



Global Exchanges and Markets Committee Matching Instructions Extension

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2 Document History

Revision	Date	Author	Revision Comments
0.10	Feb 26 2009	Aaron Pryce, London Stock Exchange	Initial
0.20	Mar 11 2009	Aaron Pryce, London Stock Exchange	Post GEMC feedback
0.30	Mar 12 2009	Aaron Pryce, London Stock Exchange	Final GEMC review
0.40	Mar 31 2009	Aaron Pryce, London Stock Exchange	Scott Atwell comments

3 Introduction

3.1 Background

The purpose of this document is to describe the requirement for a Matching Instructions component block to be added to the Order Entry, Order Modification and Trade Reporting messages.

A Matching Instructions component block will allow more complex matching instructions to be added to an Order than is currently possible using the ExecInst (18) field.

The LSE requires Day orders on certain books to be described as 'crossable' or 'not crossable' with other orders of specified validity types.

i.e. The LSE requires that an Order may have execution Matching Instructions that describe

- A Day Order as being not crossable with an IOC Order
- A Day Order as being not crossable with a Day Order
- A Day Order as being crossable with any Validity Type

3.2 Change Requirements

It is proposed to:

- Create a new repeating group component block called **<MatchingInstructions>**
- Add the <MatchingInstructions> repeating group component block to the
 - New Order Single (35=D) message
 - Order Cancel Replace (35=G) message
 - New Order Multileg (35=AB) message
 - MultilegOrderCancelReplace (35=AC) message
 - <TradeReportOrderDetail> block (for inclusion within Trade reporting Messages)
 - Execution Report (35=8) message

3.3 Proposed Solution

To allow a balance between a fully flexible data driven instruction block and a lower byte sized instruction block it is proposed that the **<MatchingInstructions>** repeating group is structured as below.

- NoMatchInst – used to describe the number of instruction in the repeating group
- MatchInst – used to describe the particular matching instruction to be applied to the order
- MarketID – used to denote the specific market or venue that an instruction is to be used upon
- MatchAttribTagID – used to convey the FIX field to be used as a Matching Attribute in conjunction with the MatchInst
- MatchAttribValue – used to convey the enumeration value of the MatchAttribTagID to be applied

The **<MatchingInstructions>** should be read and applied in order sent.

<MatchingInstructions> are to be validated by the application (Trading System) not the messaging (FIX) layer.

4 Message Tables

The **<MatchingInstructions>** repeating group component block is to be added to the following messages as noted below.

4.1 New Order Single

Tag	FieldName	Req'd	Comments	Action
StandardHeader		Y	MsgType = D	
11	ClOrdID	Y	Unique identifier of the order as assigned by institution or by the intermediary (CIV term, not a hub/service bureau) with closest association with the investor.	
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
1090	MaxPriceLevels	N		
component block	<MatchingInstructions>	N		ADD NEW
component block	<DisplayInstruction>	N		
111	MaxFloor	N	(Deprecated in FIX.5.0)	
100	ExDestination	N		
1133	ExDestinationIDSource	N		
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
StandardTrailer				

4.2 Order Cancel Replace

Tag	FieldName	Req'd	Comments	Action
StandardHeader		Y	MsgType = G	
37	OrderID	N	Unique identifier of most recent order as assigned by sell-side (broker, exchange, ECN).	
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
component block <MatchingInstructions>		N		ADD NEW
component block <DisplayInstruction>		N	Insert here the set of "DisplayInstruction" fields defined in "common components of application messages"	
111	MaxFloor	N	(Deprecated in FIX.5.0)	
100	ExDestination	N		
1133	ExDestinationIDSource	N		
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
StandardTrailer		Y		

4.3 New Order Multileg

Tag	FieldName	Req'd	Comments	Action
StandardHeader		Y	MsgType = AB	
11	CIOrdID	Y	Unique identifier of the order as assigned by institution or by the intermediary with closest association with the investor.	
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
1090	MaxPriceLevels	N		
component block <MatchingInstructions>				ADD NEW
component block <DisplayInstruction>			Insert here the set of "ReserveInstruction" fields defined in "common components of application messages"	
111	MaxFloor	N	(Deprecated in FIX.5.0)	
100	ExDestination	N		
1133	ExDestinationIDSource	N		
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
StandardTrailer		Y		

4.4 Multileg Order Cancel Replace

Tag	FieldName	Req'd	Comments	
StandardHeader		Y	MsgType = AC	
37	OrderID	N	Unique identifier of most recent order as assigned by sell-side (broker, exchange, ECN).	
<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
component block <MatchingInstructions>		N		ADD NEW
component block <DisplayInstruction>		N	Insert here the set of "DisplayInstruction" fields defined in "common components of application messages"	
111	MaxFloor	N	(Deprecated in FIX.5.0)	
100	ExDestination	N		
1133	ExDestinationIDSource	N		
<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
StandardTrailer		Y		

4.5 Execution Report

Tag	FieldName	Req'd	Comments	
StandardHeader		Y	MsgType = 8	
component block <ApplicationSequenceControl>		N	For use in drop copy applications. NOT FOR USE in transactional applications.	
37	OrderID	Y	OrderID is required to be unique for each chain of orders.	
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
component block <MatchingInstructions>		N		ADD NEW
component block <DisplayInstruction>		N	Insert here the set of "DisplayInstruction" fields defined in "common components of application messages"	
111	MaxFloor	N		
77	PositionEffect	N	For use in derivatives omnibus accounting	
210	MaxShow	N	(Deprecated in FIX.5.0)	
<<<<<			TRUNCATED MESSAGE TO SAVE TREES >>>	
StandardTrailer		Y		

5 Component Blocks

5.1 Matching Instructions

The following **NEW** repeating group component block is to be added to the messages in section 4 above and added to the component block in section 5.2 below.

<MatchingInstructions> Component Group				
Tag	FieldName	Reqd	Comments	Action
1624	NoMatchInst	Y	Number of Instructions. Required if MatchingInstructions block used.	NEW
1625	> MatchInst	N	Matching Instruction for the order. (1 st position). 1 = Match 2 = Do Not Match. Required if NoMatchInst >0.	NEW
1301	> MarketID	N	Venue identification for venue specific matching instruction (MIC codes) (2 nd position).	ADD
1626	> MatchAttribTagID	N	Existing FIX field to be applied as a MatchingCriteria to the Instruction, bilaterally agreed between parties. (3 rd position). Required if NoMatchInst >0.	NEW
1627	> MatchAttribValue	N	Enumeration value of the MatchAttribField to be applied as a MatchingCriteria to the Instruction. (4 th position). Required if NoMatchInst >0.	NEW

5.2 TradeReportOrderDetails

The **<MatchingInstructions>** repeating group component block is to be added to the TradeReportOrderDetails component block as follows

Tag	FieldName	Req'd	Comments	Action
37	OrderID	N		
198	SecondaryOrderID	N		
11	CIOrdID	N		
526	SecondaryCIOrdID	N		
66	ListID	N		
1080	RefOrdID	N	Some hosts assign an order a new order id under special circumstances. The RefOrdID field will connect the same underlying order across changing OrderIDs.	
1081	RefOrdIDSource	N		
tbd	RefOrdIDReason	N	The reason for updating the RefOrdID.	
40	OrdType	N	Order type from the order associated with the trade	
44	Price	N	Price per unit of quantity (e.g. per share) Order price at time of trade.	
99	StopPx	N	Price per unit of quantity (e.g. per share) Stop/Limit order price.	
18	ExecInst	N	Execution Instruction from the order associated with the trade	
39	OrdStatus	N	Status of order as of this trade report	
component block <OrderQtyData>		N	Insert here the set of "OrderQtyData" fields defined in "Common Components of Application Messages" Note: OrderQty field is required unless rejecting or an order ack for a CashOrderQty or PercentOrder. Order quantity at time of trade.	
151	LeavesQty	N		
14	CumQty	N		
59	TimeInForce	N		
126	ExpireTime	N	Time/Date of order expiration (always expressed in UTC (Universal Time	

Tag	FieldName	Req'd	Comments	Action
			Coordinated, also known as "GMT") The meaning of expiration is specific to the context where the field is used. For orders, this is the expiration time of a Good Til Date TimeInForce. For Quotes - this is the expiration of the quote. Expiration time is provided across the quote message dialog to control the length of time of the overall quoting process. For collateral requests, this is the time by which collateral must be assigned. For collateral assignments, this is the time by which a response to the assignment is expected. Date of order's expiration.	
Component block <MatchingInstructions>		N		ADD NEW
	component block <DisplayInstructions>	N		
528	OrderCapacity	N		
529	OrderRestrictions	N		
tbd	OrigCustOrderCapacity	N	The customer capacity for this trade at the time of the order/execution	
821	OrderInputDevice	N		
1093	LotType	N		
483	TransBkdTime	N		
586	OrigOrdModTime	N		

6 Data Dictionary

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	FIXML Schema / XPath Notation	Reference
1624	NoMatchInst	NEW	NumInGroup	Number of Instructions in the <MatchingInstructions> repeating group.			
1625	MatchInst	NEW	Int	Matching Instruction for the order. Values: 1 = Match 2 = Do Not Match Required if NoMatchInst >0.	Inst		
1626	MatchAttribTagID	NEW	TagNum	Existing FIX field to be applied as a Matching Criteria to the Instruction, bilaterally agreed between parties. Required if NoMatchInst >0.	ID		
1627	MatchAttribValue	NEW	String	Enumeration value of the MatchAttribField to be applied as a MatchingCriteria to the Instruction. Required if NoMatchInst >0.	Valu		

7 Example

In this example an order is placed with two instances of Matching Instructions, to be applied consecutively.

- the first being an instruction to 'not match' the order with an order of validity type IOC at BAIKAL
- the second being an instruction to 'not match' the order with an order of validity type Day at the LSE

<MatchingInstructions> Component Group				
Tag	FieldName	Reqd	Comments	EG
1624	NoMatchInst	Y	Number of Instructions	2
1625	> MatchInst	N	Matching Instruction for the order. 1 - Match 2 - Do Not Match	2
1301	> MarketID	N	Venue identification for venue specific matching instruction (MIC codes)	BAIK
1626	> MatchAttribTagID	N	Existing FIX field (expressed by Tag number) to be applied as a MatchingCriteria to the Instruction.	59
1627	> MatchAttribValue	N	Enumeration value of the MatchingCriteriaField to be applied as a MatchingCriteria to the Instruction.	3
1625	> MatchInst	N	Matching Instruction for the order. 1 - Match 2 - Do Not Match	2
1301	> MarketID	N	Venue identification for venue specific matching instruction (MIC codes)	XLSE
1626	> MatchAttribTagID	N	Existing FIX field (expressed by Tag number) to be applied as a MatchingCriteria to the Instruction.	59
1627	> MatchAttribValue	N	Enumeration value of the MatchingCriteriaField to be applied as a MatchingCriteria to the Instruction.	0