LMEselect 9.4 FIX Specification

Version 1.5

Please respond to:
Trading Operations
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1 Document Overview

This document describes the new functionality in FIX for LMEselect 9, as well as the existing messages in FIX.

The purpose of this document is to clearly describe the functionality in FIX for LMEselect 9 regarding syntax and semantics.

The LMEselect 9 system implements a subset of FIX 4.4.

1.1 Intended Audience

* To anybody at the LME whom it may concern.

* ISV FIX developers.
* Market data vendors.

1.2 Related Documents

* FIX 4.4 protocol, version 4.4 – 18/06/2003 (see http://fixprotocol.org/specifications/).

2 About This Document

2.1 Revision History

Revision History	Date
Revision to sections 6.2.1, 6.2.2 & 6.2.6 - Tags 389, 841 & 842 removed as no longer permitted for use from 25th January 2021 per the Decision Notice 20/283 issued on 18th December 2020	11.12.2020
Revision to sections 6.2.1, 6.2.2 & 6.2.6 - Tag 111 no longer permitted for use with Cash Settled Futures contracts from 25th January 2021 as per the Decision Notice 20/283 issued on 18th December 2020.	11.12.2020
Revision to section 6.2.3. – Update to tags 18, 40, 529, 10050, 10051 & 20023. These tags are not mandatory in the Execution Report where an order is rejected by the server	11.12.2020
Revisions to sections 9.2.2, 11.2.3, 11.2.4 & 14 – Removal of all Ring 4 (R4 & C4) references	15.10.2019
Revision to section 5.1 - Clarification regarding FIX Drop Copy users receiving ER & TCR and information added about known FIX DC issue	15.10.2019
Revisions to sections 2.2, 7.1, 8.1, 9.1, 11.1.5, 11.2.1 - Added information regarding new MDV role Select FIX CCP Market Data Vendor	15.10.2019
Revisions to sections 6.3.8, 6.3.9, 6.3.10, 6.3.11, 6.3.12 and 6.3.13 – Updates to workflow examples for speed bumps. Tag=18 ExecInst now present in the first execution report for an order revision message	08.10.2018
Revision to sections 11.2.3 – Snapshot/Full Refresh tag 5475 moved outside of the repeating group	08.10.2018
New sections 6.3.5 through to 6.3.13 added. These sections outline the workflow examples for speed bumps	29.08.2018
Revision to section 6.2.6 – adding new value 5=Held for tag 18 ExecInst for LMEprecious contracts only	29.08.2018
Clarification to sections 11.2.3 and 11.2.4 – Note added for tag 273. Only pre and post-trade messages and market report timestamps will be in UTC. All other message types will be in local UK time	09.07.2018
Clarification to sections 11.1.5, 11.2.1, 11.2.3, 11.2.4 – MDEntryType values updated to lowercase	19.06.2018
Revision to sections 6.2.1, 6.2.2, 6.2.6, 8.2.2, 9.2.2, 10.2.1, 10.2.3. 11.2.3 and 11.2.4 – New AbbreviatedPrice tag 5474 added	18.06.2018

Revisions to sections 6.2.6, 10.2.3 and 14 – New LegAbbreviatedPrice tag 10055 added	18.06.2018
Revision to sections 11.1.5, 11.1.10, 11.2.1, 11.2.3, 11.2.4 – New MDEntryType = u information for TAS substituted prices added.	18.06.2018
Revision to sections 11.2.1, 11.2.3, 11.2.4 and 14 – New tag 10054 MDEntryTASPxType added	18.06.2018
Revision to section 6.1.2 – Two new CFI codes added to tag 461 for Precious Options	18.06.2018
Revisions to section 6.1.3 – Description added for Precious Options expiry	18.06.2018
Clarification to sections 6.2.6, 10.2.3, 11.2.3 and 11.2.4 – Value '1' for Tag 277 is now applicable for both LMEprecious and base metal contracts	11.05.2018
Clarification to sections 10.2.3 and 14 – Values 3, 5, 6 and 8 are no longer valid for Tag 10020	11.05.2018
Revision to section 6.2.6 – Tag 581 updated to 'Non-Mandatory' in Execution Report.	11.05.2018
Clarification to sections 6.1.5, 6.2.6, 10.3 and 14 – Updates to Tag 10022 TradeID format. Incremental trade counter updated to reflect the change to 7 characters in length and 'x' replaced with 'X'. Example value: TAAA20100331X0000001	05.12.2017
Clarification to section 6.1.5 – Updates to Tag 17 ExecID for trades and change to ExecID description. Incremental trade counter updated to reflect the change to 7 characters in length and 'x' replaced with 'X'. Example value: TAAA20100331X0000001A	05.12.2017
New section 10.1.1 TradeReportID added. This section details the TradeReportID for the Trade Capture Report. Updated examples for TradeReportID are included in section 10.3	05.12.2017
Revisions to sections 6.1.5, 6.2.6, 10.2.3 and 14 – Tag 10022 Modification to the Select TradeID format. Example value: TAAA20100331x000001	27.11.2017
Revisions to sections 6.2.1, 6.2.2, 6.2.6, 10.2.3, 16.1, 16.2 and 16.4 – value '7' (Gross OSA) added to Tag 581 for Precious contracts only	27.11.2017
Revision to section 12.2.1 – 8 = Throttle limit exceeded added to Tag 380 BusinessRejectReason	27.11.2017
Revision to section 14 – Tag 20023 CommodityDerivativeIndicator type amended to 'String'	27.11.2017
Revision to section 13.4 – Clarification to the requirement for the mandatory use of 452=3 Client ID	12.10.2017
Revision to section 16.3 – Update to the FIX message example and the minimum fields required for the placement of an House order and the resulting Execution report returned	12.10.2017

Revisions to sections 11.2.1, 11.2.3, 11.2.4 and 14 – Tag 10035 MDsource value MI repurposed to indicate Inter-Office Orders	12.10.2017
Revisions to section 11.2.3 – Note added to tags 272 and 273 - Tags 272 and 273 should be concatenated to meet MiFID II RTS 25 obligations	12.10.2017
Revisions to section 10.2.3 – Indicator added to Tags 10048, 10049, 10050, 10051, 1057, 529 and 581 to highlight these tags as being part of a repeating group	12.10.2017
Revisions to section 6.2.2 – Amendment to Tag 10052 description.	12.10.2017
Revisions to section 13.4 – D = Proprietary/Custom code added to Tag 447 description	25.08.2017
New Section 16 'Order Entry and Execution Report Examples' added. This section provides Order Entry and Execution Report examples to cover use of new MiFID related fields	25.08.2017
Revisions to section 6.2.1 – Update to TAG 10052 ClientBranchCountry description. 'True' = Yes, 'False' = No removed	25.08.2017
Revisions to section 13.3 – Tag 461 CFICode description 'OrderCancelRequestReplaceRequest' updated to 'OrderCancelReplaceRequest'	25.08.2017
Revisions to section 13.3 – Tag 461 CFICode is now mandatory for (H) Order Status Request	25.08.2017
Revisions to section 6.2.6 – Tag 150 ExecType value H amended to H = Trade Cancel	25.08.2017
Revisions to section 10.2.3 – 10052 ClientBranchCountry description amended to 'A two character string to identify the country of the branch of the client'.	25.08.2017
Revisions to section 13.4 – Update to Party Role (452). 0= 'No Client' added to comments	25.08.2017
Revisions to sections 6.2.1, 6.2.2, 6.2.6, 10.2.3 and 14 – Tag 20053 CommodityDerivativeIndicator amended to Tag 20023 CommodityDerivativeIndicator	25.08.2017
Revisions to section: 11.2.4 – Tag 60 TransactTime removed. Tags 272 and 273 should be concatenated to meet MiFID II RTS 25 obligations	15.08.2017
Revisions to section: 13.4 – Tag 452 Party Role, 304 = Algo or Human Detail removed	09.08.2017
Revisions to section: 13.4 – Tag 452 Party Role, 122 = Decision Maker added	04.08.2017
Revisions to section 13.4 – Tag 447 PartyIDSource added with description added	04.08.2017
Revisions to section 9.2.2 – 'Post-Trade' amended to 'Post Trade' and 'Trade Halt' amended to 'Trade halt'	04.08.2017
Revision to sections: 6.2.1, 6.2.2, 6.2.6 and 10.2.3 - Removed value '7' (Gross OSA) from Tag 581.	11.07.2017

Revision to sections: 11.2.3 and 11.2.4 – Tag 346 NoOfOrders added.	07.07.2017
Revision to sections: 11.1.10 and 11.2.1 - Information about the Tradeable Instrument File (TIF) report added.	07.07.2017
Revisions to sections: 11.2.1, 11.2.3, 11.2.4 and section 14.0 – Tag 10030 MD Report Code 'TIF' code added.	07.07.2017
Revisions to section: 6.2.6 – TransactTime Tag 60 in Execution Report added.	07.07.2017
Revisions to section 11.2.4 – TransactTime Tag 60 added in Market Data Incremental Refresh Section.	07.07.2017
Revision to section: 6.2.6 – ExecType Tag 150, L = Triggered or Activated by the system added.	07.07.2017
Revisions to sections: 6.2.1, 6.2.2, 6.2.6 and 10.2.3 – Tags 10052 ClientBranchCountry and 20053 CommodityDerivativeIndicator added.	07.07.2017
Revision to section: 6.2.6 – Tag 1057 AgressorIndicator added.	07.07.2017
Revision to section: 13.4 – Additional information provided for Tag 448 PartyID and a note added to end of section providing information if Tag 452 Party Role = 35.	07.07.2017
Revisions to section 14 – Additional information provided for Tags 10052 ClientBranchCountry and Tag 20053 CommodityDerivativeIndicator	07.07.2017
Revision to section: 10.2.3 – tags 58, 529, 10050, 10051 and 581 changed to 'Non Mandatory'.	16.05.2017
Revision to section: 6.2.6 – additional value added to tag 150 '9' for Suspend orders and additional value added to tag 378 '99' for other.	14.03.2017
Revision to section: 6.2.1 – The values for tag 581: 1, 3 and 7 should only be submitted for Precious contracts only.	22.02.2017
Revision to sections: 6.2.6 – The following tag is always returned in execution Reports '40' OrdType.	22.02.2017
Revision to section: 13.4 – Updated table confirming the additional Tags and fields that will be returned in execution and trade capture reports.	22.02.2017
Revision to section: 6.1.5 – Additional information provided for ExecID displaying the differences in format for tag 17.	22.02.2017
Revision to sections: 6.2.6 and 10.2.3 – the following tags are always returned in Trade Capture Reports: Tag 529, 10050, 10051 and 581.	23.01.2017
Revision to sections: 11.2.3 and 11.2.4 – Additional value added to tag: 277. The value 1 now exists for implied trades	23.01.2017
Revision to section: 6.2.6 – The party field: 452=36 (Entering Trader) is always returned for trade execution reports.	23.01.2017

Revision to section: 4.5.6 – Removed additional 'Standard Header' (previously duplicated by error).	23.01.2017
Revision to section: 14 – Tag 10033 renamed to: 'MDReportFragmentNo'.	23.01.2017
Revision to section: 10.2.3 – AggressorIndicator changed as tag: '1057' (was originally 10057 by error).	23.01.2017

2.2 Terms & Acronyms

Term/Acronym	Description
T	Select FIX Trader
MD	Select FIX Market Data User
DC	Select FIX Drop Copy User
MDV	Select FIX Market Data Vendor
MDVCCP	Select FIX CCP Market Data Vendor

3 Introduction

3.1 Reading Instructions

The document describes:

- ***FIX Session layer:*** A section describing the FIX session layer and supported session level messages.
- ***Business Layer Introduction:*** A section describing the user interaction and the main workflows.
- ***Order Management:*** A section describing how to enter orders. Subsections include:
  1) Price Units
  2) CFI Code
  3) Maturity Dates
  4) Execution Reports for Multi-Leg Contracts
  5) ExecID
- ***News:*** A section describing the News functionality.

- ***Security List:*** A section describing Security List.
- ***Security Status:*** A section describing Security Status.
- ***Drop Copy:*** A section describing the different messages that are used for Drop Copy.
- ***Market Data:*** A section describing how to use the Market Data functionality. Subsections include:
    1) Market Data Request
    2) Market Data Message Price Depth
    3) Market Data Messages # of Messages
    4) Trade replay
- ***General Messages:*** A section describing general application messages.
- ***Common Component Blocks:*** A list of the common blocks of information used in messages.

- ***LME Specific Tags:*** A list of the LME Specific Tags used in Select 7.
- Instrument Block Examples.
- Order Entry and Execution Report Examples

4 FIX Session Layer

4.1 FIX Session Establishment

A FIX session is established by sending a Logon message. The FIX session is established between two parties; (a) the sender and (b) the target. These are represented by the following tags in the Standard Message Header:

- SenderCompID (tag 49) – the party initiating the session.
- TargetCompID (tag56) – the acceptor of the session as per configuration.
- The FIX session is always initiated by the FIX client and accepted by the FIX server.

4.2 Start of Day/End of Day Procedures

A FIX session can last forever, or until:

- A login message that specifies the sequence numbers should be reset, using ResetSeqNumFlag=Y (tag 141)
- A SequenceReset message is sent by either side of the FIX session.
- As defined by the market place.

4.3 Reject Handling

This section describes FIX reject handling.

The Reject message (MsgType = 3) is used when a message is received but cannot be properly processed due to a session level rule violation. Some examples[1]:

- A message without a mandatory tag.
- A message with an incorrect value for a specific tag.
- A tag without a value.
- Unknown message type.
- A tag which appears more than once.

If an application-level message passes the syntax checking on the FIX Session level it should then be processed at the business-level. If this process detects an error condition at business-level then a reject should be issued. Many business-level messages have specific “reject” messages which should be used. Business-level messages lacking specific “reject” messages should use the Business Message Reject message (MsgType = j).

The exceptions for the specific business-level reject message are:

- In the event a business message is received and fulfills the session-level rules, the message cannot be communicated to the business-level processing system. In this situation a Business Message Reject with BusinessRejectReason = “Application not available at this time” can be issued.
- In the event a valid business message is received and fulfills session-level rules, the message type is not supported by the recipient. In this situation a Business Message Reject message with BusinessRejectReason= “Unsupported Message Type” can be issued.
- In the event a business message is received and fulfills session level-rules, but lacks a field conditionally required by the FIX specification. However, a Business Message Reject message must NOT be used to enforce proprietary rules more restrictive than those explicit in the FIX specification. For example, requiring a Trade Capture Report to contain a TradeRequestID which the FIX specification considers to be optional.

4.4 Authorization

All FIX Sessions are subject to authorisation. When the FIX server receives a Logon message at connection start-up, the session is authorised using:

- SenderCompID (tag 49). This is the session identifier together with the TargetCompID (tag 56).
- Username (tag 553). Must contain the user ID assigned by the LME.
- Password (tag 554). Must contain the password assigned by the LME.

4.5 Message Details

The following sections cover all supported Session Messages.

[1] All supported FIX Session level reject reasons are presented in section 4.5.6

FIX Message Name	Type	Direction
Logon	A	In/Out
Heartbeat	0	In/Out
Test Request	1	In/Out
Resend Request	2	In/Out
Reject	3	Out
Sequence Reset	4	In/Out
Logout	5	In/Out

4.5.1 Logon

The first messages exchanged in a FIX session are the Logon request and the Logon response. The main purposes of the Logon request and response are:

- To authenticate the client.
- To agree on the sequence numbers.

The session initiator waits to begin sending application messages until it receives the Logon response.

The FIX server requires an encrypted password. In order to accomplish an encryption of the password, additional information is conveyed using the RawData (tag 96) field and the RawDataLength (tag 95) which is required. Currently a single entity/subfield is packed into the RawData field.

A varying number is used to further scramble the password and to make the encrypted password to be different each time a logon occurs. This number:

1) Is an integer number.
2) Has a value which is the current system time in milliseconds expressed in the GMT time.
3) Is higher than the system time in milliseconds the previous midnight in GMT time.
4) Is lower than the system time in milliseconds the following midnight in GMT time.
5) Has a higher value than the number used in the previous Logon request.

A letter identifies subfields. A colon delimits a subfield identifier from a subfield value. The delimiter for the client random number is ‘m’. A typical RawData value would be *m:1065641126118* from a client logging on to the first version of the FIX server.

If the logon request is rejected, a logout message is sent back with the reason for the rejection in the Text (tag 58) field and the TCP/IP session is terminated by the FIX server.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType= A. Component block, see section 13.1
98	EncryptMethod	Y	Method for encryption. Valid value is: 0 = None
108	HeartBtInt	Y	Heartbeat interval (seconds). Must be greater than zero.
95	RawDataLength	N	Number of bytes in raw data field. Required on incoming Logon messages from the client.
96	RawData	N	Unformatted raw data. Required on incoming Logon messages from the client.
141	ResetSeqNumFlag	N	Indicates that both sides of the FIX session should reset sequence numbers. Must always be set to Y for MIX MD. If omitted default value is N.
789	NextExpectedMsgSeqNum	N	Next expected MsgSeqNum (tag 34) value to be received. This field is required when reconnecting intraday or logging on after a failover.
553	Username	N	Must contain the user ID assigned by the LME. SenderCompID must be set to this value.
554	Password	N	Must contain the password assigned by the LME.
	Standard Trailer	Y	Component block, see section 13.2

Password Encryption

The following entities make up the encrypted password:

1. A hash pattern applied on the source password.

2. The 32-byte fax key, a field from the user's LMEselect account that is copied beside the protocol, probably by fax or email.
3. The "HmacSHA1" encryption algorithm.
4. An 8-byte increasing number generated by the client.

Java and C/C++ source codes to create the hash pattern can be found on LME's member site, http://www.lme.com/login/. The LME may assist third-party developers in finding the required source code in Java and C that implements the "HmacSHA1" encryption algorithm.

4.5.2 Logon after failover and reconnect

When logging on after a failover or reconnect, the field NextExpectedMsgSeqNum (tag 789) must be provided in the Logon message (this does not apply to the Market Data server since this is a concurrent server). By receiving this next expected sequence number we can compare it to the last replicated sequence number and calculate the difference from the last replicated messages - LastMsgSeqNumProcessed (tag 369) field to the NextExpectedMsgSeqNum (tag 789) provided by the client. The sequence number which the FIX server last processed will be used to populate the NextExpectedMsgSeqNum (tag 789) in the Logon response.

After logging on after a failover or reconnect the client will be expected to resend the messages which were not replicated to the secondary server as specified by the NextExpectedMsgSeqNum (tag 789). These resent messages will be used to synchronize the cache in the FIX server. This Logon behaviour is documented in the FIX protocol specification under the heading of "Logon Message NextExpectedMsgSeqNum Processing" as an optional method introduced in FIX 4.4.

Once the FIX server has synchronized with the back-end, any outgoing messages resulting from the synchronization will be sent to the client with the PossResend (tag 97) field set to 'true'. In this manner the client will receive messages that may have been received previously when the secondary server synchronizes its caches, but no message will be lost.

If the client should ask for a resend of messages not replicated in a fail over, these will be replied to with a gap fill message (SequenceReset (4) with the GapFillFlag (tag 123) set to 'true'). By responding with a gap fill we do not break protocol. Additionally, sending all messages that could possibly have been lost with the PossResend (tag 97) field set we can guarantee that all messages are sent to the client.

Workflow for logging-on after a failover

Msg	MsgSeqNum (34)	NextExpectedMsgSeqNum (789)	Description
-> Logon	1	-	First Logon from client to FSOE1 (FIX Order Enter primary).
<- Logon	1	-	Reply from server.
-> New Order Single	2	-	This message is not replicated to the secondary site.

Msg	MsgSeqNum (34)	NextExpectedMsgSeqNum (789)	Description
<- Execution Report	2	-	-
-	-	-	Failover from FSOE1 to FSOE1S (FIX Order Entry secondary).
-> Logon	3	3	Client logs on to FSOE1S.
<- Logon	3	2	Reply from server.
-> New Order Single	2	-	The client resends this message.
-> Sequence Reset	3	-	-
<- Execution Report	4	-	Sent with PossResend (tag97) = Y

Example of a failover with one lost NewOrderSingle

In this scenario, the client inserts 5 NewOrderSingles to the primary site and for some reason the last message is not replicated to the secondary site. After this the failover takes place and FSOE1S takes over. After the logon to FSOE1S, the client resends all the messages with MsgSeqNum more or equal to the NextExpectedMsgSeqNum (6) in the logon response from FSOE1S (which in this case would be the last NewOrderSingle with MsgSeqNum = 6 and a SequenceReset message as a GapFillMessage instead of the Logon message with MsgSeqNum = 7). All the resend messages have PossDupFlag = Y. FSOE1S will send an ExecutionReport with PossResend = Y in response to the resending of the last NewOrderSingle.

Seq Num	Server/Client	Message Type	Description
2	Client	D	Insert Order

Seq Num	Server/Client	Message Type	Description
2	Server	8	Ack
3	Client	D	-
3	Server	8	-
4	Client	D	-
4	Server	8	-
5	Client	D	-
5	Server	8	-
6	Client	D	-
6	Server	8	-
			Failover from FSOE1 to FSOE1S
7	Client	A	789=7
7	Server	A	789=6 (the secondary server didn't receive the last order)
6	Client	D	43=Y (resend of order)
7	Client	4	36=8 (sequence reset)
8	Server	8	97=Y

4.5.3 Heartbeat

During periods of message inactivity, FIX applications will generate Heartbeat messages at regular time intervals. The heartbeat monitors the status of the communication link and identifies incoming sequence number gaps.

When logging on, the client requests a heartbeat interval, using the HeartBtInt tag (see the logon message). Heartbeats must be sent in both directions:

- The FIX server will send Heartbeat requests at the requested interval, unless other messages are sent.

- The FIX Client must send Heartbeat requests at the requested interval, unless other messages are sent.

Tag	Field Name	Req'd	Comments
-	**Standard Header**	Y	MsgType = 0. Component block, see section 13.1
112	TestReqID	N	Required when the heartbeat is a result of a Test Request (MsgType = 1) message.
-	**Standard Trailer**	Y	Component block, see section 13.2

4.5.4 Test Request

The FIX server supports Test Requests in both directions. Client Test Requests are responded to with Heartbeats conveying the test request ID. The FIX server may send Test Requests in order to verify the reception of a sequence of outbound messages, confirming that the FIX client has captured the messages sent.

The grace period after the FIX server has sent a Test Request is 1.2 heartbeats. For example, if the heartbeat interval is 30 seconds, the grace period will be 36 seconds before the server disconnects the client if the client does not reply to the Test Request message.

Tag	Field Name	Req'd	Comments
-	**Standard Header**	Y	MsgType = 1. Component block, see section 13.1
112	TestReqID	Y	The value will be returned in the resulting Heartbeat.
-	**Standard Trailer**	Y	Component block, see section 13.2

4.5.5 Resend Request

The FIX server supports client Resend Requests and may issue a Resend Request as a consequence of the Logon sequence number negotiation. After the initial negotiation, there should be no reason for requesting retransmissions because the underlying protocol, TCP/IP, manages retransmissions. It is recommended that clients use an EndSeqNo value of 0, indicating all messages during retransmission are to be resent.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 2. Component block, see section 13.1

Tag	Field Name	Req'd	Comments
7	BeginSeqNo	Y	Message sequence number of the first message in the range to be resent.
16	EndSeqNo	Y	Message sequence number of the last message in the range to be resent. If the request is for all messages subsequent to a particular message, the EndSeqNo field should be set to 0 (representing infinity).
	Standard Trailer	Y	Component block, see section 13.2

4.5.6 Reject

See Section 4.2 for usage.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 3. Component block, see section 13.1
45	RefSeqNum	Y	MsgSeqNum of rejected message.
371	RefTagID	N	The tag number of the FIX field being referenced.
372	RefMsgType	N	The MsgType of the FIX message being referenced.
373	SessionRejectReason	N	Code to identify the reason for a session-level Reject message. Valid values: 0 = Invalid tag number 1 = Required tag missing 2 = Tag not defined for this message type 3 = Undefined tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 7 = Decryption problem 9 = CompID problem 10 = *SendingTime* accuracy problem 11 = Invalid *MsgType* 13 = Tag appears more than once 14 = Tag specified out of required order 15 = Repeating group fields out of order 16 = Incorrect NumInGroup count for repeating group 17 = Non "data" value includes field delimiter (SOH character)

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 3. Component block, see section 13.1
			98 = Service not available at this time 99 = Other
58	Text	N	Where possible, message to explain reason for rejection.
	Standard Trailer	Y	Component block, see section 13.2

4.5.7 Sequence Reset

The FIX server supports both Gap Fill mode and Reset mode.

Gap Fill mode is used in response to a Resent Request when one or more messages must be skipped over.

Reset mode involves specifying an arbitrary higher new sequence number to be expected by the receiver of the Sequence Reset. It is used to re-establish a FIX session after an unrecoverable application failure.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 4. Component block, see section 13.1
123	GapFillFlag	N	Indicator of Gap Fill mode. Valid values: Y = Gap Field message, MsgSeqNum (tag34) field valid. N = Sequence Reset, ignore MsgSeqNum (tag 34). If omitted default value is N.
36	NewSeqNo	Y	The new sequence number to be expected by the received.
	Standard Trailer	Y	Component block, see section 13.2

4.5.8 Logout

The Logout message initiates or confirms the termination of a FIX session. FIX clients should terminate their sessions gracefully by logging out.

When a user logs out from LMEselect then all orders will be inactivated except for GTC orders. If the user disconnects from LMEselect without logging out, all orders will be inactivated. The orders need to be activated after a reconnect.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 5. Component block, see section 13.1
58	Text	N	Additional description of message.
	Standard Trailer	Y	Component block, see section 13.2

4.5.9 Disable Users

If a FIX user is disabled by LME Helpdesk while logged in then a Logout message will be sent to the user and the session will be disconnected.

5 Business Layer Introduction

5.1 User Interaction

There are three types of FIX users in the LMEselect system.

- FIX Market Data users (FIX MD) are allowed to issue market data requests, i.e. subscribe to market data.
- FIX Traders (FIX OE) are allowed to enter orders and receive execution reports.
- FIX Drop Copy users (FIX DC) are allowed to connect to FIX Drop Copy server and receive Trade Capture Reports and Execution Reports from both the FIX side as well as from the GUI, and send Trade Capture Report Requests.

FIX Traders are allowed to enter orders, receive execution reports and query for a Security List. FIX Market Data users are allowed to issue market data requests, i.e. subscribe to market data, query for a Security List and use the Security Status functionality.

There are two types of Drop Copy users, first one can get live TCRs without sending any request, and the second type must send TCR-request for each trade to receive TCR.

1. Drop Copy user that serves as a Clearer for other members will get live TCRs without sending any requests. Drop Copy users will not receive ERs for the activity executed by other members to whom they act as a Clearer.

2. Drop Copy user that serves as a Clearer for its own member will get live ERs but not live TCRs. To receive live TCRs a Drop Copy user will need to send TCR requests

Note: There is a known issue with FIX Drop Copy accounts at the top member level. The Trade Capture Report Request has to specify the Entering Firm / Business Unit(s) in order to receive Trade Capture Reports. For example,

1. To specify Entering Firm in the TCR, please put tag 453=1, 448=XXX, 452=4 (Entering Firm).

2. To specify Business Unit(s) in the TCR, please put tag 453=1, 448=XXX_U1, 452=7 (Business Unit).

The scenarios shown in *Figure 1* and *Figure 2* assume that member B has a FIX Market Data user with an active subscription on bid and ask orders, i.e. have issued a Market Data Request for bid and ask.

Order events are handled as below:

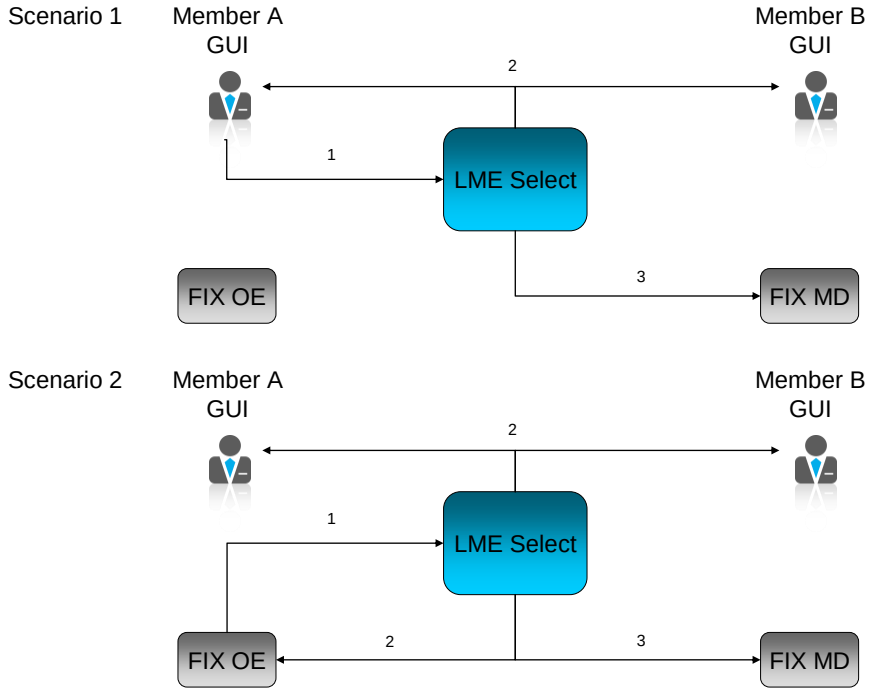

Figure 1

Scenario 1:

1. Member A places an order via GUI.
2. Member A GUI and Member B GUI receive the order via broadcast.
3. Member B FIX-MD receives market data (order book) via FIX Market Data message.

Scenario 2:

1. Member A places an order via FIX.
2. Member A GUI and Member B GUI receive the order via broadcast and Member A FIX-Trader receives order via FIX Execution Report message.
3. Member B FIX-MD receives market data (order book) via FIX Market Data message.

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Trade events are handled as below:

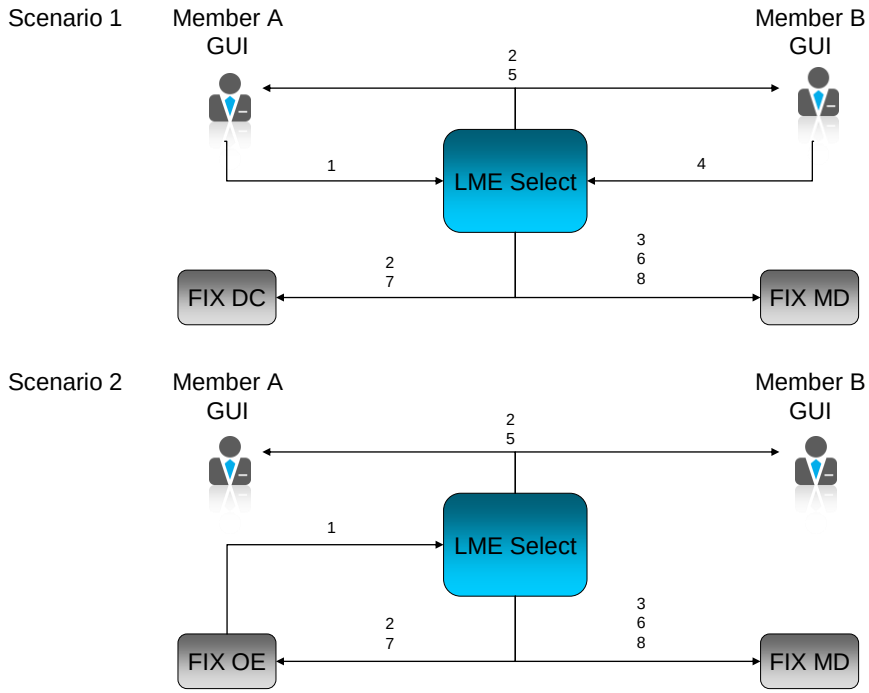

Figure 1

Scenario 1:

1. Member A places an order via GUI.
2. Member A GUI and Member B GUI receive the order via broadcast and Member A FIX-DC receives order via FIX Execution Report message
3. Member B FIX-MD receives order via FIX Market Data message.
4. Member B GUI enters an order that match the Member A Order.
5. Member A GUI and Member B GUI receive the trade via broadcast.
6. Member B FIX-MD receives the current order book via FIX Market Data message.
7. Member A FIX-DC receives the trade via FIX Execution Report.
8. Member B FIX-MD receives the trade via FIX Market Data message.

Scenario 2:

1. Member A places an order via FIX.
2. Member A GUI and Member B GUI receives the order via broadcast, Member A FIX-Trader receives the order via FIX Execution Report message.
3. Member B FIX-MD receives order via FIX Market Data message.
4. Member B GUI enters an order that match the Member A Order.
5. Member A GUI and Member B GUI receive the trade via broadcast.
6. Member B FIX-MD receives the current order book via FIX Market Data message.

7. Member A FIX-Trader receives the trade via FIX Execution Report.
8. Member B FIX-MD receives the trade via FIX Market Data message.

6 Order Management

6.1 Business Message Types

The FIX server supports the message types described in the following table.

FIX Message Name	Type	Dir	Comment	Authorised User Type
New Order – Single	D	In	Used to enter orders into the system.	T
Order Cancel/Replace Request	G	In	Used to change the parameters of an existing order.	T
Order Cancel Request	F	In	Used to cancel own orders.	T
Order Cancel Reject	9	Out	Response if the Order Cancel Request was rejected.	T
Order Status Request	H	In	Used to request the current status for own orders.	T
Execution Report	8	Out	Used for the following purposes: • Confirm the receipt of an order. • Confirm changes to an existing order. • Relay order status information. • Relay fill information on working orders. • Reject orders.	T + DC

6.1.1 Price Units

Prices

Different contract types use different price types (price, tag 44). The price types differ both in their price unit and their meaning. For carry orders, the order price is the net difference in trading price between the buy leg and sell leg. For metal option and metal option strips, the order price is expressed in volatility. If the order is matched, this price is converted into to a premium in USD, using the Black76 model.

Contract Type	Price Type	Price Unit
Metal single outright	Outright price	USD
Metal average outright	Outright price	USD
Metal carry	Net price	USD
Metal option	Volatility	%
Metal option strip	Volatility	%
Metal TAPO	Premium	USD
Index single outright	Outright price	USD
Index carry	Net price	USD
Index option	Premium	USD

Net Prices for Carry Contracts

At the LME, the net prices for carry contracts have different names depending on the slope of the time-price curve they describe:

- Contango prices – when the price of the leg far away in time is higher than the price of the leg nearer in time. In FIX, this type of price is represented by a **negative** price.
- Backwardation prices - when the price of the leg far away in time is lower than the price of the leg nearer in time. In FIX, this type of price is represented by a **positive** price.
- Level – when the price of both legs should be equal. This is represented by a price of **zero**.

6.1.2 CFI Code

The ISO 10962 Classification of Financial Instruments standard defines a standard for naming different classes of securities. The FIX protocol uses this standard.

The FIX server converts CFI codes (tag 461) to LME contract types according to the table below:

Code	Description	Used for
FCEPS	Future, Commodity, Extraction, Physical, Standardized	Single outright futures, carries and Premiums
FFICS	Future, Financial, Index, Cash, Standardized	Index futures.
OPAFPS	Option, Put, American, Future, Physical, Standardized	Metal future put options.
OCAFPS	Option, Call, American, Future, Physical, Standardized	Metal future call options.
OPEFPS	Option, Put, European, Future, Standardized	Precious future put option
OCEFPS	Option, Call, European, Future, Standardized	Precious future call option
OPXTCS	Option, Put, Commodity, Cash, Standardized	Metal TAPO puts.
OCXTCS	Option, Call, Commodity, Cash, Standardized	Metal TAPO calls.
OPEICS	Option, Put, European, Index, Cash, Standardized	Index put options.
OCEICS	Option, Call, European, Index, Cash, Standardized	Index call options.
FCECS	Future, Commodity, Extraction, Cash, Standardized	Steel Scrap and Steel Rebar, Monthly Average Futures (Formerly Swaps) and LMEmini contracts

* Please note there are no Index TAPO contracts.

6.1.3 Maturity Dates

Futures

An LME future is defined by a symbol and a maturity date, the *prompt date*. There are three different types of prompt dates for futures (PromptType, tag 10004):

* Rolling prompt dates – these prompt dates are relative to the current trading day. When trades in these contracts are sent to clearing, the date is “frozen” into a calendar date. There are three rolling prompts (MaturityRollingPrompt, tag 10000, and LegMaturityRollingPrompt, tag 10002):

    1) 3M (Three months) – this prompt date represents the date three months from today.

    2) C (Cash) – this prompt date represents the day after tomorrow.

    3) TOM (Tomorrow) – this prompt date represents tomorrow.

* Single prompt dates (MaturityDate, tag 541) – these prompt dates are calendar dates, written in the format YYYYMMDD, where YYYY is the year, MM is the month (01-12) and DD is the day (01-31). The LME uses the concept of “Monthly”, “Weekly” and “Daily” contracts, but all these contract types represent one single prompt date and no difference is being made between them in this FIX specification. (For “Monthly” contracts, the prompt date is the 3rd Wednesday in the month, for “Weekly” contracts, the prompt is the Wednesday in the week.)

* Average prompt dates (MaturityAveragePrompt, tag 10001) – these prompt dates represent several calendar dates. There are three types of average prompts:

    1) Quarterly prompts – These are written NQYY, where N is 1, 2, 3 or 4, and YY are the two last figures in the year. A quarterly prompt represents three calendar dates, namely the monthly contracts (i.e. the 3rd Wednesdays in the months) in the quarter.

    2) Half-year prompts – These are written NHYY where N is 1 or 2, and YY are the two last figures in the year. A half-year prompt represents six calendar dates, namely the monthly contracts (i.e. the 3rd Wednesdays in the months) in the half-year.

    3) Full-year prompts – These are written 1YY’Y’ where Y’Y’ are the two last figures in the year. A full-year prompt represents twelve calendar dates, namely the monthly contracts (i.e. the 3rd Wednesdays in the months) in the year.

To know what prompt dates that are available, it is necessary to have access to an LME trading calendar. A quick and incomplete summary of the trading calendar is:

For a metal and steel 3M and C always exist and TOM almost always exists. There exists one prompt day per business day between the TOM and the 3M contract, thereafter a prompt day every Wednesday for 3 months, and then prompt days the 3rd Wednesday in the month for a number of months, depending on the underlying commodity. There exist average contracts that span the months after the 3M contract.

For the index, there exists one prompt day every 2nd Wednesday in the month for 12 months. There are no rolling prompts and no average prompts.

For LMEMini, there exist one prompt every 3rd Wednesday in the month for 12 months. There are no rolling prompts.

For LMEswaps, there is one prompt on the last working day of each month. (This is actually the last tradable day rather than the LME Rulebook definition of the settlement date.)

Options

An option is defined by a symbol, an option type, a strike price and an *expiration date*. There are two types of expiration dates:

- Single expiration dates (MaturityDate, tag 541) – these are calendar dates, written in the format YYYYMMDD, where YYYY is the year, mm is the month (01-12) and DD is the day (01-31). For Base metals, there is one expiration date per month: the first Wednesday in the month.

For Precious Options the expiration date is two business days prior to the 3rd Wednesday. For the index, the expiration date is the second Wednesday in the month. For both symbols, the expiration date is rolled forward one day if the expiration date is a non-business day. Consult an LME trading calendar for exact rules for expiration dates.

- Average expiration dates (MaturityAveragePrompt, tag 10001) - these expiration dates represent several calendar dates. They are only available for metals. There are three types of average dates:

1) Quarterly expiration dates – These are written NQYY, where N is 1, 2, 3 or 4, and YY are the two last figures in the year. A quarterly date represents three calendar dates, namely the 1st Wednesdays in the months in the quarter.
2) Half-year expiration dates – These are written NHYY where N is 1 or 2, and YY are the two last figures in the year. A half-year date represents six calendar dates, namely the 1st Wednesdays in the months in the half-year.
3) Full-year expiration dates – These are written 1YY'Y' where Y'Y' are the two last figures in the year. A full-year date represents twelve calendar dates, namely the 1st Wednesdays in the months in the year.

TAPOS

A TAPO is defined by a symbol (only metals), an option type, a strike price and an expiration date. For TAPOS, the only allowed expiration date is the single expiration date in format YYYYMMDD. There is one expiration date per month: the last trading day of the month.

6.1.4 Execution Reports for Multi-Leg Contracts

For some instruments, an execution report representing a trade will contain several trade legs, although the order insert transaction only contained one instrument leg. The LastPx (tag 31) and LastQty (tag 32) fields are still well-defined, but the trade legs contain additional information, e.g. on how a carry net price was converted into trade prices in the contracts spanned by the carry. This situation occurs for:

- ***Carry contracts.*** The legs in the execution report represent the contracts spanned by the carry. The LastPx represents the net price for the entire carry; the leg prices represent the trade prices in the contracts.
- ***Average contracts.*** The legs in the execution report represent the monthly contracts that the average contract (quarters, half-year or whole-year) defines.
- ***Metal options.*** The order entry transaction contains a price expressed in volatility. The trading system will convert this into a price expressed in dollars and possibly create a hedge trade in the future that the option is based on. The execution report will contain one or two legs: leg 1 defines the price in dollars, leg 2 the price and quantity of the hedge trade.
- ***Metal option strips.*** As for the metal options, the legs in the execution report represent the dollar price and hedge trades for all legs in the option strip. Since the strip represents a number of monthly contracts (cf. average contracts), the number of legs may become twice the number of legs in the strip. In the case of a yearly strip, e.g. 1Y05 that was hedged by the system, the execution report will contain 24 legs. If no hedge trades were made, the report will contain 12 legs.

6.1.5 ExecID

The ExecID (tag 17) is a unique identifier of Execution Report messages only. In LMEselect 9 this can be represented in a range of formats depending upon the Action as outlined in the table below.

Format representing a trade is as follows:

<TA><Underlying><Trade Date>X<Sequence Number><char>

The sequence number is defined as data type long and could theoretically be up to 21 characters

For example, a trade in underlying 'AA' on 9 Feb 2010 will have an ExecID as follows:

TAAA20100209X0000049A for one side and TAAA20100209X0000049B for the other side

Action	System Output	Server	ExecID (Tag 17)
(D) New Order Single - Order Entry	Execution Report (New)	FSOE, FSDC	ON-AH-20170404-000013-41249
(D) New Order Single – Trade (Partial Fill or Fill)	Execution Report (Trade)	FSOE, FSDC	TAAH20170404X0000002B
(G) Order Cancel Replace Request - Modify Order	Execution Report (Pending Replace)	FSOE	ON-AH-20170404-000013-41249
	Execution Report (Replace)	FSOE, FSDC	ON-AH-20170404-000013-41249
(H) Order Status Request	Execution Report (Order Status)	FSOE	14 *(Single Integer)*
(F) Order Cancel Request - Cancel Order	Execution Report (Pending Cancel)	FSOE, FSDC	ON-AH-20170404-000013-41367
	Execution Report (Cancelled)	FSOE, FSDC	ON-AH-20170404-000013-42421
Bust Trade	Execution Report (Trade Cancel)	FSOE, FSDC	TAAH20170404X0000001BC ExecRefID (Tag19): TAAH20170404X0000001B

6.1.6 OrderID

The OrderID (tag 37) is a unique identifier for an order assigned by the Select system.

Example of OrderID for a carry trade:
ON-AA-20091015-000001

6.1.7 Stop Loss Order

The following tags are required to define a stop loss order:

Tag	Field Name	Req'd	Comments
40	Order type	Y	4 = StopLimit It defines the order type to be a stop loss, rather than 40=2 (Limit) as for ordinary limit orders.
99	StopPx	Yes; for stop loss orders	The trigger price.

6.2 Message Details

6.2.1 New Order – Single

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = D. Component block, see section 13.1
11	ClOrdID	Y	Unique identifier set by the entering firm.
21	HandlInst	N	If this field is used it must be set to: 1 = Automated execution order, private, no Broker intervention.
	Parties	Y	Component block, see section 13.4
18	ExecInst	N	Valid values: S = Suspend (order is inactivated, removed from public view and not available for matching. It is,

Tag	Field Name	Req'd	Comments
			however, retained by the trading system and may be activated later). 2 = Work (order is active, viewable and available for matching). Absence of this field indicates Work. An inactive order can be reactivated again by sending an OrderCancelReplaceRequest message with ExecInst (tag 18) = Work (2).
111	MaxFloor	N	Visible order quantity used for iceberg orders. Not permitted for use with the Cash Settled Futures contracts as per the Decision Notice 20/283 issued on 18th December 2020
	Instrument	Y	Component block, see section 13.3
54	Side	Y	Valid values: 1 = Buy 2 = Sell
60	TransactTime	Y	Time this order request was initiated by the trader. Format is YYYYMMDD-HH:mm:ss.SSS in 24H.
38	OrderQty	Y	Order quantity.
529	OrderRestrictions	Y	Indicates if the order is entered either by an algo trader or a human. Valid values: D = Non-algorithmic (human) E = Algorithmic (algo)
40	OrdType	Y	Valid value is: 2 = Limit 4 = Stop Limit, defines the order type to be a stop loss

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Tag	Field Name	Req'd	Comments
44	Price	Y	For orders in carry contracts, a "contango" price is expressed as a negative price, and a "backwardation" price as a positive price.
5474	AbbreviatedPrice	N	Contains the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
59	TimeInForce	N	Valid values: 0 = Day 1 = Good 'til Cancel 3 = Immediate or Cancel 6 = Good 'til Date Good 'til Cancel and Good 'til Date are only available for Cash and 3M outright contracts. Absence of this field indicates Day.
126	ExpireTime	N	Conditionally required if TimeInForce = Good 'Til Date and ExpireDate is not specified. Format is YYYYMMDD-HH:mm:ss in 24H. The date must be the current day.
432	ExpireDate	N	Conditionally required if TimeInForce = Good 'til Date and ExpireTime is not specified. Format is YYYYMMDD.
99	StopPx	N	The Stop loss trigger price. The tag is mandatory for Stop loss orders.
58	Text	Y	The value supplied in this field needs to be for a valid link to the trader's account. Max. 40 characters.
10048	InvestmentDecisionCountry	N	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.

Tag	Field Name	Req'd	Comments
10049	ExecutionDecisionCountry	N	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	DEA	Y	Indicates if the trader has a direct electronic access. Valid values: Y = The trader has direct electronic access N = The trader does not have direct electronic access.
10051	TradingCapacity	Y	Indicates the type of trading capacity. Valid values: 1 = DEAL (Dealing on own account) 2 = MTCH (Matched principal) 3 = AOTC (Any other capacity)
10052	ClientBranchCountry	N	A two character string to identify the country of the branch of the client Mandatory if tag 581 = AccountType is 1,3 or 7 For further details, refer to section 14
20023	CommodityDerivativeIndicator	Y	Indicates whether it is a commodity derivative. '0' – Trade is risk reducing '1' – Trade is NOT risk reducing For further details, refer to section 14
581	AccountType	Y	Specifies the type of account associated with the order. Valid values: 1 = Client ISA **(For Precious contracts only)** 2 = House 3 = Client OSA **(For Precious contracts only)** 7 = Gross OSA **(For Precious contracts only)**

Tag	Field Name	Req'd	Comments
	Standard Trailer	Y	Component block, see section 13.2

If the order is accepted by the trading system, an Execution Report message with ExecType = 0 (New) will be sent. Note that no Pending New message will be sent.

If the order is rejected by the trading system, an Execution Report message with ExecType = 8 (rejected) will be sent.

6.2.2 Order Cancel/Replace Request

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = G. Component block, see section 13.1
37	OrderID	N	Select order ID.
41	OrigClOrdID	Y	Original order identified as the order to be modified. It is the ID of the latest non-rejected order (not the initial order of the day).
11	ClOrdID	Y	Unique identifier set by the entering firm.
21	HandlInst	N	If this field is used it must be set to: 1 = Automated execution order, private, no Broker intervention.
	Parties	Y	Component block, see section 13.4
18	ExecInst	N	Valid values: S = Suspend (order is inactivated, removed from public view and not available for matching. It is however retained by the trading system and may be activated later). 2 = Work (order is activate, viewable and available for matching). Absence of this field indicates Work. An inactive order can be activated again by sending an OrderCancelReplaceRequest message with ExecInst (tag18) = Work (2).

Tag	Field Name	Req'd	Comments
111	MaxFloor	N	Visible order quantity used for iceberg orders. Not permitted for use with the Cash Settled Futures contracts as per the Decision Notice 20/283 issued on 18th December 2020
	Instrument	Y	Component block, see section 13.3
54	Side	Y	Must be same value as original order. Valid values: 1 = Buy 2 = Sell
60	TransactTime	Y	Time this order request was initiated by the trader. Format is YYYYMMDD-HH:mm:ss.SSS in 24H.
38	OrderQty	Y	New order quantity. Note: this is not the LeavesQty, but the new total quantity of the order.
529	OrderRestrictions	Y	Indicates if the order is entered either by an algo trader or a human. Valid values: D = Non-algorithmic (human) E = Algorithmic (algo)
40	OrdType	Y	The order type cannot change. 2 = Limit 4 = Stop Limit, defines the order type to be a stop loss
44	Price	Y	For an order in a carry contract, a "contango" price is expressed as a negative price and a "backwardation" price as positive.
5474	AbbreviatedPrice	N	Contains the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
59	TimeInForce	N	Valid values: 0 = Day 1 = Good 'til Cancel 3 = Immediate or Cancel 6 = Good 'til Date Good 'til Cancel and Good 'til Date are only available for Cash and 3M outright contracts.

Tag	Field Name	Req'd	Comments
			Absence of this field indicates Day.
126	ExpireTime	N	Conditionally required if TimeInForce = Good 'til Date and ExpireDate is not specified. Format is YYYYMMDD-HH:mm:ss in 24H. The date must be the current day.
432	ExpireDate	N	Conditionally required if TimeInForce = Good 'til Date and ExpireTime is not specified. Format is YYYYMMDD.
99	StopPx	N	The Stop loss trigger price. The tag is mandatory for Stop loss orders.
58	Text	Y	The value supplied in this field needs to be for a valid link to the trader's account. Max. 40 characters.
10048	InvestmentDecisionCountry	N	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.
10049	ExecutionDecisionCountry	N	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	DEA	Y	Indicates if the trader has a direct electronic access. Valid values: Y = The trader has direct electronic access N = The trader does not have direct electronic access.
10051	TradingCapacity	Y	Indicates the type of trading capacity. Valid values: 1 = DEAL (Dealing on own account) 2 = MTCH (Matched principal) 3 = AOTC (Any other capacity)
10052	ClientBranchCountry	N	A two character string to identify the country of the branch of the client.

Tag	Field Name	Req'd	Comments
			Mandatory if Tag 581 = AccountType is 1,3 or 7 For further details, refer to section 14
20023	CommodityDerivativeIndicator	Y	Indicates whether it is a commodity derivative. '0' – Trade is risk reducing '1' – Trade is NOT risk reducing For further details, refer to section 14
581	AccountType	Y	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 2 = House 3 = Client OSA 7 = Gross OSA
	Standard Trailer	Y	Component block, see section 13.2

6.2.3 Order Cancel Request

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = F. Component block, see section 13.1
41	OrigClOrdID	Y	Order identifier for the order to cancel. It is the ID of the latest non-rejected order (not the initial order of the day).
37	OrderID	N	Select order ID.
11	ClOrdID	Y	Unique identifier set by the entering firm.
	Instrument	Y	Component block, see section 13.3
54	Side	Y	Valid values: 1 = Buy 2 = Sell
60	TransactTime	Y	Time this order request was initiated. Format is YYYYMMDD-HH:mm:ss.SSS in 24H.

Tag	Field Name	Req'd	Comments
38	OrderQty	N	Order quantity must be equal to original order quantity. This field can also be skipped.
	Standard Trailer	Y	Component block, see section 13.2

6.2.4 Order Cancel Reject

The Order Cancel Reject message is issued by LMEselect upon receipt of an Order Cancel Request or Order Cancel/Replace Request message which cannot be honoured. When rejecting a Cancel/Replace Request (or Cancel Request), the Order Cancel Reject message will provide the ClOrdID which was specified on the Cancel/Replace Request (or Cancel Request) message for identification, and the OrigClOrdID will be that of the last accepted order (except in the case of CxlRejReason = "Unknown Order"). Tag 39 (OrdStatus)

If the Order Cancel Reject message is the response to an Order Cancel/Replace Request (434=2), tag 39 (OrdStatus) is set to 0 (New).

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 9. Component block, see section 13.1
37	OrderID	N	LMEselect order ID. Set by LMEselect if the client has included this field in the Order Cancel Request or Cancel Replace Request message. Otherwise it will be set to "NONE".
11	ClOrdID	Y	Unique identifier set by the entering firm.
41	OrigClOrdID	Y	Original order identified for the order to modify. It is the ID of the latest non-rejected order (not the initial order of the day)
39	OrdStatus	Y	Identifies current status of order. Valid values: 0 = New 1 = Partially Filled 2 = Filled 3 = Done for day 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected

Tag	Field Name	Req'd	Comments
			C = Expired E = Pending Replace
434	CxlRejResponseTo	Y	Identifies the type of request that an Order Cancel Reject (9) is in response to. Valid values: 1 = Order Cancel Request (F) 2 = Order Cancel/Replace Request (G)
102	CxlRejReason	N	Valid values: 0 = Too late to cancel 1 = Unknown order 2 = Broker Option 3 = Order already in Pending Cancel or Pending Replace Status 6 = Duplicate ClOrderID (11) received 99 = Other
58	Text	N	A text description of the reject reason.
	Standard Trailer	Y	Component block, see section 13.2

6.2.5 Order Status Request

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = H. Component block, see section 13.1
11	ClOrdID	Y	The ClOrdID (11) of the order whose status is being requested.
	Instrument	Y	Component block, see section 13.3
54	Side	Y	Valid values: 1 = Buy 2 = Sell
	Standard Trailer	Y	Component block, see section 13.2

6.2.6 Execution Report

Trades are anonymous, i.e. trades are disseminated without information regarding counter parties of the trade. According to that requirement the FIX Execution Report will also be made anonymous. Anonymity means that the tag 382 (NoContraBrokers) will not be present within the message.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 8. Component block, see section 13.1
10022	SelectTradeID	N	The TradeID in the LMEselect system. Example value TAAA20100331X0000001.
37	OrderID	Y	A unique order identifier set by the trading system. This identifier is not changed by cancel/replace messages; it will remain the same for all chain of orders. If the order is rejected the ID will be "NONE".
11	ClOrdID	Y	The identifier of the message that caused this Execution Report. Will be "NONE" for orders entered from the trading client.
452	**Parties**	Y	Component block, see section 13.4
41	OrigClOrdID	N	If this execution is an answer to a cancel/replace request, this field holds the identifier of the order that was replaced.
17	ExecID	Y	Unique identifier of execution message.
19	ExecRefID	N	Reference identifier used with Trade Cancel and Trade Correct execution types.
150	ExecType	Y	Describes the specific Execution Report. Valid values: 0 = New 3 = Done 4 = Cancelled 5 = Replace 6 = PendingCxl 8 = Rejected 9 = Suspend C = Expired D = Restated E = PendingReplace

Tag	Field Name	Req'd	Comments
			F = Trade H = Trade Cancel I = Order Status L = Triggered or Activated by the System
111	MaxFloor	N	Visible order quantity used for iceberg orders. Not permitted for use with the Cash Settled Futures contracts as per the Decision Notice 20/283 issued on 18th December 2020
39	OrderStatus	Y	Valid values: 0 = New 1 = Partially Filled 2 = Filled 3 = Done for day 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected C = Expired E = Pending Replace
529	OrderRestrictions	Y*	Indicates if the order is entered either by an algo trader or a human. Valid values: D = Non-algorithmic (human) E = Algorithmic (algo)
40	OrdType	Y*	2 = Limit 4 = Stop limit, defines the order type to be a stop loss
103	OrdRejReason	N	Set if ExecType = 8 (rejected) Valid values: 0 = Other 1 = Unknown Symbol 2 = Exchange Closed 3 = Order Exceeds Limit 5 = Unknown Order 6 = Duplicate Order 13 = Incorrect Quantity 15 = Unknown Account(s)
378	ExecRestatementReason	N	Valid values: 1 = GT renewal / restatement 99 = Other

Tag	Field Name	Req'd	Comments
	Instrument	Y	Component block, see section 13.3
54	Side	Y	Valid values: 1 = Buy 2 = Sell
60	TransactTime	Y	Time of event. Format is YYYYMMDD-HH:mm:ss.SSS in 24H in UTC.
38	OrderQty	Y	The order quantity. Note: this is not the remaining volume of the order. The remaining volume is given in the LeavesQty field.
44	Price	Y	The order price. For orders in carry contracts, a "contango" price is expressed as a negative price and a "backwardation price" as a positive price.
5474	AbbreviatedPrice	N	Contains the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
99	StopPx	N	The Stop loss trigger price. The tag is mandatory for Stop loss orders.
59	TimeInForce	Y	Valid values: 0 = Day 1 = Good 'til cancel 3 = Immediate or cancel 6 = Good 'til Date 8 = Good 'til ring 1. Note that this value can only be set via GUI on new orders.
126	ExpireTime	N	Conditionally required if TimeInForce = Good 'til Date and ExpireDate is not specified. Format is YYYYMMDD-HH:mm:ss in 24H. The date must be the current day.
432	ExpireDate	N	Conditionally required if TimeInForce = Good 'til Date and ExpireTime is not specified. Format is YYYYMMDD.
18	ExecInst	Y*	Valid values: S = Suspend (order is inactivated, removed from public view and not available for

Tag	Field Name	Req'd	Comments
			matching. It is, however, retained by the trading system and may be activated later). 2 = Work (order is active, viewable and available for matching). 5 = Held (order is delayed and not available for matching). For LMEprecious contracts only.
32	LastQty	N	Set if ExecType = F (Trade). The total volume of this trade.
31	LastPx	N	Set if ExecType = F (Trade). The price of this trade.
151	LeavesQty	Y	The quantity is open for further execution. The following will always be equal: OrderQty – CumQty.
14	CumQty	Y	The quantity of the order that has been executed so far.
6	AvgPx	Y	The average price (volume-weighted) for all the trades this order has filled.
797	CopyMsgIndicator	N	Indicates whether or not this message is a drop copy of another message.
277	Trade Condition	N	Space-delimited list of conditions describing a trade. Valid values: 1 = Implied Trade (trade as a result of an implied order being executed). Applicable to LMEprecious and base metal contracts.
58	Text	Y	Contains the value supplied in this field on the order, which would have provided a valid link to the trader's account.
555	NoLegs	N	Set if ExecType = F (Trade) and the trade is done in a multi-leg carry, an average contract,

Tag	Field Name	Req'd	Comments
			metal options or metal option strips. (See section "Multi-leg contracts" for details).
→ 600	LegSymbol	N	A two-letter string describing the metal or index for this leg. This is the start tag for the representing group and is mandatory if NoLegs > 0.
→ 608	LegCFICode	N	Describes the type of contract this leg represents.
→ 10005	LegPromptType	N	Describes what kind of prompt type that this leg uses.
→ 10002	LegMaturityRollingPrompt	N	Required if LegPromptType='R'. Valid values: TOM = Tomorrow C = Cash 3M = 3 Months
→ 611	LegMaturityDate	N	Mandatory if LegPromptTypre="S". Used for daily, weekly and monthly contracts. Represents the prompt date for futures, plus expiration date for options and TAPO's.
→ 624	LegSide	N	Represent whether the trade in the leg was a buy or sell.
→ 10003	LegLastQty	N	Represents the trade quantity for this leg.
→ 10055	LegAbbreviatedPrice	N	Represents the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP for this leg.
→ 637	LegLastPx	N	Represents the trade price for this leg.
10048	InvestmentDecisionCountry	N	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.

Tag	Field Name	Req'd	Comments
10049	ExecutionDecisionCountry	N	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	DEA	Y*	Indicates if the trader has a direct electronic access. Valid values: Y = The trader has direct electronic access N = The trader does not have direct electronic access.
10051	TradingCapacity	Y*	Indicates the type of trading capacity. Valid values: 1 = DEAL (Dealing on own account) 2 = MTCH (Matched principal) 3 = AOTC (Any other capacity)
10052	ClientBranchCountry	N	A two character string to identify the country of the branch of the client. For further details, refer to section 14
20023	CommodityDerivativeIndicator	Y*	Indicates whether it is a commodity derivative. '0' – Trade is risk reducing '1' – Trade is NOT risk reducing For further details, refer to section 14
1057	AggressorIndicator	N	Indicates if a matching order is an aggressor or not in the trade. Y = Aggressor N = Passive
581	AccountType	N	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 2 = House 3 = Client OSA 7 = Gross OSA
	Standard Trailer	Y	Component block, see section 13.2

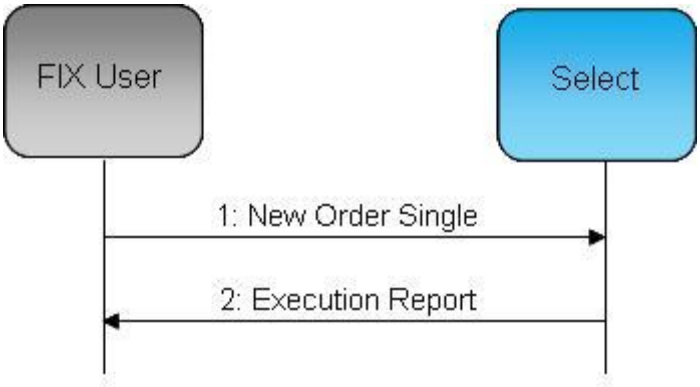
In LMEselect, busted trades will be sent out. Two messages are affected - the Execution Report and Market Data Message. In the Execution Report a busted trade will have the tag 150 (ExecType) set to H (Trade Cancel).

*Note: The following tags are not mandatory in the Execution Report where an order is rejected by the server

- Tag 18 (ExecInst)
- Tag 40 (OrdType)
- Tag 529 (Order Restrictions)
- Tag 10050 (DEA)
- Tag 10051 (Trading Capacity)
- Tag 20023 (Commodity Derivative Indicator)

6.3 Workflows

6.3.1 Enter Order



Msg	OrdID	ClOrdID	ExecType	OrdStatus
-> 1 New Order - Single	-	001	-	-
<- 2 Execution Report	ON-AA-20100209-000001	001	New	New

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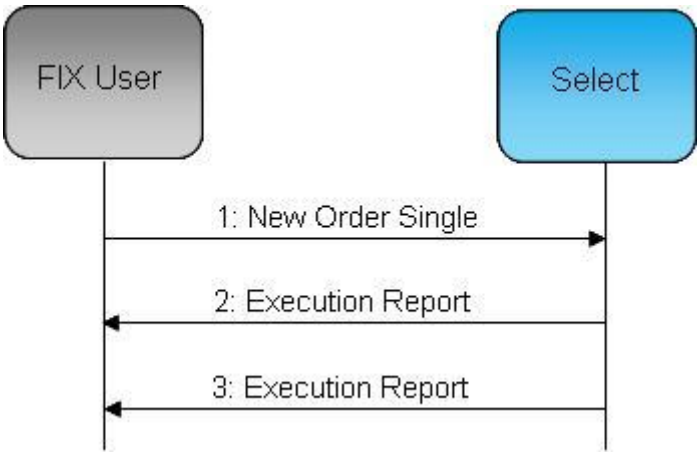
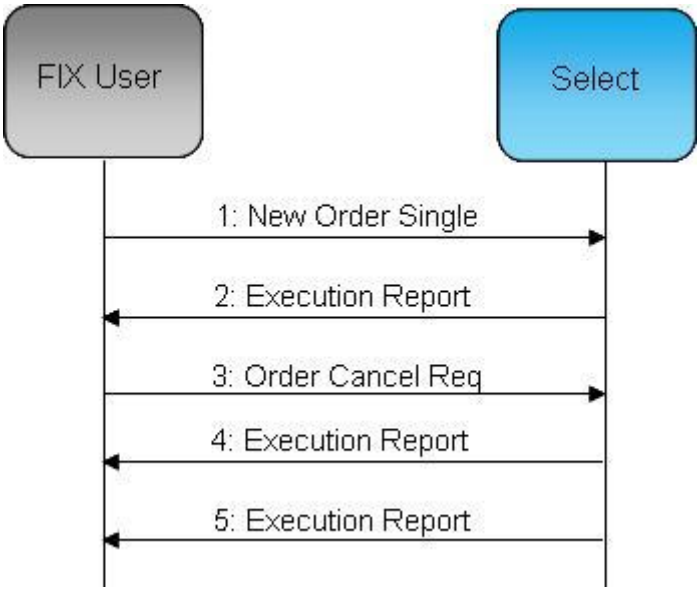
6.3.2 Enter Order (match)



Msg	OrdID	ClOrdID	ExecType	OrdStatus
-> 1 New Order - Single	-	002	-	-
<- 2 Execution Report	ON-AA-20100209-000002	002	New	New
<- 3 Execution Report	ON-AA-20100209-000002	002	Trade	Filled

6.3.3 Cancel Order



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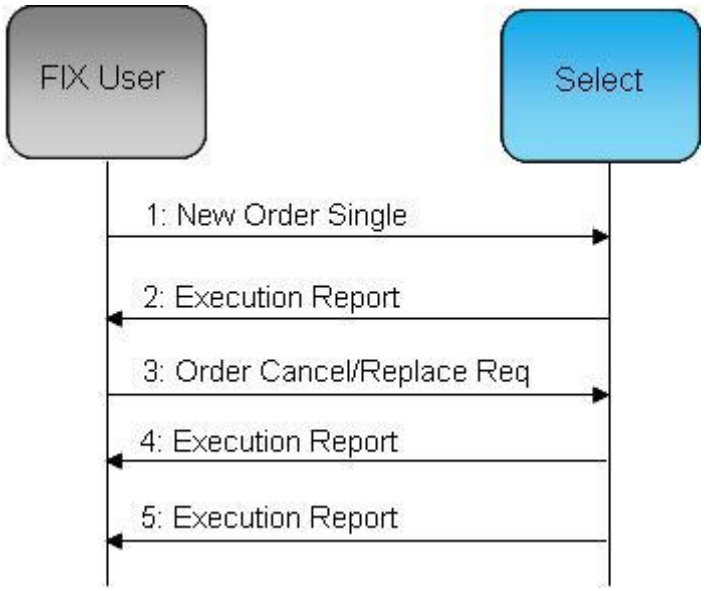
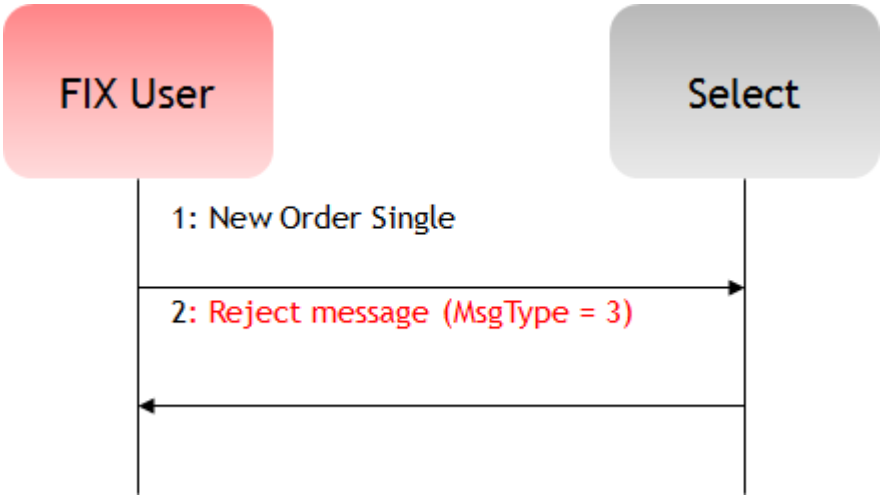
Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus
-> 1 New Order - Single	-	-	003	-	-
<- 2 Execution Report	-	ON-AA-20100209-000003	003	New	New
-> 3 Order Cancel Req	003	-	004	-	-
<- 4 Execution Report	003	ON-AA-20100209-000003	004	PendingCxl	Pending Cancel
<- 5 Execution Report	003	ON-AA-20100209-000003	004	Cancelled	Cancelled

6.3.4 Cancel Replace Order



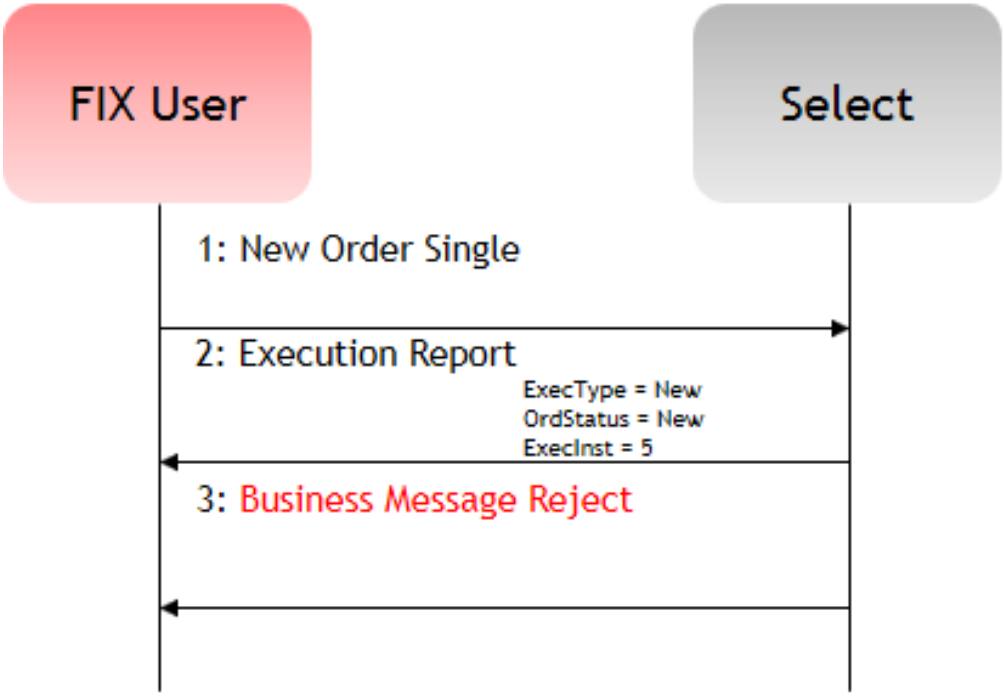
Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus
-> 1 New Order - Single	-	-	005	-	-
<- 2 Execution Report	-	ON-AA-20100209-000004	005	New	New
-> 3 Order Cancel/Replace Request	005	-	006	-	-
<- 4 Execution Report	005	ON-AA-20100209-000004	006	PendingReplace	PendingRep
<- 5 Execution Report	005	ON-AA-20100209-000004	006	Replaced	New

6.3.5 New Order –> Session level reject (Speed Bumps)



Msg	OrdID	ClOrdID	ExecType	OrdStatus	MsgType
-> 1 New Order - Single	-	007	-	-	-
<- 2 Reject Message	-	-	-	-	3

6.3.6 New Order –> Business level reject (Speed Bumps)



Msg	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	008	-	-	-
<- 2 Execution Report	ON-AU-20100209-000005	008	New	New	5
<- 3 Business Message Reject	-	-	-	-	-

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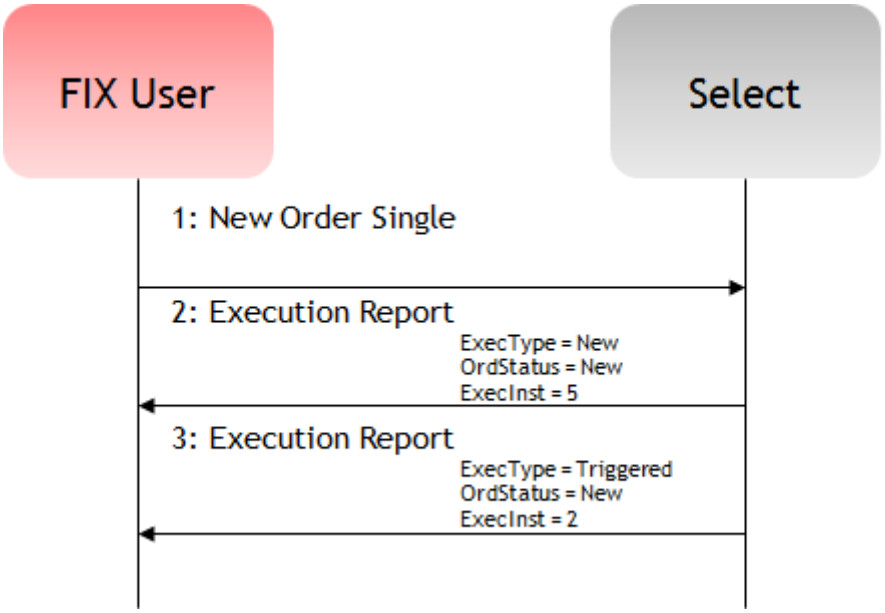
6.3.7 New Order - Delayed OK (Speed Bumps)



Msg	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	009	-	-	-
<- 2 Execution Report	ON-AU-20100209-000006	009	New	New	5
<- 3 Execution Report	ON-AU-20100209-000006	009	Triggered	New	2

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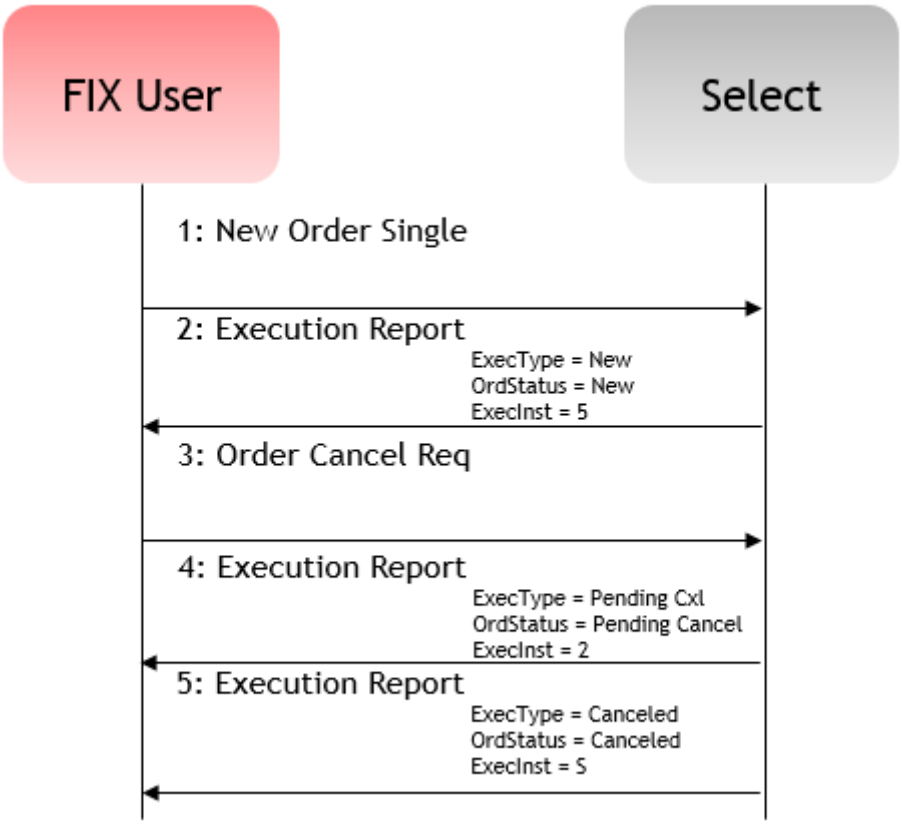
6.3.8 New Order - In Delay -> Cancel Order (Speed Bumps)



Msg	OrigClOrd ID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	-	010	-	-	-
<- 2 Execution Report	-	ON-AU-20100209-000007	010	New	New	5
-> 3 Order Cancel Req	010	-	011	-	-	-
<- 4 Execution Report	010	ON-AU-20100209-000007	011	PendingCxl	Pending Cancel	2
<- 5 Execution Report	010	ON-AU-20100209-000007	011	Cancelled	Cancelled	S

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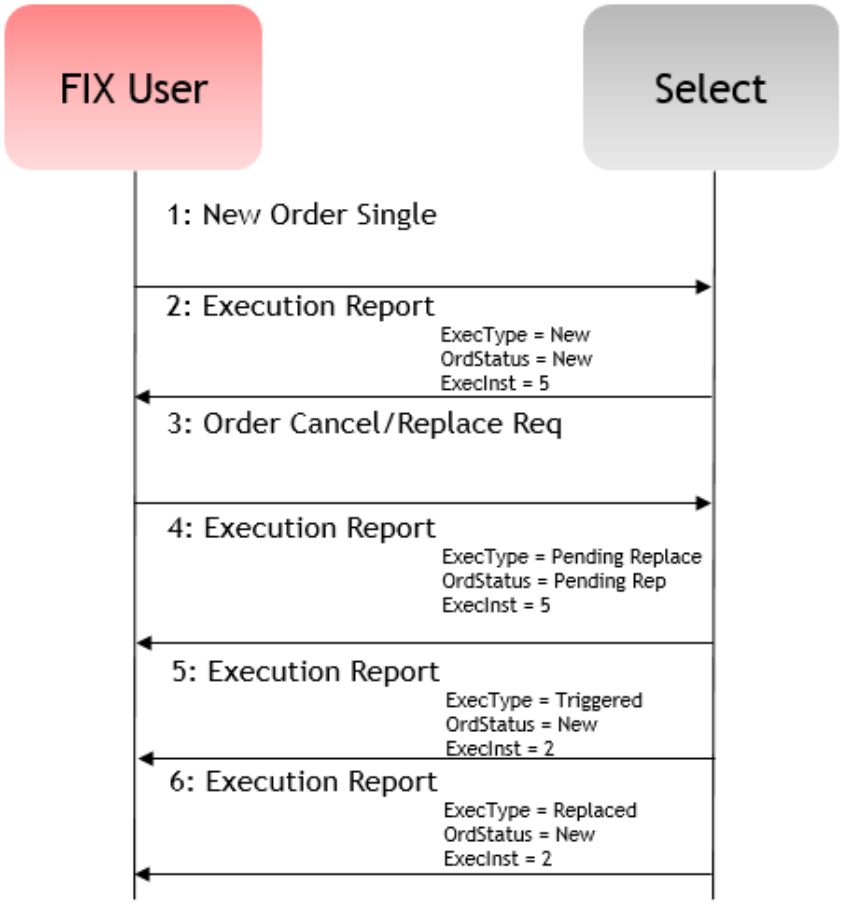
6.3.9 New Order – In Delay - > Cancel/Replace Req (Speed Bumps)



Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	-	012	-	-	-
<- 2 Execution Report	-	ON-AU-20100209-000008	012	New	New	5
-> 3 Order Cancel/Replace Req	012	-	013	-	-	-
<- 4 Execution Report	012	ON-AU-20100209-000008	013	PendingReplace	PendingRep	5
<- 5 Execution Report	012	ON-AU-20100209-000008	013	Triggered	New	2

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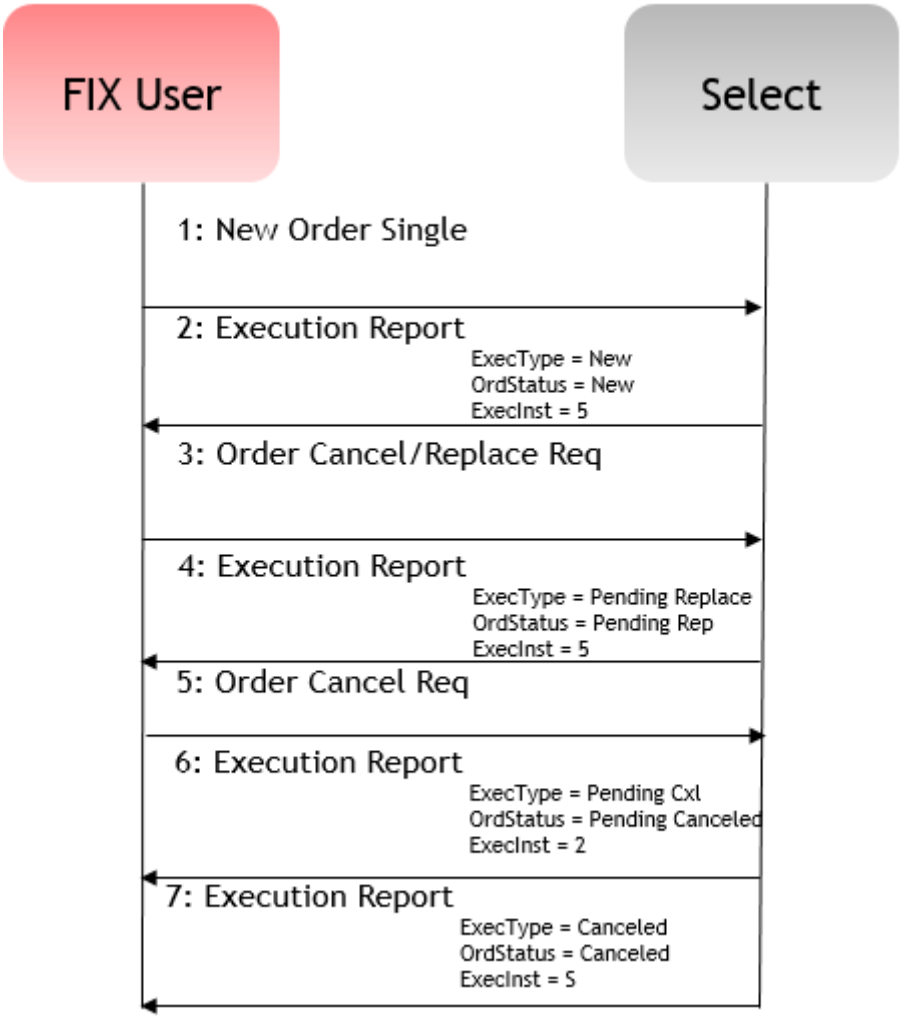
Msg	OrigClOrd ID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
<- 6 Execution Report	012	ON-AU-20100209-000008	013	Replaced	New	2

6.3.10 New Order -> In Delay ->Cancel/Replace req -> Cancel req (Speed Bumps)



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Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	-	014	-	-	-
<- 2 Execution Report	-	ON-AU-20100209-000009	014	New	New	5
-> 3 Order Cancel/Replace Req	014	-	015	-	-	-
<- 4 Execution Report	014	ON-AU-20100209-000009	015	PendingReplace	PendingRep	5
-> 5 Order Cancel Req	015	-	016	-	-	-
<- 6 Execution Report	015	ON-AU-20100209-000009	016	Pending Cxl	Pending Cancelled	2
<- 7 Execution Report	015	ON-AU-20100209-000009	016	Cancelled	Cancelled	S

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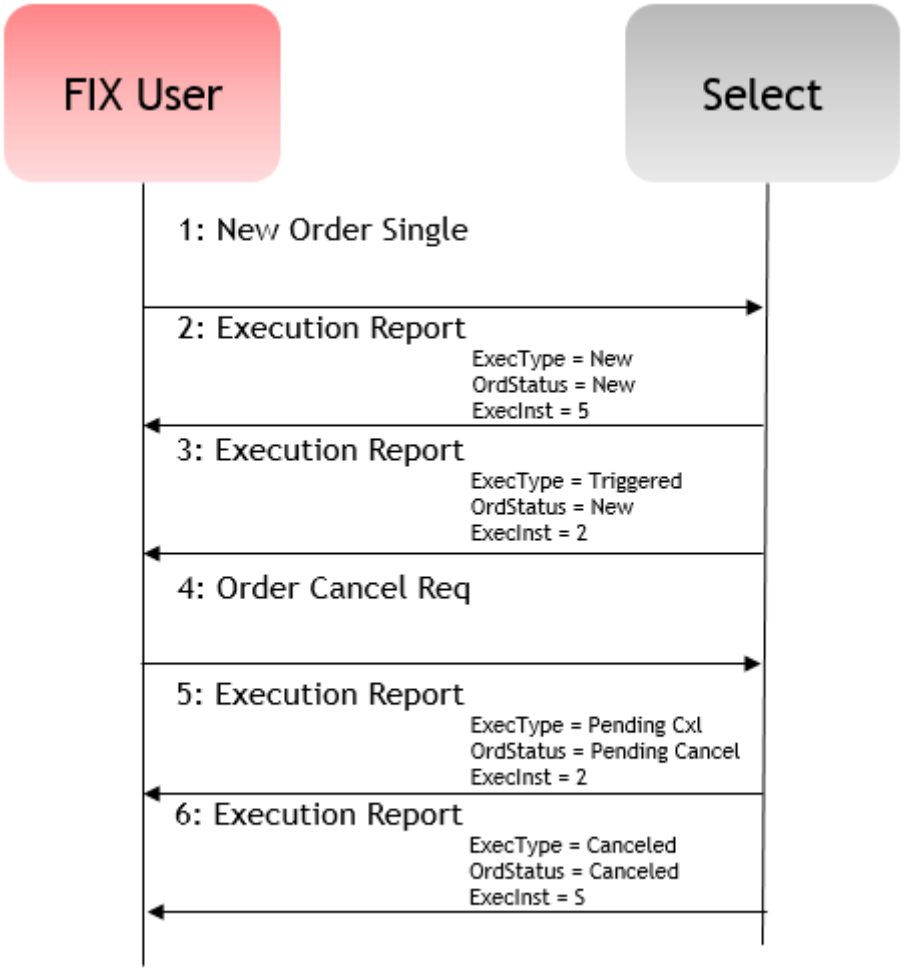
6.3.11 New Order -> Already Delay ->Cancel req (Speed Bumps)



Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	-	017	-	-	-
<- 2 Execution Report	-	ON-AU-20100209-000010	017	New	New	5
<- 3 Execution Report	-	ON-AU-20100209-000010	017	Triggered	New	2
-> 4 Order Cancel Req	017	-	018	-	-	-
<- 5 Execution Report	017	ON-AU-20100209-000010	018	Pending Cxl	Pending Cancel	2

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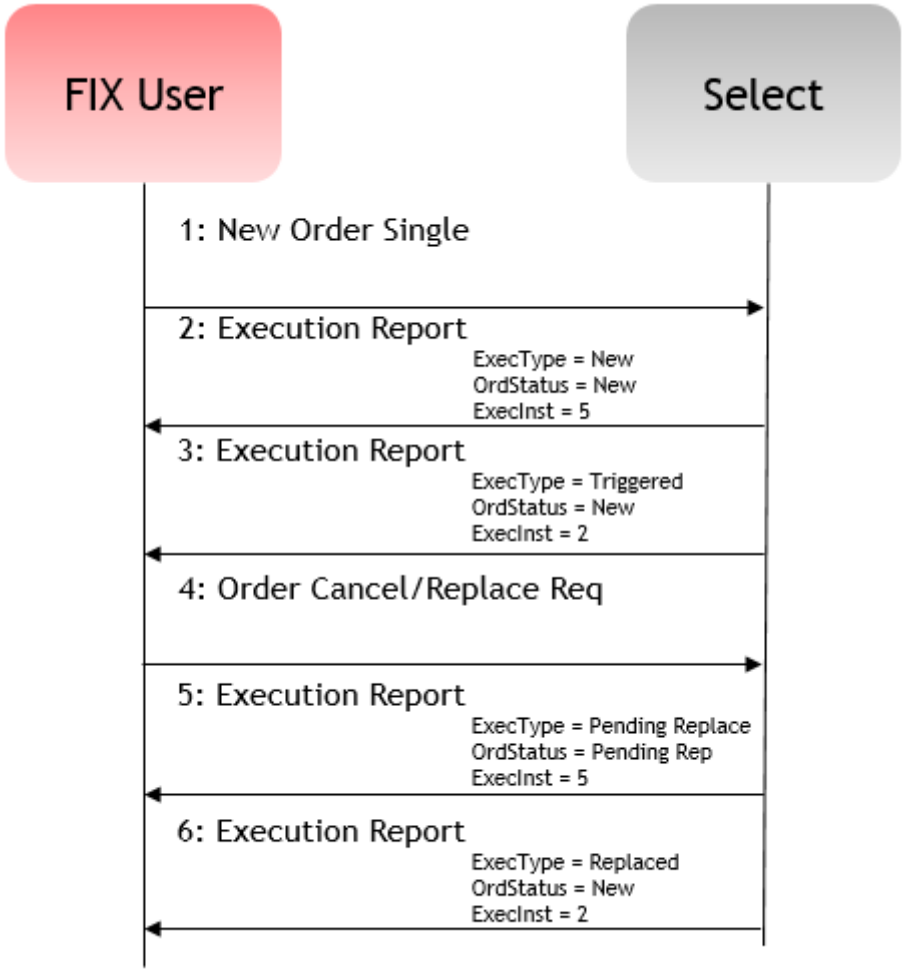
Msg	OrigClOrd ID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
<- 6 Execution Report	017	ON-AU-20100209-000010	018	Cancelled	Cancelled	S

6.3.12 New Order -> Already Delay ->Cancel/Replace req (Speed Bumps)



Msg	OrigClOrd ID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	-	019	-	-	-
<- 2 Execution Report	-	ON-AU-20100209-000011	019	New	New	5

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Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
<- 3 Execution Report	-	ON-AU-20100209-000011	019	Triggered	New	2
-> 4 Order Cancel/Replace Req	019	-	020	-	-	-
<- 5 Execution Report	019	ON-AU-20100209-000011	020	Pending Replace	Pending Rep	5
<- 6 Execution Report	019	ON-AU-20100209-000011	020	Replaced	New	2

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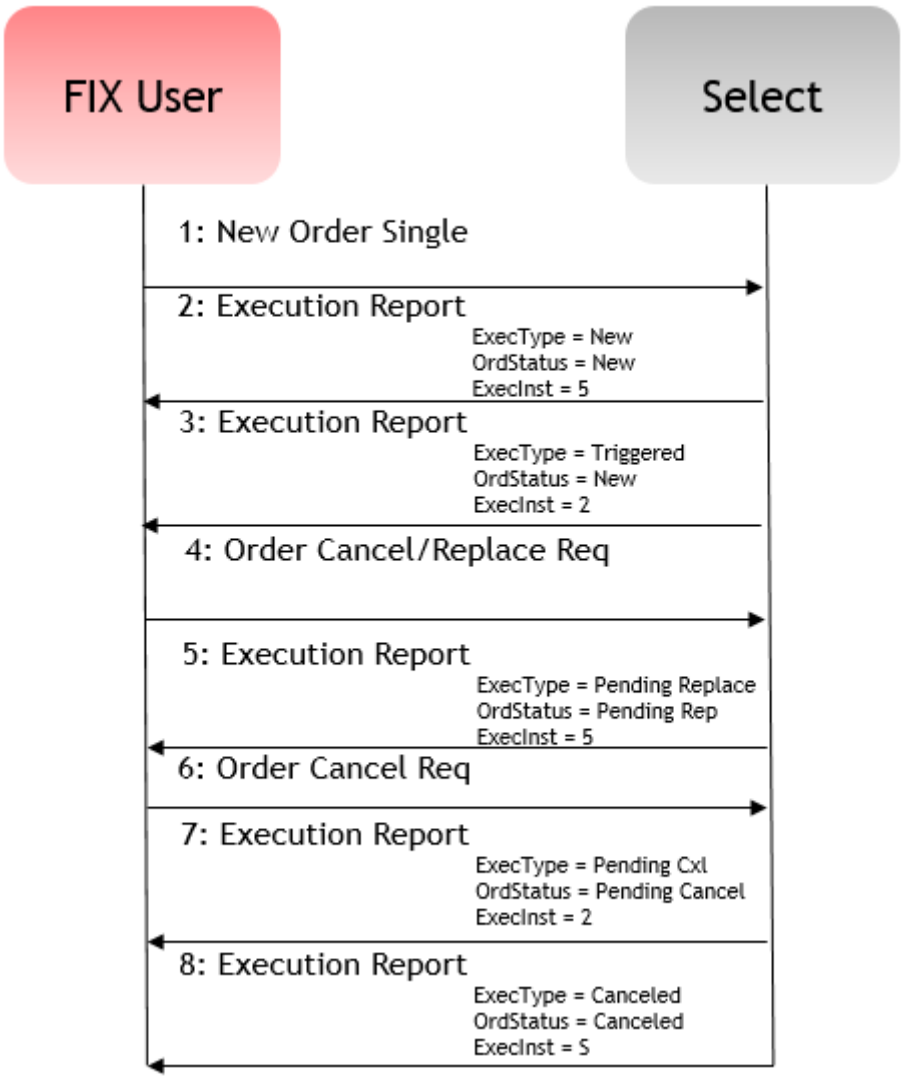
6.3.13 New Order -> Already Delay ->Cancel/Replace req-> Cancel req (Speed Bumps)



Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
-> 1 New Order - Single	-	-	021	-	-	-
<- 2 Execution Report	-	ON-AU-20100209-000012	021	New	New	5
<- 3 Execution Report	-	ON-AU-20100209-000012	021	Triggered	New	2
-> 4 Order	021	-	022	-	-	-

Msg	OrigClOrdID	OrdID	ClOrdID	ExecType	OrdStatus	ExecInst
Cancel/Replace Req						
<- 5 Execution Report	021	ON-AU-20100209-000012	022	Pending Replace	Pending Rep	5
-> 6 Order Cancel Req	022	-	023	-	-	-
<- 7 Execution Report	022	ON-AU-20100209-000012	023	Pending Cxl	Pending Cancel	2
<- 8 Execution Report	022	ON-AU-20100209-000012	023	Cancelled	Cancelled	S

7 News

7.1 Business Message Types

FIX Message Name	Type	Dir.	Comment	Authorized User Type
News	B	Out	The news message is a general free format message from the exchange to the broker. The FIX News messages implement the FIX Market Messages requirements. For example, LME Select Market Messages are distributed via FIX as News messages. Each user logged on will receive all market messages.	T + MD + DC + MDV + MDVCCP

7.2 Message Details

7.2.1 News Message

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = B. Component block, see section 13.1
148	Headline	Y	Headline text.
33	LinesOfText	Y	Identifies number of lines of text body.
→ 58	Text	N	Free text field.
	Standard Trailer	Y	Component block, see section 13.2

8 Security List

8.1 Business Message Types

FIX Message Name	Type	Dir.	Comment	Authorized User Type
Security List Request	x	In	The Security List Request message is used to request a list of securities from the LME that match criteria provided on the request.	T + MD + DC + MDV + MDVCCP
Security List	y	Out	The Security List is used to return a list of securities that match criteria provided on the request or reject of an incoming request.	T + MD + DC + MDV + MDVCCP

8.1.1 Maturity Rolling Prompt

Valid values for MaturityRollingPrompt (tag 10000) are:

- TOM (Tomorrow) – this prompt date represents tomorrow.
- C (Cash) – this prompt date represents the day after tomorrow.

- 3M (Three months) – this prompt date represents the date three months from today.
- 15M (15 months) - the monthly contract that falls in the month 15 months from the current month.
- 27M - the monthly contract that falls in the month 27 months from the current month.
- 63M - The monthly contract that falls in the month 63 months from the current month.
- 123M - The monthly contract that falls in the month 123 months from the current month.
- D – Day.
- W – Week.
- M – Month.
- Q – Average.
- N1 (Near 1) - The earliest monthly prompt that falls between the CASH and 3M dates.
- N2 (Near 2) - The second earliest monthly prompt that falls between the CASH and 3M dates.
- N3 (Near 3) - The third earliest monthly prompt that falls between the CASH and 3M dates.
- F1 (Far 1) - The earliest monthly prompt that fall after the 3M date.
- F2 (Far 2) - The second earliest monthly prompt that fall after the 3M date.
- F3 (Far 3) - The third earliest monthly prompt that fall after the 3M date.

8.2 Message Details

8.2.1 Security List Request

Security list can be requested for a specific symbol or for all symbols. With a successful Security List Request, LMEselect will send one Security List message per symbol.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = x. Component block, see section 13.1
320	SecurityReqID	Y	Unique identifier will be returned in Security List message.
559	SecurityListRequestType	Y	Type of Security List Request being made. Valid values: 0 = Symbol 4 = All Securities
55	Symbol	N	The symbol: e.g. CA. Required if SecurityListRequestType = 0

75	TradeDate	N	To request securities valid for a specific trade date (if absent current date is assumed). Format is YYYMMDD.
	Standard Trailer	Y	Component block, see section 13.2

8.2.2 Security List

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = y. Component block, see section 13.1
320	SecurityReqId	Y	Identifier supplied by the requestor in the Security List Request.
322	SecurityResponseID	Y	Identifier for the Security List message supplied by the server.
560	SecurityRequestResult	Y	Status of request. Valid values: 0 = Valid request 1 = Invalid request 2 = No instruments found
893	LastFragment	N	Indicates if this message is the last message in a fragmented response. Only used when 'All Securities' were requested. Valid values: Y = Last message N = Not last message
10027	NoOfMonthlyContracts	N	The total number of monthly contracts for the symbol.
146	NoRelatedSym	Y	Specifies the number of repeating symbols (contracts) specified.
→ 55	Symbol	Y	The symbol: E.g. CA
→ 15	Currency	Y	The currency will always be USD.

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Tag	Field Name	Req'd	Comments
→ 461	CFICode	N	The type of contract: E.g. FCEPS, FFICS. See section 6.1.2 for valid values.
→ 10004	Prompt Type	N	Defines what prompt type that is to be used. Valid values: S = Single Prompt Date R = Rolling Prompt Date A = Average Prompt Date
→ 541	Maturity Date	N	Required if PromptType = 'S'. Used for daily, weekly and monthly contracts. Represents: • Prompt date for futures • Expiration date for options and TAPO's (YYYYMMDD)
→ 10000	MaturityRollingPrompt	N	Required if PromptType='R' and for some particular prompts where PromptType='S'. Valid values: TOM = Tomorrow C = Cash 3M = 3 Months 15M = 15 Months 27M = 27 Months 63M = 63 Months 123M = 123 Months D = Day W = Week M = Month Q = Average N1 = Near 1 N2 = Near 2 N3 = Near 3 F1 = Far 1 F2 = Far 2 F3 = Far 3
→ 10011	RollingPromptDate	N	Required if prompt type = 'R'. Used for TOM, C and 3M.
→ 10001	MaturityAveragePrompt	N	Required if PromptType='A'. Used for average contracts.

Tag	Field Name	Req'd	Comments
			Valid values are, for example, "3Q11" for quarterly contracts, "2H12" for half-year contracts and "1Y11" for year contracts.
→ 10026	IsMonthlyContract	N	Will be set to 'Y' for all monthly contracts and omitted for all other contracts.
→ 5474	AbbreviatedPrice	N	Contains the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
→ 10006	SecurityStrikeType	N	Valid values: S = Single T = Table
→ 10007	NoStrikeTableRows	N	Number of strike rows.
→ 10008	→ StrikeLowLimit	N	Low limit for strike price.
→ 10009	→ StrikeGraduation	N	Graduation for strike price.
58	Text	N	Free text field.
	Standard Trailer	Y	Component block, see section 13.2

9 Security Status

9.1 Business Message Types

FIX Message Name	Type	Dir.	Comment	Authorized User Type
Security Status Request	e	In	The Security Status Request message is a request for either a snapshot, snapshot + subscribe or unsubscribe on the security status messages for the given underlying. An invalid Security Status Request message will produce a Reject message.	MD + MDV + MDVCCP

Security Status	f	Out	Sent as a reply to a Security Status Request. A Security Status message gives the current trading state.	MD + MDV + MDVCCP

9.2 Message Details

9.2.1 Security Status Request

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = e. Component block, see section 13.1
324	SecurityStatusReqID	Y	Identifier that will be returned in the Security Status messages. Must be unique for subscriptions. E.g. If SubscriptionRequestType = 1. SecurityStatusReqID must be the same as the subscription you want to unsubscribe to.
55	Symbol	Y	The symbol: e.g. CA
263	SubscriptionRequestType	Y	Valid values: 0 = Snapshot 1 = Snapshot + Subscribe 2 = Unsubscribe
	Standard Trailer	Y	Component block, see section 13.2

9.2.2 Security Status

A Security Status message gives the trading state. The following states constitute the complete set of trading states at LME:

Trading State	SecurityTradingStatus (326)	Text (58)
Init	NotAvail (18)	Init
Pre-Open	Ready (17)	Pre-Open
Open	Ready (17)	Open

Trading State	SecurityTradingStatus (326)	Text (58)
Post Trade	NotAvail (18)	Post Trade
Closed	NotAvail (18)	Closed
Trade halt	TrdHalt (2)	Trade halt
Trade	Resume (3) Ready (17)	Trade halt Pre-OpenTH
No Session	NotAvail (18)	None
R1	Ready (17)	Morning Ring 1
R2	Ready (17)	Morning Ring 2
K1	Ready (17)	Morning Kerb
R3	Ready (17)	Afternoon Ring 1
K2	Ready (17)	Afternoon Kerb

Security Status messages are sent per contract from LMEselect. Messages are not sent out for contracts that have not yet been created by the system. When a snapshot is requested, one Security Status message will be sent out for each created contract for the given underlying commodity.

If the subscription request type is set to 1 (Snapshot + Subscribe), a Security Status message is sent out when a new contract is created for the underlying.

At the LME, most contracts within the same underlying are usually in the same trading state. The exceptions are for contracts that are running on their last trading day schedule and for contracts that are running on a temporary trading schedule, i.e. when a state transition to a new trading state has been manually initiated by a Service Desk user for either an underlying commodity or a contract group within a commodity.

It is notable that Security Status messages are sent per underlying from MOIC and that only Symbol (tag 55) is used in the Instrument component block.

For example, at 15:00 the AA future with prompt date TOM is in the CLOSED state, while the other contracts in that underlying are in the state OPEN.

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Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = f. Component block, see section 13.1
324	SecurityStatusReqID	N	Unique ID, taken from the request.
	Instrument	N	Component block, see section 13.3
5474	AbbreviatedPrice	N	Contains the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
326	SecurityTradingStatus	N	Identifies the trading status applicable to the transaction. Valid values: 2 = TrdHalt 3 = Resume 17 = Ready 18 = Not Avail
327	HaltReason	N	Denotes the reason for the Trading Halt. Valid values: X = Equipment Changeover M = Additional Information
58	Text	N	Contains the name of the trading state.
10037	MDEntrySession	N	This identifies the ring trading session. Valid values: R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 = Morning kerb session K2 = Afternoon kerb session N = No session
10035	MDSource	N	Data source system. Valid values: RK = Ring & Kerb EL = Electronic Trading (from LMEselect system) MT = Matched Trades CH = Clearing House EX = Exchange (any other LME published data which falls outside the other categories).
	Standard Trailer	Y	Component block, see section 13.2

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10 Drop Copy

10.1 Business Message Types

FIX Message Name	Type	Dir.	Comment	Authorized User Type
Trade Capture Report Request	AD	In	The Trade Capture Report Request message is used to make a request for Trade Capture Reports to be sent to the client that matches the criteria specified in the request. Each Trade Capture Report will contain one trade execution. Each request could yield zero, one or more Trade Capture Reports depending on the criteria. A member can only receive Trade Capture Reports for trade executions that he is a party of. Trade Capture Reports will be available for the last five trading days.	DC
Trade Capture Report Request Ack	AQ	Out	Sent as a reply to Trade Capture Report Request if no trades matched the provided search criteria.	DC
Trade Capture Report	AE	Out	Sent as a reply to a Trade Capture Report Request	DC

10.1.1TradeReportID

The TradeReportID (tag 571) is a unique identifier of Trade Capture Report messages. In LMEselect 9 it will have the following format when representing a trade:

SelectTradeID<char>

Where Select Trade ID = TA<underlying><tradeDate>X<sequence number>

For example, a trade in underlying ‘AA’ on 15 Nov 2017 will have the following TradeReportID:
TAAA20171115X0000049A for one side and
TAAA20171115X0000049B for the other side

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10.2 Message Details

10.2.1 Trade Capture Report Request

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = AD. Component block, see section 13.1
568	TradeRequestID	Y	Identifier for the trade request.
569	TradeRequestType	Y	Valid values: 0 = All Trades 1 = Matches Trades All Trades (0) and Matched Trades (1) will generate the same result since all trades in LMEselect 9 are matched.
	Parties	N	Component block, see section 13.4 Must be filled in to request trades for GUI users.
	Instrument	N	Component block, see section 13.3
5474	AbbreviatedPrice	N	This tag should be included with the Instrument block, to request trade for a specific Trade at Settlement contract. Valid values TS, TC, TA, TN, TP
580	NoDates	N	Today if not set. Must be 1 or 2 specified. First is start date, second is end date (or today if set).
→ 75	TradeDate	N	To request trade from a specific date. Format is YYYYMMDD.
→ 60	TransactTime	N	Time criteria; get trade execution that happened after this time. If absent YYYY<<DD-00:00:00.000 is assumed, Format is YYYYMMDD-HH:mm:ss.SSS in 24H.
	Standard Trailer	Y	Component block, see section 13.2

A user can only have one outstanding trade capture request in the system at the time.

10.2.2 Trade Capture Report Request Ack

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = AQ. Component block, see section 13.1
568	TradeRequestID	Y	Identifier for the trade request.
569	TradeRequestType	Y	Valid value is: 1 = Matched Trades
748	TotalNumTradeReports	N	Total number of trade reports returned.
749	TradeRequestResult	Y	Valid values: 0 = Successful 1 = Invalid or unknown instrument 8 = TradeRequestType not supported 9 = Unauthorized for Trade Capture Report Request 99 = Other
750	TradeRequestStatus	Y	Valid values: 0 = Accepted 1 = Completed 2 = Rejected
	Instrument	N	Component block, see section 13.3
	Standard Trailer	Y	Component block, 13.2

10.2.3 Trade Capture Report

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = AE. Component block, see section 13.1
571	TradeReportID	Y	Identifier for the Trade Capture Report that is unique within LMEselect.
568	TradeRequestID	N	ID taken from the request.
150	ExecType	N	Valid values: F = Trade H = Trade Cancel

Tag	Field Name	Req'd	Comments
912	LastRptRequested	N	Indicates if this is the last report in the response to a Trade Capture Report Request (AD). Only used in response to Trade Capture Report Request. The last message will have LastRptRequested = Y and all previous messages will be set to N.
570	PreviouslyReported	Y	The value here will always be N (false).
10022	SelectTradeID	Y	Example value TAAA20100331X0000001.
	Instrument	Y	Component block, see section 13.3
32	LastQty	Y	Trade quantity.
31	LastPx	Y	Trade price.
5474	AbbreviatedPrice	N	Contains the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
75	TradeDate	Y	Format is YYYYMMDD.
555	NoLegs	N	Set if ExecType = F (Trade) and the trade is done in a multi-leg contract such as a carry, an average contract, metal options or metal option strips. (See section 6.1.4 Execution Reports for Multi-Leg Contracts for details).
→ 600	LegSymbol	N	A two-letter string describing the metal or index for this leg. This is the start tag for the repeating group and is mandatory if NoLegs > 0.
→ 608	LegCFICode	N	Describes the type of contract this leg represents.
→ 10005	LegPromptType	N	Describes what kind of prompt type that this leg uses. Valid values: S = Single Prompt Date R = Rolling Prompt Date A = Average Prompt Date

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Tag	Field Name	Req'd	Comments
→ 10002	LegMaturityRollingPrompt	N	Required if LegPromptType="R". Valid values: TOM = Tomorrow C = Cash 3M = 3 Months
→ 611	LegMaturityDate	N	Mandatory if LegPromptType="S". Used for daily, weekly and monthly contracts. Represents the prompt date for futures and the expiration date for options and TAPO's.
→ 624	LegSide	N	Represents whether the trade in this leg was a buy or sell. Valid values: 1 = Buy 2 = Sell
→ 10003	LegLastQty	N	Represents the trade quantity for this leg.
→ 10055	LegAbbreviatedPrice	N	Represents the Trade at Settlement Price type e.g. TS, TC, TA, TN, TP for this leg.
→ 637	LegLastPx	N	Represents the trade price for this leg.
60	TransactTime	Y	Format is YYYYMMDD-HH:mm:ss.SSS in 24H.
10020	CCPMatchStatus	Y	The clearing status. Valid values: 1 = UNDEFINED 2 = TO_BE_SENT_TO_CLEARING 15 = CROSS 16 = NOT APPLICABLE
10021	CCPMatchInfo	N	The clearing number.
552	NoSides	Y	Number of sides in the report will always be 1.
→ 54	Side	Y	Indicates Buy or Sell Valid values: 1 = Buy 2 = Sell

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Tag	Field Name	Req'd	Comments
→ 37	OrderID	Y	LMEselect order ID.
→ 11	ClOrdID	N	Unique identifier sent by the entering firm. Will be "NONE" for orders entered from the trading client.
→	**Parties**	N	Component block, see section 13.4
→ 581	AccountType	N	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 2 = House 3 = Client OSA 7 = Gross OSA
→ 529	OrderRestrictions	N	Indicates if the order is entered either by an algo trader or human. Valid values: D = Non-algorithmic (human) E = Algorithmic (algo)
→ 58	Text	N	Free format text string. Info field from the Trading Application.
→ 10048	InvestmentDecisionCountry	N	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.
→ 10049	ExecutionDecisionCountry	N	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
→ 10050	DEA	N	Indicates if the trader has a direct electronic access. Valid values: Y = The trader has direct electronic access. N = The trader does not have direct electronic access.

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Tag	Field Name	Req'd	Comments
→ 10051	TradingCapacity	N	Indicates the type of trading capacity. Valid values: 1 = DEAL (Dealing on own account) 2 = MTCH (Matched principal) 3 = AOTC (Any other capacity)
→ 10052	ClientBranchCountry	N	A two character string to identify the country of the branch of the client For further details, refer to section 14
→ 20023	CommodityDerivative	Y	Indicates whether it is a commodity derivative. '0' – Trade is risk reducing '1' – Trade is NOT risk reducing For further details, refer to section 14
→ 1057	AggressorIndicator	N	Indicates if matching order is an aggressor or not in the trade. Y = Aggressor N = Passive
277	Trade Condition	N	Space-delimited list of conditions describing a trade. Valid values: 1 = Implied Trade (trade as a result of an implied order being executed) Applicable to LMEprecious and base metal contracts
	Standard Trailer	Y	Component block, see section 13.2

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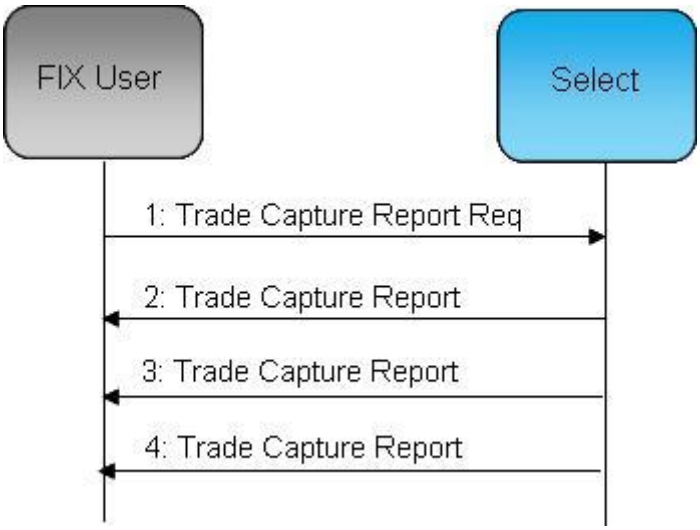
10.3 Workflows



Message	TradeRequestID	TradeReportID	ExecType	SelectTradeID	LastRptRequested
-> (1) Trade Capture Report Req	001	-	-	-	-
<- (2) Trade Capture Report	001	TNAA20100331X0000001A	Trade	TNAA20100331X0000001	N
<- (3) Trade Capture Report	001	TNAA20100331X0000001A	Trade	TNAA20100331X0000001	N
<- (4) Trade Capture Report	001	TNAA20100331X0000001A	Trade	TNAA20100331X0000001	Y

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11 Market Data

11.1 Business Message Types

FIX Message Name	Type	Dir	Comment	Authorised User Type
Market Data Request	V	In	The Market Data Request is a general request for market data on specific securities.	MD + MDV + MDVCCP
Market Data Request Reject	Y	Out	The Market Data Request Reject is used when the exchange cannot honour the Market Data Request due to business or technical reasons.	MD + MDV + MDVCCP
Market Data Message – Snapshot/Full Refresh	W	Out	The Market Data Message – Snapshot/Full Refresh will contain Market Data Entries, each with the complete data requested for one contract.	MD + MDV + MDVCCP
Market Data Message – Incremental Refresh	X	Out	The Market Data Message – Incremental Refresh will contain Market Data Entries. Each entry is assigned an ID unique among all other active entries and several incremental updates of entries for different instruments can be included in one FIX Market Data message.	MD + MDV + MDVCCP

FIX Market Data users are authorized to receive market data from LMEselect, i.e. MDSource = EL (Electronic Trading).

FIX Market Data Vendors are authorized to receive market data from all sources, i.e. MDSource = EL (Electronic Trading), RK (Ring & Kerb), MI (Member Indicative Quotes), MT (Matched Trades), CH (Clearing House) and EX (any other LME published data which falls outside the other categories).

FIX CCP Market Data Vendor is a replica of the FIX Market Data Vendor except that a FIX CCP Market Data Vendor will also receive prices for all prompts sent out for TAS instruments when requesting market data with MdEntryType = u.

11.1.1 Market Data Request

A Market Data Request is a general request for market data on specific securities. A successful Market Data Request returns one or more Market Data messages containing one or more Market Data Entries. Each Market Data Entry is a Bid, an Ask, a Trade etc. Market Data Entries usually have a price and a quantity associated with them.

Note that the Opening, Closing, Trading High/Low prices will only be published at the end of the trading day in Select. The Trading High/Low is also published at the end of each trading session from the Trading Ring.

You subscribe to market messages by a Market Data Request. A subscription request is either a request for a snapshot, a snapshot + updates or a request to withdraw the subscription. A Market Data Request can either be for Full Refresh or Incremental Refresh:

- **Full Refresh** - This mode is optimized to trade off increased bandwidth for simplicity in processing and is intended for requests on only a few instruments. Each FIX Market Data message in response to the request will contain the complete data requested for one contract. If more than just the top of book is requested, this means that both sides, and all price tiers, must be reported in that Market Data message. If for example, the CAD3M order book is modified, the Market Data will contain the complete price depth up to 15 levels for CAD3M.
- **Incremental Refresh** - This mode is optimized for handling requests for many instruments while conserving bandwidth. For example, the system sends a new market data message with updated information whenever an order is entered, modified or cancelled and the order affects the accumulated quantity of any of the top 15 price levels. Several incremental updates of entries for different instruments can be included in one FIX Market Data message.

Snapshot

A snapshot regarding bid, ask or both is quite simple to define. It's the complete order book for a security at a specific moment in time.

When Market Data Request is issued and trades are requested the snapshot will be defined as all public trades for current date (unless Trade Replay is used, see section 11.1.5).

The snapshot will be represented by either MD Full Refresh or MD Incremental refresh, depending on the value of MDUpdateType in the MD Request.

MDUpdateType (265) in MD Request	Snapshot Response
0 = Full refresh	MD Full refresh
1 = Incremental refresh	MD Incremental refresh

11.1.2 Market Data Message Price Depth

The price depth in Select can be derived from Market Data Messages. However, remember that Market Data Message is a snapshot. For example, when the FIX client gets a Market Data Message the order

book for the contract should be scratched and rebuilt with the information in the Market Data Message received.

The Market Data messages containing Order information (*MDEntryType=0* or *MDEntryType=1*) will contain the price depth for the bids and offers respectively.

It is notable that Select is sending a delete MDentry for the bottom row (i.e. last Bid or Offer price from the price level depth specified) from the order book in case of a new order being entered in the middle of order book. This happens in case of Incremental Refresh only.

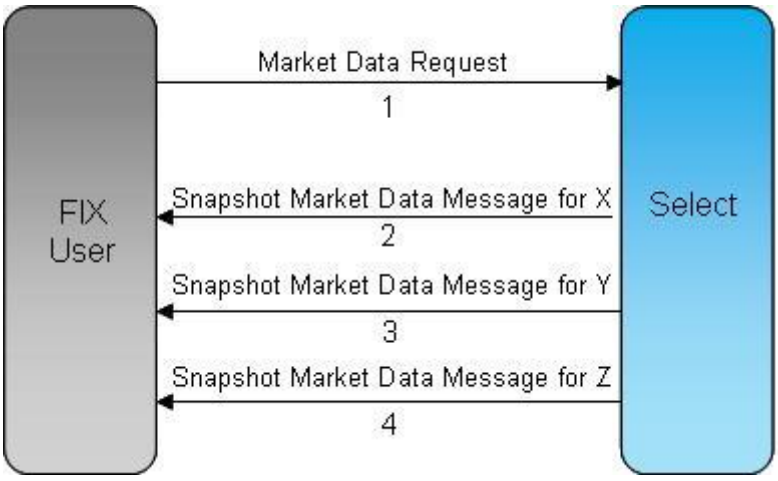
When subscribing for Full Refresh Market Data messages on Bid and/or Offer you may get an update Market Data message with NoMDEntries (tag 268) = 0 indicating that the order book was emptied. An empty order book message does not contain MDSource (tag 10035), as MDSource is part of an MDEntry. In order to receive empty order book message updates, do not specify the MDSource tag when subscribing for FullRefresh. If MDSource = 'EL' is used, empty order book messages will not be received.

A snapshot for an empty order book will not return an MDMessage. When orders are entered to the order book, updates will be sent out.

11.1.3 Market Data Messages # of Messages

A Market Data Request is a request for Market Data information for one or more symbols. The immediate reply is one message (containing order book) per contract for the requested symbol if requesting Full Refresh. For Incremental Refresh, a message will be sent out only if the contract contains any of the requested information (e.g. bid, offer, trade). The updates thereafter contain the order book for modified contracts, NOT all order books for the subscribed symbol(s).

E.g. a request for Snapshot (bid and offer) in CA where there are three contracts (X, Y, Z) that have prices will look as below:



Sequence:

1. A correct Market Data Request is sent.
2. A snapshot for contract X is sent to the client.
3. A snapshot for contract Y is sent to the client.

4. A snapshot for contract Z is sent to the client.
5. The sequence ends.

11.1.4 End of Day Information

At the end of the trading day daily statistics are sent out from LMEselect. The system will publish LMEselect Opening and Closing Prices, LMEselect Trading High, and LMEselect Trading Low for all contracts that have traded during the day. All active subscriptions on MDEntryType 4=Opening Price, 5=Closing Price, 7=Trading High, and 8=Trading Low will receive the end of day information for the particular symbol.

11.1.5 Rolling Prompts

The following rolling prompts exist for the Market Data messages.

MDEntryType (269)	MD User	MDV Users	MDVCCP Users
0 – Bid	TOM, C, 3M	TOM, C, 3M, 15M, 27M, 63M, 123M	TOM, C, 3M, 15M, 27M, 63M, 123M
1 – Ask	TOM, C, 3M	TOM, C, 3M, 15M, 27M, 63M, 123M	TOM, C, 3M, 15M, 27M, 63M, 123M
2 – Trade	TOM, C, 3M	TOM, C, 3M, 15M, 27M, 63M, 123M	TOM, C, 3M, 15M, 27M, 63M, 123M
3 – Index Value	No access	No Rolling Prompt	No Rolling Prompt
4 – Opening Price	C, 3M	C, 3M, 15M, 27M, 63M, 123M	C, 3M, 15M, 27M, 63M, 123M
5 – Closing Price	C, 3M	C, 3M, 15M, 27M, 63M, 123M	C, 3M, 15M, 27M, 63M, 123M
6 – Settlement Price	No access	C	C
7 – Trading High	C, 3M	C, 3M, 15M, 27M, 63M, 123M	C, 3M, 15M, 27M, 63M, 123M
8 – Trading Low	C, 3M	C, 3M, 15M, 27M, 63M, 123M	C, 3M, 15M, 27M, 63M, 123M
e – Evening Evaluation	No access	C, 3M, 15M, 27M, 63M, 123M	C, 3M, 15M, 27M, 63M, 123M
f – Floor Closing Price	C, 3M	No access	No access

m – Mean	No access	C, 3M, 15M, DEC1, DEC2, DEC3	C, 3M, 15M, DEC1, DEC2, DEC3
p – Official Prices	C, 3M	C, 3M, 15M, DEC1, DEC2, DEC3	C, 3M, 15M, DEC1, DEC2, DEC3
q – Sterling Equivalent	No access	C, 3M	C, 3M
r – Exchange Rate	No Rolling Prompt	No Rolling Prompt	No Rolling Prompt
s - Asian Benchmark price	3M	3M	3M
u – TAS Substituted Price	No access	C, 3M	All prompts
v – Report	Not Applicable	Not Applicable	Not Applicable
x – Report – Prompt Calendar Delayed	Not Applicable	Not Applicable	Not Applicable
y – Report - Bullion	Not Applicable	Not Applicable	Not Applicable
z – Report Notification	Not Applicable	Not Applicable	Not Applicable

11.1.6 Trade Replay

All trades disseminated by LME are assigned a trade sequence number, TradeSeqNo. This number starts with 0 (zero) every day, and is increasing during the trading day. Furthermore, the trade sequence numbers are assigned from a trade sequence number series, TradeSeqNoSeries. Trade sequence numbers are unique and increasing within each trade sequence number series, which means that the combination of TradeSeqNoSeries and TradeSeqNo uniquely identifies a trade within a given trading day. There may, however, be gaps in the trade sequence numbers, i.e. all trade sequence numbers are not necessarily used.

When setting up a subscription for trades, a client can choose to only receive trades with TradeSeqNo higher than a certain value. This is useful (and the recommended behaviour) when re-connecting after a FIX session has been down during the day, i.e. when some trades have already been received.

In order to determine the suitable starting TradeSeqNo when setting up a subscription, the client must examine TradeSeqNo and TradeSeqNoSeries from previously received trades the same trading day. For each TradeSeqNoSeries, the client should store information about the highest TradeSeqNo seen. A later subscription request should request later trades than the last seen trade. This is done by specifying the last seen TradeSeqNo for each TradeSeqNoSeries.

Example

In this example, trades are numbered with the notation “TradeSeqNoSeries-TradeSeqNo”, i.e. 2-17 means TradeSeqNo 17 within TradeSeqNoSeries 2. In FIX market data messages, the TradeSeqNoSeries and TradeSeqNo are two different fields (TradeSeqNoSeries = 7555 and TradeSeqNo = 7554).

1. The client sets up the first subscription of the trading day. Since no trades are previously received, TradeSeqNoSeries and TradeSeqNo can be omitted in the request, meaning that the client requests a snapshot and subscription for all trades.
2. The client receives trades for different prompts within the same commodity with the following trade sequence numbers:

3-20
3-21
1-40
2-17
1-41
3-22
1-43

3. The client keeps track of the highest seen TradeSeqNo for each TradeSeqNoSeries for that commodity. The highest numbers seen are:

   - TradeSeqNoSeries 1: Highest TradeSeqNo is 43

   There is also a gap; no trade was numbered 1-42.

4. The FIX connection is suddenly lost.
5. New trades are created in the system for the same commodity:

   2-18

   1-44

6. When the client has reconnected, it should set up a subscription with the following starting points:

   - TradeSeqNoSeries 1: Last seen TradeSeqNo 43

7. The client will receive new trades with the following numbers:

- New trades based on the TradeSeqNoSeries and TradeSeqNo combination listed in the request.
- Unfiltered trades of different prompts having different TradeSeqNoSeries and TradeSeqNo combination within the same commodity.

  2-18

  1-44

  3-20

  3-21

  3-22

  2-17

8. New trade “1-45” created in the system for the same commodity.
9. Client receives the new trade:

   1-45

11.1.7 Replay of Indicative Quotes

When requesting Indicative Quotes in a Market Data Request with any or both of MDEntryType bid (0) and offer (1) specified, all today's bids and offers are disseminated for all contracts that quotes are entered for. There are no specific tags in the Market Data Request for replay of Indicative Quotes, it is always performed.

The following details apply to both MD Snapshot/Full Refresh and MD Incremental Refresh.

- Generic
  - For cancel, the Withdrawn (tag 10044) is set to 'Y'.
  - MarketDepth (264) is disregarded.
  - Indicative entries (MDSource = "MI") are not mixed with entries with different MDSource.
- Snapshot
  - All quotes, quote updates and cancels of the current day are sent out.
  - All quotes, quote updates and cancels for the same contract are sent out in one single message, ordered by time - the oldest first.
- Update
  - All new quotes, quote updates and cancels are sent out.

11.1.8 Replay of prices from MOIC

When requesting MOIC prices in a Market Data Request with any or both of MDEntryType bid (0) and offer (1) specified, all today's bids and offers are disseminated for all contracts that prices are entered for. There are no specific tags in the Market Data Request for replay of MOIC prices, it is always performed.

The following details apply to both MD Snapshot/Full Refresh and MD Incremental Refresh.

- Generic
  - All new, withdrawn and deleted session prices in MOIC are sent out in time order.
  - Original price and timestamp are sent out at withdrawal and delete.
- For Snapshot; all events of the current day are sent out in original time order. This means that for a withdrawn price both the original price and the withdrawn are sent out. All events – entered, cancel or withdrawn for the same contract are sent out in one single message, ordered by time – the oldest first. (Note: There is a separate FIX message sent for Bid and Offer prices).
- For Update; the prices are sent out when they occur.

Withdrawal and deletion are distinguished as follows:

	IncrementalRefresh		FullRefresh	
Action	**MDUpdateAction**	**Withdrawn**	**Deleted (new tag)**	**Withdrawn**
Withdrawn	Delete	Y	-	Y
Delete	Delete	-	Y	-

11.1.9 Replay of Reports

When requesting for reports using any of the MDEntryTypes v, x, y and z, all today's versions of the reports and notifications embraced by the MDRequest are disseminated. There are no specific tags in the Market Data Request for replay of reports.

11.1.10 Rules for handling Market Data Messages

For market data messages, the following rules apply:

- It is possible to have several MDEntryTypes (tag 269) specified in the market data request.
- It is possible to have several Symbols (tag 55) specified in the market data request.
- All MDEntryType values specified must be available for all underlyings specified in Symbol. Otherwise the user receives a Market Data Request Reject message.
- Market Data request requiring Symbol (tag 55) are:
  - Bid (MDEntryType = 0)
  - Offer (MDEntryType = 1)
  - Trade (MDEntryType = 2)
  - Opening Price (MDEntryType = 4)
  - Closing price (MDEntryType = 5)
  - Settlement price (MDEntryType = 6)
  - Trading High (MDEntryType = 7)
  - Trading Low (MDEntryType = 8)
  - Floor Closing Price (MDEntryType = f)
  - Mean (MDEntryType = m)
  - Official Price (MDEntryType = p)
  - Sterling Equivalent (MDEntryType = q)
  - Asian Benchmark Price (MDEntryType = s)
  - Trade at Settlement Substituted Price (MDEntryType = u)
- Market data requests that should not contain Symbol (tag 55) are:
  - Official Index Value (MDEntryType = 3)
  - Exchange Rate (MDEntryType = r)
  - Report (MDEntryType = v)
  - Bullion Report (MDEntryType = y)
  - Prompt Calendar Report Delayed (MDEntryType = x)
  - Report Notification (MDEntryType = z)
  - Symbol is optional for Evening Evaluations for FX rates (MDEntryType = e), which is further declared in this section.

- For Evening Evaluation rates (MDEntryType = e) the following applies with regards to Symbol (tag 55):
  - Provisional and Final Evening Evaluation FX Rates are always received in Market Data Message regardless symbol being included or not in Market Data request.
  - The following Evening Evaluation rates require Symbol (tag 55) to be included in the Market Data request.
    (1) Provisional Futures & Carries Evening Evaluation
    (2) Final Futures & Carries Evening Evaluation
    (3) Indicative Futures & Carries Evening Evaluation
- For the MDEntryTypes allowing or requiring Symbol (tag 55), it is possible to set NoRelatedSym (tag 146) to zero and not specifying a symbol. This will result in no returning messages because effectively the request indicates that no symbols are of interest.
- It is not possible to have several MDEntryTypes for MDEntryType = v, x, y and z. These must be subscribed in separate market data requests.
- The MD user to request report (MDEntryType=v) only when MDReprtCode (10030) = “TIF”. If this condition is not met, the MD user is not authorized to the request and it should be rejected.
- The MD user to request report notification (MDEntryType=z) only when MDReportCode (10030) = “TIF”. If this condition is not met, the MD user is not authorized to the request and it should be rejected.

11.2 Message Details

11.2.1 Market Data Request

Tag	Field Name	Req’d	Comments
	Standard Header	Y	MsgType= V. Component block, see section 13.1
262	MDReqID	Y	Identifier that will be returned in Market Data Messages. Must be unique, or the ID of previous Market Data Request to unsubscribe if SubscriptionRequestType (263) = Unsubscribe (2).
263	SubscriptionRequestType	Y	Valid values: 0 = Snapshot 1 = Snapshot + Updates (Subscribe) 2 = Unsubscribe
264	Market Depth	Y	Depth of market for Book Snapshot. Valid values: 0 = Full book 1 = Top of book 2. N = Report best N price tiers of data

Tag	Field Name	Req'd	Comments
			Note: There is a maximum limit for the number of price tiers. When the limit is exceeded, the Market Data Request will be rejected.
265	MDUpdateType	N*	Valid values: 0 = Full refresh 1 = Incremental refresh
266	AggregatedBook	N	Specifies whether or not book entries should be aggregated. If omitted default value is Y. Valid value is: Y = One book entry per side per price.
267	NoMDEntryTypes	Y	The number of MDEntryType following.
→ 269	MDEntryType	Y	Valid values: 0 = Bid 1 = Offer 2 = Trade 3 = Index Value 4 = Opening Price 5 = Closing Price 6 = Settlement Price 7 = Trading High 8 = Trading Low e = Evening Evaluation f = Floor Closing Price m = Mean p = Official Price q = Sterling Equivalent r = Exchange Rate s = Asian Benchmark Price u = Trade at Settlement Substituted Price v = Report x = Report – Prompt Calendar Delayed y = Report – Bullion z = Report Notification
7565	NoTradeSeqNoSeries	N	For trade replay.
→ 7555	TradeSeqNoSeries	N	For trade replay.
→ 7554	TradeSeqNo	N	For trade replay.

Tag	Field Name	Req'd	Comments
146	NoRelatedSym	N	The number of symbols following,
→ 55	Symbol	N	The symbol. E.g. CA.
10035	MDSource	N	Data source system. Valid values: RK = Ring & Kerb MI = Inter-Office Orders EL = Electronic Trading (from LMEselect system) MT = Matched Trades CH = Clearing House EX = Exchange (any other LME published data which falls outside the other categories).
10041	NoMDReportCodes	N	Number of report codes.
→ 10030	MD Report Code	N	The 3 character short code for the report. Example: WSM, WHL, MOI, PRC, WHC, WHT, TIF.
10042	LastTrade	N	Indicates if only the last trade should be returned. If omitted default value is N. Valid values: Y = Return only the last trade. N = Return all trades if TradeSeqNoSeries and TradeSeqNo are not specified.
	Standard Trailer	Y	Component block, see section 13.2

1) Required if SubscriptionRequestType (tag 263) = Snapshot + Subscribe (1) or if SubscriptionRequestType (tag 263) = Snapshot (0)

SubscriptionRequestType (tag 263)

All values (0, 1, 2, 4, 5, 6, 7, 8, f, p, s and t) are implemented by the LME. However, for MDEntryType = F (Floor Closing Price) only 0 = Snapshot is implemented. There is no possibility to request type 1 (snapshot + subscribe) combined with entry type = F (Floor Closing Prices). I.e. you cannot subscribe for changes on Floor Closing Prices. If more than one MDEntryType is requested and f = Floor Closing Price is one of them and Snapshot + Subscribe is requested, the whole request is rejected. When requesting Floor Closing Prices you will get yesterday's Floor Closing Prices.

If type 2 (unsubscribe) is requested you unsubscribe for the complete symbol. I.e. if you did subscribe for bid, offer and trade in a market data request you cannot in a Market Data Request unsubscribe for bid and offer and still keep the subscription for trade. It is possible, however, to unsubscribe for a subset of symbols from the originating request and keep the subscription for the rest of the symbols.

Snapshot + Subscribe on trades means that when you set up the subscription you'll get all trades for current date and after that each new trade (unless Trade Replay is used, see section 11.1.6).

MDEntryType (tag 269)

- **Bid (0)** – All bid orders from LMEselect and Trading Ring. Official and unofficial bid prices from Trading Ring and Member Indicative Quotes.
- **Offer (1)** – All ask orders in LMEselect and Trading Ring. Official and unofficial ask prices from Trading Ring and Member Indicative Quotes.
- **Trade (2)** – All trades in LMEselect, Trading Ring, Telephone Trades and Inter-Office Trades. If not all previous trades are wanted in a snapshot, use the functionality of Trade Replay.
- **Index Value (3)** – Official index values.
- **Opening (4)** – Opening is the LMEselect Opening price, i.e. the price of the first trade in LMEselect in the contract during that trading day. This is part of the end of day information sent out at the end of the trading day.
- **Closing (5)** – Closing is the LMEselect Closing price, i.e. the price of the last trade in Select in the contract during that trading day. This is part of the end of day information sent out at the end of the trading day.
- **Settlement (6)** – Settlement prices are established in LMEselect and Trading Ring only for particular commodities. They are sent out once they have been confirmed.
- **Trading High (7)** – In LMEselect the Trading High is the highest trade price for the contract during that trading day. This is part of the end of day information sent out at the end of the trading day. In Trading Ring the Trading High is the highest bid price for the contract during a trading period. It is sent out at the end of each trading period.
- **Trading Low (8)** – In LMEselect the Trading Low is the lowest trade price for the contract for that trading day. This is part of the end of day information sent out at the end of the trading day. In Trading Ring the Trading Low is the lowest ask price for the contract during a trading period. It is sent out at the end of each trading period.
- **Evening Evaluation (e)** – Evening evaluations for FX rates, futures and TAPOs from clearing.
- **Floor Closing Price (f)** – Floor Closing Price refers to yesterday's floor closing prices from LMEselect. It is not possible to subscribe to Floor Closing Prices, only snapshot is supported.
- **Mean (m)** – From Trading Ring Mean is the monthly average official mean. From Clearing Mean is monthly moving average price and the monthly average settlement price for TAPOs.
- **Official Price (p)** – Official Prices are available from LMEselect only for particular commodities.
- **Sterling Equivalent (q)** – Sterling Equivalent prices are available from Trading Ring for cash and 3M contracts for particular commodities.
- **Exchange Rate (r) –** Exchange Rate is available from Trading Ring for daily, monthly and daily moving monthly average FX rates.

- **Asian Benchmark Price (s) –** Asian Benchmark is used as reference price and is only available for 3M contracts for particular commodities.
- **Trade at Settlement Substituted Price (u) –** Substituted Price to be used for Trade at Settlement contracts. The type of TAS Price can be identified by tag 10054 (MDEntryTASPxType).
- **Report (v)** – All other reports available from the Exchange that are not of type bullion or prompt calendar delayed.
- **Report – Prompt Calendar Delayed (x)** – A report containing the prompt calendar delayed data from the Exchange.
- **Report** – **Bullion (y)** – A report containing bullion data from the Exchange.
- **Report Notification (z)** – Notifications that reports are available from the Exchange.

FIX Market Data users and Market Data Vendors are allowed to subscribe for the following market data:

MDEntryType (269)	Authorized User Type
0 – Bid	MD + MDV + MDVCCP
1 – Ask	MD + MDV + MDVCCP
2 – Trade	MD + MDV + MDVCCP
3 – Index Value	MDV + MDVCCP
4 – Opening Price	MD + MDV + MDVCCP
5 – Closing Price	MD + MDV + MDVCCP
6 – Settlement Price	MDV + MDVCCP
7 – Trading High	MD + MDV + MDVCCP
8 – Trading Low	MD + MDV + MDVCCP
e – Evening Evaluation	MDV + MDVCCP
f – Floor Closing Price	MD
m – Mean	MDV + MDVCCP
p – Official Prices	MD + MDV + MDVCCP
q – Sterling Equivalent	MDV + MDVCCP

MDEntryType (269)	Authorized User Type
r – Exchange Rate	MDV + MDVCCP
s – Asian Benchmark Price	MD + MDV + MDVCCP
u- Trade at Settlement Price	MDV + MDVCCP
v – Report	MDV + MD with restrictions (see “Rules for handling market data message”) + MDVCCP
x – Report – Prompt Calendar Delayed	MDV + MDVCCP
y – Report – Bullion	MDV + MDVCCP
z – Report Notification	MDV+ MD with restrictions (see “Rules for handling market data message”) + MDVCCP

11.2.2 Market Data Request Reject

Tag	Field Name	Req’d	Comments
	Standard Header	Y	MsgType = Y. Component block, see section 13.1
262	MDReqID	Y	Unique identifier will be returned in Market Data Messages.
281	MDReqRejReason	N	Valid values: 0 = Unknown symbol 1 = Duplicate request ID 4 = Unsupported subscription request type 5 = Unsupported market depth 6 = Unsupported market update type 7 = Unsupported aggregated book 8 = Unsupported entry type A = Unsupported scope B = Unsupported open, close or settle flag C = Unsupported implicit delete W = This MDEntryType does not support the requesting underlying X = Internal server error Y = Unknown request ID Z = Other

Tag	Field Name	Req'd	Comments
			Please note that value W-Z deviates from the FIX 4.4 Standard.
58	Text	N	Free format text.
	Standard Trailer	Y	Component block, see section 13.2

11.2.3 Market Data – Snapshot/Full Refresh

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = W. Component block, see section 13.1
262	MDReqID	N	Unique identifier taken from the request.
10028	PublishTime	N	Publish time.
	Instrument	N	Component block, see section 13.3
5474	AbbreviatedPrice	N	Conditionally required when MDEntryType = 0,1,2,4,5,7,8 Contains Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
268	NoMDEntries	Y	The number of entries within the message.
→ 269	MDEntryType	Y	Valid values: 0 = Bid 1 = Offer 2 = Trade 3 = Index Value 4 = Opening Price 5 = Closing Price 6 = Settlement Price 7 = Trading High 8 = Trading Low e = Evening Evaluation f = Floor Closing Price m = Mean p = Official Price q = Sterling Equivalent r = Exchange Rate

Tag	Field Name	Req'd	Comments
			s = Asian Benchmark Price u = Trade at Settlement Price v = Report x = Report – Prompt Calendar Delayed y = Report – Bullion z = Report Notification
→ 10054	MDEntryTASPxType	N	Conditionally required when MDEntryType = u. Represents Trade at Settlement price type e.g. TS, TC, TA, TP, TN
→ 270	MDEntryPx	N	For orders in carry contracts, a contango is expressed as a 'negative price' and a backwardation is expressed as a 'positive price'.
→ 10013	MDEntryPxType	N	Valid values: 0 = Real-Time 1 = Provisional 2 = Confirmed 3 = Official 4 = Unofficial 5 = Daily 6 = Monthly Average 7 = Monthly Moving Average 8 = Indicative 9 = Reconfirmed
→ 15	Currency	N	Identifies currency used for price. Absence of this field is interpreted as the default for the security.
→ 10029	MDEntryPxDifferential	N	Differential from 3M price.
→ 10036	MDEntryPremium	N	Premium value.
→ 10039	MDEntryMarketMakerID	N	Market maker ID.
→ 10044	Withdrawn	N	Indicates if the price has been withdrawn.
→ 10046	Deleted	N	Indicates if the price is deleted.

Tag	Field Name	Req'd	Comments
→ 271	MDEntrySize	N	Volume for the entry. Busted trades are representative with a negative volume.
→ 346	NoOfOrders	N	Number of orders in the market at each price level
→ 272	MDEntryDate	N	UTC date in format YYYYMMDD. Tags 272 and 273 should be concatenated to meet MiFID II RTS 25 obligations
→ 273	MDEntryTime	N	Time formatted as HH:mm:ss.SSS. Tags 272 and 273 should be concatenated to meet MiFID II RTS 25 obligations Please note that only pre and post-trade messages and market report timestamps will be in UTC. All other message types will be in local UK time.
→ 277	Trade Condition	N	Space-delimited list of conditions describing a trade. Valid values: U = Exchange Last (when update last paid) 0 = Cancel (Busted trade) 1 = Implied Trade (trade as a result of an implied order being executed) Applicable to LMEprecious and base metal contracts
→ 7555	TradeSeqNoSeries	N	For trade replay.
→ 7554	TradeSeqNo	N	For trade replay.
→ 75	TradeDate	N	For trade replay. Format is YYYYMMDD.
→ 10040	TradeTime	N	Time of trade.
→	MDEntrySession	N	This identifies trade ring session. Valid values:

Tag	Field Name	Req'd	Comments
10037			R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 = Morning kerb session K2 = Afternoon kerb session N = No session
→ 10035	MDSource	N	Data source system. Valid values: RK = Ring & Kerb MI = Inter-Office Orders EL = Electronic Trading (from LMEselect system) MT = Matched Trades CH = Clearing House EX = Exchange (any other LME published data which falls outside the other categories).
10030	MDReportCode	N	The 3 character short code for the report. Example: WSM, WHL, MOI, PRC, WHC, WHT, TIF.
10031	MDReportName	N	The primary identifier for the report.
10032	MDReportVersion	N	The report version. This allows for re-publishing of the same report (for example, to correct errors).
10033	MDReportFragmentNo	N	For large report that are fragmented into multiple messages, this is the fragment number (1..n).
10034	MDReportLastFragment	N	This indicates that this is the last fragment of the report.
212	XmlDataLen	N	Length of the XmlData (tag 213) data block.
213	XmlData	N	Actual XML data stream in compressed format. Note: may contain embedded SOH characters.
10038	MDEntryTradeType	N	This identifies the trade type. Valid values: IO = Inter-office R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 = Morning kerb session K2 = Afternoon kerb session

Tag	Field Name	Req'd	Comments
			C1 = Basis first morning ring C2 = Basis second morning ring C3 = Basis first afternoon ring D1 = Basis morning kerb D2 = Basis afternoon kerb
10043	MaturityExchangeRateDate	N	Prompt date for Exchange Rate. UTC date in format YYYYMMDD.
	Standard Trailer	Y	Component block, see section 13.2

Busted trades will also be sent out as Market Data Message. A busted trade will be represented with tag 277 (TradeCondition) that will have value 0 (Cancel).

11.2.4 Market Data – Incremental Refresh

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = X. Component block, see section 13.1
262	MDReqID	N	Unique identifier will be returned in Market Data Messages.
268	NoMDEntries	Y	The number of entries within the message.
→ 279	MDUpdateAction	Y	Type of Market Data update action. Valid values: 0 = New 1 = Change 2 = Delete
→ 269	MDEntryType	N	Valid values: 0 = Bid 1 = Offer 2 = Trade 3 = Index Value 4 = Opening Price 5 = Closing Price 6 = Settlement Price 7 = Trading High 8 = Trading Low e = Evening Evaluation f = Floor Closing Price m = Mean p = Official Price q = Sterling Equivalent

Tag	Field Name	Req'd	Comments
			r = Exchange Rate s = Asian Benchmark Price u = Trade at Settlement Price v = Report x = Report – Prompt Calendar Delayed y = Report – Bullion z = Report Notification
→ 10054	MDEntryTASPxType	N	Conditionally required when MDEntryType = u. Represents Trade at Settlement price type e.g. TS, TC, TA, TP, TN
→	**Instrument**	N	Component block, see section 13.3
→ 270	MDEntryPx	N	For orders in carry contracts, a contango is expressed as a 'negative price' and a backwardation is expressed as a 'positive price'.
→ 5474	AbbreviatedPrice	N	Conditionally required when MDEntryType = 0,1,2,4,5,7,8 Contains Trade at Settlement Price type e.g. TS, TC, TA, TN, TP
→ 10013	MDEntryPxType	N	Valid values: 0 = Real-Time 1 = Provisional 2 = Confirmed 3 = Official 4 = Unofficial 5 = Daily 6 = Monthly Average 7 = Monthly Moving Average 8 = Indicative 9 = Reconfirmed
→ 15	Currency	N	Identifies currency used for price. Absence of this field is interpreted as the default for the security.
→ 10029	MDEntryPxDifferential	N	Differential from 3M price.
→ 10036	MDEntryPremium	N	Premium value.

Tag	Field Name	Req'd	Comments
→ 10039	MDEntryMarketMakerID	N	Market maker ID.
→ 10044	Withdrawn	N	Indicates if the price has been withdrawn.
→ 271	MDEntrySize	N	Volume for the entry. Busted trades are represented with a negative volume.
→ 346	NoOfOrders	N	Number of orders in the market at each price level
→ 272	MDEntryDate	N	UTC date in format YYYYMMDD. Tags 272 and 273 should be concatenated to meet MiFID II RTS 25 obligations
→ 273	MDEntryTime	N	Time formatted as HH:mm:ss.SSS. Tags 272 and 273 should be concatenated to meet MiFID II RTS 25 obligations Please note that only pre and post-trade messages and market report timestamps will be in UTC. All other message types will be in local UK time.
→ 277	TradeCondition	N	Space-delimited list of conditions describing a trade. Valid values: U = Exchange Last (when update last paid) 0 = Cancel (Busted trade) 1 = Implied Trade (trade as a result of an implied order being executed) Applicable to LMEprecious and base metal contracts
→ 7555	TradeSeqNoSeries	N	For trade replay.
→ 7554	TradeSeqNo	N	For trade replay.
→	TradeDate	N	For trade replay. Format is YYYYMMDD.

Tag	Field Name	Req'd	Comments
75			
→ 10040	TradeTime	N	Time of trade.
→ 574	MatchType	N	Valid value is: 4 = Auto-match
→ 10037	MDEntrySession	N	Valid values: R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 – Morning kerb session K2 = Afternoon kerb session N = No session
→ 10035	MDSource	N	Data source system. Valid values: RK = Ring & Kerb MI = Inter-Office Orders EL = Electronic Trading (from Select system) MT = Matched Trades CH = Clearing House EX = Exchange (any other LME published data which falls outside the other categories).
10030	MDReportCode	N	The 3 character short code for the report. Example: WSM, WHL, MOI, PRC, WHC, WHT, TIF.
10031	MDReportName	N	The primary identifier for the report.
10032	MDReportVersion	N	The report version. This allows for re-publishing of the same report (for example, to correct errors).
10033	MDReportFragmentNo	N	For large reports that are fragmented into multiple messages, this is the fragment number (1..n).
10034	MDReportLastFragment	N	This indicates that this is the last fragment of the report.
212	XmlDataLen	N	Length of the XmlData (tag 213) data block.

Tag	Field Name	Req'd	Comments
213	XmlData	N	Actual XML data stream in compressed format. Note: may contain embedded SOH characters.
10038	MDEntryTradeType	N	This identifies the trade type. Valid values: IO = Inter-office R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 = Morning kerb session K2 = Afternoon kerb session C1 = Basis first morning ring C2 = Basis second morning ring C3 = Basis first afternoon ring D1 = Basis morning kerb D2 = Basis afternoon kerb
10043	MaturityExchangeRateDate	N	Prompt date for Exchange Rate. UTC date in format YYYYMMDD.
	Standard Trailer	Y	Component block, see section 13.2

Busted trades will also be sent out as Market Data Messages. A busted trade will be represented with tag 277 (TradeCondition) that will have value 0 (Cancel).

11.3 Workflows

11.3.1 Market Data Message Sequence

Scenario 1:

Table name: **Market Data Request (Message type = "V")**

Tag	Value	Meaning
262	001	
263	0	Snapshot
264	0	Full book
265	0	Full refresh
267	1	One entry type requested

Tag	Value	Meaning
→ 269	1	Offer requested
146	1	One symbol requested
→ 55	CA	Symbol CA

Sequence:

1. A correct Market Data Request is sent.
2. A snapshot is sent to the client.
3. The sequence ends.

Scenario 2:

Table name: **Market Data Request (Message type = "V")**

Tag	Value	Meaning
262	001	
263	1	Snapshot + Subscribe
264	0	Full book
265	0	Full refresh
267	1	One entry type requested
→	1	Offer requested

Tag	Value	Meaning
269		
146	1	One symbol requested
→ 55	CA	Symbol CA

Sequence:

1. A correct Market Data Request is sent.
2. X # of Market Messages is sent to the client.
3. A correct Market Data Request (Unsubscribe) is sent.
4. The sequence ends.

In this scenario the requestor will get a Market Data Message each time the order book for CA is modified.

Scenario 3:

Requesting Snapshot + Subscribe for Offer and Floor Closing Prices. A request for Snapshot + Subscribe with Floor Closing Prices is illegal.

Table name: **Market Data Request (Message type = "V")**

Tag	Value	Meaning
262	001	
263	1	Snapshot + Subscribe
264	0	Full book
265	0	Full refresh

Tag	Value	Meaning
267	2	Two entry types requested
→ 269	f	Floor Closing Prices (Only Snapshot)
→ 269	1	Offer
146	1	One symbol requested
→ 55	CA	Symbol CA

Sequence:

1. An incorrect Market Data Request is sent.
2. Request is rejected
3. The sequence ends.

In this scenario the requestor will get a Market Data Request Reject message since the SubscriptionRequestType (snapshot + subscribe) is not supported for Floor Closing Prices (MDEntryType = f).

Scenario 4:

Requesting Snapshot + Subscribe for TWAP Official Prices.

Table name: **Market Data Request (Message type = "V")**

Tag	Value	Meaning
262	001	

263	1	Snapshot + Subscribe
264	0	Full book
265	0	Full refresh
267	1	One entry type requested
→ 269	p	Official Prices
146	1	One symbol requested
→ 55	PN	Symbol PN (Only Plastic Underlyings)

Sequence:

1. A correct Market Data Request is sent.
2. X # of Market Messages is sent to the client.
3. A correct Market Data Request (Unsubscribe) is sent.
4. The sequence ends.

In this scenario the requestor will get a set of Market Data Messages each time the Trade Weighted Average Price (TWAP) of specific contracts in the plastic underlying changes, or if the price calculation changes state. The prices can be of type (MDEntryPxType) “Real-Time”, “Provisional” or “Confirmed”. TWAP is calculated on the cash contract and the first and second monthly contract on any given plastic underlying.

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12 General Messages

12.1 Business Message Types

FIX Message Name	Type	Dir.	Comment
Business Message Reject	J	Out	See section 4.2

12.2 Message Details

12.2.1 Business Message Reject

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = j. Component block, see section 13.1
45	RefSeqNum	N	Reference message sequence number.
372	RefMsgType	Y	The message type of the FIX message being referenced.
379	BusinessRejectRefID	N	The value of the business-level "ID" field on the message being referenced.
380	BusinessRejectReason	Y	Code to identify reason for a Business Message Reject (j) message. Valid values: 0 = Other 3 = Unsupported Message Type 8 = Throttle limit exceeded
58	Text	N	An error message giving the reason for rejecting the request.
	Standard Trailer	Y	Component block, see section 13.2

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13 Common Component Block

All Session and Application Messages use the Standard Message Header and Trailer, as specified in the FIX 4.4 Specification. The following sections describe the FIX fields that are supported by the FIX server.

13.1 Standard Header

Tag	Name	Req'd	Comments
8	BeginString	Y	FIX 4.4 (must be first field in message).
9	BodyLength	Y	Message length, in bytes (must be second field in message). The field consists of 7 characters. Example: A message with body length 144 sets tag 9=0000144.
35	MsgType	Y	Defines message type (must be third field in message).
49	SenderCompID	Y	Assigned value used to identify firm sending message.
56	TargetCompID	Y	Assigned value used to identify receiving firm.
34	MsgSeqNum	Y	Integer message sequence number.
43	PossDupFlag	N	Indicates possible retransmission of message with this sequence number. Always required for retransmitted messages, whether prompted by the sending system or as a result of a resend request.
52	SendingTime	Y	Time of message transmission. In UTC. Format is YYYYMMDD-HH:mm:ss.SSS in 24H.
97	PossResend	N	Indicates that message may contain information that has been sent under another sequence number. Valid values: Y = Possible resend N = Original transmission

Tag	Name	Req'd	Comments
122	OrigSendingTime	N	Required for message re-sent as a result of a ResendRequest. If data is not available set to same value as SendingTime. Format is YYYYMMDD-HH:ss.SSS in 24H.
369	LastMsgSeqNumProcessed	N	The last MsgSeqNum (tage 34) value received by the FIX server.

13.2 Standard Trailer

Tag	Name	Req'd	Comments
10	CheckSum	Y	A three byte simple checksum. See FIX 4.4 Specification for a detailed description. Always the last field in the message.

13.3 Instrument Component Block

Tag	Name	Req'd	Comments
55	Symbol	Y	The symbol: eg. CA
461	CFICode	N	Indicates the type of security using ISO 10962 standard, Classification of Financial Instruments (CFI Code) values. See section 6.1.2 for a complete list of the allowed values. Required for NewOrderSingle, OrderCancelReplaceRequest, OrderCancelRequest, Order Status Request and TradeCaptureReportRequest.
10010	NoOfInstrumentLegs	N	The number of instrument legs following. Valid values: 2 – for carry contracts 1 – for all other contracts
→	PromptType	Y	Defines what prompt type that is to be used. Valid values:

Tag	Name	Req'd	Comments
10004			S = Single Prompt Date R = Rolling Prompt Date A = Average Prompt Date
→ 10000	MaturityRollingPrompt	N	Required if PromptType='R'. Valid values: TOM = Tomorrow C = Cash 3M = 3 Months 15M = 15 Months 27M = 27 Months 63M = 63 Months 123M = 123 Months D = Day W = Week M = Month Q = Average N1 = Near 1 N2 = Near 2 N3 = Near 3 F1 = Far 1 F2 = Far 2 F3 = Far 3 DEC1 = December 1 DEC2 = December 2 DEC3 = December 3
→ 541	MaturityDate	N	Required if PromptType = 'S'. Used for daily, weekly and monthly contracts. Will be populated with the absolute date for rolling prompts on outgoing messages (ie. if PromptType = 'R'). Represents: - Prompt date for futures - Expiration date for options and TAPO's (YYYYMMDD)
→ 10001	MaturityAveragePrompt	N	Required if PromptType = 'A'. Used for average contracts. Valid values are, as an example, "3Q11" for quarterly contracts, "2H12" for half-year contracts and "1Y11" for year contracts.
202	StrikePrice	N	Required if CFICode defines an option or TAPO.

If NoOfInstrumentLegs = 2, the instrument block describes a carry contract. The first entry in the repeating group then describes the buy leg, and the second entry describes the sell leg. (This means

that a buy order in the contract buys the first leg and sells the second. A sell order performs the opposite.) The maturity date for the buy leg must always be earlier in time than the maturity date for the sell leg.

The Strike price (tag 202) field is only applicable if the CFICode (tag 461) describes an option or TAPO, otherwise the message is considered invalid.

The contract currency is always USD.

Note that a syntactically correct instrument block might be rejected due to business rules in the Select system. For example, a carry buy leg must not consist of an average prompt. See section 15 for Instrument Block examples.

13.4 Parties Block

Tag	Name	Req'd	Comments
453	NoPartyID's	N	Number of parties specified.
→ 448	PartyID	Y	ID of firm or trader. Required if NoPartyID's (453) > 0. When: Party Role (452) = 3, PartyIDSource (447) =P , PartyID should be integer only with '0' for No Client, '1' for AGGR and '2' for PNAL Party Role (452) = 3, Party ID should be alphanumeric Party Role (452) = 122, Party ID should be integer only PartyRole (452) = 300, PartyID should be integer only Party Role (452) = 301, PartyID should be integer only Party Role (452) = 26, PartyID should be a 3 character string
→ 452	PartyRole	Y	Identifies the type of PartyID (Eg. Executing Broker). Required if NoPartyID's (453) > 0. Valid values: 1 = Executing Firm 3 = Client ID – Required only for Client Orders (581=1,3 or 7) 4 = Clearing Firm 7 = Entering Firm 11 = Order Origination Trader 24 = Customer Account – Required only for Client Orders (581=1, 3 or 7) 26 = Correspondent broker – non-executive broker 35 = Liquidity Provider

			36 = Entering Trader 66 = Market Maker 122 = Decision Maker – Required only for Client Orders (581=1, 3 or 7) 300 = Investment Decision Within Firm 301 = Execution Decision Within Firm The following Party Roles are required in the New Single Order and Order Cancel/Replace requests: 11 = Order Origination Trader 301 = Execution Decision Within Firm In addition, the following party roles will be returned in Execution and Trade Capture reports: 11 = Order Origination Trader 301 = Execution Decision Within Firm Lastly, in the event of a trade the following field will be returned in an Execution Report and Trade Capture Report: 36 = Entering Trader Note: tag 452 allows a-z, A-Z, 0-9, underscore and white space
→ 447	PartyIDSource	N	P = Client Short Code D = Proprietary/Custom Note: used to set the format of the value submitted for the Client ID

Note: If Tag 448 with 452 PartyRole = 35 (Liquidity Provider) is populated with 'Yes' on the order, this will indicate whether an order is submitted to a trading venue as part of a market making strategy pursuant to Articles 17 and 48 of Directive 2014/65/EU. If information is not populated the order will be treated as part of another activity in accordance with Article 3 of this Regulation.

The following Party roles are not validated by the system, but are the user's responsibility to set correctly on the New Single Order and Order Cancel/Replace requests:

- 452 = 3, 447 = P (Client ID should be a Client Short Code identifier. If that is not available, the field should be populated with the value 0= 'No Client' 1='AGGR' or 2='PNAL'.)
- 452 = 122 , 447 = P (For Decision Maker)
- 35 = Liquidity Provider (This should be set if the trader qualifies for Liquidity Provider initiative.)
- 66 = Market Maker (This should be set if the trader qualifies for a Market Maker initiative.)

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14 LME Specific Tags

Tag	Field Name	Type	Comment
7554	TradeSeqNo	Int	Used for trade replay.
7555	TradeSeqNoSeries	Int	Used for trade replay.
7565	NoTradeSeqNoSeries	Int	Used for trade replay.
10000	MaturityRollingPrompt	String	Valid values: C = Cash 3M = 3 Months 15M = 15 Months 27M = 27 Months 63M = 63 Months 123M = 123 Months D = Day W = Week M = Month N1 = Near 1 N2 = Near 2 N3 = Near 3 F1 = Far 1 F2 = Far 2 F3 = Far 3
10001	MaturityAveragePrompt	String	Used to express, eg. “3Q11”.
10002	LegMaturityRollingPrompt	String	Used to express “TOM”, “C” or “3M”
10003	LegLastQty	Qty	Used to express trading volume in a leg of a multi-leg contract.
10004	PromptType	Char	Used to define what kind of prompt type that is used in the legs in an execution report. Valid values: S = Single date prompt R = Rolling prompt A = Average prompt
10005	LegPromptType	Char	Used to define what prompt is used in the legs of an execution report. Valid values: S = Single Date Prompt R = Rolling Prompt

Tag	Field Name	Type	Comment
10006	SecurityStrikeType	Char	Used to define strike type. Values: S=Single T=Table
10007	NoStrikeTableRows	Int	Number of strike table rows if strike type equals 'T'.
10008	StrikeLowLimit	Float	Low limit for strike price.
10009	StrikeGradation	Float	Gradation for strike price.
10010	NoOfInstrumentLegs	Int	Used in the instrument block to define whether the contract is a carry contract or not.
10011	RollingPromptDate	Int	Prompt date.
10013	MDEntryPxType	Int	Type of Price distributed. Used in MarketDataSnapshotFullRefresh and MarketDataIncrementalRefresh. Valid values: 0 = Real-Time 1 = Provisional 2 = Confirmed 3 = Official 4 = Unofficial 5 = Daily 6 = Monthly Average 7 = Monthly Moving Average 8 = Indicative 9 = Reconfirmed
10020	CCPMatchStatus	String	Used in Trade Capture Report. LME Clear clearing status. Valid values: 1 = UNDEFINED 2 = TO_BE_SENT_TO_CLEARING 15 = CROSS 16 = NOT APPLICABLE
10021	CCPMatchNo	String	Used in Trade Capture Report. LME Clear clearing number.
10022	SelectTradeID	String	Used in Trade Capture Report. Example value – TAAA20100331X0000001.

Tag	Field Name	Type	Comment
10026	IsMonthlyCOntract	String	Used in Security List. 'Y' if it is a monthly contract or else the tag is omitted.
10027	NoOfMonthlyCOntracts	String	Used in Security List. The total number of monthly contracts for a specific symbol.
10028	PublishTime	String	Price publish time.
10029	MDEntryPxDifferential	Float	Differential from 3M price.
10030	MDReportCode	String	The 3 character short code for the report. Example: WSM, WHL, MOI, PRC, WHC, WHT, TIF.
10031	MDReportName	String	The primary identifier for the report.
10032	MDReportVersion	Int	The report version. This allows for republishing of the same report (for example, to correct errors).
10033	MDReportFragmentNo	Int	For large reports that are fragmented into multiple messages, this is the fragment number (1..n).
10034	MDReportLastFragment	Boolean	This indicates that this is the last fragment of the report. Valid values: Y = This is the last report fragment. N = This is not the last report fragment.
10035	MDSource	String	Data source system. Valid values: RK = Ring & Kerb MI = Inter-Office Orders EL = Electronic Trading (from Select system) MT = Matched Trades CH = Clearing House EX = Exchange (any other LME published data which falls outside the other categories).

Tag	Field Name	Type	Comment
10036	MDEntryPremium	Float	Premium value.
10037	MDEntrySession	String	This identifies trade ring session. Valid values: R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 = Morning kerb session K2 = Afternoon kerb session N = No session
10038	MDEntryTradeType	String	This identifies the trade type. Valid values: IO = Inter-office R1 = First morning ring R2 = Second morning ring R3 = First afternoon ring K1 = Morning kerb session K2 = Afternoon kerb session C1 = Basis first morning ring C2 = Basis second morning ring D1 = Basis morning kerb D2 = Basis afternoon kerb
10039	MDEntryMarketMakerID	String	Market maker ID.
10040	TradeTime	String	Time of trade.
10041	NoMDReportCodes	Int	Number of report codes.
10042	Last Trade	Boolean	Indicates if only the last trade should be returned from a MarketDataRequest message. If omitted default value is N. Valid values: Y = Return only the last trade. N = Return all trades if TradeSeqNoSeries and TradeSeqNo are not specified.
10043	MaturityExchangeRateDate	String	Prompt date for Exchange Rate. UTC date in format YYYYMMDD.
10044	Withdrawn	Boolean	Indicates if the floor price has been withdrawn. Valid values: Y = The floor price has been withdrawn. N = The floor price has not been withdrawn.

Tag	Field Name	Type	Comment
10046	Deleted	Boolean	Indicates if the floor price is deleted or the Indicative Quote is cancelled. Valid value: Y = The floor price has been deleted or the Indicative Quote is cancelled.
10048	InvestmentDecisionCountry	String	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.
10049	ExecutionDecisionCountry	String	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	DEA	Boolean	Indicates if the trader has a direct electronic access. Valid values: Y = The trader has direct electronic access. N = The trader does not have direct electronic access.
10051	TradingCapacity	String	Indicates the type of trading capacity. Valid values: 1 = DEAL (Dealing on own account) 2 = MTCH (Matched principal) 3 = AOTC (Any other capacity)
10052	ClientBranchCountry	String	Where the acquirer is a client, this field shall identify the country of the branch that received the order from the client or made an investment decision for a client in accordance with a discretionary mandate given to it by the client as required by Article 14(3). Where this activity was not conducted by a branch this shall be populated with the country code of the home Member State of the investment firm or the country code of the country where the investment firm has established its head office or registered office (in the case of third country firms). Where the transaction is for a transmitted order that has met the conditions for transmission set out in Article 4, this field shall be populated

Tag	Field Name	Type	Comment
			using the information received from the transmitting firm.
20023	CommodityDerivativeIndicator	String	Indication as to whether the transaction reduces risk in an objectively measurable way in accordance with Article 57 of Directive 2014/65/EU. Where the transaction is for a transmitted order that has met the conditions for transmission set out in Article 4, this field shall be populated by the receiving firm in the receiving firm's reports using the information received from the transmitting firm. This field is only applicable for commodity derivative transactions. '0' – Trade is risk reducing '1' – Trade is NOT risk reducing
10054	MDEntryTASPxType	String	Indicates the type of Trade at Settlement substituted Price in Market Data. This tag is mandatory when MDEntryType 269 = u. e.g.: TA, TS, TC
10055	LegAbbreviatedPrice	String	Represents Trade at Settlement Price type for the leg e.g. TS, TC, TA, TN

15 Instrument Block Examples

AADC

Cash contract for Aluminium Alloy:

Tag	Name	Value
55	Symbol	AA
461	CFICode	FCEPS
10010	NoOfInstrumentLegs	1
10004	PromptType	R

10000	MaturityRollingPrompt	C
541	MaturityDate	20100927

CADDEC10

December 2010 contract for Copper. Note that the monthly contract DEC10 means the third Wednesday in December 2010, i.e. 2010-12-15:

Tag	Name	Value
55	Symbol	CA
461	CFICode	FCEPS
10010	NoOfInstrumentLegs	1
10004	PromptType	S
541	MaturityDate	20101215

MXDJUN11

June 2011 future on the LME Index:

Tag	Name	Value
55	Symbol	MX
461	CFICode	FFICS
10010	NoOfInstrumentLegs	1
10004	PromptType	S
541	MaturityDate	20110608

NID1Q11

First quarter 2011 average contract for Nickel:

Tag	Name	Value
55	Symbol	NI
461	CFICode	FCEPS

10010	NoOfInstrumentLegs	1
10004	PromptType	A
10001	MaturityAveragePrompt	1Q11

AAD1H11

First half year 2011 average contract for Aluminium Alloy:

Tag	Name	Value
55	Symbol	AA
461	CFICode	FCEPS
10010	NoOfInstrumentLegs	1
10004	PromptType	A
10001	MaturityAveragePrompt	1Q11

AADTOMNEXT

Carry contract between TOM and C in Aluminium Alloy:

Tag	Name	Value
55	Symbol	AA
461	CFICode	FCEPS
10010	NoOfInstrumentLegs	2
10004	PromptType	R
10000	MaturityAveragePrompt	TOM
541	MaturityDate	20110121
10004	PromptType	R
10000	MaturityRollingPrompt	C

541	MaturityDate	20110124

AADDEC10-DEC11

Carry contract between DEC10 and DEC11 in Aluminium Alloy:

Tag	Name	Value
55	Symbol	AA
461	CFICode	FCEPS
10010	NoOfInstrumentLegs	2
10004	PromptType	S
541	MaturityDate	20101215
10004	PromptType	S
541	MaturityDate	20111221

AADJUN11_1400C

Call option on the June 2011 AA future with strike 1400 in Aluminium Alloy:

Tag	Name	Value
55	Symbol	AA
461	CFICode	OCAFPS
10010	NoOfInstrumentLegs	1
10004	PromptType	S
541	MaturityDate	20110601
202	StrikePrice	1400

AADOCT11_1500TP

TAPO put for October 2011 at strike 1500 in Aluminium Alloy:

Tag	Name	Value
55	Symbol	AA
461	CFICode	OPXTCS
10010	NoOfInstrumentLegs	1
10004	PromptType	S
541	MaturityDate	20111031
202	StrikePrice	1500

16 Order Entry and Execution Report Examples

Below are two new order message examples, one being a Member-Client new order placement message and the second a Member new order placement message. The corresponding execution report messages acknowledging receipt of the orders are also included.

16.1 New Order – Single (Client Order)

Member ABC submits order to buy 10 lots of LME Gold Cash (AUDC)

Tag Id		Name	Example	Comments
Standard Header				MsgType (35) =D
11		***ClOrdID***	123456	Unique identifier set by the entering firm.
21		***HandlInst***	1	Automated execution order, private, no Broker intervention.
453		***NoPartyID's***	8	Number of parties specified.
->	448	***PartyID***	ABCD	Client ISA
->	452	***PartyRole***	3	3 = Client ID
->	447	***PartyIDSource***	D	D = Proprietary/Custom code
->	448	***PartyID***	78963258	Client Short Code or 0 = 'No Client' 1 = 'AGGR' 2 = 'PNAL'
->	452	***PartyRole***	3	3 = Client ID
->	447	***PartyIDSource***	P	P = Short Code
->	448	***PartyID***	XYZ123DEF456	Client Account Code
->	452	***PartyRole***	24	24 = Customer Account
->	448	***PartyID***	JBLOGGS	Order origination trader name
->	452	***PartyRole***	11	11 = Order Origination Trader
->	448	***PartyID***	78963259	Execution Decision Short Code

->	452	***PartyRole***	301	301 = Execution Decision ID
->	448	***PartyID***	ABC	3 character broker code (Member mnemonic)
->	452	***PartyRole***	26	26 = Correspondent Broker – non-executing broker
->	448	***PartyID***	Yes	'Yes' will indicate whether an order is submitted as part of market making strategy.
->	452	***PartyRole***	35	35 = Liquidity Provider
->	448	***PartyID***	78963258	Decision Maker Short Code
->	452	***PartyRole***	122	122 = Decision Maker
->	447	***PartyIDSource***	P	P = Short Code
18		***ExecInst***	2	2 = Work
55		***Symbol***	AU	The Symbol e.g. AU
461		***CFI Code***	FCEPS	Single outright future, carries and premiums
10010		***NoOFInstrument Legs***	1	2 – for carry contracts 1 – for all other contracts
->	10004	***PromptType***	R	R = Rolling Prompt Date
->	10000	***MaturityRollingPrompt***	C	C = Cash
54		***Side***	1	1 = Buy
60		***TransactTime***	20100331-15:12:22.456	YYYYMMDD-HH:mm:ss.SSS in 24H
38		***OrderQty***	10	Order quantity
529		***OrderRestrictions***	D	D = Non-algorithmic (human)
40		***OrdType***	2	2 = Limit
44		***Price***	2000	Price
59		***TimeInForce***	0	0 = Day
58		***Text***	ABC123	Pre-Trade Risk Account
10049		***ExecutionDecisionCountry***	GB	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050		***DEA***	Y	Y = Trader has direct electronic access.
10051		***TradingCapacity***	3	3 = AOTC
10052		***ClientBranchCountry***	GB	A two character string to identify the country of the branch of the client Mandatory if tag 581 = AccountType is 1,3 or 7
20023		***CommodityDerivativeIndicator***	1	1 = Trade is NOT risk reducing
581		***AccoutType***	1	1 = Client ISA
Standard Trailer				

16.2 Execution Report – (Client Order)

LME acknowledges ABC order to buy 10 lots of LME Gold Cash (AUDC)

Tag Id	Name	Example	Comments
Standard Header			MsgType (35) =8
37	***OrderID***	ON-AU-20100331-000001	A unique order identifier set by the trading system.
11	***ClOrdID***	000001	The identifier of the message that caused this Execution Report.

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453		***NoPartyID's***	9	Number of parties specified.
->	448	***PartyID***	FIX1USER	Entering Trader (SenderCompID)
->	452	***PartyRole***	36	Entering Trader
->	448	***PartyID***	ABCD	Client ISA
->	452	***PartyRole***	3	3 = Client ID
->	447	***PartyIDSource***	D	D = Proprietary/Custom code
->	448	***PartyID***	78963258	Client Short Code or 0 = 'No Client' 1 = 'AGGR' 2 = 'PNAL'
->	452	***PartyRole***	3	3 = Client ID
->	447	***PartyIDSource***	P	P = Short Code
->	448	***PartyID***	XYZ123DEF456	Client Account Code
->	452	***PartyRole***	24	24 = Customer Account
->	448	***PartyID***	JBLOGGS	Order origination trader name
->	452	***PartyRole***	11	11 = Order Origination Trader
->	448	***PartyID***	78963259	Execution Decision Short Code
->	452	***PartyRole***	301	301 = Execution Decision ID
->	448	***PartyID***	ABC	3 character broker code (Member mnemonic)
->	452	***PartyRole***	26	26 = Correspondent Broker – non-executing broker
->	448	***PartyID***	Yes	'Yes' will indicate whether an order is submitted as part of market making strategy.
->	452	***PartyRole***	35	35 = Liquidity Provider
->	448	***PartyID***	78963258	Decision Maker Short Code
->	452	***PartyRole***	122	122 = Decision Maker
->	447	***PartyIDSource***	P	P = Short Code
17		***ExecID***	ON-AU-20100331-000713-112858	Unique identifier of execution message.
150		***ExecType***	0	New
39		***OrderStatus***	0	New
529		***OrderRestrictions***	D	D = Non-algorithmic (human)
40		***OrdType***	2	Limit
55		***Symbol***	AU	The Symbol e.g. AU
461		***CFI Code***	FCEPS	Single outright future, carries and premiums
10010		***NoOFInstrument Legs***	1	2 – for carry contracts 1 – for all other contracts
->	10004	***PromptType***	R	R = Rolling Prompt Date
->	10000	***MaturityRollingPrompt***	C	C = Cash
54		***Side***	1	1 = Buy
60		***TransactTime***	20100331-15:12:22.456	YYYYMMDD-HH:mm:ss.SSS in 24H
38		***OrderQty***	10	Order quantity
44		***Price***	2000	Price
59		***TimeInForce***	0	0 = Day
18		***ExecInst***	2	2 = Work
151		***LeavesQty***	10	The quantity is open for further execution.
14		***CumQty***	0	The quantity of the order that has been executed so far.
6		***AvgPx***	0	The average price (volume-weighted) for all the trades this order has filled.
58		***Text***	ABC123	Pre-Trade Risk Account

10049	***ExecutionDecisionCountry***	GB	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	***DEA***	Y	Y = Trader has direct electronic access.
10051	***TradingCapacity***	3	3 = AOTC
10052	***ClientBranchCountry***	GB	A two character string to identify the country of the branch of the client Mandatory if tag 581 = AccountType is 1,3 or 7
20023	***CommodityDerivativeIndicator***	1	1 = Trade is NOT risk reducing
581	***AccoutType***	1	1 = Client ISA
Standard Trailer			

16.3 New Order – Single (House Order)

Member ABC submits order to buy 10 lots of LME Gold Cash (AUDC)

Tag Id		Name	Example	Comments
Standard Header				MsgType (35) =D
11		***ClOrdID***	123456	Unique identifier set by the entering firm.
21		***HandlInst***	1	Automated execution order, private, no Broker intervention.
453		***NoPartyID's***	2	Number of parties specified.
->	448	***PartyID***	JBLOGGS	Order origination trader name
->	452	***PartyRole***	11	11 = Order Origination Trader
->	448	***PartyID***	78963259	Execution Decision Short Code
->	452	***PartyRole***	301	301 = Execution Decision ID
18		***ExecInst***	2	2 = Work
55		***Symbol***	AU	The Symbol e.g. AU
461		***CFI Code***	FCEPS	Single outright future, carries and premiums
10010		***NoOFInstrument Legs***	1	2 – for carry contracts 1 – for all other contracts
->	10004	***PromptType***	R	R = Rolling Prompt Date
->	10000	***MaturityRollingPrompt***	C	C = Cash
54		***Side***	1	1 = Buy
60		***TransactTime***	20100331-15:12:22.456	YYYYMMDD-HH:mm:ss.SSS in 24H
38		***OrderQty***	10	Order quantity
529		***OrderRestrictions***	D	D = Non-algorithmic (human)
40		***OrdType***	2	2 = Limit
44		***Price***	2000	Price
59		***TimeInForce***	0	0 = Day
58		***Text***	ABC123	Pre-Trade Risk Account
10048		***InvestmentDecisionCountry***	GB	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.

10049	***ExecutionDecisionCountry***	GB	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	***DEA***	Y	Y = Trader has direct electronic access.
10051	***TradingCapacity***	1	1 = DEAL
20023	***CommodityDerivativeIndicator***	1	1 = Trade is NOT risk reducing
581	***AccoutType***	2	2 = House
Standard Trailer			

16.4 Execution Report (House Order)

LME acknowledges ABC order to buy 10 lots of LME Gold Cash (AUDC)

Tag Id		Name	Example	Comments
Standard Header				MsgType (35) =8
37		***OrderID***	ON-AU-20100331-000001	A unique order identifier set by the trading system.
11		***ClOrdID***	000001	The identifier of the message that caused this Execution Report.
453		***NoPartyID's***	3	Number of parties specified.
->	448	***PartyID***	FIX1USER	Entering Trader (SenderCompID)
->	452	***PartyRole***	36	Entering Trader
->	448	***PartyID***	JBLOGGS	Order origination trader name
->	452	***PartyRole***	11	11 = Order Origination Trader
->	448	***PartyID***	78963259	Execution Decision Short Code
->	452	***PartyRole***	301	301 = Execution Decision ID
17		***ExecID***	ON-AU-20100331-000713-112858	Unique identifier of execution message.
150		***ExecType***	0	New
39		***OrderStatus***	0	New
529		***OrderRestrictions***	D	D = Non-algorithmic (human)
40		***OrdType***	2	Limit
55		***Symbol***	AU	The Symbol e.g. AU
461		***CFI Code***	FCEPS	Single outright future, carries and premiums
10010		***NoOFInstrument Legs***	1	2 – for carry contracts 1 – for all other contracts
->	10004	***PromptType***	R	R = Rolling Prompt Date
->	10000	***MaturityRollingPrompt***	C	C = Cash
54		***Side***	1	1 = Buy
60		***TransactTime***	20100331-15:12:22.456	YYYYMMDD-HH:mm:ss.SSS in 24H
38		***OrderQty***	10	Order quantity
44		***Price***	2000	Price
59		***TimeInForce***	0	0 = Day
18		***ExecInst***	2	2 = Work
151		***LeavesQty***	10	The quantity is open for further execution.
14		***CumQty***	0	The quantity of the order that has been executed so far.
6		***AvgPx***	0	The average price (volume-weighted) for all the trades this order has filled.

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58	***Text***	ABC123	Pre-Trade Risk Account
10048	***InvestmentDecisionCountry***	GB	ISO Country Code of the branch responsible for the person making the investment decision. This field will be used only if LME performs Transaction Reporting.
10049	***ExecutionDecisionCountry***	GB	ISO Country Code of the branch responsible for the person making the execution decision. This field will be used only if LME performs Transaction Reporting.
10050	***DEA***	Y	Y = Trader has direct electronic access.
10051	***TradingCapacity***	1	1 = DEAL
10052	***ClientBranchCountry***	GB	A two character string to identify the country of the branch of the client Mandatory if tag 581 = AccountType is 1, 3 or 7
20023	***CommodityDerivativeIndicator***	1	1 = Trade is NOT risk reducing
581	***AccoutType***	2	2 = House
Standard Trailer			