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Document History

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0.1	Feb 25, 2014	Hanno Klein, Deutsche Börse Group	Initial Version submitted to GTC
0.2	Mar 25, 2014	Andreas Kolf, Deutsche Börse Group	Error correction and integration of examples for Price Range Tables after GTC on March 20
ASBUILT	Jul. 18, 2014	Lisa T.	ASBUILT version Edited for quality control and consistency
	Nov. 11, 2014		Further edits and changes to ASBUILT based on addition analysis feedback and discussions: <ul style="list-style-type: none"> • Section 2.6 - Parties component is retracted from the messages it was proposed to be added to in favor of using the InstrumentParties component in the Instrument component already in these same messages.
	Dec. 8, 2014		To resolve build issues the following changes were discussed and agreed to with the submitting organization: <ol style="list-style-type: none"> 1) BusinessDate(2400) is corrected to EffectiveBusinessDate(2400) per change to EP182 2) FlexProductEligibilityGrp component is removed from BaseTradingRules component and added to the main message level of MarketDefinition(35=BU) and MarketDefinitionUpdateReport(35=BV) only.
	Oct 19, 2015		Per SPEC-2058, added the field and tag for ClearingSettlPrice(2528) and changed the field reference in the ClearingPriceParametersGrp component from SettlPrice(730) to ClearingSettlPrice(2528).

Revision	Date	Author	Revision Comments

1 Introduction

Within the Eurex Group, the Eurex Exchange, the International Securities Exchange and the European Energy Exchange provide reference data for derivatives. This proposal comprises a number of extensions to the standard FIX reference data messages and components as well as a number of new components and a single new message.

The detailed extensions are as follows:

1. Addition of new MarketDataReport(MsgType=~~TBD~~DR) message having fields ~~MDReportEvent(TBD)~~MDReportEvent(2535), ~~MDReportCount(TBD)~~MDReportCount(2536), ~~TotNoMarketSegmentReports(TBD)~~TotNoMarketSegmentReports(2537), ~~TotNoInstrumentReports(TBD)~~TotNoInstrumentReports(2538), ~~TotNoPartyDetailReports(TBD)~~TotNoPartyDetailReports(2539), ~~TotNoEntitlementReports(TBD)~~TotNoEntitlementReports(2540), and ~~TotNoRiskLimitReports(TBD)~~TotNoRiskLimitReports(2541).
2. Addition of new field ~~MarketSegmentStatus(TBD)~~MarketSegmentStatus(2542) to messages MarketDefinition(MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).
3. Addition of new <RelatedMarketSegmentGrp> component having fields ~~RelatedMarketSegmentID(TBD)~~RelatedMarketSegmentID(2546), ~~MarketSegmentRelationship(TBD)~~MarketSegmentRelationship(2547) to the messages MarketDefinition(MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV)
4. Addition of new field MarketSegment~~Pool~~Type(~~TBD~~2543) ~~MarketSegmentSubType(TBD)~~MarketSegmentSubType(2544) to the messages MarketDefinition(MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).
5. Addition of <InstrumentScopeGrp> component to messages MarketDefinition(MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).
6. Addition of new <AuctionTypeRuleGrp> component having fields AuctionType(1803) and AuctionTypeProductComplex(~~TBD~~2549) to messages MarketDefinition(MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).
7. Addition of a new <PriceRangeRuleGrp> component the <BaseTradingRules> component with new fields ~~StartPriceRange(TBD)~~StartPriceRange(2551), ~~EndPriceRange(2552)~~EndPriceRange(2552), ~~PriceRangeValue(TBD)~~PriceRangeValue(2553), ~~PriceRangePercentage(TBD)~~PriceRangePercentage(2554), ~~PriceRangeRuleID(TBD)~~PriceRangeRuleID(2556), and PriceRangeProductComplex(~~TBD~~2555).
8. Addition of new field ~~FastMarketPercentage(TBD)~~PriceRangeRuleID(2556) to the <BaseTradingRules> component.
9. Addition of new component <QuoteSizeRuleGrp> having fields MinBidSize(647), MinOfferSize(648) and ~~FastMarketIndicator(TBD)~~FastMarketIndicator(2447) to component <BaseTradingRules>.
10. Addition of new field QuoteSideIndicator(~~TBD~~2559) to component <BaseTradingRules>.

11. Addition of new component <FlexProductEligibilityGrp> having fields FlexProductEligibilityIndicator(1242) and FlexProductEligibilityComplex(~~TBD~~2561) to component <BaseTradingRules>.
12. Addition of new field NumOfComplexInstruments(~~TBD~~2562) to messages SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).
13. Addition of new fields ~~MarketDepthTimeInterval(TBD)~~MarketDepthTimeInterval(2563), ~~MarketDepthTimeIntervalUnit(TBD)~~MarketDepthTimeIntervalUnit(2564), ~~MDRecoveryTimeInterval(TBD)~~MDRecoveryTimeInterval(2565), MDRecoveryTimeIntervalUnit(~~TBD~~2566), PrimaryServiceLocationID(~~TBD~~2567), SecondaryServiceLocationID(~~TBD~~2568), MDPrimaryFeedLineID(TBD), MDPrimaryFeedLineSubID(TBD), MDSecondaryFeedLineID(TBD), MDSecondaryFeedLineSubID(TBD) and MDSubBookType(1173) to component <MarketDataFeedTypes>.
14. Addition of <MatchRules> and <TickRules> component to messages MarketDefinition(MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).
15. Addition of new fields MatchRuleProductComplex(~~TBD~~2569) and CustomerPriorityIndicator(~~TBD~~2570) to component <MatchRules>.
16. Addition of new field TickRuleProductComplex(~~TBD~~2571) to TickRules component.
17. Addition of component <Parties> to messages MarketDefinition(MsgType=BU), and MarketDefinitionUpdateReport(MsgType=BV), SecurityDefinitionRequest, SecurityDefinition and SecurityDefinitionUpdateReport.
18. Addition of component <RequestingPartyGrp> to messages PartyDetailsListUpdateReport(MsgType=CK), PartyEntitlementsUpdateReport(MsgType=CZ) and PartyRiskLimitsUpdateReport(MsgType=CR) to convey the actor of a change request for base information of parties or their entitlements and risk limits within related update messages.
19. Addition of field EffectiveBusinessDate(2400) to messages MarketDefinition(MsgType=BU), MarketDefinitionUpdateReport(MsgType=BV), SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).
20. Addition of component <RelatedInstrumentGrp> to messages SecurityDefinitionRequest(MsgType=c), SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).
21. Extension of valid values for RelatedInstrumentType(1648).
22. Addition of fields PriorSettlPrice(734), PrevAdjustedOpenInterest(~~TBD~~2572) and PrevUnadjustedOpenInterest(~~TBD~~2573) to messages SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).
23. Addition of new fields LowExercisePriceOptionIndicator(~~TBD~~2574), BlockTradeEligibilityIndicator(~~TBD~~2575), InstrumentPricePrecision(~~TBD~~2576), StrikePricePrecision(~~TBD~~2577), OrigStrikePrice(~~TBD~~2578), and SettlSubMethod(~~TBD~~2579) to <Instrument> component.
24. Extension of valid values for SecurityStatus(965).

25. Addition of new field FastMarketIndicator(~~TBD2447~~) to message SecurityStatus(MstType=f).
26. Addition of new component <ClearingPriceParametersGrp> to message SecurityStatus(MsgType=f) having fields BusinessDayType(~~TBD2581~~), AnnualTradingBusinessDays(~~TBD2584~~), TotalTradingBusinessDays(~~TBD2585~~), TradingBusinessDays(~~TBD2586~~), ClearingPriceOffset(~~TBD2582~~), VegaMultiplier(~~TBD2583~~), StandardVariance(~~TBD2588~~), RealisedVariance(~~TBD2587~~), RelatedClosePrice(~~TBD2589~~), ~~ARMVM~~AccumulatedReturnModifiedVariationMargin(~~TBD2591~~), ~~InterestRate(TBD)~~RiskFreeRate(1190), OvernightInterestRate(~~TBD2590~~), CalculationMethod(~~TBD2592~~), ClearingSettlPrice(2528730), DiscountFactor(1592), and Volatility(1188).

2 Business Requirements

2.1 Administrative Market Data Message

Market data messages are typically triggered by events such as new quotes or trades being available. However, some of the information may also be provided on an ongoing basis, i.e. triggered by a certain amount of time having elapsed (e.g. every minute) or simply in a cyclic manner. This can be used by applications for start of day activities or intra-day recovery purposes.

The requirement is to ease synchronization by sending explicit administrative messages to start and end a given cycle, together with counters providing details about the number of messages being sent for one cycle.

It is proposed to add a new message `MarketDataReport(MsgType=TBDDR)` and new fields as follows:

- `MDReportEvent(TBD)MDReportEvent(2535)` to identify the event causing the message.
- `MDReportCount(TBD)MDReportCount(2536)` to identify the total number of report messages.
- `TotNoMarketSegmentReports(TBD)TotNoMarketSegmentReports(2537)` to provide the number of reports related to market segments, e.g. `MarketDefinition(MsgType=BU)` messages.
- `TotNoInstrumentReports(TBD)TotNoInstrumentReports(2538)` to provide the number of reports related to instruments, e.g. `SecurityDefinition(MsgType=d)` messages.
- `TotNoPartyDetailReports(TBD)TotNoPartyDetailReports(2539)` to provide the number of reports related to party detail, e.g. `PartyDetailsListReport(MsgType=CG)` messages.
- `TotNoEntitlementReports(TBD)TotNoEntitlementReports(2540)` to provide the number of reports related to party entitlements, e.g. `PartyEntitlementsReport(MsgType=CV)` messages.
- `TotNoRiskLimitReports(TBD)TotNoRiskLimitReports(2541)` to provide the number of reports related to party risk limits, e.g. `PartyRiskLimitsReport(MsgType=CM)` messages.

2.2 Market Segment Status

A market segment comprises a number of instruments that share certain characteristics or behavior. Similar to securities it is required to be able to assign a status to an entire segment, e.g. to show the market segment to be active or inactive. Note that a market segment may be active whilst one or more of its instruments are inactive as shown by their `SecurityStatus(965)` attribute.

It is proposed to add a new field `MarketSegmentStatus(TBD)MarketSegmentStatus(2542)` to the root level of the existing messages `MarketDefinition (MsgType=BU)` and `MarketDefinitionUpdateReport(MsgType=BV)`.

2.3 Market Segment Pools

Market segments can already be subject to a hierarchical relationship by using ParentMktSegmID(1325) to reference the next higher level. A different requirement is to allow the creation of so-called market segment pools to group related market segments together to a special market segment, e.g. to create cross-segment products. The products of each market segment may belong to one or more pools and can be traded as individual products or as a complex product across segments (e.g. inter-product spreads). One example for the usage of market segment pools is trading in complex energy products that include instruments from different market segments offering power, gas, coal and emission products.

Some examples for inter-product spreads in energy markets:

- Clean Dark Spread - consists of a power leg, a coal leg and an emission leg
- Clean Spark Spread - consists of a power leg, a gas leg and an emission leg
- Dirty Dark Spread - consists of a power leg and a coal leg
- Dirty Spark Spread - consists of a power leg and a gas leg

The requirement is to allow a pool to be given a type and to be able to list the related market segments that constitute the pool.

It is proposed to add a new component <RelatedMarketSegmentGrp> (with new fields [RelatedMarketSegmentID\(TBD\)RelatedMarketSegmentID\(2546\)](#) and [MarketSegmentRelationship\(TBD\)MarketSegmentRelationship\(2547\)](#)) as well as a new fields [MarketSegmentPoolType\(TBD\)2543](#) and [MarketSegmentSubType\(TBD\)MarketSegmentSubType\(2544\)](#) to the existing messages MarketDefinition (MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).

The proposal is to keep the new component for related market segments generic to allow arbitrary relationships between market segments.

2.4 Instrument Scope for Market Segments

Instrument level messages currently have the ability to reference the market segments they belong to, together with the segment-specific trading rules. On the level of the market segment, it is required to have the ability to convey the type of instruments that belong to the segment in case of a largely homogeneous grouping. The capability should not be used to list all individual instruments of a market segment. This is already covered by means of the SecurityList(MsgType=y) and SecurityListUpdateReport (MsgType=BK) message that have MarketSegmentID(1300) as root level attribute.

The primary purpose is to use fields such as InstrumentScopeSecurityType(1547) and InstrumentScopeSecuritySubType(1548) to identify the constituents of a market segment. The fields identifying an individual security, e.g. InstrumentScopeSecurityID(1538), should only be used to specifically exclude them from a market segment having instruments that can be described with one of the other scope fields having a larger granularity.

It is proposed to add the existing repeating group <InstrumentScopeGrp> to the root level of the existing messages MarketDefinition (MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).

2.5 Trading Rules

2.5.1 Auction Order Types

A new requirement for trading rules is the ability to provide the list of available auction order types per market segment based on the existing field AuctionType(1803) and optionally limited on the level of the product complex.

It is proposed to add a new component <AuctionTypeRuleGrp> (with the existing field AuctionType(1803) and a new field AuctionTypeProductComplex(~~TBD2549~~)) to the root level of the existing messages MarketDefinition (MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV).

2.5.2 Price Range Tables

Price ranges play a major role for exchanges when validating incoming quotes or potential trade prices. A new requirement for trading rules is the ability to provide the list of price ranges per market segment that will be applied to different functionalities. A price range can be expressed as an absolute or percentage value (mutually exclusive). It is valid in an interval expressed with a start and an end value to allow multiple different price ranges. A single rule may optionally be limited on the level of a product complex and all ranges may optionally be widened by a percentage in case of a fast market.

The following are examples of where such rules can be applied:

- Price reasonability checks for incoming order and quote prices relative to a reference price
- Maximum quote spreads for market makers
- Market order matching ranges for potential executions against limit orders

The following price range table shows an example of an options series with three intervals, two of which have a price range defined by an absolute value and one with a percentage value.

Start of Interval	End of Interval	Absolute Value	Percentage Value
0.00	<1.00	0.05	N/A
1.00	<5.00	N/A	10
5.00	max	0.50	N/A

For detailed examples see Appendix D.

It is proposed to add a new component <PriceRangeRuleGrp> to the existing component <BaseTradingRules> with the following new fields:

- ~~StartPriceRange(TBD)~~StartPriceRange(2551) to define the beginning of an interval
- EndPriceRange(~~TBD2552~~) to define the end of an interval

- [PriceRangeValue\(TBD\)PriceRangeValue\(2553\)](#) to define an absolute range value
- [PriceRangePercentage\(TBD\)PriceRangePercentage\(2554\)](#) to define a percentage value for a range
- [PriceRangeRuleID\(TBD\)PriceRangeRuleID\(2556\)](#) to define a short identifier for a rule
- [PriceRangeProductComplex\(TBD2555\)](#) to limit the rule to a product complex

It is further proposed to add a new field [FastMarketPercentage\(TBD\)PriceRangeRuleID\(2556\)](#) to the root level of the existing component <BaseTradingRules>. By adding the new component and the new field to the existing component <BaseTradingRules>, it is possible to define price ranges on both the market segment as well as on the instrument level (overriding the higher level) or to define them on the market segment level and reference them on the instrument level by only using [PriceRangeRuleID\(TBD\)PriceRangeRuleID\(2556\)](#) on the lower level.

2.5.3 Quote Sizes and Single-Sidedness

Price ranges (see above) apply to prices but not to quantities of quotes which need to be defined separately. It is required to provide minimum bid and offer sizes for normal and fast market conditions. Whilst no further attributes are known at this point, it should be supported by means of a list (repeating group) even if it may only have a single entry if sizes do not change with a fast market condition.

It is proposed to add new component <QuoteSizeRuleGrp> (with existing fields MinBidSize(647) and MinOfferSize(648) and a new field FastMarketIndicator([TBD2447](#))) to the root level of the existing component <BaseTradingRules>.

Regardless of the sizes, quotes may or may not be allowed to be single-sided. It is therefore proposed to add a new field QuoteSideIndicator([TBD2559](#)) to the root level of the existing component <BaseTradingRules>.

2.5.4 Flexible Securities Support

The ability to define flexible terms for an instrument can be expressed by the existing field FlexProductEligibilityIndicator(1242). However, it cannot be provided as part of the trading rules for a market segment. It should also be possible to optionally limit it on the level of the product complex. Flexible securities can be confirmed to the request submitter with the SecurityDefinition(MsgType=D) message. The maximum number of flexible securities may be limited, i.e. the message should be able to report back the current number of such instruments that have been created.

[It is proposed to add a new component <FlexProductEligibilityGrp> \(with existing field FlexProductEligibilityIndicator\(1242\) and a new field FlexProductEligibilityComplex\(2561\)\) to the root level of the MarketDefinition\(35=BU\) and MarketDefinitionUpdateReport\(35=BV\) messages.](#)
~~[It is proposed to add a new component <FlexProductEligibilityGrp> \(with existing field FlexProductEligibilityIndicator\(1242\) and a new field FlexProductEligibilityComplex\(TBD\)\) to the root level of the existing component <BaseTradingRules>.](#)~~

It is proposed to add a new field NumOfComplexInstruments(~~TBD~~2562) to the root level of the existing messages SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).

2.5.5 Market Data Feed Types

Trading rules for market data feeds can be expressed for an individual instrument per trading session with the existing component <MarketDataFeedTypes>. The requirement is to also allow it to be defined for an entire market segment, i.e. it is proposed to add this component to the root level of the existing messages MarketDefinition (MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV). It is further required to support a number of additional attributes to describe a given feed as follows.

Market depth feeds provide netted data in bandwidth sensitive environments or when the data is intended for display purposes. The time interval used for netting needs to be expressed as the number of time units over which an aggregation of data occurs. It is proposed to add new fields ~~MarketDepthTimeInterval(TBD)~~MarketDepthTimeInterval(2563) and ~~MarketDepthTimeIntervalUnit(TBD)~~MarketDepthTimeIntervalUnit(2564) to the existing component <MarketDataFeedTypes>.

A second time interval attribute is required in the context of recovery to express the elapsed time of a full data cycle for use cases where current data, e.g. instrument reference data, is continuously and repeatedly sent. It is proposed to add new fields ~~MDRecoveryTimeInterval(TBD)~~MDRecoveryTimeInterval(2565) and ~~MDRecoveryTimeIntervalUnit(TBD)~~MDRecoveryTimeIntervalUnit(2566) to the existing component <MarketDataFeedTypes>.

Market data feeds are typically associated with IP addresses and port numbers when sent via UDP multicast or some service location identifier, but there may be other information relevant for the recipient in order to obtain them. The requirement should therefore be supported with generic fields that do not specify the exact nature of the information. It is proposed to add the following new fields to the existing component <MarketDataFeedTypes>:

- ~~MDPrimaryFeedLinePrimaryServiceLocationID(TBD)~~2567) for the ~~main~~ identifier of a ~~(single) connection~~main service location
- ~~MDPrimaryFeedLineSubSecondaryServiceLocationID(TBD)~~2568) for the identifier of a secondary or alternate service locationan additional identifier of a (single) connection
- ~~MDSecondaryFeedLineID(TBD)~~ for the main identifier of an alternate connection
- ~~MDSecondaryFeedLineSubID(TBD)~~ for an additional identifier of an alternate connection

It is further proposed to allow more granularity by adding the existing field MDSubBookType(1173) to the existing component <MarketDataFeedTypes> which currently only provides MDBookType(1021).

2.5.6 Matching Rules

The existing component <MatchRules> allows to convey the match algorithm for a given instrument and can limit the rule to one or more values of MatchType(574) as it is a repeating group. The main requirement is to also allow it to be defined for an entire market segment, i.e. it is proposed to add this component to the root level of the existing messages MarketDefinition (MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV). There are two additional requirements that can be supported by extending the existing component. The first is to tie a match algorithm to a specific product complex. The second is to indicate whether customer orders are given priority for matching or not.

It is proposed to add new fields MatchRuleProductComplex(~~TBD~~2569) and CustomerPriority Indicator(~~TBD~~2570) to the existing component <MatchRules>.

2.5.7 Tick Rules

The existing component <TickRules> allows to convey the match algorithm for a given instrument. The main requirement is to also allow it to be defined for an entire market segment, i.e. it is proposed to add this component to the root level of the existing messages MarketDefinition (MsgType=BU) and MarketDefinitionUpdateReport(MsgType=BV). An additional requirement is to tie a tick rule to a specific product complex.

It is proposed to add a new field TickRuleProductComplex(~~TBD~~2571) to the existing component <TickRules>.

2.6 Actors for Market Segments and Securities

The existing market structure and security definition messages are currently unable to convey any actors associated with a market, market segment or instrument such as market makers that are responsible for trading activities.

It is proposed to enhance slightly the component usage text for InstrumentParties within the Instrument component to clarify that the component is used to express the actors related to the instrument. The SecurityDefinitionRequest(MsgType=c), SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP) will use InstrumentParties to express the actors associated with the instrument.

It is proposed to add the existing component <Parties> to the root level of the existing messages MarketDefinition (MsgType=BU), and MarketDefinitionUpdateReport(MsgType=BV), SecurityDefinitionRequest(MsgType=c), SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).

2.7 Actors for Parties Reference Data

The existing request messages to define base information of parties or their entitlements and risk limits provide the possibility to convey the requesting actor by means of the existing component

<RequestingPartyGrp>. The related update messages may be sent to the affected parties in an unsolicited manner and currently do not allow to convey the actor who requested the change. A typical use case would be the modification of risk limits by a clearing firm for one or more of its trading firms. The latter would be informed but they need to know details about the requesting party at the clearing firm, e.g. if they would like to challenge more restrictive limits.

It is proposed to add the existing component <RequestingPartyGrp> to the root level of the existing messages PartyDetailsListUpdateReport(MsgType=CK), PartyEntitlementsUpdateReport(MsgType=CZ) and PartyRiskLimitsUpdateReport(MsgType=CR).

2.8 Business Date

It is required to allow an explicit business date to be associated with reference data as an alternative to the current approach of an implicit date. The recipient cannot necessarily rely on the current business date in the time zone of the location from where he is trading. Even in a single market, trading may cross date boundaries, e.g. trading on a given business day may start in the afternoon or evening of the previous business day where also the related reference data is provided.

It is proposed to add the existing field [EffectiveBusinessDate\(2400\)](#) to the root level of the existing messages MarketDefinition (MsgType=BU), MarketDefinitionUpdateReport(MsgType=BV), SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).

2.9 Related Instruments

Related instruments can be conveyed with the existing component <RelatedInstrumentGrp>. However, this component has only been added to the trade and position reporting and maintenance messages but not to the securities reference data messages. The component is needed to define the relationship between instruments and nested underliers. An additional use case is to link two or more instruments that are tied to one another in the context of trading. These instruments may be fungible when it comes to clearing but this is not a requirement.

It is proposed to add the existing component <RelatedInstrumentGrp> to the root level of the existing messages SecurityDefinitionRequest(MsgType=c), SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).

It is also proposed to add the following valid value to the existing field RelatedInstrumentType(1648):

- [#bd5](#) = Retail equivalent of wholesale instrument – integrated trading of retail and wholesale versions of instruments fungible for clearing purposes

2.10 Previous Business Day Reference Data

The following section addresses requirements to provide special information related to the previous business day as part of securities reference data. Market data messages already have this capability to some extent by means of specific values for MDEntryType(269).

The requirement is to support information about open interest and settlement prices. Open interest can be both unadjusted ~~or~~ and adjusted. Unadjusted open interest is typically provided at the end of a trading day prior to any corporate actions or other changes having been executed on the instrument. It is provided as adjusted open interest intra-day on the next business day. The reference data for the current business day needs to be able to convey both open interest values from the previous business day.

It is proposed to add the existing field PriorSettlPrice(734) as well as new fields PrevAdjustedOpenInterest(~~TBD~~2572) and PrevUnadjustedOpenInterest(~~TBD~~2473) to the root level of the existing messages SecurityDefinition(MsgType=d) and SecurityDefinitionUpdateReport(MsgType=BP).

2.11 Instrument Enhancements

2.11.1 Attributes

FIX provides explicit instrument attributes as well as a generic component <InstrumentExtension>. The following requirements should be covered by new explicit fields as follows:

- LowExercisePriceOptionIndicator(~~TBD~~2574) – Indicates whether ~~LEPO~~ low exercise price options's are allowed for the instrument.
- BlockTradeEligibilityIndicator(~~TBD~~2575) – Indicates whether block trades are allowed for the instrument, as determined by the exchange or regulations, in which case the instrument maybe subjected to size requirements.
- InstrumentPricePrecision(~~TBD~~2576) – Number of decimal places used for instrument prices.
- StrikePricePrecision(~~TBD~~2577) – Number of decimal places used for strike prices of the instrument.
- OrigStrikePrice(~~TBD~~2578) – Strike price prior to corporate action or other event affecting it.
- SettlSubMethod(~~TBD~~2579) – Additional detail regarding the settlement method of a contract.

2.11.2 Status Enhancements

A security can currently only be defined as either active or inactive by means of the field SecurityStatus(965) which is part of the component block <Instrument>. It is required to extend the list of possible states to cover a number of additional states related to the instrument itself and not to the trading status of the instrument which is represented by the field SecurityTradingStatus(326) and typically affects more than just a single instrument. An instrument state is also more likely to remain

unchanged from one business day to the next whereas the trading state of an instrument changes intra-day.

The existing market models across execution venues around the world differ significantly in terms of rules for instrument and trading states. The distinction between the two should thus be made in a pragmatic way, depending on the specifics of the given trading system and possibly regulatory requirements.

It is proposed to add the following valid values to the existing field SecurityStatus(965):

- **tb3** = Active, closing orders only – same as [SecurityStatus\(965\)=1 \(Active\(1\)\)](#) but only risk reducing orders are allowed.
- **tb4** = Expired – instrument has expired (can be used for intra-day expiry).
- **tb5** = Delisted – instrument has been removed from reference data.
- **tb6** = Knocked-out – barrier option went beyond the pre-defined threshold.
- **tb7** = Knock-out revoked – condition for knock-out was invalid.
- **tb8** = Pending Expiry – instrument is active but will expire after the current business day.
- **tb9** = Suspended – instrument is suspended until further notice, e.g. due to corporate news.
- **tb10** = Published – instrument reference data has been published but instrument is not active yet.
- **tb11** = Pending Deletion – instrument will be deleted from reference data after the current business day.

2.11.3 Trading Status Enhancements

The FIX message SecurityStatus(MsgType=f) conveys different kinds of current information related to an instrument. It is required to convey whether an instrument is currently in a fast market or not. This is possible today by using the existing field SecurityTradingStatus(326)=with-23=(Fast Market). However, it is required to support a fast market as an additional attribute independent of the trading states, i.e. when it is not a trading state in itself. Chapter 2.5.3 *Quote Sizes and Single-Sidedness* introduces a new field that can be re-used here.

It is proposed to add a new field FastMarketIndicator(**TBD2447**) to the root level of the existing message SecurityStatus(MsgType=f).

2.12 Variance Futures Support

The business requirement is related to parameters associated with an instrument that are related to the calculation of clearing prices and quantities wherever these are not identical to trading. The primary use case is about parameters for variance futures that change at least on a daily basis. The parameters may be conveyed for the previous or the current business day or both. Variance futures are traded in a different notation than they are cleared.

It is proposed to add a new component <ClearingPriceParametersGrp> to the root level of the existing message SecurityStatus(MsgType=f) with the following fields.

- BusinessDayType(~~TBD~~2581) to distinguish current and previous day parameters
- AnnualTradingBusinessDays(~~TBD~~2584) to define the number of trading business days in a year
- TotalTradingBusinessDays(~~TBD~~2585) to define the number of trading business days for the security
- TradingBusinessDays(~~TBD~~2586) to define the actual number of trading business days that have already passed for the security
- ClearingPriceOffset(~~TBD~~2582) to define a constant value needed to calculate clearing prices
- VegaMultiplier(~~TBD~~2583) to define a constant value needed to calculate clearing quantities
- StandardVariance(~~TBD~~2588) for the initial variance used to calculate settlement prices
- RealisedVariance(~~TBD~~2587) for the actual variance used to calculate settlement prices
- RelatedClosePrice(~~TBD~~2589) for the closing price of the underlying and used to calculate the realised variance
- ~~ARMVM~~AccumulatedReturnModifiedVariationMargin(~~TBD~~2591) for the Accumulated Return on Modified Variation Margin (economic cost of the variation margin from one trading day to the next)
- ~~InterestRate~~(~~TBD~~)RiskFreeRate(1190) for the risk free interest rate until the instrument expires and used to calculate the discount factor
- OvernightInterestRate(~~TBD~~2590) for the short term interest rate and used to calculate the ARMVM
- CalculationMethod(~~TBD~~2592) to convey whether the clearing price parameters were automatically calculated or manually determined
- ClearingSettlPrice(~~730~~2528) to be used to convey settlement prices
- DiscountFactor(1592) to be used to calculate clearing prices
- Volatility(1188) to be used to calculate settlement prices

3 Issues and Discussion Points

3.1 Eligibility Indicator for Flexible Securities

Q: Should the new repeating group of indicators of eligibility for flexible securities be available on the instrument level?

A: No. The field FlexProductEligibilityIndicator(1242) is already part of the Instrument component and hence available on any instrument level message. It is sufficient to indicate eligibility for the given instrument. The new repeating group is intended to convey eligibility for a group of instruments up to an entire market or market segment. It is therefore not added to the component BaseTradingRules

which is part of the instrument level reference data messages and only to be added to the root of market level reference data messages.

4 Proposed Message Flow

[Proposed message flow text below this line]

5 FIX Message Tables

5.1 FIX Message MarketDataReport(35=~~tbd~~DR)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	MarketDataReport
Message Abbreviated Name (for FIXML)	MktDataRpt
Category	MarketData
Action	X New __ Change
Message Synopsis	Administrative <u>The MarketDataReport(35=tbdDR) message is used to provide delimiting references (e.g. start and end markers in a continuous broadcast) and details about the number of market data messages sent in a given distribution cycle.</u>
Message Elaboration	The M message can be used when distributing reference and market data on an ongoing basis to convey start and end points for synchronization. The report contains a single generic and multiple specific message counters that are provided at the beginning or at the end of a cycle.
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	TBD DR
Repository Component ID	TBD 154

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	IC R	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = TBD DR
	Component Block <ApplicationSequenceControl>	N		ADD		
963	MDReportID	N		ADD		Unique identifier for Market Data Report(35= tbd DR)

Tag	Field Name	Req'd	IC R	Action	Mappings and Usage Comments	FIX Spec Comments
TBD2 535	MDReportEvent	Y		NEW		Reason for sending the report.
TBD2 536	MDReportCount	Y		NEW		
60	TransactTime	N		ADD		
911	TotNumReports	N		ADD		Total number of reports related to the event.
TBD2 537	TotNoMarketSegment Reports	N		NEW		
TBD2 538	TotNoInstrumentRepor ts	N		NEW		
TBD2 539	TotNoPartyDetailRepor ts	N		NEW		
TBD2 540	TotNoEntitlementRepor ts	N		NEW		
TBD2 541	TotNoRiskLimitReports	N		NEW		
	Standard Trailer	Y				

5.2 FIX Message MarketDefinition(35=BU)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	MarketDefinition
Message Abbreviated Name (for FIXML)	MktDef
Category	MarketStructureReferenceData
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> Change
Message Synopsis	The Market-Definition(35=BU) message is used to respond to Market-Definition Request(35=BT). In a subscription, it will be used to provide the initial snapshot of the information requested. Subsequent updates are provided by the Market Definition-Update-Report(35=BV).
Message Elaboration	[enter the message elaboration here]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration	BU
Repository Component ID	106

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = BU
	Component Block <ApplicationSequenceControl>	N				
1394	MarketReportID	Y		CHANGE		Unique identifier for each M market d definition message.
1393	MarketReqID	N				
1301	MarketID	Y				
1300	MarketSegmentID	N				
1396	MarketSegmentDesc	N				
1397	EncodedMktSegmDescLen	N		CHANGE		Must be set if EncodedMktSegmDesc(1398) field is specified and must immediately precede it.
1398	EncodedMktSegmDesc	N		CHANGE		Encoded (non-ASCII characters) representation of the MarketSegmDesc(1396) field in the encoded format specified via the MessageEncoding(347) field.
1325	ParentMktSegmID	N		CHANGE		Specifies that the M market s segment <u>specified in this message</u> is a sub segment of the M market s segment defined in this field.
FBD25 42	MarketSegmentStatus	N		NEW		

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
FBD2543	MarketSegmentPoolType	N		NEW		Used to specify the purpose of a special market segment identified by MarketSegmentID(1300). Conditionally required if MarketSegmentSubType(tbd)MarketSegmentSubType(2544) is specified. Required if MarketSegmentID(1300) is a special market segment (pool) that represents a group of related market segments. Specifies the type of interaction between the market segments of the pool identified by MarketSegmentID(1300).
FBD2544	MarketSegmentSubType	N		NEW		
Component Block <InstrumentScopeGrp>		N		ADD		Used to identify/specify the types of securities that belong to the market segment.
Component Block <RelatedMarketSegmentGrp>		N		NEW		Used to specify market segments that have a relationship to the market segment defined in this message here.
15	Currency	N				The default trading currency
Component Block <BaseTradingRules>		N		CHANGE		Insert here the set of "BaseTradingRules" fields defined in "common components of application messages" Used to specify the valid basic trading rules. The scope of the rule is determined by the context in which the component is used. In this case, the scope is for the identified market or market segment.
Component Block <OrdTypeRules>		N		CHANGE		Insert here the set of "OrdTypeRules" fields defined in "common components of application messages" Used to specify the order types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
Component Block <TimeInForceRules>		N		CHANGE		Insert here the set of "TimeInForceRules" fields defined in "common components of application messages" Used to specify the time in force rules that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Component Block <ExecInstRules>	N		CHANGE		Insert here the set of "ExecInstRules" fields defined in "common components of application messages" Used to specify the execution instructions that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <AuctionTypeRuleGrp>	N		NEW		Used to specify the auction order types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <MarketDataFeedTypes>	N		ADD		Used to specify the market data feed types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <MatchRules>	N		ADD		Used to specify the matching rules that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <FlexProductEligibilityGrp>	N		ADD		Specifies the eligibility indicators for the creation of flexible securities.
	Component Block <Parties>	N		ADD		Specifies parties relevant for the market or market segment, e.g. market makers.
2400	EffectiveBusinessDate	N		ADD		Specifies the business day for which the rules apply.
60	TransactTime	N				
58	Text	N		CHANGE		Comment, instructions, or other identifying information.
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	Standard Trailer	Y				

5.3 FIX Message MarketDefinitionUpdateReport(35=BV)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	MarketDefinitionUpdateReport
Message Abbreviated Name (for FIXML)	MktDefUpd
Category	MarketStructureReferenceData
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> Change
Message Synopsis	The Market Definition message is used to respond to Market Definition Request. In a subscription, it will be used to provide the initial snapshot of the information requested. Subsequent updates are provided by the Market Definition Update Report. <u>In a subscription for market structure information, this message is used once the initial snapshot of the information has been sent using the MarketDefinition(35=BU) message.</u>
Message Elaboration	[enter the message elaboration here]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	BV
Repository Component ID	107

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = BV
	Component Block <ApplicationSequenceControl>	N				
1394	MarketReportID	Y		CHANGE		Unique identifier for each M market D definition message.
1393	MarketReqID	N				
1395	MarketUpdateAction	N				Specifies the action taken
1301	MarketID	Y				
1300	MarketSegmentID	N				
1396	MarketSegmentDesc	N				

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
1397	EncodedMktSegmDescLen	N		CHANGE		Must be set if EncodedMktSegmDesc(1398) field is specified and must immediately precede it.
1398	EncodedMktSegmDesc	N		CHANGE		Encoded (non-ASCII characters) representation of the MarketSegmDesc(1396) field in the encoded format specified via the MessageEncoding(347) field.
1325	ParentMktSegmID	N		CHANGE		Specifies that the Mmarket Ssegment specified in the message is a sub segment of the Mmarket Ssegment defined in this field message.
TBD254 2	MarketSegmentStatus	N		NEW		
TBD254 3	MarketSegmentPoolType	N		NEW		Used to specify the purpose of a special market segment identified by MarketSegmentID(1300). Conditionally required if MarketSegmentSubType(tb #MarketSegmentSubType(2544)) is specified. Required if MarketSegmentID(1300) is a special market segment (pool) that represents a group of related market segments. Specifies the type of interaction between the market segments of the pool identified by MarketSegmentID(1300).
TBD254 4	MarketSegmentSubType	N		NEW		
Component Block <InstrumentScopeGrp>		N		ADD		Identifies Used to specify the types of securities that belong to the market segment.
Component Block <RelatedMarketSegmentGrp>		N		NEW		Used to specify market segments that have a relationship to the market segment defined in this message here.

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
15	Currency	N				The default trading currency
	Component Block <BaseTradingRules>	N		CHANGE		Insert here the set of "BaseTradingRules" fields defined in "common components of application messages" § Used to specify the valid basic-base trading rules. The scope of the rule is determined by the context in which the component is used. In this case, the scope is for the identified market or market segment.
	Component Block <OrdTypeRules>	N		CHANGE		Insert here the set of "OrdTypeRules" fields defined in "common components of application messages" § Used to specify the order types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <TimeInForceRules>	N		CHANGE		Insert here the set of "TimeInForceRules" fields defined in "common components of application messages" § Used to specify the time in force rules that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Component Block <ExecInstRules>	N		CHANGE		Insert here the set of "ExecInstRules" fields defined in "common components of application messages". Used to specify the execution instructions that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <AuctionTypeRuleGrp>	N		NEW		Used to specify the auction order types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <MarketDataFeedTypes>	N		ADD		Used to specify the market data feed types that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <MatchRules>	N		ADD		Used to specify the matching rules that are valid for trading. The scope of the rule is determined by the context in which the component is used. In this case, the scope is on the identified market or market segment.
	Component Block <FlexProductEligibilityGrp>	N		ADD		Specifies the eligibility indicators for the creation of flexible securities.
	Component Block <Parties>	N		ADD		Specifies parties relevant for the market or market segment, e.g. market makers.
2400	EffectiveBusinessDate	N		ADD		Specifies the effective business day for which the rules apply.
60	TransactTime	N				

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
58	Text	N		CHANGE		Comment, instructions, or other identifying information.
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	Standard Trailer	Y				

5.4 FIX Message PartyDetailsListUpdateReport(35=CK)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	PartyDetailsListUpdateReport
Message Abbreviated Name (for FIXML)	PtyDetlListUpd
Category	PartiesReferenceData
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> Change
Message Synopsis	The PartyDetailsListUpdateReport(35=CK) is used to disseminate updates to party detail information.
Message Elaboration	[enter the message elaboration here]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	CK
Repository Component ID	122

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
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Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	<i>Standard Header</i>	Y				MsgType = CK
	Component Block <ApplicationSequenceControl>	N				
1510	PartyDetailsListReportID	Y				
1505	PartyDetailsListRequestID	N		CHANGE		Conditionally required when responding to the PartyDetailsListRequest(35=CF) message.
1512	TotNoParties	N				
893	LastFragment	N				
	Component Block <RequestingPartyGrp>	N		ADD		May be used to specify the requesting party in the event the request was made verbally or via other means.
	Component Block <PartyDetailsUpdateGrp>	Y				
60	TransactTime	N				
58	Text	N				
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	<i>Standard Trailer</i>	Y				

5.5 FIX Message PartyEntitlementsUpdateReport(35=CZ)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	PartyEntitlementsUpdateReport
Message Abbreviated Name (for FIXML)	PtyEntlmtUpd

Category		PartiesReferenceData
Action		__New X Change
Message Synopsis	The PartyEntitlementsUpdateReport(35=CZ) is used to convey incremental changes to party entitlements. It is similar to the PartyEntitlementsReport(35=CV). This message uses the PartyEntitlementsUpdateGrp component which includes the ability to specify an update action using ListUpdateAction(1324).	
Message Elaboration	[enter the message elaboration here]	
To be finalized by FPL Technical Office		
(MsgType(tag 35) Enumeration)	CZ	
Repository Component ID	136	

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = CZ
	Component Block <ApplicationSequenceControl>	N				
1771	EntitlementReportID	Y				
1770	EntitlementRequestID	N		CHANGE		Conditionally required when responding to a PartyEntitlementsRequest(35=CU) message.
1512	TotNoParties	N				
893	LastFragment	N				
	Component Block <RequestingPartyGrp>	N		ADD		May be used to specify the requesting party in the event the request was made verbally or via other means.
	Component Block <PartyEntitlementUpdateGrp>	Y				Specifies the updated entitlements to be enforced for the given party(-ies) and related party(-ies).
60	TransactTime	N				
58	Text	N				

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	Standard Trailer	Y				

5.6 FIX Message PartyRiskLimitsUpdateReport(35=CR)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	PartyEntitlementsRiskLimitsUpdateReport
Message Abbreviated Name (for FIXML)	PtyRiskLmtUpd
Category	PartiesReferenceData
Action	__New X Change
Message Synopsis	The PartyRiskLimitsUpdateReport(35=CR) is used to convey incremental changes to risk limits. It is similar to the regular report but uses the <PartyRiskLimitsUpdateGrp> component instead of the <PartyRiskLimitsGrp> component to include an update action.
Message Elaboration	[enter the message elaboration here]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	CR
Repository Component ID	128

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = CR

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
Component Block <ApplicationSequenceControl>		N				
1667	RiskLimitReportID	Y				
1666	RiskLimitRequestID	N				Conditionally required when sent as part of a subscription requested by a PartyRiskLimitsRequest(35=CL)
1760	RiskLimitRequestType	N		CHANGE		Can be used if sent as part of a subscription started by a PartyRiskLimitsRequest(35=CL)
1512	TotNoParties	N				
893	LastFragment	N				
Component Block <RequestingPartyGrp>		N		ADD		May be used to specify the requesting party in the event the request was made verbally or via other means.
Component Block <PartyRiskLimitsUpdateGrp>		N				
60	TransactTime	N				
58	Text	N				
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	Standard Trailer	Y				

5.7 FIX Message SecurityDefinitionRequest(35=c)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	SecurityDefinitionRequest
Message Abbreviated Name (for	SecDefReq

FIXML)		
Category		SecuritiesReferenceData
Action		__New X Change
Message Synopsis	The Security-Definition-Request(35=c) message is used for the following: <ol style="list-style-type: none"> 1. Request a specific Ssecurity to be traded with the second party. The requested ed security can be defined as a multileg security made up of one or more instrument legs. 2. Request a set of individual securities for a single market segment. 3. Request all securities, independent of market segment. 	
Message Elaboration		
To be finalized by FPL Technical Office		
(MsgType(tag 35) Enumeration	c	
Repository Component ID	36	

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = c (lowercase)
320	SecurityReqID	Y				
321	SecurityRequestType	Y				
1301	MarketID	N				Identifies the market for which the security definition request is being made.
1300	MarketSegmentID	N				Identifies the segment of the market for which the security definition request is being made.
	Component Block <Parties>	N		ADD		
	Component Block <Instrument>	N		CHANGE		insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages" of the requested Security

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Component Block <InstrumentExtension>	N		CHANGE		Insert here the set of "InstrumentExtension" fields defined in "Common Components of Application Messages"
	Component Block <UndInstrmtGrp>	N		CHANGE		Number of underlyings
	Component Block <RelatedInstrumentGrp>	N		ADD		
15	Currency	N				
58	Text	N		CHANGE		Comment, instructions, or other identifying information.
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
336	TradingSessionID	N		CHANGE		Optional Trading Session identifier to specify a particular trading session for which you want to obtain a list of securities that are tradeable.
625	TradingSessionSubID	N				
	Component Block <Stipulations>	N				
	Component Block <InstrmtLegGrp>	N		CHANGE		Number of legs that make up the Security
	Component Block <SpreadOrBenchmarkCurve Data>	N				
	Component Block <YieldData>	N				
827	ExpirationCycle	N				
263	SubscriptionRequest Type	N				Subscribe or unsubscribe for security status to security specified in request.
	Standard Trailer	Y				

5.8 FIX Message SecurityDefinition(35=d)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	SecurityDefinition
Message Abbreviated Name (for FIXML)	SecDef
Category	SecuritiesReferenceData
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> Change
Message Synopsis	<p>The Security-Definition(35=d) message is used for the following:</p> <ol style="list-style-type: none"> 1. Accept the security defined in a Security-Definition(35=d) message. 2. Accept the security defined in a Security-Definition(35=d) message with changes to the definition and/or identity of the security. 3. Reject the security requested in a Security-Definition(35=d) message. 4. Respond to a request for securities within a specified market segment. 5. Convey comprehensive security definition for all market segments that the security participates in. 6. Convey the security's trading rules that differ from default rules for the market segment.
Message Elaboration	
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	d
Repository Component ID	37

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = d (lowercase)
	Component Block <ApplicationSequenceControl>	N				

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
964	SecurityReportID	N		CHANGE		Used to identify the Security-Definition(35=d) message.
715	ClearingBusinessDate	N				
320	SecurityReqID	N				
<u>2422</u>	<u>OrderRequestID</u>	<u>N</u>				
322	SecurityResponseID	N		CHANGE		Used to identify the response to a Security Definition-Request(35=c) message.
323	SecurityResponseType	N		CHANGE		Response to the Security Definition Request
560	SecurityRequestResult	N				Allow result of query request to be returned to requester
1607	SecurityRejectReason	N		CHANGE		Used to specify a rejection reason when SecurityResponseType (323) is equal to 5 (Reject Security Proposal).
292	CorporateAction	N				Identifies the type of Corporate Action
Component Block <Parties>		<u>N</u>		ADD		Identifies parties relevant for the creation of the security.
Component Block <Instrument>		N		CHANGE		Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages" of the requested Security
Component Block <InstrumentExtension>		N		CHANGE		Insert here the set of "InstrumentExtension" fields defined in "Common Components of Application Messages"
Component Block <FinancingDetails>		<u>N</u>				
Component Block <UndInstrmtGrp>		N		CHANGE		Number of underlyings
Component Block <RelatedInstrumentGrp>		<u>N</u>		ADD		
Component Block <SecurityClassificationGrp>		N				Used to specify forms of product classifications.
15	Currency	N				
<u>TBD257</u>	<u>PreviousAdjustedOpen Interest</u>	<u>N</u>		NEW		

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
TBD257 733	PreviousUnadjustedOpenInterest	N		NEW		
734	PriorSettlPrice	N		ADD		
58	Text	N		CHANGE		Comment, instructions, or other identifying information.
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
Component Block <Stipulations>		N				.
1606	NumOfSimpleInstruments	N		CHANGE		Number of simple instruments
TBD256 732	NumOfComplexInstruments	N		NEW		
Component Block <InstrmtLegGrp>		N		CHANGE		Number of legs that make up the security
Component Block <SpreadOrBenchmarkCurveData>		N				
Component Block <YieldData>		N				
Component Block <MarketSegmentGrp>		N				Contains all the security details related to listing and trading the security
779	LastUpdateTime	N				Represents the time at which a security was last updated.
2400	EffectiveBusinessDate	N		ADD		Specifies the current business day.
60	TransactTime	N				
	Standard Trailer	Y				

5.9 FIX Message SecurityDefinitionUpdateReport(35=BP)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	SecurityDefinitionUpdateReport
Message Abbreviated Name (for FIXML)	SecDefUpd
Category	SecuritiesReferenceData
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> Change
Message Synopsis	This message is used for reporting updates to a Product Security Master file. Updates could be the result of corporate actions or other business events. Updates may include additions, modifications or deletions.
Message Elaboration	
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	BP
Repository Component ID	95

[Other additional text detailing usage of the message may be entered below this line]

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
Standard Header		Y				MsgType = BP
Component Block <ApplicationSequenceControl>		N				
964	SecurityReportID	N		CHANGE		Used to identify Identifier for the Security-Definition UpdateReport(35=BP) message in a bulk transfer environment. Not used in Request/Response messaging.
320	SecurityReqID	N		CHANGE		Conditionally required when responding to the SecurityDefinitionRequest(35=c) message.
322	SecurityResponseID	N		CHANGE		Used to identify Identifier for the Security DefinitionUpdateReport(35=BP) message.

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
323	SecurityResponse Type	N		CHANGE		Response to the Security Definition Request.
715	ClearingBusiness Date	N				
980	SecurityUpdateAction	N				
292	CorporateAction	N		CHANGE		Identifies the type of Corporate Action
	Component Block <Parties>	N		ADD		Identifies parties relevant for the update of the security.
	Component Block <Instrument>	N				
	Component Block <InstrumentExtension>	N				
	Component Block <UndInstrmtGrp>	N				
	Component Block <RelatedInstrumentGrp>	N		ADD		
15	Currency	N				
TBD257 2	PreviousAdjustedOpen Interest	N		NEW		
TBD257 3	PreviousUnadjustedOpen Interest	N		NEW		
734	PriorSettlPrice	N		ADD		
58	Text	N		CHANGE		Comment, instructions, or other identifying information.
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	Component Block <Stipulations>	N				.
1606	NumOfSimpleInstruments	N		CHANGE		Number of simple instruments
TBD256 2	NumOfComplex Instruments	N		NEW		

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Component Block <InstrmtLegGrp>	N				
	Component Block <SpreadOrBenchmarkCurve Data>	N				
	Component Block <YieldData>	N				
	Component Block <MarketSegmentGrp>	N				Contains all the security details related to listing and trading the security
779	LastUpdateTime	N				Represents the time at which a security was last updated
2400	EffectiveBusinessDate	N		ADD		Specifies the current business day
60	TransactTime	N				
	Standard Trailer	Y				

5.10 FIX Message SecurityStatus(35=f)

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	SecurityStatus
Message Abbreviated Name (for FIXML)	SecStat
Category	SecuritiesReferenceData
Action	__New X Change
Message Synopsis	(no change)
Message Elaboration	(no change)
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	f
Repository Component ID	39

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = f (lowercase)

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Component Block <ApplicationSequenceControl>	N				
324	SecurityStatusReqID	N				
	Component Block <Instrument>	Y		CHANGE		Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages"
	Component Block <InstrumentExtension>	N		CHANGE		Insert here the set of "InstrumentExtension" fields defined in "Common Components of Application Messages"
	Component Block <UndInstrmtGrp>	N		CHANGE		Number of underlyings
	Component Block <InstrmtLegGrp>	N		CHANGE		Required for multileg quotes
15	Currency	N				
1301	MarketID	N				
1300	MarketSegmentID	N				
75	TradeDate	N				Business day that the state change applies to.
336	TradingSessionID	N				
625	TradingSessionSubID	N				
325	UnsolicitedIndicator	N				Set to 'Y' if message is sent as a result of a subscription request not a snapshot request
326	SecurityTradingStatus	N				Identifies the trading status applicable to the transaction.
1655	MarketMakerActivity	N				
TBD244 7	FastMarketIndicator	N		NEW		
1174	SecurityTradingEvent	N				Identifies an event related to the trading status
291	FinancialStatus	N				
292	CorporateAction	N				
327	HaltReason	N		CHANGE		Denotes the reason for the Opening Delay or Trading Halt.
328	InViewOfCommon	N				
329	DueToRelated	N				
1021	MDBookType	N				Used to relay changes in the book type
264	MarketDepth	N		CHANGE		Used to relay changes in Market Depth.
330	BuyVolume	N				

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
331	SellVolume	N				
332	HighPx	N				
333	LowPx	N				
1025	FirstPx	N		CHANGE	Change position of field within message	Represents the price of the first fill of the trading session.
31	LastPx	N		CHANGE		Represents the last price for that security either on a consolidated or an individual participant basis at the time it is disseminated.
Component Block <ClearingPriceParametersGrp>		N		NEW		
2451	SettlPriceDeterminationMethod	N				
60	TransactTime	N		CHANGE		Trade Dissemination Time of status information.
334	Adjustment	N				
1025	FirstPx	N		CHANGE	Change position of field within message	Represents the price of the first fill of the trading session.
TBD244	LinkageHandlingIndicator	N		NEW		
58	Text	N		CHANGE		Comment, instructions, or other identifying information.
354	EncodedTextLen	N		CHANGE		Must be set if EncodedText(355) field is specified and must immediately precede it.
355	EncodedText	N		CHANGE		Encoded (non-ASCII characters) representation of the Text(58) field in the encoded format specified via the MessageEncoding(347) field.
	Standard Trailer	Y				

6 FIX Component Blocks

This proposal suggest extensions to existing components as well as the addition of a number of new components, mostly in the area of trading rule definitions.

6.1 Component Instrument

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	Instrument
Component Abbreviated Name (for FIXML)	Instrmt
Component Type	__ Block Repeating __X__ Block
Category	Common
Action	Change
Component Synopsis	(no change)
Component Elaboration	(no change)
To be finalized by FPL Technical Office	
Repository Component ID	[1003]

Component FIXML Abbreviation: <Instrmt>						
Tag	Field Name	Req'd	ICR	Action	Mapping and Usage Comments	Comments
55	Symbol	N				
65	SymbolSfx	N				
48	SecurityID	N				
22	SecurityIDSource	N				
Component block <SecAltIDGrp>		N				
460	Product	N				
1227	ProductComplex	N				
1151	SecurityGroup	N				
461	CFICode	N				
167	SecurityType	N				
762	SecuritySubType	N				
200	MaturityMonthYear	N				
541	MaturityDate	N				
1079	MaturityTime	N				
966	SettleOnOpenFlag	N				
1049	InstrmtAssignmentMethod	N				
965	SecurityStatus	N				
224	CouponPaymentDate	N				

1449	RestructuringType	N				
1450	Seniority	N				
1451	NotionalPercentageOutstanding	N				
1452	OriginalNotionalPercentageOutstanding	N				
1457	AttachmentPoint	N				
1458	DetachmentPoint	N				
1739	ObligationType	N				
1938	AssetClass	N				
1939	AssetSubClass	N				
1940	AssetType	N				
Component block <SecondaryAssetGrp>		N				
1941	SwapClass	N				
1575	SwapSubClass					
1942	NthToDefault	N				
1943	MthToDefault	N				
1944	SettledEntityMatrixSource	N				
1945	SettledEntityMatrixPublicationDate	N				
1946	CouponType	N				
1947	TotalIssuedAmount	N				
1948	CouponFrequencyPeriod	N				
1949	CouponFrequencyUnit	N				
1950	CouponDayCount	N				
1951	ConvertibleBondEquityID	N				
1952	ConvertibleBondEquityIDSource	N				
1953	ContractPriceRefMonth	N				
1954	LienSeniority	N				
1955	LoanFacility	N				
1956	ReferenceEntityType	N				
1957	IndexSeries	N				
1958	IndexAnnexVersion	N				
1959	IndexAnnexDate	N				
1960	IndexAnnexSource	N				
1577	SettlRateIndex	N				
1580	SettlRateIndexLocation	N				
1581	OptionExpirationDesc	N				
1678	EncodedOptionExpirationDescLen	N				Must be set if EncodedOptionExpirationDesc(1697) field is specified and must immediately

						precede it.
1697	Encoded OptionExpirationDesc	N				Encoded (non-ASCII characters) representation of the OptionExpirationDesc(1581) field in the encoded format specified via the MessageEncoding(347) field.
225	IssueDate	N				
228	Factor	N				
255	CreditRating	N				
543	InstrRegistry	N				
470	CountryOfIssue	N				
471	StateOrProvinceOfIssue	N				
472	LocaleOfIssue	N				
202	StrikePrice	N				
FBD2 578	OrigStrikePrice	N		NEW		
FBD2 577	StrikePricePrecision	N		NEW		
947	StrikeCurrency	N				
967	StrikeMultiplier	N				
968	StrikeValue	N				
1698	StrikeUnitOfMeasure	N				
1866	StrikeIndex	N				
2000	StrikeIndexSpread	N				
1478	StrikePriceDeterminationMethod	N				
1479	StrikePriceBoundaryMethod	N				
1480	StrikePriceBoundaryPrecision	N				
1481	UnderlyingPriceDeterminationMethod	N				
206	OptAttribute	N				
231	ContractMultiplier	N				
1435	ContractMultiplierUnit	N				
1439	FlowScheduleType	N				
969	MinPriceIncrement	N				
1146	MinPriceIncrementAmount	N				
996	UnitOfMeasure	N				
1147	UnitOfMeasureQty	N				
1716	UnitOfMeasureCurrency	N				
1191	PriceUnitOfMeasure	N				
1192	PriceUnitOfMeasureQty	N				
1717	PriceUnitOfMeasureCurrency	N				

1193	SettlMethod	N		CHANGE		Conditionally required if SettlSubMethod(#bd2579) is specified.
FBD2 579	SettlSubMethod	N		NEW		
1194	ExerciseStyle	N				
1482	OptPayoutType	N				
1195	OptPayoutAmount	N				
1196	PriceQuoteMethod	N				
1197	ValuationMethod	N				
2002	ValuationSource	N				
2140	ValuationReferenceModel	N				
1524	PriceQuoteCurrency	N				
1198	ListMethod	N				
1199	CapPrice	N				
1200	FloorPrice	N				
201	PutOrCall	N				
1244	FlexibleIndicator	N				
1242	FlexProductEligibilityIndicator	N				
FBD2 575	BlockTradeEligibilityIndicator	N		NEW		
FBD2 574	LowExercisePriceOptionIndicator	N		NEW		
997	TimeUnit	N				
223	CouponRate	N				
207	SecurityExchange	N				
970	PositionLimit	N				
971	NTPositionLimit	N				
106	Issuer	N				
348	EncodedIssuerLen	N				
349	EncodedIssuer	N				
107	SecurityDesc	N				
350	EncodedSecurityDescLen	N				
351	EncodedSecurityDesc	N				
Component block <SecurityXML>		N				
691	Pool	N				
667	ContractSettlMonth	N				
875	CPPProgram	N				
876	CPRegType	N				
Component block <EvntGrp>		N				
873	DatedDate	N				
874	InterestAccrualDate	N				
Component block		N		Change		Used to identify the parties

<InstrumentParties>				e		listing-related to a specific instrument.
1687	ShortSaleRestriction	N				
Component block <ComplexEvents>		N				
1787	RefTickTableID	N				
2141	StrategyType	N				
2142	CommonPricingIndicator	N				
2143	SettlDisruptionProvision	N				
2144	InstrumentRoundingDirection	N				
2145	InstrumentRoundingPrecision	N				
FBD2 576	InstrumentPricePrecision	N		NEW		
Component block <DateAdjustment>		N				
Component block <PricingDateTime>		N				
Component block <AssetAttributeGrp>		N				
Component block <MarketDisruption>		N				
Component block <OptionExercise>		N				
Component block <StreamGrp>		N				
Component block <ProvisionGrp>		N				
Component block <AdditionalTermGrp>		N				
Component block <ProtectionTermGrp>		N				
Component block <CashSettlTermGrp>		N				
Component block <PhysicalSettlTermGrp>		N				
</Instrmt>						

6.2 Component BaseTradingRules

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	BaseTradingRules
Component Abbreviated Name (for FIXML)	BaseTrdgRules
Component Type	___ Block Repeating _X_ Block
Category	Common
Action	__New X Change
Component Synopsis	Trading rules that are applicable to a market, market segment or individual security independent of a trading session.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	2131

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <BaseTrdgRule>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
Component Block	<TickRules>	N		CHANGE		This block specifies the rules for determining how a security ticks, i.e. the price increments at which it can be quoted and traded, depending on the current price of the security. Specifies price tick rules for the security.
Component Block	<LotTypeRules>	N				Specifies the lot types that are valid for trading.
Component Block	<PriceLimits>	N				Specifies the price limits that are valid for trading.
Component Block	<PriceRangeRuleGrp>	N		NEW		Specifies the valid price range tables for trading.
Component Block	<QuoteSizeRuleGrp>	N		NEW		Specifies the valid quote sizes for trading.
Component Block	<FlexProductEligibilityGrp>	N		NEW		Specifies the eligibility indicators for the creation of flexible securities.

Component FIXML Abbreviation: <BaseTrdgRule>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
827	ExpirationCycle	N				
1786	TradeVolType	N		CHANGE		Defines the unit in which MinTradeVol(562) and MaxTradeVol(1140) express order quantity.
562	MinTradeVol	N		CHANGE		The minimum order quantity that can be submitted for an order.
1140	MaxTradeVol	N		CHANGE		The maximum order quantity that can be submitted for a security. For listed derivatives this indicates the minimum quantity necessary for an order or trade to qualify as a block trade.
1143	MaxPriceVariation	N		CHANGE		The maximum price variation of an execution from one event to the next for a given security. Expressed in absolute price terms.
1144	ImpliedMarketIndicator	N				
1245	TradingCurrency	N		CHANGE		Used when the trading currency can differ from the price currency.
561	RoundLot	N		CHANGE		Trading lot size of security.

Component FIXML Abbreviation: <BaseTrdgRule>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
1377	MultilegModel	N		CHANGE		Used for multileg security only. Defines whether the security is pre-defined or user-defined. Not that value = 2 (User-defined, Non-Securitized, Multileg) does not apply for Securities.
1378	MultilegPriceMethod	N		CHANGE		Used for multileg security only. Defines the method used when applying the multileg price to the legs.
423	PriceType	N		CHANGE		Defines the default Price Type used for trading.
TBD2557	FastMarketPercentage	N		NEW		Can be used as a generic parameter factor to be applied to other base trading rules during a fast market, e.g. to widen price or size ranges by the specified percentage factor.
TBD2559	QuoteSideIndicator	N		NEW		
</ BaseTrdgRule >						

6.3 Component MarketDataFeedTypes

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	MarketDataFeedTypes
Component Abbreviated Name (for FIXML)	MDFeedTypes
Component Type	<input checked="" type="checkbox"/> X <input type="checkbox"/> Block Repeating <input type="checkbox"/> Block
Category	Common
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> X Change
Component Synopsis	The MarketDataFeedTypes component is used to specify the different available feed types and sub-types, and additional market data feed related attributes, such as the market depth of the specified feed type. List of available market data feeds and sub-feeds.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	2123

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <MDFeedTypes>							
Tag	Field Name		Req'd	IC R	Action	Mappings and Usage Comments	Comments
1141	NoMDFeedTypes		N		CHANGE		The number of feed types and corresponding book depths associated with a security
→	1022	MDFeedType	N		CHANGE		Required if NoMDFeedTypes(1141) > 0. Describes a class of service for a given data feed.

Component FIXML Abbreviation: <MDFeedTyps>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
→	1683	MDSUBFeed Type	N			
→	264	MarketDepth	N			Specifies the depth of book (or levels of market depth) associated with a particular feed type.
→	FBD2 563	MarketDepth TimeInterval	N	NEW		Conditionally required when MarketDepthTimeIntervalUnit(tbd)MarketDepthTimeIntervalUnit(2564) is specified. Can be used for low bandwidth feeds.
→	FBD2 564	MarketDepth TimeInterval Unit	N	NEW		Conditionally required when MarketDataTimeInterval(tbd)2563 is specified.
→	FBD2 565	MDRecovery TimeInterval	N	NEW		Conditionally required when MDRecoveryTimeIntervalUnit(tbd)2566 is specified. Can be used for cyclical feeds.
→	FBD2 566	MDRecovery TimeInterval Unit	N	NEW		Conditionally required when MDRecoveryTimeInterval(tbd)2565 is specified.
→	1021	MDBookType	N			Describes the type of book for which the feed is intended. Can be used when multiple feeds are provided over the same connection
→	1173	— MDS SubBook Type	N	ADD		

Component FIXML Abbreviation: <MDFeedTyps>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
→	TBD2 567	MDPrimaryFeedLineIDPrimaryServiceLocationID	N		NEW	
→	TBD2 568	MDPrimaryFeedLineSubIDSecondaryServiceLocationID	N		NEW	
	TBD	MDSecondaryFeedLineID			EW	
	TBD	MDSecondaryFeedLineSubID			EW	
</MDFeedTyps>						

6.4 Component MatchRules

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	MatchRules
Component Abbreviated Name (for FIXML)	MtchRules
Component Type	_X_ Block Repeating ___ Block
Category	Common
Action	__New X Change
Component Synopsis	The MatchRules component is used to specify the details of order matching rules for specified product group or complex, for example, list of available matching algorithms.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	2125

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <MtchRules>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
<u>1235</u> 1141	NoMatchRules	N		CHANGE		Number of match rules
→	1142	MatchAlgorithm	N	CHANGE		Required if <u>NoMatchRules(1235141) > 0</u> . if The type of algorithm used to match orders in a specific security on an electronic trading platform. Possible values are FIFO, Allocation, Pro-rata, Lead Market Maker, Currency Calendar
→	574	MatchType	N	CHANGE		The point in the matching process at which this trade was matched.
→	FBD2 <u>569</u>	MatchRuleProductComplex	N	NEW		Can be used to limit match rule to specific product suite.
→	FBD2 <u>570</u>	CustomerPriorityIndicator	N	NEW		Can be used to give customer orders priority for the given matching algorithm.
</MtchRules>						

6.5 Component TickRules

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	TickRules
Component Abbreviated Name (for FIXML)	TickRules
Component Type	<input checked="" type="checkbox"/> X Block Repeating <input type="checkbox"/> Block
Category	Common
Action	<input type="checkbox"/> New <input checked="" type="checkbox"/> X Change
Component Synopsis	The TickRules component specifies the rules for determining how a security ticks, i.e. the price increments which it can be quoted, traded, and for certain cases settled, depending on the current price of the security.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	2118

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <TickRules>						
Tag	Field Name	Req'd	IC R	Action	Mappings and Usage Comments	Comments
120511 41	NoTickRules	N		Change		Number of tick rules
→	1206 StartTickPrice Range	N				Required if NoTickRules(1205) > 0.
→	1207 EndTickPrice Range	N				
→	BD TickRule ProductComplex	N		W	NE	Can be used to limit tick rule to specific product suite.

Component FIXML Abbreviation: <TickRules>							
Tag	Field Name		Req'd	IC R	Action	Mappings and Usage Comments	Comments
→	1208	TickIncrement	N				
→	1209	TickRuleType	N				
→	TBD2571	TickRuleProductComplex	N		NEW		Can be used to limit tick rule to specific product suite.
→	1830	SettlePriceIncrement	N				
→	1831	SettlePriceSecondaryIncrement	N				
</TickRules>							

6.6 Component AuctionTypeRuleGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	AuctionTypeRuleGrp
Component Abbreviated Name (for FIXML)	AuctTypRule
Component Type	<input type="checkbox"/> X <input type="checkbox"/> Block Repeating <input type="checkbox"/> Block
Category	Common
Action	<input checked="" type="checkbox"/> New <input type="checkbox"/> Change
Component Synopsis	The AuctionTypeRuleGrp component is used to specify the auction rule applicable for a given product group or complex, for example. List of available auction order types.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	TBD2253

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <AuctTypRule>						
Tag	Field Name		Req'd	ICR	Action	Mappings and Usage Comments
TBD254 8	NoAuctionTypeRules		N		NEW	Number of auction rule entries. This block specifies the available auction order types.
→	1803	AuctionType	N		ADD	Type of auction order. Required if NoAuctionTypeRules(TBD254 8) > 0.
→	TBD254 9	AuctionTypeProduct Complex	N		NEW	Can be used to limit auction order type to specific product suite. Use multiple entries with the same AuctionType(1803) if multiple but not all product suites are supported.
</AuctTypRule>						

6.7 Component FlexProductEligibilityGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	FlexProductEligibilityGrp
Component Abbreviated Name (for FIXML)	FlexProdElig
Component Type	_X_ Block Repeating ___ Block
Category	Common
Action	X New ___ Change
Component Synopsis	<u>The FlexProductEligibilityGrp component is used to specify whether securities within a product group or complex are eligible for creating flexible securities. List of indicators to create flexible securities for different suites of products.</u>
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	TBD2254

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <FlexProdElig>						
Tag	Field Name		Req'd	ICR	Action	Mappings and Usage Comments
TBD2560	NoFlexProductEligibilities		N		NEW	Number of eligibility indicators.
→	1242	FlexProductEligibilityIndicator	N		ADD	Required if NoFlexProductEligibilities (TBD2560) > 0.
→	TBD2561	FlexProductEligibilityComplex	N		NEW	Required if NoFlexProductEligibilities(2560) > 0. Used to specify a pProduct suite related to an eligibility indicator. Required if NoFlexProductEligibilities (TBD2560) > 1.
</FlexProdElig>						

6.8 Component PriceRangeRuleGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	PriceRangeRuleGrp
Component Abbreviated Name (for FIXML)	PxRngRule
Component Type	<input type="checkbox"/> X <input type="checkbox"/> Block Repeating <input type="checkbox"/> ___ Block
Category	Common
Action	<input checked="" type="checkbox"/> X <input type="checkbox"/> New <input type="checkbox"/> ___ Change
Component Synopsis	List of The PriceRangeRulesGrp component is used to specify the price range rules for a given product group or complex, available price ranges applicable to different areas of functionality, e.g. quote spreads.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	

Repository Component ID	TBD2255
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[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <PxRngRule>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
TBD25 50	NoPriceRangeRules	N		NEW		Number of price range rule entries. This block specifies valid price ranges applicable to quotes or market orders.
→	TBD25 51	StartPriceRange	N		NEW	Required if NoPriceRangeRules(TBD2550) > 0.
→	TBD25 52	EndPriceRange	N		NEW	
→	TBD25 53	PriceRangeValue	N		NEW	Mutually exclusive with PriceRangePercentage(TBD)PriceRangePercentage(2554).
→	TBD25 54	PriceRangePercentage	N		NEW	Mutually exclusive with PriceRangeValue(TBD)PriceRangeValue(2553).
→	TBD25 56	PriceRangeRuleID	N		NEW	Allows price range rule to be referenced via an ID. Can be used to provide an identifier so that the rule can be reference via the ID elsewhere. s do not need to be explicitly enumerated.
→	TBD25 55	PriceRangeProduct-Complex	N		NEW	Can be used to limit price range to specific product suite.
</PxRngRule>						

6.9 Component QuoteSizeRuleGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	QuoteSizeRuleGrp
Component Abbreviated Name (for FIXML)	QteSzRule
Component Type	<input checked="" type="checkbox"/> X Block Repeating <input type="checkbox"/> Block
Category	Common
Action	<input checked="" type="checkbox"/> X New <input type="checkbox"/> Change
Component Synopsis	Rules for minimum bid and offer sizes of quotes.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	TBD2256

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <QteSzRule>							
Tag	Field Name		Req'd	ICR	Action	Mappings and Usage Comments	Comments
TBD2558	NoQuoteSizeRules		N		NEW		Number of quote size rules.
→	647	MinBidSize	N		ADD		Required if NoQuoteSizeRules(TBD2558) > 0.
→	648	MinOfferSize	N		ADD		Required if NoQuoteSizeRules(TBD2558) > 0.
→	TBD2447	FastMarketIndicator	N		ADD		Used to distinguish-define the sizes applicable for fast market conditions
</QteSzRule>							

6.10 Component RelatedMarketSegmentGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	RelatedMarketSegmentGrp
Component Abbreviated Name (for FIXML)	ReltdMktSeg
Component Type	<input checked="" type="checkbox"/> _X_ Block Repeating <input type="checkbox"/> _ Block
Category	Common
Action	<input checked="" type="checkbox"/> New <input type="checkbox"/> _ Change
Component Synopsis	This component is used to identify market segments that are related to each other for a business purpose. This component should not be used in lieu of available explicit FIX fields that denote specific semantic relationships (e.g. ParentMktSegmID(1325) for parent market segments), but rather should be used when no such fields exist.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	TBD2257

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <ReltdMktSeg>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
TBD2545	NoRelatedMarketSegments	N		NEW		Number of market segments.
→	TBD2546	RelatedMarketSegmentID	N		NEW	Required if NoRelatedMarketSegments (TBD2545) > 0.
→	TBD2547	MarketSegmentRelationship	N		NEW	
</ReltdMktSeg>						

6.11 Component ClearingPriceParametersGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	ClearingPriceParametersGrp
Component Abbreviated Name (for FIXML)	ClrPxPrm
Component Type	<input checked="" type="checkbox"/> _X_ Block Repeating <input type="checkbox"/> ___ Block
Category	Common
Action	<input checked="" type="checkbox"/> X New <input type="checkbox"/> ___ Change
Component Synopsis	This component is used convey parameters that are relevant for the calculation of clearing prices that are different from the trading prices due to the nature of the product, e.g. variance futures.
Component Elaboration	[enter the component elaboration here]
To be finalized by FPL Technical Office	
Repository Component ID	FBD2258

[Other additional text detailing usage of the component may be entered below this line]

Component FIXML Abbreviation: <ClrPxPrm>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
FBD2580	NoClearingPriceParameters	N		NEW		Number of parameter sets.
→	FBD2581 <u>BusinessDayType</u>	N		NEW		Required if NoClearingPriceParameters(FBD2580) > 0. Use to identify the relative business day to which the parameters apply.
→	FBD2582 <u>ClearingPriceOffset</u>	N		NEW		
→	FBD2583 <u>VegaMultiplier</u>	N		NEW		
→	FBD2584 <u>AnnualTradingBusinessDays</u>	N		NEW		

Component FIXML Abbreviation: <ClrPxPrm>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
→	<u>FBD2585</u>	<u>TotalTradingBusinessDays</u>	N		NEW	
→	<u>FBD2586</u>	<u>TradingBusinessDays</u>	N		NEW	
→	<u>FBD2588</u>	<u>StandardVariance</u>	N		NEW	
→	<u>FBD2587</u>	<u>RealizedVariance</u>	N		NEW	
→	<u>FBD2589</u>	<u>RelatedClosePrice</u>	N		NEW	
→	<u>FBD1190</u>	<u>InterestRateRiskFreeRate</u>	N		NEW ADD	Interest rate until the instrument expires and used to calculate DiscountFactor(1592).
→	<u>FBD2590</u>	<u>OvernightInterestRate</u>	N		NEW	Used to calculate <u>ARMVMAccumulatedReturnModifiedVariationMargin</u> (<u>FBD2591</u>).
→	<u>FBD2591</u>	<u>ARMVMAccumulatedReturnModifiedVariationMargin</u>	N		NEW	
→	<u>1592</u>	<u>DiscountFactor</u>	N		ADD	
→	<u>1188</u>	<u>Volatility</u>	N		ADD	
→	<u>7302528</u>	<u>ClearingSettlPrice</u>	N		ADD NEW	
→	<u>FBD2592</u>	<u>CalculationMethod</u>	N		NEW	Use to indicate whether parameters were manually set or automatically calculated.
</ClrPxPrm>						

6.12 Component InstrumentScope

<u>To be completed at the time of the proposal – all information provided will be included in the repository</u>	
<u>Component Name</u>	<u>InstrumentScopeGrp</u>
<u>Component Abbreviated Name (for FIXML)</u>	<u>InstrmtScope</u>
<u>Component Type</u>	<u>X</u> <u>Block Repeating</u> <u>Block</u>
<u>Category</u>	Common – change category to Common
<u>Action</u>	<u>New</u> X Change
<u>Component Synopsis</u>	<u>Repeating group of InstrumentScope Components. Used to specify the instruments to which a request applies.</u>
<u>Component Elaboration</u>	
<u>To be finalized by FPL Technical Office</u>	
<u>Repository Component ID</u>	<u>2178</u>

[Other additional text detailing usage of the component may be entered below this line]

The only change needed is to change the component category to Common.

7 Category Changes

<u>To be completed at the time of the proposal – all information provided is stored in the repository</u>	
<u>Category Name</u>	<u>[enter the category name here]</u>
<u>Section</u>	<u>__PreTrade</u> <u>__Trade</u> <u>__PostTrade</u> <u>__Infrastructure</u>
<u>Category Synopsis</u>	<u>[enter the category synopsis here]</u>
<u>Category Elaboration</u>	<u>[enter the category elaboration here]</u>
<u>To be finalized by FPL Technical Office</u>	
<u>Category Filename</u>	

8 FIX Specification Errata

This section includes errata from prior versions and extension packs (EP) that are being implemented as corrections as part of this extension pack.

<u>Jira Item</u>	<u>Affected EP</u>	<u>Synopsis of change.</u>
SPEC-1746	EP126	Correct inadvertent change of the field reference of QuoteID(117) in the QuoteCancel(35=Z) message from "Required" to "Not Required".
SPEC-1879	EP126	Corrected the enum description for QuoteStatus(297) = 15 (Cancelled due to crossed market).
SPEC-1726	EP105	Corrected the field reference of NoPartyDetailDubIDs(1694) in the PartyDetailSubGrp(ID=2189) component from "Required" to "Not Required".
SPEC-2059	EP92, FIX.5.0SP2, and EP169	Corrected the datatype of ComplexEventStartDate(1492), ComplexEventEndDate(1493), LegComplexEventStartDate(2251), LegComplexEventEndDate(2252), UnderlyingComplexEventStartDate(2054) and UnderlyingComplexEventEndDate(2055) to UTCDateOnly (from UTCTimestamp).

Appendix A - Data Dictionary

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
Administrative Market Data Message						
2528	ClearingSettlPrice	NEW	Price	Clearing settlement price.	SetPx	Add to component ClearingPriceParametersGrp (per Jira SPEC-2058).
FBD2535	MDReportEvent	NEW	Int	<p>Technical event within market data feed.</p> <p>Valid Values:</p> <p>1 = Start of instrument reference data</p> <p>2 = End of instrument reference data</p> <p>3 = Start of off-market trades</p> <p>4 = End of off-market trades</p> <p>5 = Start of order book trades</p> <p>6 = End of order book trades</p> <p>7 = Start of open interest</p> <p>8 = End of open interest</p>	MDRptEvent	Add to message MarketDataReport

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				9 = Start of settlement prices 10 = End of settlement prices 11 = Start of statistics reference data 12 = End of statistics reference data 13 = Start of statistics 14 = End of statistics		
TBD25 36	MDReportCount	NEW	int	Number of reference and market data messages in between two MarketDataReport (35MsgType=TBD25) messages.	MDRptCnt	Add to message MarketDataReport
TBD25 37	TotNoMarketSegmentReports	NEW	int	Total number of reports related to market segments.	TotNoMktSegRpts	Add to message MarketDataReport
TBD25 38	TotNoInstrumentReports	NEW	int	Total number of reports related to instruments.	TotNoInstrmtRpts	Add to message MarketDataReport
TBD25 39	TotNoPartyDetailReports	NEW	int	Total number of reports related to party detail information.	TotNoPtyDetlRpts	Add to message MarketDataReport
TBD25 40	TotNoEntitlementReports	NEW	int	Total number of reports related to party entitlement information.	TotNoEntlmntRpts	Add to message MarketDataReport
TBD25 41	TotNoRiskLimitReports	NEW	int	Total number of reports related to party risk limit information.	TotNoRiskLmtRpts	Add to message MarketDataReport
Market Segment Status						

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 42	MarketSegmentStat us	NEW	Int	<p>Status of market segment.</p> <p>Valid Values:</p> <p>1=Active</p> <p>[Elaboration: Market segment is active, i.e. trading is possible.]</p> <p>2=Inactive</p> <p>[Elaboration: Market segment has previously been active and is now inactive.]</p> <p>3=Published</p> <p>[Elaboration: Market segment information is provided prior to its first activation.]</p>	MktSegStat	Add to messages MarketDefinition MarketDefinitionUpdateReport
Market Segment Pools						

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
EBD25 43	MarketSegmentType e	New	int	Used to classify the type of market segment. Valid values: 1 = Pool [Elaboration: Used when multiple market segments are being grouped or pooled together.] 2 = Retail 3 = Wholesale	MktSegTyp	Add to messages MarketDefinition MarketDefinitionUpdateReport

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 44	MarketSegmentPoolSubType	NEW	intString Reserved 100Plus	Used to further categorize market segments within a MarketSegmentType(tbd)MarketSegmentType(2543). Specifies the purpose for which two or more market segments have been joined to a market segment pool. Valid value: 1 = Inter-product spread [Elaboration: Complex instruments which consists of leg instruments from or different products, e.g. a location spread which includeconsists country-specific products in each leg instrument.]	MktSegPoolSubType	Add to messages MarketDefinition MarketDefinitionUpdateReport
TBD25 45	NoRelatedMarketSegments	NEW	NumInGroup	Number of related market segments.		Add to component <RelatedMarketSegmentGrp>
TBD25 46	RelatedMarketSegmentID	NEW	StringInt	Identifies a related market segment.	ReltdMktSegID	Add to component <RelatedMarketSegmentGrp>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 47	MarketSegmentRelationship	NEW	Int, Reserved 100Plus	Type of relationship between two or more market segments. Valid values: 1=Market segment pool Valid values: 1=Market segment pool member [Elaboration: Market segments represent constituents of the pool identified on the root level of the message.] 2=Retail segment [Elaboration: Retail segment related to wholesale segment identified on the root level of the message.] 3=Wholesale segment [Elaboration: Wholesale segment related to retail segment identified on the root level of the message.]	MktSegRlntshp	Add to component <RelatedMarketSegmentGrp>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
Auction Rules						
TBD25 48	NoAuctionTypeRules	NEW	NumInGroup	Number of auction order types.		Add to component <AuctionTypeRuleGrp>
TBD25 49	AuctionTypeProductComplex	NEW	IntString	Identifies an entire suite of products for which the auction order type rule applies in the context of trading rules related to auction order types.	AuctTypProdComplexRuleID	Add to component <AuctionTypeRuleGrp>
Price Range Tables						
TBD25 50	NoPriceRangeRules	NEW	NumInGroup	Number of rules related to price ranges.		Add to component <PriceRangeRuleGrp>
TBD25 51	StartPriceRange	NEW	Price	Lower boundary for price range.	StartPxRng	Add to component <PriceRangeRuleGrp>
TBD25 52	EndPriceRange	NEW	Price	Upper boundary for price range.	EndPxRng	Add to component <PriceRangeRuleGrp>
TBD25 53	PriceRangeValue	NEW	Price	Maximum range expressed as absolute value.	PxRngValue	Add to component <PriceRangeRuleGrp>
TBD25 54	PriceRangePercentage	NEW	Percentage	Maximum range expressed as percentage.	PxRngPctage	Add to component <PriceRangeRuleGrp>
TBD25 55	PriceRangeProductComplex	NEW	String	Identifies an entire suite of products in the context of trading rules related to price ranges.	PxRngProdComplex	Add to component <PriceRangeRuleGrp>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 56	PriceRangeRuleID	NEW	StringInt	Identifier for a price range rule related to a price range.	PxRngRuleID	Add to component <PriceRangeRuleGrp>
TBD25 57	FastMarketPercentage	NEW	Percentage	The Percentage factor to be applied to trading rule parameters (e.g. price ranges, size ranges, etc.) when in case of a fast market conditions are applicable.	FastMktPctage	Add to messages MarketDefinition MarketDefinitionUpdateReport
Quote Sizes and Single-Sidedness						
TBD25 58	NoQuoteSizeRules	NEW	NumInGroup	Number of rules related to quote sizes.		Add to component <QuoteSizeRuleGrp>
TBD	FastMarketIndicator	NEW	Boolean	Indicates whether the market is in if a fast market state is present. Valid Values: 0-N = Market is not in a fast market stateNo 1-Y = Market is in a fast market stateYes	FastMktInd	Add to message <u>SecurityStatus</u> Add to component <QuoteSizeRuleGrp>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 59	QuoteSideIndicator	NEW	Boolean	Indicates whether single sided quotes are allowed. Valid Values: 0N = No single sided quotes are not allowed 1Y = Single sided quotes are allowed	QuotSideInd	Add to component <BaseTradingRules>
Flexible Securities Support						
TBD25 60	NoFlexProductEligibilities	NEW	NumInGroup	Number of eligibility indicators for the creation of flexible securities.	NoFlexProdElig	Add to component <FlexProductEligibilityGrp>
TBD25 61	FlexProductEligibilityComplex	NEW	String	Identifies an entire suite of products in the context of trading rules related to which are eligible eligibility indicators for the creation of flexible securities.	FlexProdEligibilityCmplx	Add to component <FlexProductEligibilityGrp>
TBD25 62	NumOfComplexInstruments	NEW	Int	Represents the total number of multileg securities or user defined securities that make up the security. Number of multileg securities. Can be used to convey the current number of user defined securities if there is an upper limit.	NumCmplxInstrument	Add to messages SecurityDefinition SecurityDefinitionUpdateReport
Market Data Feed Types						
TBD25 63	MarketDepthTimeInterval	NEW	Int	Specifies the time interval used for netting market data in a price depth feed.	MktDepthTimeInterval	Add to component <MarketDataFeedTypes>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 64	MarketDepthTimeIntervalUnit	NEW	Int	The time unit associated with the time interval of the netting of market data in a price depth feed. [Uses enums from OrderDelayUnit(1429)]	MktDepthTmIntvUnit	Add to component <MarketDataFeedTypes>
TBD25 65	MDRecoveryTimeInterval	NEW	int	Specifies the time interval between two repetitions of the same market data for cyclic recovery feeds.	MDRcvryTmIntv	Add to component <MarketDataFeedTypes>
TBD25 66	MDRecoveryTimeIntervalUnit	NEW	Int	The time unit associated with the time interval between two cycles of the same market data in cyclic data recovery feeds. [Uses enums from OrderDelayUnit(1429)]	MDRcvryTmIntvUnit	Add to component <MarketDataFeedTypes>
TBD25 67	PrimaryServiceLocationIDMDPrimaryFeedLineID	NEW	StringInt	Primary source of market data, e.g. IP address-service location identifier.	SvcLctnID1MDFeedLineID	Add to component <MarketDataFeedTypes>
TBD25 68	SecondaryServiceLocationIDMDPrimaryFeedLineSubID	NEW	StringInt	Secondary or alternate service location identifier. Additional information for primary source defined by MDPrimaryFeedLineID (TBD), e.g. port number.	SvcLctnID2MDFeedLineSubID	Add to component <MarketDataFeedTypes>
TBD	MDSecondaryFeedLineID	NEW	Int	Secondary source of market data, e.g. IP address.	MDFeedLineID2	Add to component <MarketDataFeedTypes>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD	MDSecondaryFeedLineSubID	NEW	int	Additional information for secondary source defined by MDSecondaryFeedLineID (TBD), e.g. port number.	MDFeedLineSubID2	Add to component <MarketDataFeedTypes>
Matching Rules						
TBD2569	MatchRuleProductComplex	NEW	String	Identifies an entire suite of products for which the matching rule applies in the context of trading rules related to matching.	MtchRuleProductComplex	Add to component <MatchRules>
TBD2570	CustomerPriorityIndicator	NEW	Int	Specifies the kind of priority given to customers. Valid Values: 0 = No priority 1 = Unconditional priority	CustPriorityIndicator	Add to component <MatchRules>
Tick Rules						
TBD2571	TickRuleProductComplex	NEW	String	Identifies an entire suite of products for which the price tick rule applies in the context of trading rules related to tick rules.	TickRuleProductComplex	Add to component <TickRules>
Business Date						

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
2400	<u>Effective</u> BusinessDate	ADD	LocalMkt Date	Specifies an explicit business date for associated reference data or transaction. Used when an implicit date is not sufficiently specific. Used to indicate the <u>effective</u> applicable business day.	<u>Efctv</u> BizDt	Add to messages MarketDefinition MarketDefinitionUpdateReport SecurityDefinition SecurityDefinitionUpdateReport
Related Instruments						
1648	RelatedInstrumentType	CHANGE	int	The type of instrument relationship Valid Values: 1 = "hedges for" instrument 2 = Underlier 3 = Equity equivalent 4 = Nearest exchange-traded contract <u>FBD_5 = Retail equivalent of wholesale instrument</u> <u>[Elaboration: Can be used for integrated retail/wholesale trading.]</u>	InstrmtTyp	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
Previous Business Day Reference Data						
TBD25 72	PreviousAdjustedOpenInterest	NEW	Amt	Previous day's adjusted open interest.	PrevAdjOpenInt	Add to messages SecurityDefinition SecurityDefinitionUpdateReport
TBD25 73	PreviousUnadjustedOpenInterest	NEW	Amt	Previous day's unadjusted open interest.	PrevUnadjOpenInt	Add to messages SecurityDefinition SecurityDefinitionUpdateReport
734	PriorSettlPrice	ADD	Price	Previous settlement price	PriSetPx	Add to messages SecurityDefinition SecurityDefinitionUpdateReport
Instrument Attribute Enhancements						
TBD25 74	LowExercisePriceOptionIndicator	NEW	Boolean	Indicates if a given option instrument permits low exercise prices (LEPO).	LowExerPxOptionInd	Add to component <Instrument>
TBD25 75	BlockTradeEligibilityIndicator	NEW	Boolean	Indicates if a given instrument is eligible for block trading.	BlckTrdEligibilityInd	Add to component <Instrument>
TBD25 76	InstrumentPricePrecision	NEW	int	Specifies the number of decimal places for instrument prices.	PxPrctn	Add to component <Instrument>
TBD25 77	StrikePricePrecision	NEW	int	Specifies the number of decimal places for exercise price.	StrkPxPrctn	Add to component <Instrument>
TBD25 78	OrigStrikePrice	NEW	Price	Original exercise price, e.g. after corporate action requiring changes.	OrigStrkPx	Add to component <Instrument>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 79	SettlSubMethod	NEW	int, Reserved 100Plus	<p>Describes Specifies a suitable settlement sub-method for a given settlement method defined by SettlMethod(1193).</p> <p>Valid values:</p> <p>1=Shares</p> <p>2=Derivatives</p> <p>3=Payment vs payment</p> <p>4=Notional</p> <p>5=Cascade</p> <p>6=Repurchase</p> <p>99=Other</p>	SettlSubMeth	<p>Add to component</p> <p><Instrument></p>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
1377	MultilegModel	CHANGE	Int	<p>Specifies the type of multileg order.</p> <p>Defines whether the security is pre-defined or user-defined. Note that <u>MultilegModel(1377)=2=(User-defined, Non-Securitized, Multileg)</u> does not apply for Securities.</p> <p>Valid values:</p> <p>0=Predefined Multileg Security</p> <p>1=User-defined Multileg Security</p> <p>2= User-defined, Non-Securitized, Multileg</p>	MLegModel	
Instrument Status Enhancements						
965	SecurityStatus	CHANGE	String	<p>Used for derivatives. Denotes the current state of the Instrument</p> <p>Valid values:</p> <p>1 = Active</p> <p>[Elaboration: Instrument is active, i.e. trading is possible.]</p>	Status	

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				<p>2 = Inactive</p> <p>[Elaboration: Instrument has previously been active and is now no longer traded but has not expired yet. <u>The instrument may become active again.</u>]</p> <p>TBD(3)3 = Active, closing orders only</p> <p>[Elaboration: Instrument is active but only orders closing positions (reducing risk) are allowed.]</p> <p>TBD(4)4 = Expired</p> <p>[Elaboration: Instrument has expired. <u>E.g. An instrument may expire due to reaching maturity or expired based on contract definitions or exchange rules.</u>]</p> <p>TBD(5)5 = Delisted</p> <p>[Elaboration: Instrument has been removed from master securities reference data. <u>Delisting rules varies from exchange to exchange, which may include non-compliance of capitalization, revenue, consecutive minimum closing price. The instrument may become listed again once</u></p>		

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				<p>the instrument is back in compliance. A delisted instrument would not trade on the exchange but it may still be traded over-the-counter (e.g. OTCBB) or on Pink Sheets, or other similar trading service.]</p> <p>FBD(6)6 = Knocked-out</p> <p>[Elaboration: Instrument has breachedbreached a pre-defined price threshold.]</p> <p>FBD(7)7 = Knock-out revoked</p> <p>[Elaboration: Instrument reinstated, i.e. threshold has not been breachedbreached.]</p> <p>FBD(8)8 = Pending Expiry</p> <p>[Elaboration: Instrument is <u>currently still active but will expire after the current business day. For example, a contract that expires intra-day (e.g. at noon time) and is no longer tradeable but will still show up in the current day's order book with related statistics. -awaiting expiry.</u>]</p> <p>FBD(9)9 = Suspended</p>		

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				<p>[Elaboration: Instrument has been temporarily disabled for trading (i.e. halted).]</p> <p>TBD(10)10 = Published</p> <p>[Elaboration: Instrument information is provided prior to its first activation.]</p> <p>TBD(11)11 = Pending Deletion</p> <p>[Elaboration: Instrument is awaiting deletion from security reference data or delisting.]</p>		
Instrument Trading Status Enhancements						
TBD	FastMarketIndicator	ADD	Boolean	<p>Indicates if a fast market state is present.</p> <p>Valid Values: 0 = No 1 = Yes</p>	FastMktInd	<p>Field already created in the context of quote sizes (see above).</p> <p>Add to message SecurityStatus</p>

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
Variance Futures Support						
TBD25 80	NoClearingPriceParameters	NEW	NumInGroup	Number of parameter sets for clearing prices.		Add to component ClearingPriceParametersGrp
40921	BusinessDayConvention	CHANGE	int	The business day convention used for adjusting dates. The value defined here applies to all adjustable dates in the instrument unless specifically overridden. Valid values: 0=Not applicable 1=None (cCurrent dDay) ...	BizDayCnvt	
TBD25 81	BusinessDayType	NEW	int	Relative identification of a business day. [Uses enum values from BusinessDayConvention(40921)]	BizDayTyp	Add to component ClearingPriceParametersGrp
TBD25 82	ClearingPriceOffset	NEW	PriceOffsetfloat	Constant value required for the calculation of the clearing price, e.g. for variance futures.	ClrPxOfst	Add to component ClearingPriceParametersGrp
TBD25 83	VegaMultiplier	NEW	float	Constant value required for the calculation of the clearing quantity, e.g. for variance futures.	VegaMult	Add to component ClearingPriceParametersGrp

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD25 84	AnnualTradingBusinessDays	NEW	int	Number of trading business days in a year.	AnnlTrdgBizDays	Add to component ClearingPriceParametersGrp
TBD25 85	TotalTradingBusinessDays	NEW	int	Number of trading business days over the lifetime of an instrument.	TotTrdgBizDays	Add to component ClearingPriceParametersGrp
TBD25 86	TradingBusinessDays	NEW	int	Number of actual trading business days of an instrument.	TrdgBizDays	Add to component ClearingPriceParametersGrp
TBD25 87	RealizedVariance	NEW	float	Actually or realized variance of an instrument used to calculate settlement prices, e.g. for variance futures.	RealzdVarnc	Add to component ClearingPriceParametersGrp
TBD25 88	StandardVariance	NEW	float	Standard variance (over the lifetime of an instrument) or initial variance used to calculate settlement prices, e.g. for variance futures.	StdVarnc	Add to component ClearingPriceParametersGrp
TBD25 89	RelatedClosePrice	NEW	Price	Closing price of the underlying required to calculate the RealizedVariance(TBD2587).	ReltdClsPx	Add to component ClearingPriceParametersGrp
TBD	InterestRate	NEW	float	Interest rate.	IntRt	Add to component ClearingPriceParametersGrp
TBD25 90	OvernightInterestRate	NEW	float	Overnight interest rate.	OvrNiteIntRt	Add to component ClearingPriceParametersGrp
TBD25 91	AccumulatedReturnModifiedVariationMarginARMVM	NEW	float	Accumulated Return on Modified Variation Margin (is the economic cost of the variation margin from one trading day to the next).	ARMVM	Add to component ClearingPriceParametersGrp

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
73025 92	CalculationMethod	NEW	int	Specifies how the calculation will be made. Identifies the nature of a calculation. Valid values: 0=Automatic (default) 1=Manual	CalcMeth	Add to component ClearingPriceParametersGrp
73025 28	ClearingSettlPrice	NEW ADD	Price	Clearing settlement price	SetPx	Add to component ClearingPriceParametersGrp
1188	Volatility	CHANGE ADD	Float	Annualized Annualized volatility for option model calculations	Vol	Add to component ClearingPriceParametersGrp
1190	RiskFreeRate	ADD	Float	Interest rate. Usually some form of short term rate.	RFR	Add to component ClearingPriceParametersGrp
1592	DiscountFactor	ADD	Float	Used to calculate the present value of an amount to be paid in the future.	DiscFctr	Add to component ClearingPriceParametersGrp
1143	MaxPriceVariation	CHANGE	float	The maximum price variation of an execution from one event to the next for a given security.- Expressed in absolute price terms.	MxPxVar	

Appendix B - Glossary Entries

Term	Definition	Field where used

Appendix C - Abbreviations

Term	Proposed Abbreviation	Proposed Messages, Components, Fields where used
Clearing	Clr	ClearingPriceOffset
Overnight	OvrNite	OvernightInterestRate
Annual	Annl	AnnualTradingBusinessDays

Appendix D - Usage Examples

Price Range Tables (see Chapter 2.5.2)

The following price range table shows an example of an options series with three intervals, two of which have a price range defined by an absolute value and one with a percentage value.

Start of Interval	End of Interval	Absolute Value	Percentage Value
0.00	<1.00	0.05	N/A
1.00	<5.00	N/A	10
5.00	max	0.50	N/A

The absolute or percentage value can then be used to determine a base value for the calculation of different price ranges related to a reference price, depending on the functionality for which they are applied. The mutual exclusivity between the absolute and the percentage value can be expressed as a formula (using zero for N/A): $\langle \text{absolute value} \rangle + \langle \text{reference price} \rangle * \langle \text{percentage value} \rangle / 100$.

The following table shows some examples for the base value calculation using the context of the price range table shown above. Reference prices can be the best bid/offer, trade prices or theoretical prices

such as a minimum or maximum price and can therefore not be statically associated with a rule. The reference price also depends on the side of the order or quote to be validated against.

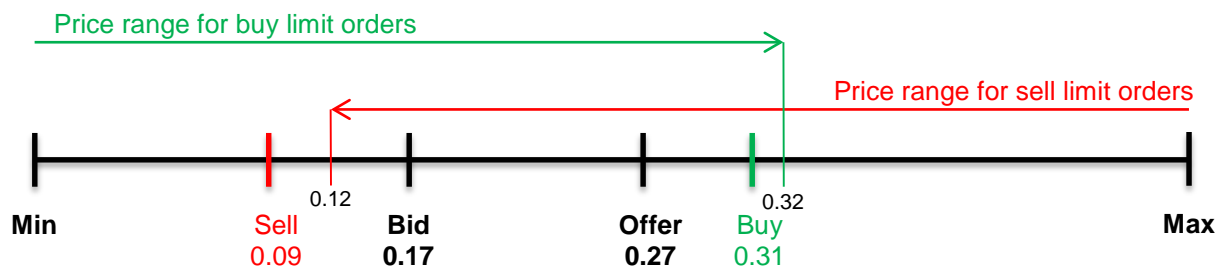
Reference Price	Base Value Calculation	Base Value	Fast Market %	Base Value (Fast Market)
0.27	$0.05 + 0.27 * 0 / 100$	0.05	125	$0.05 * 125\% = 0.0625$
1.00	$0 + 1.00 * 10 / 100$	0.10	125	$0.10 * 125\% = 0.125$
3.50	$0 + 3.50 * 10 / 100$	0.35	125	$0.35 * 125\% = 0.4375$
5.00	$0.50 + 5.00 * 0 / 100$	0.50	125	$0.50 * 125\% = 0.625$
7.80	$0.50 + 7.80 * 0 / 100$	0.50	125	$0.50 * 125\% = 0.625$

The resulting base value can then be used to determine actual price ranges used for validation. These calculations should not be pre-defined by FIX as there may be many different use cases which can be significantly complex and use different kinds of reference prices. Therefore, only a few examples are given here to illustrate the principles. All examples use the parameters shown in the price range table above. Parameters are not limited to a product suite.

Example 1 – Price Reasonability Check

Reject an incoming buy (sell) limit order whenever its limit price exceeds the price of the best sell (buy) order plus (minus) the base value, i.e. valid price range goes from zero to best offer + base value (max to best bid – base value).

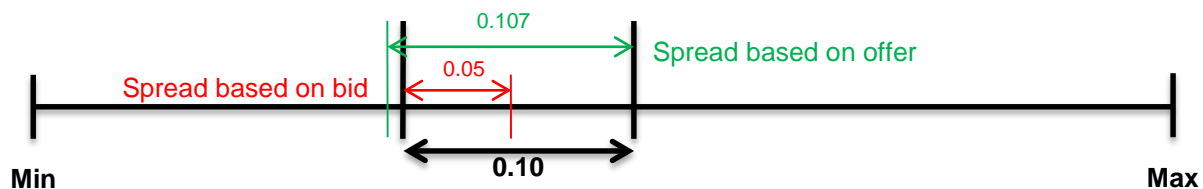
- Incoming buy limit order for 0.31 is validated against the current offer of 0.27 as reference price
- Incoming sell limit order for 0.09 is validated against the current bid of 0.17 as reference price
- Validation of buy limit order for 0.31
 - Incoming price lies within interval from 0 to <1.00 → absolute value 0.05
 - Reference price is 0.27 → valid price range is from 0 to 0.32
 - Buy limit order is accepted
- Validation of sell limit order for 0.09
 - Incoming price lies within interval from 0 to <1.00 → absolute value 0.05
 - Reference price is 0.17 → valid price range is from 0.12 to max
 - Sell limit order is rejected



Example 2 – Maximum Quote Spread for Market Makers

Reject double-sided quotes if the spread between bid and offer price exceeds the base value, i.e. incoming bid and offer prices serve as reference prices to calculate two base values (they differ if bid and offer are in different intervals of the price range table) and two price ranges which start at the bid (offer) price and must not exceed the offer (bid) price when adding (subtracting) the base value.

- Incoming quote of 0.97 – 1.07
- Incoming bid of 0.97 is used to calculate the maximum spread range using the given bid as reference price
 - Bid lies within the interval from 0 to <1.00 → absolute value 0.05
 - Spread is allowed to be 0.05 or less based on the bid
- Incoming offer of 1.07 is used to calculate the maximum spread range using the given offer as reference price
 - Offer lies within the interval from 1.00 to <5.00 → 10% of 1.07 → 0.107
 - Spread is allowed to be 0.107 or less based on the offer
- Validation checks maximum of both spreads → spread up to 0.107
- Incoming quote is accepted as it has a spread of 0.10



Example 3 – Market Order Matching

Reject an incoming buy (sell) market order if it cannot match against resting sell (buy) orders at a trade price calculated from the best bid price plus the base value (best offer price minus base value), i.e. valid price range goes from zero to best bid + base value (max to best offer – base value).

- Incoming buy market order, best resting buy order for 2.24 and best resting sell order for 2.48
- Incoming buy market order is validated against the current best bid of 2.24 as reference price
 - Bid lies within the interval from 1.00 to <5.00 → 10% of 2.24 → 0.224
 - Valid price range to match buy market order is from 0 to 2.464
 - Best sell limit order is slightly outside of currently permitted matching range
 - Buy market order is either rejected or goes as resting order into the book
- Note that incoming sell market orders would have been able to match against the best resting buy limit order ($2.48 - 10\% = 2.232 \leq 2.24$)!

