream (required, contains exactly one isfi:VanillaFixedStream)

ipff:floatingStream(required, contains exactly one isfo:VanillaFloatingStream)

XML:

<!ELEMENT ipff:VanillaFixedFloat (ipff:fixedStream , ipff:floatingStream)>

1.54 ips:SwapStreams

Description:

To Be Specified

Contents:

ips:streams (required, contains one or more isss:SwapStream)

XML:

<!ELEMENT ips:SwapStreams (ips:streams)>

1.55 ipso:Swaption

Description:

Not yet specified.

Contents:

ipso:option (required, contains exactly one isos:OptionStream)

XML:

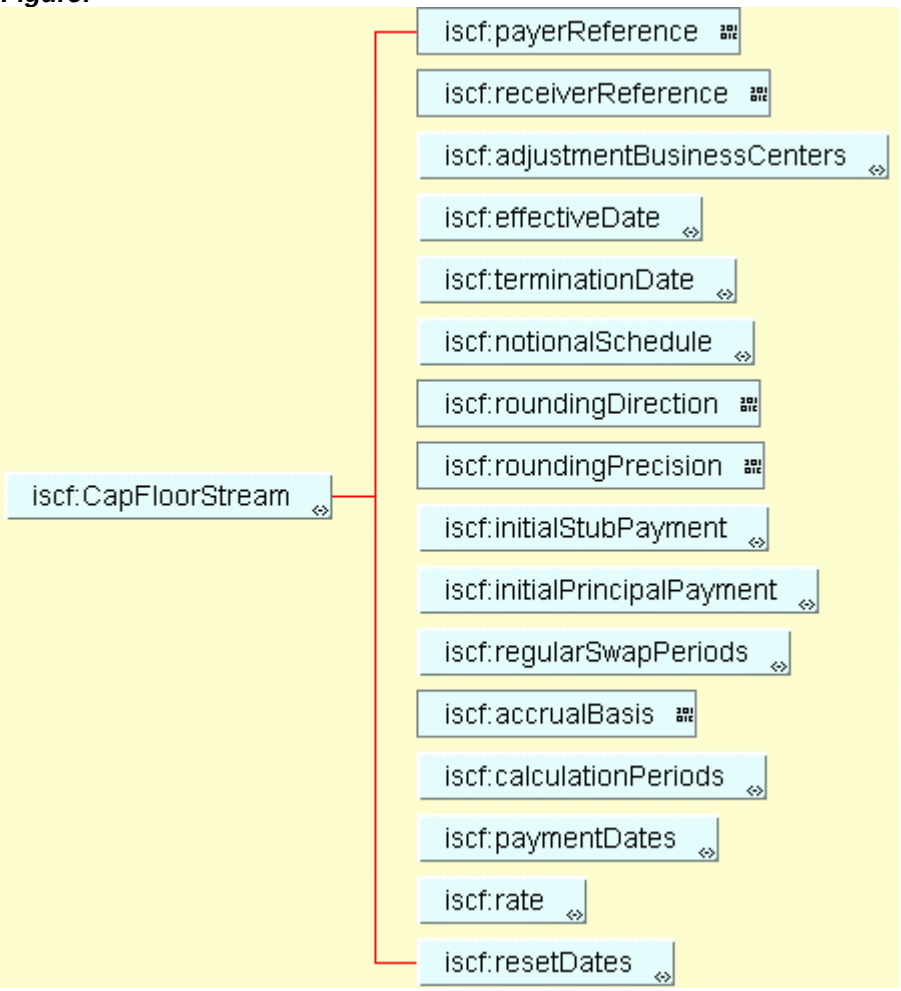
<!ELEMENT ipso:Swaption (ipso:option)>

1.56 iscf:CapFloorStream

Description:

Not yet specified.

Figure:



Contents:

iscf:payerReference(required, string)

iscf:receiverReference(required, string)

iscf:adjustmentBusinessCenters(required, contains exactly one d:BusinessCenters)

iscf:effectiveDate (required, contains exactly one d:AdjustableDate)

iscf:terminationDate(required, contains exactly one d:AdjustableDate)

iscf:notionalSchedule(required, contains exactly one m:NotionalSchedule)

iscf:roundingDirection(required, string)

iscf:roundingPrecision(required, integer)

iscf:initialStubPayment(required, contains exactly one p:InterestPayment)

iscf:initialPrincipalPayment(required, contains exactly one p:Payment)

iscf:regularSwapPeriods(required, contains exactly one d:BasicPeriodSchedule)

iscf:accrualBasis (required, value domain: '30Per360 actual actualPer360 actualPer365 ')

iscf:calculationPeriods(required, contains exactly one d:AdjustablePeriodSchedule)

iscf:paymentDates (required, contains exactly one d:AdjustableDateSchedule)

iscf:rate (required, contains one of set r:OptionReset)

iscf:resetDates (required, contains exactly one d:AdjustableDateSchedule)

XML:

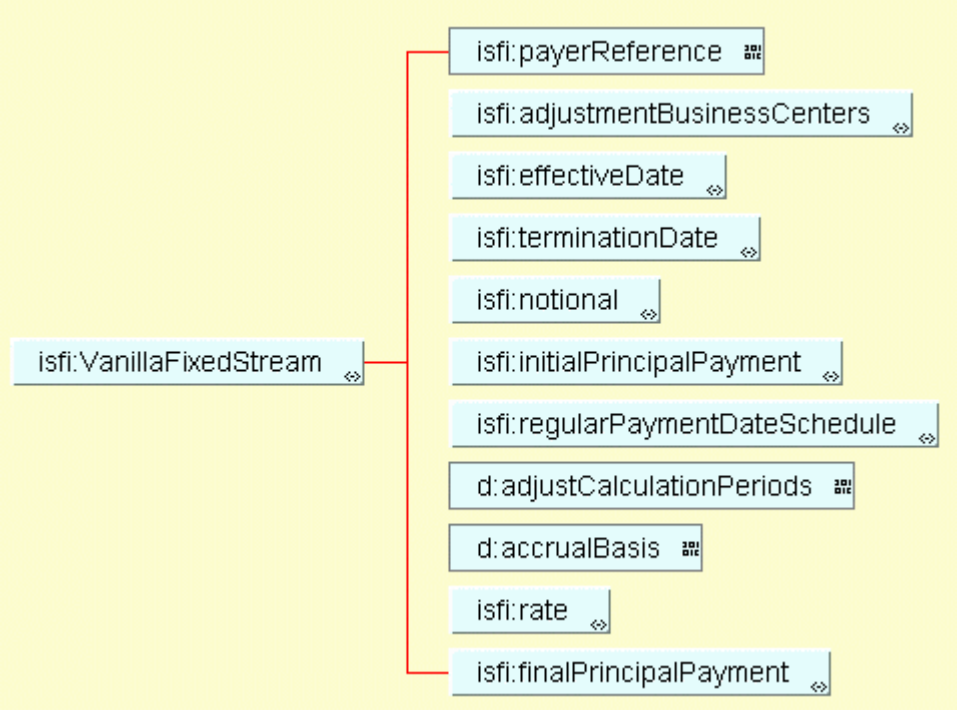
<!ELEMENT iscf:CapFloorStream (iscf:payerReference , iscf:receiverReference , iscf:adjustmentBusinessCenters , iscf:effectiveDate , iscf:terminationDate , iscf:notionalSchedule , iscf:roundingDirection , iscf:roundingPrecision , iscf:initialStubPayment , iscf:initialPrincipalPayment , iscf:regularSwapPeriods , iscf:accrualBasis , iscf:calculationPeriods , iscf:paymentDates , iscf:rate , iscf:resetDates)>

1.57 isfi:VanillaFixedStream

Description:

Not yet specified.

Figure:



Contents:

isfi:payerReference(required, string)

isfi:adjustmentBusinessCenters(required, contains exactly one d:BusinessCenters)

isfi:effectiveDate (required, contains exactly one d:AdjustableDate)

isfi:terminationDate(required, contains exactly one d:AdjustableDate)

isfi:notional (required, contains exactly one m:Money)

isfi:initialPrincipalPayment(required, contains exactly one p:Payment)

isfi:regularPaymentDateSchedule(required, contains exactly one d:AdjustableDateSchedule)

d:adjustCalculationPeriods(required, value domain: 'true false')

d:accrualBasis (required, value domain: '30Per360 actual actualPer360 actualPer365 ')

- A code identifying the convention used to determine the number of days between two dates in order to calculate accrued interests, yields, and other measures of value for an instrument

isfi:rate (required, contains one of set r:FixedRate)
isfi:finalPrincipalPayment(required, contains exactly one p:Payment)

XML:

<!ELEMENT isfi:VanillaFixedStream (isfi:payerReference , isfi:adjustmentBusinessCenters , isfi:effectiveDate , isfi:terminationDate , isfi:notional , isfi:initialPrincipalPayment , isfi:regularPaymentDateSchedule , d:adjustCalculationPeriods , d:accrualBasis , isfi:rate , isfi:finalPrincipalPayment)>

1.58 isfo:VanillaFloatingStream

Description:

Not yet specified.

Figure:

Contents:

isfo:payerReference(required, string)

isfo:adjustmentBusinessCenters(required, contains exactly one d:BusinessCenters)

isfo:effectiveDate (required, contains exactly one d:AdjustableDate)

isfo:terminationDate(required, contains exactly one d:AdjustableDate)

isfo:notional (required, contains exactly one m:Money)

isfo:initialPrincipalPayment(required, contains exactly one p:Payment)

isfo:regularPaymentDateSchedule(required, contains exactly one d:AdjustableDateSchedule)

d:adjustCalculationPeriods(required, value domain: 'true false')

d:accrualBasis (required, value domain: '30Per360 actual actualPer360 actualPer365 ')

- A code identifying the convention used to determine the number of days between two dates in order to calculate accrued interests, yields, and other measures of value for an instrument

isfo:rate (required, contains one of set r:FloatingRate)
isfo:resetBusinessDayConvention(required, value domain: 'modifiedFollowing modifiedPrevious following previous none')
isfo:resetAdjustmentsReference(required, string)
isfo:refixInArrears(required, value domain: 'true false')
isfo:refixOffset (required, integer)
isfo:roundingDirection(required, value domain: 'off on up down nearest')
isfo:roundingPrecision(required, integer)
isfo:finalPrincipalPayment(required, contains exactly one p:Payment)

XML:

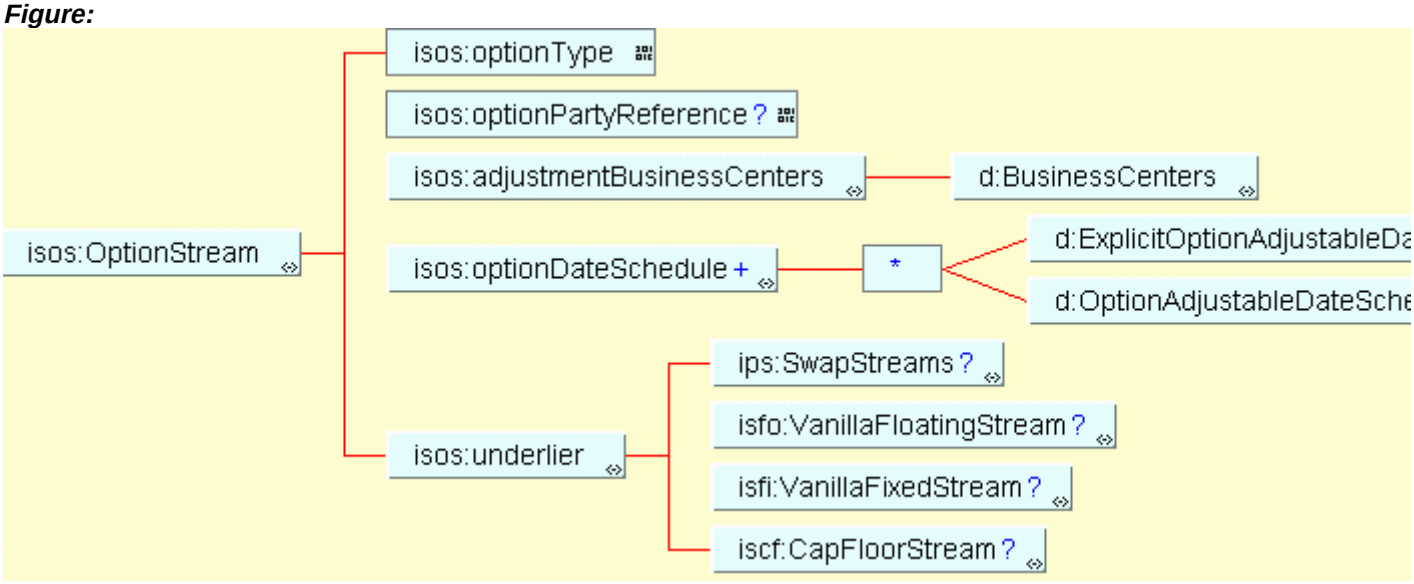
<!ELEMENT isfo:VanillaFloatingStream (isfo:payerReference , isfo:adjustmentBusinessCenters , isfo:effectiveDate , isfo:terminationDate , isfo:notional , isfo:initialPrincipalPayment , isfo:regularPaymentDateSchedule , d:adjustCalculationPeriods , d:accrualBasis , isfo:rate , isfo:resetBusinessDayConvention , isfo:resetAdjustmentsReference , isfo:refixInArrears , isfo:refixOffset , isfo:roundingDirection , isfo:roundingPrecision , isfo:finalPrincipalPayment)>

1.59 isos:OptionStream

Description:

Not yet specified.

Figure:



Contents:

isos:optionType (required, string)

isos:optionPartyReference(optional, string)

isos:adjustmentBusinessCenters(required, contains exactly one d:BusinessCenters)

isos:optionDateSchedule(one or more, one of d:ExplicitOptionAdjustableDateSchedule, d:OptionAdjustableDateSchedule)

isos:underlier (required, one of ips:SwapStreams, isfo:VanillaFloatingStream, isfi:VanillaFixedStream, iscf:CapFloorStream)

XML:

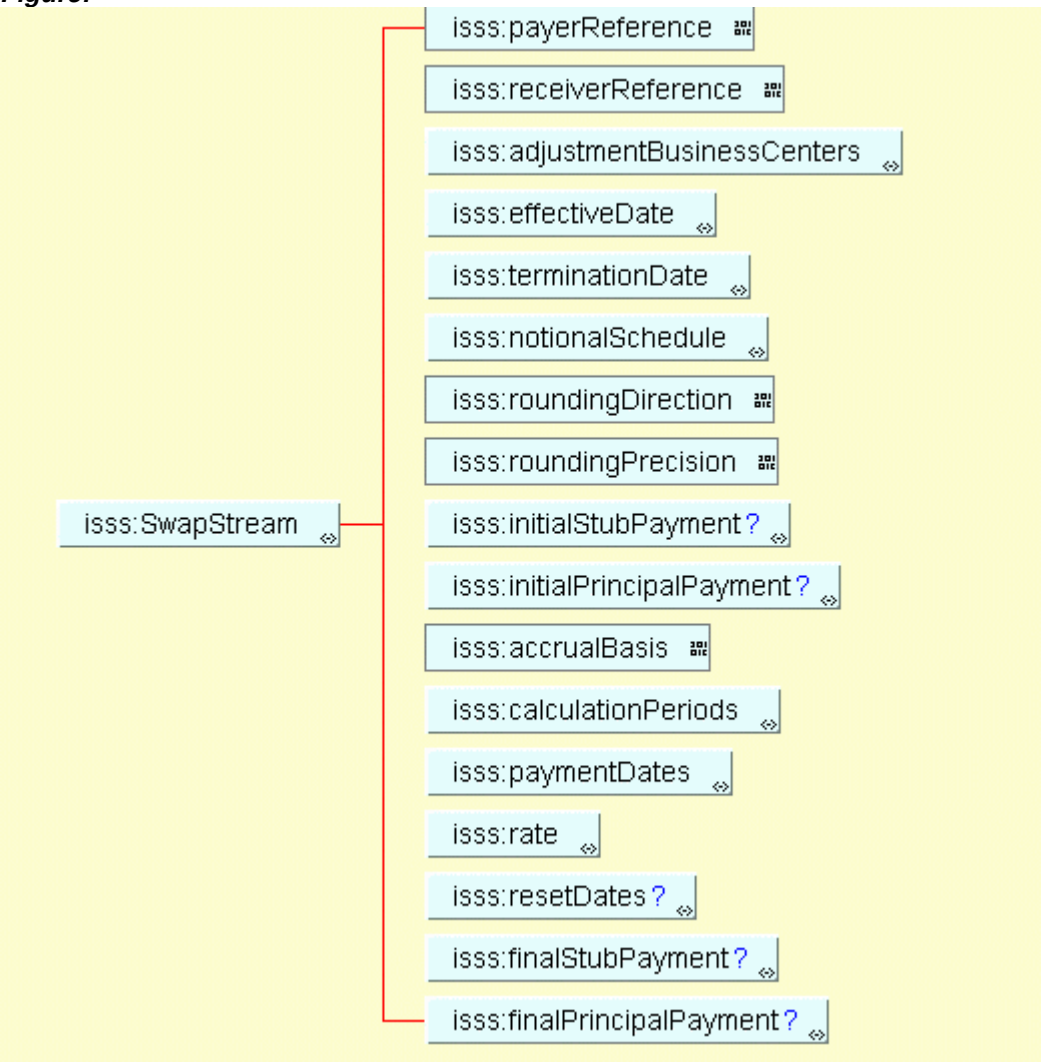
<!ELEMENT isos:OptionStream (isos:optionType , isos:optionPartyReference? , isos:adjustmentBusinessCenters , isos:optionDateSchedule+ , isos:underlier)>

1.60 isss:SwapStream

Description:

A generic fixed or floating stream that supports the following features: stubs, notional schedules, principal exchanges

Figure:



Contents:

isss:payerReference(required, string)

- Reference to the section of the message holding identifiers to the parties to the trade.

isss:receiverReference(required, string)

- Reference to the section of the message holding identifiers to the parties to the trade.

isss:adjustmentBusinessCenters(required, contains exactly one d:BusinessCenters)
isss:effectiveDate (required, contains exactly one d:AdjustableDate)
isss:terminationDate(required, contains exactly one d:AdjustableDate)
isss:notionalSchedule(required, contains exactly one m:NotionalSchedule)
isss:roundingDirection(required, value domain: 'on off up down nearest')

- This indicates the rounding treatment to be applied to an amount.

isss:roundingPrecision(required, integer)

- The precision in decimal places (eg 5, 6) to which the rounding direction must be applied.

isss:initialStubPayment(optional, contains exactly one p:InterestPayment)
isss:initialPrincipalPayment(optional, contains exactly one p:Payment)
isss:accrualBasis (required, value domain: '30Per360 actual actualPer360 actualPer365 ')

- The day count calculation method for accrual periods within the stream

isss:calculationPeriods(required, contains exactly one d:AdjustablePeriodSchedule)
isss:paymentDates (required, contains exactly one d:AdjustableDateSchedule)
isss:rate (required, one of r:FixedRate, r:FloatingRate)
isss:resetDates (optional, contains exactly one d:AdjustableDateSchedule)
isss:finalStubPayment(optional, contains exactly one p:InterestPayment)
isss:finalPrincipalPayment(optional, contains exactly one p:Payment)

XML:

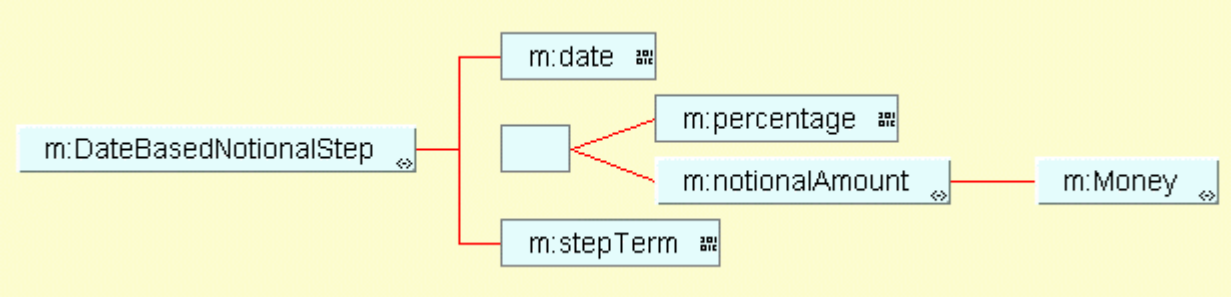
<!ELEMENT isss:SwapStream (isss:payerReference , isss:receiverReference , isss:adjustmentBusinessCenters , isss:effectiveDate , isss:terminationDate , isss:notionalSchedule , isss:roundingDirection , isss:roundingPrecision , isss:initialStubPayment? , isss:initialPrincipalPayment? , isss:accrualBasis , isss:calculationPeriods , isss:paymentDates , isss:rate , isss:resetDates? , isss:finalStubPayment? , isss:finalPrincipalPayment?)>

1.61 m:DateBasedNotionalStep

Description:

To Be Specified

Figure:



Contents:

m:date (required, date)

m:stepTerm (required, value domain: 'remaining period')

- To Be Specified

m:percentage (one of set, float)

- To Be Specified*

m:notionalAmount (one of set, contains exactly one m:Money)

XML:

<!ELEMENT m:DateBasedNotionalStep (m:date , (m:percentage | m:notionalAmount) , m:stepTerm)>

1.62 m:ExplicitNotionalSteps

Description:

Comprises of one or more DateBasedNotionalSteps

Contents:

m:DateBasedNotionalStep(one or more)

XML:

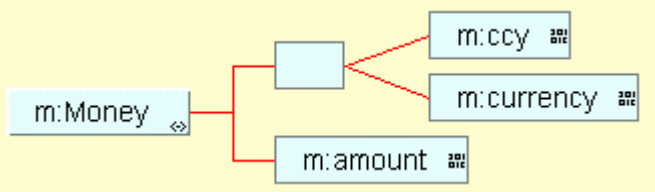
<!ELEMENT m:ExplicitNotionalSteps (m:DateBasedNotionalStep+)>

1.63 m:Money

Description:

The money element contains both a currency and an amount element that must be used in conjunction with each other. The amount element would contain a numeric monetary quantity expressed in the currency designated by the currency element. The currency element is an ISO currency code that designates the currency in which the amount is denominated.

Figure:



Contents:

m:amount (required, float)

- The amount element would contain a numeric monetary quantity expressed in the currency designated by the currency element. A non-negative floating point number

m:ccy (one of set, string)

- The currency element designates the currency in which the amount is denominated. This must be a valid ISO currency code.

m:currency (one of set, string)

XML:

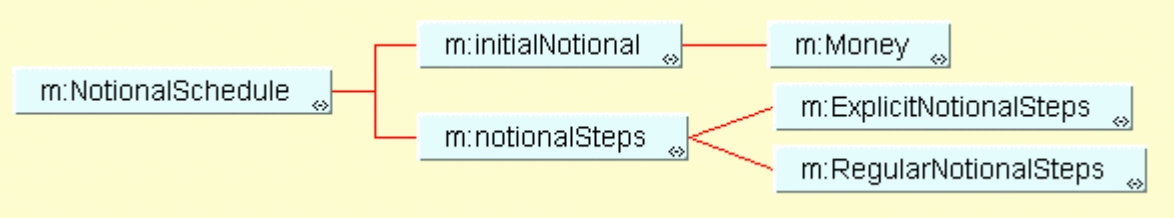
<!ELEMENT m:Money ((m:ccy | m:currency) , m:amount)>

1.64 m:NotionalSchedule

Description:

Defines the notional schedule for a stream. May be a single amount or sequence of dates and amounts.

Figure:



Contents:

m:initialNotional (required, contains exactly one m:Money)

m:notionalSteps (required, one of m:ExplicitNotionalSteps, m:RegularNotionalSteps)

XML:

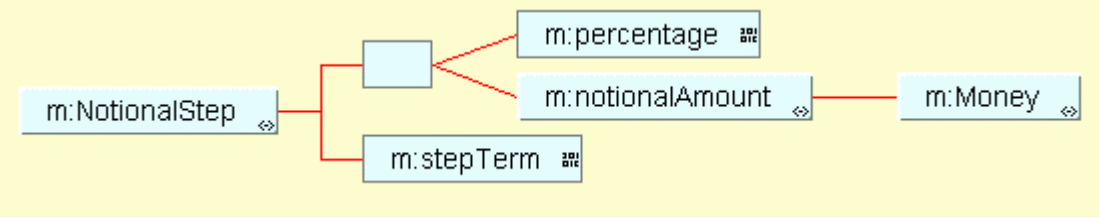
<!ELEMENT m:NotionalSchedule (m:initialNotional , m:notionalSteps)>

1.65 m:NotionalStep

Description:

The change in Notional for particular period. Expressed either by percentage of Notional Amount

Figure:



Contents:

m:stepTerm (required, value domain: 'remaining period')

- To Be Specified

m:percentage (one of set, float)

- To Be Specified*

m:notionalAmount (one of set, contains exactly one m:Money)

XML:

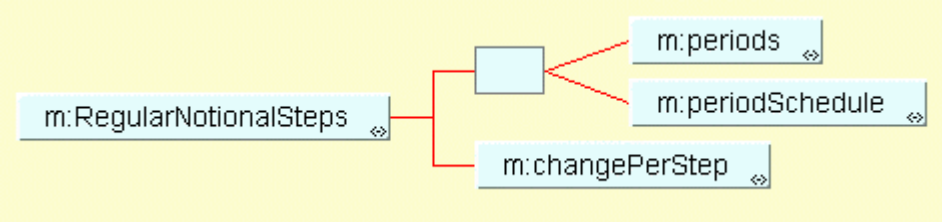
<!ELEMENT m:NotionalStep ((m:percentage | m:notionalAmount) , m:stepTerm)>

1.66 m:RegularNotionalSteps

Description:

For the Notional with the same change (called changePerStep) from period to period is the set of change p per step and corresponding period schedule

Figure:



Contents:

m:changePerStep (required, contains exactly one m:NotionalStep)

m:periods (one of set, contains exactly one d:AdjustablePeriodSchedule)

m:periodSchedule (one of set, contains exactly one d:AdjustablePeriodSchedule)

XML:

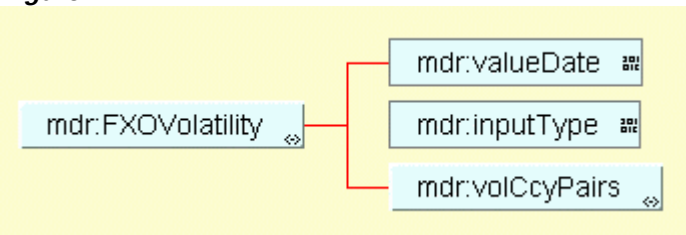
<!ELEMENT m:RegularNotionalSteps ((m:periods | m:periodSchedule) , m:changePerStep)>

1.67 mdr:FXOVolatility

Description:

Defines elements for implied volatilities of FX Options

Figure:



Contents:

mdr:valueDate (required, datetime.tx)

- The date on which the implied volatilities apply

mdr:inputType (required, value domain: 'IntraDay EndOfDay')

- This field indicates whether the data that is being described is of intra-day or end of day

mdr:volCcyPairs (required, contains exactly one mdr:VolCcyPair)

XML:

<!ELEMENT mdr:FXOVolatility (mdr:valueDate , mdr:inputType , mdr:volCcyPairs)>

1.68 mdr:MarketData

Description:

Logical block that groups market data specific components.

Contents:

mdr:fxoVolatility (required, contains exactly one mdr:FXOVolatility)

XML:

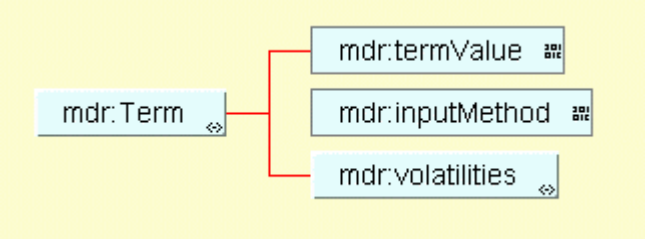
<!ELEMENT mdr:MarketData (mdr:fxoVolatility)>

1.69 mdr:Term

Description:

A construct that organizes implied volatility data per tenor

Figure:



Contents:

mdr:inputMethod (required, value domain: 'N D')

- Defines whether the implied volatility described is based on delta or standard deviation

mdr:termValue (required, value domain: 'SP 7D 1M 2M 3M 6M 9M 12M 18M 1Y 2Y 3Y 4Y 5Y')

- Defines the tenor of the implied volatility data

mdr:volatilities (required, contains one or more mdr:Volatility)

XML:

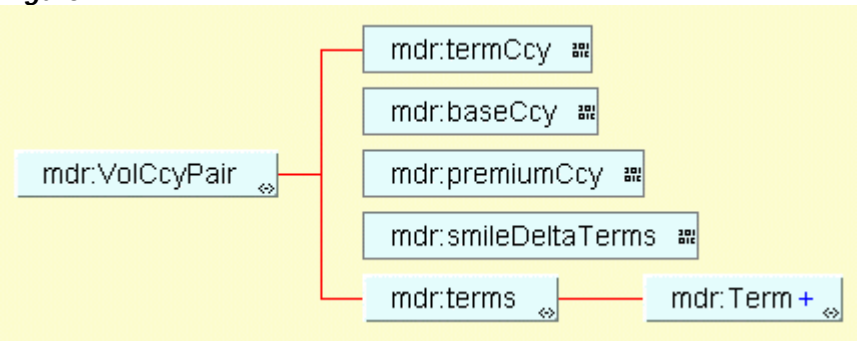
<!ELEMENT mdr:Term (mdr:inputMethod , mdr:termValue , mdr:volatilities)>

1.70 mdr:VolCcyPair

Description:

The construct that organizes implied volatility data per currency pair

Figure:



Contents:

mdr:termCcy (required, string)

- Contains the ISO code of the term/risk currency involved

mdr:baseCcy (required, string)

- Contains the ISO code of the base currency involved

mdr:premiumCcy (required, string)

- Contains the ISO code of the premium currency involved

mdr:smileDeltaTerms(required, string)

- It indicates whether the delta is in risk or base terms

mdr:terms (required, contains one or more mdr:Term)

XML:

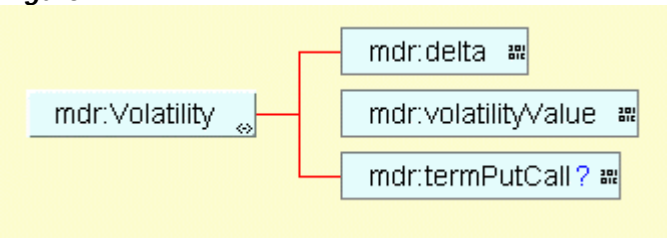
<!ELEMENT mdr:VolCcyPair (mdr:termCcy , mdr:baseCcy , mdr:premiumCcy , mdr:smileDeltaTerms , mdr:terms)>

1.71 mdr:Volatility

Description:

A construct that defines implied volatility for a given delta and put (or call)

Figure:



Contents:

mdr:delta (required, value domain: 'NEUTRAL 10 25')

- Defines the delta which refers to the sensitivity of the option price to changes in the price of the underlying asset.

mdr:volatilityValue(required, float)

- Defines the implied volatility

mdr:termPutCall (optional, value domain: 'PUT CALL')

- Defines whether the delta is for a put or a call option

XML:

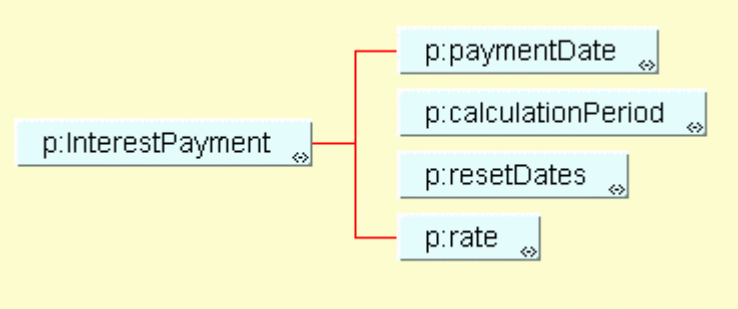
<!ELEMENT mdr:Volatility (mdr:delta , mdr:volatilityValue , mdr:termPutCall?)>

1.72 p:InterestPayment

Description:

Represents a single payment based on a standard interest rate calculation

Figure:



Contents:

p:paymentDate (required, contains exactly one d:AdjustableDate)

p:calculationPeriod(required, contains exactly one d:AdjustablePeriod)

p:resetDates (required, contains exactly one d:AdjustableDateSchedule)

p:rate (required, one of r:FloatingRate, r:OptionReset)

XML:

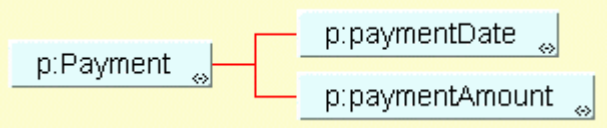
<!ELEMENT p:InterestPayment (p:paymentDate , p:calculationPeriod , p:resetDates , p:rate)>

1.73 p:Payment

Description:

To Be Specified*

Figure:



Contents:

p:paymentDate (required, contains exactly one d:AdjustableDate)

p:paymentAmount (required, contains exactly one m:Money)

XML:

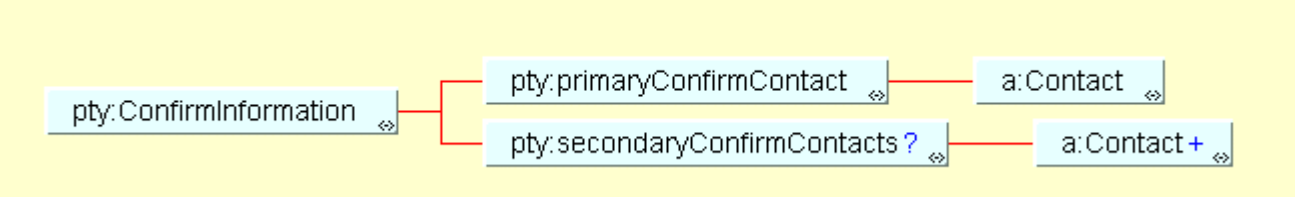
<!ELEMENT p:Payment (p:paymentDate , p:paymentAmount)>

1.74 pty:ConfirmInformation

Description:

Not yet specified.

Figure:



Contents:

pty:primaryConfirmContact(required, contains exactly one a:Contact)

pty:secondaryConfirmContacts(optional, contains one or more a:Contact)

XML:

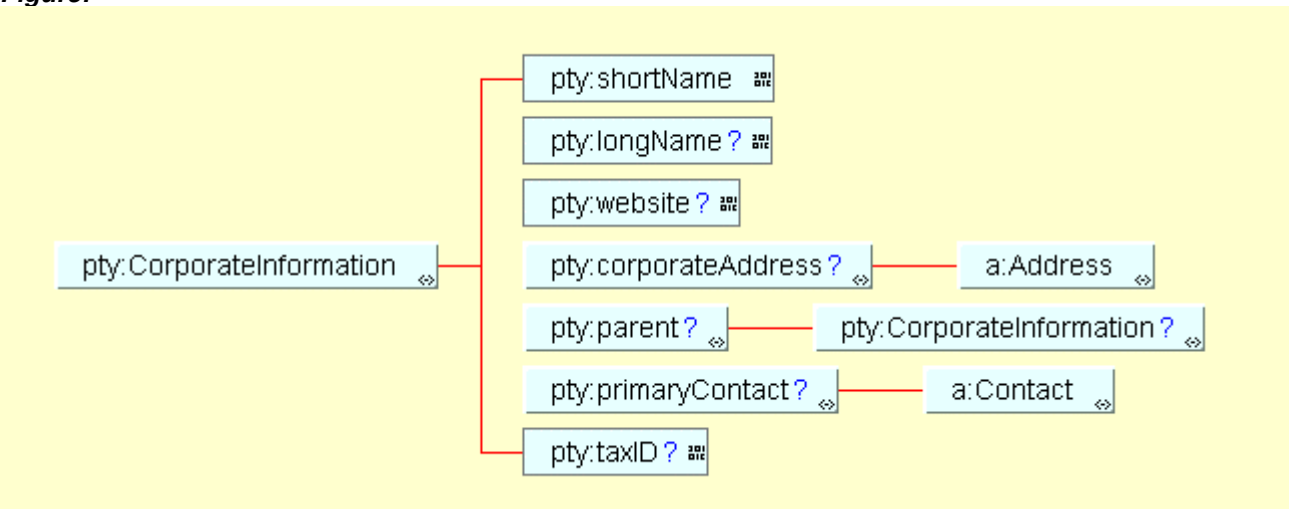
<!ELEMENT pty:ConfirmInformation (pty:primaryConfirmContact , pty:secondaryConfirmContacts?)>

1.75 pty:CorporateInformation

Description:

Contains the detailed elements of the basic corporate information of the Party

Figure:



Contents:

pty:shortName (required, string)

- An abbreviated name for the party

pty:longName (optional, string)

- The legal or officially recorded name of the party. This is to be used on all legal confirms and correspondence

pty:website (optional, string)

- The Party's Internet website address

pty:corporateAddress(optional, contains exactly one a:Address)
pty:parent (optional, contains optional pty:CorporateInformation)
pty:primaryContact (optional, contains exactly one a:Contact)
pty:taxID (optional, string)

- The party's corporate tax id.

XML:

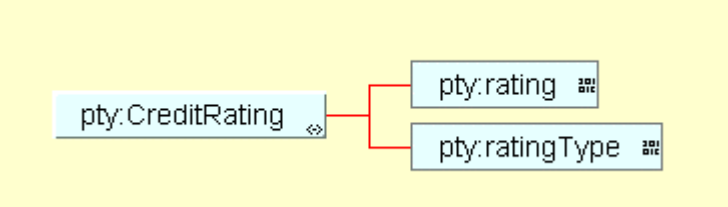
<!ELEMENT pty:CorporateInformation (pty:shortName , pty:longName? , pty:website? , pty:corporateAddress? , pty:parent? , pty:primaryContact? , pty:taxID?)>

1.76 pty:CreditRating

Description:

The party's internal or external credit ratings

Figure:



Contents:

pty:rating (required, string)

- The rating representing the assessment of the credit worthiness of a party.

pty:ratingType (required, string)

- The name of the credit rating source that provided the rating. Examples are S and Pm and Moody's.

XML:

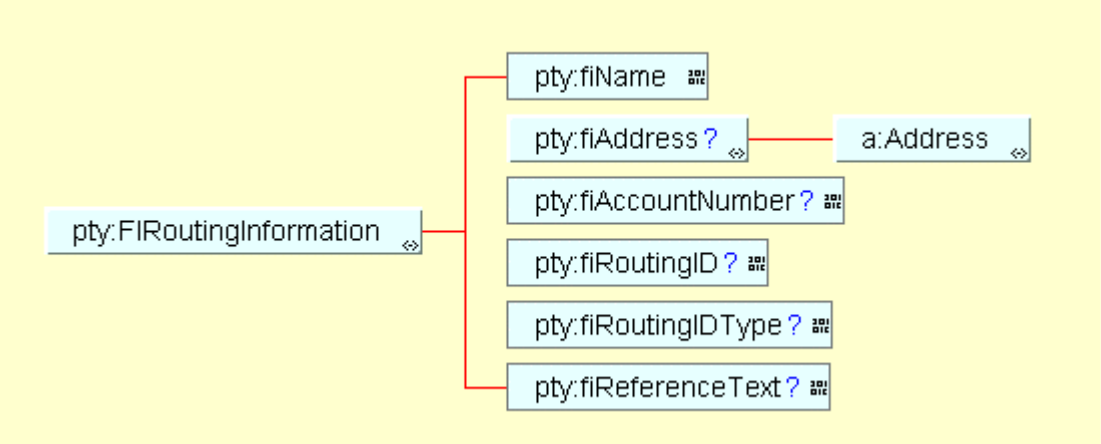
<!ELEMENT pty:CreditRating (pty:rating , pty:ratingType)>

1.77 pty:FIRoutingInformation

Description:

Contains the detail routing instructions for a correspondent, intermediary or beneficiary.

Figure:



Contents:

pty:fiName (required, string)

- Name of the correspondent, intermediary or beneficiary.

pty:fiAddress (optional, contains exactly one a:Address)
pty:fiAccountNumber(optional, string)

- The account number at the correspondent, intermediary or beneficiary that must be referenced to ensure proper posting of funds.

pty:fiRoutingID (optional, string)

- The correspondent, intermediary or beneficiary's routing identification for transferring funds.

pty:fiRoutingIDType(optional, value domain: 'ABA SwiftBIC CHIPS CHAPS')

- The type of routing ID that has been provided. Examples: ABA Number, Swift BIC ID, etc.

pty:fiReferenceText(optional, string)

- Free form text to further describe payment terms

XML:

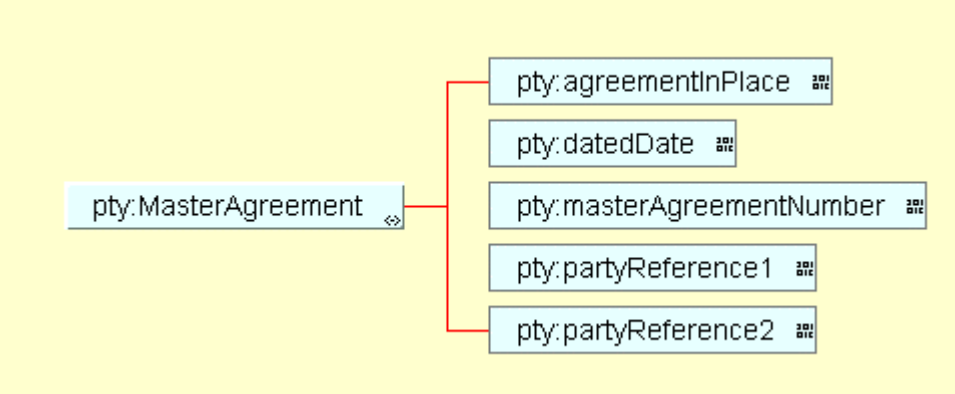
<!ELEMENT pty:FIRoutingInformation (pty:fiName , pty:fiAddress? , pty:fiAccountNumber? , pty:fiRoutingID? , pty:fiRoutingIDType? , pty:fiReferenceText?)>

1.78 pty:MasterAgreement

Description:

Contains detailed information about the Master Agreements involved in the trade

Figure:



Contents:

pty:agreementInPlace(required, value domain: 'YES NO')

- Indicates if Master Agreement is signed and in place

pty:datedDate (required, date)

- Indicates the date on which the agreement was effective

pty:masterAgreementNumber(required, string)

- Contains a reference number that identifies the Master Agreement

pty:partyReference1(required, string)

- Contains a reference to the first principal party in the Master Agreement

pty:partyReference2(required, string)

- Contains a reference to the second principal party in the Master Agreement

XML:

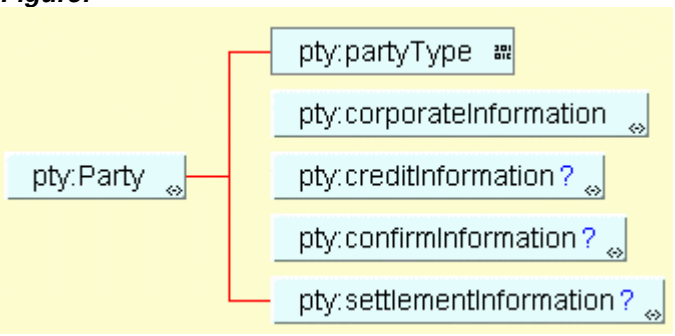
<!ELEMENT pty:MasterAgreement (pty:agreementInPlace , pty:datedDate , pty:masterAgreementNumber , pty:partyReference1 , pty:partyReference2)>

1.79 pty:Party

Description:

Party describes the PARTY with whom another Party is transacting a DEAL, processing an ORDER, or performing a TRADE

Figure:



Contents:

pty:partyType (required, value domain: 'PRINCIPAL COUNTERPARTY')

- Identifies the role that the party is playing relative to this trade. A party can play multiple roles within a trade, each being identified by a unique reference name.

pty:corporateInformation(required, contains exactly one pty:CorporateInformation)
pty:creditInformation(optional, contains one or more pty:CreditRating)
pty:confirmInformation(optional, contains exactly one pty:ConfirmInformation)
pty:settlementInformation(optional, contains one or more pty:SettlementInstructions)

XML:

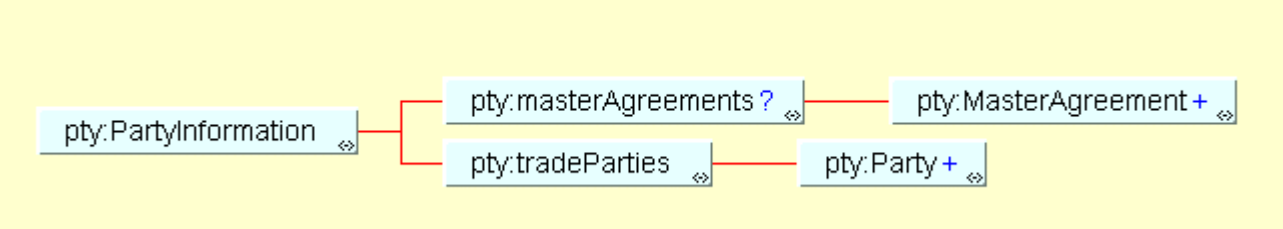
<!ELEMENT pty:Party (pty:partyType , pty:corporateInformation , pty:creditInformation? , pty:confirmInformation? , pty:settlementInformation?)>

1.80 pty:PartyInformation

Description:

Contains information about the parties involved in the trade

Figure:



Contents:

pty:masterAgreements(optional, contains one or more pty:MasterAgreement)

pty:tradeParties (required, contains one or more pty:Party)

XML:

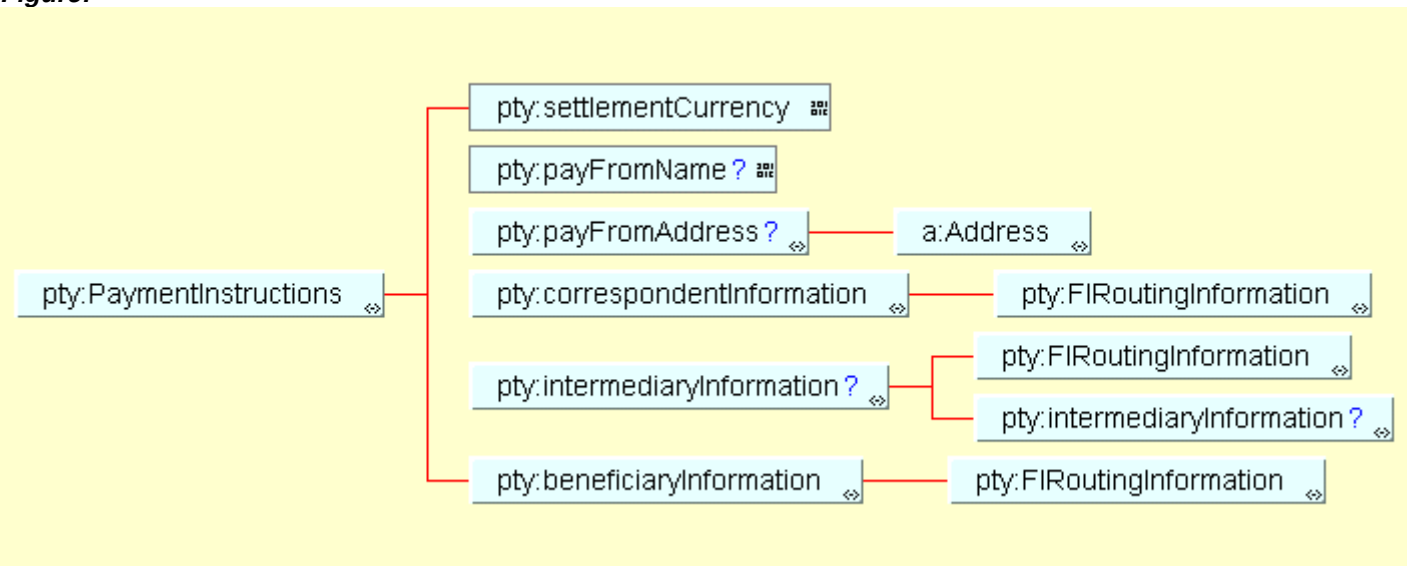
<!ELEMENT pty:PartyInformation (pty:masterAgreements? , pty:tradeParties)>

1.81 pty:PaymentInstructions

Description:

Not yet specified.

Figure:



Contents:

pty:settlementCurrency(required, string)

- The ISO code representing the currency in which the payment for the cash flow event will be made.

pty:payFromName (optional, string)

- Name of the correspondent bank or clearing agent from which payment is expected to be made.

pty:payFromAddress (optional, contains exactly one a:Address)
pty:correspondentInformation(required, contains exactly one pty:FIRoutingInformation)
pty:intermediaryInformation(optional, one of pty:FIRoutingInformation, pty:intermediaryInformation)
pty:beneficiaryInformation(required, contains exactly one pty:FIRoutingInformation)

XML:

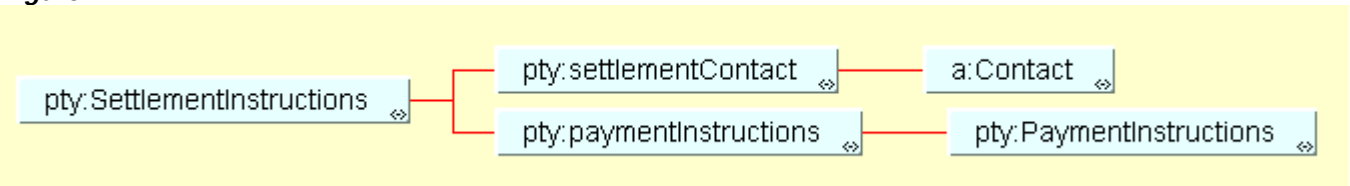
<!ELEMENT pty:PaymentInstructions (pty:settlementCurrency , pty:payFromName? , pty:payFromAddress? , pty:correspondentInformation , pty:intermediaryInformation? , pty:beneficiaryInformation)>

1.82 pty:SettlementInstructions

Description:

Contains the instructions required for trade settlement

Figure:



Contents:

pty:settlementContact(required, contains exactly one a:Contact)

pty:paymentInstructions(required, contains exactly one pty:PaymentInstructions)

XML:

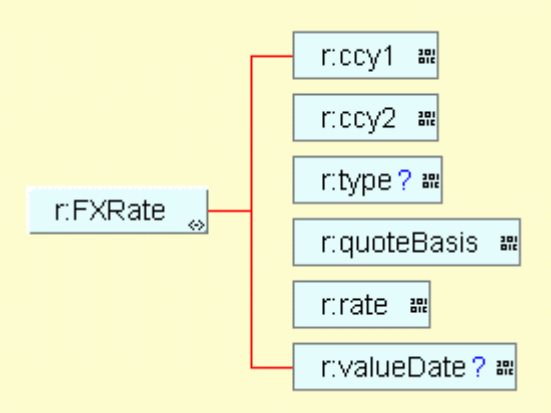
<!ELEMENT pty:SettlementInstructions (pty:settlementContact , pty:paymentInstructions)>

1.83 r:FXRate

Description:

FX Rate Class. Note there is no implication of which currency is the default 'base' or 'term'. The term of the rate is given by the 'quoteBasis' field which indicates the rate convention.

Figure:



Contents:

r:ccy1 (required, string)

- ISO currency identifier. Used to identifier which is the first currency of an FX rate.

r:ccy2 (required, string)

- ISO currency identifier. Used to identifier which is the second currency of an FX rate.

r:type (optional, value domain: 'bid offer mid')

- Identifies the 'type' of rate. 'offer', 'bid', 'mid', etc.

r:quoteBasis (required, value domain: 'ccy1PerCcy2 ccy2PerCcy1')

- The rate quote type. Either 'CCY1PERCCY2' or 'CCY2PERCCY1'.

r:rate (required, float)

- The rate value.

r:valueDate (optional, date)

- The date on which the Fx points apply.

XML:

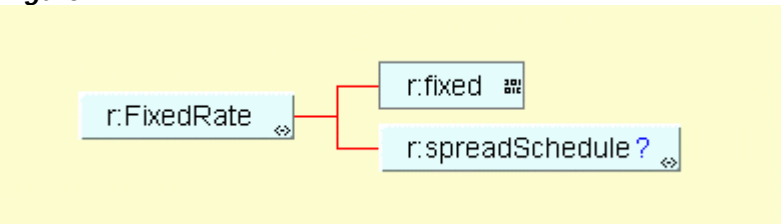
<!ELEMENT r:FXRate (r:ccy1 , r:ccy2 , r:type? , r:quoteBasis , r:rate , r:valueDate?)>

1.84 r:FixedRate

Description:

Interest rate including spread.

Figure:



Contents:

r:fixed (required, float)

- The fixed interest rate

r:spreadSchedule (optional, contains exactly one r:SpreadSchedule)

XML:

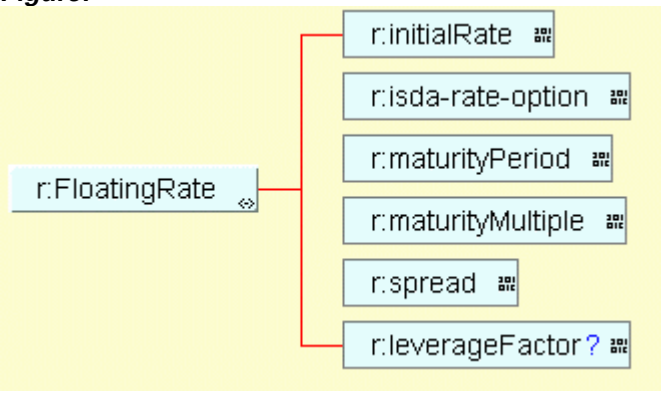
<!ELEMENT r:FixedRate (r:fixed , r:spreadSchedule?)>

1.85 r:FloatingRate

Description:

Holds the floating reference rate information

Figure:



Contents:

r:initialRate (optional, float)

- The rate to be applied to the first accrual calculation in a regular stream of interest rate payments

r:isda-rate-option (required, string)

- An ISDA -compliant identifier which describes a rate Index, how it is to be sourced, and (sometimes) it's regulatory authority (eg BBA)

r:maturityPeriod (required, value domain: 'day week month year quarter')

- The Period units of the designated maturity (see ISDA Definitions) applied to a Rate Option

r:maturityMultiple (required, integer)

- The number of units of the maturity period required

r:spread (required, float)

- Margin to be applied to (normally) a floating interest rate

r:leverageFactor (optional, float)

- A scaling factor to be applied to an interest rate formula

XML:

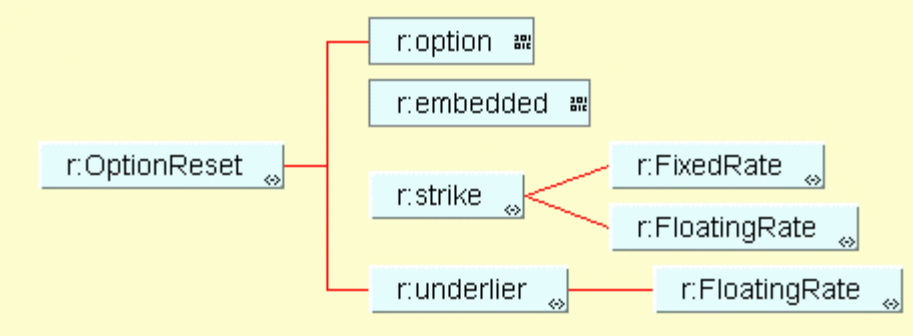
<!ELEMENT r:FloatingRate (r:initialRate? , r:isda-rate-option , r:maturityPeriod , r:maturityMultiple , r:spread , r:leverageFactor?)>

1.86 r:OptionReset

Description:

Not yet specified.

Figure:



Contents:

r:option (required, value domain: 'cap floor')

r:embedded (required, boolean)

r:strike (required, one of r:FixedRate, r:FloatingRate)

r:underlier (required, contains one of set r:FloatingRate)

XML:

<!ELEMENT r:OptionReset (r:option , r:embedded , r:strike , r:underlier)>

1.87 r:Rate

Description:

Not yet specified.

Contents:

r:rate (required, float)

- The rate value.

XML:

<!ELEMENT r:Rate (r:rate)>

1.88 r:SpreadSchedule

Description:

A list of spread steps

Contents:

r:steps (required, contains one or more r:SpreadStep)

XML:

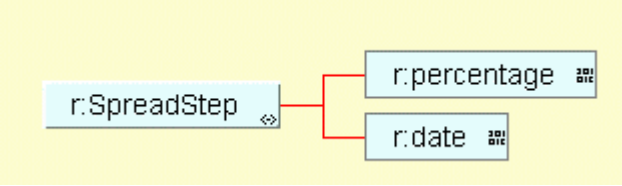
<!ELEMENT r:SpreadSchedule (r:steps)>

1.89 r:SpreadStep

Description:

Defines the date and percentage of change for spread

Figure:



Contents:

r:percentage (required, float)

- Is percentage!

r:date (required, date)

- The date since when a new spread is in effect

XML:

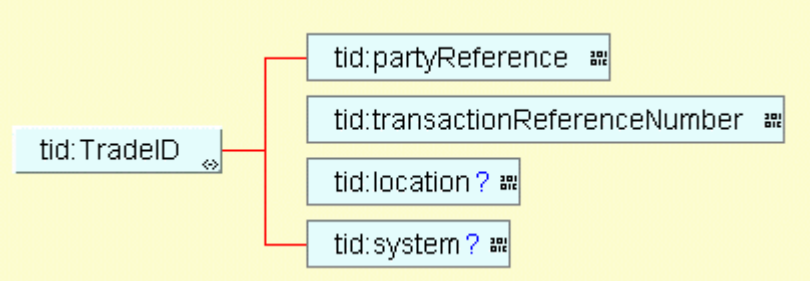
<!ELEMENT r:SpreadStep (r:percentage , r:date)>

1.90 tid:TradeID

Description:

A unique identifier for the trade. Each party involved in the trade would assign its own unique number as they identify it.

Figure:



Contents:

tid:partyReference (required, string)

- Reference to the section of the message holding identifiers of the parties to the trade.

tid:transactionReferenceNumber(required, integer)

- Unique Trade ID.

tid:location (optional, string)
tid:system (optional, string)

XML:

<!ELEMENT tid:TradeID (tid:partyReference , tid:transactionReferenceNumber , tid:location? , tid:system?)>

1.91 tid:TradeIDs

Description:

version 1.0b Contains a list of ID's used by each of trade parties to uniquely identify the trade

Contents:

tid:TradeID(one or more)

XML:

<!ELEMENT tid:TradeIDs (tid:TradeID+)>

---

2 DOCUMENT TYPE DEFINITIONS (DTD)

2.1 Shared

2.1.1 date.dtd

```
<!-- Copyright (c) 1999 by J.P.Morgan and PricewaterhouseCoopers.
PricewaterhouseCoopers refers to the individual member firms of the world
wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ELEMENT d:BusinessCenters  (d:businessCenter+ )>
<!ATTLIST d:BusinessCenters  name NMTOKEN  #IMPLIED >
<!ELEMENT d:businessCenter  (#PCDATA )>
<!ATTLIST d:businessCenter  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:AdjustableDate  (d:date , d:businessDayConvention ,  (d:adjustmentsReference
| d:adjustments ) )>

<!ELEMENT d:date  (#PCDATA )>
<!ATTLIST d:date  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT d:businessDayConvention  (#PCDATA )>
<!ATTLIST d:businessDayConvention  e-dvalue NMTOKENS  'modifiedFollowing modifiedPrevious
following previous none'
                                   e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT d:adjustmentsReference  (#PCDATA )>
<!ATTLIST d:adjustmentsReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:startDate  (#PCDATA )>
<!ATTLIST d:startDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT d:endDate  (#PCDATA )>
<!ATTLIST d:endDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT d:frequency  (#PCDATA )>
<!ATTLIST d:frequency  e-dvalue NMTOKENS  'monthly quarterly semi-annual annual weekly
daily'
                       e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT d:rollConvention  (#PCDATA )>
<!ATTLIST d:rollConvention  e-dvalue NMTOKENS  'rollOnLast rollOnDay none'
                            e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT d:adjustCalculationPeriods  (#PCDATA )>
<!ATTLIST d:adjustCalculationPeriods  e-dvalue NMTOKENS  'true false'
                                      e-dtype  NMTOKEN   #FIXED 'boolean' >
<!ELEMENT d:accrualBasis  (#PCDATA )>
<!ATTLIST d:accrualBasis  e-dvalue NMTOKENS  '30Per360 actual actualPer360 actualPer365 '
                          e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT d:AdjustablePeriod  (d:start , d:end , d:businessDayConvention ,
(d:adjustmentsReference | d:adjustments ) )>
<!ATTLIST d:AdjustablePeriod  name NMTOKEN  'stubCalcPeriod' >
<!ELEMENT d:relativeTo  (#PCDATA )>
<!ATTLIST d:relativeTo  e-dvalue NMTOKENS  'periodStart periodEnd positionStart
positionEnd'
                        e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT d:offsetDays  (#PCDATA )>
<!ATTLIST d:offsetDays  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:AdjustableDateSchedule  ( ( (d:periodScheduleReference | d:periodsReference |
d:periodReference ) , d:relativeTo , d:offsetDays? ) |  (d:startDate , d:endDate ,
d:frequency , d:rollConvention? , d:businessDayConvention? ,  (d:adjustmentsReference |
d:adjustments ) ) )>
<!ATTLIST d:AdjustableDateSchedule  name NMTOKEN  'exerciseDates' >
<!ELEMENT d:adjustments  (d:BusinessCenters )>

<!ELEMENT d:periodsReference  (#PCDATA )>
<!ATTLIST d:periodsReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:BasicPeriodSchedule  (d:start , d:end , d:frequency , d:rollConvention? )>
<!ATTLIST d:BasicPeriodSchedule  name NMTOKEN  'regularPeriodsSchedule' >
<!ELEMENT d:periodSchedule  (d:BasicPeriodSchedule )>
```

```
<!ELEMENT d:AdjustablePeriodSchedule  ( ( (d:periodSchedule | d:periodScheduleReference )
, d:businessDayConvention ,  (d:adjustmentsReference | d:adjustments ) ) )>
<!ATTLIST d:AdjustablePeriodSchedule  name NMTOKEN  'calculationPeriods' >
<!ELEMENT d:CommonAdjustments  (d:businessDayConvention ,  (d:adjustmentsReference |
d:adjustments ) )>

<!ELEMENT d:exerciseAdjustments  (d:CommonAdjustments )>

<!ELEMENT d:notificationAdjustments  (d:CommonAdjustments )>

<!ELEMENT d:daysOffset  (#PCDATA )>
<!ATTLIST d:daysOffset  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT d:NotificationOffset  (d:daysOffset , d:businessDayConvention ,
(d:adjustmentsReference | d:adjustments ) )>
<!ATTLIST d:NotificationOffset  name NMTOKEN  'optionNotificationOffset' >
<!ELEMENT d:exerciseDate  (#PCDATA )>
<!ATTLIST d:exerciseDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT d:notificationDate  (#PCDATA )>
<!ATTLIST d:notificationDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT d:percentageOfNotional  (#PCDATA )>
<!ATTLIST d:percentageOfNotional  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT d:notificationReference  (#PCDATA )>
<!ATTLIST d:notificationReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:strikeInterpolation  (#PCDATA )>
<!ATTLIST d:strikeInterpolation  e-dvalue NMTOKENS  'linear minimum'
                                 e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT d:nextPercentageOfNotional  (#PCDATA )>
<!ATTLIST d:nextPercentageOfNotional  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT d:EuropeanExerciseStep  (d:exerciseDate ,  (d:notificationDate |
d:notificationReference ) , d:percentageOfNotional )>

<!ELEMENT d:AmericanExerciseStep  (d:start , d:end ,  (d:notificationDate |
d:notificationReference ) , d:percentageOfNotional , d:strikeInterpolation ,
d:nextPercentageOfNotional? )>

<!ELEMENT d:ExerciseSteps  ( (d:ExerciseStep* ) |  (d:EuropeanExerciseStep* ,
d:AmericanExerciseStep* ) )>

<!ELEMENT d:ExplicitOptionAdjustableDateSchedule  (d:exerciseAdjustments ,
d:notificationAdjustments , d:notificationOffset , d:ExerciseSteps )>
<!ATTLIST d:ExplicitOptionAdjustableDateSchedule  name NMTOKEN  'exerciseDates' >
<!ELEMENT d:notificationOffset  (d:NotificationOffset )>

<!ELEMENT d:exerciseDates  (d:AdjustableDateSchedule )>

<!ELEMENT d:ExtendedAdjustableDateSchedule  (d:dateScheduleReference , d:relativeTo ,
d:notificationOffset )>

<!ELEMENT d:dateScheduleReference  (#PCDATA )>
<!ATTLIST d:dateScheduleReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:notificationDates  (d:ExtendedAdjustableDateSchedule )>

<!ELEMENT d:OptionAdjustableDateSchedule  (d:exerciseDates , d:notificationDates ,
d:percentageOfNotional? , d:exercisePartyReference? )>

<!ELEMENT d:periodReference  (#PCDATA )>
<!ATTLIST d:periodReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:ExerciseStep  ( (d:exerciseDate |  (d:startDate , d:endDate ) ) ,
d:notificationReference , d:exercisePartyReference )>

<!ELEMENT d:exercisePartyReference  (#PCDATA )>
<!ATTLIST d:exercisePartyReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:periodScheduleReference  (#PCDATA )>
<!ATTLIST d:periodScheduleReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT d:start  (#PCDATA )>
<!ATTLIST d:start  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT d:end  (#PCDATA )>
<!ATTLIST d:end  e-dtype NMTOKEN  #FIXED 'date' >
```

2.1.2 money.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!NOTATION isoccy-4217 SYSTEM "http://www.iso.ch/cate/d23132.html">

<!ENTITY % DATE "INCLUDE">

<![ %DATE; [
<!ENTITY % date.dtd SYSTEM "date.dtd">

%date.dtd;

]]>
<!ELEMENT m:Money  ( (m:ccy | m:currency ) , m:amount )>

<!-- -->
<!ELEMENT m:NotionalSchedule  (m:initialNotional , m:notionalSteps )>

<!-- -->
<!ELEMENT m:initialNotional  (m:Money )>

<!-- -->
<!ELEMENT m:notionalSteps  (m:ExplicitNotionalSteps | m:RegularNotionalSteps )>

<!-- -->
<!ELEMENT m:DateBasedNotionalStep  (m:date ,  (m:percentage | m:notionalAmount ) ,
m:stepTerm )>

<!-- -->
<!ELEMENT m:notionalAmount  (m:Money )>

<!-- -->
<!ELEMENT m:percentage  (#PCDATA )>
<!ATTLIST m:percentage  e-dtype NMTOKEN  #FIXED 'float' >
<!-- -->
<!ELEMENT m:stepTerm  (#PCDATA )>
<!ATTLIST m:stepTerm  e-dvalue NMTOKENS  'remaining period'
                      e-dtype  NMTOKEN   #FIXED 'string' >
<!-- -->
<!ELEMENT m:ccy  (#PCDATA )>
<!ATTLIST m:ccy  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                 e-dtype  NMTOKEN   #FIXED 'string' >
<!-- -->
<!ELEMENT m:amount  (#PCDATA )>
<!ATTLIST m:amount  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT m:date  (#PCDATA )>
<!ATTLIST m:date  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT m:ExplicitNotionalSteps  (m:DateBasedNotionalStep+ )>

<!ELEMENT m:NotionalStep  ( (m:percentage | m:notionalAmount ) , m:stepTerm )>

<!ELEMENT m:changePerStep  (m:NotionalStep )>

<!ELEMENT m:periods  (d:AdjustablePeriodSchedule )>

<!ELEMENT m:RegularNotionalSteps  ( (m:periods | m:periodSchedule ) , m:changePerStep )>

<!ELEMENT m:periodSchedule  (d:AdjustablePeriodSchedule )>

<!ELEMENT m:currency  (#PCDATA )>
<!ATTLIST m:currency  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                      e-dtype  NMTOKEN   #FIXED 'string' >
```

2.1.3 rate.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!--
<!NOTATION isoccy-4127 SYSTEM "http://www.iso.ch/cate/d23132.html">
-->
<!NOTATION isda-rate-options SYSTEM "http://www.isda.org">

<!ELEMENT r:FixedRate  (r:fixed , r:spreadSchedule? )>

<!ELEMENT r:spreadSchedule  (r:SpreadSchedule )>

<!ELEMENT r:SpreadSchedule  (r:steps )>

<!ELEMENT r:steps  (r:SpreadStep+ )>

<!ELEMENT r:SpreadStep  (r:percentage , r:date )>

<!ELEMENT r:FloatingRate  (r:initialRate? , r:isda-rate-option , r:maturityPeriod ,
r:maturityMultiple , r:spread , r:leverageFactor? )>

<!ELEMENT r:initialRate  (#PCDATA )>
<!ATTLIST r:initialRate  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT r:isda-rate-option  (#PCDATA )>
<!ATTLIST r:isda-rate-option  e-dvalue NOTATION  (isda-rate-options )  #IMPLIED
                              e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:maturityPeriod  (#PCDATA )>
<!ATTLIST r:maturityPeriod  e-dvalue NMTOKENS  'day week month year quarter'
                            e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:spread  (#PCDATA )>
<!ATTLIST r:spread  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT r:percentage  (#PCDATA )>
<!ATTLIST r:percentage  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT r:maturityMultiple  (#PCDATA )>
<!ATTLIST r:maturityMultiple  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT r:FXRate  (r:ccy1 , r:ccy2 , r:type? , r:quoteBasis , r:rate , r:valueDate? )>

<!ELEMENT r:ccy1  (#PCDATA )>
<!ATTLIST r:ccy1  e-dsize  NMTOKEN   #FIXED '3'
                  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                  e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:ccy2  (#PCDATA )>
<!ATTLIST r:ccy2  e-dsize  NMTOKEN   #FIXED '3'
                  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                  e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:type  (#PCDATA )>
<!ATTLIST r:type  e-dvalue NMTOKENS  'bid offer mid'
                  e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:quoteBasis  (#PCDATA )>
<!ATTLIST r:quoteBasis  e-dvalue NMTOKENS  'ccy1PerCcy2 ccy2PerCcy1'
                        e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:rate  (#PCDATA )>
<!ATTLIST r:rate  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT r:valueDate  (#PCDATA )>
<!ATTLIST r:valueDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT r:rateConvention  (#PCDATA )>
<!ATTLIST r:rateConvention  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT r:leverageFactor  (#PCDATA )>
<!ATTLIST r:leverageFactor  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT r:fixed  (#PCDATA )>
<!ATTLIST r:fixed  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT r:underlier  (r:FloatingRate )>

<!ELEMENT r:strike  (r:FixedRate | r:FloatingRate )>

<!ELEMENT r:embedded  (#PCDATA )>
```

```
<!ATTLIST r:embedded  e-dtype NMTOKEN  #FIXED 'boolean' >
<!ELEMENT r:option  (#PCDATA )>
<!ATTLIST r:option  e-dvalue NMTOKENS  'cap floor'
                    e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT r:OptionReset  (r:option , r:embedded , r:strike , r:underlier )>

<!ELEMENT r:date  (#PCDATA )>
<!ATTLIST r:date  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT r:Rate  (r:rate )>
```

2.1.4 contact.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ELEMENT a:Contact  (a:contactName , a:contactOrganizationName , a:emailAddress* ,
a:phoneNumber+ , a:faxNumber? , a:contactAddress? , a:cable? , a:telex? ,
a:businessGroup? )>
<!ATTLIST a:Contact  xmlns:a CDATA  #FIXED 'urn:fpml-contact' >
<!ELEMENT a:contactName  (#PCDATA )>
<!ATTLIST a:contactName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:contactOrganizationName  (#PCDATA )>
<!ATTLIST a:contactOrganizationName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:emailAddress  (#PCDATA )>
<!ATTLIST a:emailAddress  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:phoneNumber  (#PCDATA )>
<!ATTLIST a:phoneNumber  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:faxNumber  (#PCDATA )>
<!ATTLIST a:faxNumber  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:contactAddress  (a:Address )>

<!ELEMENT a:cable  (#PCDATA )>
<!ATTLIST a:cable  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:telex  (#PCDATA )>
<!ATTLIST a:telex  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:businessGroup  (#PCDATA )>
<!ATTLIST a:businessGroup  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:Address  (a:streetAddress? , a:city , a:state? , a:country , a:postalCode? ,
a:region? )>

<!ELEMENT a:streetAddress  (a:StreetAddress )>

<!ELEMENT a:StreetAddress  (a:streetLine+ )>

<!ELEMENT a:streetLine  (#PCDATA )>
<!ATTLIST a:streetLine  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:city  (#PCDATA )>
<!ATTLIST a:city  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:state  (#PCDATA )>
<!ATTLIST a:state  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:country  (#PCDATA )>
<!ATTLIST a:country  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:postalCode  (#PCDATA )>
<!ATTLIST a:postalCode  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT a:region  (#PCDATA )>
<!ATTLIST a:region  e-dtype NMTOKEN  #FIXED 'string' >
```

2.1.5 fpml.dtd

```
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-->
```

```
<!-- version 1.0b2 : August 6, 1999 -->
<!ENTITY % rate.dtd PUBLIC "" "rate.dtd">
%rate.dtd;
<!ENTITY % RATE "IGNORE">
<!ENTITY % date.dtd PUBLIC "" "date.dtd">
%date.dtd;
<!ENTITY % DATE "IGNORE">
<!ENTITY % money.dtd PUBLIC "" "money.dtd">
%money.dtd;
<!ENTITY % MONEY "IGNORE">
<!ENTITY % fxshared.dtd PUBLIC "" "fxshared.dtd">
%fxshared.dtd;
<!ENTITY % FXSHARED "IGNORE">
<!ENTITY % Payment.dtd SYSTEM "Payment.dtd">
%Payment.dtd;
<!ENTITY % PAYMENT "IGNORE">
<!ENTITY % ftsl.dtd SYSTEM "ftsl.dtd">
%ftsl.dtd;
<!ENTITY % FXTEMPLATE "IGNORE">
<!ENTITY % fxoshared.dtd SYSTEM "fxoshared.dtd">
%fxoshared.dtd;
<!ENTITY % FXOSHARED "IGNORE">
<!ENTITY % frashared.dtd SYSTEM "frashared.dtd">
%frashared.dtd;
<!ENTITY % FRASHARED "IGNORE">
<!ENTITY % ftvo.dtd SYSTEM "ftvo.dtd">
%ftvo.dtd;
<!ENTITY % TEMPLATEVANILLAOPTION "IGNORE">
<!ENTITY % ftbn.dtd SYSTEM "ftbn.dtd">
%ftbn.dtd;
<!ENTITY % BINARY "IGNORE">
<!ENTITY % ftba.dtd SYSTEM "ftba.dtd">
%ftba.dtd;
<!ENTITY % TEMPLATEBARRIEROPTION "IGNORE">
<!ENTITY % ftbb.dtd SYSTEM "ftbb.dtd">
%ftbb.dtd;
```

```
<!ENTITY % BINARYBARRIER "IGNORE">
<!ENTITY % VanillaFloatStream.dtd SYSTEM "VanillaFloatStream.dtd">
%VanillaFloatStream.dtd;
<!ENTITY % VANILLAFLOATSTREAM "IGNORE">
<!ENTITY % VanillaFixedStream.dtd SYSTEM "VanillaFixedStream.dtd">
%VanillaFixedStream.dtd;
<!ENTITY % VANILLAFIXEDSTREAM "IGNORE">
<!ENTITY % SwapStream.dtd SYSTEM "SwapStream.dtd">
%SwapStream.dtd;
<!ENTITY % SWAPSTREAM "IGNORE">
<!ENTITY % Swap.dtd SYSTEM "Swap.dtd">
%Swap.dtd;
<!ENTITY % SWAP "IGNORE">
<!ENTITY % CapFloorStream.dtd SYSTEM "CapFloorStream.dtd">
%CapFloorStream.dtd;
<!ENTITY % CAPFLOORSTREAM "IGNORE">
<!ENTITY % OptionStream.dtd SYSTEM "OptionStream.dtd">
%OptionStream.dtd;
<!ENTITY % OPTIONSTREAM "IGNORE">
<!ENTITY % VanillaFixedFloat SYSTEM "VanillaFixedFloat.dtd">
<!ENTITY % tradeID.dtd SYSTEM "tradeID.dtd">
<!ENTITY % marketdata.dtd SYSTEM "marketdata.dtd">
<!ENTITY % FXBinaryOption.dtd SYSTEM "FXBinaryOption.dtd">
<!ENTITY % FRA.dtd SYSTEM "FRA.dtd">
<!ENTITY % FXVanillaOption SYSTEM "FXVanillaOption.dtd">
<!ENTITY % FXBarrierOption.dtd SYSTEM "FXBarrierOption.dtd">
<!ENTITY % FXBinaryBarrierOption.dtd SYSTEM "FXBinaryBarrierOption.dtd">
<!ENTITY % FXFixingOption.dtd SYSTEM "FXFixingOption.dtd">
<!ENTITY % FXSingleLeg.dtd SYSTEM "FXSingleLeg.dtd">
<!ENTITY % FXSwap.dtd SYSTEM "FXSwap.dtd">
<!ENTITY % CapFloor.dtd SYSTEM "CapFloor.dtd">
<!ENTITY % Swaption.dtd SYSTEM "Swaption.dtd">
<!ENTITY % Cancellable.dtd SYSTEM "Cancellable.dtd">
<!ENTITY % Party.dtd SYSTEM "Party.dtd">
%Party.dtd;
```

```
%Cancellable.dtd:

%Swaption.dtd;

%CapFloor.dtd;

%FXSwap.dtd;

%FXSingleLeg.dtd;

%FXFixingOption.dtd;

%FXBinaryBarrierOption.dtd;

%FXBarrierOption.dtd;

%FXVanillaOption;

%FRA.dtd;

%FXBinaryOption.dtd;

%marketdata.dtd;

%tradeID.dtd;

%VanillaFixedFloat;

<!ELEMENT fpml:Trade  (fpml:tradeIDs , fpml:product , fpml:partyInformation? )>

<!ELEMENT fpml:FpML  (fpml:Trade | mdr:MarketData )>
<!ATTLIST fpml:FpML  xmlns:fpml NMTOKEN  #FIXED 'urn:fpml-FpML'
                     xmlns:t    NMTOKEN  #FIXED 'urn:fpml-type'
                     xmlns:d    NMTOKEN  #FIXED 'urn:fpml-date'
                     xmlns:m    NMTOKEN  #FIXED 'urn:fpml-money'
                     xmlns:r    NMTOKEN  #FIXED 'urn:fpml-rate'
                     xmlns:mdr  NMTOKEN  #FIXED 'urn:fpml-MarketData'
                     xmlns:pty  NMTOKEN  #FIXED 'urn:fpml-party' >
<!ELEMENT fpml:product  (ipc:Cancellable | ipso:Swaption | ipcf:CapFloor |
fpvo:FXVanillaOption | ipff:VanillaFixedFloat | fpsl:FXSingleLeg | fpswp:FXSwap |
fpba:FXBarrierOption | fpbn:FXBinaryOption | fpfra:ForwardRateAgreement |
fpfo:FXFixingOption | ips:SwapStreams | fpbb:FXBinaryBarrierOption )>

<!ELEMENT fpml:tradeIDs  (tid:TradeIDs )>

<!ELEMENT fpml:partyInformation  (pty:PartyInformation )>
```

2.1.6 marketdata.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!--
<!NOTATION isoccy-4217 SYSTEM "http://www.iso.ch/cate/d23132.html">
<!ATTLIST mdr:MarketData  xmlns:mdr NMTOKEN  #FIXED 'urn:fpml-MarketData' >
-->
<!ELEMENT mdr:MarketData  (mdr:fxoVolatility )>

<!ELEMENT mdr:FXOVolatility  (mdr:valueDate , mdr:inputType , mdr:volCcyPairs )>

<!ELEMENT mdr:valueDate  (#PCDATA )>
<!ATTLIST mdr:valueDate  e-dtype NMTOKEN  #FIXED 'datetime.tx' >
<!ELEMENT mdr:inputType  (#PCDATA )>
<!ATTLIST mdr:inputType  e-dvalue NMTOKENS  'IntraDay EndOfDay'
                         e-dtype  NMTOKEN   #FIXED 'string' >
```

```
<!ELEMENT mdr:volCcvPairs  (mdr:VolCcvPair )>

<!ELEMENT mdr:VolCcyPair  (mdr:termCcy , mdr:baseCcy , mdr:premiumCcy ,
mdr:smileDeltaTerms , mdr:terms )>

<!ELEMENT mdr:termCcy  (#PCDATA )>
<!ATTLIST mdr:termCcy  e-dsize  NMTOKEN   '3'
                       e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                       e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:baseCcy  (#PCDATA )>
<!ATTLIST mdr:baseCcy  e-dsize  NMTOKEN   '3'
                       e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                       e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:premiumCcy  (#PCDATA )>
<!ATTLIST mdr:premiumCcy  e-dsize  NMTOKEN   '3'
                          e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                          e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:smileDeltaTerms  (#PCDATA )>
<!ATTLIST mdr:smileDeltaTerms  e-dsize  NMTOKEN   '3'
                               e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                               e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:terms  (mdr:Term+ )>

<!ELEMENT mdr:Term  (mdr:inputMethod , mdr:termValue , mdr:volatilities )>

<!ELEMENT mdr:termValue  (#PCDATA )>
<!ATTLIST mdr:termValue  e-dvalue NMTOKENS  'SP 7D 1M 2M 3M 6M 9M 12M 18M 1Y 2Y 3Y 4Y 5Y'
                         e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:inputMethod  (#PCDATA )>
<!ATTLIST mdr:inputMethod  e-dvalue NMTOKENS  'N D'
                           e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:volatilities  (mdr:Volatility+ )>

<!ELEMENT mdr:Volatility  (mdr:delta , mdr:volatilityValue , mdr:termPutCall? )>

<!ELEMENT mdr:delta  (#PCDATA )>
<!ATTLIST mdr:delta  e-dvalue NMTOKENS  'NEUTRAL 10 25'
                     e-dtype  NMTOKEN   #FIXED 'integer' >
<!ELEMENT mdr:volatilityValue  (#PCDATA )>
<!ATTLIST mdr:volatilityValue  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT mdr:termPutCall  (#PCDATA )>
<!ATTLIST mdr:termPutCall  e-dvalue NMTOKENS  'PUT CALL'
                           e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT mdr:fxoVolatility  (mdr:FXOVolatility )>
```

2.1.7 party.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % CONTACT "INCLUDE">

<![ %CONTACT; [
<!ENTITY % CONTACT.DTD PUBLIC "" "contact.dtd">

%CONTACT.DTD;

]]>
<!ELEMENT pty:PartyInformation  (pty:masterAgreements? , pty:tradeParties )>
<!ATTLIST pty:PartyInformation  xmlns:a   CDATA  #FIXED 'urn:fpml-contact'
                                xmlns:pty CDATA  #FIXED 'urn:fpml-party' >
<!ELEMENT pty:masterAgreements  (pty:MasterAgreement+ )>

<!ELEMENT pty:MasterAgreement  (pty:agreementInPlace , pty:datedDate ,
pty:masterAgreementNumber , pty:partyReference1 , pty:partyReference2 )>
```

```
<!ELEMENT pty:agreementInPlace  (#PCDATA )>
<!ATTLIST pty:agreementInPlace  e-dvalues CDATA    #FIXED 'YES NO'
                                e-dtype   NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:datedDate  (#PCDATA )>
<!ATTLIST pty:datedDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT pty:masterAgreementNumber  (#PCDATA )>
<!ATTLIST pty:masterAgreementNumber  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:partyReference1  (#PCDATA )>
<!ATTLIST pty:partyReference1  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:partyReference2  (#PCDATA )>
<!ATTLIST pty:partyReference2  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:tradeParties  (pty:Party+ )>

<!ELEMENT pty:Party  (pty:partyType , pty:corporateInformation , pty:creditInformation? ,
pty:confirmInformation? , pty:settlementInformation? )>
<!ATTLIST pty:Party  name NMTOKEN  #IMPLIED >
<!ELEMENT pty:partyType  (#PCDATA )>
<!ATTLIST pty:partyType  e-dvalue CDATA    #FIXED 'PRINCIPAL COUNTERPARTY'
                         e-dtype  NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:corporateInformation  (pty:CorporateInformation )>

<!ELEMENT pty:CorporateInformation  (pty:shortName , pty:longName? , pty:website? ,
pty:corporateAddress? , pty:parent? , pty:primaryContact? , pty:taxID? )>

<!ELEMENT pty:confirmInformation  (pty:ConfirmInformation )>

<!ELEMENT pty:ConfirmInformation  (pty:primaryConfirmContact ,
pty:secondaryConfirmContacts? )>

<!ELEMENT pty:primaryConfirmContact  (a:Contact )>

<!ELEMENT pty:secondaryConfirmContacts  (a:Contact+ )>

<!ELEMENT pty:creditInformation  (pty:CreditRating+ )>

<!ELEMENT pty:settlementContact  (a:Contact )>

<!ELEMENT pty:CreditRating  (pty:rating , pty:ratingType )>

<!ELEMENT pty:settlementInformation  (pty:SettlementInstructions+ )>

<!ELEMENT pty:SettlementInstructions  (pty:settlementContact , pty:paymentInstructions )>

<!ELEMENT pty:paymentInstructions  (pty:PaymentInstructions )>

<!ELEMENT pty:PaymentInstructions  (pty:settlementCurrency , pty:payFromName? ,
pty:payFromAddress? , pty:correspondentInformation , pty:intermediaryInformation? ,
pty:beneficiaryInformation )>

<!ELEMENT pty:shortName  (#PCDATA )>
<!ATTLIST pty:shortName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:longName  (#PCDATA )>
<!ATTLIST pty:longName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:website  (#PCDATA )>
<!ATTLIST pty:website  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:corporateAddress  (a:Address )>

<!ELEMENT pty:primaryContact  (a:Contact )>

<!ELEMENT pty:payFromName  (#PCDATA )>
<!ATTLIST pty:payFromName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:payFromAddress  (a:Address )>

<!ELEMENT pty:intermediaryInformation  (pty:FIRoutingInformation ,
pty:intermediaryInformation? )>

<!ELEMENT pty:correspondentInformation  (pty:FIRoutingInformation )>

<!ELEMENT pty:beneficiaryInformation  (pty:FIRoutingInformation )>
```

```
<!ELEMENT pty:FIRoutingInformation  (pty:fiName , pty:fiAddress? , pty:fiAccountNumber? ,
pty:fiRoutingID? , pty:fiRoutingIDType? , pty:fiReferenceText? )>

<!ELEMENT pty:fiName  (#PCDATA )>
<!ATTLIST pty:fiName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiAddress  (a:Address )>

<!ELEMENT pty:fiAccountNumber  (#PCDATA )>
<!ATTLIST pty:fiAccountNumber  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiRoutingID  (#PCDATA )>
<!ATTLIST pty:fiRoutingID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiRoutingIDType  (#PCDATA )>
<!ATTLIST pty:fiRoutingIDType  e-dvalue CDATA    #FIXED 'ABA SwiftBIC CHIPS CHAPS'
                               e-dtype  NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiReferenceText  (#PCDATA )>
<!ATTLIST pty:fiReferenceText  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:taxID  (#PCDATA )>
<!ATTLIST pty:taxID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:parent  (pty:CorporateInformation? )>

<!ELEMENT pty:rating  (#PCDATA )>
<!ATTLIST pty:rating  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:ratingType  (#PCDATA )>
<!ATTLIST pty:ratingType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:settlementCurrency  (#PCDATA )>
<!ATTLIST pty:settlementCurrency  e-dtype NMTOKEN  #FIXED 'string' >
```

2.1.8 tradeID.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ELEMENT tid:TradeIDs  (tid:TradeID+ )>
<!ATTLIST tid:TradeIDs  xmlns:tid NMTOKEN  #FIXED 'urn:fpml-TradeID' >
<!-- -->
<!ELEMENT tid:TradeID  (tid:partyReference , tid:transactionReferenceNumber ,
tid:location? , tid:system? )>

<!-- -->
<!ELEMENT tid:partyReference  (#PCDATA )>
<!ATTLIST tid:partyReference  e-dtype NMTOKEN  #FIXED 'string' >
<!-- -->
<!ELEMENT tid:transactionReferenceNumber  (#PCDATA )>
<!ATTLIST tid:transactionReferenceNumber  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT tid:location  (#PCDATA )>
<!ATTLIST tid:location  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT tid:system  (#PCDATA )>
<!ATTLIST tid:system  e-dtype NMTOKEN  #FIXED 'string' >
```

2.2 FX

2.2.1 FXVanillaOption.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % TEMPLATEVANILLAOPTION "INCLUDE">
<![ %TEMPLATEVANILLAOPTION; [
<!ENTITY % ftvo.dtd SYSTEM "ftvo.dtd">
%ftvo.dtd;
```

```
]]>

<!ELEMENT fpvo:vanillaOption  (ftvo:FXVanillaOptionTemplate )>
<!ELEMENT fpvo:productID  (#PCDATA )>
<!ATTLIST fpvo:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpvo:productType  (#PCDATA )>
<!ATTLIST fpvo:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpvo:FXVanillaOption  (fpvo:productID , fpvo:productType , fpvo:vanillaOption
)>
<!ATTLIST fpvo:FXVanillaOption  xmlns:fpvo NMTOKEN  #FIXED 'urn:fpml-FX-Product-
VanillaOption' >
```

2.2.2 frashared.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd SYSTEM "rate.dtd">

%rate.dtd;

]]>
<!ENTITY % MONEY "INCLUDE">

<![ %MONEY; [
<!ENTITY % money.dtd PUBLIC "" "money.dtd">

%money.dtd;

]]>
<!ELEMENT fras:sellerReference  (#PCDATA )>
<!ATTLIST fras:sellerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fras:buyerReference  (#PCDATA )>
<!ATTLIST fras:buyerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fras:fixingDate  (#PCDATA )>
<!ATTLIST fras:fixingDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fras:startDate  (#PCDATA )>
<!ATTLIST fras:startDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fras:endDate  (#PCDATA )>
<!ATTLIST fras:endDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fras:settlementDate  (#PCDATA )>
<!ATTLIST fras:settlementDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fras:notional  (m:Money )>

<!ELEMENT fras:dayCountFraction  (#PCDATA )>
<!ATTLIST fras:dayCountFraction  e-dvalue NMTOKENS  '30Per360 actual actualPer360
actualPer365 '
                                 e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT fras:settlementRule  (#PCDATA )>
<!ATTLIST fras:settlementRule  e-dvalue NMTOKENS  'FRABBA'
                               e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT fras:FRAFixedRate  (fras:fixedRate , fras:rateConvention )>

<!ELEMENT fras:fraFixedRate  (fras:FRAFixedRate )>

<!ELEMENT fras:floatingRates  (r:FloatingRate+ )>

<!ELEMENT fras:FRACore  (fras:sellerReference , fras:buyerReference , fras:fixingDate ,
fras:startDate , fras:endDate , fras:settlementDate , fras:notional ,
fras:dayCountFraction , fras:settlementRule , fras:fraFixedRate , fras:floatingRates )>

<!ELEMENT fras:fixedRate  (#PCDATA )>
```

```
<!ATTLIST fras:fixedRate  e-dtype NMTOKEN  #FIXED 'float' >
<!ELEMENT fras:rateConvention  (#PCDATA )>
<!ATTLIST fras:rateConvention  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fras:fraCore  (fras:FRACore )>

<!ELEMENT fras:fixingWeighting  (#PCDATA )>
<!ATTLIST fras:fixingWeighting  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT fras:Fixing  (fras:fixingDate , fras:fixingWeighting , fras:fixingRate? )>

<!ELEMENT fras:fixingRate  (r:Rate )>

<!ELEMENT fras:fixings  (fras:Fixing+ )>

<!ELEMENT fras:discountRate  (#PCDATA )>
<!ATTLIST fras:discountRate  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fras:AverageFRA  (fras:discountRate , fras:fixings )>

<!ELEMENT fras:averageFRA  (fras:AverageFRA )>
```

2.2.3 ftba.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FXOSHARED "INCLUDE">

<![ %FXOSHARED; [
<!ENTITY % fxoshared.dtd SYSTEM "fxoshared.dtd">

%fxoshared.dtd;

]]>
<!ELEMENT ftba:FXBarrierOptionTemplate  (fxos:style , fxos:fxOptionCore ,
fxos:fxOptionBarriers , fxos:optionPrice )>
<!ATTLIST ftba:FXBarrierOptionTemplate  xmlns:ftba NMTOKEN  #FIXED 'urn:fpml-FX-Template-
BarrierOption'
                                        xmlns:fxos NMTOKEN  #FIXED 'urn:fpml-FXO-shared'
>
```

2.2.4 ftbb.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FXOSHARED "INCLUDE">

<![ %FXOSHARED; [
<!ENTITY % fxoshared.dtd SYSTEM "fxoshared.dtd">

%fxoshared.dtd;

]]>
<!ELEMENT ftbb:FXBinaryBarrierOptionTemplate  (fxos:fxOptionBinaryCore ,
fxos:fxOptionBarriers , fxos:optionPrice )>
<!ATTLIST ftbb:FXBinaryBarrierOptionTemplate  xmlns:fxos NMTOKEN  #FIXED 'urn:fpml-FXO-
shared'
                                             xmlns:ftbb NMTOKEN  #FIXED 'urn:fpml-FX-
Template-BinaryBarrierOption' >
```

2.2.5 ftbn.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FXOSHARED "INCLUDE">

<![ %FXOSHARED; [
<!ENTITY % fxoshared.dtd SYSTEM "fxoshared.dtd">

%fxoshared.dtd;

]]>
<!ELEMENT ftbn:FXBinaryOptionTemplate  (fxos:fxOptionBinaryCore , fxos:optionPrice )>
<!ATTLIST ftbn:FXBinaryOptionTemplate  xmlns:fxos NMTOKEN  #FIXED 'urn:fpml-FXO-shared'
                                       xmlns:ftbn NMTOKEN  #FIXED 'urn:fpml-FX-Template-
BinaryOption' >
```

2.2.6 ftfo.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FXOSHARED "INCLUDE">

<![ %FXOSHARED; [
<!ENTITY % fxoshared.dtd SYSTEM "fxoshared.dtd">

%fxoshared.dtd;

]]>
<!ELEMENT ftfo:FXFixingOptionTemplate  (fxos:fxOptionCore , ftfo:fxOptionFixings ,
fxos:optionPrice )>
<!ATTLIST ftfo:FXFixingOptionTemplate  xmlns:ftfo NMTOKEN  #FIXED 'urn:fpml-FX-Template-
FixingOption'
                                       xmlns:fxos NMTOKEN  #FIXED 'urn:fpml-FXO-shared' >
<!ELEMENT ftfo:fxOptionFixings  (ftfo:FXOptionFixingRef )>

<!ELEMENT ftfo:FXOptionFixingRef  (ftfo:fixingFrequency , ftfo:holidays ,
ftfo:fixingPageRef , ftfo:startDate , ftfo:fixingQuoteBasis , ftfo:numberOfFixesToDate ,
(ftfo:fxOptionFixingAARef | ftfo:fxOptionFixingTTRef ) , ftfo:fixings )>

<!ELEMENT ftfo:fixingFrequency  (#PCDATA )>
<!ATTLIST ftfo:fixingFrequency  e-dvalue NMTOKENS  'daily weekly monthly quarterly semi-
annual annual'
                                e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT ftfo:holidays  (#PCDATA )>
<!ATTLIST ftfo:holidays  e-dvalue NMTOKENS  'CCY1 CCY2 BOTH NONE'
                         e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT ftfo:fixingPageRef  (#PCDATA )>
<!ATTLIST ftfo:fixingPageRef  e-dvalue NMTOKENS  'MGFX'
                              e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT ftfo:startDate  (#PCDATA )>
<!ATTLIST ftfo:startDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT ftfo:fixingQuoteBasis  (#PCDATA )>
<!ATTLIST ftfo:fixingQuoteBasis  e-dvalue NMTOKENS  'CCY1PERCCY2 CCY2PERCCY1'
                                 e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT ftfo:numberOfFixesToDate  (#PCDATA )>
<!ATTLIST ftfo:numberOfFixesToDate  e-dmin  NMTOKEN  '0'
                                    e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT ftfo:fxOptionFixingAARef  (ftfo:FXOptionFixingAARef )>

<!ELEMENT ftfo:FXOptionFixingAARef  (ftfo:averageQuoteBasis , ftfo:averageToDate )>
```

```
<!ELEMENT ftfo:averageQuoteBasis  (#PCDATA )>
<!ATTLIST ftfo:averageQuoteBasis  e-dvalue NMTOKENS  'CCY1PERCCY2 CCY2PERCCY1'
                                  e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT ftfo:averageToDate  (r:FXRate )>

<!ELEMENT ftfo:fixings  (ftfo:Fixing+ )>

<!ELEMENT ftfo:Fixing  (ftfo:fixingDate , ftfo:fixingRate , ftfo:fixingWeighting ,
ftfo:TTfixingITM? )>

<!ELEMENT ftfo:fixingDate  (#PCDATA )>
<!ATTLIST ftfo:fixingDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT ftfo:fixingWeighting  (#PCDATA )>
<!ATTLIST ftfo:fixingWeighting  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT ftfo:rebate  (m:Money )>

<!ELEMENT ftfo:numberOfITMFixes  (#PCDATA )>
<!ATTLIST ftfo:numberOfITMFixes  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT ftfo:FXOptionFixingTTRef  (ftfo:numberOfITMFixes , ftfo:rebate )>

<!ELEMENT ftfo:fxOptionFixingTTRef  (ftfo:FXOptionFixingTTRef )>

<!ELEMENT ftfo:TTfixingITM  (#PCDATA )>
<!ATTLIST ftfo:TTfixingITM  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT ftfo:fixingRate  (r:FXRate )>
```

2.2.7 ftfra.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FRASHARED "INCLUDE">

<![ %FRASHARED; [
<!ENTITY % frashared.dtd SYSTEM "frashared.dtd">

%frashared.dtd;

]]>
<!ELEMENT ftfra:ForwardRateAgreementTemplate  (fras:fraCore , fras:averageFRA? )>
<!ATTLIST ftfra:ForwardRateAgreementTemplate  xmlns:ftfra NMTOKEN  #FIXED 'urn:fpml-
Template-Fra'
                                              xmlns:fras  NMTOKEN  #FIXED 'urn:fpml-FRA-
shared' >
```

2.2.8 ftleg.dtd

Error! Cannot open file.

2.2.9 ftsl.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd PUBLIC "" "rate.dtd">
```

```
%rate.dtd;

]]>
<!ENTITY % FXSHARED "INCLUDE">

<![ %FXSHARED; [
<!ENTITY % fxshared.dtd SYSTEM "fxshared.dtd">

%fxshared.dtd;

]]>
<!ELEMENT ftsl:FXLegTemplate  (fxs:ccy1 , fxs:ccy2 , fxs:ccy1BuyerReference ,
fxs:ccy2BuyerReference , fxs:ccy1Amount , fxs:ccy2Amount ,  ( (fxs:ccy1SettleDate ,
fxs:ccy2SettleDate ) | fxs:settlementDate ) , fxs:exchangeRate )>
<!ATTLIST ftsl:FXLegTemplate  xmlns:ftsl NMTOKEN  #FIXED 'urn:fpml-FX-Template-Leg'
                              xmlns:fxs  NMTOKEN  #FIXED 'urn:fpml-shared-FX' >
```

2.2.10 ftvo.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FXOSHARED "INCLUDE">

<![ %FXOSHARED; [
<!ENTITY % fxoshared.dtd SYSTEM "fxoshared.dtd">

%fxoshared.dtd;

]]>

<!ELEMENT ftvo:FXVanillaOptionTemplate  (fxos:fxOptionCore , fxos:optionPrice )>
<!ATTLIST ftvo:FXVanillaOptionTemplate
                                    xmlns:ftvo NMTOKEN  #FIXED 'urn:fpml-FX-Template-
VanillaOption'
                              xmlns:fxos NMTOKEN  #FIXED 'urn:fpml-FXO-shared'>
```

2.2.11 FXBarrierOption.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % TEMPLATEBARRIEROPTION "INCLUDE">

<![ %TEMPLATEBARRIEROPTION; [
<!ENTITY % ftba.dtd SYSTEM "ftba.dtd">

%ftba.dtd;

]]>
<!ELEMENT fpba:barrierOption  (ftba:FXBarrierOptionTemplate )>

<!ELEMENT fpba:productID  (#PCDATA )>
<!ATTLIST fpba:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpba:productType  (#PCDATA )>
<!ATTLIST fpba:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpba:FXBarrierOption  (fpba:productID , fpba:productType , fpba:barrierOption
)>
<!ATTLIST fpba:FXBarrierOption  xmlns:fpba NMTOKEN  #FIXED 'urn:fpml-FX-Product-
BarrierOption' >
```

2.2.12 FXBinaryBarrierOption.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % BINARYBARRIER "INCLUDE">

<![ %BINARYBARRIER; [
<!ENTITY % ftbb.dtd SYSTEM "ftbb.dtd">

%ftbb.dtd;

]]>
<!ELEMENT fpbb:FXBinaryBarrierOption  (fpbb:productID , fpbb:productType ,
fpbb:binaryBarrierOption )>
<!ATTLIST fpbb:FXBinaryBarrierOption  xmlns:fpbb NMTOKEN  #FIXED 'urn:fpml-FX-Product-
BinaryBarrierOption' >
<!ELEMENT fpbb:productID  (#PCDATA )>
<!ATTLIST fpbb:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpbb:productType  (#PCDATA )>
<!ATTLIST fpbb:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpbb:binaryBarrierOption  (ftbb:FXBinaryBarrierOptionTemplate )>
```

2.2.13 FXBinaryOption.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % BINARY "INCLUDE">

<![ %BINARY; [
<!ENTITY % ftbn.dtd SYSTEM "ftbn.dtd">

%ftbn.dtd;

]]>

<!ELEMENT fpbn:FXBinaryOption  (fpbn:productID , fpbn:productType , fpbn:binaryOption )>
<!ATTLIST fpbn:FXBinaryOption  xmlns:fpbn NMTOKEN  #FIXED 'urn:fpml-FX-Product-
BinaryOption' >
<!ELEMENT fpbn:productID  (#PCDATA )>
<!ATTLIST fpbn:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpbn:productType  (#PCDATA )>
<!ATTLIST fpbn:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpbn:binaryOption  (ftbn:FXBinaryOptionTemplate )>
```

2.2.14 FXFixingOption.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % ftfo.dtd SYSTEM "ftfo.dtd">

%ftfo.dtd;
```

```
<!ELEMENT fpfo:fixingOption  (ftfo:FXFixingOptionTemplate )>

<!ELEMENT fpfo:productID  (#PCDATA )>
<!ATTLIST fpfo:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpfo:productType  (#PCDATA )>
<!ATTLIST fpfo:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpfo:FXFixingOption  (fpfo:productID , fpfo:productType , fpfo:fixingOption )>
<!ATTLIST fpfo:FXFixingOption  xmlns:fpfo NMTOKEN  #FIXED 'urn:fpml-FX-Product-
FixingOption' >
```

2.2.15 fxoshared.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % DATE "INCLUDE">

<![ %DATE; [
<!ENTITY % date.dtd PUBLIC "" "date.dtd">

%date.dtd;

]]>
<!ENTITY % MONEY "INCLUDE">

<![ %MONEY; [
<!ENTITY % money.dtd SYSTEM "money.dtd">

%money.dtd;

]]>
<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd PUBLIC "" "rate.dtd">

%rate.dtd;

]]>
<!ELEMENT fxos:buyerReference  (#PCDATA )>
<!ATTLIST fxos:buyerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:sellerReference  (#PCDATA )>
<!ATTLIST fxos:sellerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:fxOptionCore  (fxos:FXOptionCore )>

<!ELEMENT fxos:FXOptionCore  (fxos:buyerReference , fxos:sellerReference , fxos:ccy1 ,
fxos:ccy2 , fxos:baseCcy , fxos:putCall , fxos:ccy1Amount , fxos:ccy2Amount ,
fxos:settlementDate , fxos:strikeRate , fxos:optionMaturity )>

<!ELEMENT fxos:putCall  (fxos:PutCall )>

<!ELEMENT fxos:PutCall  (fxos:indicator , fxos:ccy )>

<!ELEMENT fxos:indicator  (#PCDATA )>
<!ATTLIST fxos:indicator  e-dsize NMTOKEN  '3'
                          e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:ccy1  (#PCDATA )>
<!ATTLIST fxos:ccy1  e-dsize NMTOKEN  '3'
                     e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:strikeRate  (r:FXRate )>

<!ELEMENT fxos:optionMaturity  (fxos:OptionMaturity )>

<!ELEMENT fxos:OptionMaturity  (fxos:date , fxos:cutoffLocation , fxos:cutoffTime )>
```

```
<!ELEMENT fxos:date  (#PCDATA )>
<!ATTLIST fxos:date  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxos:cutoffLocation  (#PCDATA )>
<!ATTLIST fxos:cutoffLocation  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:cutoffTime  (#PCDATA )>
<!ATTLIST fxos:cutoffTime  e-dtype NMTOKEN  #FIXED 'time' >
<!ELEMENT fxos:OptionPremium  (fxos:premiumTerm , fxos:premiumAmount ,
fxos:premiumPaymentDate )>

<!ELEMENT fxos:premiumTerm  (fxos:PremiumTerm )>

<!ELEMENT fxos:PremiumTerm  (fxos:quoteBasis , fxos:value )>

<!ELEMENT fxos:quoteBasis  (#PCDATA )>
<!ATTLIST fxos:quoteBasis  e-dvalue NMTOKENS  'ccy1PerCcy2 ccy2PerCcy1 percentCcy1
percentCcy2'
                           e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT fxos:value  (#PCDATA )>
<!ATTLIST fxos:value  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:premiumAmount  (m:Money )>

<!ELEMENT fxos:premiumPaymentDate  (#PCDATA )>
<!ATTLIST fxos:premiumPaymentDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxos:fxOptionBarriers  (fxos:FXOptionBarrierCore+ )>

<!ELEMENT fxos:FXOptionBarrierCore  (fxos:barrierType , fxos:direction , fxos:startDate?
, fxos:endDate? , fxos:barrierRate )>

<!ELEMENT fxos:barrierType  (#PCDATA )>
<!ATTLIST fxos:barrierType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:barrierRate  (r:FXRate )>

<!ELEMENT fxos:fxOptionHighBarrier  (fxos:FXOptionBarrierCore )>

<!ELEMENT fxos:fxOptionLowBarrier  (fxos:FXOptionBarrierCore )>

<!ELEMENT fxos:binaryRate  (r:FXRate )>

<!ELEMENT fxos:FXOptionBinaryCore  (fxos:buyerReference , fxos:sellerReference ,
fxos:ccy1, fxos:ccy2, fxos:putCall , fxos:binaryRate , fxos:optionMaturity ,
fxos:binaryNotional , fxos:settlementDate )>

<!ELEMENT fxos:binaryNotional  (m:Money )>

<!ELEMENT fxos:fxOptionBinaryCore  (fxos:FXOptionBinaryCore )>

<!ELEMENT fxos:binaryPaymentDate  (#PCDATA )>
<!ATTLIST fxos:binaryPaymentDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxos:ccy2  (#PCDATA )>
<!ATTLIST fxos:ccy2  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:baseCcy  (#PCDATA )>
<!ATTLIST fxos:baseCcy  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:ccy  (#PCDATA )>
<!ATTLIST fxos:ccy  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:ccy1Amount  (m:Money )>

<!ELEMENT fxos:ccy2Amount  (m:Money )>

<!ELEMENT fxos:settlementDate  (#PCDATA )>
<!ATTLIST fxos:settlementDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxos:optionPrice  (fxos:OptionPremium )>

<!ELEMENT fxos:direction  (#PCDATA )>
<!ATTLIST fxos:direction  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxos:startDate  (#PCDATA )>
<!ATTLIST fxos:startDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxos:endDate  (#PCDATA )>
<!ATTLIST fxos:endDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxos:style  (#PCDATA )>
<!ATTLIST fxos:style  e-dtype NMTOKEN  #FIXED 'string' >
```

2.2.16 fxshared.dtd

```
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->
<!--
<!NOTATION isoccy-4217 SYSTEM "http://www.iso.ch/cate/d23132.html">
-->
<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd SYSTEM "rate.dtd">

%rate.dtd;

]]>
<!ENTITY % MONEY "INCLUDE">

<![ %MONEY; [
<!ENTITY % money.dtd PUBLIC "" "money.dtd">

%money.dtd;

]]>
<!ELEMENT fxs:ccy1  (#PCDATA )>
<!ATTLIST fxs:ccy1  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                    e-dsize  NMTOKEN   '3'
                    e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT fxs:ccy2  (#PCDATA )>
<!ATTLIST fxs:ccy2  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                    e-dsize  NMTOKEN   '3'
                    e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT fxs:ccy1SettleDate  (#PCDATA )>
<!ATTLIST fxs:ccy1SettleDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxs:ccy2SettleDate  (#PCDATA )>
<!ATTLIST fxs:ccy2SettleDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxs:baseCcy  (#PCDATA )>
<!ATTLIST fxs:baseCcy  e-dvalue NOTATION  (isoccy-4217 )  #IMPLIED
                       e-dsize  NMTOKEN   '3'
                       e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT fxs:ccy1BuyerReference  (#PCDATA )>
<!ATTLIST fxs:ccy1BuyerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxs:ccy2BuyerReference  (#PCDATA )>
<!ATTLIST fxs:ccy2BuyerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxs:ccy  (#PCDATA )>
<!ATTLIST fxs:ccy  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fxs:amount  (#PCDATA )>
<!ATTLIST fxs:amount  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT fxs:ccy1Amount  (m:Money )>

<!ELEMENT fxs:ccy2Amount  (m:Money )>

<!ELEMENT fxs:settlementDate  (#PCDATA )>
<!ATTLIST fxs:settlementDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT fxs:exchangeRate  (r:FXRate )>
```

2.2.17 FXSingleLeg.dtd

```
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->
```

```
<!ENTITY % FXTEMPLATE "INCLUDE">

<![ %FXTEMPLATE; [
<!ENTITY % ftsl.dtd SYSTEM "ftsl.dtd">

%ftsl.dtd;

]]>
<!ELEMENT fpsl:FXSingleLeg  (fpsl:productID , fpsl:productType , fpsl:fxLeg )>
<!ATTLIST fpsl:FXSingleLeg  xmlns:fpsl NMTOKEN  #FIXED 'urn:fpml-FX-Product-SingleLeg' >
<!ELEMENT fpsl:productID  (#PCDATA )>
<!ATTLIST fpsl:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpsl:productType  (#PCDATA )>
<!ATTLIST fpsl:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpsl:fxLeg  (ftsl:FXLegTemplate )>
```

2.2.18 FXSwap.dtd

```
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % FXTEMPLATE "INCLUDE">
<![ %FXTEMPLATE; [
<!ENTITY % ftsl.dtd SYSTEM "Ftsl.dtd">

%ftsl.dtd;

]]>
<!ELEMENT fpswp:FXSwap  (fpswp:productID , fpswp:productType , fpswp:nearLeg ,
fpswp:farLeg )>
<!ATTLIST fpswp:FXSwap  xmlns:fpswp NMTOKEN  #FIXED 'urn:fpml-FX-Product-SwapType' >
<!ELEMENT fpswp:productID  (#PCDATA )>
<!ATTLIST fpswp:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpswp:productType  (#PCDATA )>
<!ATTLIST fpswp:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpswp:nearLeg  (ftsl:FXLegTemplate )>

<!ELEMENT fpswp:farLeg  (ftsl:FXLegTemplate )>
```

2.3 FRA.

2.3.1 FRA.dtd

```
<!-- Copyright (c) 1999 by J.P.Morgan and PricewaterhouseCoopers.
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % ftfra.dtd SYSTEM "ftfra.dtd">

%ftfra.dtd;

<!ELEMENT fpfra:ForwardRateAgreement  (fpfra:productID , fpfra:productType ,
fpfra:forwardRateAgreement )>
<!ATTLIST fpfra:ForwardRateAgreement  xmlns:fpfra NMTOKEN  #FIXED 'urn:fpml-Product-Fra'
>
<!ELEMENT fpfra:productID  (#PCDATA )>
<!ATTLIST fpfra:productID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpfra:productType  (#PCDATA )>
```

```
<!ATTLIST fpfra:productType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT fpfra:forwardRateAgreement  (ftfra:ForwardRateAgreementTemplate )>
```

2.4 IRM

2.4.1 SwapStream.dtd

```
<!-- Copyright (c) 1999 by J.P.Morgan and PricewaterhouseCoopers.
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->
<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd SYSTEM "rate.dtd">

%rate.dtd;

]]>
<!ENTITY % DATE "INCLUDE">

<![ %DATE; [
<!ENTITY % date.dtd SYSTEM "date.dtd">

%date.dtd;

]]>
<!ENTITY % MONEY "INCLUDE">

<![ %MONEY; [
<!ENTITY % money.dtd SYSTEM "money.dtd">

%money.dtd;

]]>
<!ENTITY % PAYMENT "INCLUDE">

<![ %PAYMENT; [
<!ENTITY % payment.dtd SYSTEM "payment.dtd">

%payment.dtd;

]]>
<!ELEMENT isss:SwapStream  (isss:payerReference , isss:receiverReference ,
isss:adjustmentBusinessCenters , isss:effectiveDate , isss:terminationDate ,
isss:notionalSchedule , isss:roundingDirection , isss:roundingPrecision ,
isss:initialStubPayment? , isss:initialPrincipalPayment? , isss:accrualBasis ,
isss:calculationPeriods , isss:paymentDates , isss:rate , isss:resetDates? ,
isss:finalStubPayment? , isss:finalPrincipalPayment? )>
<!ATTLIST isss:SwapStream  xmlns:isss NMTOKEN  #FIXED 'urn:fpml-IRD-Stream-SwapStream' >
<!ELEMENT isss:payerReference  (#PCDATA )>
<!ATTLIST isss:payerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT isss:receiverReference  (#PCDATA )>
<!ATTLIST isss:receiverReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT isss:adjustmentBusinessCenters  (d:BusinessCenters )>

<!ELEMENT isss:effectiveDate  (d:AdjustableDate )>

<!ELEMENT isss:terminationDate  (d:AdjustableDate )>

<!ELEMENT isss:notionalSchedule  (m:NotionalSchedule )>

<!ELEMENT isss:roundingDirection  (#PCDATA )>
<!ATTLIST isss:roundingDirection  e-dvalue NMTOKENS  'on off up down nearest'
```

```
                                    e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT isss:roundingPrecision  (#PCDATA )>
<!ATTLIST isss:roundingPrecision  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT isss:initialStubPayment  (p:InterestPayment )>

<!ELEMENT isss:initialPrincipalPayment  (p:Payment )>

<!ELEMENT isss:accrualBasis  (#PCDATA )>
<!ATTLIST isss:accrualBasis  e-dvalue NMTOKENS  '30Per360 actual actualPer360
actualPer365 '
                              e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT isss:calculationPeriods  (d:AdjustablePeriodSchedule )>

<!ELEMENT isss:paymentDates  (d:AdjustableDateSchedule )>

<!ELEMENT isss:rate  (r:FixedRate | r:FloatingRate )>

<!ELEMENT isss:regularSwapPeriods  (d:BasicPeriodSchedule )>

<!ELEMENT isss:resetDates  (d:AdjustableDateSchedule )>

<!ELEMENT isss:finalStubPayment  (p:InterestPayment )>

<!ELEMENT isss:finalPrincipalPayment  (p:Payment )>
```

2.4.2 VanillaFixedStream.dtd

```
<!-- Copyright (c) 1999 by J.P.Morgan and PricewaterhouseCoopers.
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd SYSTEM "rate.dtd">

%rate.dtd;

]]>
<!ENTITY % DATE "INCLUDE">

<![ %DATE; [
<!ENTITY % date.dtd SYSTEM "date.dtd">

%date.dtd;

]]>
<!ENTITY % MONEY "INCLUDE">

<![ %MONEY; [
<!ENTITY % money.dtd SYSTEM "money.dtd">

%money.dtd;

]]>
<!ENTITY % PAYMENT "INCLUDE">

<![ %PAYMENT; [
<!ENTITY % payment.dtd SYSTEM "payment.dtd">

%payment.dtd;

]]>
```

```
<!ELEMENT isfi:VanillaFixedStream  (isfi:payerReference , isfi:adjustmentBusinessCenters
, isfi:effectiveDate , isfi:terminationDate , isfi:notional ,
isfi:initialPrincipalPayment , isfi:regularPaymentDateSchedule ,
d:adjustCalculationPeriods , d:accrualBasis , isfi:rate , isfi:finalPrincipalPayment )>
<!ATTLIST isfi:VanillaFixedStream  xmlns:isfi NMTOKEN  #FIXED 'urn:fpml-IRD-Stream-
VanillaFixedStream'
                                   xmlns:p    NMTOKEN  #FIXED 'urn:fpml-Payment' >
<!ELEMENT isfi:payerReference  (#PCDATA )>
<!ATTLIST isfi:payerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT isfi:adjustmentBusinessCenters  (d:BusinessCenters )>
<!ATTLIST isfi:adjustmentBusinessCenters  name NMTOKEN  'primaryBusinessCenters' >
<!ELEMENT isfi:effectiveDate  (d:AdjustableDate )>

<!ELEMENT isfi:terminationDate  (d:AdjustableDate )>

<!ELEMENT isfi:notional  (m:Money )>

<!ELEMENT isfi:initialPrincipalPayment  (p:Payment )>

<!ELEMENT isfi:regularPaymentDateSchedule  (d:AdjustableDateSchedule )>

<!ELEMENT isfi:rate  (r:FixedRate )>

<!ELEMENT isfi:finalPrincipalPayment  (p:Payment )>
```

2.4.3 VanillaFloatStream.dtd

```
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % RATE "INCLUDE">

<![ %RATE; [
<!ENTITY % rate.dtd PUBLIC "" "rate.dtd">

%rate.dtd;

]]>
<!ENTITY % DATE "INCLUDE">

<![ %DATE; [
<!ENTITY % date.dtd SYSTEM "date.dtd">

%date.dtd;

]]>
<!ENTITY % MONEY "INCLUDE">

<![ %MONEY; [
<!ENTITY % money.dtd SYSTEM "money.dtd">

%money.dtd;

]]>
<!ENTITY % PAYMENT "INCLUDE">

<![ %PAYMENT; [
<!ENTITY % payment.dtd SYSTEM "payment.dtd">

%payment.dtd;

]]>
```

```
<!ELEMENT isfo:VanillaFloatingStream  (isfo:payerReference ,
isfo:adjustmentBusinessCenters , isfo:effectiveDate , isfo:terminationDate ,
isfo:notional , isfo:initialPrincipalPayment , isfo:regularPaymentDateSchedule ,
d:adjustCalculationPeriods , d:accrualBasis , isfo:rate , isfo:resetBusinessDayConvention
, isfo:resetAdjustmentsReference , isfo:refixInArrears , isfo:refixOffset ,
isfo:roundingDirection , isfo:roundingPrecision , isfo:finalPrincipalPayment )>
<!ATTLIST isfo:VanillaFloatingStream  xmlns:isfo NMTOKEN  #FIXED 'urn:fpml-IRD-Stream-
VanillaFloatingStream'
                                     xmlns:p    NMTOKEN  #FIXED 'urn:fpml-Payment' >
<!ELEMENT isfo:payerReference  (#PCDATA )>
<!ATTLIST isfo:payerReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT isfo:adjustmentBusinessCenters  (d:BusinessCenters )>
<!ATTLIST isfo:adjustmentBusinessCenters  name NMTOKEN  #IMPLIED >
<!ELEMENT isfo:effectiveDate  (d:AdjustableDate )>

<!ELEMENT isfo:terminationDate  (d:AdjustableDate )>

<!ELEMENT isfo:notional  (m:Money )>

<!ELEMENT isfo:initialPrincipalPayment  (p:Payment )>

<!ELEMENT isfo:regularPaymentDateSchedule  (d:AdjustableDateSchedule )>

<!ELEMENT isfo:rate  (r:FloatingRate )>

<!ELEMENT isfo:resetBusinessDayConvention  (#PCDATA )>
<!ATTLIST isfo:resetBusinessDayConvention  e-dvalue NMTOKENS  'modifiedFollowing
modifiedPrevious following previous none'
                                           e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT isfo:resetAdjustmentsReference  (#PCDATA )>
<!ATTLIST isfo:resetAdjustmentsReference  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT isfo:refixInArrears  (#PCDATA )>
<!ATTLIST isfo:refixInArrears  e-dvalue NMTOKENS  'true false'
                               e-dtype  NMTOKEN   #FIXED 'boolean' >
<!ELEMENT isfo:refixOffset  (#PCDATA )>
<!ATTLIST isfo:refixOffset  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT isfo:roundingDirection  (#PCDATA )>
<!ATTLIST isfo:roundingDirection  e-dvalue NMTOKENS  'off on up down nearest'
                                  e-dtype  NMTOKEN   #FIXED 'string' >
<!ELEMENT isfo:roundingPrecision  (#PCDATA )>
<!ATTLIST isfo:roundingPrecision  e-dtype NMTOKEN  #FIXED 'integer' >
<!ELEMENT isfo:finalPrincipalPayment  (p:Payment )>
```

2.4.4 VanillaFixedFloat.dtd

```
<!-- Copyright (c) 1999 by J.P.Morgan and PricewaterhouseCoopers.
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wide PricewaterhouseCoopers organization.  All rights reserved.
-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % VANILLAFLOATSTREAM "INCLUDE">

<![ %VANILLAFLOATSTREAM; [
<!ENTITY % VanillaFloatStream.dtd SYSTEM "VanillaFloatStream.dtd">

%VanillaFloatStream.dtd;

]]>
<!ENTITY % VANILLAFIXEDSTREAM "INCLUDE">

<![ %VANILLAFIXEDSTREAM; [
<!ENTITY % VanillaFixedStream.dtd SYSTEM "VanillaFixedStream.dtd">

%VanillaFixedStream.dtd;

]]>
<!ELEMENT ipff:VanillaFixedFloat  (ipff:fixedStream , ipff:floatingStream )>
```

```
<!ATTLIST ipff:VanillaFixedFloat  xmlns:ipff NMTOKEN  #FIXED 'urn:fpml-IRD-Product-
VanillaFixedFloat' >
<!ELEMENT ipff:fixedStream  (isfi:VanillaFixedStream )>

<!ELEMENT ipff:floatingStream  (isfo:VanillaFloatingStream )>
```

2.5 Party

2.5.1 Party.dtd

```
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-->
<!-- version 1.0b2 : August 6, 1999 -->

<!ENTITY % CONTACT "INCLUDE">

<![ %CONTACT; [
<!ENTITY % CONTACT.DTD PUBLIC "" "contact.dtd">

%CONTACT.DTD;

]]>
<!ELEMENT pty:PartyInformation  (pty:masterAgreements? , pty:tradeParties )>
<!ATTLIST pty:PartyInformation  xmlns:a   CDATA  #FIXED 'urn:fpml-contact'
                                xmlns:pty CDATA  #FIXED 'urn:fpml-party' >
<!ELEMENT pty:masterAgreements  (pty:MasterAgreement+ )>

<!ELEMENT pty:MasterAgreement  (pty:agreementInPlace , pty:datedDate ,
pty:masterAgreementNumber , pty:partyReference1 , pty:partyReference2 )>

<!ELEMENT pty:agreementInPlace  (#PCDATA )>
<!ATTLIST pty:agreementInPlace  e-dvalues CDATA    #FIXED 'YES NO'
                                e-dtype   NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:datedDate  (#PCDATA )>
<!ATTLIST pty:datedDate  e-dtype NMTOKEN  #FIXED 'date' >
<!ELEMENT pty:masterAgreementNumber  (#PCDATA )>
<!ATTLIST pty:masterAgreementNumber  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:partyReference1  (#PCDATA )>
<!ATTLIST pty:partyReference1  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:partyReference2  (#PCDATA )>
<!ATTLIST pty:partyReference2  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:tradeParties  (pty:Party+ )>

<!ELEMENT pty:Party  (pty:partyType , pty:corporateInformation , pty:creditInformation? ,
pty:confirmInformation? , pty:settlementInformation? )>
<!ATTLIST pty:Party  name NMTOKEN  #IMPLIED >
<!ELEMENT pty:partyType  (#PCDATA )>
<!ATTLIST pty:partyType  e-dvalue CDATA    #FIXED 'PRINCIPAL COUNTERPARTY'
                         e-dtype  NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:corporateInformation  (pty:CorporateInformation )>

<!ELEMENT pty:CorporateInformation  (pty:shortName , pty:longName? , pty:website? ,
pty:corporateAddress? , pty:parent? , pty:primaryContact? , pty:taxID? )>

<!ELEMENT pty:confirmInformation  (pty:ConfirmInformation )>

<!ELEMENT pty:ConfirmInformation  (pty:primaryConfirmContact ,
pty:secondaryConfirmContacts? )>

<!ELEMENT pty:primaryConfirmContact  (a:Contact )>

<!ELEMENT pty:secondaryConfirmContacts  (a:Contact+ )>

<!ELEMENT pty:creditInformation  (pty:CreditRating+ )>
```

```
<!ELEMENT pty:settlementContact  (a:Contact )>

<!ELEMENT pty:CreditRating  (pty:rating , pty:ratingType )>

<!ELEMENT pty:settlementInformation  (pty:SettlementInstructions+ )>

<!ELEMENT pty:SettlementInstructions  (pty:settlementContact , pty:paymentInstructions )>

<!ELEMENT pty:paymentInstructions  (pty:PaymentInstructions )>

<!ELEMENT pty:PaymentInstructions  (pty:settlementCurrency , pty:payFromName? ,
pty:payFromAddress? , pty:correspondentInformation , pty:intermediaryInformation? ,
pty:beneficiaryInformation )>

<!ELEMENT pty:shortName  (#PCDATA )>
<!ATTLIST pty:shortName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:longName  (#PCDATA )>
<!ATTLIST pty:longName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:website  (#PCDATA )>
<!ATTLIST pty:website  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:corporateAddress  (a:Address )>

<!ELEMENT pty:primaryContact  (a:Contact )>

<!ELEMENT pty:payFromName  (#PCDATA )>
<!ATTLIST pty:payFromName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:payFromAddress  (a:Address )>

<!ELEMENT pty:intermediaryInformation  (pty:FIRoutingInformation ,
pty:intermediaryInformation? )>

<!ELEMENT pty:correspondentInformation  (pty:FIRoutingInformation )>

<!ELEMENT pty:beneficiaryInformation  (pty:FIRoutingInformation )>

<!ELEMENT pty:FIRoutingInformation  (pty:fiName , pty:fiAddress? , pty:fiAccountNumber? ,
pty:fiRoutingID? , pty:fiRoutingIDType? , pty:fiReferenceText? )>

<!ELEMENT pty:fiName  (#PCDATA )>
<!ATTLIST pty:fiName  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiAddress  (a:Address )>

<!ELEMENT pty:fiAccountNumber  (#PCDATA )>
<!ATTLIST pty:fiAccountNumber  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiRoutingID  (#PCDATA )>
<!ATTLIST pty:fiRoutingID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiRoutingIDType  (#PCDATA )>
<!ATTLIST pty:fiRoutingIDType  e-dvalue CDATA    #FIXED 'ABA SwiftBIC CHIPS CHAPS'
                               e-dtype  NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:fiReferenceText  (#PCDATA )>
<!ATTLIST pty:fiReferenceText  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:taxID  (#PCDATA )>
<!ATTLIST pty:taxID  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:parent  (pty:CorporateInformation? )>

<!ELEMENT pty:rating  (#PCDATA )>
<!ATTLIST pty:rating  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:ratingType  (#PCDATA )>
<!ATTLIST pty:ratingType  e-dtype NMTOKEN  #FIXED 'string' >
<!ELEMENT pty:settlementCurrency  (#PCDATA )>
<!ATTLIST pty:settlementCurrency  e-dtype NMTOKEN  #FIXED 'string' >
```

2.5.2 Contact.dtd

3 GLOSSARY

Element Name	Description
a:Address	Contains the details describing an address. Elements such as street address, city, state, etc. are contained in this element. It can be used to define a contact person's address, corporate address or wherever an address must be present.
a:businessGroup	Department/Group that the contact person works in
a:cable	Contains a code for correspondence via cable.
a:city	Free form text holding the part of the address that identifies the city, town, or similar municipality.
a:Contact	Contains information about a person who is acting as a point of correspondence for a party for various purposes (i.e. confirmations, settlement, etc.).
a:contactAddress	Contains the address of the Party's contact person
a:contactName	Name of a particular person designated to act as a Party's correspondent for a particular purpose.
a:contactOrganizationName	Organization in which the Party's contact person is employed
a:country	Free form text holding the part of the address that identifies the country.
a:emailAddress	Email address of a contact point or specific person.
a:faxNumber	Fax number of the a contact point or specific person.
a:phoneNumber	Telephone number of a contact point or specific person.
a:poBoxLine	The post office box number to be used in the address.
a:postalCode	Free form text holding the part of the address that identifies a specific postal delivery area in a form specified by the relevant Postal Authority.
a:region	Country regional classification (continental, regional, etc.). Application defines regional classifications.
a:state	Free form text holding the part of the address that identifies the state.
a:streetAddress	
a:StreetAddress	The street portion of the address of a party, identifying the name of the street, the number of the building on the street, and if necessary an apartment in the building
a:streetLine	Free form text holding the part of a streetAddress that identifies the street and the building within the street. It may also include an apartment number, floor identifier, etc.
a:telex	Contains a code for correspondence via telex.
d:accrualBasis	A code identifying the convention used to determine the number of days between two dates in order to calculate accrued interests, yields, and other measures of value for an instrument
d:AdjustableDate	Contains a date that may need to be adjusted to a valid business date and the associated adjustment parameters (Business Day convention and Business Centers).
d:AdjustableDateSchedule	Defines the set of parameters used to compute a specific schedule of dates over a specified period of time applying adjustments for Business Day Convention and Business Centers. Can reference a particular schedule of periods elsewhere in the document or specify

	the periods using detailed parameters.
d:AdjustablePeriod	Represents a single period for the interest rate calculation, for which the accrual dates will be adjusted, as necessary, in accordance with Business Day Convention and Business Centers. For example, this element is used for stubs where a single period is required rather than a schedule.
d:AdjustablePeriodSchedule	Defines the set of parameters used to compute a schedule of periods applying adjustments for Business Day Convention and Business Centers. Can reference a particular basic/unadjusted schedule of periods elsewhere in the document or specify the periods using detailed parameters.
d:adjustCalculationPeriods	
d:AdjustmentBusinessCenters	Defines which financial centers' calendar is to be utilized in determining valid business days
d:adjustments	Defines which financial centers' calendar(s) that are to be utilized in determining valid business days
d:adjustmentsReference	Reference to a set of Adjustment Business Centres held elsewhere in the message, to be used for adjusting dates that fall on bad business days
d:AmericanExerciseStep	It defines the exercise period and the set of terms that apply upon exercising the American option
d:BasicPeriodSchedule	Defines the parameters used to compute different types of unadjusted date periods contained in a trade. These dates are only adjusted for Roll Day Convention (e.g. last day pf the month).
d:businessCenter	A name of a financial center that is referenced for a particular purpose. Currently used to define which calendar should be utilized in determining valid business days
d:BusinessCenters	Contains a list of financial centers that need to be referenced for particular purpose within the trade
d:businessDayConvention	The convention for adjusting any relevant date if it would otherwise fall on the day which is not a Business Day
d:CommonAdjustments	Combines the adjustment parameters which are constant for different adjustable dates. (e.g. used in defining a set of exercise steps where the steps all utilize the same Business Day Convention and Business Centers)
d:date	A date that may need to be adjusted to a valid business day
d:dateScheduleReference	Reference to an appropriate schedule elsewhere in the FpML, for example a schedule of exercise dates.
d:daysOffset	See comments
d:end	The last unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)
d:endDate	The last unadjusted date of the specified time period. Is used for the calculation of future event dates (e.g. payment dates)
d:EuropeanExerciseStep	Defines the exercise date(s) and the set of terms that apply upon exercising the European option. Each step can have an explicit notification date or reference to an offset.
d:exerciseAdjustments	A set of Common Adjustments that applies across a list of exercise steps
d:exerciseDate	The date on which the right to exercise the option becomes effective
d:exerciseDates	Contains the schedule of exercise dates.
d:exercisePartyReference	A reference to a Party held elsewhere in the message. Defines the

	Party that has the right to exercise its option.
d:ExerciseStep	Generic set of parameters defining exercise periods and/or dates. This is used in a Cancelable Swap.
d:ExerciseSteps	Contains either a set of exercise steps or explicitly American/European steps, depending on the type of product.
d:ExplicitOptionAdjustableDateSchedule	Set of exercise steps with explicit dates and/or periods and applicable adjustment parameters used to adjust exercise and notification dates.
d:ExtendedAdjustableDateSchedule	Defines the set of parameters used to calculate specific dates over period of time by referencing another date schedule and applying NotificationOffset parameters.
d:frequency	Periodic interval at which consequent repeating events occur (payment, reset, etc.)
d:nextPercentageOfNotional	
d:NonPrimaryAdjustablePeriods	To Be Specified
d:notificationAdjustments	
d:notificationDate	The date on which the party which bought option notify the counterparty that right will be exercised
d:notificationDates	
d:notificationOffset	
d:NotificationOffset	Contains the information required to determine the date on which notification is required in order to exercise an option. This includes the number of days offset, Business Day Convention and Business Centers.
d:notificationReference	Contains a reference to a NotificationOffset used to adjust the exercise date in determining the appropriate notification date.
d:offsetDays	The number of days prior to the reset date on which the rate is observed
d:OptionAdjustableDateSchedule	Expresses exercise and notification dates in the form of schedules using an AdjustableDateSchedule applied to option exercise dates and an ExtendedAdjustableDateSchedule applied to option notification dates
d:percentageOfNotional	Expresses a percentage of the stated notional amount that will be effective upon the exercising of an option.
d:period	
d:periodReference	A reference to the specific period held elsewhere in the message
d:periodSchedule	Contains a list of BasicPeriodSchedule.
d:periodsReference d:periodScheduleReference ?	A reference to a set of periods held elsewhere in the message
d:PrimaryAdjustablePeriods	To Be Specified
d:relativeTo	Indicates what a particular date is based on (i.e. a period start or end date)
d:rollConvention	Specifies when payments should be made (e.g. EOM, regular, IMM)
d:start	The first unadjusted date of the specified time period. Is used for the calculation of future periods of time (e.g. accrual periods)
d:startDate	The first unadjusted date of the specified time period. Is used for the calculation of future event dates (e.g. payment dates)
d:strikeInterpolation	The method of interpolation to be utilized in the calculation of a numeric value using at least two other values over a specified period of time.
d:SwapAdjustableDateSchedule	To Be Specified*
d:SwapAdjustableDateSchedule	To Be Specified

fpba:barrierOption	Option where the payoff depends on whether the underlying asset's price reaches a certain level during a certain period of time
fpba:FXBarrierOption	A binary (digital) option is option with discontinuous payoffs
fpba:productID	A product identifier for a binary option
fpba:productType	Identifies the type of binary barrier option.
fpbb:binaryBarrierOption	Option with discontinuous payoff which depends on whether the underlying asset's price reaches a certain level during a certain period of time
fpbb:FXBinaryBarrierOption	Fx Option binary. Only a single currency payment is made if the option is exercised. A barrier will knock-in/out the option.
fpbb:productID	A product identifier for a binary barrier option.
fpbb:productType	Identifies the type of binary barrier option.
fpbn:binaryOption	A binary (digital) option is option with discontinuous payoffs
fpbn:FXBinaryOption	Fx Option binary. Only a single currency payment is made if the option is exercised.
fpbn:productID	A product identifier for an Binary option.
fpbn:productType	Identifies the type of binary option: Binary, Digital.
fpfo:fixingOption	
fpfo:FXFixingOption	Any option whose parameters contain fixings.
fpfo:FXFixingOptionTemplate	Template common to all Fixing style options.
fpfo:productID	A product identifier for a Fixing type option.
fpfo:productType	Identifies the type of fixing option. ASRO/Asian or Time Trigger.
fpfra:forwardRateAgreement	
fpfra:ForwardRateAgreement	
fpfra:productID	A product identifier for a forward rate agreement
fpfra:productType	Identifies the type of a forward rate agreement
fpml:Trade	Defines business context in which the embedded trade is to be processed. Contains processing specific details.
fpsl:fxLeg	An FX Leg template element.
fpsl:FXSingleLeg	
fpsl:productID	Used to identify each product when more than one product is contained within a trade.
fpsl:productType	Used to identify the type of single Fx Leg product. Currently this field can be either 'Spot' or 'Outright'.
fpswp:farLeg	Second Fx leg. Settlement date must be after the settlement date in the first Fx Leg.
fpswp:FXSwap	
fpswp:nearLeg	First Fx leg. Settlement date must be before the settlement date in the second Fx Leg.
fpswp:productID	Used to identify each product when more than one product is contained within a trade.
fpswp:productPrice	Pricing information component at the product level.
fpswp:productType	Used to identify the type of Fx Swap product.
fpvo:FXVanillaOption	FX Vanilla option: American or European.
fpvo:productID	A product identifier for a vanilla option.
fpvo:productType	Identifies the type of vanilla option: American or European.
fpvo:vanillaOption	The buyer of an option has the right, but not the obligation to buy or sell an agreed amount of a commodity / financial instrument at an agreed price on or before a specified future date. (ADTrading.com)
fras:averageFRA	
fras:AverageFRA	

fras:buyerReferences	A reference to the buyer of the FRA. The buyer agrees to borrow and pay the interest given by the trade's fixed rate, anticipating that interest rates will rise.
fras:dayCountFraction	Related to a rate index. It is the year fraction, which together with the number of days, which is used to determine the compound interest for both the fixed and floating rate calculations.
fras:discountRate	
fras:DiscountRate	Once the net forward interest payment is found, the discount rate is used to bring the payment amount back from the end date to the payment date. Normally the discount rate is the last fixing rate or the average rate.
fras:endDate	The end date of the interest period.
fras:fixedRate	The numerical value of constant rate
fras:Fixing	Fixing date, its weighting, and fixing rate(s)
fras:fixingDate	The date on which the floating rate is fixed.
fras:fixingDate	date when floating rate is fixed.
fras:fixingRate	The numerical value of variable rate taken for calculations
fras:fixings	List of fixing dates, their weighting, and fixing rates.
fras:fixingWeighting	The multiplying factor applied to the fixing rate for this date when calculating the average rate.
fras:floatingRates	Normally one floating rate. Can be two floating rates for an interpolated FRA when the fixing rate is interpolated between two benchmark indices.
fras:fraCore	
fras:FRACore	Functionality common to all FRAs.
fras:fraFixedRate	The agreed fixed rate.
fras:FRAFixedRate	
fras:notional	The currency and amount on which the interest calculations are based. Note that the notional amount is not exchanged between the parties.
fras:rateConvention	Indicates whether the rate is 'yield' or 'discount'.
fras:sellerReference	A reference to the seller of the FRA. The seller agrees to receive the interest given by the deal's fixed rate, anticipating that interest rates will fall.
fras:settlementDate	The date on which the net payment is exchanged between the two parties. Note the buyer does not necessarily pay the seller, it depends on the rate difference between the trade's fixed and floating rates.
fras:settlementRule	Recognised agreement used to determine the settlement amounts, dates , etc.
fras:startDate	The start date of the interest period.
ftba:FXBarrierOptionTemplate	
ftbb:FXBinaryBarrierOptionTemplate	
ftbn: FXBinaryOptionTemplate	
ftfo:averageQuoteBasis	The method of quoting the rate when averaging.
ftfo:averageToDate	The average Fx rate calculated so far using the fixings that have occurred.
ftfo:Fixing	Fixing date, its weighting, and fixing rate(s)
ftfo:fixingDate	Date of fixing.
ftfo:fixingFrequency	How often fixing takes occurs.
ftfo:fixingPageRef	The reference page where the fixing rate is obtained.
ftfo:fixingQuoteBasis	The term in which the fixing rate is quoted.

ftfo:fixingRate	The numerical value of variable rate taken for calculations
ftfo:fixings	List of the Fx fixing rates that have already been used.
ftfo:fixingWeighting	Weighting applied to rate when determining a weighted average fixing rate.
ftfo:FXFixingOptionTemplate	
ftfo:fxOptionFixingAARef	Fixing information for FX ASRO/Asian options.
ftfo:FXOptionFixingAARef	
ftfo:FXOptionFixingRef	
ftfo:fxOptionFixings	
ftfo:fxOptionFixingTTRef	Fixing information applicable to Fx Option Time Trigger instrument.
ftfo:FXOptionFixingTTRef	
ftfo:holidays	The holiday calendar that the fixings adhere to.
ftfo:instrumentPrice	Instrument pricing information.
ftfo:numberOfFixesToDate	The number of fixes that have occurred to date.
ftfo:numberOfITMFixes	
ftfo:rebate	Amount per "in the money" fix.
ftfo:startDate	The date of the first fixing.
ftfo:TTfixingITM	
ftfra:ForwardRateAgreementTemplate	A template class for FRA products.
ftleg:fxCore	Common fields amongst all FX instruments
ftleg:FXLegTemplate	The FX Leg template class.
ftsl:fxCore	Common fields amongst all FX instruments
ftsl:FXLegTemplate	The FX Leg template class.
ftvo:FXVanillaOptionTemplate	
fxos:barrierRate	FX rate at which barrier is activated.
fxos:barrierType	knock-in or knock-out.
fxos:baseCcy	Used in FX Option instruments to indicate which of the two currencies is regarded as the base currency for this FX trade. In conjunction with the FXRate and its quoteBasis field, the baseCcy indicates the market convention being used: American ('base per term' or 'base per risk') or European ('term per base' or 'risk per base'). The 'baseCcy' must correspond to one of the two currencies involved in the trade.
fxos:binaryNotional	Notional in binary option
fxos:binaryPaymentDate	
fxos:binaryRate	
fxos:buyerReference	A reference to the party who is the purchaser.
fxos:ccy	
fxos:ccy1	
fxos:ccy1Amount	The absolute amount of currency1. See the 'buyerReference' and 'putCall' to determine direction.
fxos:ccy2	
fxos:ccy2Amount	The absolute amount of currency1. See the 'buyerReference' and 'putCall' to determine direction.
fxos:cutoffReference	
fxos:cutoffTime	
fxos:date	
fxos:direction	
fxos:endDate	end date of barrier (optional, for windowed barriers)
fxos:FXOptionBarrierCore	fields common to all barrier options.

fxos:fxOptionBarriers	one or more barriers can be included.
fxos:fxOptionBinaryCore	
fxos:FXOptionBinaryCore	
fxos:fxOptionCore	The common fields across all FX Option products.
fxos:FXOptionCore	The class containing the common FX option fields.
fxos:fxOptionHighBarrier	
fxos:fxOptionLowBarrier	
fxos:indicator	PUT or CALL indicator
fxos:optionMaturity	Maturity date information. Specific to FX option trades, the date cut-off time and location reference is included.
fxos:OptionMaturity	The last date when the option can be exercised (ISDA)
fxos:OptionPremium	Price paid for option, contains terms of premium, amount and date. The amount payable in consideration for granting the currency option and payable by buyer to seller (ISDA)
fxos:optionPrice	Price paid for option, contains terms of premium and amount.
fxos:premiumAmount	Currency and amount of option premium
fxos:premiumPaymentDate	
fxos:premiumTerm	Terms of premium payment.
fxos:PremiumTerm	
fxos:putCall	Field to indicate the direction of a FX option instrument.
fxos:quoteBasis	
fxos:seller Reference	A reference to the party who is selling.
fxos:settlementDate	
fxos:startDate	start date of barrier (optional, for windowed barriers)
fxos:strikeRate	Deal rate for FX Option trade.
fxos:style	Style of option (American or European)
fxos:value	
fxs:amount	
fxs:baseCcy	
fxs:ccy	
fxs:ccy1	The ISO currency code identifying the first currency of this FX instrument.
fxs:ccy1Amount	The absolute amount of currency1. See the 'ccy1BuyerReference' to determine its direction.
fxs:ccy1BuyerReference	A reference to the party who is the buyer of the ISO currency 1 within this FX leg.
fxs:ccy1SettleDate	Settlement date for currency1.
fxs:ccy2	The ISO currency code identifying the second currency of this FX instrument.
fxs:ccy2Amount	The absolute amount of currency2. See the 'ccy2BuyerReference' to determine its direction.
fxs:ccy2BuyerReference	A reference to the party who is the buyer of the ISO currency 2 within this FX leg.
fxs:ccy2SettleDate	Settlement date for currency2.
fxs:crossCcy	
fxs:exchangeRate	Component containing the deal exchange rate between currency1 and currency2.
fxs:FXCore	Class for common FX fields.
fxs:Money	
fxs:settlementDate	
ipff:fixedStream	

ipff:floatingStream	
ipff:VanillaFixedFloat	
ips:streams	To Be Specified
ips:SwapStreams	To Be Specified
isfi:adjustmentBusinessCenters	
isfi:effectiveDate	
isfi:finalPrincipalPayment	
isfi:initialPrincipalPayment	
isfi:notional	
isfi:payerReference	
isfi:rate	
isfi:regularPaymentDateSchedule	
isfi:terminationDate	
isfo:adjustmentBusinessCenters	
isfo:effectiveDate	
isfo:finalPrincipalPayment	
isfo:initialPrincipalPayment	
isfo:notional	
isfo:payerReference	
isfo:rate	
isfo:refixInArrears	
isfo:refixOffset	
isfo:regularPaymentDateSchedule	
isfo:resetAdjustmentsReference	
isfo:resetBusinessDayConvention	
isfo:roundingDirection	
isfo:roundingPrecision	
isfo:terminationDate	
isfo:VanillaFloatingStream	
isss:accrualBasis	The day count calculation method for accrual periods within the stream
isss:adjustmentBusinessCenters	Defines a set of business centres that will be used along with a business day convention to adjust dates for bad business days.
isss:calculationPeriods	Interest accrual periods
isss:effectiveDate	The start date of the stream. This does not preclude coupon accruals commencing before this date.
isss:initialPrincipalPayment	Defines the date and amount of the initial principal exchange
isss:initialStubPayment	The payment details of the initial irregular accrual period
isss:notionalSchedule	To Be Specified
isss:payerReference	Reference to the section of the message holding identifiers to the parties to the trade.
isss:paymentDates	To Be Specified
isss:rate	To Be Specified
isss:receiverReference	Reference to the section of the message holding identifiers to the parties to the trade.
isss:regularSwapPeriods	To Be Specified
isss:resetDates	To Be Specified*
isss:roundingDirection	This indicates the rounding treatment to be applied to an amount.
isss:roundingPrecision	The precision in decimal places (eg 5, 6) to which the rounding direction must be applied.
isss:SwapStream	A generic fixed or floating stream that supports the following features:

	stubs, notional schedules, principal exchanges
isss:terminationDate	The date on which the final payment is made in the stream (inclusive of any final stub period).
m:amount	The amount element would contain a numeric monetary quantity expressed in the currency designated by the currency element. A non-negative floating point number
m:ccy	The currency element designates the currency in which the amount is denominated. This must be a valid ISO currency code.
m:changePerStep	The amount of money expressing the change in Notional per period
m:currency	
m:date	
m:DateBasedNotionalStep	To Be Specified
m:ExplicitNotionalSteps	Comprises of one or more DateBasedNotionalSteps
m:initialNotional	Element that contains the amount of Notional Principal on the stream effective date, on which (in the standard case) all coupon calculations are based. Also contains the currency of the stream's Notional Principal, and, therefore, normally the currency in which each payment within the stream is made
m:Money	Money class. Contains ISO currency identifier and amount.
m:Money	The money element contains both a currency and an amount element that must be used in conjunction with each other. The amount element would contain a numeric monetary quantity expressed in the currency designated by the currency element. The currency element is an ISO currency code that designates the currency in which the amount is denominated.
m:notionalAmount	The nominal value used to calculate swap payments and on which many other risk management contract payments are based. In an interest rate swap agreement, each period's rates will be multiplied by the notional principal amount to determine the value of each counterparty's payment.
m:NotionalSchedule	Defines the notional schedule for a stream. May be a single amount or sequence of dates and amounts.
m:NotionalStep	The change in Notional for particular period. Expressed either by percentage of Notional Amount
m:notionalSteps	The set of Notional steps. Can be expressed either explicitly or by RegularNotionalStepsb
m:percentage	To Be Specified*
m:periods	
m:periodSchedule	
m:RegularNotionalSteps	For the Notional with the same change (called changePerStep) from period to period is the set of change p per step and corresponding period schedule
m:stepTerm	To Be Specified
mdr:baseCcy	Contains the ISO code of the base currency involved
mdr:delta	Defines the delta which refers to the sensitivity of the option price to changes in the price of the underlying asset.
mdr:fxoVolatility	An instance of FXOVolatility class
mdr:FXOVolatility	Defines elements for implied volatilities of FX Options
mdr:inputMethod	Defines whether the implied volatility described is based on delta or standard deviation
mdr:inputType	This field indicates whether the data that is being described is of intra-

	day or end of day
mdr:MarketData	Logical block that groups market data specific components.
mdr:premiumCcy	Contains the ISO code of the premium currency involved
mdr:smileDeltaTerms	It indicates whether the delta is in risk or base terms
mdr:Term	A construct that organizes implied volatility data per tenor
mdr:termCcy	Contains the ISO code of the term/risk currency involved
mdr:termPutCall	Defines whether the delta is for a put or a call option
mdr:terms	A collection of mdr:Term component
mdr:termValue	Defines the tenor of the implied volatility data
mdr:valueDate	The date on which the implied volatilities apply
mdr:volatilities	A collection of mdr:Volatility component
mdr:Volatility	A construct that defines implied volatility for a given delta and put (or call)
mdr:volatilityValue	Defines the implied volatility
mdr:VolCcyPair	The construct that organizes implied volatility data per currency pair
mdr:volCcyPairs	A collection of mdr:VolCcyPair
p:calculationPeriod	To Be Specified
p:InterestPayment	Represents a single payment based on a standard interest rate calculation
p:Payment	To Be Specified*
p:paymentAmount	The payment amount
p:paymentDate	The date on which the payment is made
p:rate	Contains the details that make up the interest rate
p:resetDates	To Be Specified*
pty:agreementInPlace	Indicates if Master Agreement is signed and in place
pty:beneficiaryInformation	Contains payment routing information of the party to whom the cash or security delivery is ultimately attributed to.
pty:confirmInformation	Information needed to complete the trade confirmation
pty:ConfirmInformation	
pty:corporateAddress	The party’s official corporate Address
pty:corporateAddress	The party’s official corporate address
pty:corporateInformation	Contains the basic corporate information of the Party
pty:CorporateInformation	Contains the detailed elements of the basic corporate information of the Party
pty:correspondentInformation	Contains payment routing information of the correspondent bank or clearing agent who will perform the actual cash and/or securities settlement in the local market.
pty:creditInformation	A list of internal and/or external Credit ratings for the Party.
pty:CreditRating	The party's internal or external credit ratings
pty:datedDate	Indicates the date on which the agreement was effective
pty:fiAccountNumber	The account number at the correspondent, intermediary or beneficiary that must be referenced to ensure proper posting of funds.
pty:fiAddress	The full address of the correspondent, intermediary or beneficiary.
pty:fiName	Name of the correspondent, intermediary or beneficiary.
pty:fiReferenceText	Free form text to further describe payment terms
pty:fiRoutingID	The correspondent, intermediary or beneficiary's routing identification for transferring funds.
pty:fiRoutingIDType	The type of routing ID that has been provided. Examples: ABA Number, Swift BIC ID, etc.
pty:FIRoutingInformation	Contains the detail routing instructions for a correspondent, intermediary or beneficiary.

pty:intermediaryInformation	Contains payment routing information for an intermediary agent, if applicable. There can be multiple intermediaries involved in the payment transaction.
pty:longName	The legal or officially recorded name of the party. This is to be used on all legal confirms and correspondence
pty:MasterAgreement	Contains detailed information about the Master Agreements involved in the trade
pty:masterAgreementNumber	Contains a reference number that identifies the Master Agreement
pty:masterAgreements	Contains a list of Master Agreements applicable to the trade
pty:parent	General corporate and credit information about the parent legal entity of the PARTY.
pty:Party	Party describes the PARTY with whom another Party is transacting a DEAL, processing an ORDER, or performing a TRADE
pty:PartyInformation	Contains information about the parties involved in the trade
pty:partyReference1	Contains a reference to the first principal party in the Master Agreement
pty:partyReference2	Contains a reference to the second principal party in the Master Agreement
pty:partyReferenceName	Reference name for the party. A unique name to the party used as a key in the FpML document that can be used to reference the party structure
pty:partyType	Identifies the role that the party is playing relative to this trade. A party can play multiple roles within a trade, each being identified by a unique reference name.
pty:payFromAddress	Address of the correspondent bank or clearing agent from which payment is expected to be made.
pty:payFromName	Name of the correspondent bank or clearing agent from which payment is expected to be made.
pty:paymentInstructions	Contains detail payment instructions for trade settlement
pty:PaymentInstructions	
pty:primaryConfirmContact	The first level contact person to handle trade confirmation inquiries
pty:primaryContact	The first level of the corporate contact for the party.
pty:rating	The rating representing the assessment of the credit worthiness of a party.
pty:ratingType	The name of the credit rating source that provided the rating. Examples are S and Pm and Moody's.
pty:secondaryConfirmContacts	pty:secondaryConfirmContacts
pty:settlementContact	Contact person to handle trade settlement questions
pty:settlementCurrency	The ISO code representing the currency in which the payment for the cash flow event will be made.
pty:settlementInformation	Information needed for confirmation generation and trade settlement - may contain settlement instructions for each trade settlement currency
pty:SettlementInstructions	Contains the instructions required for trade settlement
pty:shortName	An abbreviated name for the party
pty:taxID	The party's corporate tax id.
pty:tradeParties	Contains a list of parties involved in the trade
pty:website	The Party's Internet website address
r:ccy1	ISO currency identifier. Used to identifier which is the first currency of an FX rate.
r:ccy2	ISO currency identifier. Used to identifier which is the second currency of an FX rate.

r:date	The date since when a new spread is in effect
r:embedded	
r:fixed	The fixed interest rate
r:FixedRate	Interest rate including spread.
r:FloatingRate	Holds the floating reference rate information
r:FXPoints	Fx forward points. The points represent the difference between the Fx Spot exchange rate and the Fx forward rate on the date given by the valueDate field.
r:FXRate	FX Rate Class. Note there is no implication of which currency is the default 'base' or 'term'. The term of the rate is given by the 'quoteBasis' field which indicates the rate convention.
r:IndexedSpreadSchedule	To Be Specified
r:initialRate	The rate to be applied to the first accrual calculation in a regular stream of interest rate payments
r:isda-rate-option	ISDA reference to floating rate index.
r:isda-rate-option	An ISDA -compliant identifier which describes a rate Index, how it is to be sourced, and (sometimes) it's regulatory authority (eg BBA)
r:leverageFactor	A scaling factor to be applied to an interest rate formula
r:maturity	With reference to a floating rate index, this is the period of time, from spot, over which the interest rate applies.
r:maturityMultiple	The number of units of the maturity period required
r:maturityPeriod	The Period units of the designated maturity (see ISDA Definitions) applied to a Rate Option
r:option	
r:OptionReset	
r:percentage	Is percentage!
r:points	The field containing the actual Fx points value. Its precision is given by the 'precision' field.
r:precision	The value of one Fx point. See FXPoints.
r:quoteBasis	The rate quote type. Either 'CCY1PERCCY2' or 'CCY2PERCCY1'.
r:rate	The rate value.
r:rateConvention	Indicates whether the rate is 'yield' or 'discount'
r:spread	Margin to be applied to (normally) a floating interest rate
r:spreadSchedule	To Be Specified
r:SpreadSchedule	A list of spread steps
r:SpreadStep	Defines the date and percentage of change for spread
r:SpreadSteps	A list of spread steps
r:strike	Is the rate at which option will be exercised
r:type	Identifies the 'type' of rate. 'offer', 'bid', 'mid', etc.
r:underlier	
r:valueDate	The date on which the Fx points apply.
tid:partyReference	Reference to the section of the message holding identifiers of the parties to the trade.
tid:TradeID	A unique identifier for the trade. Each party involved in the trade would assign its own unique number as they identify it.
tid:TradeIDs	Contains a list of ID's used by each of trade parties to uniquely identify the trade
tid:transactionReferenceNumber	Unique Trade ID.

1 APPENDIX: MOZILLA PUBLIC LICENSE
VERSION 1.0

1. Definitions.

1.1. "Contributor" means each entity that creates or contributes to the creation of Modifications.

1.2. "Contributor Version" means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor.

1.3. "Covered Code" means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof**.**

1.4. "Electronic Distribution Mechanism" means a mechanism generally accepted in the software development community for the electronic transfer of data.

1.5. "Executable" means Covered Code in any form other than Source Code.

1.6. "Initial Developer" means the individual or entity identified as the Initial Developer in the Source Code notice required by **Exhibit A**.

1.7. "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.

1.8. "License" means this document.

1.9. "Modifications" means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is:

A. Any addition to or deletion from the contents of a file containing Original Code or previous Modifications.

B. Any new file that contains any part of the Original Code or previous Modifications.

1.10. "Original Code" means Source Code of computer software code which is described in the Source Code notice required by **Exhibit A** as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License.

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