London Stock Exchange

London Stock Exchange

MIT 202 - FIX Trading Gateway (FIX5.0)

Issue 11.8

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London Stock Exchange Group

Contents

Disclaimer

1.0 Introduction

London Stock Exchange has provided a FIX trading gateway that enables member firms to submit orders and/or quotes and to receive real-time information on executed trades.

The interface is a point-to-point service based on the technology and industry standards TCP/IP, FIXT and FIX. The session and application event models and messages are based on versions 1.1 and 5.0 (Service Pack 2) of the FIXT and FIX protocols respectively.

1.1 Purpose

The purpose of this document is to provide a technical description of the FIX trading gateway available on the Millennium Exchange platform.

1.2 Readership

This document outlines how to connect to the FIX trading gateway and the detailed message types and fields used.

When read in conjunction with the other Millennium Exchange guides, it is intended that these documents provide all of the details directly connected London Stock Exchange customers require to develop to the new services.

This document is particularly relevant to technical staff within the Exchange's member firms.

1.3 Document series

This document is part of series of documents providing a holistic view of full trading and information services available from London Stock Exchange post the migration to Millennium Exchange.

The current series of documents are set out below:

- MIT201 - Guide to the New Trading System
- **MIT202 – FIX Trading Gateway (FIX 5.0) (this document)**
- MIT203 – Native Trading Gateway Specification
- MIT204 – Post Trade Gateway (FIX 5.0) Specification
- MIT205 – Drop Copy Gateway (FIX 5.0) Specification
- MIT301 - Guide to Market Data Services
- MIT303 – Level 2-MITCH Specification
- MIT304 - Regulatory News Service Specification
- MIT401 – Guide to Reference Data Services
- MIT501 – Guide to Testing Services
- MIT502 - Guide to Application Certification
- MIT503 - Certification Report
- MIT601 – Guide to Trading Services Disaster Recovery
- MIT701 – Guide to Sponsored Access
- MIT801 – Reject Codes

This series principally covers non-regulatory information. It does not override or supersede the Rules of the London Stock Exchange, the AIM Rules or Admission and Disclosure Standards and is intended to be read in conjunction with these Rules documents and the Millennium Exchange Parameters document.

The latest version of this document series can be found at the following link:

http://www.londonstockexchange.com/products-and-services/millennium-exchange/technicalinformation/technicalinformation.htm

1.4 Document history

This document has been through the follow iterations:

Issue	Date	Description
8.0	23 May 2011	Eighth issue of this document published via London Stock Exchange's website and distributed to customers.
8.1	14 June 2011	New logon functionality will now be introduced in the next functional release which is yet to be scheduled. Please refer to page 28.
9.0	23 September 2011	Ninth issue of this document published via London Stock Exchange's website and distributed to customers.
10.0	9 December 2011	Tenth issue of this document published via London Stock Exchange's website and distributed to customers.
10.1	28 September 2012	Amended to include new PassiveOnlyOrder and PriceDifferential tags. Published on London Stock Exchange's website.
10.2	1 November 2012	Amended to include Connectivity Policy Section 3.4. Added additional guidance on Passive Only Order and Price Differential functionality.
10.3	22 March 2013	Amended to reflect the latest Millennium enhancements.
10.3	5 April 2013	Update to Sections 6.1.2.2; 6.1.3.2; 6.4.5; 6.5.5 to remove references to Trade Correct and to remove duplicate Tag 336 from Execution Report.
10.3	18 April 2013	6.4.5 – Enum 3 added to tab 378 in ER. Tag 336 removed completely.
11.0	5 July 2013	Amended to reflect the latest Millennium enhancements.
11.1	2 June 2014	Further amendments to reflect the latest Millennium enhancements. Sections 2.2.1; 2.1.4; 6.4.1; 6.4.4; 6.4.5 and 6.7.2 have been updated.

11.2	31 October 2014	Amended to reflect ITCH rebranding to MITCH.
11.3	21 January 2015	The following sections have been amended or added to support the new Cross Order functionality and additional amendments. 2.2.1 New table added describing the New Order types for Cross/BTF order functionality. 2.1.2.1 & 2.1.2.2 Cancellation behaviour for the new Cross/BTF orders. 2.1.2.3 Amendment information for the new Cross/BTF orders, plus clarification around how the system handles in flight conditions on amendments. 2.1.4 Clarification on the treatment of Client Order IDs when an order is cancelled by Market Operations. 2.8 Cancel on Disconnect/Logout not applicable to Cross Orders/BTF. 2.10.1.18 Clarification on how usage of the Cancel on disconnect functionality is managed at the end of the day. 2.10.1.19 Additional information on cross order cancellations. 3.5 Clarification on message throttling behaviour. 3.6 Cancel on Disconnect/Logout not applicable to Cross Orders/BTF. 4.1 Further clarifications around logon behaviour. 6.1.2.1 New message types added for New Order Cross and Cross Order Cancel request messages. 6.4.1 Clarification that the TimeInForce(59) should not be populated if the order is a CPX order. 6.4.3 & 6.52 Clarification to the use of TargetParty Tags 1461,1462,1463,and 1464. 6.4.5 Tag 44 in the execution report. Clarification around the meaning of the price field if Exec Type is Restated. Additional tags (548,549 and 551) to support Cross order implementation. 6.4.8 New Order Cross message details. 6.4.9 Cross Order Cancel Request message details. 6.7.1 Clarification of the use of tag 448 PartyID.

		8.3 New Event model for Cross Orders. See MIT902 – Cross Orders Message Change Guidelines for full details on all changes.
11.4	16 June 2015	The following sections have been amended or added to clarify existing behaviour and also to support Pegged Order Enhancements: 2.1.1 Included description of new Minimum Execution Size (MES) for pegged and pegged limit order types. Also change in behaviour for pegged limit orders where limit orders no longer get cancelled if limit price is worse than midpoint. 2.1.2.1, 2.1.2.2 and 2.1.2.3 - Clarification of system behaviour if an order is cancelled or modified by a different user to the submitter. 2.2.2.1 – Corrected description as LSE do not support single sided quotes. 2.2.2.3 Clarification of system behaviour if a client sends a mass quote cancel request after post close. Also improved table description. 2.5.2 – Standardised the paragraph on trade cancellations. 2.10.17 – Removed Price Differential. 3.4 – Clarification of system behaviour and expected customer actions upon successful connection to the secondary gateway following a primary gateway failover. 3.5 – Standardised the message rate throttling description. 3.6 - Clarification of system mass cancel behaviour if a client logs out or disconnects after post close session. 4.1 - Correction to description of system behaviour if additional client messages are sent before the exchange of logon messages. 4.2.2 – Described system behaviour if heart beat interval is set to 0 during logon. 6.4.1, 6.4.4, 6.4.5 - New Minimum Quantity Tag (MES) for enhanced pegged order functionality.

		6.4.5 – Clarification on population of CrossID and improved description for ExecRestatementReason on execution reports. Removed PriceDifferential. 6.4.8 / 7.3.2 - Clarified the system validation of CrossIDs and also corrected the reject text for a missing TIF. 6.5.2 – Improved description of mandatory TargetParty tags. 6.5.3 – Corrected fact that QuoteType is not a required tag on a Quote Status Report.
11.5	16 September 2015	The following sections have been amended to clarify behaviour of message throttling, the Minimum Quantity Tag (MES) and the ExpireTime field: 3.5 – Clarified the behaviour of message throttling. 6.4.1, 6.4.4 - Clarified that MES is not applicable to pegged IOC/FOK orders and only applicable to pegged DAY/GTT orders. 6.4.4 – Amended the behaviour of the ExpireTime field in Order Cancel/Replace Request. 6.4.5 – Removed duplicate row for tag 103.
11.6	16 August 2016	The following sections have been amended to aid clarity and also to reflect the changes introduced in the Millennium 9.1 upgrade: 2.1.4 – Clarified Order Cancel and Order Cancel/ Replace behaviour. Removed reference to CPP session since it has been removed. 2.4 – Clarified Party identification behaviour. 2.5.2 – Clarified Trade Cancellation behaviour. 2.6 – Clarified SendingTime (60) behaviour. 2.10.14 – Amended the behaviour of what happens when an undefined tag is sent along with Administrative and Application messages. 3.4 – Clarified Connectivity Policy. 4.1 – Clarified Establishing a Connection behaviour. 6.1.3 – Added new messages for RFQ functionality and clarified the descriptions of existing messages.

		6.2.1 – Clarified DeliverToCompID behaviour. 6.3.1 – Added new SessionStatus reason. 6.4.1 – Removed enum ‘C’ in the OrderCapacity tag. Clarified ExpireDate/ExpireTime behaviour. 6.4.1-6.4.4, 6.4.6-6.4.9 – Clarified ClOrdID behaviour. 6.4.4 – Removed Trading Session Component Block. Clarified ExpireDate/ExpireTime behaviour. 6.4.5 – Added LastLiquidityInd tag. 6.4.5, 6.5.3– Clarified Text field behaviour. 6.5.1 - Added tags RFQID, BidID, OfferID and PrivateQuote. QuoteMsgID is no longer a required field. Added enum ‘2’ in QuoteType. Clarified behaviour of OrderCapacity and Capacity tags. 6.5.2 – Added RFQID and OrderBook tags. 6.5.3 - Added tags ExpireTime, QuoteReqID, RFQID, BidID and OfferID. Added enum ‘2’ to QuoteType tag. 6.5.5 – Added RFQID and MDEntryID tags. Added missing enums ‘4’ and ‘C’ in Exectype tag. 6.5.6 - 6.5.9 – Added new messages for the RFQ functionality. 6.7.1 – Added enums ‘37’ and ‘66’. 7.3.2 – Clarified Business Reject Reason. 9.0 – Corrected Telnet Access time.
	15 November 2016	The following sections have been updated to aid clarity, and include the change in RFQ execution policy from ‘Best Execution’ to ‘Select and Match’. 3.3 – Clarified Failover behaviour. 6.4.1, 6.4.4 – Clarified ExpireTime/ExpireDate behaviour. 6.5.5 - Added tag TypeOfTrade. 6.5.9, 8.4.15 – Added tags Cover Price, Bid ID and Offer ID.

11.7	07 April 2017	The following sections have been amended to aid clarity and also to reflect the changes introduced in the Millennium 9.2 (MiFID II compliant) upgrade: 2.1.1.1, 2.12.3, 6.4.1, 6.4.5, 6.4.8, 6.5.1, 6.5.5, 6.5.9, 8.2.6, 8.2.7, 7.4.10, 7.4.15, 7.4.16, 7.4.17,7.4.18, 7.4.25, 7.4.27 - Clarified Order Capacities. 2.4, 2.13.5 – Clarified Party Identification behaviour. 2.5.1 – Clarified Order Cancellation by Market Operations behaviour. 2.6, 2.13.1– Clarified Timestamps and dates behaviour. 2.13.2, 6.5.3, 6.5.8, – BidID and OfferID behaviour will now also be populated for quotes. 2.13.4, 6.4.5, 6.5.5, 8.4.16, 8.4.17 – Added a new NoTrdRegPublications (2668) Repeating Group to the Order and Quote Execution Reports for Waiver Flags. 6.2.1 – Clarified DeliverToCompID behaviour. 6.4.1, 6.4.5, 6.4.8, 6.5.1, 6.5.3, 6.5.5, 6.5.6, 6.5.7, 6.5.8, 6.5.9 - Clarified NoPartyIDs, PartyID, PartyIDSource, PartyRole behaviour and added new Party Identification enums. Added PartyRoleQualifier tag, Order Attribute component block and OrderOrigination tag. 6.5.3 - Clarified QuoteStatus description. 6.7.1 – Removed trading party component block and included the party identification tags in the individual messages. Changed all references of enum 12 to 100 for the Trader ID PartyRole.
11.7.1	27 June 2017	The following sections have been updated to aid clarity: 2.2.2.3 – Clarified Mass Cancelling Quotes behaviour 2.10 – Clarified Functional & Implementation Limitations behaviour 6.4.1, 6.4.5, 6.5.1, 6.5.5 – Clarified NoPartyIDs 6.4.1, 6.4.8, 6.5.1, 6.5.6 – Clarified PartyIDSource and

		PartyRoleQualifier behaviour 6.5.3, 6.5.8 – Clarified BidID and OfferID behaviour 6.4.5 – Clarified PartyRole behaviour
11.7.2	09 August 2017	The following sections have been updated to aid clarity: 2.4.2 – Removed scenario 12 from the table 6.4.1, 6.4.2, 6.4.4, 6.4.5, 6.4.8, 6.5.1, 6.5.3, 6.5.5 - Clarified PartyRole (452) behaviour. Trader ID (100) is optional. 8.0 – Clarified that Telnet and Login access are only available until 17:32.
11.7.3	15 August 2017	The following sections have been updated to aid clarity: 2.10.22 – Added the limitation 6.3.6 – Clarified SessionRejectReason (373) description 6.4.5 – Clarified PartyRole (452) behaviour 6.4.6 – Clarified CxlRejReason (102) behaviour 6.4.7 - Clarified MassCancelRejectReason (532) behaviour 6.5.3, 6.5.4 – Clarified QuoteRejectReason (300) behaviour 6.5.4 – Clarified QuoteEntryRejectReason (368) behaviour 6.6.1 – Clarified BusinessRejectReason (380) behaviour 7 - Removed section since MIT801 has all the applicable Reject reasons and codes
11.7.4	23 August 2017	The following sections have been updated to aid clarity: 2.13.4 – Corrected the OILQ flag typo 2.7 – Clarified Repeating Groups behaviour
11.7.5	8 September 2017	The following sections have been updated to aid clarity: 2.1.4, 6.4.5 – Reference to order being amended by Market Operations is removed 6.4.5 - Updated the description of the DisplayQty(1138)

		6.4.5 – The value in TrdRegPublicationReason (2670) for OILQ flag is corrected 6.4.5 - Description of ExecRestatementReason (378) is updated to aid clarity. The reference to the auction call for the enum 100 is removed since it is also valid for iceberg replenishment during Regular Trading. 6.5.2 – The description of NoTargetPartyIDs (1461) is corrected.
11.7.5	7 November 2017	The following sections have been updated to aid clarity: 6.4.1 - Clarified Party Role (452) behaviour 6.5.1 – Clarified Party Role (452) behaviour
11.8	28 Aug 2018	2.8 – Added more details for 'Auto cancel on Disconnect' feature, no actual changes in the functionality. 2.13.3 – Minor update in the description 2.14 – The new Section is added to describe RFQ Models 6.4.1- Added a clarification that PartyID(448)=0'None' is not valid for PartyRole (4520=12 'Executing Trader' 6.4.1 – OrderCapacity(528) – references to pre-MIFIDII capacities are removed 6.4.2 – PartyID (448) - Added a clarification that PartyRole(452)=100 is ignored if specified 6.4.4- PartyRole (452) - Added a clarification regarding TraderID 6.4.5 – LastPx(31) field – Added a clarification that it will not be populated with Exec Type(150) 6.4.5 - PartyID (448) – Added a clarification how PartyID with PartyRole (452)=17 is populated for cleared, not cleared and internalized trades 6.4.5 – PartyRole (452) – Added a clarification 6.4.5 - OrderCapacity(528) – references to pre-MIFIDII capacities are removed 6.4.8 - OrderCapacity(528) – references to pre-MIFIDII capacities are removed 6.4.8 – PartyRole (452) – Added a clarification 6.5.1 – Two new sub sections are created to specify

		the format for: 6.5.1.1 – client initiated message 6.5.1.2 - server initiated message OrderCapacity(528) – references to pre-MIFIDII capacities are removed 6.5.5 – LastPx(31) field – Added a clarification that it will not be populated with Exec Type(150) 6.5.5 - PartyID (448) – Added a clarification how PartyID with PartyRole (452)=17 is populated for cleared, not cleared and internalized trades 6.5.5 – PartyRole (452) – Added a clarification 6.5.5 - OrderCapacity(528) – references to pre-MIFIDII capacities are removed 6.5.6 – Two new sub sections are created to specify the format for: 6.5.6.1 – client initiated message 6.5.6.2 - server initiated message New fields are added to Quote Request for Auto RFQ: • OrderCapacity (528) • QuoteRequestType (303) • Price (44) • AccountType (581) • RFQExecutionDelay (33001) • RFQMinQuotes (33002) • RFQDiscloseSide (33004) The offset is corrected for the Trading party component (453) and Tags 448, 447, 452, 2376 6.5.7 – Two new sub sections are created to specify the format for: 6.5.7.1 – client initiated message 6.5.7.2 - server initiated message PartyRole (452) – Added clarification Component 'Order Attributes', Tag 1724 – clarified that it is only populated if the value was specified by client 6.5.8 – Tag (30006) is mandatory 6.5.9 – Two new sub sections are created to specify the format for: 6.5.9.1 – client initiated message 6.5.9.2 - server initiated message

		6.7.2 Updated description for NoOrderAttributes(2593) – a value more than 2 will not be allowed 7.4 – RFQ event model is removed as it is now outdated and RFQ related messages are splitted into client initiated and server initiated in section 6. This section

Within this document, where amendments have been made to the previous version, these changes will be identified using a series of side bars as illustrated opposite.

1.5 Enquiries

Please contact either the Technical Account Management Team or your Technical Account Manager if you have any functional questions about the Millennium Exchange services outlined in this document. Client Technology Services (UK) can be contacted at:

- Telephone: +44 (0)20 7797 3939
- Email: londontam@lseg.com

2.0 Service description

2.1 Order handling

2.1.1 Order types & validity types

Clients may submit the order types outlined below via the New Order – Single message.

Order Type	Description	Relevant FIX Tags
Market	An order that will execute at the best available prices until it is fully filled. Any remainder will be expired.	OrderType (40) = 1
Limit	An order that will execute at or better than the specified price. The remainder, if any, is added to the order book or expired in terms of its TimeInForce (59).	OrderType (40) = 2 Price (44)
Stop	A market order that remains inactive until the market reaches a specified stop price.	OrderType (40) = 3 StopPx (99)
Stop Limit	A limit order that remains inactive until the market reaches a specified stop price.	OrderType (40) = 4 StopPx (99) Price (44)
Fixed Peak Iceberg	An order that contains a disclosed quantity which will be the maximum quantity displayed in the order book. Once the displayed quantity is reduced to zero, it will be replenished by the lower of the disclosed quantity and the remainder.	DisplayQty (1138) OrderQty (38)
Random Replenished Iceberg	An order that contains a disclosed quantity which will be the maximum quantity displayed in the order book. Once the displayed quantity is reduced to zero, the replenishment quantity will be randomly determined within a pre-defined percentage	DisplayQty (1138) OrderQty (38) DisplayMethod (1084) = 3

Hidden	An order that contains no displayed quantity.	DisplayQty (1138) = 0 DisplayMethod (1084) = 4 (optional)

Order Type	Description	Relevant FIX Tags
Pegged	A hidden order pegged to the mid-point of the best bid and offer price for instrument. It may be configured by the user with a Limit Price and/or a Minimum Execution Size (MES).	OrderType (40) = P Price (44) MinQty (110)
Named	An order for which the identity of the submitting member is disclosed in the pre-trade market data feed.	PreTradeAnonymity = N

Clients may submit the order types outlined below via the New Order Cross Message.

Order Type	Description	Relevant FIX Tags
Internal Cross	A dual sided order that will execute with each other side at a price between visible best bid & visible best offer (including extremes)	CrossType (549) = 5
Internal BTF	A dual sided order that will execute with each other side at a price between visible best bid - % & visible best offer + % (including extremes)	CrossType (549) = 6
Committed Cross	A single sided order that will execute with the other side of the cross order at a price between visible best bid & visible best offer (including extremes)	CrossType (549) = 7
Committed BTF	A single sided order that will execute with the other side of the BTF order at a price between visible best bid - % & visible best offer + % (including extremes)	CrossType (549) = 8

Validity Type	Description	Relevant FIX Tags
Day	An order that will expire at the end of the day.	TimeInForce (59) = 0
Immediate or Cancel (IOC)	An order that will be executed on receipt and the remainder, if any, immediately expired.	TimeInForce (59) = 3
Fill or Kill (FOK)	An order that will be fully executed on receipt or immediately expired.	TimeInForce (59) = 4
On Open	An order that may only be executed in the opening auction.	TimeInForce (59) = 2
On Close	An order that may only be executed in the closing auction.	TimeInForce (59) = 7
Good for Intra-Day Auction (GFX)	An order that may only be executed in the EDSP auction.	TimeInForce (59) = 8
Good for Auction (GFA)	An order that may only be executed in the next auction.	TimeInForce (59) = 9
Good Till Time (GTT)	An order that will expire at a specified time during the current day.	TimeInForce (59) = 6 ExpireTime (126)
Good Till Date (GTD)	An order that will expire at the end of a specified day.	TimeInForce (59) = 6 ExpireDate (432)
Closing Price Crossing (CPX)	An order that is intended for closing price crossing session.	TradingSessionID(336) = a
Good for next scheduled auction(GFS)	An order that will only be injected at the beginning of the next scheduled intra-day auction excluding the EDSP auction, (i.e. it will not be triggered by a Re-opening Auction Call).	TimeInForce (59) = C

2.1.1.1 Order Capacity

Clients are responsible for indicating the capacity an order is submitted under. If a New Order – Single message does not contain the OrderCapacity (528) field, it will be rejected. Further details can be found in section 2.13.3.

2.1.2 Order Management

2.1.2.1 Cancellation

The remainder of a live order may be cancelled via the Order Cancel Request message. The server will respond with an Execution Report or Order Cancel Reject to confirm or reject the cancellation request respectively.

In a scenario where the Order Cancel Request message is submitted by a different user than the user who submitted the original order, the Execution Report will be sent to the cancelling user. If the user cancelling the order does not have permissions to cancel orders on behalf of the firm, the cancel request will be rejected.

The client should identify the order being cancelled by either its OrigClOrdID (41) or OrderID (37). If an Order Cancel Request contains values for both OrigClOrdID (41) and OrderID (37), the server will only process the OrderID (37).

If an order submitted under a different SenderCompID (49) is being cancelled, the Order Cancel Request should include its OrderID (37).

An open Committed Cross/BTF order may be cancelled via the Cross Order Cancel Request message. The server will respond with an Execution Report or Order Cancel Reject message to confirm or reject the cancellation request respectively. The Execution Report message returns the CrossID of the original Committed Cross/BTF being cancelled.

The client should identify the order being cancelled by providing OrigClOrdID (41).

2.1.2.2 Mass Cancellation

A client may mass cancel live orders via the Order Mass Cancel Request message. The server will respond with an Order Mass Cancel Report to indicate, via the MassCancel Response (531) field, whether the request is successful or not.

If the mass cancel request is accepted, the Order Mass Cancel Report will be sent first. The server will then immediately transmit Execution Reports for each order that is cancelled and Order Cancel Rejects for each order that could not be cancelled. The ClOrdID (11) of all such messages will be the ClOrdID (11) of the Order Mass Cancel Request.

In a scenario where the Order Mass Cancel Request message is submitted by a different user than the user who submitted the original orders, the Execution Reports will be sent to the submitted user whereas the Order Mass Cancel Report will be sent to cancelling user. If the user mass cancelling orders does not have permissions to cancel orders on behalf of the firm, the mass cancel request will be rejected.

If the mass cancel request is rejected, the reason will be specified in the MassCancelReject Reason (532) field of the Order Mass Cancel Report.

Clients may use the Order Mass Cancel Request to mass cancel all orders or only those for a particular instrument or segment. A mass cancel request may apply to all the orders of the member or only to those of a particular Trader Group. It is required to specify the trading party when an Order Mass Cancel Request is submitted. The FIX fields relevant to each of the supported mass cancel combinations are outlined below.

	Target Party	
	Trading Party	**Member**
All Orders	MassCancelRequestType (530) = 7 TargetPartyRole (1464) = 76 TargetPartyID (1462)	MassCancelRequestType (530) = 7 TargetPartyRole (1464) = 1 TargetPartyID (1462)
All Orders for an Instrument	MassCancelRequestType (530) = 1 SecurityID (48) SecurityIDSource (22) = 8 TargetPartyRole (1464) = 76 TargetPartyID (1462)	MassCancelRequestType (530) = 1 SecurityID (48) SecurityIDSource (22) = 8 TargetPartyRole (1464) = 1 TargetPartyID (1462)
All Orders for a Segment	MassCancelRequestType (530) = 9 MarketSegmentID (1300) TargetPartyRole (1464) = 76 TargetPartyID (1462)	MassCancelRequestType (530) = 9 MarketSegmentID (1300) TargetPartyRole (1464) = 1 TargetPartyID (1462)

Quotes and unmatched pre-negotiated trades may not be cancelled via an Order Mass Cancel Request.

Open Committed Cross/BTF Orders cannot be cancelled via an Order Mass Cancel Request.

2.1.2.3 Amending an Order

The following attributes of a live order may be amended via the Order Cancel/Replace Request message:

- Order quantity
- Disclosed quantity
- Price
- Stop price
- Expiration time (GTT orders)
- Expiration date (GTD orders)
- Client reference

The server will respond with an Execution Report or Order Cancel Reject to confirm or reject the amendment request respectively.

In a scenario where the Order Cancel/Replace Request message is submitted by a different user than the user who submitted the original order, the Execution Report will be sent to the modifying user. If the user amending the order does not have permissions to modify orders on behalf of the firm, the amend request will be rejected.

The client should identify the order being amended by either its OrigClOrdID (41) or OrderID (37). If an Order Cancel/Replace Request contains values for both OrigClOrdID (41) and OrderID (37), the server will only process the OrderID (37).

If an order submitted under a different SenderCompID (49) is being amended, the Order Cancel/Replace Request should include its OrderID (37). If the amendment is successful, the order will be treated as one submitted under the SenderCompID (49) that sent the Order Cancel/Replace Request.

Display Method (Tag 1084) containing Enum 3 will not be populated in the execution reports. (Including instances where a user has specified Display Method (Tag 1084) = 3 in the New order and Order Cancel / Replace Request).

If a Randomized iceberg order is modified (E.g. to a fully visible order) the display method in the Order Cancel / Replace Request should always equal to 3 or else the system will reject the order.

You can not amend a fully visible order to be a Random Replenished Iceberg order.

When an order amendment (Order Cancel/Replace message) is rejected, the order ID will be populated in the OrderID field of the Order Cancel Reject message.

An order will lose time priority if its order or disclosed quantity is increased or if its price is amended. A reduction in order or disclosed quantity of an order or the amendment of its expiration time, expiration date or client reference will not cause it to lose time priority. Clients may not amend orders that are fully filled.

The Stop price of a Stop / Stop Limit order cannot be amended once the order has been injected into the order book.

If Order Quantity is being amended then the Disclosed Quantity must also be amended at the same time.

A Cross/BTF order cannot be amended.

When an order receives one or more fills while an amendment request is in flight, the system will not reject the incoming amendment request. Even if the amendment request has a display quantity greater than the order leaves quantity after the partial fill. It will accept the said amendment request and set the display quantity equal to the leaves quantity.

2.1.3 Order Status

As specified in the FIX protocol, the OrdStatus (39) field is used to convey the current state of an order. If an order simultaneously exists in more than one order state, the value with highest precedence is reported as the OrdStatus (39). The relevant order statuses are given below from the highest to lowest precedence.

Value	Meaning
2	Filled
4	Cancelled
C	Expired
1	Partially Filled
0	New
8	Rejected
9	Suspended

Please refer to Section 8.1.1 for process flow diagrams on the various statuses that may apply to an order.

2.1.4 Execution Reports

The Execution Report message is used to communicate many different events to clients. The events are differentiated by the value in the ExecType (150) field as outlined below:

Exec Type	Usage	Order Status
0	**Order Accepted** Indicates that a new order has been accepted. This message will also be sent unsolicited if an order was submitted by Market Operations on behalf of the client. This message will also be sent when a parked order is injected and added to the order book without receiving an execution. This message will also be sent when a parked order with time in force GFX/GFS/GFA/ATC is un-parked and added to the order book without triggering an execution.	0
8	**Order Rejected** Indicates that an order has been rejected. The reason for the rejection is specified in the field OrdRejReason (103).	8

F	**Order Executed** Indicates that an order has been partially or fully filled. The execution details (e.g. price and quantity) are specified. This message will also be sent when a parked order is injected and receives executions on aggression. This message will also be sent when a parked pegged order is un-parked and receives executions on aggression. This message will also be sent when a parked order with time in force GFX/GFA/ATC is un-parked and receives executions on aggression.	1, 2
C	**Order Expired** Indicates that an order has expired in terms of its time qualifier. This message will also be sent when orders are expired upon entering the order book when the number of orders in the order book is at the maximum allowed level, when the incoming order is configured with the Self Execution Prevention[1] specifying CIO or CRO. The reason for the expiration is specified in the Text (58) field. This message will also be sent when a Market Order or a Stop Order is expired at the point of aggressing the order book during the Continuous Trading session, if a circuit breaker is breached during that aggression, the reason for the expiration is specified in the Text (58) field.	C
4	**Order Cancelled** Indicates that an order cancel request has been accepted and successfully processed. This message will also be sent unsolicited if the order was cancelled by Market Operations or by the system In such a scenario the Execution Report will include an ExecRestatementReason (378) of Market Option (8). It will not include an OrigClOrdID (41) and will not be assigned a new Client Order ID.	4
5	**Order Cancel/Replaced** Indicates that an order cancel/replace request has been accepted and successfully processed.	0, 1

1

- Cancel Incoming Order (CIO), leaves the resting order
- Cancel Resting Order (CRO), allows the incoming order to be executed/rest

D	**Order Cancel/Replace by Market Operations/Restated** This is sent when: Market Operations cancel a trade that previously partially filled the order or quote; ExecRestatement Reason (378) will be Market Option (8). It will not include an OrigClOrdID (41) and will not be assigned a new Client Order ID. An order price/size is changed by the system without being requested by the participants When there is an iceberg order replenishment, which happens after an aggressing order has fully exhausted first the visible, and then any hidden quantities of passive iceberg orders.	0, 1
H	**Trade Cancel** Indicates that an execution has been cancelled by Market Operations or by clients. An ExecRefID (19) to identify the execution being cancelled will be included.	0, 1
9	**Order Suspended** Indicates that an order has been parked by the system without adding it to the order book. This message will be sent when an incoming stop or stop limit order is put in to the parked state. This message will be sent when an incoming pegged order is put into the parked state. This message will be sent when an incoming order with a time in force GFA/GFX/GFS/ATC is put into the parked state.	9

It should be noted that the Exchange will generally not amend orders or trades. These events are included in the above table for completeness.

2.1.5 Order and execution identifiers

2.1.5.1 Client Order IDs

The server will not validate each ClOrdID (11) for uniqueness. Clients should comply with the FIX protocol and ensure unique ClOrdIDs across all messages (e.g. New Order – Single, Order Cancel Request, etc.) sent under a particular SenderCompID (49). Given that the server supports GTD orders, clients should also ensure that their ClOrdIDs are unique across trading days (e.g. embed the date within the ClOrdID).

Clients must, in terms of the FIX protocol, specify the ClOrdID (11) when submitting an Order Cancel Request, Order Mass Cancel Request or Order Cancel/Replace Request.

2.1.5.2 Order IDs

The server will use the OrderID (37) field of the Execution Report to keep track of orders within the matching system. Order IDs will be unique across trading days.

In terms of the FIX protocol, unlike ClOrdID (11) which requires a chaining through cancel/replace requests and cancel requests, the OrderID (37) of an order will remain constant throughout its life.

Clients have the option of specifying the OrderID (37) when submitting an Order Cancel Request or Order Cancel/Replace Request.

2.1.5.3 Execution IDs

The server will use the ExecID (17) field to affix a unique identifier for each Execution Report. ExecIDs will be unique across trading days.

2.1.5.4 Order ID tag length.

The system will accept a maximum length of 20 characters. If the ID is longer than 20 characters then it will be rejected. This is valid for the following.

NewOrderSingle – ClOrdID (11)

OrderCancelRequest – OriginalClOrdID (41)

NewOrderSingle – SecondaryClOrdID (526)

NewOrderSingle – ClOrdLinkID (583)

Quote – QuoteMsgID (1166)

2.2 Quote handling

The server supports the submission of firm and executable quotes. A particular trading party may only have one active quote per instrument. If the server receives a quote for a trading party that already has an active quote for the instrument, it will treat it as an update to the quote. All firm and executable quotes are considered as named.

Quotes are two-sided (i.e. bid and offer). If one side of a quote fails the validations (e.g. price tick, spread, etc.) of the server, both sides will be rejected. However, if a quote is accepted it is treated as two separate and independent limit orders. One side of a quote will not be automatically cancelled if the other side is fully filled.

Quotes may be submitted individually via the Quote message. All active quotes will expire at the end of the trading day.

Please refer to section 8.2 for process flow diagrams relating to quote handling.

2.2.1.1 Acknowledgement

The server will explicitly acknowledge or reject each Quote message via the Quote Status Report message. The QuoteStatus (297) field will indicate whether the quote is Accepted (0) or Rejected (5). If a quote is rejected, the reason will be specified in the QuoteRejectReason (300) field. A Quote Status Report will be sent to the client if a quote is expired.

2.2.1.2 Execution

The Execution Report message is used to notify the client if a quote is executed. The ClOrdID (11) of the message will contain the QuoteMsgID (1166) of the last Quote message that updated the executed quote.

The side, quantity and price fields (i.e. Side (54), LastQty (32), LastPx (31), LeavesQty (151), OrderQty (38), Price (44), etc.) will contain information for the executed side. As the server does not keep track of cumulative quantity for quotes, the value in the field CumQty (14) will be “0”.

2.2.1.3 Cancellation by Market Operations

An unsolicited Quote Status Report will be sent to the client if a quote is cancelled by Market Operations. The QuoteStatus (297) of such a message will be removed from Market (6) and the QuoteMsgID (1166) will be the identifier of the last Quote message used to update the quote entry.

2.2.1.4 Expiration

A Quote Status Report will be sent to the client if a quote is expired. The QuoteStatus (297) of such a message will be Expired (7) and the QuoteMsgID (1166) will be the identifier of the last Quote message used to update the quote entry.

2.2.2 Quote management

2.2.2.1 Updating a quote

A client may update a live quote entry by sending another quote, via the Quote message, for the same instrument. When submitting an update, clients may:

(i) Update both sides of a quote

(ii) Update one side of a quote and leave the other side unchanged

Clients may update a side of a quote by providing a new price and/or quantity. The bid or offer side of a quote will lose time priority in the order book if its quantity is increased or its price is updated. A reduction in quantity will not cause a side to lose time priority.

When one side of a quote is replaced, the Client Order ID is updated for both sides. The execution report is sent out only for the amended side.

Note that a quote update request sent via the Order Cancel/Replace message will be rejected.

2.2.2.2 Cancelling a single quote

A client may use the Quote Cancel message to cancel a single quote entry. The message should include a QuoteCancelType (298) of Cancel for Instruments (1) and a NoQuoteEntries (295) of “1”. The instrument to which the cancellation applies should also be specified. It is required to include the NoTargetPartyIDs (1461) block in the message and the TargetPartyRole (1464) should be Trader Group (76).

The server will explicitly acknowledge or reject such a Quote Cancel message via the Quote Status Report message. The QuoteStatus (297) field will indicate whether the quote is Cancelled (17) or whether the quote cancel request is Rejected (5). If a cancel request is rejected, the reason will be specified in the QuoteRejectReason (300) field.

2.2.2.3 Mass cancelling quotes

The client may also mass cancel quotes via a single Quote Cancel message. The server will respond with a Mass Quote Acknowledgement to indicate, via the QuoteStatus (297) field, whether the request is successful or not.

The Mass Quote Acknowledgement will not contain any quote sets or quote entries if the cancellation of all quotes covered by the request is either confirmed or rejected. If the entire request is rejected, the reason will be specified in the QuoteRejectReason (300) field.

If the cancellations of some quotes are confirmed while those of others are rejected, the Mass Quote Acknowledgement will contain each quote entry that was not cancelled. The QuoteEntryStatus (1167) of each quote entry will be Rejected (5) and the reason the cancellation was rejected will be specified in the field QuoteEntryRejectReason (368). All quote entries will be grouped under a single quote set.

If a mass cancel quote request is submitted after the post close session end but before the market end, the open quotes will not get cancelled. In this scenario, the server will respond with a Mass Quote Acknowledgement with QuoteStatus (297) of Accepted followed by Quote Status Reports with QuoteStatus (297) of Rejected for each side of open quotes. The reason for rejection will be specified in each Quote Status Report.

Clients may use the Quote Cancel message to mass cancel all quotes or those for a specified list of instruments. If a Quote Cancel is used to cancel quotes for multiple instruments, it may not contain more than 25 entries in the NoQuoteEntries repeating block. A mass quote cancel request may apply to all the quotes of the member or only to those of a particular Trader Group. It is required to target the target party when the Quote Cancel is submitted. The FIX fields relevant to each of the supported mass cancel combinations are outlined below.

	Target Party	
	Other Party	**Member**
All Quotes	QuoteCancelType (298) = 4 TargetPartyRole (1464) = 76 TargetPartyID (1462)	QuoteCancelType (298) = 4 TargetPartyRole (1464) = 1 TargetPartyID (1462)
All Quotes for Specified Instruments	QuoteCancelType (298) = 1 TargetPartyRole (1464) = 76 TargetPartyID (1462) NoQuoteEntries (295) = n (<= 25) ➡ SecurityID (48) SecurityIDSource (22) = 8	QuoteCancelType (298) = 1 TargetPartyRole (1464) = 1 TargetPartyID (1462) NoQuoteEntries (295) = n (<= 25) ➡ SecurityID (48) SecurityIDSource (22) = 8

If a mass quote cancellation is requested when there are no open quotes/RFQ quotes in the book, the server will respond with a Mass Quote Acknowledgement with a QuoteStatus (297) of Accepted, while NoQuoteSets (269) will be unset. This behavior is common when a mass quote cancellation is directed to a partition in which the instrument does not reside.

Orders and unmatched pre-negotiated trades may not be cancelled via a Quote Cancel.

2.2.3 Quote identifiers

2.2.3.1 Message identifiers

The server will not validate each QuoteMsgID (1166) for uniqueness. Clients should comply with the FIX protocol and ensure unique QuoteMsgIDs across all Quote and Quote Cancel messages sent under a particular SenderCompID (49).

2.2.3.2 Entity identifiers

A particular trading party may only have one active quote per instrument. The QuoteID (117) of a Quote should always be “1”.

2.2.3.3 Set identifiers

If the server sends a Mass Quote Acknowledgement in response to a Quote Cancel message, the QuoteSetIDs of the message will be sequential numbers starting at one (1).

2.3 Security identification

Instruments will be identified using the SecurityID (48) field. It is required to specify SecurityIDSource (22) field as well

2.4 Party identification

ID	Description	Relevant FIX Tags
Member ID	Identifier of the member the interest is submitted under.	PartyRole (452) = 1 PartyIDSource=D PartyID (448)
Trader Group	Identifier of the trader group the interest is submitted under.	PartyRole (452) = 76 PartyIDSource (447)=D PartyID (448)
Trader ID	Identifier of the trader the interest is submitted under.	PartyRole (452) = 100 PartyIDSource (447)=D PartyID (448)
Client Reference	Client reference information applicable to an order	Account (1)
Counterparty Firm	Identifier of the counterparty firm in a trade.	PartyRole (452) = 17 PartyIDSource=D PartyID (448)
Market Makers	Identifier of the market maker firms to whom a private RFQ is directed at	PartyRole (452) = 66 PartyIDSource (447)=D PartyID (448)

Contra Trader	The trading mnemonic of the contra-side of a privately negotiated RFQ.	PartyRole (452) = 37 PartyIDSource (447)=D PartyID (448)
Executing Trader	Identifier of the Executing Trader relevant to the order/quote or RFQ	PartyRole (452) = 12 PartyIDSource (447)=P PartyID (448)
Client ID	Identifier of the client of the order/quote or RFQ	PartyRole (452) = 3 PartyIDSource (447)=P PartyID (448)
Investment Decision Maker	Identifier of the investment decision relevant to the order/quote or RFQ	PartyRole (452) = 122 PartyIDSource (447)=P PartyID (448)

Trading privileges are, depending on how the participant is set up, assigned at the level of the SenderCompID (49), Trader Group or Trader ID.

2.4.1 Trader Group, Trader ID, Counterparty Firm

A member of London Stock Exchange is required to specify a Trader Group. Members of these markets may optionally specify a Trader ID in each message.

Trader Group (PartyRole (452) = 76) must be specified in the New Order – Single, Order Cancel, Order Cancel/Replace and Quote messages. For the New Order Single (D), Order Cancel Request (F), Quote (S) and Order Cancel/Replace Request (G) messages, the message will be rejected if the Trading Party Component does not include a Party ID (448) Tag without a corresponding PartyRole (452) Tag equal to 76 (Trader Group) within the same repeating group.

For rejected messages, the client will receive a Business Message Reject (j) message with the following tags specified:

Business Reject Reason (380) = ‘0’

Text (58) = “Trader Group not specified on message”

The New Order Single (D), Order Cancel Request (F) and Order Cancel/Replace Request (G) messages will be rejected if the Party ID (448) corresponding to the PartyRole (452) of Trade Group (76) is invalid. The rejected messages will be acknowledged with an Execution Report which will have ExecType (8), OrdRejReason (103) = 9100 and Text (58) = Unknown user (Owner ID).

It should be noted that the party block with the invalid Trader Group (76) will not be included in the rejected Execution Report. In a scenario where the request was submitted with multiple party blocks, only the party block with the invalid Trader Group (76) will be dropped from the rejected Execution Report. The other party blocks will be included in the message.

2.4.2 Client ID, Investment Decision Maker, Executing Trader

The participants should provide the short code in the PartyID (448) tag to identify the Client, Investment Decision Maker or Executing Trader in the following messages: New Order Single, Quote, New Order Cross, Quote Request.

A short code must be in the range from 4 to 4294967295.

The below table shows the valid combinations of the Party Role Qualifier and Party Role tags, including the use of reserved Party ID values (0-3). Note; other combinations outside of the ranges below maybe accepted but this is not advised.

Party identifier	FIX Tags
1. Client - Legal entity (LEI)	Party Role (452)=3 , PartyRoleQualifier (2376)= 23, PartyID (448) = <Short Code>, PartyIDSource (447)=P
2. Client - Natural person	Party Role (452)=3 , PartyRoleQualifier (2376)= 24, PartyID (448) = <Short Code>, PartyIDSource (447)=P
3. An aggregation of multiple client orders	Party ID (448) = 1 (AGGR), Party Role (452)=3, PartyIDSource (447)=P
4. Clients are pending allocation	Party ID (448) =2 (PNAL), Party Role (452)=3, PartyIDSource (447)=P
5. No client for the order	Party ID (448) = 0 (None), Party Role (452)=3, PartyIDSource (447)=P
6. Investment Decision Maker - Natural person	Party Role (452)=122 , PartyRoleQualifier (2376)= 24, PartyID (448) = <Short Code>, PartyIDSource (447)=P
7. Investment Decision Maker – Algorithm	Party Role (452)=122 , PartyRoleQualifier (2376)= 22, PartyID (448) = <Short Code>, PartyIDSource (447)=P
8. No Investment Decision Maker	Party ID (448) = 0 (None), Party Role (452)=122, PartyIDSource (447)=P
9. Executing Trader - Natural person	Party Role (452)=12 , PartyRoleQualifier (2376)= 24, PartyID (448) = <Short Code>, PartyIDSource (447)=P
10. Executing Trader is Algorithm	Party Role (452)=12 , PartyRoleQualifier (2376)= 22, PartyID (448) = <Short Code>, PartyIDSource (447)=P
11. Executing Trader on behalf of a client	Party ID (448) =3 (CLIENT), Party Role (452)=12, PartyIDSource (447)=P

2.5 Market operations

2.5.1 Interest submission and management

Market Operations is able to submit an order cancel request or quote cancel request on behalf of a client.

The client will be notified of the cancel request submitted on its behalf if it is accepted. The client will not be notified if the action is rejected. If the cancellation is accepted, the disseminated Execution Report will not be assigned a new Client Order ID.

This feature is intended to help a client manage an emergency situation and should not be relied upon as a normal business practice.

2.5.2 Trade cancellations

Market Operations may also cancel any (automatically executed) trade. Additionally participants may cancel their own trades. Note that cancellation of cross/BTF order trades are expected to be carried out by the customer. Execution Reports will be sent to the relevant clients to notify them of a trade cancellation.

If an execution received by an order is cancelled, the order will be restated to reduce its order quantity by the cancelled quantity. The client will receive two notifications in such a scenario; one for the trade cancel and another for the restatement. The LeavesQty (151) and CumQty (14) of a live order will always add up to its OrderQty (38).

If an execution received by a quote is cancelled, the cancelled quantity will always be cancelled. The side of the quote will be restated to reduce its order quantity by the cancelled quantity. The client will receive two notifications in such a scenario; one for the trade cancel and another for the restatement. The LeavesQty (151) and CumQty (14) of one live side of a quote will always add up to its OrderQty (38).

An unsolicited Quote Status Report will be sent to the client if a quote is cancelled by Market Operations. The QuoteStatus (297) of such a message will be Removed from Market (6) and the QuoteMsgID (1166) will be the identifier of the last Quote message used to update the quote entry.

2.6 Timestamps and dates

The matrix below clarifies the expectations for timestamps and dates.

FIX Tag	Client Generated tag– accepted format	Server Generated tag – sent format
SendingTime (52)	UTC, YYYMMDD-HH:MM:SS.uuuuuu and YYYYMMDD-HH:MM:SS.sss	UTC, YYYYMMDD-HH:MM:SS.uuuuuu
OrigSendingTime (122)		
TransactTime (60)		
ExpireTime (126)	UTC, YYYYMMDD-HH:MM:SS	
ExpireDate (432)	YYYYMMDD, specified in the local date for the server (i.e. not in UTC).	

2.7 Repeating groups

If a repeating group (Components/Component Block) is used in a message, the NoXXX field (for example NoPartyIDs field in the trading party repeating group) should be specified first before the repeating group starts. This is applicable for both the messages generated by the client and the server.

The messages generated by the server will have the fields within a repeating group in order.

The messages generated by a client should have the first field in a repeating group in order. If the first field in a repeating group is in order, a message generated by a client will be accepted; else the message will be rejected.

In case the client specifies duplicate repeating groups, only the last entry will be considered by the system. The server will not reject such messages.

2.8 Auto Cancel on Disconnect

When a client has enabled "Mass Cancel on Disconnect" and/or "Mass Cancel on Logout", client's orders and quotes will be cancelled upon disconnection or a log out respectively.

On a subsequent successful login the client will receive the execution report messages for cancelled orders but will not receive a Quote Status Report for cancelled quotes.

Please note that Committed Cross/BTF orders will not be cancelled as part of a mass cancellation on disconnect/logout. At the request of the participant, the server can be configured to automatically cancel all live orders and quotes submitted under a CompID whenever it disconnects and/or logs out from the server.

This feature does not guarantee that all outstanding orders will be successfully cancelled as executions that occur very near the time of disconnect may not be reported to the client. During

such a situation, the client should contact market operations to verify that all orders have been cancelled and all *Execution Reports* have been received.

The configuration of the mass cancellation on disconnect feature may be updated during a FIX session.

This feature, if configured for a CompID, can be overridden for an individual order or quote by including an ExecInst (18) or Do Not Cancel on Disconnect/Logout (n)

If the disconnection is initiated by the server (e.g. when a user is locked, when a user is force logged out, when the maximum message rate is exceeded), the server first logs out the user and then disconnects the connection. In such a scenario the *Auto Cancel on Logout* feature will be applicable, where as if the disconnection is initiated by the client (e.g. heartbeat expiration, when a message is sent with an invalid sequence number), the applicable feature will be *Auto Cancel on Disconnect*.

2.9 Generating Reject Messages

A session reject message will be sent by the server if a required tag or a conditionally required tag is missing in a message sent by a client.

Also if an unsupported value is sent within a tag, an execution report or an order cancel reject is sent by the server.

2.10 Functional & Implementation Limitations

2.10.1 As an exception to 2.9, a session reject message can also be generated for an unsupported value. This can happen if the FIX tag supports a different data type compared to the internal field (for example if an invalid capacity is sent with a New Order message, a session reject is sent but if an invalid account type is sent, an Execution Report message is sent).

2.10.2 Quote Type (537) will not be populated in Quote Status Report which is generated as a response for rejecting a Quote Cancel due to a duplicate quote message ID.

2.10.3 When a cancellation or amendment to a “Filled” or “Cancelled” or “Expired” order is rejected, order status is given as “Rejected” in the Order Cancel Reject instead of the actual status of the order.

2.10.4 As an exception to 2.9, when a quote is rejected due to an invalid quote type, a Reject is given rather than a Quote Status Report.

2.10.5 Order Status (39) can be “Rejected” in the Execution Report and Order Cancel Reject, if the order is unknown or the cancellation or amendment request cannot be processed anymore. There are some basic validations that need to be passed to process an order. If those validations fail, an order will not be processed anymore hence some of the actual information of

the order will not be stamped in the messages generated by the server. For example, an amend request to change the Order Quantity (38) or Display Quantity (1138) to a negative value will be rejected via a Order Cancel Reject with the Order Status (39) as “Rejected”.

2.10.6 The order status will be communicated as “Expired” for an order which is cancelled in the case of MASS CANCEL ON LOGOUT / MASS CANCEL ON DISCONNECT after the user logs out/disconnects if the appropriate setting is turned on.

2.10.7 Within a client generated message, if the same FIX tag has been repeated with different values, the server takes the value in the last tag. The server will not reject such messages.

2.10.8 If the value Trader Group (76) has been repeated with the PartyRole (452) in the Trading Party Component Block in a client generated message, the value in the last Party ID (448) (which is corresponding to the last PartyRole (452)) is taken as the ID of the Trader Group. The server will not reject such messages.

2.10.9 If the client tries to amend the order quantity or the display quantity in the New Order message and if the request cannot be completely fulfilled due to edge conditions, the server will do the amendment to the maximum possible extent. The server will not reject the amend request.

For example if an order is sent with order quantity and display quantity as 800 and then tries to amend the display quantity to 500 two scenarios can happen. (a) The user may have already received a partial fill for 400 and tries to amend the leaves quantity via the display quantity which is not permitted. (b) While the amend request is on the wire, there may be a partial fill of 400 which is not known to user at the point of generating the amend request; in this case, rejecting the amend request is not ideal. The server cannot differentiate the two scenarios hence it has implemented fairer option which is to execute the amend request to the maximum possible extent.

2.10.10 The server does not keep track of filled/cancelled/expired/rejected orders or quotes (i.e. it does not keep track of orders or quotes whose life cycle is over). Also it is not possible to find whether there are active quotes for a particular instrument or not; hence the server does not reject a mass quote cancel request in total just because there are no quotes for a particular user + instrument combination; the rest of the user + instrument combinations may have valid open quotes.

Due to the above behaviour and limitations, when a mass quote cancel is sent, the server will try to cancel all the quotes requested. If a quote cannot be cancelled because it is already filled/cancelled/expired/rejected, the quote set repeating group will not be populated for such quotes in the mass quote acknowledgement as server does not have information of those quotes.

2.10.11 It is not possible to publish the TotalAffectedOrders (533) field in the Order Mass Cancel Report if the system sends the Order Mass Cancel Report before the Execution Reports (for orders that are cancelled) or Order Cancel Rejects (for orders that are not cancelled).

2.10.12 At present, if an order/quote mass cancel request is sent for instruments which are in multiple matching partitions, an Order Mass Cancel Report or Mass Quote Acknowledgement

(depending on whether the request is for order or quotes respectively) will be sent per matching partition with the confirmation/rejection of the cancellations of orders/quotes in that respective partition. This is because the system handles mass cancel requests per partition internally. The relevant partition will be stamped in the AppIID (1180) field in the Order Mass Cancel Report and Mass Quote Acknowledgement.

2.10.13 An order mass cancel request should not be sent during Start of Trading session. If a request is sent, it will be rejected as expected. But thereafter in a subsequent session the client will not be able to mass cancel the same orders again. But the client can individually cancel orders.

2.10.14 The system will ignore an undefined tag sent along with any Administrative message and will process the rest of the message. However if an undefined tag is sent along with an Application message, then the system will completely reject the message.

2.10.15 You cannot amend a fully visible order to a Random Replenished Iceberg order. However it is possible to amend a fully visible order to a Fixed peak Iceberg.

2.10.16 If a randomized iceberg order is modified (e.g. to a fully visible order) then the display method in the Order Cancel / Replace Request message should always be equal to 3 otherwise the message will be rejected.

2.10.17 Passive Only Order functionality is only available for certain instruments. Information on whether Passive Only Order functionality is available for a particular instrument can be found in the Millennium Exchange Business Parameters document.

2.10.18 Cancel on disconnect is applicable only if the user is disconnected before the end of day. In this case, the user is not disconnected but logged off by the system at EOD.

2.10.19 Unmatched Committed Cross/BTF Orders can also be cancelled via the Order Cancel Request message. However it is recommended that Committed Cross/BTF orders are cancelled using the Cross Order Cancel Request.

2.10.20 An order amendment request will be rejected if the Expire Time field is set for GTD orders or the Expire Date field is set for GTT orders, or neither Expire Time or Expire Date is set for GTD/GTT orders.

2.10.21 A client initiated message with an invalid Party Role (452) / Target Party Role (1464) of Trader Group (76) will be rejected due to an unknown user (reject code 9100 will be sent). The party block with the invalid Trader Group (76) will not be included in the reject response. If a client initiated message has multiple party blocks, the party block with the invalid Trader Group (76) will not be sent in the reject response. Party blocks with the correct Trader Group (76) will be included in the message.

2.10.22 The maximum length supported by the system for the field PartyID (448) is 11. Any values greater than 11 will be truncated by the system. After truncating, the system will validate the PartyID, and if the PartyID is invalid, the order will be rejected with reject reason "Unknown user (OwnerID)”

2.11 Mapping Order ID from FIX to MITCH

To convert FIX Order ID to MITCH Order ID:

Step 1 – Convert the 12 byte FIX Order ID from ASCII into a base 62 equivalent using the base 62 mapping table below

Step 2 – Convert this string into a base 10 (decimal) number

Step 3 – The MITCH Order ID is this base 10 number represented in binary

Note

- 64 bit integer data types should be used for the calculation otherwise integers will overflow
- Excel also rounds the value since its using a 64 bit float data type for the calculation

The Order ID format (ASCII):

12 bytes
0-9, A-Z, a-z
Base 62 encoded Order ID

The base 62 mapping table:

0	0	20	K	40	e	60	y
1	1	21	L	41	f	61	z
2	2	22	M	42	g		
3	3	23	N	43	h		
4	4	24	O	44	i		
5	5	25	P	45	j		
6	6	26	Q	46	k		
7	7	27	R	47	l		
8	8	28	S	48	m		

9	9	29	T	49	n		
10	A	30	U	50	o		
11	B	31	V	51	p		
12	C	32	W	52	q		
13	D	33	X	53	r		
14	E	34	Y	54	s		
15	F	35	Z	55	t		
16	G	36	a	56	u		
17	H	37	b	57	v		
18	I	38	c	58	w		
19	J	39	d	59	x		

An Example:

ASCII Order ID for FIX	004Xj7Wu76ta
Base 62 equivalent	00,00,04,33,45,07,32,56,07,06,55,36
Base 10 (decimal) number	61512470073704470
MITCH Order ID	Binary encoding of the above decimal

2.12 Mapping Trade Match ID to MITCH

To convert FIX Trade Match ID to MITCH Trade ID:

Step 1 – Convert the 10 byte Trade Match ID from ASCII into a base 36 equivalent using the base 36 mapping table below

Step 2 – Convert this string into a base 10 (decimal) number

Step 3 – The MITCH Trade ID is this base 10 number represented in binary

The Trade Match ID format (ASCII):

10 bytes
0-9, A-Z
Base 36 encoded trade id

The Trade Match ID binary format is calculated as follows:

20 bits	2bits	3 bits	2bits	24 bits
<number of sec>	[0-15]	[0-7]	[0-3]	
The number of 5 mins intervals from Jan 1, 2010)	ID	Partition id	Thread id	Trade number

The base 36 mapping table (G offset):

0	G	20	0
1	H	21	1
2	I	22	2
3	J	23	3
4	K	24	4
5	L	25	5

6	M	26	6
7	N	27	7
8	O	28	8
9	P	29	9
10	Q	30	A
11	R	31	B
12	S	32	C
13	T	33	D
14	U	34	E
15	V	35	F
16	W		
17	X		
18	Y		
19	Z		

An Example:

ASCII Trade ID for FIX	G5DIF33YV0
Base 36 equivalent	00,25,33,02,35,23,23,18,15,20
Base 10 (decimal) number	73120274710544
MITCH Trade ID	Binary encoding of the above decimal

2.13 MiFID II changes

2.13.1 Timestamping at Microsecond granularity

All server generated timestamps will now be in microsecond granularity. It is not mandatory for client generated timestamps to be in microsecond granularity. Further details are described in the Timestamps and dates section.

2.13.2 Unique System IDs

The existing BidID and OfferID tags will now be populated for electronic and firm quotes in the Quote Status Report, and for RFQ Quotes in the Quote Ack message.

2.13.3 Order Capacity

The Order capacities are shown below.

Pre-MiFID II name	MiFID II name
Principal	Dealing on own account (DEAL)
Agency	Any other trading capacity (AOTC)
Riskless Principal	N/A
N/A	Matched Principal (MTCH)

Prior to the MiFID II go-live, tag OrderCapacity(528) = R was treated as Riskless Principal. Since the MiFID II go-live, it is treated as Matched Principal (MTCH).

2.13.4 Pre-trade Waiver Flags

If a Cross/BTF/RFQ transaction was executed under a pre-trade waiver, the relevant Waiver Flag [2] will be sent in the Order Execution Report for Cross/BTF trades and trade cancellations. Flags will also be sent in the Quote Execution Report for RFQ trades and trade cancellations.

- For equity instruments:

[2] Orders executed under large in scale waiver will not be flagged with the waiver indicator since it is not required by MIFID II/MiFIR (RTS22)

- ‘NLIQ’ = Negotiated transactions in liquid financial instruments
- ‘OILQ’ = Negotiated transactions in illiquid financial instruments

- For non-equity instruments:
  - ‘SIZE’ = Above specific size transaction
  - ILQD’ = Illiquid instrument transaction

The matrices below show in which scenario each of the flags will be sent.

Cross Trades/ Trade Cancels	Instrument Category		Liquidity		Order Size		Waiver Indicator Flag
	Equity	Non-equity	Liquid	Illiquid	Size ≥ Pre-trade LIS	Size < Pre-trade LIS	
	✓		✓			✓	**NLIQ**
	✓			✓		✓	**OILQ**
		✓		✓	✓		**ILQD**
		✓		✓		✓	**ILQD**

BTF Trades/ Trade Cancels	Instrument Category		Liquidity		Order Size		Waiver Indicator Flag
	Equity	Non-equity	Liquid	Illiquid	Size ≥ Minimum BTF Value	Size < Minimum BTF Value	
		✓		✓	✓		**ILQD**

RFQ Trades/ Trade	Instrument Category	Liquidity	Pre-Trade Transparency Model of the RFQ	Waiver Indicator

Cancels	Equity	Non-equity	Liquid	Illiquid	NPT	
		✓	✓			**SIZE**
		✓		✓	✓	**ILQD**

2.13.5 Order Record Keeping Information

The participants should provide the short code with PartyRole (452) = 'Client ID (3)', 'Investment Decision Maker (122)' or 'Executing Trader (12)'. These new party identifiers are named as 'Client ID', 'Investment decision within firm' and 'Execution within firm' in the MiFID II/MiFIR RTS 24 regulatory documentation. Further information about these new party identifiers has been added in the Party identification section.

2.14 RFQ models

The Requestor can submit *Named* RFQ (Manual or Automatic) or *Anonymous* (Manual or Automatic). They can also choose whether to send an RFQ to a *selected* list of Market Makers or to *all*.

To submit a given RFQ model the Requestor should specify the below combination of tags:

Model	QuoteRequestType (303)	Party ID (448) with Party Role (452)= 66
Manual Named RFQ to listed MMs	1 – Manual OR 101 - Manual (Named)	Market Makers Firm IDs
Manual Named RFQ to all MMs	101 - Manual (Named)	Not specified
Manual Anonymous RFQ to listed MMs	100 – Manual (Anonymous)	Market Makers Firm IDs
Manual Anonymous RFQ to all MMs	100 – Manual (Anonymous)	Not specified
Automatic Named RFQ to listed MMs	103 – Automatic (Named)	Market Makers Firm IDs
Automatic Named RFQ to all MMs	103 – Automatic (Named)	Not specified
Automatic Anonymous RFQ to listed MMs	102 – Automatic (Anonymous)	Market Makers Firm IDs
Automatic Anonymous RFQ to all MMs	2 – Automatic OR 102 – Automatic (Anonymous)	Not specified

3.0 Connectivity

3.1 CompIDs

The CompID of each client must be registered with London Stock Exchange before FIX communications can begin. A single client may have multiple connections to the server (i.e. multiple FIX sessions, each with its own CompID).

The CompID of the server is **FGW**. The messages sent to the server should contain the CompID assigned to the client in the field SenderCompID (49) and FGW in the field TargetCompID (56). The messages sent from the server to the client will contain FGW in the field SenderCompID (49) and the CompID assigned to the client in the field TargetCompID (56).

3.1.1 Passwords

Each new CompID will be assigned a password on registration. Clients must change their password to one of their choosing at first login via the Logon message. The new password must comply with London Stock Exchange password policy. The status of the new password (i.e. whether it is accepted or rejected) will be specified in the SessionStatus (1409) field of the Logon sent by the server to confirm the establishment of a FIX connection. The new password will, if accepted, be effective for subsequent logins.

New passwords should adhere to the rules below:

- Minimum length – 8 characters
- Maximum length – 14 characters
- Minimum numeric characters – 1 character
- Minimum alpha characters – 1 character
- Minimum special characters – 1 character

3.2 Production IP addresses and ports

The IP addresses and ports for the FIX gateway are published in a separate configuration document which can found on the Millennium Exchange Technical Information website.

3.3 Failover and recovery

The system has been designed with fault tolerance and disaster recovery technology that ensures that trading should continue in the unlikely event of a process, gateway or site outage.

On unexpected disconnection from the primary gateway, a customer should ensure that their application behaves in accordance with London Stock Exchange's connectivity policy.

In case of a failover, the system will send all messages If the participant has not logged in to the gateway within the trading day, the gateway will send all available messages upon login.

3.4 Connectivity Policy

An application should attempt to connect a maximum of 3 times to the primary gateway with a minimum time out value of 3 seconds between attempts before attempting to connect to the secondary gateway – and this should be retried a maximum of a further 3 times. After 6 failed connection attempts (3 on each gateway) the clients should contact London Stock Exchange for further guidance.

Upon successful connection to the secondary gateway it is important to note that the system will increment the server side outbound sequence number (i.e. customer inbound sequence number) by 5,000. Since customers need to comply with FIX Session rules, they should submit a Resend Request (handled by the FIX Session layer) after receiving a response to the login request. This would result in syncing the inbound sequence number on the customer side. In this scenario, there is a low probability that the customer might receive duplicate messages (i.e. messages the customer has already received before the Fail-over). All these duplicate messages will have PossResend(97) field set to “Y”. It is expected for the customer to perform a check for duplicate messages with PossResend(97) set “Y”. The customer might receive Business Rejects with reject reason ‘Application Unavailable’ for requests that were submitted during a failover (also low probability). It should be noted that these requests have not been accepted by the system and the customer should resubmit if required.

Information on London Stock Exchange’s Connectivity Policy can be found at the following link:

http://www.londonstockexchange.com/products-and-services/technical-library/technical-guidance-notes/technical-guidance-notes.htm

3.5 Message Rate Throttling

London Stock Exchange has implemented a scheme for throttling message traffic where each CompID is only permitted to submit up to a specified number of messages per second.

Additional information is provided in the MIT201 *Guide to the New Trading System* document, and also in the *Trading Technical Parameters* document both at http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm.

Every message which exceeds the maximum rate of a CompID will be rejected via a Business Message Reject (with BusinessRejectReason (380) of Other (0) and Text (58) field = “Message rate exceeded”). A client’s connection will be disconnected by the server if its message rate exceeds the maximum rate for a specific time duration. In such a case, the server will transmit a Logout message (with SessionStatus (1409) = 102 (Logout by market operations) and Text (58) = "Maximum Message Rate Exceeded”) and 5 seconds afterwards will terminate the TCP/IP connection.

Please note that client Heartbeat messages, reject messages and any other client-initiated administrative messages are not counted towards the throttling limits.

3.6 Mass Cancellation On Disconnect

At the request of the member firm, the server can be configured to automatically cancel all live orders and quotes submitted under a CompID whenever it disconnects from the server.

This feature does not guarantee that all outstanding orders will be successfully cancelled as executions that occur very near the time of disconnect may not be reported to the client. During such a situation, the client should contact Market Operations to verify that all orders have been cancelled and all Execution Reports have been received.

If a disconnection/logout takes place after the end of the post close session, it should not result in a mass cancellation of orders. Therefore, if the user gets disconnected/logged out after post close while mass cancel on disconnect/logout is enforced, any orders open at that point will not be cancelled.

The configuration of the mass cancellation on disconnect feature cannot be updated during a FIX session.

Please note that Committed Cross/BTF orders will not be cancelled as part of a mass cancellation on disconnect/logout.

4.0 FIX connections and sessions

4.1 Establishing a FIX connection

FIX connections and sessions between the client and server are maintained as specified in the FIX protocol.

Each client will use the assigned IP address and port to establish a TCP/IP session with the server. The client will initiate a FIX session at the start of each trading day by sending the Logon message. The client will identify itself using the SenderCompID (49) field. The server will validate the CompID, password and IP address of the client.

Once the client is authenticated, the server will respond with a Logon message. The SessionStatus (1409) of this message will be Session Active (0). If the client's Logon message included the field NewPassword (925) and the client is authenticated, the server will respond with a Logon message. The SessionStatus (1409) of this message will be Session Active (0).

The client must wait for the server's Logon response before sending additional messages. If the client sends messages prior to sending the Logon message or prior to receiving the Logon response, the server will break the TCP/IP connection with the client without sending any message.

When the client sends a logon with a sequence number higher than expected by the FIX Gateway, the FIX Gateway will send a Resend Request.

If a logon attempt fails because of an invalid SenderCompID, invalid TargetCompID, invalid IP address, invalid password or not having the appropriate privileges to login to the gateway, or if the user sends a Logon message with duplicated tags, the server will break the TCP/IP

connection with the client without sending a Logout or Reject message. If during a logon of a SenderCompID, the server receives a second connection attempt while a valid FIX session is already underway for that same SenderCompID, the server will break the TCP/IP connection with the second connection without sending a Logout or Reject message. As the logon attempt failed, the server will not increment the next inbound message sequence number expected from the client.

If a logon attempt fails because of a locked CompID or if logins are not currently permitted, the server will send a Logout message and then break the TCP/IP connection with the client. In both these scenarios the next inbound sequence number expected from the client and the outbound sequence number will not be incremented. The message sequence number '1' will be sent with the Logout message.

If a logon attempt fails because of a session level failure (e.g. due to invalid EncryptMethod or DefaultApplVerID…etc) both the inbound sequence number and the outbound sequence number will not be incremented**.** The message sequence number '1' will be sent with the Logout message.

However if a session level failure occurs due to a message sent by a client which contains a sequence number that is less than what is expected and the PossDupFlag (43) is not set to "Y", then the server will send a Logout message and terminate the FIX connection. In this scenario the inbound sequence number will not be incremented but the outbound sequence number will be incremented.

If during a logon of a SenderCompID the server receives a second connection attempt via the same TCP/IP connection while a valid FIX session is already underway for that same SenderCompID, the server will immediately break the TCP/IP connection with the client without sending any messages. If the server receives another connection attempt from the same SenderCompID, while a session is already established, the connection attempt will be rejected via a Reject message without breaking the existing TCP/IP connection with the client. The server will increment the next inbound message sequence number expected from the client as well as its own outbound message sequence number.

A protection mechanism is in place in order to protect the gateway from rapid login/logouts. If a user reaches the thresholds for rapid login/logouts, any future logins/logouts will be delayed exponentially.

The impact of logon failures on sequence numbers is summarised in the table below:

Reason for Logon Failure	Session status (of logout)	Inbound Sequence Number	Outbound Sequence Number

Invalid or expired password	8 (password expired)	Does not increase	Does not increase (defaulted to 1)
Locked/suspended/inactivated CompID	6 (account locked)	Does not increase	Does not increase (defaulted to 1)
Logins are not currently permitted	7 (logins are not allowed)	Does not increase	Does not increase (defaulted to 1)
Session level failure (e.g. due to invalid EncryptMethod or DefaultApplVerID…etc)	101 (logout session level failure)	Does not increase	Does not increase (defaulted to 1)
Login sequence number is less than the expected sequence number	101 (logout session level failure)	Does not increase	Incremented by 1
Second connection attempt	- (Blank as Reject message used instead.)	Incremented by 1	Incremented by 1

4.2 Maintaining a FIX session

4.2.1 Message sequence numbers

As outlined in the FIX protocol, the client and server will each maintain a separate and independent set of incoming and outgoing message sequence numbers. Sequence numbers should be initialized to 1 (one) at the start of the FIX session and be incremented throughout the session.

Monitoring sequence numbers will enable parties to identify and react to missed messages and to gracefully synchronize applications when reconnecting during a FIX session.

If any message sent by the client contains a sequence number that is less than what is expected and the PossDupFlag (43) is not set to “Y”, the server will send a Logout message and terminate the FIX connection. The Logout will contain the next expected sequence number as well as the received sequence number in the Text (58) field.

A FIX session may not continue to the next trading day. The server will initialize its sequence numbers at the start of each day. The client is expected to employ the same logic.

4.2.2 Heartbeats

The client and server will use the Heartbeat message to exercise the communication line during periods of inactivity and to verify that the interfaces at each end are available. The heartbeat interval will be the HeartBtInt (108) specified in the client’s Logon message.

The server will send a Heartbeat anytime it has not transmitted a message for the heartbeat interval. The client is expected to employ the same logic.

As a safety mechanism, the system will not allow the user to login if the HeartBtInt is set to 0. Therefore, if the server receives a logon with HeartBtInt = 0, the user will receive a logout message with SessionStatus = 101 (Logout due to session level failure) and Text = 'HeartBtInt should be greater than zero'.

If the server detects inactivity for a period longer than the heartbeat interval plus a reasonable transmission time, it will send a Test Request message to force a Heartbeat from the client. If a response to the Test Request is not received by a reasonable transmission time, the server will send a Logout and break the TCP/IP connection with the client. The client is expected to employ similar logic if inactivity is detected on the part of the server.

4.2.3 Increasing expected sequence number

The client or server may use the Sequence Reset message in Gap Fill mode if it wishes to increase the expected incoming sequence number of the other party.

The client or server may also use the Sequence Reset message in Sequence Reset mode if it wishes to increase the expected incoming sequence number of the other party. The Sequence Reset mode should only be used to recover from an emergency situation. It should not be relied upon as a regular practice.

4.3 Terminating a FIX connection

The client is expected to terminate each FIX connection at the end of each trading day before the server shuts down. The client will terminate a connection by sending the Logout message. The server will respond with a Logout to confirm the termination. The client will then break the TCP/IP connection with the server.

All open TCP/IP connections will be terminated by the server when it shuts down (a Logout will be sent). Under exceptional circumstances the server may initiate the termination of a connection during the trading day by sending the Logout message.

If, during the exchange of Logout messages, the client or server detects a sequence gap, it should send a Resend Request.

4.4 Re-establishing a FIX session

If a FIX connection is terminated during the trading day it may be re-established via an exchange of Logon messages.

4.4.1 Resetting sequence numbers: Starting a new FIX session

4.4.1.1 Reset initiated by the client

If the client requires both parties to initialize (i.e. reset to 1) sequence numbers, it may use the ResetSeqNumFlag (141) field of the Logon message. The server will respond with a Logon with the ResetSeqNumFlag (141) field set to "Y" to confirm the initialization of sequence numbers.

A client may also manually inform the service desk that it would like the server to initialize its sequence numbers prior to the client's next login attempt.

These features are intended to help a client manage an emergency situation. Initializing sequence numbers on a re-login should not be relied upon as a regular practice.

4.4.1.2 Reset initiated by the server

The system has been designed with fault tolerance and disaster recovery technology that should ensure that the server retains its incoming and outgoing message sequence numbers for each client in the unlikely event of an outage.

However, clients are required to support a manual request by London Stock Exchange to initialize sequence numbers prior to the next login attempt.

4.5 Matching system failure

In the event of matching system failure, following order entry, clients will receive a Business Reject Message with a BusinessRejectReason (380) of “4” indicating “Application not available.”

5.0 Recovery

5.1 Resend requests

The client may use the Resend Request message to recover any lost messages. As outlined in the FIX protocol, this message may be used in one of three modes:

(i) To request a single message. The BeginSeqNo (7) and EndSeqNo (16) should be the same.

(ii) To request a specific range of messages. The BeginSeqNo (7) should be the first message of the range and the EndSeqNo (16) should be the last of the range.

(iii) To request all messages after a particular message. The BeginSeqNo (7) should be the sequence number immediately after that of the last processed message and the EndSeqNo (16) should be zero (0).

The server caches a maximum number of messages transmitted to the client. Clients are unable to use a Resend Request to recover messages not in the server’s cache. This cache size is available in the Trading Technical Parameters document that can found on the Millennium Exchange Technical Information website.

5.2 Possible duplicates

The server handles possible duplicates according to the FIX protocol. The client and server will use the PossDupFlag (43) field to indicate that a message may have been previously transmitted with the same MsgSeqNum (34).

5.3 Possible resends

5.3.1 Client-initiated messages

The server does not handle possible resends for the client-initiated messages (e.g. New Order – Single, Quote, etc.) and ignores the value in the PossResend (97) field of such messages.

5.3.2 Server-initiated messages

The server may, in the circumstances outlined in Sections 5.4 and 5.5, use the PossResend (97) field to indicate that an application message may have already been sent under a different MsgSeqNum (34). The client should validate the contents (e.g. ExecID) of such a message against those of messages already received during the current trading day to determine whether the new message should be ignored or processed.

5.4 Transmission of missed messages

The Execution Report, Order Cancel Reject, Order Mass Cancel Report, Quote Status Report, Mass Quote Acknowledgement and Business Message Reject messages generated during a period when a client is disconnected from the server will be sent to the client when it next reconnects. In the unlikely event the disconnection was due to an outage of the server, all such messages will include a PossResend (97) of “Y”.

6.0 Message formats

This section provides details on the header and trailer, the seven administrative messages and fifteen application messages utilized by the server. Client-initiated messages not included in this section are rejected by the server via a Reject or Business Message Reject. All fields are encoded using printable ASCII.

6.1 Supported message types

6.1.1 Administrative messages

All administrative messages may be initiated by either the client or the server

Message	MsgType	Usage
Logon	A	Allows the client and server to establish a FIX session.
Logout	5	Allows the client and server to terminate a FIX session.
Heartbeat	0	Allows the client and server to exercise the communication line during periods of inactivity and verify that the interfaces at each end are available.
Test Request	1	Allows the client or server to request a response from the other party if inactivity is detected.
Resend Request	2	Allows for the recovery of messages lost during a malfunction of the communications layers.

Reject	3	Used to reject a message that does not comply with FIXT.
Sequence Reset	4	Allows the client or server to increase the expected incoming sequence number of the other party.

6.1.2 Application messages: order handling

6.1.2.1 Client-initiated

Message	MsgType	Usage
New Order – Single	D	Allows the client to submit a new order.
Order Cancel Request	F	Allows the client to cancel a live order.
Order Mass Cancel Request	q	Allows the client to mass cancel: (i) All live orders. (ii) All live orders for a particular instrument. (iii) All live orders for a particular segment. The mass cancel may apply to the orders of a particular trading party or to all orders of the member.
Order Cancel/Replace Request	G	Allows the client to cancel/replace a live order.
New Order Cross Message	s	Allows the client to submit a Cross/BTF order.
Cross Order Cancel Request	u	Allows the client to cancel a Committed Cross/BTF order.

6.1.2.2 Server-initiated

Message	MsgType	Usage

Execution Report	8	Indicates one of the following: (i) Order accepted. (ii) Order rejected. (iii) Order executed. (iv) Order expired. (v) Order cancelled. (vi) Order cancel/replaced. (vii) Trade cancel. (viii) Order status.
Order Cancel Reject	9	Indicates that an order cancel request or order cancel/replace request has been rejected.
Order Mass Cancel Report	r	Indicates one of the following: (i) Mass order cancel request accepted. (ii) Mass order cancel request rejected.

6.1.3 Application messages: quote handling

6.1.3.1 Client-initiated

Message	MsgType	Usage
Quote	S	Allows the client to submit a quote or RFQ quote for a single instrument.
Quote Cancel	Z	Allows the client to cancel a quote for a particular instrument. It may also use this message to mass cancel all quotes or those for a specified list of instruments.
Quote Request	R	Allows the Requester to submit an RFQ
Quote Request Reject	AG	Allows the Market Marker to reject the RFQ
Quote Response	AJ	Allows the Requester to execute (accept) a RFQ Quote or initiate an RFQ cancellation

6.1.3.2 Server-initiated

Message	MsgType	Usage
Quote Status Report	AI	Indicates one of the following: (i) Quote/RFQ accepted (ii) Quote rejected (iii) Request to cancel a single quote/RFQ accepted (iv) Request to cancel a single quote/RFQ rejected (v) Quote/RFQ cancelled by Market Operations

Mass Quote Acknowledgement	b	Indicates one of the following: (i) Request to mass cancel quotes accepted (ii) Request to mass cancel quotes rejected
Execution Report	8	Indicates one of the following: (i) Quote executed (ii) Trade cancel
Quote Request	R	Indicates a RFQ sent to the Market Maker
Quote Request Reject	AG	Indicates an RFQ reject to the Requester
Quote Ack	CW	Indicates an acknowledgement of a new or modified RFQ to the Market Maker
Quote Response	AJ	Indicates the status of a quote and RFQ to the Requester and Market Makers
Quote	S	Indicates the RFQ Quote sent to the Requester

6.1.4 Application messages: other

6.1.4.1Server-initiated

Message	MsgType	Usage
Business Message Reject	j	Indicates that an application message could not be processed

6.2 Message Header and Trailer

6.2.1 Message header

Tag	Field Name	Req	Description
8	BeginString	Y	FIXT.1.1
9	BodyLength	Y	Number of characters after this field up to and including the delimiter immediately preceding the CheckSum.
35	MsgType	Y	Message type.
49	SenderCompID	Y	CompID of the party sending the message.

56	TargetCompID	Y	CompID of the party the message is sent to.
34	MsgSeqNum	Y	Sequence number of the message.
43	PossDupFlag	N	Whether the message was previously transmitted under the same MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N). **Value** / **Meaning** Y – Possible Duplicate N – Original Transmission
97	PossResend	N	Whether the message was previously transmitted under a different MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N). **Value** / **Meaning** Y – Possible Resend N – Original Transmission
52	SendingTime	N	Time the message was transmitted. Not required for incoming messages sent by the clients (even if sent by a client, no validation will be done). Required for outgoing messages sent by the server.
122	OrigSendingTime	N	Time the message was originally transmitted. If the original time is not available, this should be the same value as SendingTime (52). Required if PossDupFlag (43) is Possible Duplicate (Y).
1128	ApplVerID	N	Version of FIX used in the message. Required if the message is generated by the server. **Value** / **Meaning** 9 – FIX50SP2
115	OnBehalfOfCompID	N	The ID of the party whose on behalf the message is sent; will only be used in client initiated messages

128	DeliverToCompID	N	The value specified in the OnBehalfOfCompID(115) field will be stamped; Will only be stamped in server initiated messages which are sent in response to the below messages: New Order – Single, Order Cancel Request, Order Cancel/Replace Request, Order Mass Cancel Request, New Order Cross Message, Cross Order Cancel Request, Quote (Electronic), Quote Cancel, Logon This tag will not be received for RFQ related messages.

6.2.2 Message trailer

Tag	Field Name	Req	Description
10	CheckSum	Y	

6.3 Administrative messages

6.3.1 Logon

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	A = Logon
Message Body			
98	EncryptMethod	Y	Method of encryption. **Value** – **Meaning** 0 – None
108	HeartBtInt	Y	Indicates the heartbeat interval in seconds.

141	ResetSeqNum Flag	N	Indicates whether the client and server should reset sequence numbers. Absence of this field is interpreted as Do Not Reset Sequence Numbers (N). **Value** / **Meaning** Y – Reset Sequence Numbers N – Do Not Reset Sequence Numbers
554	Password	N	Password assigned to the CompID. Required if the message is generated by the client.
925	NewPassword	N	New password for the CompID.
1409	SessionStatus	N	Status of the FIX session or the request to change the password. Required if the message is generated by the server. **Value** / **Meaning** 0 – Session Active 3 – New session password does not comply with policy.
1137	DefaultApplVerID	Y	Default version of FIX messages used in this session and this value will be validated by the server. **Value** / **Meaning** 9 – FIX50SP2
Standard Trailer			

6.3.2 Logout

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	5 = Logout
Message Body			

1409	SessionStatus	N	Status of the FIX session. Required if the message is generated by the server. **Value** / **Meaning** 4 – Session logout complete 6 – Account locked 7 – Logons are not allowed at this time 8 – Password expired 100 – Other 101 – Logout due to session level failure 102 – Logout by market operations
58	Text	N	The field will contain the next expected sequence number as well as the received sequence number if the server terminated the connection after receiving a sequence number that was less than what was expected. In other cases the field will contain the reason for logout.
Standard Trailer			

6.3.3 Heartbeat

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	0 = Heartbeat
Message Body			
112	TestReqID	N	Required if the heartbeat is a response to a Test Request. The value in this field should echo the TestReqID (112) received in the Test Request.
Standard Trailer			

6.3.4 Test Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	1 = Test Request.
Message Body			
112	TestReqID	Y	Identifier for the request.
Standard Trailer			

6.3.5 Resend Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	2 = Resend Request
Message Body			
7	BeginSeqNo	Y	Sequence number of first message in range.
16	EndSeqNo	Y	Sequence number of last message in range.
Standard Trailer			

6.3.6 Reject

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	3 = Reject
Message Body			
45	RefSeqNum	Y	MsgSeqNum (34) of the rejected message.
372	RefMsgType	N	MsgType (35) of the rejected message.
371	RefTagID	N	If a message is rejected due to an issue with a particular field its tag number will be indicated.
373	SessionReject Reason	N	Code specifying the reason for the reject. Please refer to MIT801 for a list of reject codes.
58	Text	N	Text specifying the reason for the rejection.
Standard Trailer			

6.3.7 Sequence Reset

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	4 = Sequence Reset
Message Body			
36	NewSeqNo	Y	Sequence number of the next message to be transmitted.
123	GapFillFlag	N	Mode in which the message is being used. Absence of this field is interpreted as Sequence Reset (N). **Value** / **Meaning** Y – Gap Fill N – Sequence Reset
Standard Trailer			

6.4 Application messages: order handling

6.4.1 New Order – Single

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	D = New Order – Single
Message Body			
11	ClOrdID	Y	Client specified identifier of the order. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.
453	NoPartyIDs	Y	Number of party identifiers. Will be ‘4’ or ‘5’.

<table>
<tr><td>➡</td><td>448</td><td>PartyID</td><td>Y</td><td>Identifier of the party.

Short code in a range from 4 to 4294967295 can be used to identify the Client, Investment Decision Maker or Executing Trader.

Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles and will be rejected when Party Role (452) is set to ‘12’.

Value ‘1’ and ‘2’ are valid only for Client ID (3) party role.

Value ‘3’ is valid only for Executing Trader (12).

Short Code is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>0</td><td>None</td></tr>
<tr><td>1</td><td>AGGR (Aggregated Order)</td></tr>
<tr><td>2</td><td>PNAL (Pending Allocations)</td></tr>
<tr><td>3</td><td>CLIENT</td></tr>
</table></td></tr>
<tr><td>➡</td><td>447</td><td>PartyIDSource</td><td>Y</td><td>Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles, otherwise Value ‘D’ is considered.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>D</td><td>Proprietary/Custom Code</td></tr>
<tr><td>P</td><td>Short Code</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>➡</td><td>452</td><td>PartyRole</td><td>Y</td><td>Role of the specified PartyID (448).

It is mandatory to provide PartyRole Trader Group (76), Client ID (3), Investment Decision Maker (122) and Executing Trader (12).

Trader ID (100) is optional. The value specified in Trader ID (100) will not be validated by the system.

<table><tr><td>Value</td><td>Meaning</td></tr><tr><td>100</td><td>Trader ID</td></tr><tr><td>76</td><td>Trader Group</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>122</td><td>Investment Decision Maker</td></tr><tr><td>12</td><td>Executing Trader</td></tr></table></td></tr>
<tr><td>➡</td><td>2376</td><td>PartyRoleQualifier</td><td>N</td><td>Provides a further qualification for the value specified in the PartyRole (452).

Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295), otherwise the value will be ignored.

<table><tr><td>Value</td><td>Meaning</td></tr><tr><td>22</td><td>Algorithm</td></tr><tr><td>23</td><td>Firm or Legal Entity</td></tr><tr><td>24</td><td>Natural Person</td></tr></table>
Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles.
Value ‘23’ is applicable for Client ID (3) party role.
Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.</td></tr>
</table>

Component Block <Trading Session>		N	Identifier of the trading session. Repeating block indicates whether the order is a CPX order or not. Please refer to section 6.7.1. TimeInForce(59) field should not be populated if the order is a CPX order.
1	Account	N	Client reference information.
48	SecurityID	Y	Identifier of the instrument.
22	SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 – Exchange Symbol
40	OrdType	Y	Type of the order. **Value** / **Meaning** 1 – Market 2 – Limit 3 – Stop 4 – Stop Limit P – Pegged
1091	PreTrade Anonymity	N	Whether the order is anonymous or named. Absence of this field is interpreted as Anonymous (Y). **Value** / **Meaning** Y – Anonymous N – Named

<table>
<tr><td>59</td><td>TimeInForce</td><td>N</td><td>Time qualifier of the order. Absence of this field is interpreted as DAY (0).

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>DAY</td></tr><tr><td>2</td><td>At the Opening (OPG)</td></tr><tr><td>3</td><td>Immediate or Cancel (IOC)</td></tr><tr><td>4</td><td>Fill or Kill (FOK)</td></tr><tr><td>6</td><td>Good Till Date (GTD)</td></tr><tr><td>7</td><td>At the Close (ATC)</td></tr><tr><td>8</td><td>Good for Intra-Day Auction (GFX)</td></tr><tr><td>9</td><td>Good for Auction (GFA)</td></tr><tr><td>C</td><td>Good for Scheduled Auction (GFS)</td></tr></table></td></tr>
<tr><td>126</td><td>ExpireTime</td><td>N</td><td>Time the order expires which must be a time during the current trading day. Required if TimeInForce (59) is GTD (6) and ExpireDate (432) is not specified. If both the ExpireTime (126) and ExpireDate (432) are specified, the message will be rejected. The value specified for this field will be ignored for TIFs other than GTD.</td></tr>
<tr><td>432</td><td>ExpireDate</td><td>N</td><td>Date the order expires. Required if TimeInForce (59) is GTD (6) and ExpireTime (126) is not specified. The value specified for this field will be ignored for TIFs other than GTD.</td></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Side of the order.
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Buy</td></tr><tr><td>2</td><td>Sell</td></tr></table></td></tr>
<tr><td>38</td><td>OrderQty</td><td>Y</td><td>Total order quantity.</td></tr>
<tr><td>1138</td><td>DisplayQty</td><td>Y</td><td>Maximum quantity that may be displayed. It is mandatory to specify the intended display quantity.</td></tr>
</table>

<table>
<tr><td>1084</td><td>DisplayMethod</td><td>N</td><td>
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>3</td><td>Random (randomize value)</td></tr>
<tr><td>4</td><td>Undisclosed (Hidden Order)</td></tr>
</table>
If this is populated with value “4” while a value which is greater than 0 is populated in DisplayQty (1138), the order will be considered as a Hidden (Reserve) Order.

If this is populated with value “3” while a value which is greater than 0 and less than the Order Quantity is populated in DisplayQty (1138), the DisplayQty (1138) after replenishment will be random.

If blank while a value which is greater than 0 and less than the Order Quantity is populated in DisplayQty (1138), the DisplayQty (1138) after a replenishment will be “fixed peak”
</td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>Limit price. Required if OrderType (40) is Limit (2) or Stop Limit (4).</td></tr>
<tr><td>99</td><td>StopPx</td><td>N</td><td>Stop price. Required if OrderType (40) is Stop (3) or Stop Limit (4).</td></tr>
<tr><td>581</td><td>AccountType</td><td>Y</td><td>Type of account associated with the order.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>1</td><td>Client</td></tr>
<tr><td>3</td><td>House</td></tr>
</table>
</td></tr>
<tr><td>528</td><td>OrderCapacity</td><td>Y</td><td>Capacity of the order
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>A</td><td>Any other trading capacity (AOTC)</td></tr>
<tr><td>P</td><td>Dealing on own account (DEAL)</td></tr>
<tr><td>R</td><td>Matched Principal (MTCH)</td></tr>
</table>
</td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Time the order was created.</td></tr>
<tr><td>526</td><td>SecondaryClOrdID</td><td>N</td><td>A secondary ID assigned by the trading party.</td></tr>
<tr><td>583</td><td>ClOrdLinkID</td><td>N</td><td>Personal exposure of the trading party</td></tr>
</table>

<table>
<tr><td>27010</td><td>PassiveOnlyOrder</td><td>N</td><td>Order level parameter to allow clients to specify that they would like their order to rest prior to execution, with flexibility for visible orders to rest at a specified price level on the book.
Passive Only Orders will execute against hidden orders sat within the BBO on order entry.
Any fully hidden order will be rejected if it has enum 100, 1,2 or 3.
No passive order validation will be done if field is not stamped or has 0 stamped on it.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>0</td><td>No constraint (Default)</td></tr>
<tr><td>99</td><td>Only accept order if it will not match with visible contra order. Otherwise expire order</td></tr>
<tr><td>100</td><td>Only accept order if setting new visible BBO, otherwise expire order</td></tr>
<tr><td>1</td><td>Only accept order if setting new BBO or joining existing BBO. Otherwise expire order</td></tr>
<tr><td>2</td><td>Only accept order if will be at BBO or within one visible price-point. Otherwise expire order</td></tr>
<tr><td>3</td><td>Only accept order if will be at BBO or within two visible price-points. Otherwise expire order</td></tr>
</table></td></tr>
<tr><td>110</td><td>MinQty</td><td>N</td><td>Minimum Execution Size (MES) of an order. A value of 0 (zero) means no MES. MES is only applicable to pegged DAY/GTT orders. It is not applicable to pegged IOC/FOK orders. If this tag is specified on a non-pegged order the message will be rejected.</td></tr>
<tr><td colspan="2">Component Block <Order Attributes></td><td>N</td><td>Please refer to section 6.7.2.</td></tr>
</table>

1724	OrderOrigination	N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following value can be sent by the customer. **Value** / **Meaning** 5 / DEA
Standard Trailer			

6.4.2 Order Cancel Request

Tag		Field Name	Req	Description
Standard Header				
35		MsgType	Y	F = Order Cancel Request
Message Body				
11		ClOrdID	Y	Client specified identifier of the cancel request. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.
41		OrigClOrdID	N	ClOrdID (11) of the order being cancelled. Required if OrderID (37) is not specified.
37		OrderID	N	Server specified identifier of the order being cancelled. Required if OrigClOrdID (41) is not specified.
48		SecurityID	Y	Identifier of the instrument.
22		SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 / Exchange Symbol
453		NoPartyIDs	Y	Number of party identifiers. The value in this field can be ‘1’ or ‘2’.
➡	448	PartyID	Y	Identifier of the party. TraderID (PartyRole(452)=100) specified in Order Cancel Request messages are ignored by the system.
➡	447	PartyIDSource	Y	Required if PartyID (448) is specified **Value** / **Meaning** D / Proprietary/Custom Code

➡	452	PartyRole	Y	Role of the specified PartyID (448). It is mandatory to have Party Role Trader Group (76). Trader ID (100) is optional. **Value** / **Meaning** 100 – Trader ID 76 – Trader Group
54		Side	Y	Must match the value in the order. Side tag with value Buy or Sell will be ignored for a single sided quote cancellation.
60		TransactTime	Y	Time the order cancel request was created.
Standard Trailer				

6.4.3 Order Mass Cancel Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	q = Order Mass Cancel Request
Message Body			
11	ClOrdID	Y	Client specified identifier of mass cancel request. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.
530	MassCancel RequestType	Y	Scope of the mass cancel request. **Value** / **Meaning** 1 – Cancel All Orders for Instrument 7 – Cancel All Orders 9 – Cancel All Orders for Segment
48	SecurityID	N	Identifier of the instrument. Required if the scope of mass cancel is for an instrument.

22	SecurityIDSource		N	Identifier of the source of the SecurityID (48) value. Required if SecurityID (48) is specified. **Value** / **Meaning** 8 / Exchange Symbol
1461	NoTargetPartyIDs		Y	Number of parties the mass cancel relates to. Will be '1', or '2'.
➡	1462	TargetPartyID	Y	Identifier of the party the mass cancel relates to.
➡	1463	TargetParty IDSource	Y	**Value** / **Meaning** D / Proprietary/Custom Code
➡	1464	TargetPartyRole	Y	Role of the TargetPartyID (1462). **Value** / **Meaning** 1 / Member ID 76 / Trader Group
1300	MarketSegmentID		N	Identifier of the segment the mass cancel relates to. Required if MassCancelRequestType (530) is Cancel All for Segment (9).
60	TransactTime		Y	Time the mass cancel request was created.
Standard Trailer				

6.4.4 Order Cancel/Replace Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	G = Order Cancel/Replace Request
Message Body			
11	ClOrdID	Y	Client specified identifier of the cancel/replace request. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.
41	OrigClOrdID	N	ClOrdID (11) of the order being amended. Required if OrderID (37) is not specified.

37		OrderID	N	Server specified identifier of the order being amended. Required if OrigClOrdID (41) is not specified.
453		NoPartyIDs	Y	Number of party identifiers. The value in this field will be ‘1’ or ‘2’.
➡	448	PartyID	Y	Identifier of the party
➡	447	PartyIDSource	Y	Required if PartyID (448) is specified **Value** / **Meaning** D / Proprietary/Custom Code
➡	452	PartyRole	Y	Role of the specified PartyID (448). It is mandatory to have Party Role Trader Group (76). Trader ID (100) is optional. **Value** / **Meaning** 100 / Trader ID 76 / Trader Group If TraderID(100) specified in the message is different to that of the existing order, it will be updated with the newly specified Trader ID.
1		Account	N	Client reference information.
48		SecurityID	Y	Identifier of the instrument.
22		SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 / Exchange Symbol
40		OrdType	Y	Must match the value in the order.

126	ExpireTime	N	Time the order expires which must be a time during the current trading day. Required if TimeInForce (59) is GTD (6) and ExpireDate (432) is not specified. The value specified for this field will be ignored for non-GTT orders. If this is populated for a GTD Order when the new order had been submitted without this, then the message will be rejected. If both the ExpireTime (126) and ExpireDate (432) are specified, the message will be rejected. If the New Order message contained the ExpireTime (126), the server requires only the expiry time and not ExpireDate (432) and vice versa.
432	ExpireDate	N	Date the order expires. Required if TimeInForce (59) is GTD (6) and ExpireTime (126) is not specified. The value specified in this field will be ignored if the TIF is not GTD**.** If both the ExpireTime (126) and ExpireDate (432) are specified, the message will not be rejected. If the New Order message contained the ExpireTime (126), the server processes only the expiry time and ignores ExpireDate (432) and vice versa. If this is populated for a GTD Order when the new order had been submitted with an ExpireTime (126), then the message will be rejected.
54	Side	Y	Must match the value in the order.
38	OrderQty	Y	Total order quantity.
1138	DisplayQty	Y	Maximum quantity that may be displayed. It is mandatory to specify the intended display quantity.
1084	DisplayMethod	N	Whether the order is a hidden order. **Value** / **Meaning** 3 / Random (randomized value) 4 / Undisclosed (Hidden Order) If this is populated with value “4” while a value which is greater than 0 is populated in DisplayQty (1138), the order will be considered as a Hidden (Reserve) Order. If this is populated with value “3” while a value which is greater than 0 and less than the Order Quantity is populated in DisplayQty (1138), the DisplayQty (1138) after replenishment will be random.

44	Price	N	Limit price. Required if OrderType (40) is Limit (2) or Stop Limit (4).
99	StopPx	N	Stop price. Required if OrderType (40) is Stop (3) or Stop Limit (4).
60	TransactTime	Y	Time the cancel/replace request was created.
27010	PassiveOnlyOrder	N	Order level parameter to allow clients to specify that they would like their order to rest prior to execution, with flexibility for visible orders to rest at a specified price level on the book. No protection is provided against order execution against hidden orders. A hidden order must be set to a value of either 0 or 99, otherwise it will be rejected. No passive order validation will be done if field is not stamped or has 0 stamped on it. The value set on this field will be ignored unless a price amendment is also done to the order. **Value** / **Meaning** 0 — No constraint (Default) 99 — Only accept order if it will not match with visible contra order. Otherwise expire order 100 — Only accept order if setting new visible BBO, otherwise expire order 1 — Only accept order if setting new BBO or joining existing BBO. Otherwise expire order 2 — Only accept order if will be at BBO or within one visible price-point. Otherwise expire order 3 — Only accept order if will be at BBO or within two visible price-points. Otherwise expire order

110	MinQty	N	Minimum execution size (MES) of an order. A value of 0 (zero) means no MES. MES is only applicable to pegged DAY/GTT orders. It is not applicable to pegged IOC/FOK order. If unspecified on amend of a pegged order the system will maintain any previous MES value. If tag is specified on a non-pegged order amend the message will be rejected.
Standard Trailer			

6.4.5 Execution Report

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	8 = Execution Report
Message Body			
17	ExecID	Y	Server specified identifier of the message. This is a 62 base encoded value in ASCII format.
11	ClOrdID	Y	Client specified identifier of the order.
41	OrigClOrdID	N	Will be filled with the actual original client order id of the order irrespective of the fact whether OrigClOrdID was specified (valid or invalid value) or not in the order cancel or cancel/replace request.
37	OrderID	Y	Server specified identifier of the order. This will be a 62 base encoded value in ASCII format. By converting this to binary, this can be mapped with MITCH Order ID.

<table>
<tr><td>150</td><td>ExecType</td><td>Y</td><td>Reason the execution report was generated.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>0</td><td>New</td></tr>
<tr><td>4</td><td>Cancelled</td></tr>
<tr><td>5</td><td>Replaced</td></tr>
<tr><td>8</td><td>Rejected</td></tr>
<tr><td>C</td><td>Expired</td></tr>
<tr><td>D</td><td>Restated</td></tr>
<tr><td>F</td><td>Trade</td></tr>
<tr><td>H</td><td>Trade Cancel</td></tr>
<tr><td>9</td><td>Suspended</td></tr>
</table></td></tr>
<tr><td>19</td><td>ExecRefID</td><td>N</td><td>Reference to the execution being cancelled or corrected. Required if ExecType (150) is Trade Cancel (H).</td></tr>
<tr><td>378</td><td>ExecRestatement Reason</td><td>N</td><td>Reason the order was restated. Required if ExecType (150) is Restated (D).
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>3</td><td>Order re-priced (at the start of CPX session).</td></tr>
<tr><td>8</td><td>Market Option.
• Order is cancelled by market operations
• Trade is cancelled by market operations
• On-book trade is cancelled via Post Trade Gateway</td></tr>
<tr><td>100</td><td>Order replenishment (with a new Public Order ID).</td></tr>
</table></td></tr>
</table>

39	OrdStatus	Y	Current status of the order. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>New</td></tr><tr><td>1</td><td>Partially Filled</td></tr><tr><td>2</td><td>Filled</td></tr><tr><td>4</td><td>Cancelled</td></tr><tr><td>8</td><td>Rejected</td></tr><tr><td>C</td><td>Expired</td></tr><tr><td>9</td><td>Suspended</td></tr></table>
103	OrdRejReason	N	Code specifying the reason for the reject. Please refer to MIT801 for a list of reject codes. The value in this field should be disregarded if Exec Type is not Rejected (8) or Expired(C).
58	Text	N	Text specifying the reason for the rejection, cancellation or expiration
32	LastQty	N	Quantity executed in this fill. Required if ExecType (150) is Trade (F).
31	LastPx	N	Price of this fill. Required if ExecType (150) is Trade (F). Will not be populated if Exec Type (150) is Restated (D).
151	LeavesQty	Y	Quantity available for further execution. Will be “0” if OrdStatus (39) is Filled (2), Cancelled (4), Rejected (8) or Expired (C).
14	CumQty	Y	Total cumulative quantity filled.
48	SecurityID	Y	Identifier of the instrument.
22	SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>8</td><td>Exchange Symbol</td></tr></table>
1	Account	N	Value submitted with the order.
453	NoPartyIDs	Y	Number of party identifiers. Will be ‘4’, ‘5’ or ‘6’.

➡	448	PartyID	Y	Identifier of the party. If the optional field TraderID (PartyRole=100) is specified in New Order, Order Cancel/Replace, New Order Cross or Quote message, Execution Report message will stamp the value specified in the New order or the latest order modification request. Short code in a range from 4 to 4294967295 is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles. Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles. Value ‘1’ and ‘2’ are valid only for Client ID (3) party role. Value ‘3’ is valid only for Executing Trader (12). **Value** / **Meaning** 0 / None 1 / AGGR (Aggregated Order) 2 / PNAL (Pending Allocations) 3 / CLIENT If a trade is cleared when the Party Role (452) = Counterparty Firm (17), the Party ID will be populated with a CCP value derived based on user/instrument configuration. If a trade is internalized when the Party Role (452) = Counterparty Firm (17), the Party ID will be populated with the user’s own Firm ID If a trade is not cleared when the Party Role (452) = Counterparty Firm (17), the Party ID will be populated with the contra party Firm ID.

<table>
<tr><td>➡</td><td>447</td><td>PartyIDSource</td><td>Y</td><td>Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>D</td><td>Proprietary/Custom Code</td></tr>
<tr><td>P</td><td>Short Code</td></tr>
</table></td></tr>
<tr><td>➡</td><td>452</td><td>PartyRole</td><td>Y</td><td>Role of the specified PartyID (448).
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>100</td><td>Trader ID</td></tr>
<tr><td>17</td><td>Counterparty Firm</td></tr>
<tr><td>76</td><td>Trader Group</td></tr>
<tr><td>3</td><td>Client ID</td></tr>
<tr><td>122</td><td>Investment Decision Maker</td></tr>
<tr><td>12</td><td>Executing Trader</td></tr>
</table>
Trader Group (76), Client ID (3), Investor ID (122) and Executing Trader (12) are mandatory.

Trader ID (100) and Counterparty Firm (17) are optional.

Counterparty Firm (17) will only be populated if Exec Type (150) is set to any of the following values:
• Trade (F) or Trade Cancel (H) for any order
• New (0), Cancel (4) or Rejected (8) for Cross Orders</td></tr>
</table>

➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the PartyRole (452). Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295). **Value** / **Meaning** 22 – Algorithm 23 – Firm or Legal Entity 24 – Natural Person Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles. Value ‘23’ is applicable for Client ID (3) party role. Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.
40		OrdType	Y	Value submitted with the order.
1091		PreTrade Anonymity	N	Value submitted with the order.
59		TimeInForce	N	Value submitted with the order.
126		ExpireTime	N	Value submitted with the order.
432		ExpireDate	N	Value submitted with the order.
54		Side	Y	Value submitted with the order.
38		OrderQty	Y	Value submitted with the order.
1138		DisplayQty	N	Quantity currently displayed in the order book. This field will also be populated for un-elected/parked orders.
1084		DisplayMethod	N	Populated only if the value submitted with the order was 4 or the display size submitted with the initial order was zero.
44		Price	N	Value submitted with the order. If Exec Type is ‘Restated (D)’ this field represents the re-priced value at the start of CPX with new price equal to closing price.
99		StopPx	N	Value submitted with the order.

<table>
<tr><td>581</td><td>AccountType</td><td>Y</td><td>Type of account associated with the order.
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Client</td></tr><tr><td>3</td><td>House</td></tr></table></td></tr>
<tr><td>528</td><td>OrderCapacity</td><td>Y</td><td>Capacity of the order
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>A</td><td>Any other trading cpacity (AOTC)</td></tr><tr><td>P</td><td>Dealing on own account (DEAL)</td></tr><tr><td>R</td><td>Matched Principal (MTCH)</td></tr></table></td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Time the transaction represented by the Execution Report occurred.</td></tr>
<tr><td>526</td><td>SecondaryClOrdID</td><td>N</td><td>Value submitted with the order.</td></tr>
<tr><td>583</td><td>ClOrdLinkID</td><td>N</td><td>Value submitted with the order.</td></tr>
<tr><td>9730</td><td>TradeLiquidityIndicator</td><td>N</td><td>Whether the order added or removed liquidity.
Required only for messages generated for a trade or trade cancellations. Will be populated for both automatic trades (AT) and auction trades (UT).
Possible values are:
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>A</td><td>Added Liquidity</td></tr><tr><td>R</td><td>Removed Liquidity</td></tr><tr><td>C</td><td>Auction</td></tr></table></td></tr>
<tr><td>336</td><td>TradingSessionID</td><td>N</td><td>Value submitted with the order. Indicates whether the order is a CPX order or not.</td></tr>
<tr><td>880</td><td>TradeMatchID</td><td>N</td><td>The unique ID of the trade.
This will be a 36 base encoded value in ASCII format.
Since the MITCH trade ID will be disseminated in binary format via the MITCH gateway, this Base 36 value needs to be converted to the binary format to compare against it.
Required if ExecType (150) is Trade (F) or Trade Cancel (H).
Also the identifier sent to the clearer.</td></tr>
</table>

<table>
<tr><td>20000</td><td>TypeOfTrade</td><td>N</td><td>Indicates whether the executed portion is visible or hidden. Required only if ExecType (150) = F - Trade.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>0</td><td>Visible</td></tr>
<tr><td>1</td><td>Hidden</td></tr>
<tr><td>2</td><td>Not Specified</td></tr>
</table></td></tr>
<tr><td>27010</td><td>PassiveOnlyOrder</td><td>N</td><td>Value submitted with the order or order amend request.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>0</td><td>No constraint</td></tr>
<tr><td>99</td><td>Only accept order if it will not match with visible contra order. Otherwise expire order</td></tr>
<tr><td>100</td><td>Only accept order if setting new visible BBO, otherwise expire order</td></tr>
<tr><td>1</td><td>Only accept order if setting new BBO or joining existing BBO. Otherwise expire order</td></tr>
<tr><td>2</td><td>Only accept order if will be at BBO or within one visible price-point. Otherwise expire order</td></tr>
<tr><td>3</td><td>Only accept order if will be at BBO or within two visible price-points. Otherwise expire order</td></tr>
</table></td></tr>
<tr><td>278</td><td>MDEntryID</td><td>Y</td><td>Public Order ID</td></tr>
<tr><td>548</td><td>CrossID</td><td>N</td><td>The unique ID of the Cross/BTF Order. The value submitted with the New Order Cross Message will be populated.</td></tr>
</table>

549	CrossType	N	The type of the Cross/BTF Order. Only populated for execution report messages generated Internal/Committed Cross/BTF Orders. The value submitted with the New Order Cross Message or Cross Order Cancel Request message will be populated. If cross orders are disabled, then Cross Type will not be populated in Execution Reports.
551	OrigCrossID	N	The unique identifier of the Cross/BTF Order being cancelled. Only populated for execution report messages generated Committed Cross/BTF Order cancellation. The value submitted with the Cross Order Cancel Request message will be populated.
110	MinQty	N	Minimum Execution Size (MES) where specified on a pegged order. Following an execution if the remaining quantity of order < MES specified in the order, Minimum Quantity = Remaining Quantity. For pegged orders with no MES and order types other than pegged this tag will not be present.
851	LastLiquidityInd	N	Whether the order added or removed liquidity. Required only for messages generated for trades (Exec Type F) or trade cancellations (Exec Type H) during continuous trading and auctions. For other execution types, the value in this tag should be ignored. **Value** / **Meaning** 1 – Added Liquidity 2 – Removed Liquidity 4 – Auction
2668	NoTrdRegPublications	N	The number of regulatory publication rules in the repeating group.

➡	2669	TrdRegPublicationType	N	Specifies the type of regulatory trade publication. **Value** / **Meaning** 0 – Pre-trade transparency waiver
➡	2670	TrdRegPublicationReason	N	Populated when Execution Type is F or H. The Pre-trade Waiver Flags section describes in which scenarios the values are populated. **Value** / **Meaning** 0 – NLIQ 1 – OILQ 4 – ILQD
Component Block <Order Attributes>			N	Please refer to section 6.7.2.
1724		OrderOrigination	N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following values will be sent. **Value** / **Meaning** 5 – DEA
Standard Trailer				

6.4.6 Order Cancel Reject

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	9 = Order Cancel Reject
Message Body			
11	ClOrdID	Y	ClOrdID (11) that was submitted with the order cancel or cancel/replace request being rejected. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.

41	OrigClOrdID	N	OrigClOrdID (41), that was submitted with the order cancel or cancel/replace request being rejected.
37	OrderID	Y	Server specified identifier of the order for which the cancel or cancel/replace was submitted. Will be "NONE" if the order is unknown.
39	OrdStatus	Y	Current status of the order. Will be Rejected (8) if the order is unknown or the request cannot be processed. **Value** / **Meaning** 0 New 1 Partially Filled 2 Filled 4 Cancelled 8 Rejected C Expired 9 Suspended
434	CxlRej ResponseTo	Y	Type of request being rejected. **Value** / **Meaning** 1 Order Cancel Request 2 Order Cancel/Replace Request
102	CxlRejReason	Y	Code specifying the reason for the rejection. Please refer to MIT801 for a list of reject codes.
58	Text	N	Text specifying the reason for the rejection.
Standard Trailer			

6.4.7 Order Mass Cancel Report

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	r = Order Mass Cancel Report
Message Body			
1369	MassActionReportID	Y	Server specified identifier of the message.
11	ClOrdID	Y	Client specified identifier of mass cancel request. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.
530	MassCancel RequestType	Y	Value specified in the mass cancel request.

531	MassCancel Response	Y	Action taken by server. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>Mass Cancel Request Rejected</td></tr><tr><td>1</td><td>Cancelled All Orders for Instrument</td></tr><tr><td>7</td><td>Cancelled All Orders</td></tr><tr><td>9</td><td>Cancelled All Orders for Segment</td></tr></table>
532	MassCancelReject Reason	N	Code specifying the reason for the rejection. Please refer to MIT801 for a list of reject codes. Required if MassCancelResponse (531) is Mass Cancel Request Rejected (0).
1180	ApplId	Y	Partition ID to which the Order Mass Cancel Report corresponds to.
Standard Trailer			

6.4.8 New Order Cross

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	s = New Order Cross
Message Body			
548	CrossID	Y	An identifier of the Cross/BTF Order. Must be unique per day but note that the system only validates the uniqueness of the CrossID with the currently open Committed cross Orders in the container. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.

<table>
<tr><td>549</td><td colspan="2">CrossType</td><td>Y</td><td>The type of the Cross/BTF Order.
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>5</td><td>Internal Cross</td></tr><tr><td>6</td><td>Internal BTF</td></tr><tr><td>7</td><td>Committed Cross</td></tr><tr><td>8</td><td>Committed BTF</td></tr></table>Any other value will be rejected via a Reject message.</td></tr>
<tr><td>550</td><td colspan="2">Cross Prioritization</td><td>Y</td><td>Priority of a side of the Cross/BTF Order
The value always has to be 0 (None).
Any other value will be rejected via a Reject message.</td></tr>
<tr><td>552</td><td colspan="2">NoSides</td><td>Y</td><td>Number of sides. The value in this field should be “1” for CrossType (549) 7 and 8; it should be “2” for CrossType (549) 5 and 6. Any other combination should be rejected via a Reject message.</td></tr>
<tr><td>➡</td><td>54</td><td>Side</td><td>Y</td><td>Side of the order.
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Buy</td></tr><tr><td>2</td><td>Sell</td></tr></table>Any other value will be rejected via a Reject message.</td></tr>
<tr><td>➡</td><td>11</td><td>ClOrdID</td><td>Y</td><td>Client specified identifier of the order. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.</td></tr>
<tr><td>➡</td><td>528</td><td>OrderCapacity</td><td>Y</td><td>Capacity of the order
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>A</td><td>Any other trading capacity (AOTC)</td></tr><tr><td>P</td><td>Dealing on own account (DEAL)</td></tr><tr><td>R</td><td>Matched Principal (MTCH)</td></tr></table></td></tr>
</table>

➡	581		AccountType	Y	Type of account associated with the order. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Client</td></tr><tr><td>3</td><td>House</td></tr></table>
➡	38		OrderQty	Y	Total order quantity of the Cross/BTF Order
➡	453		NoPartyIDs	Y	Number of party identifiers. The value in this field should always be ‘6’ for cross types 7 and 8 and should always be ‘5’ for cross types 5 and 6. Any other value should be rejected via a Reject message.
➡	➡	448	PartyID	Y	Identifier of the party. The executing Firm’s Trader Group (PartyRole 76) should be specified when entering a Cross/BTF trade. Short code in a range from 4 to 4294967295 can be used to identify the Client, Investment Decision Maker or Executing Trader. Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles and will be rejected when Party Role (452) is set to ‘12’. Value ‘1’ and ‘2’ are valid only for Client ID (3) party role. Value ‘3’ is valid only for Executing Trader (12). Short Code is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>None</td></tr><tr><td>1</td><td>AGGR</td></tr><tr><td>2</td><td>PNAL</td></tr><tr><td>3</td><td>CLIENT</td></tr></table>

<table>
<tr><td>➡</td><td>➡</td><td>447</td><td>PartyIDSource</td><td>Y</td><td>Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles, otherwise value ‘D’ is considered.
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>D</td><td>Proprietary/Custom Code</td></tr><tr><td>P</td><td>Short Code</td></tr></table></td></tr>
<tr><td>➡</td><td>➡</td><td>452</td><td>PartyRole</td><td>Y</td><td>Role of the specified PartyID (448).
It is mandatory to have PartyRole Trader Group (76). Trader ID (100) is optional. The value specified in the Trader ID (100) will not be validated by the system.
<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Executing Firm</td></tr><tr><td>17</td><td>Counterparty Firm</td></tr><tr><td>76</td><td>Trader Group</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>122</td><td>Investment Decision Maker</td></tr><tr><td>12</td><td>Executing Trader</td></tr></table></td></tr>
</table>

➡	➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the PartyRole (452). Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295), otherwise the value will be ignored. **Value** / **Meaning** 22 – Algorithm 23 – Firm or Legal Entity 24 – Natural Person Value '22' is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles. Value '23' is applicable for Client ID (3) party role. Value '24' is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.
Component Block <Order Attributes>				N	Please refer to section 6.7.2.
1724	OrderOrigination			N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following value can be sent by the customer. **Value** / **Meaning** 5 – DEA
48	SecurityID			Y	Identifier of the instrument.
22	SecurityIDSource			Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 – Exchange Symbol Any other value will be rejected via a Reject message.
60	TransactTime			Y	Time the order was created.
44	Price			Y	Price of the Cross/BTF Order

40	OrdType	Y	Type of the order. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>2</td><td>Limit</td></tr></table> Any other value will be rejected via a Reject message.
59	TimeInForce	N	Time qualifier of the order. Only DAY TIF is allowed for Committed and Internal Cross/BTF Orders. If not, it will be rejected via a session Reject. For a committed Cross/BTF order, if a TIF is not specified a business reject would be generated to reject the order. TIF is optional for Internal Cross Orders, unlike for Committed Cross orders. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>DAY</td></tr></table>
Standard Trailer			

6.4.9 Cross Order Cancel Request

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	u = Cross Order Cancel Request
Message Body			
11	ClOrdID	Y	A unique identifier of the cancel request itself. But this field will not be used as the unique identifier of the order being cancelled. Should not be prefixed or suffixed with a forward slash, or contain two consecutive forward slashes.
548	CrossID	Y	An identifier of the cancel request itself. But this field will not be used as the unique identifier of the order being cancelled or the value in this field will not be validated for uniqueness.

551	OrigCrossID			Y	The identifier of the Cross/BTF Order being cancelled. However this will not be used as the unique identifier of the order that is cancelled. The value specified will not be validated against the value specified in the New Order Cross Message.
549	CrossType			Y	The value submitted with the Cross/BTF Order to be cancelled. The value specified in this will not be validated against the value specified in the New Order Cross Message.
550	Cross Prioritization			Y	The value submitted with the Cross/BTF Order to be cancelled. Any other value will be rejected via a Reject message.
552	NoSides			Y	Number of party identifiers.The value in this field should always be “1”. Any other value should be rejected via a Reject message.
➡	54		Side	Y	The value submitted with the Cross/BTF Order to be cancelled. Any other value will be rejected via a Reject message.
➡	41		OrigClOrdID	Y	The value submitted with the original Cross/BTF Order to be cancelled. This will be unique identifier of the order being cancelled.
➡	38		OrderQty	Y	Total order quantity of the Cross/BTF Order. The value specified in this will not be validated against the value specified in the New Order New Cross Message.
➡	453		NoPartyIDs	Y	Number of party identifiers. The value in this field can only be ‘1’.
➡	➡	448	PartyID	Y	Identifier of the party. The executing Firm’s Trader Group (PartyRole 76) should be specified when cancelling the Cross/BTF trade.
➡	➡	447	PartyIDSource	Y	**Value** / **Meaning** D / Proprietary/Custom Code Any other value will be rejected via a Reject message.

➡	➡	452	PartyRole	Y	Role of the specified PartyID (448). Only PartyRole supported for cross cancellations is 76. Any other values should be rejected. **Value** / **Meaning** 76 / Trader Group
48	SecurityID			Y	The value submitted with the Cross/BTF Order to be cancelled.
22	SecurityIDSource			Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 / Exchange Symbol Any other value will be rejected via a Reject message.
60	TransactTime			Y	Time the order was created.
Standard Trailer					

6.5 Application messages: quote handling

6.5.1 Quote

i) the Market Maker to send an electronic or RFQ Quote
ii) the system to send the Requester the RFQ Quote provided by the Market Maker

6.5.1.1 The Market Maker to send an electronic or RFQ Quote

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	S = Quote
Message Body			
1166	QuoteMsgID	N	Client specified identifier of the message.
117	QuoteID	Y	Identifier of the quote entry. The value is this field should always be “1”.
30006	RFQID	N	The unique identifier of the initial RFQ automatically generated via the server. Mandatory if the quote is submitted to the RFQ trade book.
1171	PrivateQuote	N	**Value** / **Meaning** Y / Private Quote Mandatory if the quote is submitted to the RFQ trade book and should not be specified otherwise.

537		QuoteType	N	Type of quote. Absence of this tag is interpreted as Firm Quote (0). Mandatory if the quote is submitted to the RFQ trade book. **Value** / **Meaning** 0 – Firm Quote 1 – Electronic Quote 2 – RFQ Quote
48		SecurityID	Y	Identifier of the instrument.
22		SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 – Exchange Symbol
➡	453	NoPartyIDs	Y	Number of party identifiers. Can be ‘4’, ‘5’ or ‘6’.

➡	448	PartyID	Y	Identifier of the party. Short code in a range from 4 to 4294967295 can be used to identify the Client, Investment Decision Maker or Executing Trader. Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles and will be rejected when Party Role (452) is set to ‘12’. Value ‘1’ and ‘2’ are valid only for Client ID (3) party role. Value ‘3’ is valid only for Executing Trader (12). Short Code is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles. During amendments, the same values should be provided as in the original quote submission for Party Roles Client ID (3), Investor ID (122) and Executing Trader (12). If a different value is specified, the value provided at the initial submission (i.e. New Quote) will be sent regardless of the value specified in the amendment. **Value** / **Meaning** 0 – None 1 – AGGR 2 – PNAL 3 – CLIENT

➡	447	PartyIDSource	Y	Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles, otherwise Value ‘D’ is considered. During amendments, the same value should be provided as in the original quote submission. If a different value is specified, the value provided at the initial submission (i.e. New Quote) will be sent regardless of the value specified in the amendment. **Value** / **Meaning** D – Proprietary/Custom Code P – Short Code
➡	452	PartyRole	Y	Role of the specified PartyID (448). PartyRole Trader Group (76), Client ID (3), Investment Decision Maker (122) and Executing Trader (12) are mandatory for a new quote and quote’s amendment. Trader ID (100) is optional. The value will not be validated by the system. **Value** / **Meaning** 76 – Trader Group 100 – Trader ID 3 – Client ID 122 – Investment Decision Maker 12 – Executing Trader

➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the PartyRole (452). Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295), otherwise the value will be ignored. **Value** / **Meaning** 22 – Algorithm 23 – Firm or Legal Entity 24 – Natural Person Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles. Value ‘23’ is applicable for Client ID (3) party role. Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles. During amendments, the same values should be provided as in the original quote submission for Party Roles Client ID (3), Investor ID (122) and Executing Trader (12). If a different value is specified, the value provided at the initial submission (i.e. New Quote) will be sent regardless of the value specified in the amendment.
132		BidPx	N	Bid price. Required if BidSize (134) is specified.
134		BidSize	N	Bid quantity. Required if BidPx (132) is specified.
133		OfferPx	N	Offer price. Required if OfferSize (135) is specified.
135		OfferSize	N	Offer quantity. Required if OfferPx (133) is specified.

581	AccountType	Y	Type of account associated with the quote. **Value** / **Meaning** 1 – Client 3 – House Required for Electronic and RFQ quotes.
528	OrderCapacity	N	Capacity of the order **Value** / **Meaning** A – Any other trading capacity (AOTC) P – Dealing on own account (DEAL) R – Matched Principal (MTCH) Required for Electronic and RFQ quotes.
Component Block <Order Attributes>		N	Please refer to section 6.7.2.
1724	OrderOrigination	N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. **Value** / **Meaning** 5 – DEA
Standard Trailer			

6.5.1.2 The system to send the Requester the RFQ Quote provided by the Market Maker

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	S = Quote
Message Body			
117	QuoteID	Y	Identifier of the quote entry. The value is this field should always be “1”.

30006		RFQID	Y	The unique identifier of the initial RFQ automatically generated via the server
30007		BidID	N	System generated Order ID for the Bid Side of the RFQ.
30008		OfferID	N	System generated Order ID for the Sell Side.
1171		PrivateQuote	Y	**Value** / **Meaning** Y – Private Quote
537		QuoteType	Y	Type of quote. **Value** / **Meaning** 2 – RFQ Quote
48		SecurityID	Y	Identifier of the instrument.
22		SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 – Exchange Symbol
➡	453	NoPartyIDs	Y	Number of party identifiers. Can be ‘1’ or ‘3’.
➡	448	PartyID	Y	Identifier of the party: Requestor’s User ID (Party Role(452)=76) will always be populated. In Named RFQ model only: Market Maker’s User ID (Party Role(452)=37) Market maker’s Firm ID (Party Role(452)=66)
➡	447	PartyIDSource	Y	**Value** / **Meaning** D – Proprietary/Custom Code

➡	452	PartyRole	Y	Role of the specified PartyID (448). Trader Group (76) will always be populated. In Named RFQ model only: Contra Trader (37) and Market Maker (66) will be populated. **Value** / **Meaning** 76 – Trader Group 37 – Contra Trader 66 – Market Maker (Firm IDs)
132		BidPx	N	Bid price.
134		BidSize	N	Bid quantity.
133		OfferPx	N	Offer price.
135		OfferSize	N	Offer quantity.
Standard Trailer				

6.5.2 Quote Cancel

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	Z = Quote Cancel
Message Body			
1166	QuoteMsgID	Y	Client specified identifier of the message.
298	QuoteCancelType	Y	Type of quote cancel request. **Value** / **Meaning** 1 – Cancel for Instruments 4 – Cancel All Quotes
30006	RFQID	N	The unique identifier of the initial RFQ automatically generated via the server.

30001	OrderBook		N	Identifier of the order book. In the absence of this field, the request will be routed to all the Order Books. **Value** / **Meaning** 1 – Regular 11 – RFQ Trades
1461	NoTargetPartyIDs		Y	Number of parties. The value in this field should always be “1”.
➡	1462	TargetPartyID	Y	Identifier of the party the Quote Cancel relates to.
➡	1463	TargetPartyIDSource	Y	**Value** / **Meaning** D – Proprietary/Custom Code
➡	1464	TargetPartyRole	Y	Role of the TargetPartyID (1462). **Value** / **Meaning** 1 – Member ID 76 – Trader Group
295	NoQuoteEntries		N	Number of instruments for which quotes are to be cancelled. The value in this field may not be greater than 25. Required if QuoteCancel Type (298) is Cancel for Instruments (1).
➡	48	SecurityID	N	Identifier of the instrument. Required of the type of quote cancel request is based on an instrument(s).
➡	22	SecurityIDSource	N	Identifier of the source of the SecurityID (48) value. Required if the SecurityID (48) is specified. **Value** / **Meaning** 8 – Exchange Symbol
Standard Trailer				

6.5.3 Quote Status Report

Tag	Field Name	Req	Description

Standard Header			
35	MsgType	Y	AI = Quote Status Report
Message Body			
1166	QuoteMsgID	Y	Client specified identifier of the quote or quote cancel or quote response request the message relates to.
131	QuoteReqID	N	Client specified identifier of the RFQ that is being responded to.
30006	RFQID	N	The unique identifier of the initial RFQ automatically generated via the server
30007	BidID	N	Unique identifier assigned to the bid side of the quote/RFQ quote. Should be ignored if a RFQ quote amendment is rejected.
30008	OfferID	N	Unique identifier assigned to the offer side of the quote/RFQ Quote. Should be ignored if a RFQ quote amendment is rejected.
298	QuoteCancel Type	N	Value specified in the Quote Cancel request. Required if the message is sent in response to a Quote Cancel.
453	NoPartyIDs	Y	Number of party identifiers.

➡	448	PartyID	Y	Identifier of the party. If the optional field TraderID (PartyRole=100) is specified in Quote message, Quote Status Report message will stamp the value specified in the Quote. Short code in a range from 4 to 4294967295 is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles. Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles. Value ‘1’ and ‘2’ are valid only for Client ID (3) party role. Value ‘3’ is valid only for Executing Trader (12). **Value** / **Meaning** 0 – None 1 – AGGR (Aggregated Order) 2 – PNAL (Pending Allocations) 3 – CLIENT
➡	447	PartyIDSource	Y	Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles. **Value** / **Meaning** D – Proprietary/Custom Code P – Short Code

➡	452	PartyRole	Y	Role of the specified PartyID (448). It is mandatory to have PartyRole Trader Group (76). Trader ID (100) is optional. The value specified in the Trader ID (100) will not be validated by the system. For an Electronic Quote acknowledgement, values ‘100’,’76’,’3’,’122’ and ‘3’ will be stamped. For a positive acknowledgement of a Quote request, ‘100’,’76’,’3’,’122’,’66’ and ‘3’ will be stamped. No values will be stamped for rejected hit/lift of a RFQ or a response to a quote cancel request. **Value** / **Meaning** 100 / Trader ID 76 / Trader Group 66 / Market Maker (Firm IDs) 3 / Client ID 122 / Investment Decision Maker 12 / Executing Trader

➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the PartyRole (452). Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295). **Value** / **Meaning** 22 – Algorithm 23 – Firm or Legal Entity 24 – Natural Person Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles. Value ‘23’ is applicable for Client ID (3) party role. Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.
537		QuoteType	N	Type of quote. Value / Meaning 0 – Firm Quote 1 – Executable Quote 2 – RFQ Quote
297		QuoteStatus	Y	Status of the quote, cancel request or RFQ. **Value** / **Meaning** 0 – Accepted 5 – Rejected 6 – Removed from Market 7 – Expired 17 – Cancelled
300		QuoteRejectReason	N	Code specifying the reason for the reject. Please refer to MIT801 for a list of reject codes. Required if QuoteStatus (297) is Rejected (5). Will also be populated for certain expirations.

58	Text	N	Text specifying the reason for the rejection, cancellation or expiration.
126	ExpireTime	N	UTC time stamp of the time the negotiation process terminated at. Will be in YYYYMMDD-HH:MM:SS format.
Component Block <Order Attributes>		N	Please refer to section 6.7.2.
1724	OrderOrigination	N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following values will be sent. **Value** / **Meaning** 5 / DEA
Standard Trailer			

6.5.4 Mass Quote Acknowledgement

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	b = Mass Quote Acknowledgement
Message Body			
1180	ApplId	N	Partition ID to which the Order Mass Cancel Report corresponds to.
117	QuoteID	Y	QuoteMsgID (1166) of the Quote Cancel the message is sent in response to.
298	QuoteCancelType	N	Value submitted in the quote cancel request. Required if the message is sent in response to a Quote Cancel.
297	QuoteStatus	Y	Status of the cancel request. **Value** / **Meaning** 0 / Accepted 5 / Rejected
300	QuoteRejectReason	N	Code specifying the reason for the rejection. Please refer to MIT801 for a list of reject codes. Required if QuoteStatus (297) is Rejected (5).
58	Text	N	Text specifying the reason for the rejection.
296	NoQuoteSets	N	Number of quote sets. Required if the message is a response to a quote cancel.

➡	302	QuoteSetID		N	Identifier of the quote set which should be the first entry in the repeating group. Required if NoQuoteSets (296) is specified.
➡	295	NoQuoteEntries		N	Number of quote entries in the quote set.
➡	➡	299	Quote EntryID	N	Identifier of the quote entry which should be the first entry in the repeating group. If specified, the value in this field will always be "1". Required if NoQuoteEntries (295) is specified.
➡	➡	48	SecurityID	N	Identifier of the instrument. Required if NoQuoteEntries (295) is specified.
➡	➡	22	SecurityIDSource	N	Identifier of the source of the SecurityID (48) value. Required if NoQuoteEntries (295) is specified. **Value** / **Meaning** 8 / Exchange Symbol
➡	➡	1167	Quote Entry Status	N	Status of the cancel request for the quote entry. Required if NoQuoteEntries (295) is specified. **Value** / **Meaning** 5 / Rejected
➡	➡	368	Quote Entry Reject Reason	N	Code specifying the reason the quote or cancel request for the quote entry was rejected. Please refer to MIT801 for a list of reject codes. Required if QuoteEntry Status (1167) is Rejected (5).
Standard Trailer					

6.5.5 Execution Report

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	8 = Execution Report
Message Body			
17	ExecID	Y	Server specified identifier of the message.
11	ClOrdID	Y	QuoteMsgID (1166) of the message last used to update the quote entry.

37	OrderID	Y	Server specified identifier of the executed side. This will be a 62 base encoded value in ASCII format. By converting this to binary, this can be mapped with MITCH Order ID.
30006	RFQID	N	The unique identifier of the initial RFQ automatically generated via the server
150	ExecType	Y	Reason the execution report was generated. **Value** / **Meaning** D – Restated F – Trade H – Trade Cancel C – Expired 4 – Cancelled
19	ExecRefID	N	Reference to the execution being cancelled or corrected. Required if ExecType (150) is Trade Cancel (H)
378	ExecRestatementReason	N	Reason the order was restated. Required if ExecType (150) is Restated (D) and if order is cancelled via Market Operations. When an order is amended or cancelled by Market Supervision, value 8 will be populated. In some scenarios, when a trade is cancelled by market supervision, value 8 will be populated in the execution reports sent for order restatements. **Value** / **Meaning** 3 – Order re-priced at start of CPX 8 – Market Option 51 – Partial decline or OrderQty 100 – Order replenishment
54	Side	Y	Side of the quote that was executed. **Value** / **Meaning** 1 – Buy 2 – Sell
32	LastQty	N	Quantity executed in this fill. Required if ExecType (150) is Trade (F).

31	LastPx	N	Price of this fill. Required if ExecType (150) is Trade (F). Will not be populated if Exec Type (150) is Restated (D).
39	OrdStatus	Y	Current status of the executed side of the quote entry. **Value** / **Meaning** 0 – New 1 – Partially Filled 2 – Filled 4 – Cancelled C – Expired
151	LeavesQty	Y	Quantity available for further execution. Will be “0” if OrdStatus (39) is Filled (2), Cancelled (4) or Expired (C).
14	CumQty	Y	Will always be “0”.
48	SecurityID	Y	Identifier of the instrument.
22	SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 – Exchange Symbol
453	NoPartyIDs	Y	Number of party identifiers. Will be ‘4’, ‘5’ or ‘6’.

<table>
<tr><td>➡</td><td>448</td><td>PartyID</td><td>Y</td><td>Identifier of the party.

If the optional field TraderID (PartyRole=100) is specified in Quote message, Execution Report message will stamp the value specified in the Quote.

Short code in a range from 4 to 4294967295 is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles

Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles.
Value ‘1’ and ‘2’ are valid only for Client ID (3) party role.
Value ‘3’ is valid only for Executing Trader (12).

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>None</td></tr><tr><td>1</td><td>AGGR (Aggregated Order)</td></tr><tr><td>2</td><td>PNAL (Pending Allocations)</td></tr><tr><td>3</td><td>CLIENT</td></tr></table>If a trade is cleared when the Party Role (452) = Counterparty Firm (17), the Party ID will be populated with a CCP value derived based on user/instrument configuration.

If a trade is internalized when the Party Role (452) = Counterparty Firm (17), the Party ID will be populated with the user’s own Firm ID.

If a trade is not cleared when the Party Role (452) = Counterparty Firm (17), the Party ID will be populated with the contra party Firm ID.</td></tr>
<tr><td>➡</td><td>447</td><td>PartyIDSource</td><td>Y</td><td>Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles.<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>D</td><td>Proprietary/Custom Code</td></tr><tr><td>P</td><td>Short Code</td></tr></table></td></tr>
</table>

<table>
<tr><td>➡</td><td>452</td><td>PartyRole</td><td>Y</td><td>Role of the specified PartyID (448).

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>100</td><td>Trader ID</td></tr><tr><td>17</td><td>Counterparty Firm</td></tr><tr><td>76</td><td>Trader Group</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>122</td><td>Investment Decision Maker</td></tr><tr><td>12</td><td>Executing Trader</td></tr></table>
Trader Group (76), Client ID (3), Investor ID (122) and Executing Trader (12) are mandatory.

Trader ID (100) and Counterparty Firm (17) are optional.

Counterparty Firm (17) will only be populated if Exec Type (150) is set to Trade (F) or Trade Cancel (H).</td></tr>
<tr><td>➡</td><td>2376</td><td>PartyRoleQualifier</td><td>N</td><td>Provides a further qualification for the value specified in the PartyRole (452).

Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295).

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>22</td><td>Algorithm</td></tr><tr><td>23</td><td>Firm or Legal Entity</td></tr><tr><td>24</td><td>Natural Person</td></tr></table>
Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles.
Value ‘23’ is applicable for Client ID (3) party role.
Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.</td></tr>
</table>

40	OrdType	Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>2</td><td>Limit</td></tr></table>
59	TimeInForce	Y	Time qualifier of the quote entry.<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>0</td><td>Day</td></tr></table>
38	OrderQty	Y	Quantity submitted in RFQ or quote, depending on the recipient of the execution report.
44	Price	Y	Bid or offer price submitted with the last update for the quote entry.
581	AccountType	N	Type of account associated with the quote. Only required for Executable quotes.<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Client</td></tr><tr><td>3</td><td>House</td></tr></table>
528	OrderCapacity	N	Capacity of the order<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>A</td><td>Any other trading capacity (AOTC)</td></tr><tr><td>P</td><td>Dealing on own account (DEAL)</td></tr><tr><td>R</td><td>Matched Principal (MTCH)</td></tr></table>
60	TransactTime	Y	Time the transaction represented by the Execution Report occurred.
9730	TradeLiquidityIndicator	N	Whether the order added or removed liquidity. Required only for messages generated for a trade or trade cancellations. Will be populated for both automatic trades (AT) and auction trades (UT). Possible values are:<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>A</td><td>Added Liquidity</td></tr><tr><td>R</td><td>Removed Liquidity</td></tr><tr><td>C</td><td>Auction</td></tr></table>

880	TradeMatchID		N	The unique ID of the trade. This will be a 36 base encoded value in ASCII format. Since the MITCH trade ID will be disseminated in binary format via the MITCH gateway, this Base 36 value needs to be converted to the binary format to compare against it. Required if ExecType (150) is Trade (F) or Trade Cancel (H) Also the identifier sent to the clearer.
278	MDEntryID		Y	Public Order ID
20000	TypeOfTrade		N	Indicates whether the executed portion is visible or hidden. This field will be populated with 2 (Not Specified) for RFQ trades. Required only if ExecType (150) = F. **Value** / **Meaning** 0 – Visible 1 – Hidden 2 – Not specified
2668	NoTrdRegPublications		N	The number of regulatory publication rules in the repeating group.
➡	2669	TrdRegPublication Type	N	Specifies the type of regulatory trade publication. **Value** / **Meaning** 0 – Pre-trade transparency waiver

➡	2670	TrdRegPublication Reason	N	Additional reason for trade publication type specified in TrdRegPublicationType(2669). Populated when Execution Type is F or H. The Pre-trade Waiver Flags section describes in which scenarios the values are populated. **Value** / **Meaning** 4 – ILQD 5 – SIZE
Component Block <Order Attributes>			N	Please refer to section 6.7.2.
1724	OrderOrigination		N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following values will be sent. **Value** / **Meaning** 5 – DEA
Standard Trailer				

6.5.6 Quote Request

Generated by:

i) the Requester to submit an RFQ
ii) the server to send the RFQ to the Market Maker

6.5.6.1 The Requester to submit an RFQ

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	R = Quote Request.
Message Body			
131	QuoteReqID	Y	Client specified identifier of the RFQ.
1171	PrivateQuote	Y	**Value** / **Meaning** Y – Private Quote

30001		OrderBook	Y	Identifier of the order book. In absence of this tag the request will be rejected via a session reject. **Value** – **Meaning** 11 – RFQ Trades
126		ExpireTime	N	Optional. UTC timestamp of the time the negotiation process will be terminated. Will be in YYYYMMDD-HH:MM:SS format with an optional .uuu milliseconds suffix.
528		OrderCapacity	Y	Capacity of the Order. Value – Meaning A – Any other trading capacity (AOTC) P – Dealing on own account (DEAL) R – Matched Principal (MTCH)
146		NoRelatedSym	Y	Should always be “1”.
➡	48	SecurityID	Y	Identifier of the instrument.
➡	22	SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** – **Meaning** 8 – Exchange Symbol

<table>
<tr><td>➡</td><td>54</td><td>Side</td><td>N</td><td>Optional.

Side, if any, a one-sided RFQ is submitted for.

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Buy</td></tr><tr><td>2</td><td>Sell</td></tr></table>
A valid side must be specified when the Quote Request Type = 2, 102 or 103 (Automatic).</td></tr>
<tr><td>➡</td><td>38</td><td>Order Qty</td><td>Y</td><td>Quantity that the Requester is expecting to trade. Should be greater than 0.</td></tr>
<tr><td>➡</td><td>303</td><td>QuoteRequestType</td><td>N</td><td>Indicates the type of Quote Request

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Manual (Named if any Market Maker IDs are specified, else Anonymous)</td></tr><tr><td>2</td><td>Automatic (Named if any Market Maker IDs are specified, else Anonymous)</td></tr><tr><td>100</td><td>Manual (Anonymous)</td></tr><tr><td>101</td><td>Manual (Named)</td></tr><tr><td>102</td><td>Automatic (Anonymous)</td></tr><tr><td>103</td><td>Automatic (Named)</td></tr></table>
Absence of this tag is interpreted as 1 (Manual).</td></tr>
</table>

				Refer to Section 2.14 for more details on RFQ models.
➡	44	Price	N	Optional Limit Price. Absence of the tag or a value of 0 will be interpreted as limit price unspecified.
➡	581	AccountType	Y	Type of account associated with the request Value — Meaning 1 — Client 3 — House
➡	33001	RFQExecutionDelay	N	The minimum number of seconds from the time of RFQ submission to be elapsed for the RFQ execution to be triggered automatically. Only valid when QuoteRequestType is 2, 102 or 103 (Automatic).
➡	33002	RFQMinQuotes	N	The minimum number of market maker quotes to be available for the RFQ execution to be triggered automatically. Only valid when QuoteRequestType is 2, 102 or 103 (Automatic).
➡	33004	RFQDiscloseSide	N	Instructs the system whether to disclose the side of the request to the market makers. Only valid when QuoteRequestType is 4 or 5 (Automatic). Value — Meaning 0 — Do not disclose 1 — Disclose

					Absence of this tag is interpreted as 0 (Do not disclose). Only valid when QuoteResponseType is 2, 102 or 103 (Automatic). The value will be ignored otherwise. Note that for Manual RFQs (QuoteRequestType 1, 100 or 101) the side is always disclosed to the Market Makers.
➡	453	NoPartyIDs		Y	Number of party identifiers;. Should at least be 1. Includes Requester and Market Markers.
➡	➡	448	PartyID	Y	Identifier of the party. Short code in a range from 4 to 4294967295 can be used to identify the Client, Investment Decision Maker or Executing Trader. Value ‘0’ is valid only for Client ID (3) and Investment Decision Maker (452 = 122) party roles and will be rejected when Party Role (452) is set to ‘12’. Value ‘1’ and ‘2’ are valid only for Client ID (3) party role. Value ‘3’ is valid only for Executing Trader (12). Short Code is valid only for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles **Value** / **Meaning** 0 – None 1 – AGGR (Aggregated Order) 2 – PNAL (Pending Allocations) 3 – CLIENT
➡	➡	447	PartyIDSource	N	Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles, otherwise Value ‘D’ is considered. **Value** / **Meaning** D – Proprietary/Custom Code P – Short Code

➡	➡	452	PartyRole	Y	Role of the specified PartyID (448). It is mandatory to have PartyRole Trader Group (76). Market Makers (Firm IDs) (66) should be specified in the Named models. **Value** / **Meaning** 66 – Market Makers (Firm IDs) 76 – Trader Group 3 – Client ID 122 – Investment Decision Maker 12 – Executing Trader
➡	➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the PartyRole (452). Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295), otherwise the value will be ignored. **Value** / **Meaning** 22 – Algorithm 23 – Firm or Legal Entity 24 – Natural Person Value '22' is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles. Value '23' is applicable for Client ID (3) party role. Value '24' is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.
Component Block <Order Attributes>				N	Please refer to section 6.7.2.

1724	OrderOrigination	N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following value can be sent by the customer. **Value** / **Meaning** 5 / DEA

6.5.6.2 The server to send the RFQ to the Market Maker

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	R = Quote Request.
Message Body			
30006	RFQID	Y	The unique identifier of the initial RFQ automatically generated via the server
1171	PrivateQuote	Y	**Value** / **Meaning** Y / Private Quote
30001	OrderBook	Y	Identifier of the order book. **Value** / **Meaning** 11 / RFQ Trades
146	NoRelatedSym	Y	Will always be “1”.
➡ 48	SecurityID	Y	Identifier of the instrument.
➡ 22	SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 / Exchange Symbol

➡	54	Side		N	Manual RFQs will always disclose the side to the market maker. For Automatic RFQs the Requester can choose whether to disclose the side to the market maker. **Value** / **Meaning** 1 – Buy 2 – Sell
➡	38	Order Qty		Y	Quantity that the Requester is expecting to trade. Should be greater than 0.
➡	303	QuoteRequestType		N	Indicates the type of Quote Request Value / Meaning 1 – Manual 2 – Automatic Absence of this tag is interpreted as 1 (Manual).
➡	453	NoPartyIDs		Y	Number of party identifiers. Can be ‘1’ or ‘3’.
➡	➡	448	PartyID	Y	Identifier of the party.
➡	➡	447	PartyIDSource	N	**Value** / **Meaning** D – Proprietary/Custom Code
➡	➡	452	PartyRole	Y	Role of the specified PartyID (448). Trader Group (76) is mandatory and populated with Market Maker’s User Id.

					In Named Model only: Requestor's User ID (Party Role(452)=37) Requestor's Firm ID (Party Role(452)=66) **Value** / **Meaning** 66 – Market Makers (Firm IDs) 37 – Contra Trader 76 – Trader Group
Standard Trailer					

6.5.7 Quote Request Reject

Generated by:

i) the server to reject an RFQ from a Requester
ii) the Market Marker to reject the RFQ
iii) the server to communicate the rejection of the RFQ by a Market Maker to the Requester

6.5.7.1 The server to reject an RFQ from a Requester or communicate Market Maker rejection to Requester

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	AG = Quote Request Reject
Message Body			
1180	ApplID	Y	The server will stamp the identifier of the matching partition for the instrument.
131	QuoteReqID	Y	Client specified identifier of the RFQ being rejected.
30006	RFQID	N	The unique identifier of the RFQ automatically generated via the server

658	QuoteRequestRejectReason			Y	Code specifying the reason for the rejection.
58	Text			N	Text specifying the reason for the rejection.
30001	OrderBook			Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>11</td><td>RFQ Trades</td></tr></table>
146	NoRelatedSym			Y	Value in this field will always be '1'.
➡	48	SecurityID		Y	Identifier of the instrument
➡	22	SecurityIDSource		Y	Identifier of the source of the SecurityID (48) value. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>8</td><td>Exchange Symbol</td></tr></table>
➡	54	Side		N	Value submitted with the RFQ.
➡	38	OrderQty		Y	Value submitted with the RFQ.
➡	453	NoPartyIDs		Y	Number of party identifiers. Can be ‘1’ or ‘3’.
	➡	448	PartyID	Y	Identifier of the party.
	➡	447	PartyIDSource	N	Value ‘P’ is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>D</td><td>Proprietary/Custom Code</td></tr><tr><td>P</td><td>Short Code</td></tr></table>
	➡	452	PartyRole	N	Role of the specified PartyID (448). When RFQ is rejected by the server, the values ‘76’,’3’,’122’ and ‘12’ will be stamped. When RFQ is rejected by a Market Maker, ‘76’

					will always be stamped, ‘66’ and ‘37’ will be stamped in the Named model. **Value** / **Meaning** 17 – Counterparty Firm 76 – Trader Group 37 – Contra Trader 66 – Market Maker (Firm IDs) 3 – Client ID 122 – Investment Decision Maker 12 – Executing Trader
	➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the PartyRole (452). Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295). **Value** / **Meaning** 22 – Algorithm 23 – Firm or Legal Entity 24 – Natural Person Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles. Value ‘23’ is applicable for Client ID (3) party role. Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.
Component Block <Order Attributes>				N	Please refer to section 6.7.2. It is only populated if it was submitted by the Requestor and rejected by the server.
1724	OrderOrigination			N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following values will be sent. **Value** / **Meaning** 5 – DEA It is only populated if it was submitted by the Requestor and rejected by the server.

Standard Trailer

6.5.7.2 The Market Marker to reject an RFQ

Tag	Field Name			Req	Description
Standard Header					
35	MsgType			Y	AG = Quote Request Reject
Message Body					
30006	RFQID			Y	The unique identifier of the RFQ automatically generated via the server
30001	OrderBook			Y	**Value** / **Meaning** 11 / RFQ Trades
146	NoRelatedSym			Y	Value in this field should always be '1'
➡	48	SecurityID		Y	Identifier of the instrument
➡	22	SecurityIDSource		Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 / Exchange Symbol
➡	54	Side		N	Value submitted with the RFQ.
➡	38	OrderQty		N	Value submitted with the RFQ.
➡	453	NoPartyIDs		Y	Number of party identifiers. Must be 1.
	➡	448	PartyID	Y	Identifier of the party.
	➡	447	PartyIDSource	Y	**Value** / **Meaning** D / Proprietary/Custom Code

	➡	452	PartyRole	Y	Role of the specified PartyID (448). It is mandatory to have PartyRole Trader Group (76). **Value** / **Meaning** 76 / Trader Group
Standard Trailer					

6.5.8 Quote Ack

Generated by:

i) the server to acknowledge a new/modified RFQ Quote or to acknowledge a Quote Cancel request to the Market Maker.

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	AG = Quote Request Reject
Message Body			
1180	ApplID	Y	The server will stamp the identifier of the matching partition for the instrument
117	QuoteID	Y	Will be always set to 1.
1166	QuoteMsgID	N	Client specified identifier of the quote or quote cancel request the message relates to.
30006	RFQID	Y	Server specified identifier of the initial RFQ sent by the Requester
30007	BidID	N	Server specified identifier of the bid side of the RFQ quote. Should be ignored if a RFQ quote amendment is rejected.
30008	OfferID	N	Server specified identifier of the offer side of the RFQ quote. Should be ignored if a RFQ quote amendment is rejected.

1865	QuoteAckStatus		Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Accepted</td></tr><tr><td>2</td><td>Rejected</td></tr></table>
300	QuoteRejectReason		N	Conditionally required if QuoteAckStatus(1865) is Rejected(2).
58	Text		N	Text specifying the reason for the rejection or cancellation.
60	TransactTime		Y	Time the message was generated.
30001	OrderBook		Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>11</td><td>RFQ Trades</td></tr></table>
453	NoPartyIDs		N	No of Party IDs. Wil be ‘4’.
➡	448	PartyID	N	Identifier of the party. Same value as submitted with the quote.
➡	447	PartyIDSource	N	Same value as submitted with the quote.
➡	452	PartyRole	N	Role of the specified PartyID (448). Same value as submitted with the quote. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>76</td><td>Trader Group</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>122</td><td>Investment Decision Maker</td></tr><tr><td>12</td><td>Executing Trader</td></tr></table>
➡	2376	PartyRoleQualifier	N	Provides a further qualification for the value specified in the

				PartyRole (452). Same value as submitted with the quote.
Component Block <Order Attributes>			N	Please refer to section 6.7.2.
1724	OrderOrigination		N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Only the following values will be sent. **Value** / **Meaning** 5 / DEA
Standard Trailer				

6.5.9 Quote Response

Generated by:

i) the Requester to execute (accept) an RFQ Quote (valid for a Manual RFQ model only)

ii) the Requestor to amend/cancel an RFQ

iii) the server to communicate the status of an RFQ and quote to the Requester and Market Makers

6.5.9.1 The Requester to execute (accept) an RFQ Quote or amend/cancel an RFQ

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	AJ = Quote Response
Message Body			
1166	QuoteMsgID	Y	The client specified identifier of the RFQ modification / cancellation /execution request. Should be unique per user.
30006	RFQID	Y	The unique ID of the negotiation process.
30007	BidID	N	The unique identifier of the bid side of the quote. When quote response is used to accept a quote, this field will be required if

			Side (54) is Buy(1).
30008	OfferID	N	The unique identifier of the offer side of the quote. When quote response is used to accept a quote, this field will be required if Side (54) is Sell(2).
694	QuoteRespType	Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Hit/Lift</td></tr><tr><td>11</td><td>Cancelled</td></tr><tr><td>100</td><td>Replace</td></tr></table>
48	Security ID	Y	Instrument ID of instrument
22	SecurityIDSource	Y	Identifier of the source of the SecurityID (48) value. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>8</td><td>Exchange Symbol</td></tr></table>
38	OrderQty	Y	The quantity to be executed. When amending or cancelling an RFQ, quantity should be the same as the quantity in the initial RFQ.
1917	Price	N	Required in the ‘Select and Match’ execution policy. Price stated by the Requester when accepting a Quote submitted by a Market Maker to trade against.
54	Side	N	Value submitted in the RFQ <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Buy</td></tr><tr><td>2</td><td>Sell</td></tr></table>

30001	OrderBook		Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>11</td><td>RFQ Trades</td></tr></table>
453	NoPartyIDs		Y	Number of party identifiers, must be 1.
➡	448	PartyID	N	Identifier of the party.
➡	447	PartyIDSource	Y	<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>D</td><td>Proprietary/Custom Code</td></tr></table>
➡	452	PartyRole	Y	Role of the specified PartyID (448). When accepting a quote or initiating a RFQ cancellation, only value ‘76’ is applicable. <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>76</td><td>Trader Group</td></tr></table>
Standard Trailer				

6.5.9.2 The server to communicate the status of an RFQ and quote to the Requester and Market Makers

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	AJ = Quote Response
Message Body			
1180	ApplID	Y	Identity of the partition
1166	QuoteMsgID	Y	The client specified identifier of the quote message for which the message is generated (only if the message is sent for market makers with respect to a specified quote). The client specified identifier of the RFQ modification / cancellation/ execution request (only if the message is sent to the requestor with respect to an RFQ).
30006	RFQID	Y	The unique ID of the negotiation process.
30007	BidID	N	The unique identifier of the bid side of the quote.
30008	OfferID	N	The unique identifier of the offer side of the quote.
694	QuoteRespType	Y	**Value** / **Meaning** 3 – Expired 7 – End Trade 8 – Timed Out 11 – Cancelled
48	Security ID	Y	Instrument ID of instrument

22	SecurityIDSource		Y	Identifier of the source of the SecurityID (48) value. **Value** / **Meaning** 8 – Exchange Symbol
1917	Price		N	Required in the 'Select and Match' execution policy. Price stated by the Requester when accepting a Quote submitted by a Market Maker to trade against. The new limit price when modifying the limit price of an RFQ (when QuoteRespType = 100 (replace)). A value of 0 will be interpreted as removal of the limit price.
54	Side		N	Value submitted in the RFQ **Value** / **Meaning** 1 – Buy 2 – Sell
60	TransactTime		Y	Time the message was generated.
30001	OrderBook		Y	**Value** / **Meaning** 11 – RFQ Trades
453	NoPartyIDs		Y	Number of party identifiers. Up to 3 can be populated in the Server Initiated Quote Response message
→	448	PartyID	Y	Identifier of the party.
→	447	PartyIDSource	Y	Value 'P' is applicable for Client ID (452=3), Investment Decision Maker (452=122) and Executing Trader (452=12) party roles. **Value** / **Meaning** D – Proprietary/Custom Code P – Short Code

<table>
<tr><td>→</td><td>452</td><td>PartyRole</td><td>Y</td><td>Role of the specified PartyID (448).

If specified in the relevant client initiated messages, the server initiated quote response messages will contain this information and will only be sent to the party who submitted the original values.

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>76</td><td>Trader Group</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>122</td><td>Investment Decision Maker</td></tr><tr><td>12</td><td>Executing Trader</td></tr></table></td></tr>
<tr><td>→</td><td>2376</td><td>PartyRoleQualifier</td><td>N</td><td>Provides a further qualification for the value specified in the PartyRole (452).

Required only if PartyRole (452) is set to 3, 122 or 12 when the PartyID is a short code (i.e. 4-4294967295).

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>22</td><td>Algorithm</td></tr><tr><td>23</td><td>Firm or Legal Entity</td></tr><tr><td>24</td><td>Natural Person</td></tr></table>Value ‘22’ is applicable for Investment Decision Maker (122) and Executing Trader (12) party roles.
Value ‘23’ is applicable for Client ID (3) party role.
Value ‘24’ is applicable for Client ID (3) Investment Decision Maker (122) and Executing Trader (12) party roles.</td></tr>
<tr><td>581</td><td colspan="2">AccountType</td><td>N</td><td>Type of account associated with the quote.

Required when the message is generated as a response to a quote to a Market Maker.

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Client</td></tr></table></td></tr>
</table>

			3 House
528	OrderCapacity	N	Capacity of the order. Required when the message is generated as a response to a quote to a Market Maker. Value: Meaning A: Any other trading capacity (AOTC) P: Dealing on own account (DEAL) R: Matched Principal (MTCH)
58	Text	N	Text specifying the reason for the rejection, cancellation or expiration.
Component Block <Order Attributes>		N	Please refer to section 6.7.2.
1724	OrderOrigination	N	Whether the order, quote or RFQ was generated via Direct Electronic Access (DEA) or not. Value: Meaning 5: DEA
Standard Trailer			

6.6 Application messages: others

6.6.1 Business Message Reject

Tag	Field Name	Req	Description
Standard Header			
35	MsgType	Y	j = Business Message Reject
Message Body			
379	BusinessReject RefID	N	Client specified identifier (e.g. ClOrdID, QuoteMsgID, etc.) of the rejected message if it is available.
45	RefSeqNum	Y	MsgSeqNum (34) of the rejected message.
372	RefMsgType	Y	MsgType (35) of the rejected message.
371	RefTagID	N	If a message is rejected to due to an issue with a particular field its tag number will be indicated.
380	BusinessReject Reason	Y	Code specifying the reason for the reject. Please refer to MIT801 for a list of reject codes.

58	Text	N	Text specifying the reason for the rejection (not including TagID. See RefTagID for this information).
Standard Trailer			

6.7 Components of application messages

6.7.1 Trading Session

Tag	Field Name		Req	Description
386	NoTrading Sessions		N	Number of sessions the order is valid for. If specified, the value in this field should always be “1”.
➡	336	TradingSessionID	N	Session the order is valid for. **Value** **Meaning** a Closing Price Cross

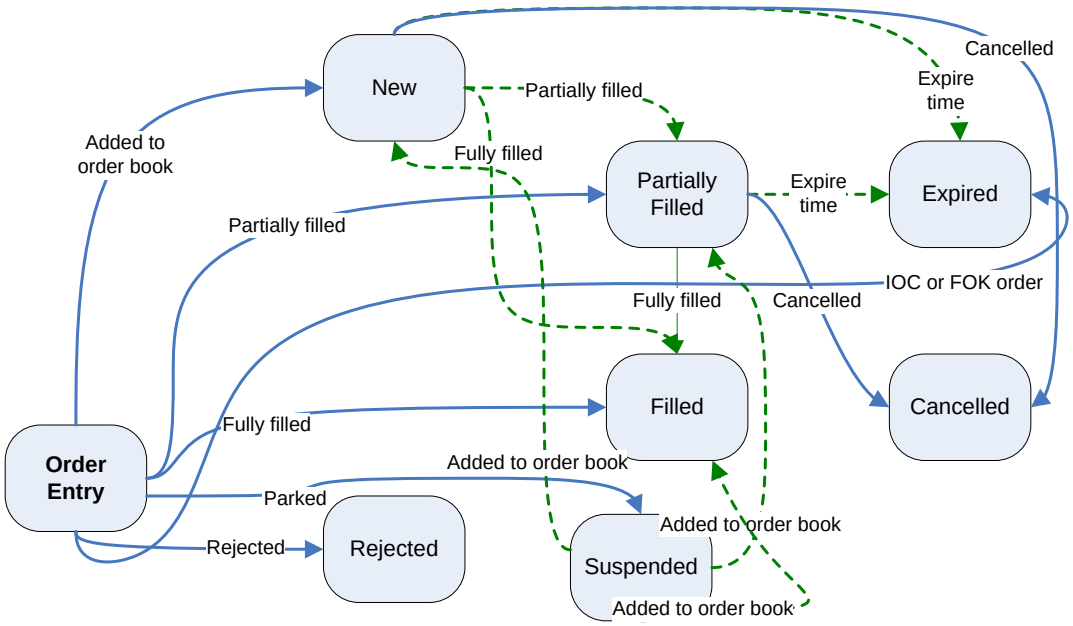
6.7.2 Order Attributes

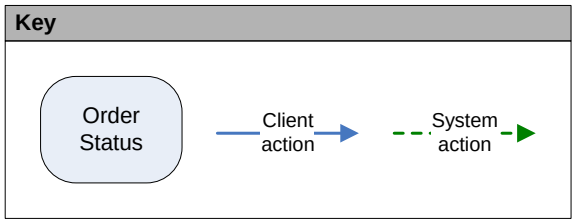
Tag	Field Name		Req	Description
2593	NoOrderAttributes		N	Number of order attributes. A value more than 2 will not be allowed During amendments, the values submitted at the initial submission will be sent back.
➡	2594	OrderAttributeType	N	Indicates if the order was generated via an algorithm or is submitted as a part of liquidity provision (i.e. as a part of the market making strategy). **Value** **Meaning** 4 Algorithm 2 Liquidity Provision
	2595	OrderAttributeValue	N	Mandatory if OrderAttributeType (2594) is specified. **Value** **Meaning** Y Yes

7.0 Process flows

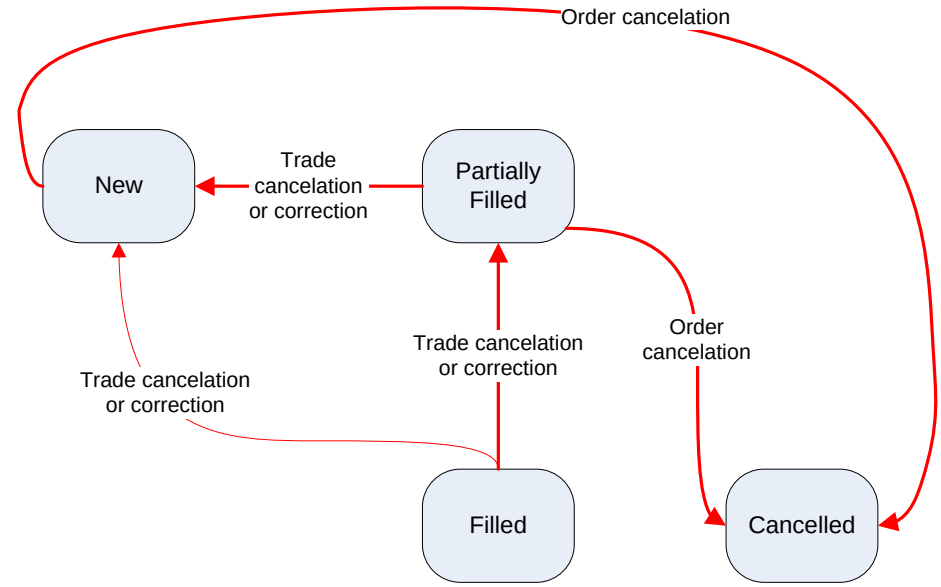
7.1 Order handling

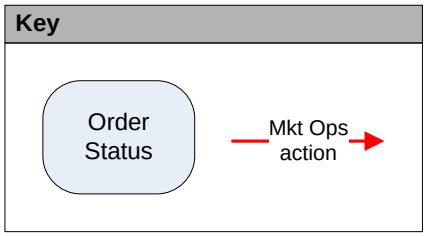
7.1.1 Order Status Changes





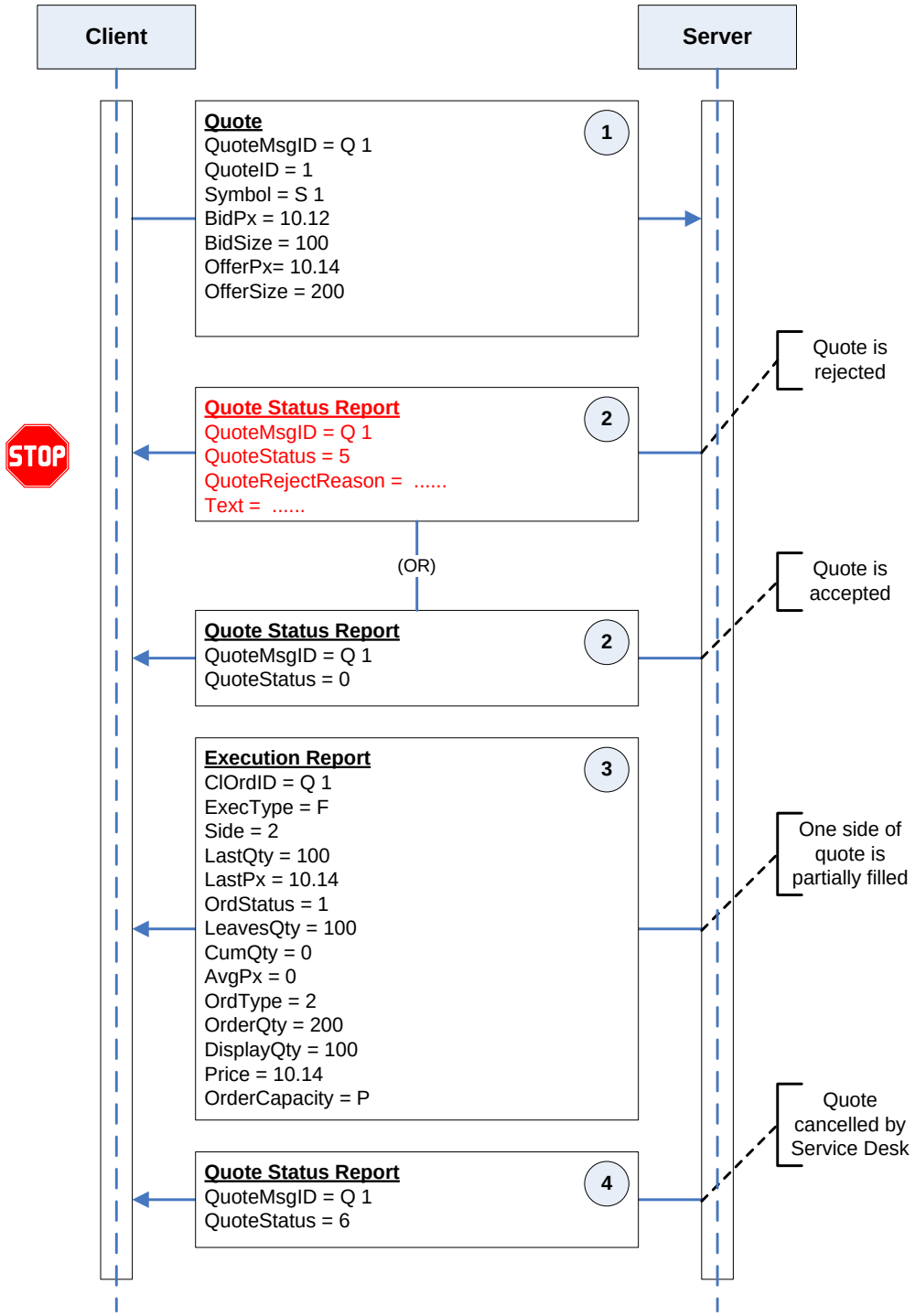
7.1.1.1 Market Operations Actions





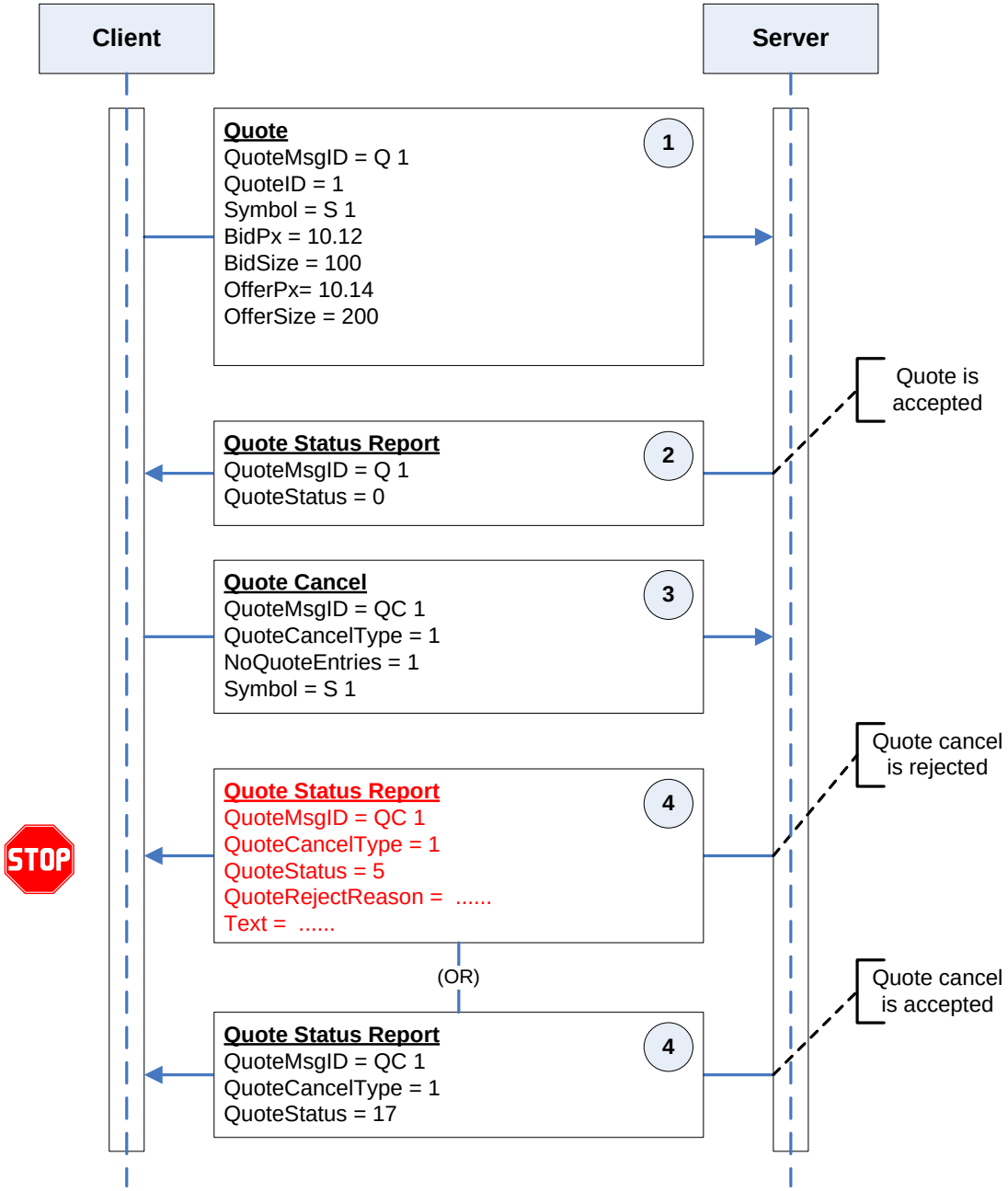
7.2 Quote handling

7.2.1 Single Quotes

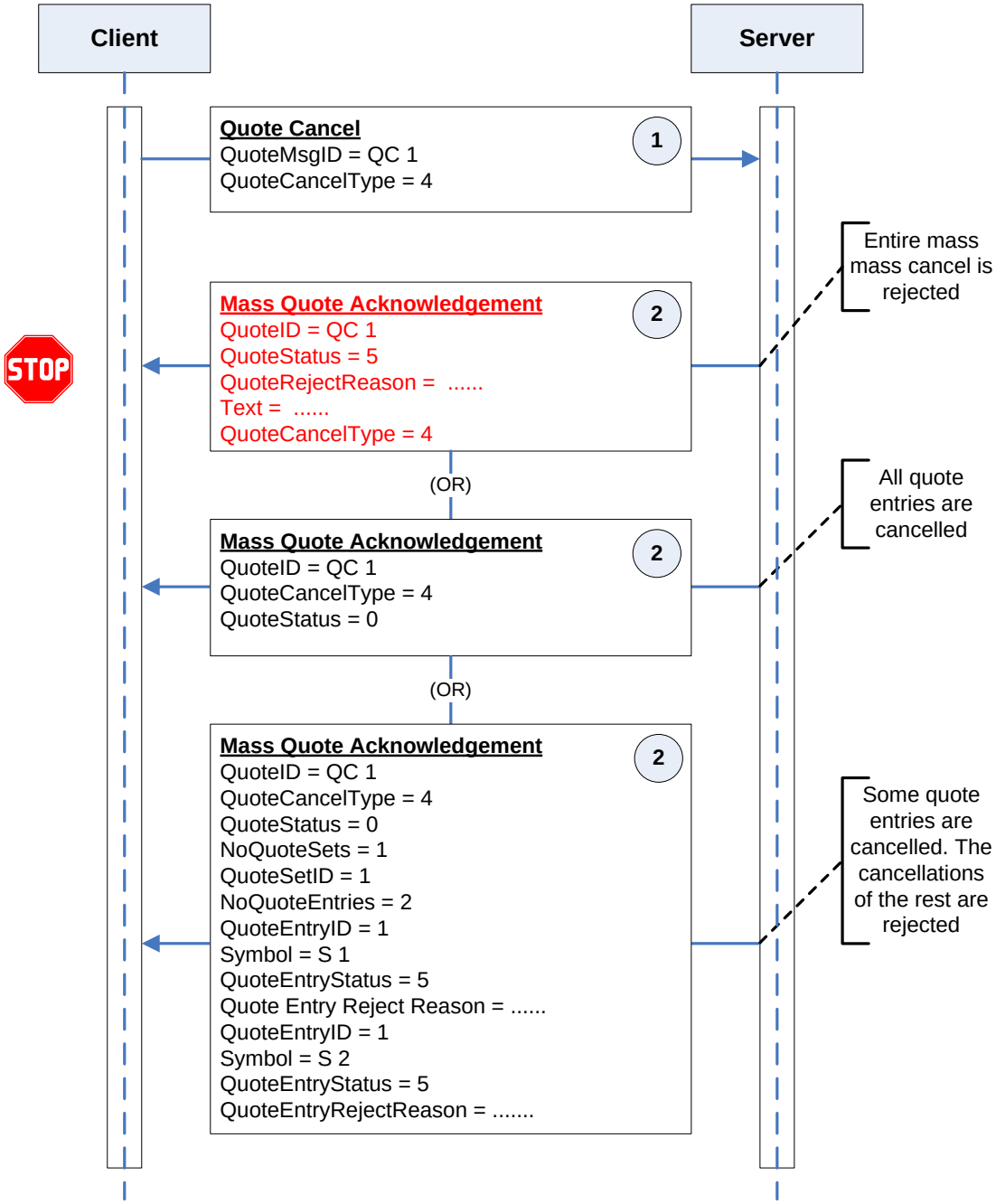


7.2.2 Quote cancellation

7.2.2.1 Cancellation of a single quote



7.2.2.2 Mass cancellation of quotes



7.3 Cross Orders

7.3.1 Event Model – Rejecting a Committed Cross/BTF Order

	Client		Server
1.	Sends a New Order Cross message for Committed Cross/BTF Order	→	Receives Order and Processes
2.	Receives one Execution Report message (Order Status = Rejected, Exec Type = Rejected, Reject Code = <>, Reject Reason = <>)	←	Order is rejected

7.3.2 Event Model – Rejecting an Internal Cross/BTF Order

	Client		Server
1.	Sends a New Order Cross message for Internal Cross/BTF Order	→	Receives order and processes
2.	Receives one Execution Report for buy side (Order Status = Rejected, Exec Type = Rejected, Reject Code = <>, Reject Reason = <>)	←	Order is rejected
3.	Receives one Execution Report for sell side (Order Status = Rejected, Exec Type = Rejected, Reject Code = <>, Reject Reason = <>)	←	Order is rejected

7.3.3 Event Model – Accepting a Committed Cross/BTF Order

	Client		Server
1.	Sends a New Order Cross message for Committed Cross/BTF Order	→	Receives order and processes
2.	Receives one Execution Report message (Order Status = New, Exec Type = New, Reject Code = <>, Reject Reason = <>)	←	Order is accepted

7.1.2 Event Model – Accepting a Committed Cross/BTF Order and Executed

	Client		Server
1.	Sends a New Order Cross message for Committed Cross/BTF Order	→	Receives order and processes
2.	Receives one Execution Report message (Order Status = New, Exec Type = New, Reject Code = <>, Reject Reason = <>)	←	Order is accepted
3.	Receives one Execution Report message (Order Status = Filled, Exec Type = Filled)	←	Order is executed

7.1.3 Event Model – Executing an already Cached Committed Cross/BTF Order

	Client		Server
1.	Receives one Execution Report message (Order Status = Filled, Exec Type = Filled)	←	Order is executed

7.1.4 Event Model – Accepting an Internal Cross/BTF Order and Executed

	Client		Server
1.	Sends a New Order Cross message for Internal Cross/BTF Order	→	Receives order and processes
2.	Receives one Execution Report for buy side (Order Status = New, Exec Type = New)	←	Order is accepted
3.	Receives one Execution Report for sell side (Order Status = New, Exec Type = New)	←	Order is accepted
4.	Receives one Execution Report message for buy side (Order Status = Filled, Exec Type = Filled)	←	Order is executed
5.	Receives one Execution Report message for sell side (Order Status = Filled, Exec Type = Filled)	←	Order is executed

7.1.5 Event Model – Rejecting the cancellation of an Internal Cross/BTF Order

	Client		Server
1.	Sends a Cross Order Cancel Request message for Internal Cross/BTF Order	→	Receives cancel request and processes
2.	Receives one Order Cancel Reject (Order Status = Filled – will be Rejected if the order is unknown)	←	Cancel is rejected

7.1.6 Rejecting the cancellation of a Committed Cross/BTF Order

	Client		Server
1.	Sends a Cross Order Cancel Request message for Committed Cross/BTF Order	→	Receives cancel request and processes
2.	Receives one Order Cancel Reject (Order Status = Filled – will be Rejected if the order is unknown)	←	Cancel is rejected

7.1.7 Event Model – Accepting the cancellation of a Committed Cross/BTF Order

	Client		Server
1.	Sends a Cross Order Cancel Request message for Committed Cross/BTF Order	→	Receives cancel request and processes
2.	Receives an Execution Report message (Order Status = Cancelled, Exec Type = Cancelled)	←	Cancel is accepted

7.1.8 Event Model – Rejecting the amendment of a Committed/Internal Cross/BTF Order

	Client		Server
1.	Sends a Cross Order Cancel/Replace Request message for Committed Cross/BTF Order	→	Receives cancel/replace request and processes
2.	Receives one Order Cancel Reject For matched Committed and Internal Cross/BTF orders RejReason = 1(Order not found (too late to cancel or unknown order)). For unmatched Committed Cross/BTF orders RejReason=130701 (Cannot Amend Cross/BTF Orders) Order Status = Filled (if order is matched) and New (if order is unmatched)	←	Cancel/Replace is rejected

8.0 Service availability

Customer Activity	Availability
Telnet Access	04.00 - 17:32
Login Access	04.00 - 17:32
Order Deletion	07.50 - 17.15

Clients wishing to test connectivity outside of these hours should review MIT501 – Guide to Testing Services for more information.

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