ISDA – FpML 5.5 – Messaging Framework

Structure of a typical FpML message:

<requestExecution>

Header (e.g. sent by, sent to, message id, timestamp. digital signature)

<correlationId>, <sequenceNumber>, ...

Business Event (e.g. <trade>, <novation>)
<trade>
  <tradeheader>...
  Product (e.g. <swap>, <swaption>, <creditDefaultSwap>)
</trade>

<party>, <account>

</requestExecution>

Anatomy of an FpML Message
(e.g., requestExecution)
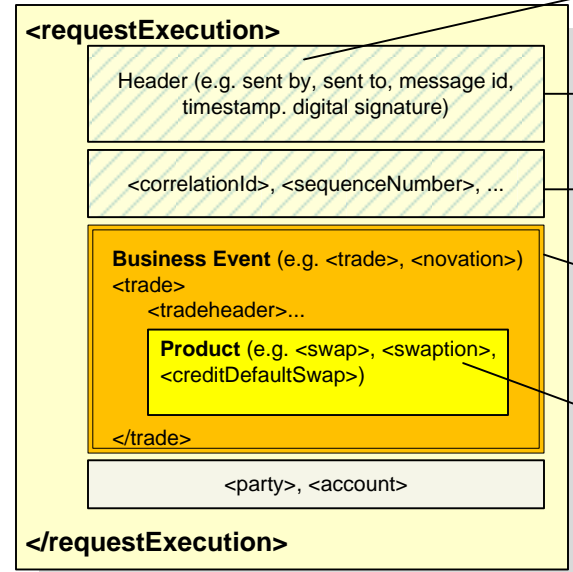
FpML root element. There are many root elements defined in FpML for the different message types and business processes. (see *Business Processes* below for full list)
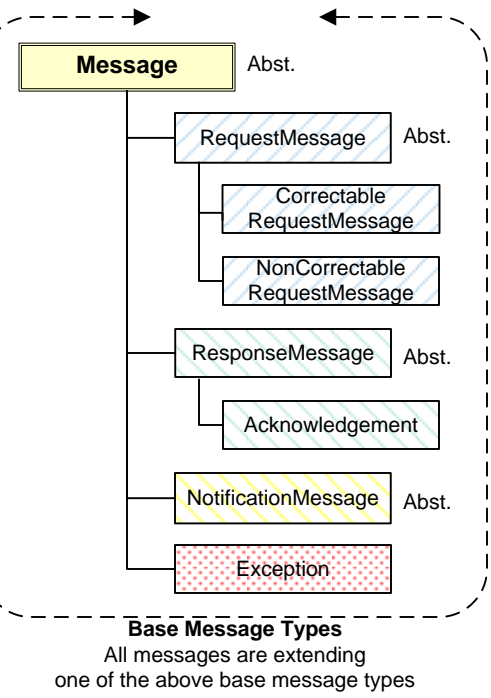
The **header** contains standard envelope information used for electronic messaging. Envelope fields vary depending on the base message type

Additional fields for **message correlation** i.e., linking successive messages together (response, correction, retraction)
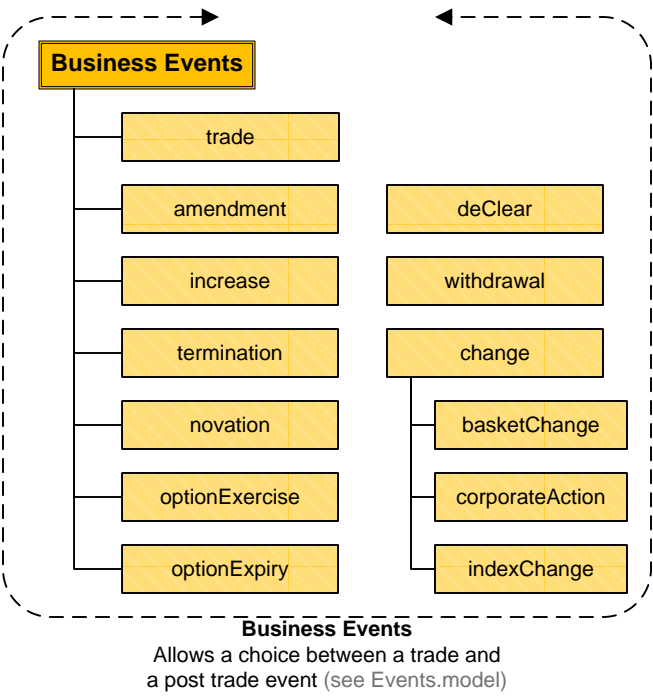
The **payload** of the message is determined by choosing one business event (e.g., trade, increase, termination) (each business event has a different content model)

A **product** can be specified as part of the event. Products are defined for the different asset classes (e.g., IRD, CD, FX) (see *Products Framework* for full list) Product representation can be looser or tighter depending on the view (e.g., Confirmation, Reporting)

Message (Abst.)
fpml-msg.xsd

- RequestMessage (Abst.)
  - Correctable RequestMessage
  - NonCorrectable RequestMessage
- ResponseMessage (Abst.)
  - Acknowledgement
- NotificationMessage (Abst.)
- Exception

Base Message Types
All messages are extending one of the above base message types

Business Events
fpml-business-events.xsd

- trade
- amendment
- increase
- termination
- novation
- optionExercise
- optionExpiry
- deClear
- withdrawal
- change
  - basketChange
  - corporateAction
  - indexChange

Business Events
Allows a choice between a trade and a post trade event (see Events.model)

SHARED MESSAGES across multiple views
fpml-msg.xsd

messageRejected
requestRetransmission   Not in Transparency
requestEventStatus
eventStatusResponse
eventStatusException
serviceNotification
serviceNotificationException
valuationReport (+ Ack / Exc / Retr)   In Reporting/Recordkpg
verificationStatusNotification
verificationStatusAcknowledgement
verificationStatusException

SHARED MESSAGES across multiple views

Business Processes — Business processes are organized under 5 views:

Examples of FpML <root> elements (messages)

Reporting View
fpml-reporting.xsd

Reporting

requestPositionReport
positionReport
positionReportAcknowledgement
positionReportException

positionActivityReport
positionActivityReportAck (…)
positionActivityReportException

terminatingEventsReport
terminatingEventsReportAck (…)
terminatingEventsReportException

eventActivityReport
eventActivityReportAck (…)
eventActivityReportException

resetReport
resetReportAcknowledgement
resetReportException

partyReport
partyReportAcknowledgement
partyReportException

fpml-reporting.xsd

Large Trader Reporting

exposureReport
exposureReportAcknowledgement
exposureReportException

fpml-valuation-reporting.xsd

Valuation

requestValuationReport
valuationReport (also in Recordkp)
valuationReportAcknowledgement
valuationReportException
valuationReportRetracted

fpml-reconciliation.xsd

Cash Flow Matching

tradeCashflowsMatchResult
tradeCashflowsAsserted
cancelTradeCashflows
nettedTradeCashflowsAsserted
nettedTradeCashflowsRetracted
nettedTradeCashflowsAck (…)
nettedTradeCashflowsException
nettedTradeCashflowsMatchResult

Portfolio Reconciliation

requestPortfolio
positionsMatchResults
positionsAcknowledged
positionsAsserted

fpml-collateral-processes.xsd

Collateral

Margin Call
requestMargin
requestMarginRetracted
marginAcknowledgement
marginException
marginCallStatus
marginCallStatusRetracted
requestCollateralAcceptance
collateralAcceptanceAck (…)
collateralAcceptanceException
collateralProposalStatus
disputeNotification
disputeRetracted
disputeAcknowledgement
disputeException

Interest Payment
requestInterest
requestInterestRetracted
interestStatus
interestStatusRetracted
interestStatement

Collateral Substitution
requestSubstitution
requestSubstitutionRetracted
substitutionStatus
substitutionStatusRetracted
substituteConfirmationStatus
returnConfirmationStatus

Recordkeeping View
fpml-recordkeeping-processes.xsd

Non-Public Reporting

nonpublicExecutionReport (also in Reporting)
nonpublicExecutionReportRetracted
nonpublicExecutionReportAcknowledgement
nonpublicExecutionReportException

Transparency View
fpml-transparency-processes.xsd

Public Reporting

publicExecutionReport
publicExecutionReportRetracted
publicExecutionReportAcknowledge
publicExecutionReportException

Confirmation View
← fpml-confirmation-processes.xsd →

Allocation

requestAllocation
requestAllocationRetracted
allocationAcknowledgement
allocationException
allocationRefused
allocationApproved

Collateral Allocation (LSOC)

requestCollateralAllocation
collateralAllocationAccepted
collateralAllocationAck(…)
collateralAllocationRejected

Clearing

requestClearing
requestClearingRetracted
clearingAcknowledgement
clearingException
clearingRefused
clearingStatus
clearingConfirmed

Clearing Eligibility

requestClearingEligibility
clearingEligibility
clearingEligibilityAcknowledgement
clearingEligibilityException

← fpml-clearing-processes.xsd →

Confirmation

requestConfirmation
requestConfirmationRetracted
confirmationAcknowledgement
confirmationException
confirmationStatus
confirmationAgreed
confirmationDisputed

Maturity

maturityNotification
maturityAcknowledgement
maturityException

Option Expiration Notification

optionExpirationNotification

Consent

requestConsent
requestConsentRetracted
consentAcknowledgement
consentException
consentGranted
consentRefused

Trade Info Update

requestTradeReferenceInformationUpdate
requestTradeReferenceInformationUpdateRetracted
tradeReferenceInformationUpdateAcknowledgement
tradeReferenceInformationUpdateException

Other

creditEventNotification

Execution

requestExecution
requestExecutionRetracted
executionAcknowledgement
executionException
executionNotification
executionRetracted

Execution Advice

executionAdvice
executionAdviceRetracted
executionAdviceAcknowledgement
executionAdviceException

Trade Change Advice

tradeChangeAdvice
tradeChangeAdviceRetracted
tradeChangeAdviceAck (…)
tradeChangeAdviceException

Pretrade View
fpml-pretrade-processes.xsd

Credit Limit Check

requestLimitCheck
limitCheckApproved
limitCheckRefused
creditLimitReport
creditLimitException
setCreditLimit
creditLimitResponse
suspendCredit
restoreCredit
orderStatusNotification