Financial Information eXchange

SOLA® FIX Specifications Guide for BOX

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FIX-BX-002E, Document Version 3.5

Document History

Version	Date	Change Description
1.0	2003.05.16	Overall: • BOX-FIX specific feature are shown in grey highlight
		Section 2: • Add note to have only one firm per CompID • Minimum 108-HeartBtInt value specified.
		Section 3.3.1: • Add optional field 7906-CombinedOrdType • Remove values 'X' and 'Y' in the 40-OrdType field
		Section 3.3.2: • Define the use of the field 38-OrderQty in Order Cancel/Replace message. • Add optional field 7906-CombinedOrdType.
		Section 3.3.3: • Add optional field 7906-CombinedOrdType. • Move field 1-ClOrdID in the group section.
		Section 3.3.6: • Add section for Flash Order
		Section 3.3.7: • Formerly 3.3.6. Remove fields 382-NoContraBrokers and 375-ContraBroker. • Add optional field 7906-CombinedOrdType
		Section 4: • Remove fields 382-NoContraBrokers, 375-ContraBroker and 102-CxlRejReason • Add fields 84-CxlQty and 7906-CombinedOrdType. • Add value 'P' in field 47-Rule80A, value 'FL' in 35-MsgType field and Remove values 'X' and 'Y' in the 40-OrdType field. • Add field description.
		Appendix A: • Add error list.
		Appendix B: • New Section to explain the relation between field 47-Rule80A and 7906-CombinedOrdType
		3.3.9 to 3.3.11: • Remove until more detailed specifications will be available.

Version	Date	Change Description
1.1	2003.06.17	General: • Change 'Flash Order' for 'Flash Message'. Modify format of fields from 99-FieldName to [*FieldName 99*]
		Section 2.2: • Add 0 (zero) as a valid value in the [*HeartBtInt 108*] field.
		Section 3.3.1: • Remove fields [*MinQty 110*] and [*MaxShow 210*]. • Add fields [*OrigClOrdId 41*], [*ExDestination 100*], [*OLATradeDate 7907*], [*OLATradeQty 7908*] and [*OLATradePx 7909*] for OLA order. • Add comments on fields value for OLA order. • Change default value of field [*CombinedOrdType 7906*].
		Section 3.3.2: • Remove fields [*MinQty 110*] and [*MaxShow 210*]. • Change default value of field [*CombinedOrdType 7906*].
		Section 3.3.3: • Remove fields [*ImproveMngtType 7901*], [*ImproveType 7902*] and [*ImproveMaxPx 7903*].
		Section 3.3.6: • Remove value 'P-Professional' for field [*Rule80A 47*]. Move field [*OpenClose 77*] in the group section. • Substitute field [*NoFlashOrder 7907*] for [*NoOrders 73*].
		Section 3.3.7: • Add "NONE" value in field [*OrderID 37*] when order is rejected. • Remove fields [*MinQty 110*] and [*MaxShow 210*]. • Add status for OLA Order action. • Add field [*TrdType 828*]. • Change description of fields [*LastPx 31*] and [*LastShares 32*]. • Update table for status definition. • Add description in [*LastPx 31*] and [*LastShares 32*] fields when reporting a fill for a Flash Message.
		Section 4: • Change length of field [*OrderID 37*] from 15 to 20. Set maximum length of field [*QuoteReqID 131*] from 20 to 50. • Remove value 'P-Professional' for field [*Rule80A 47*]. • Restrict [*SenderCompID 49*] and [*TargetCompID 56*] fields to a maximum of 8 characters. • Add 0 (zero) as a valid value in the [*HeartBtInt 108*] field. • Remove fields [*MinQty 110*], [*MaxShow 210*], [*ImproveMngtType 7901*]. • Add value 'P' in field [*Ord Status 39*], value 3 in field [*HandlInst 21*]
		Appendix B: • Remove value 'P-Professional' for [*Rule80A 47*] and add value 4 in field [*CombinedOrdType 7906*].

<table>
<tr><th>Version</th><th>Date</th><th>Change Description</th></tr>
<tr><td rowspan="12">1.2</td><td rowspan="12">2003-08-05</td><td>Overall:
• OLA-FIX specific feature are shown in bleu highlight.</td></tr>
<tr><td>Section 1:
• Add 'Order Mass Status Request' message.</td></tr>
<tr><td>Section 2.2:
• Fix minimum [HeartBtInt 108] note.</td></tr>
<tr><td>Section 3.3.1:
• Field [ExDestination 100] is now mandatory for OLA Order.
• Replace [OLATradeDate 7907] by [TradeThruTime 5202], [OLATradeQty 7908] by [TradeThruSize 5203] and [OLATradePx 7909] by [TradeThruPrice 5204].
• Add field [ExecutingParticipantID 7901] for 'Directed Order'.
• Change default value of field [CombinedOrdType 7906] to 1.</td></tr>
<tr><td>Section 3.2.2:
• Remove field [OrderCapacity 6528].
• Change default value of field [CombinedOrdType 7906] to 1.
• Add field [ExecutingParticipantID 7901] for 'Directed Order'.</td></tr>
<tr><td>Section 3.3.3:
• Add note when modifying a PIP Initial order</td></tr>
<tr><td>Section 3.3.4:
• Add field [ExecutingParticipantID 7901] for 'Directed Order'.</td></tr>
<tr><td>Section 3.3.6:
• Modify use of fields [OrderQty 38] and [CxlQty 84] in Flash Message.
• Field [Price 44] is now mandatory.</td></tr>
<tr><td>Section 3.3.7:
• Add action for 'Order Mass Status Request' message in the status table.
• Modify [OrdStatus 39] values in the status table for a Trade kill and OLA orders.
• Add Directed Order in the status table. Add note when in response to a Directed Order.</td></tr>
<tr><td>Section 3.3.10:
• Add 'SecurityDefinition Request' message.</td></tr>
<tr><td>Section 3.3.11:
• Add 'SecurityDefinition' message.</td></tr>
<tr><td>Section 3.3.12:
• Add 'Order Mass Status Request' message.</td></tr>
</table>

Version	Date	Change Description
1.2 (Cont)		Section 4: • Add fields 310, 311, 313, 315, 316, 319, 320, 321, 322, 584, 585 and 7901. • Replace [*OLATradeDate 7907*] by [*TradeThruTime 5202*] and [*OLATradeQty 7908*] by [*TradeThruSize 5203*] and [*OLATradePx 7909*] by [*TradeThruPrice 5204*] • Change value of ISE in field [*ExDestination 100*]. • Add explanation of value 'O' (Market at Open) for field [*OrdType 40*]. • Add value 1 in field [*CombinedOrdType 7906*]. • Add values 'L' and 'Q' in field [*OrdStatus 39*] for Directed and OLA orders
		Appendix A: • Update error list. Add error list for 'Directed Order
1.3	2003-09-24	Section 1: • BOX now can sends 'Test Request' message.
		Section 2: • Move in BOXBusinessDesignGuideFIX document. Following sections renumbered.
		Section 2.3.6: • Add examples for different action types
		Section 2.3.7: • Change usage of fields when [*MultiLegReportingType 442=2*]. • Add field [*MassStatusReqID 585*] field when in respond to an Order Mass Status Request message. [*OrigClOrdID 41*] is not provided when [*ExecTransType 20=1*]. • Add CORRECT status in field [*ExecTransType 20*]
		Section 2.3.12: • Active orders are the only ones returned. No message is returned if there is not active order
		Section 3: • Change length of field [*ClearingFirm 439*] from 8 to 5. • Add CORRECT status in field [*ExecTransType 20*]
		Appendix B: • Add Directed Order.
1.4	2003-10-15	Section 1: • Specified that fields not in the current document are rejected.

Version	Date	Change Description
2.0	2005-04-26	Section 2.3.7: • Modify [*OrdStatus 39*] for Ola order. [*ImprovePhaseID 7900*] field only return for a response to a PIP Initial order.
		Section 3: • Update possible values of field [*TrdType 828*]
		Appendix B: • Update values for OLA Order [*OrderCapacity 6528=R*]
		Overall: • Change minimum value of [*HeartBtInt 108*] from 120 to 30. • Removed all references to trade price adjustement.
		Doc. History: • Now distinguishes FIX implementation version and document version. • General formatting changed.
		Section 2.3.1: • American style market orders introduced. • All market order types may now be directed.
		Section 2.3.3: • Tag [*ClOrdID 11*] for the MBF side must always keep its original value. • Optional when improving the price of an ongoing PIP
		Section 2.3.4: • Removed tag [*ExecutingParticipantID 7901*].
		Section 2.3.7: • Update definition of field [*LastPx 31*] when [*MultiLegReportingType 442=2*]. Change [*PossDupFlag 43*] for [*PossResend 97*] field for 'Status' report type. • Added tag 375 and 382. Removed reference to order expiration and trade price adjustement in status matrix.
		Section 3: • Removed value '9' = Suspended' in field [*ExecType 150*] • Change length of fields [*ClearingDestination 439*] from '5' to '3', [*ExecID 17*] & [*ExecRefID 19*] from '15' to '1 to 15'. • Added tags [*ContraBroker 375*] and [*NoContraBroker 382*]. • Removed "expired" from the list of possible values for tag [*OrdStatus 39*]. • Tag [*Price 44*], [*StrikePrice 202*] and [*TradeThruPrice 5204*] now accept up to 6 decimals. • Tags [*OrderQty 38*], [*ClxQty 84*], [*RatioQty 319*] and [*TradeThruSize 5203*] now accept no decimals.
		Appendix A: • List of error messages updated
		Appendix B: • Added definitions for each Rule80A and CombinedOrdType values. • Validity matrix updated. Updated values for Directed Order. • Notes added concerning IOC orders and OLA.

Version	Date	Change Description
2.1	2005-07-05	• Inserted maximum order size for PIPs independently of the maximum order size for regular orders.
2.2	2005-08-23	Modifications in Appendix B. • Added values (X, Y, Z, V, W) for tag 47 -rule 80A
2.3	2006-02-08	Modifications to Appendix B (R.Levy) • (RFC BX05-0016 and BX05-0029)
2.4	2006-03-15	• Removed modifications made to Appendix B in versions 2.2 and 2.3 that are not applicable to the current version of the application • Inserted the document number (identifier) in the document header • Used Initial Capital letters for Appendix titles (Evelyn Correia)
	2006-03-24	• Removed Added values (X, Y, Z, V, W) for tag 47 -rule 80A from section 2.3.6 and 3. and table in Appendix B (E. Correia)
2.5	2006-07-20	• Re-inserted removed values (X, Y, Z, V, W) for tag 47 - Rule80A, in sections 2.3, 3, and Appendix B (W.Applebee)
	2006-11-13	• Modifications to messages 2.3.1, 2.3.2 and Chapter 3 as per RFC BX04-0045 U.S. Style Orders (APPW)
	2006-12-06	• Additional modifications from meeting with LECC, BESR, BOUM
	2006-12-12	• Final Modifications as per Technical Notice 06-002 (APPW)
	2007-02-07	• Draft version placed on the Intranet (F. Goulet)
2.6	2007-03-20	• Insert links to Field Descriptions for OrdType, Rule80A, and CombinedOrdType, Modify definition for CombinedOrdType • Removed two fields previously used with Flash Msg. (APPW)
	2007-03-21 2007-03-21	• Final modifications as per LEGE Approved version updated to Intranet

<table>
<tr><th>Version</th><th>Date</th><th>Change Description</th></tr>
<tr><td rowspan="4">2.7</td><td>2007-11-20</td><td>Section 3:
Added Q = Nasdaq (NDQ) in field ExDestination
Added values;
120 = NDQ S,
121 = NDQ P/A,
122 = NDQ P
in field TrdType.</td></tr>
<tr><td>2008-05-22</td><td>Impacts of Options Symbology Initiative.
New field No. 205 is added to specify the maturity day of instrument. The MaturityDay field is mandatory for the new OSI and optional for the old format.
This new field will be present in the following message types:
• New Order - Single (MsgTyp 35 = D)
• Order Cancel/Replace Request (MsgTyp 35 = G)
• PIP Initial Order (MsgTyp 35 = PI)
• Order Cancel Request (MsgTyp 35 = F)
• Quote Request (MsgTyp 35 = R)
• Execution Report (MsgTyp 35 = 8)
• Security Definition (MsgTyp 35 = d)</td></tr>
<tr><td>2008-05-29</td><td>Symbology updates approved</td></tr>
<tr><td>2008-05-30</td><td>New Field ’TradeLiquidityIndicator’ added to the ExecutionReport ((MsgTyp 35 = 8), and Field Type definitions, for Make or Take</td></tr>
<tr><td>2.8</td><td>2009-04-27</td><td>Updates pertaining to ISO Inbound Order</td></tr>
<tr><td>2.9</td><td>2009-06-15</td><td>Added Tag 18 - ISO Order</td></tr>
<tr><td>3.0</td><td>2009-07-21</td><td>Modification to Msg Types D (New Order) & G (Order Cancel) for Tag 7906 CombinedOrdType, indicating Order Rejection when tags 18 (ExecInst) and 7906 (CominedOrdType) are present in the same order.</td></tr>
<tr><td>3.1</td><td>2009-10-14</td><td>Modification to Msg Types D (New Order) & G (Order Cancel) for Tag 7906 CombinedOrdType, indicating Default Value of 3.
Re-working of text for Rule80A (47) and CombinedOrdType (7906).</td></tr>
</table>

<table>
<tr><th>Version</th><th>Date</th><th>Change Description</th></tr>
<tr><td rowspan="2">3.2</td><td>2010-03-16</td><td>For Give-Up functionality, new tags added:
• Tag# 76 [ExecBroker] for Give-Up used in:
  • New Order Single (D), and Order Cancel / Replace Request (G), with exsiting Tag# 439 [ClearingFirm] for CMTA, to set up a Give-Up
  • PIP Initial Order (PI), with existing Tag# 439 [ClearingFirm] for CMTA, to set up either a Give-Up or a CMTA, but not both
• Tag# 9459 [SpecialTradeInd] used in:
  • Execution Report (8)
• Existing tags; Tag# 828[TrdType] and Tag# 9730 [TradeLiquidityIndicator] will have new values.</td></tr>
<tr><td>2010-08-09</td><td>• Remove all tags and tag values related to OLA Satisfaction and Principal Orders.
• Add new tags for MIP functionality.
• Add Session Order duration type and status.</td></tr>
<tr><td rowspan="2">3.3</td><td>2011-07-18</td><td>Message G - Order Cancel/Replace (a.k.a. Order Modification)Tag 38 modified as follows:
• Quantity in Order Cancel/Replace messages sent on connections configured as such by the BOX MOC will contain the total order quantity instead of the remaining booked quantity.
• Added Tag 58 (Text) in FIX F - Order Cancel message to contain reason for the cancellation.</td></tr>
<tr><td>2011-07-26</td><td>Updated to reflect New Solicitation and Facilitation Auctions for Block Trades.
Messages modified:
PI - PIP Initial Order new fields added:
• 9383 - Auction Type
• 7388 - Contingent Order
PI - PIP Initial Order fields modified:
• 7906 - CombinedOrdType
• 9461 - AddQty
• 854 - QtyType
• 639 - PriceImprovement
8 - Execution Report fields modified:
• 9459 - SpecialTradeInd
• 828 -TrdType
• 9383 - AuctionType
• 7388 - Contingent Order
• 854 - QtyType
• 9461 - AddQty</td></tr>
</table>

Version	Date	Change Description
3.4	2012-02-13	Added Complex Order changes. • Updated “D-New Order Single” message and renamed it “New Single/ Complex Order” • Updated “G-Order Cancel/Replace” message and renamed it “Cancel/ Replace Single/Complex Order” • Updated “PI-PIP Initial Order” message • Updated “F-Order Cancel Request” message and renamed it “Order Single/Complex Cancel Request” • Updated “8-Execution Report” message • Updated “c-Security Definition Request” message • Updated “d-Security Definition” message • Renamed “9-Order Cancel Reject” message to “Order Single/Complex Cancel Reject” • Added “j-Business Message Reject” message • Added “AB-New Multi-Leg Order - Single” message • Added “AC-Cancel/Replace Multi-Leg Order” message • Updated Field Definition section Added Customer Cross Order changes. Added CancelPending status changes. Added Order Elimininated status due to out of limits order entry price. Updated all tag related to firm number from 3 to 4 bytes. 38 - OrdQty: Now represents only the total order quantity in “G-Order Cancel/Replace Request. Replaced all references to OLA by IML.
3.5	2012-05-22	Renamed message “PIP Initial Order” to “Auction Initial Order” 2.3.3: Update message format. 2.3.6: New Order status when an order is canceled by the MOC and when a Complex Order is eliminated. Chapter 3: Update values of tags 35, 828 and 9459. Chapter 3: Change length of tag 48 Appendix B.3: Add Customer Cross Order

Document Notes

Date	Description
2008-05-22	Conversion to FrameMaker
2009-03-27	Document ID changed from FIX-BX-02E to FIX-BX-002E, Document title changed from Specifications to BOX SOLA FIX Specifications Guide

Typographic Conventions

Convention	Meaning
Abbreviated menu commands	This document uses abbreviated menu. For example, "Click **Display > Toolbars > Standard**" means that you should click the **Display** menu, point to **Toolbars**, and click the **Standard** entry.
Boldface type	**Boldface** type is used for commands, keywords, file names URLs, or other information that you must use literally. Name of windows, dialogs, and other controls also appear in boldface type.
Initial Capital Letters	The first letter of the names of menus, dialog boxes, dialog box elements, and commands are capitalized.
<Text in angle brackets>	Angle brackets are used for variables and values that you must provide. This can be in boldface type or italics type.
Italics type	Italics type is used for words and phrases that need to be emphasized, as for new terms defined in the text. Italicized type is also used for foreign languages terms.
`Monospace`	Code and script examples appear in a `monospace` font.
Plus sign in text	Keyboard shortcuts are indicated by a plus sign separating key names. For example, **Ctrl+F1** means that you must press the **Ctrl** and **F1** keys at the same time.
Bold Italics	In this document, exceptions specific to BOX are shown throughout the document in ***bold-italics*** style format.
Bold Blue Italics	In this document, exceptions defined by IML are in ***bold blue italics*** style format.

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Table 1: – FIX Messages Supported by BOX 1

Chapter 1 Overview

This document is designed to define the subset of the Financial Information eXchange (FIX) messages that BOX will support in its FIX implementation. All FIX communication with BOX's trading engine will be according to the protocol defined herein. This document is designed to supplement the FIX protocol documentation that can be found at **www.fixprotocol.org** rather than be a complete and self-sufficient reference.

BOX-FIX implementation is built on version 4.2 of FIX with a few exceptions as noted in the current document. Exceptions specific to BOX are shown throughout the document in ***bold-italics*** style format.

Note: **The only fields accepted by BOX are the ones described in the current document. Unsupported fields are rejected with a Fix Protocol Error/Reject message (message type 3).**

The reader must have a good working knowledge of FIX prior to reading this document.

The following are the FIX messages supported by BOX.

Table 1: FIX Messages Supported by BOX

Type	FIX Messages	Originator
Application	D - New Order Single	Client
	G - Order Cancel/Replace Request	Client
	F - Order Cancel Request	Client
	R - Quote Request	Client
	8 - Execution Report	BOX
	9 - Order Cancel Reject	BOX
	b - Quote Acknowledgement	BOX
	c - Security Definition Request	Client
	d - Security Definition	BOX
	AF - Order Mass Status Request [1]	Client
	PI - Auction Initial Order	Client
Administrative	3 - FIX Protocol Error / Reject	Client / BOX
	0 - Heartbeat	Client / BOX
	A - Logon	Client / BOX
	2 - Resend Request	Client / BOX
	5 - Logout	Client / BOX
	1 - Test Request	Client / BOX
	4 - Sequence Reset	Client / BOX

1. Taken from FIX v4.3

Chapter 2 Message Definition

2.1 Header and Trailer

2.1.1 Standard Message Header

Tag	Field Name	Req'd	Comments
8	BeginString	Y	Value equals FIX.4.2 Must be first field in message.
9	BodyLength	Y	Must be second field in message.
35	MsgType	Y	Must be third field in message.
49	SenderCompID	Y	
56	TargetCompID	Y	
34	MsgSeqNum	Y	
52	SendingTime	Y	
43	PossDupFlag	N	Always required for retransmitted messages, whether prompted by the sending system or as the result of a resend request.
122	OrigSendingTime	N	Required for message resends. If data is not available, set to same value as SendingTime.
97	PossResend	N	Required when message may be duplicate of another message sent under a different sequence number.

2.1.2 Standard Message Trailer

Tag	Field Name	Req'd	Comments
10	CheckSum	Y	(Always unencrypted, and last field in message)

2.2 Administrative Messages

2.2.1 A: Logon

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=A]
98	EncryptMethod	Y	Must be set to 0.
108	HeartBtInt	Y	'0' means no HeartBeat message will be sent. The value provided must not be less than 30.
141	ResetSeqNumFlag	N	Indicates both sides of a FIX session should reset sequence numbers.
383	MaxMessageSize	N	Can be used to specify the maximum number of bytes supported for messages received.
	Standard Trailer	Y	

2.2.2 0: Heartbeat

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=0]
112	TestReqID	N	Required when the Heartbeat is the result of a Test Request message. Used only in Heart-beat message from server to client.
	Standard Trailer	Y	

2.2.3 1: Test Request

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=1]
112	TestReqID	Y	
	Standard Trailer	Y	

2.2.4 2: Resend Request

Tag	Field Name	Req'd	
	Standard Header	Y	[MsgType 35=2]
7	BeginSeqNo	Y	
16	EndSeqNo	Y	

Tag	Field Name	Req'd	
	Standard Trailer	Y	

2.2.5 3: FIX Protocol Error / Reject

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=3]
45	RefSeqNum	N	MsgSeqNum of rejected message.
371	RefTagID	N	Tag number of the FIX field being referenced.
372	RefMsgType	N	MsgType of the FIX message being referenced.
373	SessionRejectReason	N	Code to identify reason for a session-level Reject message.
58	Text	N	Where possible, message to explain reason for rejection.
	Standard Trailer	Y	

2.2.6 4: Sequence Reset

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=4]
123	GapFillFlag	N	
36	NewSeqNo	Y	Cannot be lower than the last [MsgSeqNum 34].
	Standard Trailer	Y	

2.2.7 5: Logout

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=5]
58	Text	N	
	Standard Trailer	Y	

2.3 Application Messages

2.3.1 D: New Single/Complex Order

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=D]
11	ClOrdID	Y	Unique identifier of the order as assigned by institution.
18	ExecInst	N	f = Intermarket Sweep Order Must not be provided when [SecurityType 167= MLEG]
1	Account	N	
167	SecurityType	Y	Valid values: OPT = Options MLEG = Complex Order
55	Symbol	Y	Underlying symbol when [SecurityType 167=OPT]. Complex Order symbol when [SecurityType 167=MLEG].
201	PutOrCall	N	Mandatory when [SecurityType 167=OPT]. Must not be provided when [SecurityType 167=MLEG].
202	StrikePrice	N	
200	MaturityMonthYear	N	
205	MaturityDay	N	
54	Side	Y	
60	TransactTime	N	Time at which this order request was initiated/ released by the trader or trading system.
38	OrderQty	Y	
40	OrdType	Y	For a detailed description of OrdType, refer to Chapter 3, Field Definitions
47	Rule80A	Y	Identifies the type of account. For detail information on Rule80A account type values, refer to Chapter 3, Field Definitions
44	Price	N	Required when [OrdType 40=2]. Can be negative or zero when [SecurityType 167=MLEG].
59	TimeInForce	N	Absence of this field indicates Day order.
432	ExpireDate	N	Conditionally required if [TimeInForce 59=6] (GTD), refer to Chapter 3, Field Definitions
58	Text	N	
77	OpenClose	Y	Refer to Chapter 3, Field Definitions

Tag	Field Name	Req'd	Comments
76	ExecBroker	N	Give-Up firm
439	ClearingFirm	N	Clearing Firm for CMTA
7901	***ExecutingParticipantID***	**N**	Use to indicate that the order is a Directed Order.
7906	***CombinedOrdType***	**N**	Use when when [SecurityType 167=OPT]. Indicates the Price Validation Type requested by the client within the IML rules. Default value = 3 For detail information on Price Validation Type values, refer to Chapter 3, Field Definitions. **Note:** When ExecInst and CombinedOrdType are present together, the order is rejected and a FIX Order Report (MsgType = 8) is transmitted back to the participant. When [SecurityType 167=MLEG], the only valid value is 3 (or not provided).
	Standard Trailer	Y	

2.3.2 G: Cancel/Replace Single/Complex Order Request (a.k.a. Order Modification Request)

All fields can be modified except; [Symbol 55], [PutOrCall 201], [StrikePrice 202], [MaturityMonthYear 200], [MaturityDay 205], [Side 54].

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=G]
37	OrderID	N	Unique identifier as assigned by BOX.
1	Account	N	
41	OrigClOrdID	Y	[ClOrdID 11] of the order being replaced.
11	ClOrdID	Y	Unique identifier of replacement order as assigned by the Participant. **Note:** This identifier will be used in [ClOrdID 11] field of the Cancel Reject message if the replacement request is rejected.
167	SecurityType	Y	Valid values: OPT = Options MLEG = Complex Order
55	Symbol	Y	Must match the value provided in the original order.

Tag	Field Name	Req'd	Comments
201	PutOrCall	N	Must match the value provided in the original order. Must not be provided when [SecurityType 167=MLEG].
202	StrikePrice	N	
200	MaturityMonthYear	N	
205	MaturityDay	N	
54	Side	Y	Must match the value provided in the Execution Report when the order was booked.
60	TransactTime	Y	Time this order request was initiated/released by the trader or trading system.
38	OrderQty	Y	Represents the total order quantity.
40	OrdType	Y	For a detailed description of OrdType, refer to Chapter 3, Field Definitions.
47	Rule80A	Y	Identifies the type of account. For detail information on Rule80A account type values, refer to Chapter 3, Field Definitions.
44	Price	N	Required when [OrdType 40=2]. Can be negative or zero when [SecurityType 167=MLEG].
59	TimeInForce	N	Absence of this field indicates Day order.
432	ExpireDate	N	Conditionally required if [TimeInForce 59=6] (GTD).
58	Text	N	
77	OpenClose	Y	
76	ExecBroker	N	Give-Up Firm
439	ClearingFirm	N	Clearing Firm for CMTA
7901	***ExecutingParticipantID***	**N**	Use to indicate that the modification is for a Directed Order.
7906	***CombinedOrdType***	**N**	Use when when [SecurityType 167=OPT]. Indicates the Price Validation Type requested by the client within the IML rules. Default value = 3 For detail information on Price Validation Type values, refer to Chapter 3, Field Definitions. **Note:** When ExecInst and CombinedOrdType are present together, the order is rejected and a FIX Order Report (MsgType = 8) is transmitted back to the participant. Must not be provided when [SecurityType 167=MLEG].
	Standard Trailer	Y	

2.3.3 PI: Auction Initial Order

Regarding modification of a Auction Initial order, only the [Price 44] field may be modified.

When used for a Complex Order instrument, participant can specify either the [Symbol 55] or the repeating leg block.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=PI]
167	SecurityType	Y	Valid values: OPT = Options MLEG = Complex Order
55	Symbol	N	Underlying symbol when [SecurityType 167=OPT]. Complex Order symbol when [SecurityType 167=MLEG]. Must not be used when using the repeating leg block section. For a modification, it must be identical to the one provided in the original message.
201	PutOrCall	N	Must not be provided when [SecurityType 167=MLEG].
202	StrikePrice	N	
200	MaturityMonthYear	N	
205	MaturityDay	N	
54	Side	Y	
38	OrderQty	Y	For Auction Initial Order modification, the value must be equal to the quantity of the original Auction Initial Order.
44	Price	Y	For Auction Initial Order modification, the value must be different than the price of the related Auction Initial Order.
854	***QtyType***	N	Defines auction type as MIP (Maximum Improve Price) or surrender quantity for Solicitation. Must not be provided for Facilitation auction type. For a list of values, refer to Chapter 3, Field Definitions
639	***PriceImprovement***	N	Specifies the Maximum Improve Price for PIP. Must not be provided for Solicitation and Facilitation auction types.

Tag	Field Name		Req'd	Comments
7900	***ImprovePhaseID***		N	Identification of the improvement phase. Mandatory when the message represents a modification.
9461	***AddQty***		N	Used for PIP and Solicitation auction types. Must not be provided for Facilitation auction type. Indicates the number of contracts the InitO is willing to surrender. For Solicitation, used when the field ”854-QtyType” is set to ”B”. For PIP, use when the field ”854-QtyType” is set to ”J” The value must be less than or equal to the auction initial quantity.
9383	***Auction Type***		N	Specifies which type of auction/order to start. If this tag is not provided, the default auction type is PIP. For detail information on Auction Type values, refer to Chapter 3, Field Definitions
7388	***Contingent Order***		N	Applies to Solicitation and Facilitation auction types and specifies that the Auction is contingent and should not be controlled against the NBBO for the execution price. For detailed information on Auction Type values, refer to Chapter 3, Field Definitions
7904	NoClearingData		Y	Value equals 2. The first group of fields provides the broker information, and the second group provides the 'Must be Filled' side information.
Clearing Data Block				
➔	**11**	**ClOrdID**	**Y**	Unique identifier of the order as assigned by institution. **Note:** When improving the price of an ongoing PIP, tag [ClOrdID 11] for the "Must be Filled" side is optional and, if supplied, must always keep its original value.
➔	**1**	**Account**	**N**	
➔	**58**	**Text**	**N**	
➔	**47**	**Rule80A**	**Y**	Identifies the type of account. For detailed information on Rule80A account type values, refer to Chapter 3, Field Definitions.
➔	**77**	**OpenClose**	**Y**	Refer to Chapter 3, Field Definitions.

Tag	Field Name		Req'd	Comments
➔	**76**	**ExecBroker**	**N**	Give-Up Firm
➔	**439**	**ClearingFirm**	**N**	Clearing Firm for CMTA
➔	***7906***	***Combined OrdType***	**N**	Indicates the price validation type requested by the client within the IML rules. Value equals 3. Must not be provided when [SecurityType 167=MLEG]. For detailed information on Price Validation Type values, refer to Chapter 3, Field Definitions
➔	**60**	**TransactTime**	**N**	
555	NoLegs		Y	Number of legs that make up the instrument. Group of fields must be included in sequential order as defined in the Complex Order. Must not be provided when [Symbol 55] is included. From 2 to 4.
Leg Block				
➔	**654**	**LegRefID**	**Y**	Unique identifier for each leg within the order. Not required to be unique for the day. This tag must be received in sequential order (ex.: leg 1 before leg 2) and must be the first tag in each component block. Must not be provided when [Symbol 55] is included.
➔	**600**	**LegSymbol**	**Y**	Symbol for each individual leg.
➔	**608**	**LegCFICode**	**Y**	Type of option of each individual leg. Valid values: OC = Option Call OP = Option Put Must not be provided when [Symbol 55] is included.
➔	**611**	**LegMaturity-Date**	**Y**	Maturity date of each individual leg. Format: YYYYMMDD Must not be provided when [Symbol 55] is included.
➔	**612**	**LegStrikePrice**	**Y**	Strike price of each individual leg. Must not be provided when [Symbol 55] is included.

Tag		Field Name	Req'd	Comments
➔	**623**	**LegRatioQty**	**Y**	The ratio quantity for this individual leg relative to the entire Complex Order. Must not be provided when [Symbol 55] is included.
➔	**624**	**LegSide**	**Y**	Side of each individual leg. Valid values: 1 = Buy 2 = Sell Must not be provided when [Symbol 55] is included.
	Standard Trailer		Y	

2.3.4 F: Order Single/Complex Cancel Request

Used to cancel an open order by the order originator or to cancel an existing Solicitation or Facilitation auction type by the Initiating Participant (InitO).

When use to cancel a Complex Order, participant can specify either the [Symbol 55] or the repeating leg block.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=F]
41	OrigClOrdID	Y	[ClOrdID 11] of the order being cancelled.
37	OrderID	N	Unique identifier of most recent order as assigned by BOX.
11	ClOrdID	Y	Unique ID of cancel request as assigned by the Participant.
38	OrderQty	Y	Represents the total order quantity.
167	SecurityType	Y	Valid values: OPT = Options MLEG = Complex Order
55	Symbol	Y	Must match the value provided in the original order. Must not be provided when using leg blocks.
201	PutOrCall	N	Must match the value provided in the original order. Must not be provided when [SecurityType 167=MLEG].
202	StrikePrice	N	
200	MaturityMonthYear	N	
205	MaturityDay	N	
54	Side	Y	Must match the value provided in the original order.

Tag	Field Name		Req'd	Comments
58	Text		N	
60	TransactTime		Y	Time this order request was initiated/released by the trader or trading system.
555	NoLegs		N	Must not be provided when [SecurityType 167=OPT]. Must match the value provided in the original order (message type AB). When [SecurityType 167=MLEG], replace the use of the [Symbol 55] field. Must not be provided when Symbol is defined.
→	**654**	**LegRefID**	**N**	
→	**564**	**LegPositionEffect**	**N**	
→	**600**	**LegSymbol**	**N**	
→	**608**	**LegCFICode**	**N**	
→	**611**	**LegMaturityDate**	**N**	
→	**612**	**LegStrikePrice**	**N**	
→	**623**	**LegRatioQty**	**N**	
→	**624**	**LegSide**	**N**	
	Standard Trailer		Y	

2.3.5 R: Quote Request

This message is used to broadcast a request for a quote on a particular instrument. The request is broadcastin the HSVF Market Data feed.

Note: Only applies for option instrument, not for Complex Order instrument.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=R]
131	QuoteReqID	N	
146	NoRelatedSym	N	If provided, must be set to 1.
167	SecurityType	Y	
55	Symbol	Y	
201	PutOrCall	Y	
202	StrikePrice	Y	
200	MaturityMonthYear	Y	
205	MaturityDay	Y	
38	OrderQty	N	
	Standard Trailer	Y	

2.3.6 8: Execution Report

Execution Report can be generated for the following:

- A Trade is canceled by the Market Operation Center on behalf of a participant
- An Order gets eliminated
- A New Single/Complex Order confirmation
- A New Multi-Leg Order - Single confirmation
- A Cancel/Replace Single/Complex Order Request confirmation
- A Multi-Leg Order Cancel/Replace Request confirmation
- An Order Single/Complex Cancel Request confirmation
- A Directed Order confirmation
- In response to an Order Mass Status Request
- In response to all PIP, Solicitation and Facilitation auction types
- In response to a Customer Cross order.

Tag	Field Name	Comments
	Standard Header	[MsgType 35=8]
37	OrderID	Required to be unique for each chain of orders. Set to "**NONE**" if in response to a New Order Single being rejected.
11	ClOrdID	If provided in the original New Order, Cancel Request, or Order Cancel/Replace.
41	OrigClOrdID	Conditionally required for response to a Cancel or Cancel/Replace request [ExecType 150=Replaced or Canceled]. [ClOrdID 11] of the previous order (NOT the initial order of the day) when cancelling or replacing an order. Not provided when [ExecTransType 20=1].
18	ExecInst	f = Intermarket Sweep Order. Only provided when [SecurityType 167=OPT]
1	Account	Used for firm identification. If provided in the original order.
17	ExecID	Unique for each Execution Report message.
20	ExecTransType	See table below for possible values.
19	ExecRefID	Provided when [ExecTransType 20=1] or [ExecTransType 20=2].
150	ExecType	Describes the type of execution report. See table below for possible values.
103	OrdRejReason	May be provided when [ExecType 150=8] (rejected).

Tag	Field Name	Comments
39	OrdStatus	Describes the current state of a CHAIN of orders, same scope as OrderQty, [CumQty 14], [LeavesQty 151], and [AvgPx 6]. See table below for possible values
38	OrderQty	Quantity of the order (as opposed to [LastShares 32] which refer to the fill).
44	Price	Price of order (as opposed to [LastPx 31] which refer to the fill). If provided in the original order.
167	SecurityType	Valid values: OPT = Options MLEG = Complex Order
55	Symbol	Underlying symbol when [SecurityType 167=OPT]. Complex Order symbol when [SecurityType 167=MLEG].
201	PutOrCall	Not provided when [MultiLegReportingType 442=3]
202	StrikePrice	
200	MaturityMonthYear	
205	MaturityDay	
54	Side	
40	OrdType	For a detailed description of OrdType, refer to Chapter 3, Field Definitions
59	TimeInForce	Absence of this field indicates Day order, refer to Chapter 3, Field Definitions
432	ExpireDate	Provided when [TimeInForce 59=6] (GTD)
32	LastShares	Quantity of shares bought/sold on this (last) fill. Indicate the quantity traded of the current leg when [MultiLegReportingType 442=2]
31	LastPx	Price of this (last) fill. When [MultiLegReportingType 442=2], indicates the price of the current leg.
151	LeavesQty	Amount of shares open for further execution. If [OrdStatus 39=4] (Canceled), then [LeavesQty 151] could be 0, otherwise [LeavesQty 151] = [OrderQty 38] - [CumQty 14].
14	CumQty	Currently executed shares for chain of orders. Equal [LastShares 32] when the fill is for a Flash Message.
6	AvgPx	Equal [LastPx 31] when the fill is for a Flash Message.
60	TransactTime	
77	OpenClose	Refer to Chapter 3, Field Definitions.

Tag	Field Name	Comments
58	Text	If provided in the original order. When [ExecType 150=8] (rejected), contains the text associated with the reason of the rejection.
76	ExecBroker	Give-up firm.
439	ClearingFirm	If provided in the original order.
47	Rule80A	Identifies the type of account. For detail information on Rule80A account type values, refer to Chapter 3, Field Definitions.
442	MultiLegReportingType	Values are: 1 = Single security or outright contract (default value) 2 = Individual leg of a Complex Order 3 = Report refers to a Complex Order
382	NoContraBrokers	Value will be 1 when reporting cross trades. For all other messages, tag [NoContraBroker 382] will not be supplied. Always appear before tag [ContraBroker 375].
375	ContraBroker	Value will be equal to the receiver's BOX number when reporting cross trades. For all other messages, tag [ContraBroker 375] will not be supplied.
584	***MassStatusReqID[1]***	Required if responding to a Order Mass Status Request. Echo back the value provided by the requester.
828	***TrdType***	Type of Trade. For a list of values, refer to Chapter 3, Field Definitions
7900	***ImprovePhaseID***	Identification of the improvement phase. Used when the 'Execution Report' message is a respond to an Auction Initial Order.
7906	***CombinedOrdType***	Indicates the price validation type requested by the client within the IML rules. For detailed information on Price Validation Type values, refer to Chapter 3, Field Definitions Not used when [MultiLegReportingType 442=2]
9383	***Auction Type***	Applies to PIP, Solicitation and Facilitation auction types and specifies the type of auction that the Execution Report refers to. For detailed information on Auction Type values, refer to Chapter 3, Field Definitions
7388	***Contingent Order***	Applies to Solicitation and Facilitation auction types and specifies that the auction was contingent and was not controlled against the NBBO for the execution price. For detailed information on Auction Type values, refer to Chapter 3, Field Definitions

Tag	Field Name	Comments
9459	***SpecialTradeInd***	Indicates the type of trade. For a list of values, refer to Chapter 3, Field Definitions
9730	***TradeLiquidity Indicator***	Indicates whether a trade adds or removes liquidity from the marketplace, or if the trade was done at an Away Exchange For a list of values, refer to Chapter 3, Field Definitions
9461	***AddQty***	Applies to Solicitation and PIP auction types. Contains the Surrender Quantity. Will be included in responses of PI messages to start au auction if it was originally included in the PI message. Will not be included in responses of PI messages to improve an existing auction. Will be included in Fill Reports sent for the InitO side on an auction only when there was no improvement sent on the initial auction and if it was originally included in the PI message. Will be included in Fill Reports sent for the MBF side if it was originally included in the PI message.
854	***QtyType***	Defines auction type as MIP for PIP or auction type Solicitation with a surrender quantity. For a list of values, refer to Chapter 3, Field Definitions
639	***PriceImprovement***	Specifies the Maximum Improvement Price
654	LegRefID	Unique identifier for each leg as assigned by the Participant when [MultiLegReportingType 442=2].
10455	SecurityAltId	Complex Order symbol when [MultiLegReportingType 442=2].
527	SecondaryExedId	Equal to the [ExecID 17] of the Complex Order Execution Report when [MultiLegReportingType 442=2].
	Standard Trailer	

1. Taken from FIX 4.4

The following table defines the use of fields, [ExecType 150], [OrdStatus 39], [ExecTransType 20] according to the action performed on an Order or a Trade (Fill).

Action	[ExecType 150]	[OrdStatus 39]	[ExecTransType 20]
New Order accepted and put in the book	0 = New	0 = New	0 = New
New Order already received with [PossResend 97=Y]	According to the status of the order at that time	According to the status of the order at that time	3 = Status

Action	[ExecType 150]	[OrdStatus 39]	[ExecTransType 20]
Response to an 'Order Mass Status Request' message [MsgType 35=AF]	The current status of the order. 0 = New 1 = Partial fill 2 = Fill	The current status of the order. 0 = New 1 = Partial fill 2 = Fill	3 = Status
Order sent to an away exchange	0 = New	***L = Directed through IML***	0 = New
Order Traded	1 = Partial fill 2 = Fill	1 = Partial filled 2 = Filled	0 = New
Order Canceled by the client	4 = Canceled	4 = Canceled	0 = New
Order Canceled by the Market Operation Center (MOC)	4 = Canceled	***M = Canceled by the MOC***	0 = New
Order Eliminated for one of the following reasons: • Becauseof an update on the instrument • An 'Immediate or Cancel' order is not filled or partially filled • After an exposition phase if the order is not traded	4 = Canceled	4 = Canceled	0 = New
Order Cancel/Replace accepted and put in the book	5 = Replace	5 = Replace	0 = New
Order Cancel/Replace accepted and put in the book on a partially filled order	5 = Replace	1 = Partial filled	0 = New
New Order	8 = Rejected	8 = Rejected	0 = New
Order is being exposed at the NBBO because it may causes a trade through.	0 = New	***P = Exposed***	0 = New
Order is waiting to be traded at an away exchange.	0 = New	***L = Directed through IML***	0 = New
Trade Killed (Busted)	1 = Partial fill 2 = Fill	The current status of the order. 0 = New 1 = Partial fill 4 = Canceled	1 = Cancel
Auction Initial Order is accepted or modified	0 = New	0 = New	0 = New
Auction Initial Order is canceled	4 = Canceled	4 = Canceled	0 = New

Action	[ExecType 150]	[OrdStatus 39]	[ExecTransType 20]
Directed Order sent to an Executing Participant	0 = New	***Q = Directed***	0 = New
Directed Order is refused and transformed into a regular New Order	0 = New	0 = New	0 = New
Directed Order is refused and cannot be transformed into a regular New Order	8 = Rejected	8 = Rejected	0 = New
Order eliminated due to a trading restriction (Wash Sale Prevention feature)	4 = Canceled	***T = Canceled due to Trading Restriction***	0 = New
Order eliminated due to an invalid price	4 = Canceled	***F = Eliminated Out of Limits***	0 = New
Order cancellation is pending because the option instrument is not in a state where order cancel are accepted. The order will be cancelled once the instrument will be back in a state allowing order cancellation.	6 = Cancel Pending	6 = Cancel Pending	0 = New
Incoming Complex Order cannot be matched against resting Complex Order because one of the leg does not satisfy the NBBO requirements.	4 = Canceled	***U = Eliminated due to unpriced leg***	0 = New

2.3.7 9: Order Single/Complex Cancel Reject

Tag	Field Name	Comments
	Standard Header	[MsgType 35=9]
37	OrderID	If error = "Unknown order", specify "NONE", otherwise refer to the order being referred.
11	ClOrdID	Unique order ID assigned by institution to the cancel request or to the replacement order.
41	OrigClOrdID	[ClOrdID 11] which could not be canceled/replaced. [ClOrdID 11] of the previous order (NOT the initial order of the day) when canceling or replacing an order.
39	OrdStatus	Value after this cancel reject is applied.
434	CxlRejResponseTo	

Tag	Field Name	Comments
58	Text	Contains the reason why the Cancel/Replace message has been rejected.
	Standard Trailer	

2.3.8 b: Quote Acknowledgement

Tag	Field Name	Comments
	Standard Header	[MsgType 35=b] (lowercase)
131	QuoteReqID	
297	QuoteAckStatus	Status of the quote acknowledgement. 0 = Accepted 5 = Rejected
300	QuoteRejectReason	Reason Quote was rejected.
	Standard Trailer	

2.3.9 c: Security Definition Request

This message is used to define a new Complex Order instrument or to request the list of all listed instruments trading on BOX.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=c] (lowercase)
320	SecurityReqID	N	Unique identifier as assigned by the Participant
321	SecurityRequestType	Y	Valid values: 1 = Request to create a new Complex Order instrument 2 = Request to receive all listed instruments
167	SecurityType	N	Must be MLEG when [SecurityRequestType 321=1] Must not be provided when [SecurityRequestType 321=2]
146	NoRelatedSym	N	From 2 to 4. Number of legs that are part of the current Complex Order instrument creation request. Must not be provided when [SecurityRequestType 321=2]

Tag		Field Name	Req'd	Comments
Leg Block				
➔	**311**	**Underlying-Symbol**	N	Complex Order instrument leg symbol. Must not be provided when [SecurityRequest-Type 321=2]
➔	**310**	**Underlying Security-Type**	N	Must be set to OPT. Must not be provided when [SecurityRequest-Type 321=2]
➔	**313**	**Underlying Maturity-MonthYear**	N	Complex Order instrument maturity date, for-mat YYYYMM. Must not be provided when [SecurityRequestType 321=2]
➔	**314**	**Underlying MaturityDay**	N	Complex Order instrument maturity date, for-mat DD. Must not be provided when [SecurityRequestType 321=2]
➔	**315**	**Underlying PutOrCall**	N	Valid values are: 0 = Call 1 = Put Must not be provided when [SecurityRequest-Type 321=2]
➔	**316**	**Underlying StrikePrice**	N	Complex Order instrument leg strike price. Must not be provided when [SecurityRequestType 321=2]
➔	**319**	**RatioQty**	N	Complex Order instrument ratio or quantity. Must not be provided when [SecurityRequestType 321=2]
➔	**54**	**Side**	N	Side of the Complex Order instrument. Valid values are: 1 = Buy 2 = Sell Must not be provided when [SecurityRequest-Type 321=2]
	Standard Trailer		Y	

2.3.10 d: Security Definition

This message is used to acknowledge a Security Definition Request.

Tag	Field Name	Comments
	Standard Header	[MsgType 35=d] (lowercase)
320	SecurityReqID	As provided in the Security Definition Request message.
322	SecurityResponseID	Unique identifier as assigned to the response by BOX.
323	SecurityResponseType	Valid values are: 1 = Accept Security Definition Request as initially requested. 2 = Accept Security Definition Request with revisions as indicated in this message.
55	Symbol	Underlying symbol when [SecurityType 167=OPT]. Complex Order symbol when [SecurityType 167=MLEG].
167	SecurityType	Valid values are: OPT = Options MLEG = Complex Order instrument
200	MaturityMonthYear	Provided for Options only, when [SecurityType 167=OPT]
205	MaturityDay	
201	PutOrCall	
202	StrikePrice	
48	SecurityID	BOX internal instrument ID.
22	IDSource	Set to 8
146	NoRelatedSym	From 2 to 4. Number of legs that make up the instrument. Provided only when [SecurityType 167=MLEG].

Tag	Field Name		Comments
		Leg Block	
→	311	**UnderlyingSymbol**	As provided in the Security Definition Request. Provided only when [SecurityType 167=MLEG].
→	310	**Underlying SecurityType**	
→	313	**Underlying MaturityMonthYear**	
→	314	**Underlying MaturityDay**	
→	315	**Underlying PutOrCall**	
→	316	**Underlying StrikePrice**	
→	319	**RatioQty**	Provided only when [SecurityType 167=MLEG]. As provided in the Security Definition Request unless a similar Complex Order instrument already exists with ratios using the same denominator. Ex.: Given that A is the first leg and B the second leg: A request to create the Complex Order instrument 10A+20B will result in the instrument 1A+2B being created.
→	54	**Side**	Provided only when [SecurityType 167=MLEG].
	Standard Trailer		

2.3.11 j: Business Message Reject

This message is used when rejecting one of the following messages:

c: Security Definition Request

AB: New Multi-Leg Order - Single

PI: Complex Order instrument creation request using a Auction Initial Order.

Tag	Field Name	Comments
	Standard Header	[MsgType 35=j] (lowercase)
45	RefSeqNum	Value of the field [MsgSeqNum 34] of the FIX message being rejected.

Tag	Field Name	Comments
372	RefMsgType	Value of the field [MsgType 35] of the FIX message being rejected. Valid values are: c = Security Definition Request AB = New Multi-Leg Order - Single PI = Auction Initial Order on a Complex Order instrument
379	BusinessRejectRefID	Value of the field [SecurityReqID 320] when the Business Reject message refers to a Security Definition Request (message type ‘c’) Value of the field [ClOrdID 11] when the Business Reject message refers to a New Multi-Leg Order - Single (message type ‘AB’) or a Auction Initial Order (message type ‘PI’) message.
380	BusinessRejectReason	Code identifying the reason of the reject. Valid value: 2 = Unknown Security (default value)
58	Text	Text explaining the reason of the reject.
	Standard Trailer	

2.3.12 AF: Order Mass Status Request

Execution Report [MsgType 35=8] with [ExecTransType 20=3] (Status) are returned for each active order belonging to the participant. If no active order belongs to the participant, no response is returned.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=AF]
584	MassStatusReqID	N	
585	MassStatusReqType	N	= 7 (Status for all orders for the participant)
	Standard Trailer	Y	

2.3.13 AB: New Multi-Leg Order - Single

This message is used to define a Complex Order instrument (aka multi-leg or Strategy) and add a new Complex Order entry (or send a Directed Order on a Complex Order) simultaneously. Legs details are specified using a repeating leg block.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=AB]
11	ClOrdID	Y	Unique identifier of the order as assigned by institution.
1	Account	N	
167	SecurityType	Y	Must be MLEG
54	Side	Y	
60	TransactTime	N	Time at which this order request was initiated/ released by the trader or trading system.
38	OrderQty	Y	
40	OrdType	Y	For a detailed description of OrdType, refer to Chapter 3, Field Definitions
47	Rule80A	Y	Identifies the type of account. For detail information on Rule80A account type values, refer to Chapter 3, Field Definitions
44	Price	N	Required when [OrdType 40=2]. Net price of the Complex Order. Can be positive, negative or zero.
59	TimeInForce	N	Absence of this field indicates Day order. Valid values are: 0 = Day 3 = Immediate or Cancel (IOC) W = Session Order
58	Text	N	
76	ExecBroker	N	Give-Up firm
439	ClearingFirm	N	Clearing Firm for CMTA
7901	***ExecutingParticipantID***	**N**	Use to indicate that the order is a Directed Order.
7906	***CombinedOrdType***	**N**	Must be set to 3 if provided.
Leg Block			
555	NoLegs	Y	Number of legs that make up the instrument. Group of fields must be included in sequential order as defined in the Complex Order. From 2 to 4.
➔	**654** **LegRefID**	Y	Unique identifier for each leg within the order. Not required to be unique for the day. This tag must be received in sequential order (ex.: leg 1 before leg2) and must be the first tag in each component block.

Tag	Field Name		Req'd	Comments
→	**564**	**LegPositionEffect**	Y	Type of position of each individual leg. Valid values: O = Open C = Close
→	**600**	**LegSymbol**	Y	Symbol for each individual leg.
→	**608**	**LegCFICode**	Y	Type of option of each individual leg. Valid values: OC = Option Call OP = Option Put
→	**611**	**LegMaturityDate**	Y	Maturity date of each individual leg. Format: YYYYMMDD
→	**612**	**LegStrike-Price**	Y	Strike price of each individual leg.
→	**623**	**LegRatio-Qty**	Y	The ratio quantity for this individual leg relative to the entire Complex Order.
→	**624**	**LegSide**	Y	Side of each individual leg. Valid values: 1 = Buy 2 = Sell
	Standard Trailer		Y	

2.3.14 AC: Cancel/Replace Multi-Leg Order

This message is used to modify a Complex Order instrument (aka multi-leg or Strategy). Legs details are specified using a repeating leg block and must represent the same Complex Order instrument defined in the original AB-New Multi-Leg Order Single message.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	[MsgType 35=AC]
37	OrderID	N	Unique identifier of order as assigned by BOX.
11	ClOrdID	Y	Unique identifier of the new order as assigned by the Participant.
41	OrigClOrdID	Y	[ClOrdID 11] of the order being replaced.
1	Account	N	
167	SecurityType	Y	Must be MLEG
54	Side	Y	Must match the value sent in the original order.

Tag	Field Name		Req'd	Comments
60	TransactTime		N	Time at which this order request was initiated/ released by the trader or trading system.
38	OrderQty		Y	Represents the total order quantity.
40	OrdType		Y	For a detailed description of OrdType, refer to Chapter 3, Field Definitions
47	Rule80A		Y	Identifies the type of account. For detail information on Rule80A account type values, refer to Chapter 3, Field Definitions
44	Price		N	Required when [OrdType 40=2]. Net price of the Complex Order. Can be positive, negative or zero.
59	TimeInForce		N	Absence of this field indicates Day order. Valid values are: 0 = Day 3 = Immediate or Cancel (IOC) W = Session Order
58	Text		N	
76	ExecBroker		N	Give-Up firm
439	ClearingFirm		N	Clearing Firm for CMTA
7901	***ExecutingParticipantID***		**N**	Use to indicate that the modification is for a Directed Order.
555	NoLegs		Y	Must match the values provided in the original order.
Leg Block				
➔	**654**		Y	Must match the Complex Order instrument definition entered in the original AB message.
➔	**564**	**LegPosition Effect**	Y	
➔	**600**	**LegSymbol**	Y	
➔	**608**	**LegCFICode**	Y	
➔	**611**	**LegMaturity Date**	Y	
➔	**612**	**LegStrike-Price**	Y	
➔	**623**	**LegRatio-Qty**	Y	
➔	**624**	**LegSide**	Y	
	Standard Trailer		Y	

Chapter 3 Field Definitions

Field #	Field Name	Description	Field Length
1	Account	Account mnemonic as agreed between broker and institution. The following characters are accepted but are not sent to OCC on trade submissions: > (greater than) < (less than) ‘ (single quote) “ (double quote) & (ampersand)	1 to 12
6	AvgPx	Calculated average price of all fills on this order.	1 to 9
7	BeginSeqNo	Message sequence number of first message in range to be resent	1 to 9
8	BeginString	Identifies beginning of new message and protocol version. ALWAYS FIRST FIELD IN MESSAGE. Valid values: FIX.4.2	7
9	BodyLength	Message length, in bytes, forward to the [CheckSum 10] field. ALWAYS SECOND FIELD IN MESSAGE.	2 to 4
10	CheckSum	Three bytes, simple checksum (see FIX v4.2 document for description). ALWAYS LAST FIELD IN MESSAGE; i.e. serves, with the trailing <SOH>, as the end-of-message delimiter. Always defined as three characters.	3

Field #	Field Name	Description	Field Length
11	ClOrdID	Unique identifier for Order as assigned by institution. Uniqueness must be guaranteed within a single trading day. Firms which submit multi-day orders should consider embedding a date within this field to assure uniqueness across days. **Note:** The following format rules: • Has none of the following ascii characters: % (percent sign) , (comma) ; (semi-colon) # (pound sign) • Contains no ascii characters in the decimal code ranges between: 0 to 31 127 and up • The following characters are accepted but are not sent to OCC on trade submissions: > (greater than) < (less than) ‘ (single quote) “ (double quote) & (ampersand)	1 to 50
14	CumQty	Total number of shares filled.	1 to 9
16	EndSeqNo	Message sequence number of last message in range to be resent. If request is for a single message [BeginSeqNo 7 = EndSeqNo 16]. If request is for all messages subsequent to a particular message, [EndSeqNo 16=0].	1 to 9
17	ExecID	Unique identifier of execution message as assigned by broker (will be 0 (zero) for [ExecTransType 20=3] (Status)).	1 to 15
18	ExecInst	’f’ = Intermarket Sweep Order	1
19	ExecRefID	Reference identifier used with Cancel transaction types.	1 to 15

Field #	Field Name	Description	Field Length
20	ExecTransType	Identifies transaction type. Valid values: 0 = New 1 = Cancel 2 = Correct 3 = Status	1
22	IDSource	Define the length of the [SecurityID 48] field. Set to 8	1
31	LastPx	Price of this (last) fill.	1 to 9
32	LastShares	Quantity of shares bought/sold on this (last) fill	1 to 9
34	MsgSeqNum	Message sequence number.	1 to 9
35	MsgType	Defines message type. ALWAYS THIRD FIELD IN MESSAGE Valid values: 0 = Heartbeat 1 = Test Request 2 = Resend Request 3 = Reject 4 = Sequence Reset 5 = Logout 8 = Execution Report 9 = Order Cancel Reject A = Logon D = New Single/Complex Order F = Order Single/Complex Cancel Request G = Cancel/Replace Single/Complex Request R = Quote Request b = Quote Acknowledgement c = Security Definition Request d = Security Definition ***AF = Order Mass Status Request*** ***PI = Auction Initial Order*** AB = New Multi-Leg Order - Single AC = Cancel/Replace Multi-Leg Order j = Business Reject	1
36	NewSeqNo	New sequence number	1 to 9

Field #	Field Name	Description	Field Length
37	OrderID	Unique identifier for Order as assigned by BOX.	10 to 20
38	OrderQty	Number of shares ordered. Should not contain decimals.	1 to 9
39	OrdStatus	Identifies current status of order. Valid values: 0 = New 1 = Partially filled 2 = Filled 4 = Canceled 5 = Replaced 6 = Cancel Pending 8 = Rejected ***P = Exposed*** ***Q = Directed Order*** ***L = Directed through IML*** ***I = Session Order Canceled when the participant connection gets disconnected*** ***T = Order canceled due to Trading Restriction*** ***F = Order eliminated due to an invalid out of limits price*** ***M = Canceled by the Market Operation Center (MOC)*** ***U = IIncoming Complex Order cannot be matched against resting Complex Order because one of the leg does not satisfy the NBBO requirements***.	1
40	OrdType	Valid values for both [SecurityType 167=OPT and MLEG]: 1 = Market 2 = Limit ***V = U.S. Market Order*** (Used in continuous trading and pre-opening) Valid value for [SecurityType 167=OPT] only: ***O = Market at Open*** (The order will trade at the opening price. The remaining quantity, if it exists, will be booked at the opening price. This usage and meaning are different from the [TimeInForce 59=2] in FIX v4.2)	1

Field #	Field Name	Description	Field Length
41	OrigClOrdID	[ClOrdID 11] of the previous order (NOT the initial order of the day) as assigned by the participant, used to identify the previous order in cancel and cancel/ replace requests	1 to 50
43	PossDupFlag	Indicates possible retransmission of message with this sequence number Valid values: Y = Possible duplicate N = Original transmission	1
44	Price	Price per contract. A maximum of 6 decimals are accepted. Can be positive (options and Complex Order), negative or zero (Complex Order)	1 to 9
45	RefSeqNum	Sequence number of the initial message being referenced.	1 to 9
47	Rule80A	Identifies the type of account. Valid values: C = Public Customer F = Broker Dealer M = Market Maker T = Professional Customer V = Away Broker Dealer Cleared as Customer W = Broker Dealer Cleared as Customer X = Away Affiliated Market Maker Y = Away Broker Dealer Z = Away Market Maker not Affiliated Refer to Appendix B, Rule80A and CombinedOrdType Combinations for additional details.	1
48	SecurityID	BOX internal instrument ID.	12
49	SenderCompID	Assigned value used to identify the sender in a FIX session BOX trading engine = 'BOX1	4 to 8
52	SendingTime	Time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT")	17 to 21
54	Side	Side of order. Valid values: 1 = Buy 2 = Sell	1

Field #	Field Name	Description	Field Length
55	Symbol	Class root symbol for options or Complex Order instrument symbol	1 to 20
56	TargetCompID	Assigned value used to identify the receiver in a FIX session. BOX trading engine = 'BOX1	4 to 8
58	Text	Free format text string. **Note:** The following format rules: • Has none of the following ascii characters: % (percent sign) , (comma) ; (semi-colon) # (pound sign) • Contains no ascii characters in the decimal code ranges between: 0 to 31 127 and up • The following characters are accepted but are not sent to OCC on trade submissions: > (greater than) < (less than) ‘ (single quote) “ (double quote) • & (ampersand)	1 to 18 in New Order message 1 to 80 otherwise
59	TimeInForce	Specifies how long the order remains in effect. Absence of this field indicates DAY order. Valid values for [SecurityType 167= OPT and MLEG]: 0 = Day 3 = Immediate or Cancel (OC) ***W = Session Order*** Valid values for [SecurityType 167= OPT] only: 1 = Good Till Cancel (GTC) 6 = Good Till Date	1
60	TransactTime	Time of execution/order creation, expressed in UTC (Universal Time Coordinated, also known as "GMT")	17 to 21
76	ExecBroker	Defines the Give-Up firm	4

Field #	Field Name	Description	Field Length
77	OpenClose	Type of position. Valid Values for options and individual leg of a Complex Order instrument: O = Open C = Close The following values are used when referencing Complex Order instrument: 1 = 1st leg Open, 2nd leg Close 2 = 1st leg Close, 2nd leg Open 3 = 1st and 2nd legs Open, 3rd leg Close 4 = 1st leg Open, 2nd leg Close, 3rd leg Open 5 = 1st leg Open, 2nd and 3rd legs Close 6 = 1st leg Close, 2nd and 3rd legs Open 7 = 1st leg Close, 2nd leg Open, 3rd leg Close 8 = 1st and 2nd legs Close, 3rd leg Open A = 1st, 2nd and 3rd legs Open, 4th leg Close B = 1st and 2nd legs Open, 3rd leg Close, 4th leg Open D = 1st and 2nd legs Open, 3rd and 4th legs Close E = 1st leg Open, 2nd leg Close, 3rd and 4th legs Open F = 1st leg Open, 2nd leg Close, 3rd leg Open, 4th leg Close G = 1st leg Open, 2nd and 3rd legs Close, 4th leg Open H = 1st leg Open, 2nd, 3rd and 4th legs Close I = 1st leg Close, 2nd, 3rd and 4th legs Open J = 1st leg Close, 2nd and 3rd legs Open, 4th legs Close K = 1st leg Close, 2nd leg Open, 3rd leg Close, 4th leg Open L = 1st leg Close, 2nd leg Open, 3rd and 4th legs Close M = 1st and 2nd legs Close, 3rd and 4th legs Open N = 1st and 2nd legs Close, 3rd leg Open, 4th leg Close P = 1st, 2nd and 3rd legs Close, 4th leg Open	1

Field #	Field Name	Description	Field Length
97	PossResend	Indicates that message may contain information that has been sent under another sequence number. Valid Values: Y = Possible resend N = Original transmission	1
98	EncryptMethod	Method of encryption. Valid values: 0 = None	1
103	OrdRejReason	Code to identify reason for order rejection.	1 to 6
108	HeartBtInt	Heartbeat interval (seconds). Must be equal or greater than 30 or equal to 0 (no heartbeat)	1 to 4
112	TestReqID	Identifier included in Test Request message to be returned in resulting Heartbeat	1 to 20
122	OrigSendingTime	Original time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT") when transmitting orders as the result of a resend request.	17 to 21
123	GapFillFlag	Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent. Valid values: Y = Gap Fill message, MsgSeqNum field valid N = Sequence Reset, ignore MsgSeqNum	1
131	QuoteReqID	Unique identifier for quote request	1 to 50
141	ResetSeqNum-Flag	Indicates that the both sides of the FIX session should reset sequence numbers. Valid values: Y = Yes, reset sequence numbers N = No	1
146	NoRelatedSym	Specifies the number of repeating symbols specified. From 1 to 4.	1

Field #	Field Name	Description	Field Length
150	ExecType	Describes the specific Execution Report. Valid values: 0 = New 1 = Partial fill 2 = Fill 4 = Canceled 5 = Replace 6 = Cancel Pending 8 = Rejected C = Expired	1
151	LeavesQty	Amount of shares open for further execution.	1 to 9
167	SecurityType	Indicates type of security. Valid values: OPT = Option MLEG = Complex Order instrument	3
200	MaturityMonth-Year	Month and Year of the maturity for [SecurityType 167 = OPT].	6
201	PutOrCall	Indicates whether an Option is for a put or call. Valid values: 0 = Put 1 = Call	1
202	StrikePrice	Strike Price for an Option. A maximum of 6 decimals are accepted.	1 to 9
205	MaturityDay	Day of the maturity for [SecurityType 167=OPT]..	1 to 2
297	QuoteAckStatus	Identifies the status of the quote acknowledgement. Valid values: 0 = Accepted 5 = Rejected	1
300	QuoteReject Reason	Reason Quote was rejected See Appendix A for the list of error code	4 to 6
310	Underlying SecurityType	Complex Order instrument leg SecurityType. See [SecurityType 167] field for description	3
311	Underlying Symbol	Complex Order instrument leg Symbol. See [Symbol 55] field for description.	1 to 20
313	Underlying MaturityMonth Year	Complex Order instrument leg maturity date. See [MaturityMonthYear 200] field for description.	6

Field #	Field Name	Description	Field Length
314	Underlying MaturityDay	Complex Order instrument leg maturity day. See [MaturityDay 205] field for description.	1 to 2
315	Underlying PutOrCall	Complex Order instrument leg PutOrCall. See [PutOrCall 201] field for description.	1
316	UnderlyingStrike-Price	Complex Order instrument leg strike price. See [StrikePrice 202] field for description.	1 to 9
319	RatioQty	Complex Order instrument leg ratio to determine valid quantity. Should not contain decimals. Valid values from1 to 99.	1 to 2
320	SecurityReqID	Unique ID of a Security Definition Request as defined by the participant.	1 to 50
321	Security RequestType	Type of Security Definition Request. Valid values: 1 = Request to create a new Complex Order instrument 2 = Request to receive all listed instruments	1
322	Security ResponseID	Unique ID of a Security Definition message as assigned by BOX.	1 to 15
323	Security ResponseType	Type of response when responding to a Security Definition Request message. Valid values are: 1 = Accept Security Definition Request as initially requested. 2 = Accept Security Definition Request with revisions as indicated in this message.	1
371	RefTagID	The tag number of the FIX field being referenced.	1 to 5
372	RefMsgType	The message type of the FIX message being referenced. See field [MsgType 35].	1 to 2
373	Session RejectReason	Code to identify reason for a session-level Reject message.	1 to 2
375	ContraBroker	BOX number of the firm on the opposite side of the trade. Value will be equal to the receiver's BOX number when reporting cross trades. For all other messages, tag [ContraBroker 375] will not be supplied.	4

Field #	Field Name	Description	Field Length
379	Business RejectRefID	Value of the field [SecurityReqID 320] when the Business Reject message refers to a Security Definition Request (message type 'c') Value of the field [ClOrdID 11] when the Business Reject message refers to a New Multi-Leg Order - Single (message type 'AB') or a Auction Initial Order (message type 'PI') message.	1 to 50
380	Business RejectReason	Code identifying the reason of the reject. Valid value: 2 = Unknown Security (default value)	1
382	NoContraBrokers	Number of ContraBrokers repeating group instances. Always appear before tag [ContraBroker 375]. Value will be 1 when reporting cross trades. For all other messages, tag [NoContraBroker 382] will not be supplied.	1
383	MaxMessage-Size	Maximum number of bytes supported for a single message.	2 to 4
432	ExpireDate	Date of order expiration (last day the order can trade), always expressed in terms of the local market date	8
434	CxlRej ResponseTo	Identifies the type of request that a Cancel Reject is in response to. Valid values: 1 = Order Cancel Request 2 = Order Cancel/Replace Request	1
439	ClearingFirm	Firm that will clear the trade. Used if different from the executing firm.	4
442	MultiLeg ReportingType	Used to indicate what an Execution Report represents (e.g. used with multi-leg instrument, such as option strategies, spreads, etc.). Valid values: 1 = Single security or outright contract (default) 2 = Individual leg of a Complex Order 3 = Report refers to a Complex Order	1
527	SecondaryExecId	Equal to the [ExecID 17] of the Complex Order Execution Report when [MultiLegReportingType 442=2].	1 to 15
555	NoLegs	Number of legs part of the Complex Order instrument. Valid values are: 1, 2, 3 and 4.	1

Field #	Field Name	Description	Field Length
564	LegPositionEffect	Type of position of each individual leg. Valid values: O = Open C = Close	1
584	***MassStatus ReqID***	This field is taken from FIX v4.3 Value assigned by issuer of Mass Status Request to uniquely identify the request.	1 to 50
585	***MassStatus ReqType***	This field is taken from FIX v4.3. Mass Status Request Type Valid values: 7 = Status for all orders	1
600	LegSymbol	Symbol for each individual leg.	1 to 20
608	LegCFICode	Type of option of each individual leg. Valid values: OC = Option Call OP = Option Put	2
611	LegMaturityDate	Maturity date of each individual leg. Format: YYYYMMDD	8
612	LegStrikePrice	Strike price of each individual leg. Maximum of 6 deci-mal.	1 to 9
623	LegRatioQty	The ratio quantity for this individual leg relative to the entire Complex Order. Maximum value of 99.	1 to 2
624	LegSide	Side of each individual leg. Valid values: 1 = Buy 2 = Sell	1
639	***Price Improvement***	Specifies the Max Improvement price for PIP. Must not be provided for Solicitation and Facilitation auction types.	1 to 9
654	LegRefID	Unique identifier for each leg within the order. Not required to be unique for the day. This tag must be received in sequential order (ex.: leg 1 before leg2) and must be the first tag in each component block.	1 to 50

Field #	Field Name	Description	Field Length
828	***TrdType***	Valid Values: < > = Unknown O = Opening -Trade performed during opening Rotation A = Guaranteed Auction - Trade done at the end of a PIP Auction F = Continuous Trading - All other trade conditions B = Solicitation Auction - Trade was part of that type of auction C = Facilitation Auction - Trade was part of that type of auction	1
854	***QtyType***	Valid Values: J = Auction Type is MIP **Note:** If not transmitted, Auction Type is regular PIP B = Surrender Quantity for Solicitation Indicates that the InitO is willing to surrender a portion of the total number of contracts in the Solicitation auction. It must not be provided for Facilitation.	1
7388	***Contingent Order***	2 = Contingent Order Specifying that the auction is contingent and should not be/was not controlled against the NBBO for the execution price	1
7900	***Improve PhaseID***	Identification of the improvement phase.	1 to 6
7901	***Executing ParticipantID***	Identification of the Executing Participant to whom the 'Directed Order' is to be submitted. Indicate the 3 digits participant ID.	4
7904	***NoClearingData***	Valid values: 2	1

Field #	Field Name	Description	Field Length
7906	***Combined OrdType***	Indicates the price validation type requested by the client within the IML rules, and is validated against the value provided in the field [Rule80A 47]. Valid values for [SecurityType 167=OPT]:: 1 = NBBO Filtering and IML Routing 2 = No NBBO Filtering 3 = NBBO Filtering and no IML Routing (default value if the field is not provided) 4 = InBound ISO order. The order is a limit and IOC order. It is not controlled against the NBBO and not routed away. For Solicitation and Facilitation auction types: When tag 7388 is sent with value 2 (Contingent), the tag ”7906-CombinedOrdType” must be set to 2 (No NBBO Filtering) or must not be provided, otherwise the auction is rejected. When tag 7388 is not provided, tag 7906 must be set to 3 (NBBO Filtering and No Routing) or must not be provided. For a detailed description of Price Validation Types, refer to Appendix B, Rule80A and CombinedOrdType Combinations Valid value for [SecurityType 167=MLEG]: 3 = NBBO Filtering and no IML Routing (default value if the field is not provided)	1
9383	***Auction Type***	Specifies the type of auction/order. G = Regular Auction B = Solicitation Auction C = Facilitation Auction X = Customer Cross Order	1
9459	***SpecialTradeInd***	0 = Regular Trade (All) g = Contingent Trade (Solicitation and Facilitation) D = Customer Cross Order	1

Field #	Field Name	Description	Field Length
9461	***AddQty***	Used for PIP and Solicitation auction types. Contains the Surrender Quantity expressed in number of contract. This field is only accepted when initiating an Auction (PIP or Solicitation). If this field is provided when improving an existing auction, the auction message (PI) will be rejected. Indicates the number of contracts the Initiating Participant is willing to surrender. The value must be less than or equal to the auction initial quantity.	1 to 9
9730	***TradeLiquidity Indicator***	Indicates whether a trade adds or removes liquidity from the marketplace. Valid values Are: A = Add liquidity (Make) R = Remove liquidity (Take) X = Away Exchange Trade	1
10455	SecurityAltId	Complex Order instrument symbol	1 to 30

Appendix A Error Codes

In the following pages you will find the list of errors that can be returned by BOX. Those codes can be returned in messages *Execution Report, Order Cancel Reject* and *Quote Acknowledgement*. Please note that they are not all supported by the actual BOX version.

Error Codes	Error Text
1000	This instrument doesn't exist
1001	Unknown function
1002	Forbidden function for subscriber type
1003	Group state doesn't allow this function
1004	Instrument state doesn't allow this function
1005	Quantities must be numeric
1006	Price format is not valid
1007	A mandatory area is either incorrectly, or not filled
1008	Invalid Hour area format
1009	Group not authorized for this subscriber
1010	Mandatory field $$ is not filled
1011	Field $$ is incorrectly filled
1012	Unknown group of instrument
1013	Tick expression format is invalid
1014	This instrument doesn't allow this function
2002	Message not used
2003	Order price must be filled for limited orders
2004	Order price must not be filled for 'O','M','X','N','R' & 'J' orders
2005	Quantities must be multiple of traded lot
2006	Type of price invalid or not authorized according to stock or GR state
2009	Cross orders forbidden in pre-opening stage
2010	Cross order price type must be limited
2011	Total quantity must be greater than traded lot for a cross order
2013	Market price orders not supported by opposite limit
2014	Price must be valid against tick table
2015	Cross order price must be inside the limits
2016	FAK orders forbidden for at best, all or none, MIT and Stop-less orders
2018	Invalid Date format
2019	Validity date must be higher than current session date
2020	Validity date must be lower than default date

Error Codes	Error Text
2021	Order account type code must be 1, 2, 6
2023	Buy-Out Orders must have limit price and multiply quantity
2025	Validity date of FOK, Day or Dflt order must not be filled
2028	Disclosed or minimum quantity greater than total quantity
2029	Min quantity forbidden for cross best, stop orders or market orders
2030	Minimum quantity forbidden in pre-open except for All or none orders
2031	Disclosed quantity too small
2032	Disclosed quantity forbidden for FAK, MOO, cross, Best and Stop orders
2033	This Subscriber doesn't exist
2034	Order cannot be captured for CC
2035	Only CC can capture an order for another subscriber
2036	Order type must be 'A' 'I' 'P' or 'G'
2037	Order sequential number must be numeric
2038	Order side flag for modification or cancel must be A or V
2040	Minimum quantity cannot be modified
2041	Order account types A and V are only valid for cross orders
2042	No modification for the order
2044	Validity date type for a cross order must be FAK
2045	This order is not in the book
2046	Disclosed quantity cannot be greater than total or remaining qty
2047	Quantity must be less than 100.000.000
2048	Unfreeze with acceptance impossible, Best orders not given
2049	Cross order forbidden for stop, MIT and OCO orders
2050	Cross order forbidden for All or none
2051	Invalid cross order price, All or none order
2052	AON : Tot qty not multiple of min qty or (tot qty/min qty) >10 or <2
2053	Disclosed qty & Min Qty > 0, forbidden for FAK order
2054	AON : Tot qty not multiple of this qty or (tot qty/min qty) >10 or <2
2055	Trigger price format is invalid
2056	Invalid Tick table for trigger price
2057	Trigger price invalid for order type
2058	Stop price maxi-mini must be >= trigger price
2059	Stop price maxi-mini must be <= trigger price
2060	Trigger price must be < last price or last day price
2061	Trigger price must be > last price or last day price
2062	Qty (tot or min or dev) > qty authorized for an AON

Error Codes	Error Text
2063	(Qty (tot or min or dev) * price) > capital authorized for AON
2064	This Trader does not belong to this Member
2065	Trader Id cannot be updated
2066	Origin date greater than current
2069	Last underlying instr. price is out of limits
2070	STOP and MIT orders not authorized for SPREADS
2071	Price must be > 0
2072	Foreign firm subscriber must be different from original subscriber
2073	Order's type not accepted with allocation
2074	Modification from STOP/MIT to AON or AON/MIT to STOP is forbidden
2115	Total quantity must be inside the limits
2129	Minimum quantity forbidden for STOP orders
2130	Minimum quantity forbidden in pre-opening stage
2137	Order price is outside the limits
2500	Confirmation mandatory for this order
2501	Order handled in PreOpening - rejected in Continuous Trading
2502	Error, Instrument already in Fast-Market
2503	Error, Instrument already in Slow-Market
2504	Error, Instrument already in Very-Fast-Market
2600	The Member is NOT Liquidity provider for this Instrument
2601	Buy price must be less or equal to sell price
2602	Invalid price publicity type
2603	Invalid Subscriber type
2604	Trader ID is invalid
2900	Block amounts (minimum and maximum) must be in ascending order
2901	The side of the block must be buy or sell
2903	This function is forbidden for the current TCS stock group state
2904	This function is forbidden for the current TCS stock state
2908	Timer is outside allowed limits
2910	The indicator trade must be 1 for a block
2911	The block amount is less than the minimum amount for the TCS group
2917	Validity type of block must be day
2921	The block account type must be C or N
2933	This counterpart subscriber does not exist
2934	An block cannot be entered with a counterpart equal to Surveillance
2935	The Surveillance must not be the clearer of a block

Error Codes	Error Text
2937	The clearer does not exist
2940	The link trader-clearer does not exist
2941	The price of the block is outside allowed limits
2942	The price of the block must be the market price
2943	The block amount is higher than maximum block amount allowed
2944	Surv Interv 1 Session Time must be the earliest time entered
2947	Surv Interv 2 and Post-Market sessions must be provided
2948	Market or Post-Market times must follow Surv. Interv time
2949	No Post-Market Sess. if trades for the group are not yet broadcasted
2950	The block tick-limit is invalid or must be less than or equal to 100%
2951	All times are mandatory or all null
2952	The trader-clearer link already exists
2953	Subscriber not allowed for TCS
3000	Instrument already suspended
3001	Instrument already reserved
3002	Instrument must be reserved or suspended
3003	Instrument must be frozen
3004	Instrument must be authorized
3005	Instrument must be forbidden
3006	No specialist subscriber for this instrument
3007	Fixing time must be less than End consult time
3008	No order to delete in the book
3009	High limit must be greater to Low limit
3010	Frozen price must be inside high and low limit
3011	Settle price mandatory
3012	Old Last day price invalid
3013	Frozen price is not found
3014	Last day price must be filled
3015	Instrument was traded after the session beginning
3016	A group or an instrument must be filled
3017	Invalid data for Low and high limits
3018	The group has no instrument
3019	The Group opening Time commands the Instrument's one
3020	No opening time or fixing recorded for the Instrument
3021	The opening/Fixing time must be greater than system Time
3022	Opening Time must be < Post Session Time or PS Time must exists

Error Codes	Error Text
3023	TRADING-DATE must be > ORDER-ENTRY-DATE
3024	Previous Lot size different from the current one
3025	Previous H/L Limits different from current ones
3026	Previous Ref.P/T.Limit/Vali.D. different from the current ones
3027	Previous Coeff.Part different from current
3028	Previous Nbr of Stocks QMG different from current
3029	The Lot size cannot be changed if there are orders in the Book
3030	FIRST-LINE-REQUESTED must be filled
3031	NBRE-LINES-REQUESTED must be filled
3032	Selection is empty
3033	Opening or Fixing already scheduled for this Time
3034	Opening or Fixing already scheduled, Time entry rejected
3035	Opening or Fixing already scheduled, Reset rejected
3036	The Min and Max values entered are incorrect
3037	The Max value must be greater than the Min value
3038	The Posted Request to suppress is not in the REQUESTS table
3039	There is no Request corresponding to selection in the REQUESTS table
3040	High limit must be different than zero
3041	The Tick limit must be > 0 and < or equal to 100%
3042	HOST ORDER NUMBER cannot be null
3043	ORDER DIRECTION INDICATOR must be 'A' or 'V'
3045	The Times entered must be greater than the System Time
3048	Time POST-SESSION is mandatory, unique and equal to last Time
3049	All the Group event must have different scheduled Times
3050	The After-Opening scheduled state must be at least 10 minutes after
3051	Minimum delay between 2 scheduled Group events not respected
3052	At Least 10 minutes between Opening and Surv-Interv
3053	A State Change Time cannot be scheduled if State is the current one
3060	This group does not exist
3062	The OLD TEMP TICK LIMIT is invalid
3063	The OLD DEFAULT TICK LIMIT is invalid
3064	An indicator. value must be 0 or 1
3065	The old value of an indicator is incorrect
3066	Relative day 0 cannot have events with triggered time = 00:00:00
3067	Data unchanged
3068	PRICE VALIDITY DATE is wrong

Error Codes	Error Text
3069	Undefined currency for the instrument. Instrument still forbidden
3070	No Tick for the instrument, Instrument still forbidden
3071	The concerned subscriber does not have the type MEMBER
3072	The reservation indicator. must be '+' or '-'
3073	The entered date does not exist in the system calendar
3074	There is no Variable Tick row for the specified criteria
3094	Post-session timer must be > Instrument differed opening timer
3095	Forbidden break after Interruption during end-consult stage
3096	Restarting in Continuous impossible after a Market Interrupt
3097	Impossible Upd, an Instrument has odd lots in the book
3099	Previous Instr. different from the current one
3100	The Instrument Reference Price must be non null
3101	If H/L are null, Instr. or Group Tick Limit must be non null
3102	The temporary tick limit must be non null
3103	The default Tick Limit must be non null
3104	No valid tick for limit computed
3105	Forbidden delete, instrument state forbidden or frozen
3106	The Last Adjusted Closing Price must be non null
3107	The Request Time must be smaller or equal to System Time
3108	Request already exists for the Instrument or the Group
3109	Indic. order cancellation can only take values 0,1,2,3
3110	There are STOP orders for this Instr, Reset is rejected
3111	Change displayed Qty is forbidden on STOP/AON orders
3112	Incorrect value for Ref/Settl. Price
3113	Incorrect value for the Last Adjusted Closing Price
3114	Trading Day indicator = 0 or 1
3115	Session Template must be empty for day type 'F' or 'O'
3116	Day type incompatible with next day
3117	Day type incompatible with previous day
3118	First Default schedule time must have relative day value 0
3120	Invalid Group Event code
3121	Group state after opening empty or badly filled
3122	Group state after opening must be filled only if Opening
3123	Session template incompatible with market type associated to Group
3132	State change invalid :
3133	Scheduled time for the group are expired

Error Codes	Error Text
3134	Update cancelled, the day does not exist in calendar
3135	Invalid day type
3136	Invalid matching algorithm type (A/F/2)
3137	Matching algorithm type is already Allocation
3138	Matching algorithm type is already FIFO
3139	Matching algorithm type is already FIFO2
3140	Invalid demand regarding current algorithm
3150	This spread cannot be disinterested
3151	Only Spreads could be disinterested
3152	A leg of this spread is already linked
3153	Dst cannot be activated for this spread
3154	The state of a leg doesn't allow this function
3200	The Strategy type already exists
3201	The Strategy type doesn't exist
3202	This strategy does not exist
3203	This couple group-strategy type is already forbidden
3204	This couple group-strategy type is not forbidden
3205	The delay is not higher than the minimum delay
3206	Max/Min leg must be between including 2-40 and Min = or < Max
3207	A leg cannot be a Strategy
3208	Number of legs must be between including Min and Max
3209	The quantity type must be filled with Blank or AON
3210	Number of legs is bad filled
3211	The legs must have the same contract
3212	All instrument codes in the reserved bracket are used
3213	A similar strategy $$ already exists
3214	The ratios must respect conditions on strategy type
3215	Strategy not authorized for group
3216	Authorization forbidden - transaction unauthorized for strategy
3217	This function can not be captured for another subscriber
3218	This strategy is forbidden for this quantity type
3219	Invalid instrument code
3220	Two legs of this strategy are similar
3221	A leg does not exist
3222	The legs must respect conditions on strategy type
3223	Command rejected, the couple group-strategy type is forbidden

Error Codes	Error Text
3224	This strategy cannot be a delta neutral
3225	Invalid instrument type
3226	Ratios must be less than 99
3227	Stock shown is rejected because the order is no more valid
3228	Date was expired for the stock
3229	Command rejected, duration goes through the next stage
3230	Strategy type must be filled
3231	Indicator ratio authorized must be Y or N
3232	Authorization to trade on strategy type must be Y or N
3233	Inconsistent leg price algorithm ID
3234	Same underlying indicator for a strategy must be Y or N
3235	Invalid number of legs
3236	Ratio must be numeric
3237	Ratio sign must be + or -
3238	Inconsistent leg type
3239	Too many legs for the number defined
3240	Same leg defined several times
3241	Leg number inconsistent regarding max legs
3300	The legs OCO must have the same sens
3301	This orders combination is forbidden for OCO
3302	Tprice stop/mit must>price stop/mit and price mit>price stop
3303	Lprice of limited order must be > price stop order
3304	Price Stop must be > price MIT
3305	STOP Trigger price must be > Order Limited price
3306	Modification leg OCO forbidden for the function
3307	The discretion point must be blanc or >= 0 and <= 9999
3308	Trigger price outside allowed limits
3309	STOP Trigger price must be < Order Limited price
3400	Reservation with acceptation forbidden for cross/market to limit
3401	AON orders forbidden when Market Order are allowed
3402	Cross order price outside price range
3403	The cross quantity must be greater than total quantity to limit
3404	Change the order side is forbidden
3410	Market Maker not authorized for class
3411	IXMs have different class
3412	More one quote for IXM

Error Codes	Error Text
3413	Cross quote forbidden
3414	Incoherent number of quote
3415	Side must be A or V
3416	Quantity side must be - or +
3417	The mandatory field Posting Action is bad filled
3418	The mandatory field Order user origin is bad filled
3419	The mandatory field Origin account is bad filled
3420	Can't modify expiration date when IXM already expired
3421	Inconsistent ratio regarding strategy type
3422	Unknown quote in book
3423	Couple Group/Associated group does not exist
3424	An associated group already exists for this Group
3425	This Group is already associated to another one
3426	Action code must be D or C
3427	No associated group for underlying IXM(s)
3428	Associated groups must be different
3429	Couple Group/Associated group already exists
3430	Market Maker Protection in progress...
3431	Market Maker state setup required
3432	Market Maker state setup invalid
3433	No quotes in book for group
3500	Unknown Dealer
3501	Order price outside the limits NBBO
3502	Quantity must be greater than minimum improvement quantity
3503	Invalid phase number
3504	Improvement period already started
3505	Only price must be updated
3506	Price must be better than last initial price
3507	Invalid improvement quantity
3508	Only price and quantity must be updated
3509	Unknown management type
3510	Unknown improvement type
3511	Maximum price must be better than price
3512	Mandatory field client account is not filled
3513	Mandatory field trader order number is not field
3514	Improvement order forbidden for dealer

Error Codes	Error Text
3515	Forbidden improvement phase for IXM
3516	Invalid improvement side
3517	Forbidden update for automatic phase
3518	One IXM hasn't got an improvement tick
3519	Inconsistent improvement tick
3520	Improvement phase to be in progress, Minimum quantity forbidden
3521	Deferred opening on IXM
3522	Maximum improvement price must be filled
3523	Quantity must be greater than last improvement quantity
3524	Order Account type is Incoherent with Combined Order Type
3525	Forbidden exposition for group
3526	NBBO crossed
3529	Quote already in book
3531	Combined order type is not authorized in GR state
3532	Lot size better than max quantity of IXM
3534	Automatic improvement forbidden
3535	Minimum Market Maker requisite to improvement phase
3536	Expiry date < current date
3537	Active date > current date
3901	Unknown order in book
3902	Old priority invalid for database
3903	New and Old priority are equal
3904	Priority already exists
3905	Priority hour greater then current time
3906	Old shown qty is not equal to database
3907	Displayed quantity is not multiple from trade unit
3908	New and Old quantity are equal
3909	New Displayed qty greater than disclosed quantity
3910	New Displayed quantity greater than left quantity
3911	Trade hour greater than current
3912	Traded quantity less than trade unit
3913	Traded quantity not multiple of trade unit
3914	Invalid trade price
3915	The subscribers are not member firms
3916	Cancel trade date not equal to current
3917	Trade does not exist

Error Codes	Error Text
3918	Invalid trade price against tick table
3919	trade hour must be greater than last trade hour
3920	Invalid hour format
3921	Trade hour must be less than last trade hour
3922	Order MUST have a hidden Qty in order to change its displayed Qty
3923	Trade rejected: its price crosses STOP or MIT orders in the book
3924	Delay between current time and first asked time is too short
3925	Next to Last price and Last adj closing price are invalid
3926	Cancel is impossible: Ask Stop with trigg. price > next to last traded
3927	Cancel is impossible: Bid Stop with trigg. price < next to last traded
3928	Trade price must be inside the limits
3999	The OBBP and the CP are allowed only in auction trading
4008	Only one field should be informed
4009	One or more group code 2 must be filled.
5500	SQL Error, Advise Computer staff
5501	SQL tables mismatch, Advise computer staff
5502	No anomalies itemized
5503	Invalid Group/user; Access denied
5504	Invalid password; Access denied
5505	Password expired; please update it
5506	Captured data unknown in database
5507	You're not authorized to break this screen
5508	Direct screen break for this screen
5509	Your logon was changed. Please logon again
5510	Data were created
5511	Data were updated
5512	Date were deleted
5513	Logon authorization doesn't allow to execute this function
5514	Data already exist
5515	Invalid new password
5516	Invalid id code, advise production staff
5517	0000 screen access must be authorized
5518	Invalid screen (check nb/authorization)
5519	SLE Id unknown in SDF Frontend file
5520	NSC unknown in SDF Frontend file
5521	SEC unknown in SDF Frontend file

Error Codes	Error Text
5522	Link SLE/Subscriber unknown in NSC
5523	Invalid SDF FILE entity
5524	Invalid SDF DEVICE entity
5525	Invalid SDF PROCESS SDF
5526	Invalid Precise Dest File
5527	Invalid General Dest File
5528	SEC application unknown in SDF; SLE/Subscriber unknown in NSC
5529	No member authorization for the Group
5530	NO Group authorization for the member
5531	No group defined in NSC-C database
5532	No member defined in NSC-C database
5533	CC Subscriber, no update allowed
5534	Subscriber is not Market maker for the instr.
5535	Delete cancelled, trader is connected
5536	Delete cancelled, associated instruments still exist
5537	Server name invalid
5538	Data were read
5540	Min price too low
5541	Min price too high
5542	Last page raised
5543	Invalid key. Too many field captured.
5544	Invalid key. Tick not captured
5545	Invalid key for Tick & min price compute.
5546	Decimal number too high
5547	Decimal number too low
5548	Delete cancelled, Variable tick table index still use
5549	Class code doesn't exist
5550	Server launched
5551	Launch cancelled
5552	Batch mode doesn't allow this function
5553	File in use try later
5554	Update cancelled, profile does not exist
5555	Surveillance Subscriber does not exist
5599	Error message doesn't exist
6000	Empty file
6001	Invalid record type

Error Codes	Error Text
6002	Invalid File name
6003	Invalid date
6004	Invalid record number
6005	Existing record after footer record
6006	IXM code not numeric
6007	Footer record not found
6008	Header record not found
6009	Mandatory Data
6010	IXM type must be F, C, P or S
6011	Validity date type must be E, D, J, F or S
6012	Not numeric data
6013	Not numeric under. IXM code
6014	Under. IXM filled and indicator not present
6015	Invalid price format
6016	Strikes fill. strike currency code missing
6017	strike currency filled, strike missing
6018	H/L variation type expression is <> 1 or 2
6019	records chaining impossible for the Instrument
6020	Date/hour expired for record type I or C
6021	Underlying Instr not filled while indic fill.
6022	Settle Indicator must be blank, N or C
6023	Settle Indicator inconsistent
6024	Settle Indicator must be 0 or 1
6025	Price definition must be 1, 2 or blank
6026	Exp. date must be >= Active. date
6027	Matching code must be A or F
6028	Exp & active. date must be > system date
6029	Unknown Instrument in NSC-C Database
6030	Instrument already exists in NSC-C Database
6031	IXM code conversion Error. Ask technical support
6032	Max Quantity must be greater than Min Quantity
6033	Low limit must be lower than High limit
6034	Invalid Margin Rate
6035	Credit class must be blank
6036	Stop orders to cancel, command must be confirmed
6037	- PS29A ALREADY PERFORMED! -

Error Codes	Error Text
6038	- PS29B NOT PERFORMED! -
6039	IS NOT RECOGNIZED!
6040	! CONSULT REJECT FILE!
6041	Variable tick table index does not exist
6042	- EXECUTE PS29A BEFORE ALL! -
6100	Trader authorization doesn't exist.
6101	Trader authorization already created.
7000	Invalid market type (cash or futures)
7001	KUR not to be filled in (cash)
7002	NDS account clearer not to be fill in (cash)
7003	NIK not to be filled in (cash)
7004	NIK sub account not to be filled in (cash)
7005	Client inst id not to be filled in (futures)
7006	Broker not found in TFINT
7007	Clearer not found in TFINT
7008	Broker not found in TFABI
7009	Clearer not found in TFABI
7010	Client/Clearer not found in TFKKL
7011	Inactive link between Client /Clearer
7012	Broker/Clearer not found in TFUUR
7013	Inactive link between Broker /Clearer
7014	Date of settlement invalid or not found
7015	Date of settlement < Session Date
7016	Value limit overload during pre opening
7017	Value limit overload during session
7018	Trade quantity invalid during pre opening
7019	Trade quantity invalid during session
7020	Declaration cancelled by surveillance
7021	Declaration cancelled by broker
7022	The quantity between the two counterpart are different
7023	The price between the two counterpart are different
7024	Declaration has been eliminated
7025	Accrued interest not found in TFCOUPON
7026	Invalid type of value
7027	Type of settlement not found in TFDELAI
7028	Client not found in TFINT

Error Codes	Error Text
7029	Client not found in TFABI
7030	I.B.O. and I.A.O. group states allowed only for fixing group
7031	It is not a specialist of the instrument
7032	To modify, it must be assigned to same subscriber which created it
7033	The order side can't be modified
7034	The instrument id can't be modified
7035	The new quantity order must be >= than the old quantity
7036	The new price must be >= than the old for a buy (less for a sell)
7037	The orders at opening price cannot be modified
7038	The orders at best cannot be modified
7039	Modification is limited to 3%
7040	There is no modification
7041	Only limited order on crossing phase
7042	Only limited orders at the last quoted price on crossing phase
7043	No cross available
9001	Price term is forbidden for ISO order
9002	Quantity term is forbidden for ISO order
9003	ISO order must be limit
9007	ISO order must be IOC
9008	Change to ISO order is forbidden
9998	FLOW SHUT for the Trading Engine
9999	Technical error - Function not performed.

The following errors are specific to IML orders.

Error Codes	Error Text
10000	Broker Option
10001	Unknown Invalid Symbol
10002	Exchange Closed
10003	Order Exceeds Limit
10004	Too Late To Enter
10005	Unknown Order
10006	Duplicate Order
10007	Stale Order
10008	Instrument State Rotation
10009	Instrument State NonFirmMode,

Error Codes	Error Text
10010	Instrument State halted
10010	Not At NBBO
10011	Reference Price Is Out Of Bound
10012	Unknown Clearing Firm
10013	SubAccount ID Missing
10014	Invalid Auto Ex Value
10015	Account Missing
10016	Time In Force Missing Invalid
10017	Open Close Missing Invalid,
10018	Exec Broker Missing
10019	Clearing Account Missing,
10020	Execution Information Missing
10021	Order Received Too Soon
10022	Order Capacity Missing Invalid
10023	Late Print To OPRA Tape
10024	Communications Delays To OPRA
10025	Manual Crowd Trade
10026	Processing Problems
10027	Complex Order
10028	Trade Rejected
10029	Trade Busted Corrected
10030	Original Order Rejected
10030	Cancel Due To Non Block Trade
10031	Rejected Linkage Trade
10032	Other
10033	Traded At NBBO
10034	Unknown Exchange
10035	Unknown Order Type

The following errors are specific to 'Directed Orders'.

Error Codes	Error Text
020001	Executing Participant discretion
020002	Initial Order Failed
020003	Submission timed-out
020004	Unregistered Executing Participant

Error Codes	Error Text
020005	Invalid modification of price
020007	Unknown order id
020008	Invalid modification of clearing info
020009	Invalid modification of quantity
020010	Invalid modification of Executing Participant
020011	Invalid connection state

Appendix B Rule80A and *CombinedOrdType* Combinations

The following section provides additional information on how to use the Rule80A (tag 47) and CombinedOrderType (tag 7906) tags found in several FIX messages supported by BOX. As a reminder, BOX participant uses field Rule80A to specify the type of trader sending the order (public customer, market maker, etc.) while the CombinedOrdType field specifies what action should be taken by BOX if the order may potentially trade through the current NBBO. Not all CombinedOrdType value may be used with all trader types. You will find below a definition for each value available in these two fields along with all valid combinations for each type of message.

The FIX Tag47 (Rule 80A) appears in the following messages:

- New Order - Single
- Order Cancel / Replace Request
- Auction Intitial Order
- Execution Report
- New Multi-Leg Order - Single
- Cancel/Replace Multi-Leg Order

B.1 Supported Origins

C - Public Customer: Is a regulatory definition which comprises all accounts which are neither the proprietary account of a Broker Dealer, nor a Market Maker.

F - Broker Dealer: BOX Participant proprietary account.

M - Market Maker: BOX Market Maker.

T - Professional Customer (please refer to BOX Circular IC-2011-003 for more information on how and when to use that value).

V - Away Broker Dealer cleared as Customer: Non BOX Participant Broker Dealer account **not** affiliated with BOX Participant for which the order is to be cleared to a customer account.

W - Broker Dealer cleared as Customer: BOX Participant proprietary account as well as proprietary account affiliates for which the order is to be cleared to a customer account.

X - Away Affiliated Market Maker: Away Market Maker affiliated with a BOX Participant.

Y - Away Broker Dealer: Non BOX Participant Broker Dealer account **not** affiliated with BOX Participant.

Z - Away Market Maker not Affiliated: Non BOX Market Maker not affiliated with BOX Participant.

B.2 Supported CombinedOrdType Values

1 - NBBO Filtering and IML Routing: The order is filtered for NBBO and is routed to the best away Exchange if it is executable and BOX is not at NBBO.

2 - No NBBO Filtering: The order is not filtered for NBBO. This Combiner Order Type is not acceptable for Public Customer and Broker Dealer Origin Orders, regardless of whether thay are for BOX Participants or not.

3 - NBBO Filtering and no IML Routing: The order is filtered for NBBO and is rejected back to the sender if it is executable and BOX is not at NBBO.

4- InBound ISO Order: InBound ISO order. The order is a limit and IOC order. It is not controlled against the NBBO and not routed away.

B.3 Validity Matrix

The following table presents, for each type of message, which **Rule80A/ CombinedOrderType** combinations are supported:

Message Type	Rule 80A		
	C Public Customer **T** Professional Customer	**F** Broker Dealer **V** Away Broker Dealer Cleared as Customer **W** Broker Dealer Cleared as Customer **X** Away Affiliated Market Maker **Y** Away Broker Dealer **Z** Away Market Maker not Affiliated	**M** Market Maker
New Order Single (35=D)*	1, 3, 4	3, 4	2, 3, 4
Order Cancel/Replace Request (35=G)	1, 3, 4	3, 4	2, 3, 4
Auction Initial Order Broker Side (35=PI)	3	3	3
Auction Initial Order MBF Side (35=PI)	3	3	3
Directed Order (35=D)	1, 3	3	2, 3
Solicitation/Facilitation - Non Contingent, Broker Side (35=PI, 9383=B or C)	n/a	3	3
Solicitation/Facilitation - Non Contingent, MBF Side (35=PI, 9383=B or C)	3	3	3

Message Type	Rule 80A		
	C Public Customer **T** Professional Customer	**F** Broker Dealer **V** Away Broker Dealer Cleared as Customer **W** Broker Dealer Cleared as Customer **X** Away Affiliated Market Maker **Y** Away Broker Dealer **Z** Away Market Maker not Affiliated	**M** Market Maker
Solicitation/Facilitation - Contingent, Broker Side (35=PI, 9383=B or C, 7388=2)	n/a	2	2
Solicitation/Facilitation - Contingent, MBF Side (35=PI, 9383=B or C, 7388=2)	2	2	2
Customer Cross Order (35=PI, 9383=X)	3 (C: Public Customer is the only supported value)	n/a	n/a
Any message type related to Complex Order (35=D, 35=AB, 35=G, 35=AC, 35=PI)	3	3	3

Note: Fill and Kill orders are not eligible to NBBO exposition nor IML routing. If either NBBO Control and IML Routing or NBBO filtering is selected, BOX will eliminate the remaining quantity even if it could be traded at another market.

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