



Global Fixed Income Subcommittee Pre-Trade Indication Enhancements

November 20, 2014

[Revision 0.3]

Proposal Status: ~~Public Comment~~Approved

For Global Technical Committee Governance Internal Use Only

Submission Date	November 20, 2014	Control Number	<u>EP194</u>
Submission Status	Public Comment <u>Approved</u>	Ratified Date	<u>Dec. 18, 2014</u>
Primary Contact Person	Simon Wiltshire, Etrading Software Ltd.	Release Identifier	<u>5.0 SP3</u>

DISCLAIMER

THE INFORMATION CONTAINED HEREIN AND THE FINANCIAL INFORMATION EXCHANGE PROTOCOL (COLLECTIVELY, THE "FIX PROTOCOL") ARE PROVIDED "AS IS" AND NO PERSON OR ENTITY ASSOCIATED WITH THE FIX PROTOCOL MAKES ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE FIX PROTOCOL (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF) OR ANY OTHER MATTER AND EACH SUCH PERSON AND ENTITY SPECIFICALLY DISCLAIMS ANY WARRANTY OF ORIGINALITY, ACCURACY, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SUCH PERSONS AND ENTITIES DO NOT WARRANT THAT THE FIX PROTOCOL WILL CONFORM TO ANY DESCRIPTION THEREOF OR BE FREE OF ERRORS. THE ENTIRE RISK OF ANY USE OF THE FIX PROTOCOL IS ASSUMED BY THE USER.

NO PERSON OR ENTITY ASSOCIATED WITH THE FIX PROTOCOL SHALL HAVE ANY LIABILITY FOR DAMAGES OF ANY KIND ARISING IN ANY MANNER OUT OF OR IN CONNECTION WITH ANY USER'S USE OF (OR ANY INABILITY TO USE) THE FIX PROTOCOL, WHETHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, LOSS OF DATA, LOSS OF USE, CLAIMS OF THIRD PARTIES OR LOST PROFITS OR REVENUES OR OTHER ECONOMIC LOSS), WHETHER IN TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), CONTRACT OR OTHERWISE, WHETHER OR NOT ANY SUCH PERSON OR ENTITY HAS BEEN ADVISED OF, OR OTHERWISE MIGHT HAVE ANTICIPATED THE POSSIBILITY OF, SUCH DAMAGES.

DRAFT OR NOT RATIFIED PROPOSALS (REFER TO PROPOSAL STATUS AND/OR SUBMISSION STATUS ON COVER PAGE) ARE PROVIDED "AS IS" TO INTERESTED PARTIES FOR DISCUSSION ONLY. PARTIES THAT CHOOSE TO IMPLEMENT THIS DRAFT PROPOSAL DO SO AT THEIR OWN RISK. IT IS A DRAFT DOCUMENT AND MAY BE UPDATED, REPLACED, OR MADE OBSOLETE BY OTHER DOCUMENTS AT ANY TIME. THE FPL GLOBAL TECHNICAL COMMITTEE WILL NOT ALLOW EARLY IMPLEMENTATION TO CONSTRAIN ITS ABILITY TO MAKE CHANGES TO THIS SPECIFICATION PRIOR TO FINAL RELEASE. IT IS INAPPROPRIATE TO USE FPL WORKING DRAFTS AS REFERENCE MATERIAL OR TO CITE THEM AS OTHER THAN "WORKS IN PROGRESS". THE FPL GLOBAL TECHNICAL COMMITTEE WILL ISSUE, UPON COMPLETION OF REVIEW AND RATIFICATION, AN OFFICIAL STATUS ("APPROVED") OF/FOR THE PROPOSAL AND A RELEASE NUMBER.

No proprietary or ownership interest of any kind is granted with respect to the FIX Protocol (or any rights therein).

Copyright 2003-2014 FIX Protocol Limited, all rights reserved.

Table of Contents

Document History	5
1 Introduction	6
1.1 Summary of Proposed Changes	6
1.1.1 Levels and Relative Values	6
1.1.2 IOIQualifier and QuoteQualifier	6
1.1.3 Trader and Desk Visibility.....	7
2 Business Requirements.....	8
2.1.1 Relative Values.....	8
2.1.2 IOIQualifier and QuoteQualifier.....	9
2.1.3 Trader and Desk Visibility.....	9
3 Issues and Discussion Points.....	10
3.1 Levels and Relative Values	10
4 Proposed Message Flow	11
4.1 Dealer Sends an Axe or Inventory to a Customer	11
Model Flow	12
4.2 Dealer Sends a Run to a Customer	13
Model Flow	14
5 FIX Message Tables.....	15
5.1 FIX Message IOI	15
5.2 FIX Message Quote.....	16
5.3 FIX Message Execution Report	18
6 FIX Component Blocks	19
6.1 Component RelativeValueGrp.....	19
7 Category Changes	20
Appendix A - Data Dictionary.....	21
Appendix B - Glossary Entries	28
Appendix C - Abbreviations.....	29
Appendix D - Usage Examples.....	29

Table of Figures

Figure 1: Dealer Sends an Axe of Inventory to a Customer 11
Figure 2: Dealer Sends a Run to a Customer 13

Document History

Revision	Date	Author	Revision Comments
0.1	November 13, 2014	Simon Wiltshire (Etrading Software)	Initial draft
0.2	November 19, 2014	Simon Wiltshire (Etrading Software)	Following review
0.3	November 20, 2014	Simon Wiltshire (Etrading Software)	Following GTC review

1 Introduction

In 2014 the Global Fixed Income Subcommittee updated the Cash Bonds Best Practices document to include a section describing how to use FIX 5.0 SP2 for pre-trade liquidity discovery workflows (Axes, Inventories and Runs) between the sell-side and the buy-side. These enhancements are documented in the Cash Bonds Best Practices document which is expected to be ratified by November 2014.

1.1 Summary of Proposed Changes

1.1.1 Levels and Relative Values

It is proposed that a new component, called RelativeValueGrp, be introduced to both the IOI (35=6) message and the Quote (35=S) message with an enumerated set of relative value measurement types. This component will support the requirement to include a number of relative valuations on both message types and, for the Run indications, allow both bid and offer valuations to be included.

The following relative valuation type enumerations are proposed:

- 1 = ASW Spread
- 2 = OIS Spread
- 3 = Z spread
- 4 = Discount Margin
- 5 = I Spread
- 6 = OA Spread
- 7 = G Spread
- 8 = CDS Basis
- 9 = CDS Interpolated Basis

In addition, it is proposed that two new fields are to be added to the Quote message (35=S) to provide a means to indicate a bid and ask pricing spread to a specified benchmark. The following new fields are proposed:

- BidSpread (TBD2533)
- OfferSpread (TBD2534)

1.1.2 IOIQualifier and QuoteQualifier

In order to clarify this enumeration it is proposed that the accompanying text is amended to be:

- S = Inventory or Portfolio Show

1.1.3 Trader and Desk Visibility

In order to allow Runs to be made visible (i.e. routed) to specific desks and users it is proposed that the following component is added to the Quote (35=S) message:

- RoutingGrp

In order to support the inclusion or exclusion of specific users in the RoutingGrp, it is proposed that the following enumerations are added to RoutingType (216)

~~tb~~5 = Target Person

~~tb~~6 = Block Person

2 Business Requirements

Within the Fixed Income market, the process of pre-trade liquidity discovery by the buy-side is supported by the communication of indication messages by the sell-side. These messages show the buy-side that the sell-side has an interest in buying or selling a particular instrument – in a specified quantity and, optionally, at a specified price. Historically this has been communicated via email or a venue’s messaging system, but in 2014 a group of sell-side and buy-side institutions agreed to work together in order to define a standard for the transmission of the Indications.

The indication message is a simple structure containing a minimal detail which supports the buy-side decision making process but which is not directly linked to any trading activity since the participants would always expect a “last look” via phone, email etc. before proceeding with quotation/negotiation workflows and/or trading (i.e. order) workflows.

There are three main qualifiers of indication message: Axe, Inventory and Run (defined elsewhere in this document) that provide different levels of information to the recipient about the availability of the liquidity.

2.1.1 Relative Values

As a part of the pre-trade liquidity discovery process, an indication message (Axe, Inventory or Run) provides the sell-side with the ability to show the buy-side that they are willing to buy or sell a quantity of an instrument at a particular level. The level of a Fixed Income instrument can be expressed as a price (percent of par value), a yield and/or a spread against a default-free benchmark instrument that has a similar coupon and maturity.

In addition, the sell-side may choose to include further color on the indication that allows the buy-side to assess the sell-side valuation of the instrument in question. These relative valuations are typically spreads against a chosen type of yield curve or point on a yield curve and any indication message may include one or more of these measurements. The following relative valuation types are required in the new proposed field `RelativeValueType(tbd)` `NoRelativeValues(2530)`:

- ASW Spread
- OIS Spread
- Z spread
- Discount Margin
- I Spread
- OA Spread
- G Spread
- CDS Basis
- CDS Interpolated Basis

An indication may be sent as an IOI (35=6) message – where it is a one-sided Axe or Inventory – or as a Quote (35=5) message – where it is a two-sided Run. For two-sided indications, the sell-side may choose to include levels and relative value measurements for both the bid and offer sides via the use of two IOI (35=6) messages, each representing a specified side.

In order to satisfy this requirement it is proposed that a new repeating group component, called `RelativeValueGrp`, be created and added to the `IOI(35=6)`, `Quote(35=S)` and `ExecutionReport(35=8)` messages. The proposed new fields for the component are:

- `RelativeValueType`
- `RelativeValueSide`
- `RelativeValue`

Since the `Quote (35=S)` message does not currently support the ability to express both a bid and offer pricing spread value, it is also necessary to add the following two fields to this message:

- `BidSpread`
- `OfferSpread`

2.1.2 IOIQualifier and QuoteQualifier

The current FIX 5.0 SP2 specification includes the enumeration `S="Portfolio Shown"` for the `IOIQualifier (104)` and `QuoteQualifier (695)` fields that is ambiguous. We propose to enhance the description of the enumeration to clarify that the indication is based upon Inventory that is held by the sell-side. The following description text is suggested enhancement for enumeration value "S":

- Inventory or Portfolio Shown

2.1.3 Trader and Desk Visibility

When an indication is sent from the sell-side to the buy-side, there is a requirement for the sell-side to be able to indicate to the buy-side the specific user(s) or desk(s) who they believe would have a particular interest in seeing this indication. This component is included in the `IOI (35=6)` message but is not currently part of the `Quote (35=S)` message.

In addition, it is possible to specify one or more desks through using the enumeration `2 = "Target List"` in the `RoutingType (216)` field but specifying one or more Users is not currently supported.

We propose adding new values to `RoutingType(216)` to facilitate the routing of the `IOI(35=6)` or `Quote(35=S)` to be targeted at (or blocked from receiving by) one or more specified traders. The values proposed are:

- `TargetPerson`
- `BlockPerson`

3 Issues and Discussion Points

3.1 Levels and Relative Values

To address the requirements for the support of levels and relative value measurements, a number of possible options were put forward for consideration:

- Option 1 Create new dedicated fields for each of the individual relative valuation types including separate fields for the bid and offer values on the Quote(35=S) message (eg: BidASWSpread, OfferASWSpread).
- Option 2 Create new components for the specific sides that would be required and add the appropriate group(s) to each indication message. RelativeValueGrp would be added to the IOI(35=6) message. BidRelativeValueGrp and OfferRelativeValueGrp would be added to the Quote(35=S) message.
- Option 3 Embed a new component called SpreadGrp into the existing SpreadOrBenchmarkCurveData component. This would support the relative value measurements but benchmark spread would also be included as an enumeration in the new component. This enumeration would be marked as mutually exclusive with Spread (218) for benchmark spread values only.
- Option 4 Create a new component, RelativeValueGrp, that contained a specific field for the definition of the side. This component would be added to both the IOI(35=6) and Quote(35=S) messages. In addition, BidSpread(~~ttb2533~~) and OfferSpread(~~ttb2534~~) would be added to the Quote(35=S) message in order to support benchmark spreads on two-sided indications.

After much discussions it was determined that Option 4 was as the most appropriate solution for the business requirements while avoiding complex mutual exclusive rules and FIXML schema technical issues for FIXML users.

4 Proposed Message Flow

4.1 Dealer Sends an Axe or Inventory to a Customer

This scenario illustrates the workflow in which the Dealer sends an Axe or Inventory indication message to a Customer. The IOI(35=6) message is to be used for one-sided indications.

The type of indication is denoted by the IOIQualifier(104):

Common Indication Type	IOIQualifier (104)
Axe	E = Axe
	F = Axe on Bid
	G = Axe on Offer
Inventory	S = Inventory or Portfolio Shown

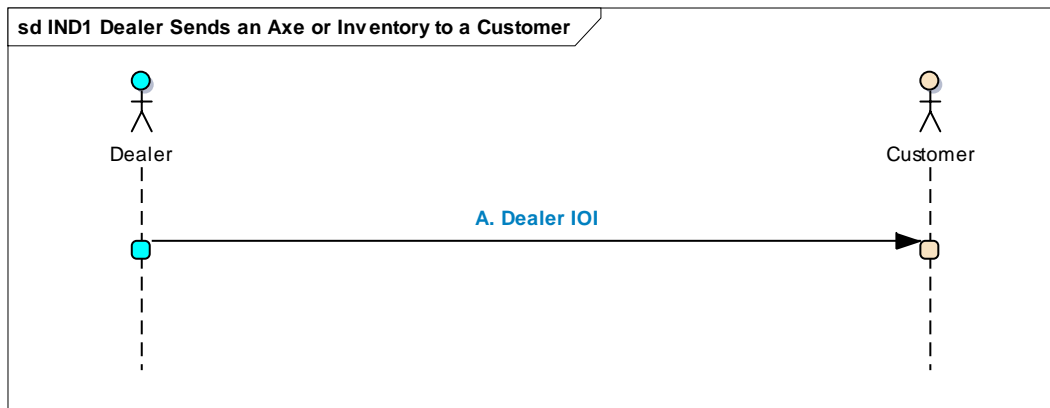


Figure 1: Dealer Sends an Axe of Inventory to a Customer

Model Flow

The following table illustrates the flows expected when communicating with an Execution Venue implementing FIX 5.0 SP2. This table includes some example relative valuation type values that could be included in the RelativeValueGrp component.

Model FIX 5.0				
(A) Dealer sends IOI	Dealer	→	<p>6 – IOI IOIID(23)= ① IOITransType(28)=New(N) Instrument <required> Side(54) <required> Price(44) <Axe indication price> IOIQty(27) <Axe indication size> NoIOIQualifiers(199)=1 -> IOIQualifier(104)= <i>Axe(E)</i> <i>Axe on Bid(F)</i> <i>Axe on Offer</i> (G) <i>Inventory or Portfolio Shown (S)</i> <RelativeValueGrp> -> NoRelativeValues(TBD2529) -> RelativeValueType(TBD)NoRelativeValues(2530)=eg: ASW Spread(1) <i>Z Spread(3)</i> -> RelativeValueSide(TBD2532) -> RelativeValue (TBD2531)</p>	Customer

4.2 Dealer Sends a Run to a Customer

This scenario illustrates the workflow in which the Dealer sends a Run indication message to a Customer. The Quote(35=S) message is to be used for two-sided indications.

The type of indication is denoted by the QuoteQualifier(695) with an “axed” side denoted by the appropriate QuoteQualifier(695).

Common Indication Type	QuoteQualifier (695)
Run	R = Ready To Trade
Axed Side	F = Axe on Bid G = Axe on Offer

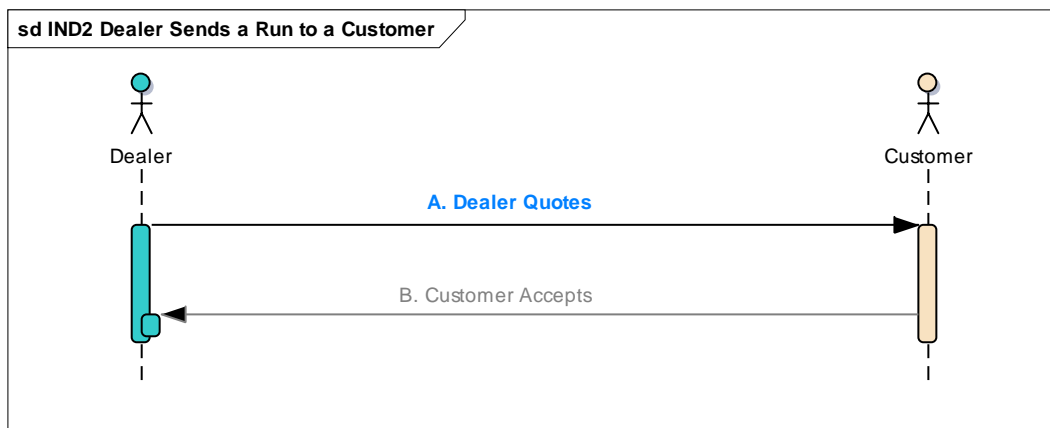


Figure 2: Dealer Sends a Run to a Customer

Model Flow

The following table illustrates the flows expected when communicating with an Execution Venue implementing FIX 5.0 SP2. This table includes some example relative valuation type values that could be included in the RelativeValueGrp component and an example corporate email address to show that the Run would be of particular interest to this user.

Model FIX 5.0				
	Dealer	→	<p>S - Quote QuoteID(117)= ❶ QuoteType(537)=Indicative(0) Instrument <required> QuoteRespType(301) BidPx(132) <Run bid price> OfferPx(133) <Run offer price> BidSize(134) <Run bid size> OfferSize(135) <Run offer size> NoQuoteQualifiers(735)=2 -> QuoteQualifier(695)= <i>Ready To Trade (R)</i> -> QuoteQualifier(695)= <optional> <i>Axe on Bid(F) / Axe on Offer (G)</i> BidSpread(TBD2533)= <optional> <i>Bid Benchmark Spread</i> OfferSpread(TBD2534)= <optional> <i>Offer Benchmark Spread</i> <RelativeValueGrp> -> NoRelativeValues(TBD2529) -> RelativeValueType(TBD)NoRelativeValues(2530) = eg: <i>ASW-Spread(1) / Z-Spread(3)</i> -> RelativeValueSide(TBD2532) -> RelativeValue (TBD2531) <RoutingGrp> -> NoRoutingIDs(215) -> RoutingType(216)=<u>2</u> (<i>TargetList(2)</i>) / <u>5</u> (<i>TargetPerson(TBD)</i>) -> RoutingID(217)=eg: <i>john.smith@institution.com</i></p>	Customer
<p>(B) Execution Venue Accepts (optional : According to the value of QuoteResponseLevel (301))</p>	←		<p>CW - QuoteAck QuoteID(117)= ❶ QuoteMsgID(1166)= ❷ QuoteAckStatus (1865)=Accepted(1)</p>	

5 FIX Message Tables

5.1 FIX Message IOI

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	IOI
Message Abbreviated Name (for FIXML)	IOI
Category	Indication
Action	CHANGE
Message Synopsis	[No change]
Message Elaboration	[No change]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	6
Repository Component ID	7

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = 6
<...truncated...>						
	Component Block <RoutingGrp>	N				
	Component Block <SpreadOrBenchmarkCurveData>	N				
	Component Block <RelativeValueGrp>	N		NEW		
	Component Block <YieldData>	N				
	Standard Trailer	Y				

5.2 FIX Message Quote

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	Quote
Message Abbreviated Name (for FIXML)	Quot
Category	QuotationNegotiation
Action	CHANGE
Message Synopsis	[No change]
Message Elaboration	[No change]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	S
Repository Component ID	27

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = S
<...truncated...>						
423	PriceType	N				
TBD 2533	BidSpread	N		NEW		SpreadOfBenchmarkCurveData component may be used to specify the benchmark.
TBD 2534	OfferSpread	N		NEW		SpreadOfBenchmarkCurveData component may be used to specify the benchmark.
Component Block <SpreadOrBenchmarkCurveData>		N		CHANGE		Spread(218) may be used for a mid-spread value.
Component Block <RelativeValueGrp>		N		NEW		
Component Block <YieldData>		N				
Component Block <RoutingGrp>		N		NEW		
1685	ThrottleInst	N				
<...truncated...>						

<i>Tag</i>	<i>Field Name</i>	<i>Req'd</i>	<i>ICR</i>	<i>Action</i>	<i>Mappings and Usage Comments</i>	<i>FIX Spec Comments</i>
	<i>Standard Trailer</i>	Y				

5.3 FIX Message Execution Report

To be completed at the time of the proposal – all information provided will be stored in the repository	
Message Name	ExecutionReport
Message Abbreviated Name (for FIXML)	ExecRpt
Category	SingleGeneralOrderHandling
Action	CHANGE
Message Synopsis	[No change]
Message Elaboration	[No change]
To be finalized by FPL Technical Office	
(MsgType(tag 35) Enumeration)	<u>8</u>
Repository Component ID	<u>9</u>

Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y				MsgType = 8
<...truncated...>						
	Component Block <CommissionData>	N				
	Component Block <SpreadOrBenchmarkCurveData>	N				
	Component Block <RelativeValueGrp>	N		NEW		
	Component Block <YieldData>	N				
<...truncated...>						
	Standard Trailer	Y				

6 FIX Component Blocks

6.1 Component RelativeValueGrp

To be completed at the time of the proposal – all information provided will be included in the repository	
Component Name	RelativeValueGrp
Component Abbreviated Name (for FIXML)	ReltvVal
Component Type	Repeating Group
Category	Common
Action	NEW
Component Synopsis	The RelativeValueGrp component is used to convey relative valuation metrics or analytics for a given instrument.
Component Elaboration	Relative valuation metrics or analytics are commonly provided by the trading party providing pricing as part of fixed income cash bonds or OTC derivatives indication or quoting activities.
To be finalized by FPL Technical Office	
Repository Component ID	<u>2252</u>

Component FIXML Abbreviation: <ReltvVal>						
Tag	Field Name	Req'd	ICR	Action	Mappings and Usage Comments	Comments
TBD2529	NoRelativeValues	N		NEW		
→	TBD2530 RelativeValue Type	N		NEW		Required if NoRelativeValues(2529) > 0. Required if NoRelativeValues(tbd) > 0.
→	TBD2531 RelativeValue	N		NEW		Required if NoRelativeValues(2529) > 0. Required if NoRelativeValues(tbd) > 0.
→	TBD2532 RelativeValue Side	N		NEW		
</ReltvVal>						

7 Category Changes

(none)

Appendix A - Data Dictionary

Tag	FieldName	Action	Datatype	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
TBD 25 29	NoRelativeValues	NEW	NumInGroup	Number of <u>relative value metrics entries in the repeating group</u> .repeating group instances of <u>RelativeValueType (TBD), RelativeValueSide (TBD) and RelativeValue (TBD)</u> .		Add to the following component: RelativeValueGrp
TBD 25 30	RelativeValueType	NEW	Reserved 100plus int	Indicates the type of relative value measurement being specified. Valid values: 1 = <u>Asset Swap ASW-Spread</u> [Elaboration: <u>ASW Spread</u> . In Fixed Income cash bond context: <u>the asset swap spread is shows the relative difference between the bond's implied value and its market price over the bond receiver leg of the underlying swap expressed in basis points.</u> the difference in the bond's yield (yield to maturity) and a floating interest rate (usually LIBOR), expressed in basis points.] [Symbolic name: <u>ASWSpread</u>] 2 = <u>Overnight Indexed Swap OIS-Spread</u> [Elaboration: <u>OIS Spread</u> . In Fixed Income cash bond context: <u>the overnight indexed swap spread shows the relative difference is the spread, expressed in basis points, between the bond yield (the fixed rate) and the an overnight indexed swap rate (e.g. Fed Funds rate, EONIA, SONIA, etc.) (the floating rate)expressed in basis</u>	@Typ	Add to the following component: RelativeValueGrp

			<p>points.] [Symbolic name: OIS]</p> <p>3 = Zero Volatility Spread- [Elaboration: Z-Spread. In Fixed Income cash bond context tThe zero coupon spread shows the relative difference is the constant spread in yield between the bond and added to the reference Zzero Ccoupon yield curve (usually Treasury spot rate curve), expressed in basis points, to derive the adjusted yield curve used to determine the present value of the cash flows so that it equals the dirty price of the bond (i.e. accrued interest factored in).] [Symbolic name: ZSpread]</p> <p>4 = Discount Margin- [Elaboration: In Fixed Income cash bond context: tThe DM is the spread, expressed in basis points, added to the bond's reference rate that will equate the bond's cash flows to its current price, additional return of an Floating Rate Note over and above the specific floating rate index of the Floating Rate Note expressed in basis points.] [Symbolic name: DiscountMargin]</p> <p>5 = Interpolated Spread- [Elaboration: I-Spread or I-Curve spread. In Fixed Income cash bond context tThe spread, expressed in basis points, interpolated shows the relative yield difference between the bond and added to an interpolated point on the reference yield curve expressed in basis points.] [Symbolic name: ISpread]</p> <p>6 = Option Adjusted Spread- [Elaboration: OAS or</p>		
--	--	--	---	--	--

			<p>OA-spread. In Fixed Income cash bond context Used to evaluate bonds with embedded (callable or put-able) options. The option adjusted spread is a constant spread, expressed in basis points, applied to each point on the spot rate curve (usually Treasury spot rate curve) where the bond's cash flow is received, such that the price of the bond is the same as the present value of its cash flows. the value of the embedded option inside a callable bond expressed in basis points.] [Symbolic name: OAS]</p> <p>7 = G-Spread- [Elaboration: In Fixed Income cash bond context the gross. The spread shows the relative difference, between the bond's yield and the interpolated yield from the gov. government bond reference yield curve, expressed in basis points. It represents the curve adjusted value of the bond by accounting for the difference between the bond's benchmark yield and the interpolated government reference yield at the same point on the curve that matches the bond's remaining life.] [Symbolic name: GSpread]</p> <p>8 = CDS Basis- [Elaboration: In Fixed Income cash bond context Also referred to as CDS Bond Basis. The CDS basis shows the relative is the spread difference, between the CDS spread or premium for the obligor and the Z-Spread or the ASW spread of the same reference or obligor bond, expressed in basis points.] [Symbolic name: CDSBasis]</p>		
--	--	--	---	--	--

				9 = CDS Interpolated Basis- [Elaboration: In Fixed Income cash bond context tAlso referred to as CDS Bond Interpolated Basis. The CDS interpolated basis shows the relative is the difference between a Cash Bond and an the reference or obligor bond's Z Spread or ASW spread and an interpolated point on CDS curve that matches the maturity of the reference bond, expressed in basis points.] [Symbolic name: CDSInterpolatedBasis]		
TBD 25 31	RelativeValue	NEW	float	The valuation of an instrument relative to a base measurement specified in RelativeValueType (TBD 2530). This value can be negative.	@Val	Add to the following component: RelativeValueGrp
TBD 25 32	RelativeValueSide	NEW	int	Specifies the side of the relative value, is applicable for. Valid values: 1 = Bid 2 = Mid 3 = Offer	@Side	Add to the following component: RelativeValueGrp
TBD 25 33	BidSpread	NEW	float	Basis points relative to a benchmark curve on the bid side, such as LIBOR, or a known security, such as 10Y US Treasury bond. The benchmark security or curve name is specified in the SpreadOrBenchmarkCurveData component.	@BidSpread	Add to the following message: Quote (35=S)
TBD 25 34	OfferSpread	NEW	float	Basis points relative to a benchmark curve on the offer side, such as LIBOR, or a known security, such as 10Y US Treasury bond. The benchmark security or curve name is specified in the SpreadOrBenchmarkCurveData component.	@OfrSpread	Add to the following message: Quote (35=S)

104	IOIQualifier	CHANGE	char	A = All or None B = Market On Close C = At the close D = VWAP I = In touch with L = Limit M = More Behind O = At the Open P = Taking a Position Q = At the Market R = Ready to trade S = Inventory or Portfolio Shown T = through the Day V = Versus W = Indication = Working Away X = Crossing Opportunity Y = At the Midpoint Z = Pre-Open E = Axe F = Axe on bid G = Axe on offer	@Qual	
-----	--------------	--------	------	---	-------	--

695	QuoteQualifier	CHANGE	char	A = All or None B = Market On Close C = At the close D = VWAP I = In touch with L = Limit M = More Behind O = At the Open P = Taking a Position Q = At the Market R = Ready to trade S = Inventory or Portfolio Shown T = through the Day V = Versus W = Indication = Working Away X = Crossing Opportunity Y = At the Midpoint Z = Pre-Open E = Axe F = Axe on bid G = Axe on offer	@Qual	Inherits enums from <u>IOIQualifier(104)</u> .
216	RoutingType	CHANGE	int	1 = Target Firm 2 = Target List 3 = Block Firm 4 = Block List TBD_5 = Target Person TBD_6 = Block Person	@RtgTyp	
TBD	BidSpread	NEW	float	Basis points relative to a benchmark curve on the bid side, such as LIBOR, or a known security, such as 10Y US Treasury bond. The benchmark security or curve name is specified in the SpreadOrBenchmarkCurveData component.	@BidSprd	Add to the following message: <u>Quote (35=S)</u>

TBD	OfferSpread	NEW	float	Basis points relative to a benchmark curve on the offer side, such as LIBOR, or a known security, such as 10Y US Treasury bond. The benchmark security or curve name is specified in the SpreadOrBenchmarkCurveData component.	@OfrSprd	Add to the following message: Quote (35=S)
-----	-------------	-----	-------	--	----------	---

Appendix B - Glossary Entries

Term	Definition	Field where used
Axe	In Fixed Income cash bond context: An Axe is an indication qualifier that allows the sender to advertise a desire to trade a specified amount of a particular instrument in a particular direction. Although the Axe is not a firm offer to trade, the industry accepts that it indicates a genuine intent to trade.	IOIQualifier (104) QuoteQualifier (695)
Inventory	In Fixed Income cash bond context: An Inventory is an indication message qualifier that allows the sender to reveal a position or availability in a particular instrument and in doing so their ability to satisfy an order in that instrument. The indication is for a specified amount of the instrument in a particular direction. Although an Inventory is not a firm offer to trade, the industry accepts that it indicates a genuine intent to trade.	IOIQualifier (104) QuoteQualifier (695)
Run	In Fixed Income cash bond context: A Run is an indication qualifier that allows the sender to advertise a willingness to trade a particular instrument and to provide indicative price to the market. The indication is typically two-sided with two quantities and (optionally) two indicative prices, a bid and an offer price. Runs are not regarded as showing a desire to trade but are more commonly used to provide the recipient with a view of the market and to show an interest in that instrument.	IOIQualifier (104) QuoteQualifier (695)
Benchmark Spread	In Fixed Income cash bond context this shows the difference between the yield of a bond and an associated benchmark bond.	Spread (218) BidSpread (TBD)2533) OfferSpread (TBD)2534)
Asset Swap Spread (ASW Spread)	In Fixed Income cash bond context this shows the relative difference between the bond's implied value and its market price, expressed in the number of basis points over the bond receiver leg of the underlying swap.	RelativeValueType (TBD)RelativeValueType (2530)
Overnight Indexed Swap Spread (OIS-Spread)	In Fixed Income cash bond context this shows the relative difference between the bond yield and the Overnight Indexed Swap rate.	RelativeValueType (TBD)RelativeValueType (2530)
Zero Coupon Spread (Z-Spread)	In Fixed Income cash bond context this shows the relative difference in yield between the bond and the	RelativeValueType (TBD)RelativeValue

	reference Zero Coupon yield curve.	<u>Type (2530)</u>
Discount Margin	In Fixed Income cash bond context this shows the additional return of a Floating Rate Note over and above the specific floating rate index of the FRN.	<u>RelativeValueType (TBD)RelativeValueType (2530)</u>
Interpolated Spread (I-Spread)	In Fixed Income cash bond context this shows the relative yield difference between the bond and an interpolated point on the reference yield curve.	<u>RelativeValueType (TBD)RelativeValueType (2530)</u>
Option Adjusted Spread (OA-Spread)	In Fixed Income cash bond context this shows the value of the embedded option inside a callable bond.	<u>RelativeValueType (TBD)RelativeValueType (2530)</u>
Gross Spread (G-Spread)	In Fixed Income cash bond context this shows the relative difference, in basis points, between the bond yield and the interpolated yield from the govt. bond curve.	<u>RelativeValueType (TBD)RelativeValueType (2530)</u>
CDS Basis	In Fixed Income cash bond context this shows the relative difference, in basis points, between the CDS Spread for the obligor and the Z-Spread of the bond.	<u>RelativeValueType (TBD)RelativeValueType (2530)</u>
CDS Interpolated Basis	In Fixed Income cash bond context this shows the relative difference between a Cash Bond and an interpolated CDS curve.	<u>RelativeValueType (TBD)RelativeValueType (2530)</u>

Appendix C - Abbreviations

Term	Proposed Abbreviation	Proposed Messages, Components, Fields where used

Appendix D - Usage Examples