Order Entry Gateway
Binary Specification

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Document History

Version	Date	Change Description
1.0	27/07/2020	Initial draft

Preface

This document describes the binary interface protocol of the LME Order Entry Gateway.

The terminology used, message format, message flow and event models described throughout this document are similar to that of FIX 5.0 SP2 protocol specifications (https://www.fixtrading.org) where applicable, with some specific changes for performance and adaptability reasons.

Note message flow examples in this document are illustrations and do not contain all the mandatory fields. The presence of (…) denotes that fields have been omitted.

Bit position is shown as BP in the message definitions.

1 Session Management

1.1 Authentication

1.1.1 Comp ID

A participant user should use the Comp ID (a unique session identifier) provided by the Exchange for each session in order to connect to the gateway. A single participant may have multiple connections to the gateway, i.e., multiple binary order entry sessions, each with its own Comp ID.

The messages sent to the gateway should contain the Comp ID assigned to the client in the field Comp ID in the header section of a message.

1.1.2 Password Encryption

The binary protocol requires Password and New Password to be encrypted when they are sent in the Logon (5) message from the client to the gateway.

To encrypt the password, the client is expected to use a 2048-bit RSA (https://en.wikipedia.org/wiki/RSA_(cryptosystem)) public key circulated (through a different medium) by the Exchange. The binary output of the RSA encryption must be represented in Big Endian PKCS #1 with padding scheme OAEP (https://en.wikipedia.org/wiki/PKCS_1) and then converted to an alphanumeric value by means of standard base-64 encoding (http://en.wikipedia.org/wiki/Base64) when communicating with the gateway.

1.1.3 Password

The client should specify their password in the Password field of the Logon (5) message. This password must be in encrypted form. For security reasons, the client is expected to prefix the login time, in UTC format (YYYYMMDDHHMMSS), to the password before encryption. The client must ensure that login time is in accurate UTC.

The gateway will extract the login time prefix from the decrypted password string and validate that it is within the acceptable tolerance of the actual current time. A logon request from the client that fails this validation is rejected by the gateway.

The gateway validates the password, any validation failure will result in logon attempt being unsuccessful.

Repeated failures in password validation will result in the client account being locked. The participant is expected to contact the Exchange to unlock the client account.

1.1.4 Change Password

Each new Comp ID will be assigned a password on registration. The client is expected to change the password upon first logon whenever a password is (re)issued by the Exchange.

Password change request can be made together with Logon (5) request. The client should specify the encrypted new password in the New Password field and the current encrypted password in the Password field.

The status of the new password (i.e. whether it is accepted or rejected) will be specified in the Session Status response from the gateway. The new password, if accepted, will be effective for subsequent logins. If the new password provided fails validation, the gateway will reject the logon attempt.

1.2 Establishing a Binary Session

The client must wait for a successful Logon (5) response from the gateway before sending additional messages. If any message is received from the client before the exchange of logon messages, the TCP/IP connection with the client will be disconnected.

If a logon attempt fails, the gateway will send a Logout (6) and terminate the session; the Session Status of the Logout (6) message will indicate the reason for the logout.

If a client has already logged on, and if the gateway receives another connection attempt followed by a Logon (5) message with the same Comp ID, the gateway will terminate both connections without sending a Logout (6) or Reject (3) message.

If a session level failure occurs due to a message sent by the client which contains a sequence number that is less than what is expected and the PossDup is not set to 1 (Yes), then the gateway will send a Logout (6) and terminate the binary connection. In this scenario, the inbound sequence number will not be incremented but the outbound sequence number will be incremented.

If the gateway does not respond to the session initiation (client initiated Logon message), it is recommended that the client wait for a duration of 60 seconds prior to terminating the connection. The client is expected to retry session initiation after an elapsed time duration of 60 seconds.

If a client is disconnected abruptly or via a Logout message from the gateway, it is recommended that the client wait for a duration of 10 seconds prior to reconnecting to the gateway.

1.3 Message Sequence Numbers

The client and the gateway will each maintain a separate and independent set of incoming and outgoing message sequence numbers. Sequence numbers should be initialized to one (1) at the start of the day and be incremented throughout the session. Either side of a binary session will track the:

- Next Expected MsgSeqNum (starting at 1)
- Next To Be Sent MsgSeqNum (starting at 1) to the contra-party.

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

Any message sent by either side of a binary session will increment the sequence number unless explicitly specified for a given message type.

If any message sent by one side of a binary session contains a sequence number that is LESS than the Next Expected MsgSeqNum then the other side of this session is expected to send a Logout message and terminate the binary connection immediately, unless the PossDup indicator is set to 1 (Yes)

A binary session will not be continued to the next trading day. Both sides are expected to initialize (reset to 1) the sequence numbers at the start of each day. At the start of each trading day if the client starts with a sequence number greater than 1 then the gateway will terminate the session immediately without any further exchange of messages.

1.4 Heartbeat and Test Request

The client and the gateway will use the Heartbeat (0) message to monitor the communication line during periods of inactivity and to verify that the interfaces at each end are available.

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

If the gateway detects inactivity for a period longer than 3 heartbeat intervals, it will send a Test Request message to force a Heartbeat from the client. If a response to the Test Request is not received within a reasonable transmission time (recommended being an elapsed time equivalent to 3 heartbeat intervals), the gateway will send a Logout (6) and break the TCP/IP connection with the client. The client is expected to employ similar logic if inactivity is detected on the part of the gateway.

1.5 Terminating a Binary Session

Session termination can be initiated by either the gateway or the client by sending a Logout (6) message. Upon receiving the logout request, the contra party will respond with a Logout (6) message signifying a logout reply. Upon receiving the logout reply, the receiving party will terminate the connection.

If the contra-party does not reply with either a Resend Request (2) or a Logout (6) reply, the logout initiator should wait for 60 seconds prior to terminating the connection.

The client is expected to terminate each binary session at the end of each trading day before the gateway service is shut down. Any open binary connection will be terminated by the gateway by sending a Logout (6) when the service is shut down. Under exceptional circumstances, the gateway may initiate the termination of a connection during the trading day by sending the Logout (6) message.

If, during the exchange of logout messages, the client or the gateway detects a sequence gap, it should send a Resend Request (2).

1.6 Re-establishing a Binary Session

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

Once the binary session is re-established, the message sequence numbers will continue from the last message successfully transmitted prior to the termination as described in 2.7 Transmission of Missed Messages.

1.7 Sequence Reset

Gap-fill mode can be used by one side when skipping session level messages which can be ignored by the other side.

During a binary session the gateway or the client may use the Sequence Reset (4) message in Gap Fill mode if either side wishes to increase the expected incoming sequence number of the other party.

It will not be possible to reset the client sequence number to 1 using the Logon message. Should a reset be required the participant should contact the Exchange.

The client is required to support a manual request by Exchange to initialize sequence numbers prior to the next login attempt.

1.8 Fault Tolerance

After a failure on the client side or on the gateway side, the client is expected to be able to continue with the same session.

If the sequence number is reset to one (1) by the gateway, all previous messages from the gateway will not be available for the client side.

The client and the gateway are expected to negotiate on the Next Expected MsgSeqNum and Next To Be Received Sequence number by contacting the Exchange prior to initiating the new session and consequently manually setting the sequence number for both ends after having a direct communication with the participant.

1.9 Checksum Validation

The gateway performs a checksum validation on all incoming messages into the input services. Incoming messages that fail the checksum validation will be rejected and the connection will be dropped by the gateway without sending a logout.

Conversely, the gateway stamps an identically calculated checksum field on all outgoing messages from the input interfaces. In case of a checksum validation failure, the client is expected to drop the connection and take any appropriate action before reconnecting. Messages that fail the checksum validation should not be processed.

This checksum is a CRC32C value with the polynomial 0x1EDC6F41, presented as a 32-bit unsigned integer (http://en.wikipedia.org/wiki/Cyclic_redundancy_check#CRC-32C).

2 Recovery

2.1 General Message Recovery

Message gaps may occur which are detected via the tracking of incoming sequence numbers. Recovery will be initiated if a gap is identified when an incoming message sequence number is found to be greater than Next Expected MsgSeqNum during Logon or the Sequence Number at other times.

The Resend Request (2) will indicate the Start Sequence and End Sequence of the message gap identified and when replying to a Resend Request (2), the messages are expected to be sent strictly honouring the sequence.

If messages are received outside of the Start Sequence and End Sequence, then the recovering party is expected to queue those messages until the gap is recovered.

During the message recovery process, the recovering party will increment the Next Expected MsgSeqNum accordingly based on the messages received. If messages applicable to the message gap are received out of sequence then the recovering party will drop these messages.

The party requesting the Resend Request (2) can specify “0” in the End Sequence to indicate that they expect the sender to send ALL messages starting from the Start Sequence. In this scenario, if the recovering party receives messages with a sequence greater than the Start Sequence, out of sequence, the message will be ignored.

Administrative messages such as Sequence Reset (4), Heartbeat (0) and Test Request (1) which can be considered irrelevant for a retransmission could be skipped using the Sequence Reset (4) message in gap-fill mode. Note that the gateway expects the client to skip Sequence Reset (4) messages when replying to a Resend Request (2) at all times.

When resending messages, the gateway would use either PossDup or PossResend indicator to indicate whether the messages were retransmitted earlier. If PossDup is set, it indicates that the same message with the given sequence number with the same business content may have been transmitted earlier. In the case where PossResend is set, it indicates that the same business content may have been transmitted previously but under the different message sequence number. In this case business contents needs to be processed to identify the resend. For example, in execution reports the Exec ID may be used for this purpose.

2.2 Resend Request

The client may use the Resend Request (2) message to recover any lost messages. This message may be used in one of three modes:

1. To request a single message. The Start Sequence and End Sequence should be the same.
2. To request a specific range of messages. The Start Sequence should be the first message of the range and the End Sequence should be the last of the range.
3. To request all messages after a particular message. The Start Sequence should be the sequence number immediately after that of the last processed message and the End Sequence should be zero (0).

2.3 Logon Message Processing – Next Expected Message Sequence

The session initiator should supply the Next Expected MsgSeqNum the value next expected from the session acceptor in Sequence Number. The session acceptor should validate the logon request including that Next Expected MsgSeqNum does not represent a gap. It then constructs its logon response with Next Expected MsgSeqNum containing the value next expected from the session initiator in Sequence Number having incremented the number above the logon request if that was the sequence expected.

The session initiator must wait until the logon response is received in order to submit application messages. Once the logon response is received, the initiator must validate that Next Expected MsgSeqNum does not represent a gap.

In case of gap detection from either party (lower than the next to be assigned sequence) recover all messages from the last message delivered prior to the logon through the specified Next Expected MsgSeqNum sending them in order, then gap fill over the sequence number used in logon and proceed sending newly queued messages with a sequence number one higher than the original logon.

Neither side should generate a Resend Request (2) based on Sequence Number of the incoming Logon message but should expect any gaps to be filled automatically by following the Next Expected Sequence processing described above. Whilst the gateway is resending messages to the client, the gateway does not allow another Resend Request (2) from the client. If a new Resend Request (2) is received during this time, the gateway will terminate the session immediately without sending the Logout (6) message.

Note that indicating the Next Expected MsgSeqNum in Logon (5) is mandatory.

2.4 Possible Duplicates

The gateway handles possible duplicates in the same way as the FIX protocol. The client and the gateway use the PossDup field to indicate that a message may have been previously transmitted with the same Sequence Number.

2.5 Possible Resends

The gateway does not handle possible resends for the client-initiated messages (e.g., New Order, Mass Quote, etc.) and all the messages will be processed without considering the value in the PossResend field. Any message with duplicate Client Order ID will be rejected based on the Client Order ID uniqueness check and those messages that conform to the uniqueness check will be processed as normal messages.

The gateway may use the PossResend field to indicate that an application message may have already been sent under a different sequence number. The client should validate the contents (e.g., Exec ID) of such a message against those of messages already received during the current trading day to determine whether the new message should be ignored or processed.

2.6 Gap Fills

The following messages are expected to be skipped using gap-fills when being retransmitted:

1. Logon
2. Logout
3. Heartbeat
4. Test Request
5. Resend Request
6. Sequence Reset

All other messages are expected to be replayed within a retransmission.

2.7 Transmission of Missed Messages

Following messages will be sent to the client when it reconnects if such messages were generated during a period when this client was disconnected from the gateway:

- Execution Report (includes order reject)
- Order Amend Rejected
- Order Cancel Rejected
- Mass Cancel Report
- Business Message Reject
- Reject
- Quote Request Rejected
- Mass Quote Ack
- Security Definition
- MMP Reset Ack
- News.

In the unlikely event the disconnection was due to an outage of the gateway, Business Message Reject and Reject messages may not be retransmitted, and the other messages which will be retransmitted to the client will include a PossResend set to 1 (Yes).

3 Service Description

3.1 Security Identification

Each Tradable Instrument will be identified using the Security ID field which can be a maximum of 19 digits.

3.2 Security Creation

A Security Definition Request can be submitted to create a new tradable instrument:

Instrument Request Type	Binary Fields
Options strike	Security Type = 2 Security Sub Type = 0 Maturity Date Strike Price Put or Call
Strategy	Security Type = 3 Security Sub Type = 1 to 10 Leg Security ID Leg Ratio Leg Side Leg Price

3.2.1 Strategies

Strategy legs must be specified in order of expiry. For a Delta Hedge custom strategy, the option legs must precede those of the future(s). Security Definition Requests (10) containing strategy legs that are not in correct order will not be permitted and the Security Definition (11) returned will contain the Security Response Type = ‘5’ Reject security proposal and the Security Reject Reason (1607) = ‘12’ Invalid instrument structure.

The accepted strategy definition is the buy side of the strategy. A Strategy Definition Request will be accepted which is the inverse (sell side) of an already created strategy or an Exchange defined strategy that has not been created. The Security Definition returned will contain the SecurityResponseType = ‘2’ Accept security proposal with revisions as indicated in the message and the Security ID of the existing strategy.

3.2.1.1 Exchange Defined Strategy Types

The following defined strategy types are supported:

Futures Strategies

Security Sub Type	Strategy Name	Definition (from buy perspective)
1	Carry	Buy near leg, sell far leg
3	Average 3M	Buying 3 consecutive (monthly) legs
4	Average 6M	Buying 6 consecutive (monthly) legs
5	Average 12M	Buying 12 consecutive (monthly) legs
6	Carry Average	Buy an outright (e.g. 3M), sell a Future Average (e.g. first quarter 2023).

For an Average strategy only the front leg needs to be specified as the remaining legs will be consecutive.

Options Strategies

Security Sub Type	Strategy Name	Definition (from buy perspective)
7	Call Spread	Buy a (call) strike, sell a (call) higher strike within the same option expiry
8	Put Spread	Buy a (put) strike, sell a (put) lower strike within the same option expiry

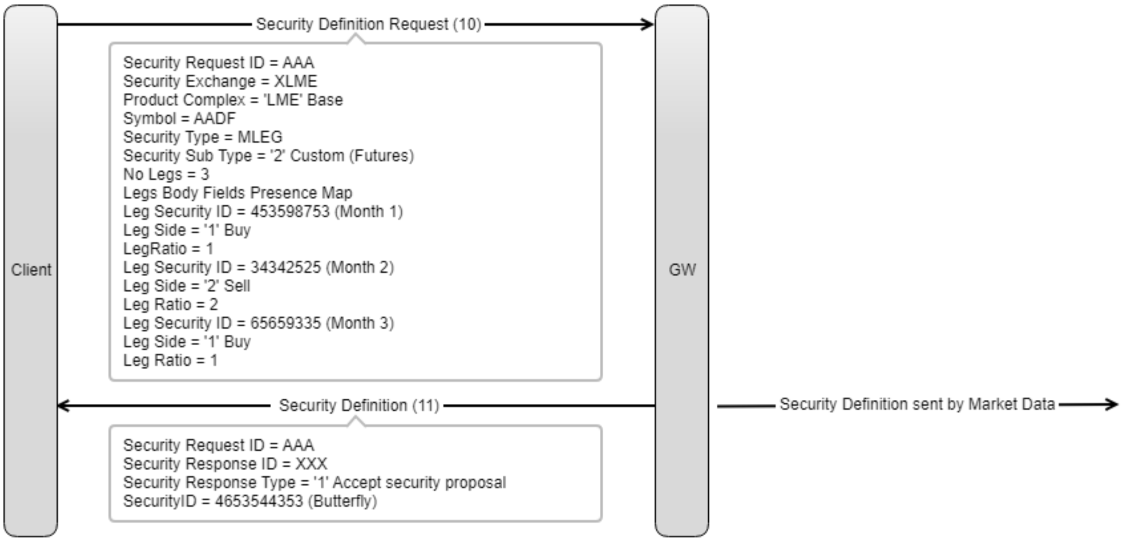
3.2.1.2 Custom Strategies

A non-Exchange defined strategy can be submitted in a Security Definition Request as a Custom strategy using either:

- Security Sub Type = ‘2’ Custom (Futures)
- Security Sub Type = ‘9’ Custom (Delta Hedge)
- Security Sub Type = ‘9’ Custom (Options).

A custom strategy may consist of up to five legs in a Futures contract or premium quoted Option. Each leg in the strategy must be in the same contract except for a delta hedge custom strategy in premium-based options where the last 1 to 2 legs belong to the underlying futures contract.

The custom strategy is defined from a buy side perspective by specifying the Security ID of each of the legs, the leg ratio and leg side. For example, a Futures Butterfly is defined as buy Month 1, sell Month 2 twice and buy Month 3.


Client
Security Definition Request (10)
GW
Security Definition (11)
Security Definition sent by Market Data

Security Request ID = AAA
Security Exchange = XLME
Product Complex = 'LME' Base
Symbol = AADF
Security Type = MLEG
Security Sub Type = '2' Custom (Futures)
No Legs = 3
Legs Body Fields Presence Map
Leg Security ID = 453598753 (Month 1)
Leg Side = '1' Buy
LegRatio = 1
Leg Security ID = 34342525 (Month 2)
Leg Side = '2' Sell
Leg Ratio = 2
Leg Security ID = 65659335 (Month 3)
Leg Side = '1' Buy
Leg Ratio = 1

Security Request ID = AAA
Security Response ID = XXX
Security Response Type = '1' Accept security proposal
SecurityID = 4653544353 (Butterfly)

3.3 Order Submission

It is possible to submit orders for outright futures, options series or strategies using any of the order types specified in 3.4.1 Order Types. An individual order can be submitted using New Order Single (12) whereas multiple orders can be submitted using Mass Quote (22).

3.4 Order Management

3.4.1 Order Types

The following order types are supported:

Order Type	Binary Field
Limit An order submitted with a price and volume that will trade at the limit price or better for as much of its stated volume as is available in the order book.	Order Type = 2 Order Price
Market to Limit An order submitted with a volume specified but no price. The order is executed at the best available price(s) up / down to their assigned limit price. Any order volume which is not fully executed rests in the order book as a limit order at the assigned limit price.	Order Type = 10
Stop Loss An order that is submitted but not visible in the order book until it is triggered by the last traded price and/or best bid/offer. Once triggered the order is entered into the order book as a Market to Limit order.	Order Type = 3 Trigger Price Trigger Price Type

Order Type	Binary Field
Stop Limit An order that is submitted but not visible in the order book until it is triggered by the last traded price and/or best bid/offer. Once triggered the order is entered into the order book as a Limit order with at the specified price.	Order Type = 4 Trigger Price Trigger Price Type Order Price
Iceberg An order submitted with a visible order quantity and a total order quantity. The visible order quantity must be fully executed before it can be replenished with the next visible order quantity.	Order Type = 11 Order Price Display Quantity Order Quantity
Post Only The order must rest in the order book before it can trade. If the order can be executed on entry into the order book it is rejected. If an amendment to the order can result in execution it also is rejected and the original order remains.	Order Type = 12 Order Price
One Cancels Other (OCO) – Market to Limit A single order which is a combination of a Limit and a Stop. On submission the Limit price and a Stop trigger price is specified. A partial trade at the Limit price will reduce the quantity available in the OCO. If the order is traded out at the Limit price the Stop component will be cancelled. Similarly if the Stop is triggered then the Limit component is cancelled. Note: No Execution Report will be generated for the cancelled component. If the Stop component is triggered the order becomes a Market to Limit order.	Order Type = 13 Order Price Trigger Price Trigger Price Type
One Cancels Other (OCO) – Limit A single order which is a combination of a Limit and a Stop. On submission the Limit price and a Stop trigger price is specified. A partial trade at the Limit price will reduce the quantity available in the OCO. If the order is traded out at the Limit price the Stop component will be cancelled. Similarly if the Stop is triggered then the Limit component is cancelled. Note: No Execution Report will be generated for the cancelled component.	Order Type = 14 Order Price Trigger Price Trigger Price Type Trigger New Price

Order Type	Binary Field
If the Stop component is triggered it becomes a Limit order at a new price.	

3.4.2 Order Validity Conditions

Validity Condition	Binary Field
Day An order that will expire at the end of the day.	Time In Force = 0
Good Till Cancelled (GTC) An order that is valid until it is either cancelled or matched.	Time In Force = 1
Immediate or Cancel (IOC) An order that is executed at the stated price or better for as much order volume that is available. Any order volume that cannot be traded is cancelled.	Time In Force = 3
Fill or Kill (FOK) An order that is only executed if there is sufficient volume available, at the stated price or better, for them to execute fully. Otherwise the entire order is cancelled.	Time In Force = 4
Good Till Date (GTD) The order is valid until the end of the trading date specified.	Time In Force = 6

3.4.3 Order Types and Permitted Order Validity Conditions

Order Type	Day	GTC	IOC	FOK	GTD
Limit	✔	✔	✔	✔	✔
Market to Limit	✔	✔	✔	✔	✔
Stop Loss	✔	✔			✔
Stop Limit	✔	✔			✔
Iceberg	✔	✔			✔
Post Only	✔	✔			✔

Order Type	Day	GTC	IOC	FOK	GTD
OCO Market to Limit	✔	✔			✔
OCO Limit	✔	✔			✔

3.5 Order Identification

The client must specify a Client Order ID when submitting a New Order Single, Order Amend, Order Cancel or Mass Cancel request. As with the FIX protocol, the client should comply with and ensure that the each Client Order ID for this Comp ID is unique for the duration of the trading day and has not been used already for any of the currently persisted orders belonging to this Comp ID.

Note the Quote ID supplied on a Mass Quote must also be unique and must not have been specified as a Client Order ID.

When an order is accepted, the system assigns an Order ID that is unique for all orders and quotes.

When modifying or cancelling an order, the Original Client Order ID is used to identify the original order.

3.6 Order Expiry

No Execution Report will be sent for orders with a Time in Force = ‘0’ Day when they expire at the end of the trading day.

At the end of the day, the order originator will receive an Execution Report with Exec Type = ‘C’ and Order Status = ‘12’ Expired for:

- Expiring orders submitted with Time in Force = ‘6’ Good Till Date (GTD).
- GTC orders if the tradable instrument expires at the end of the trading day

A GTD order with an expiry date between the current and next business day will be cancelled on the new business day prior to member connectivity and therefore not receive an Execution Report.

3.7 Order Restatement

GTC/GTD orders that have not hit their expiry condition are persisted when the respective tradable instrument enters the Close state. The order originator is notified by Execution Report with Exec Type = ‘3’ and Order Status = 3 = Done for Day.

On initial logon on the next trading day, Execution Reports are sent for persisted orders that have been returned with Exec Type = ‘D’ Restated, Order Status = ‘0’ New or ‘1’ Partially Filled and Exec Restatement Reason = ‘1’ GT renewal / restatement.

3.8 Order Amendment

An order can be amended by using Amend Order (13) and specifying the Original Client Order ID. The client can optionally specify the Order ID in the Amend Order (13). If Order ID is specified the system will validate whether the Order ID is associated with the correct order as identified using the

Original Client Order ID. The Amend Order (13) will be rejected if the specified Order ID is invalid based on this validation.

The following order attributes can be modified if they have been specified on the original order:

- Order Price
- Trigger Price
- Trigger New Price
- Order Quantity
- Display Quantity
- Expiry Date
- Order Capacity
- Order Restriction
- Execution Decision Within Firm
- Client Branch Country Code
- Text.

The following optional order attributes can be modified. If the attribute is not present in the Amend Order (13), this indicates that the default value will be used:

- Direct Electronic Access
- Aggregated Order
- Pending Allocation Order
- Liquidity Provision Order
- Risk Reduction Order.

The following optional order attributes can be modified. If the attribute is not present in the Amend Order (13) it indicates that the value have been removed or not applicable:

- Text
- Investment Decision Within Firm
- Investment Decision Country Code
- Execution Decision Country Code.

The client cannot amend an order that is fully filled or cancelled or expired.

Amend Order (13) cannot be used to amend an order submitted using Mass Quote.

The Trigger Price or Trigger New Price cannot be amended if the Stop order has been triggered.

If the client sends an Amend Order (13) for an order for which an Amend Order (13) or a Cancel Order (15) is already being processed the incoming Amend Order (13) is rejected.

3.9 Order Cancellation

An individual order can be cancelled using Cancel Order (15) by specifying the Original Client Order ID.

The client can optionally specify the Order ID in the Cancel Order (15). If the Order ID is specified the system will validate whether the Order ID is associated with the correct order as identified using the Original Client Order ID. The Cancel Order (15) will be rejected if the specified Order ID is invalid based on this validation.

A successful cancellation will return an Execution Report (8). If the cancel is rejected, an Order Cancel Rejected (16) is sent containing the reason for rejection.

The client may not cancel an order that is fully filled or cancelled or expired.

Cancel Order (15) cannot be used to cancel an order submitted using Mass Quote.

If the client sends a Cancel Order (15) for an order for which a Cancel Order (15) is already being processed the incoming Cancel Order (15) is rejected.

If the client sends a cancel request for an order for which an amendment is being processed the incoming cancel request will be processed (i.e., accepted or rejected) once the outcome of the amendment is known.

3.10 Mass Cancellation

Multiple orders/quotes can be cancelled using Mass Cancel Request (17) by specifying which orders/quotes are to be cancelled:

Cancellation Type	Binary Field
All orders/quotes for a Comp ID	Mass Cancel Request Type = 7 Mass Cancel Scope
All orders/quotes for a specific tradable instrument	Mass Cancel Request Type= 1 Mass Cancel Scope Security ID
All orders/quotes for a specific contract	Mass Cancel Request Type= 3 Mass Cancel Scope Contract Code
All quotes for a specific Quote ID	Mass Cancel Request Type = 101 Mass Cancel Scope = 2 Quote ID
All orders/quotes for a specific end client	Mass Cancel Request Type= 7

Cancellation Type	Binary Field
	Mass Cancel Scope Broker Client ID

If the Mass Cancel Request is accepted, Execution Reports will be sent for each order cancellation and will include the Client Order ID provided on the Mass Cancel Request (17). The Mass Cancel Report (18) will reflect the action taken and indicate the Total Affected Orders.

If the Mass Cancel Request is rejected, the Mass Cancel Response = ‘0’ Cancel Request Rejected and will include the Mass Cancel Reject Reason.

3.11 Cancel on Disconnect

The gateway will not automatically cancel a user’s non-persisted orders and quotes in the event of a Logout. A user should explicitly cancel such orders and quotes prior to Logout using a Mass Cancel Request (17).

On order submission, a user can specify whether non-persisted orders should be cancelled on system disconnection (due to, for example, a network issue or in the event of inactivity such as too many missed heartbeats) using Cancel on Disconnect.

On detection of a loss of connectivity, the system will determine whether a user’s non-persisted orders are to be cancelled based on Cancel on Disconnect attribute for an order. Orders from a Mass Quote are by default classified as non-persisted orders and are therefore automatically cancelled.

This feature does not guarantee that all live orders will be successfully cancelled as executions that occur very near to the time of disconnect may not be reported to the client. It also depends on the tradable instrument trading state when the abrupt disconnection is identified by the Exchange system.

3.12 Mass Quote

Multiple orders can be submitted by permissioned trading users in multiple tradable instruments in the same contract using a Mass Quote (22).

Orders in the form of quotes are submitted as a quote pair (bid and offer) in a quote entry with a Quote Entry ID. Up to 20 quote entries can be submitted in a Mass Quote.

Each quote entry is related to a Quote Set which identifies the tradable instrument. All the quote sets must belong to the same contract. Within each quote set, up to three prices levels can be specified using Quote Price Level.

Quote entries within a Mass Quote can be both amended or cancelled using a Mass Quote. Amendments and cancellations can be made simultaneously.

Amendments are made by sending replacement quotes to overwrite both sides of a quote entry or a single side of a quote pair leaving the other side unchanged. Note, an existing order is identified using the Security ID, Quote Price Level and Side. If there is no such order, the amend instruction will result in a new order.

Cancellation is indicated by a zero value for Bid Size for bid side or Offer Size for offer side. Cancellation can be for both sides of a quote pair or a single side of a quote pair leaving the other side unchanged. One side of a quote entry can be amended and the other side can be cancelled.

Unchanged is indicated by -1 value for Bid Size for bid side or Offer Size for offer side. The quote side that has not changed will retain its current price time priority.

For each quote entry side in the Mass Quote, an Execution Report (8) is returned to indicate whether the quote entry has been accepted or rejected. The Execution Report (8) can be mapped back to the quote in the Mass Quote message through the:

1. Quote ID returned as Client Order ID
2. Quote Entry ID returned as Secondary Client Order ID.

If an amendment to a quote side fails validation Order Amend Rejected (14) will be returned. Similarly for a cancellation validation failure Order Cancel Rejected (16) will be returned.

Crossed quotes submitted in the same quote pair will be rejected but will be executed if supplied in different quote pairs.

If a Mass Quote message is rejected, the gateway will return a Mass Quote Ack (23) containing the Quote Reject Reason. For example, if quotes for different contracts have been specified.

An order resulting from a quote is always treated as a Limit order which expires at the end of the current day. In the event of a system related connection loss, orders from Mass Quotes will be automatically cancelled, see 3.11 Cancel on Disconnect.

An order resulting from a quote is assigned the order attributes as defined in the Mass Quote message. The following attributes are not included in the Mass Quote message and the resulting order is assigned the following default values:

Attribute	Assigned Value
Cancel on Disconnect	N = No
Aggregated Order	N = No
Pending Allocation Order	N = No
Liquidity Provision Order	Y = Yes
Risk Reduction Order	N = No
Text	Absent

For an existing quote that is being amended, only the following attributes will be amended. All other order attributes are non-amendable and will retain their original value.

- Bid Size
- Bid Price
- Offer Size

- Offer Price.

3.13 Request for Quote (RFQ)

An RFQ indicates a trading interest in a specific instrument which is published to market participants by the Market Data service.

The Quote Request (20) will include the Quote Request Type which specifies whether a single quote or streaming quotes are requested. It can optionally specify the side and the quantity for which a price is required.

Trading participants respond to an RFQ using standard order and quote functionality.

3.14 Speed Bumps

Exchange contracts may be configured with speed bumps. A speed bump will only be applicable to New Order Single (12) and Amend Order (13).

Passive orders, cancellations using Cancel Order (15) or Mass Cancel Request (17), Mass Quote (22) and Post Only orders will be exempt.

The status of an order in a speed bump will be reported in Exec Type Reason in the Execution Report (8):

101 = Order accepted but speed bump applied

102 = Order added after speed bump

103 = Order cancelled whilst in speed bump delay

104 = Original order is in speed bump enforced delay

105 = Order updated after speed bump delay

106 = Amend is in speed bump delay

107 = Order amended after speed bump delay

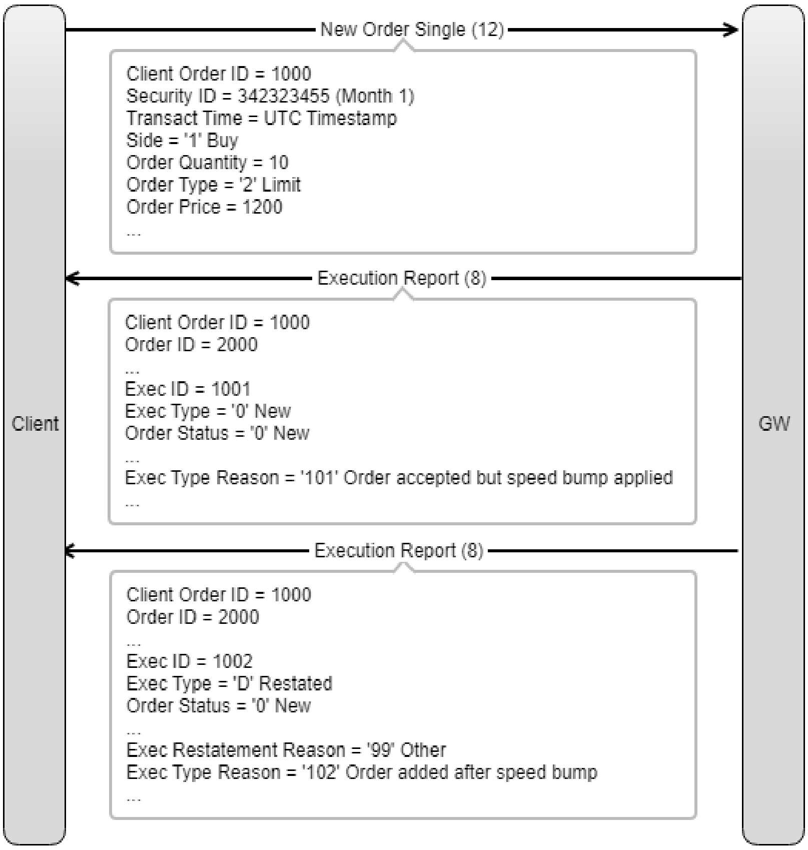
108 = Order rejected after speed bump delay

109 = Unsolicited cancel while in speed bump

Order submission is speed bumped

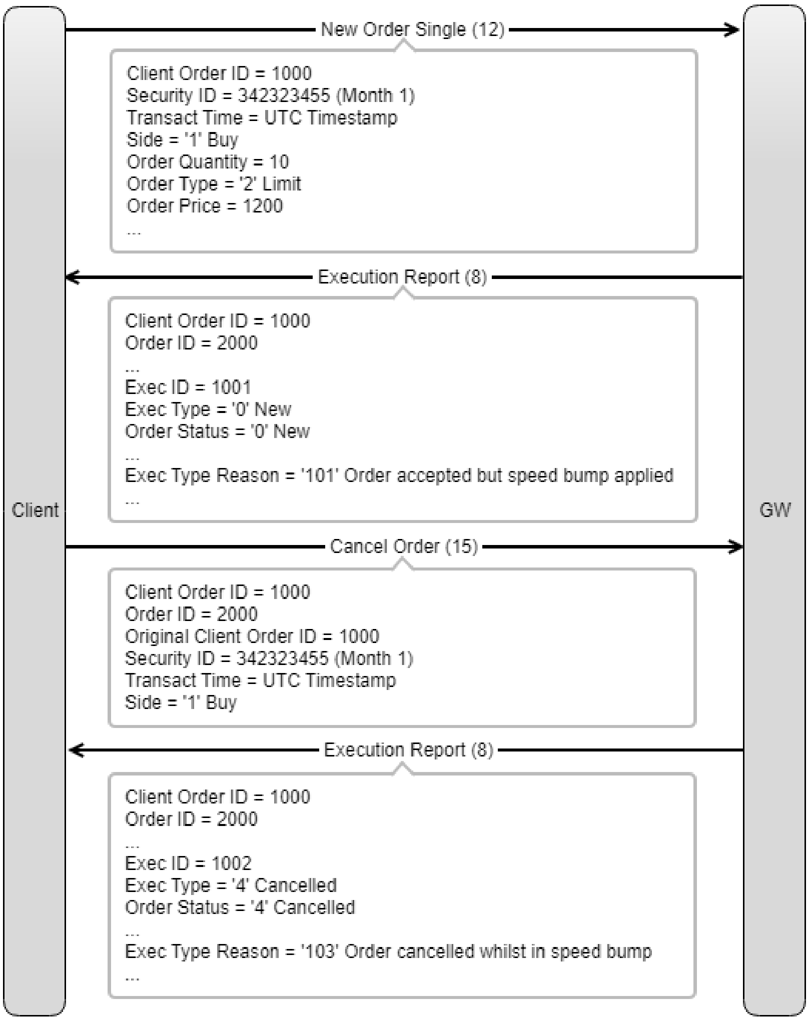
If an order is submitted but is subject to a speed bump, the order is held and not added to the order book until the order has been released from the speed bump. The Execution Report sent in acknowledgement includes an Exec Type Reason = ‘101’ Order accepted but speed bump applied.

The Execution Report sent once the order has cleared the speed bump and is added to the order book includes Exec Type = ‘D’ Restated and Exec Type Reason = ‘102’ Order added after speed bump.



Order cancellation for a speed bumped order

An order cancellation submitted while an order is in the speed bump will be processed without any delay as the Cancel Order (15) is not subject to speed bump conditions. The Execution Report sent in response to the cancellation includes Exec Type Reason = ‘103’ Order cancelled whilst in speed bump delay.

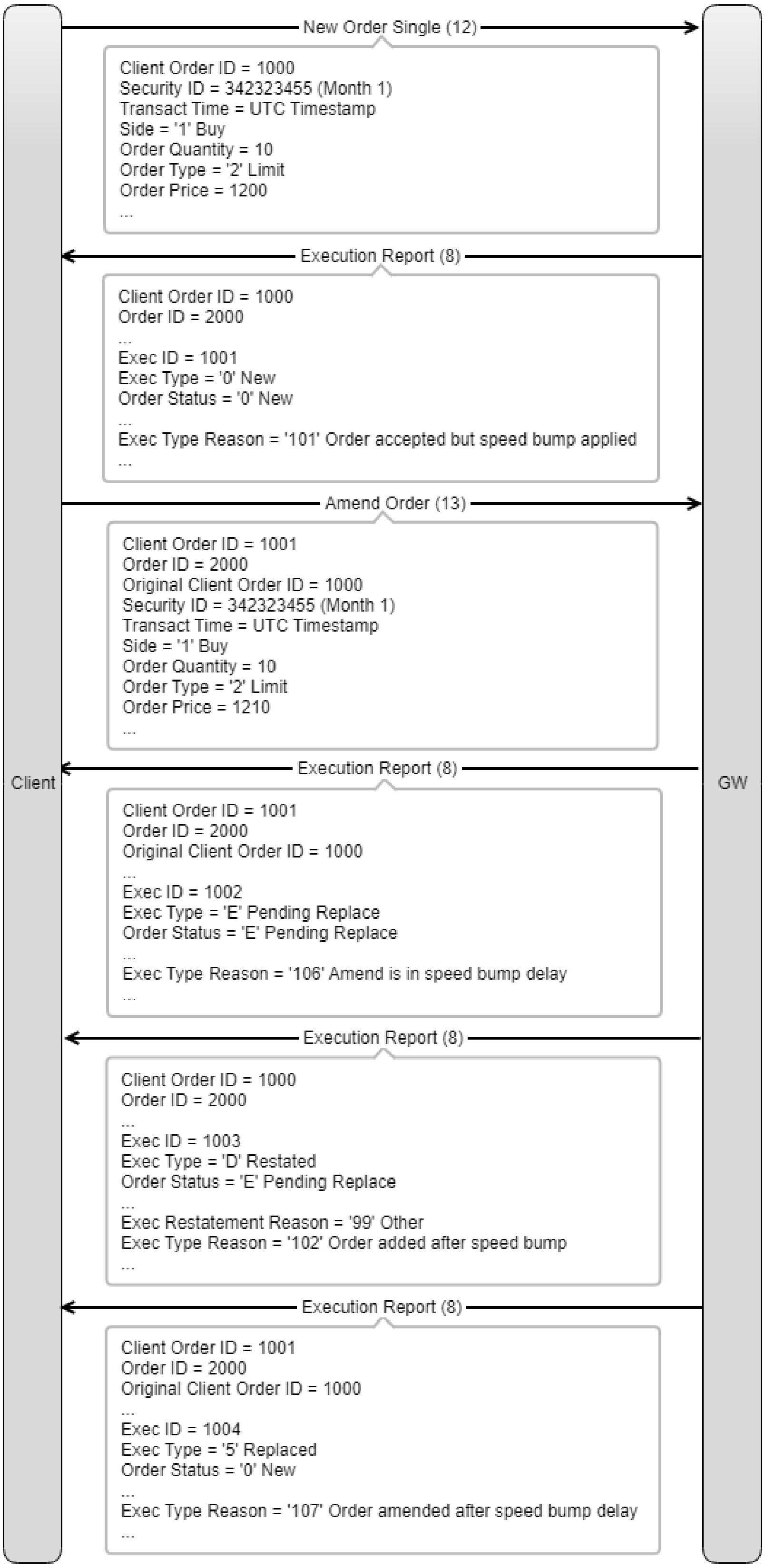


Executable order amendment for a speed bumped order will be speed bumped

An order is submitted which is subject to a speed bump. An Amend Order (13) is submitted while the order submission is in the speed bump queue. The amended order is executable and therefore speed bumped. The Execution Report for the order revision includes Exec Type Reason = ‘106’ Amend is in speed bump delay. The Amend Order will not be processed until the original order has cleared the speed bump.

The Execution Report sent when the original order submission is released from the speed bump and added to the order book includes Exec Type = ‘D’ Restated, Order Status = ‘E’ Pending Replace and Exec Type Reason = ‘102’ Order added after speed bump.

Another Execution Report is sent when the order revision clears the speed bump and replaces the original order. The Execution Report includes Exec Type = ‘5’ Replaced and Exec Type Reason (2431) = ‘107’ Order amended after speed bump delay.



New Order Single (12)

Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
...

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1001
Exec Type = '0' New
Order Status = '0' New
...
Exec Type Reason = '101' Order accepted but speed bump applied
...

Amend Order (13)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1210
...

Execution Report (8)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
...
Exec ID = 1002
Exec Type = 'E' Pending Replace
Order Status = 'E' Pending Replace
...
Exec Type Reason = '106' Amend is in speed bump delay
...

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1003
Exec Type = 'D' Restated
Order Status = 'E' Pending Replace
...
Exec Restatement Reason = '99' Other
Exec Type Reason = '102' Order added after speed bump
...

Execution Report (8)

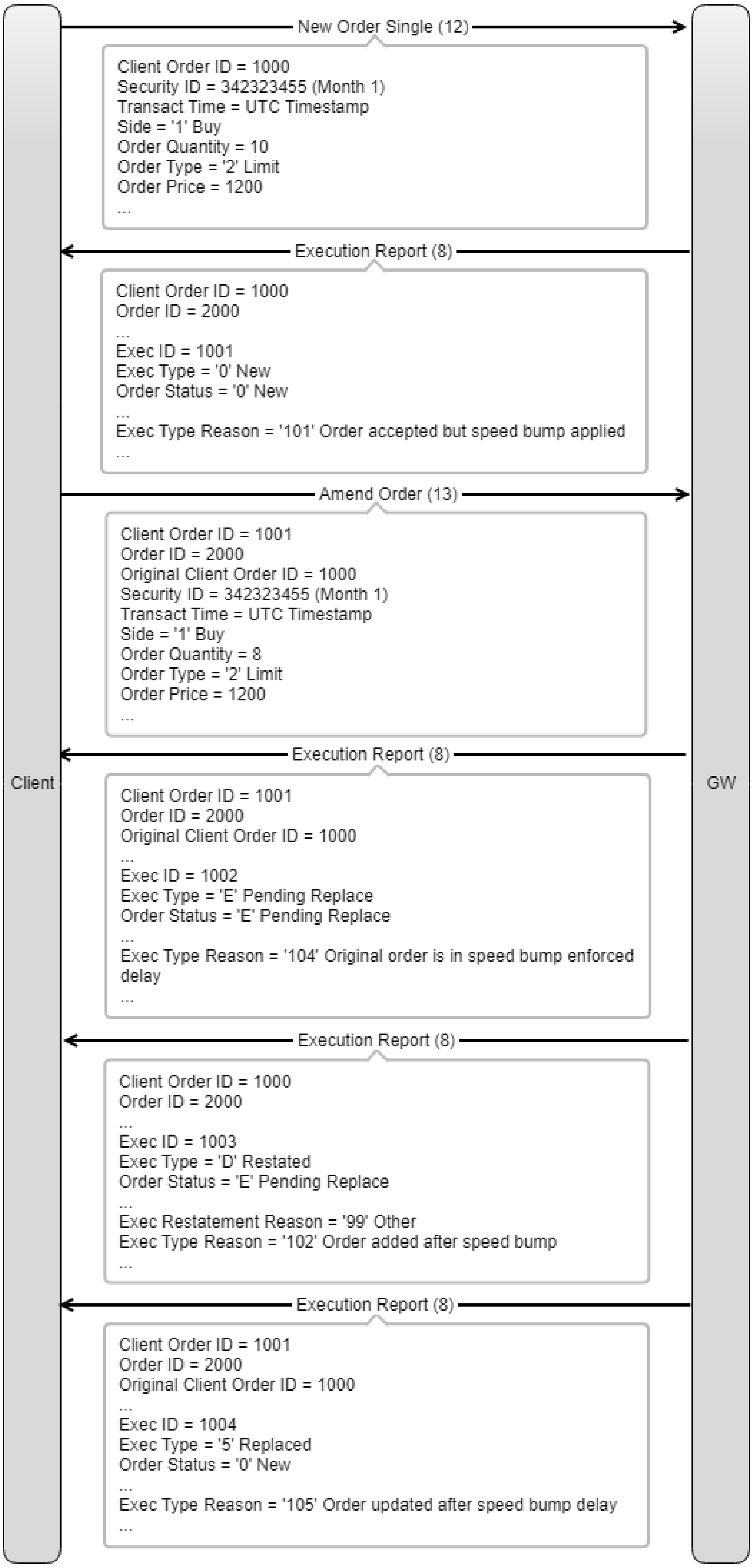
Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
...
Exec ID = 1004
Exec Type = '5' Replaced
Order Status = '0' New
...
Exec Type Reason = '107' Order amended after speed bump delay
...

Non-executable order amendment for a speed bumped order will not be speed bumped

An order is submitted which is subject to a speed bump. An Amend Order (13) is submitted while the order submission is in the speed bump queue. The amended order will rest in the order book and is therefore not subject to speed bump conditions. The Amend Order will not be processed until the original order has cleared the speed bump therefore the Execution Report for the revision includes Exec Type = ‘E’ Pending Replace and Exec Type Reason = ‘104’ Original order is in speed bump enforced delay.

The Execution Report sent once the order submission has cleared the speed bump and is added to the order book includes Exec Type = ‘D’ Restated and Exec Type Reason = ‘102’ Order added after speed bump.

When the order is replaced the Execution Report includes Exec Type = ‘5’ Replaced and Exec Type Reason = ‘105’ Order updated after speed bump delay.



New Order Single (12)

Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
…

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
…
Exec ID = 1001
Exec Type = '0' New
Order Status = '0' New
…
Exec Type Reason = '101' Order accepted but speed bump applied
…

Amend Order (13)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 8
Order Type = '2' Limit
Order Price = 1200
…

Execution Report (8)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
…
Exec ID = 1002
Exec Type = 'E' Pending Replace
Order Status = 'E' Pending Replace
…
Exec Type Reason = '104' Original order is in speed bump enforced delay
…

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
…
Exec ID = 1003
Exec Type = 'D' Restated
Order Status = 'E' Pending Replace
…
Exec Restatement Reason = '99' Other
Exec Type Reason = '102' Order added after speed bump
…

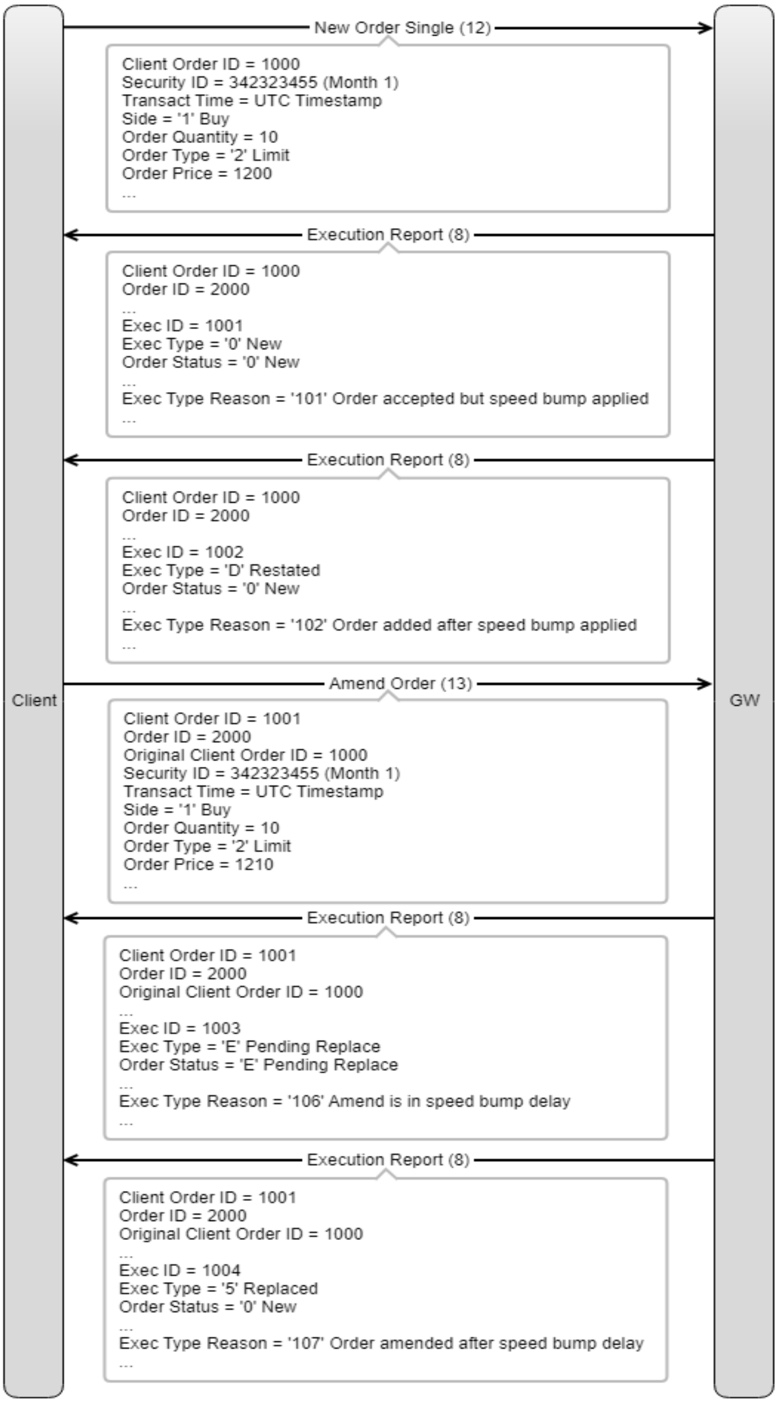
Execution Report (8)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
…
Exec ID = 1004
Exec Type = '5' Replaced
Order Status = '0' New
…
Exec Type Reason = '105' Order updated after speed bump delay
…

Executable order amendment for a resting order will be speed bumped

An order amendment is submitted for a resting order that was previously speed bumped. The Amend Order is speed bumped as the amended order will not provide liquidity. The Execution Report for the amendment includes Exec Type= ‘E’ Pending Replace with and Exec Type Reason = ‘106’ Amend is in speed bump delay.

When the order is replaced the Execution Report includes Exec Type = ‘5’ Replaced and Exec Type Reason = ‘107’ Order amended after speed bump delay.



New Order Single (12)

Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
...

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1001
Exec Type = '0' New
Order Status = '0' New
...
Exec Type Reason = '101' Order accepted but speed bump applied
...

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1002
Exec Type = 'D' Restated
Order Status = '0' New
...
Exec Type Reason = '102' Order added after speed bump applied
...

Amend Order (13)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1210
...

Execution Report (8)

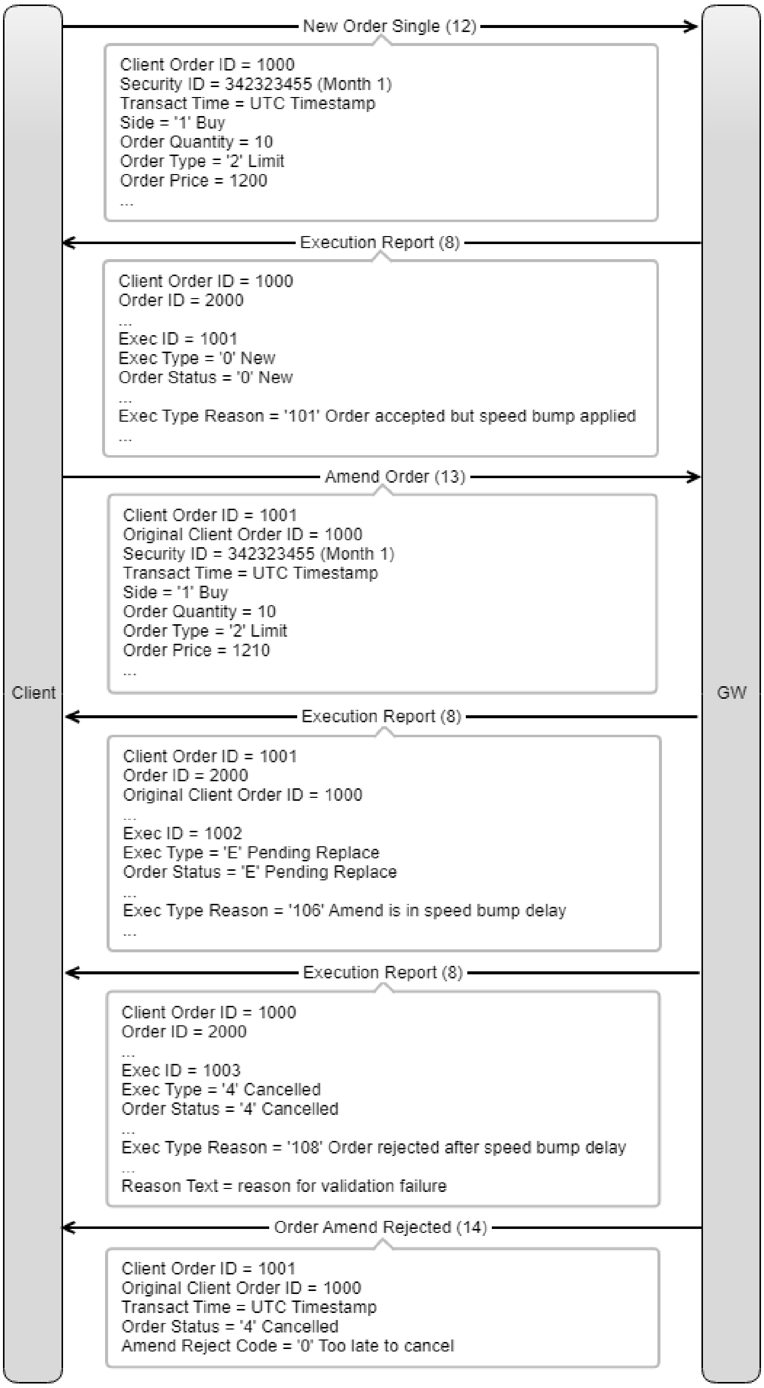
Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
...
Exec ID = 1003
Exec Type = 'E' Pending Replace
Order Status = 'E' Pending Replace
...
Exec Type Reason = '106' Amend is in speed bump delay
...

Execution Report (8)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
...
Exec ID = 1004
Exec Type = '5' Replaced
Order Status = '0' New
...
Exec Type Reason = '107' Order amended after speed bump delay
...

Speed bumped order is cancelled due to validation failure (inflight speed bumped revision also cancelled)

An order is submitted which is subject to a speed bump. An Amend Order (13) is accepted which is also subject to speed bump conditions. The original order submission fails business validation on clearing the speed bump and is cancelled. The Execution Report includes Exec Type = ‘4’ Cancelled and Exec Type Reason = ‘108’ Order rejected after speed bump delay with the reason for the business validation failure in Reason Text. An Order Amend Rejected (14) is sent for the order amend.



New Order Single (12)

Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
...

Execution Report (8)

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1001
Exec Type = '0' New
Order Status = '0' New
...
Exec Type Reason = '101' Order accepted but speed bump applied
...

Amend Order (13)

Client Order ID = 1001
Original Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1210
...

Execution Report (8)

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
...
Exec ID = 1002
Exec Type = 'E' Pending Replace
Order Status = 'E' Pending Replace
...
Exec Type Reason = '106' Amend is in speed bump delay
...

Execution Report (8)

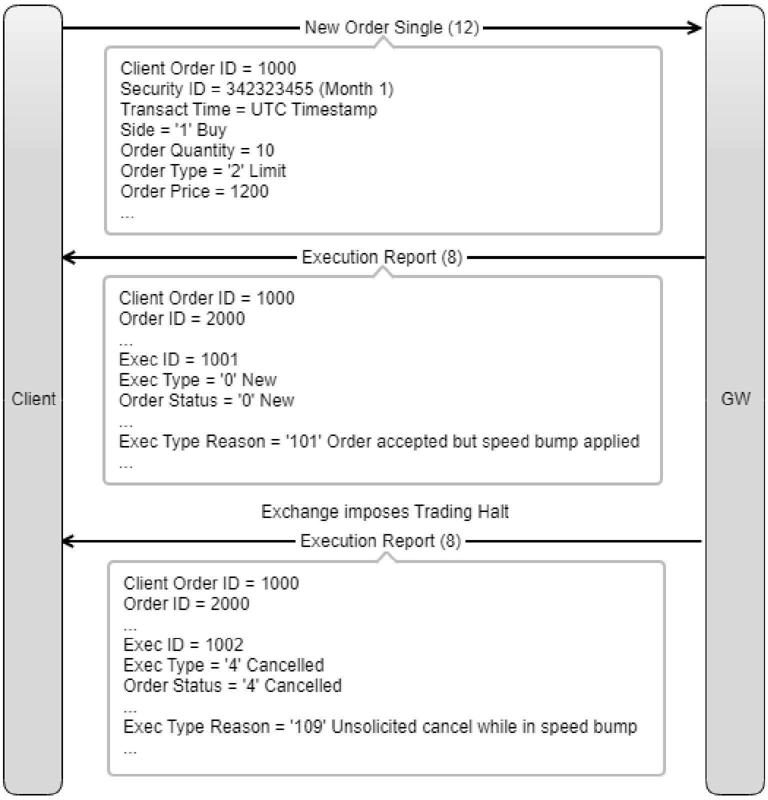
Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1003
Exec Type = '4' Cancelled
Order Status = '4' Cancelled
...
Exec Type Reason = '108' Order rejected after speed bump delay
...
Reason Text = reason for validation failure

Order Amend Rejected (14)

Client Order ID = 1001
Original Client Order ID = 1000
Transact Time = UTC Timestamp
Order Status = '4' Cancelled
Amend Reject Code = '0' Too late to cancel

Unsolicited order cancellation while in speed bump

An order is submitted which is speed bumped. While the order is in the speed bump, the Exchange invokes a Trading Halt and all orders are pulled. The Execution Report sent for the order in the speed bump includes Exec Type) = ‘4’ Cancelled with Exec Type Reason = ‘109’ Unsolicited cancel while in speed bump and Reason Text = Trading Halt.



Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
...

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1001
Exec Type = '0' New
Order Status = '0' New
...
Exec Type Reason = '101' Order accepted but speed bump applied
...

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1002
Exec Type = '4' Cancelled
Order Status = '4' Cancelled
...
Exec Type Reason = '109' Unsolicited cancel while in speed bump
...

3.15 Message Throttling

The Exchange imposes a message throttle which limits the maximum number of messages that can be submitted per second by a Comp ID using the following messages:

- New Order Single (12)
- Amend Order (13)
- Quote Request (20)
- Security Definition Request (10)
- Mass Quote (22).

Security Definition Requests are included in the message throttle but also have their throttle limits.

Each Mass Quote message is counted as a single message irrespective of the number of quote pairs present in the message.

Messages submitted in excess of the throttle limit in any given whole second will result in those messages being rejected by the gateway and will be notified by a Business Message Reject (7).

Note, Cancel Order (15) and Mass Cancel (17) messages are exempt from throttling.

3.16 Security Definition Throttle

The number of Security Definition Request (10) messages that can be submitted by a Comp ID is set at per day rate and also included in the per second message throttle. A user breaching the daily limit will have further Security Definition Request (10) submissions rejected by the gateway.

3.17 Self Execution Prevention (SEP)

A member can guard against traders in their organisation executing orders with each other.

A member can use SEP functionality without configuring a SEP handling action in which case the Exchange configured response type would be triggered to cancel the incoming order. Alternatively a member can configure SEP identifiers and specify the action to be taken if two orders with an identical SEP ID could execute.

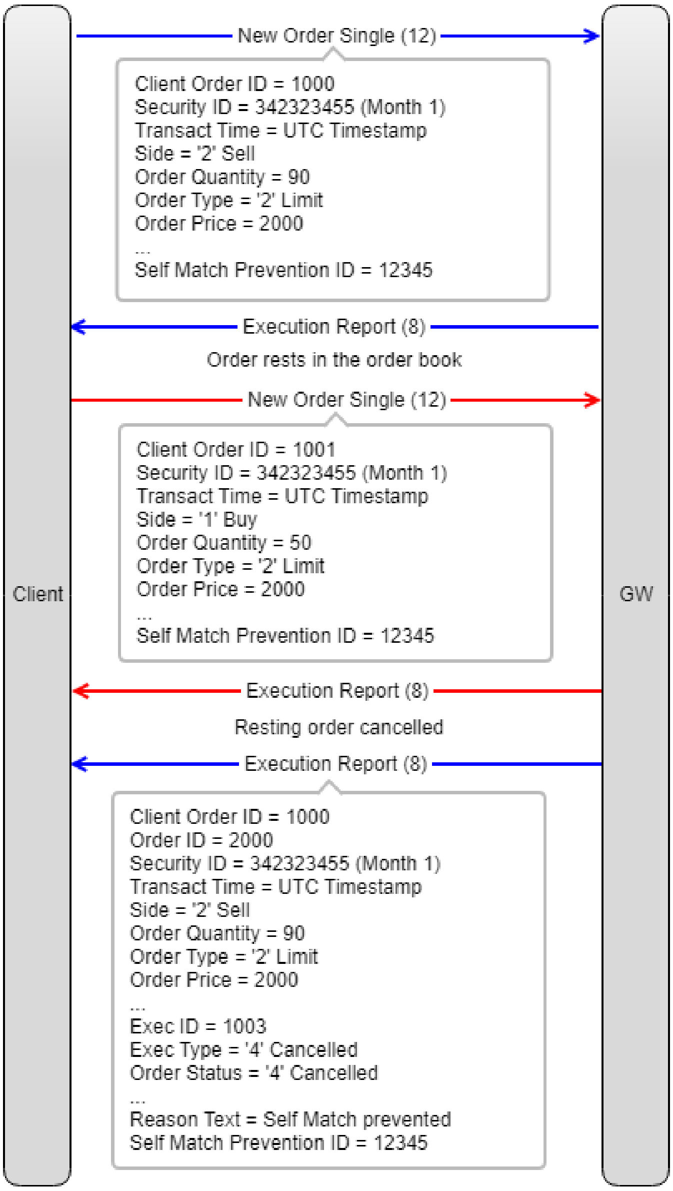
A SEP ID will be specified as a maximum of 9 digits. A Member Risk Manager can use the Risk Management interface to define the SEP configuration as described in the Risk Management Gateway FIX Specification. This configuration will be effective from the next trading day.

A SEP ID can be entered in the Self Match Prevention ID on order submission. If orders with an identical SEP ID from the same member firm can cross the SEP handling action that has been configured is triggered to cancel either the incoming or resting order.

The Execution Report sent for the cancelled order will contain Reason Text = Self Match prevented.

The availability of SEP functionality will be determined by the Exchange. If an order is submitted with the Self Match Prevention ID populated and SEP is not available for the Security ID specified, the order will be rejected. The Execution Report (8) sent will contain Reason Text = Self Match Prevention not configured for the tradable instrument.

Self Execution Prevention triggered – resting order cancelled



3.18 Market Maker Protection (MMP)

Market Maker Protection will be available to permissioned trading users. A Member Risk Manager will use the Risk Management interface to specify the level of protection that should apply to a trading user in a particular contract as described in the Risk Management Gateway FIX Specification.

The Member Risk Manager will specify the protection type and protection limit measured over a configured time period which is defined in seconds. This time period defines the length of the rolling time interval for MMP recalculation which is used to determine if the quantity limit has been reached.

The following protection types can be configured:

- Cumulative percent over time - Total percentage of orders executed within the configured time period
- Volume over time - Total count of volume executed within the configured time period
- Number of tradable instruments traded over time - Total count of option strikes within the configured time period.

If an MMP limit is breached the protection response is triggered to pull orders and reject further orders until MMP is explicitly reset by the trading user using an MMP Reset Request (30). The MMP reset will only affect the MMP limit that has been breached.

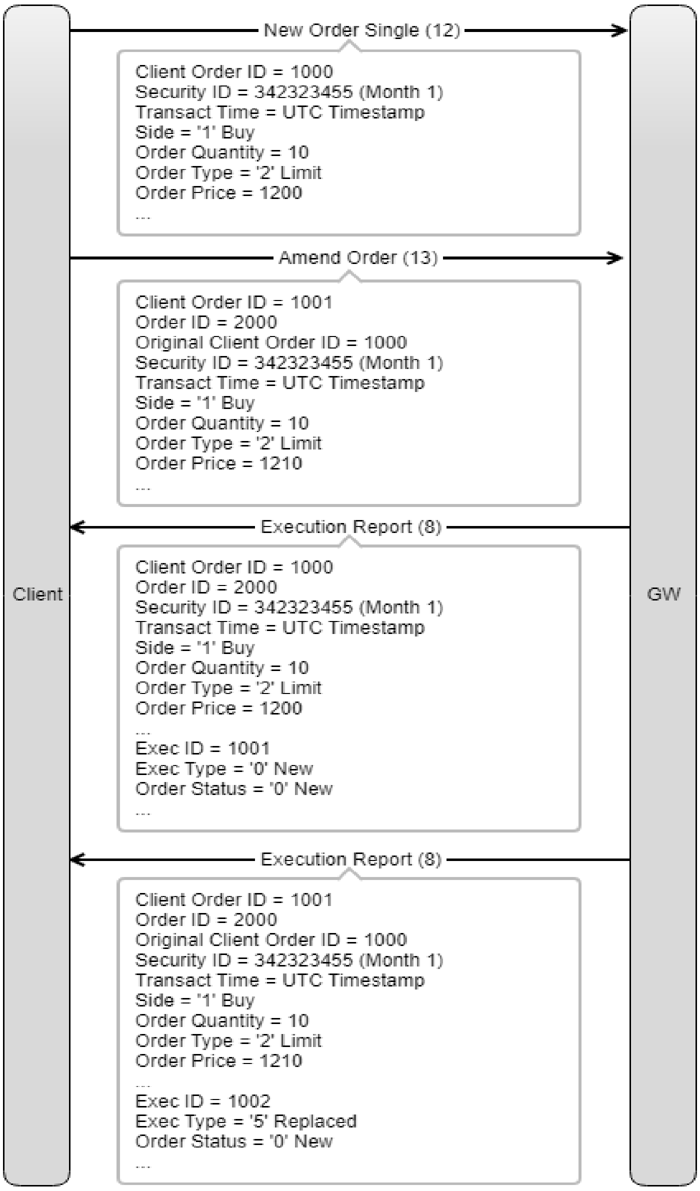
Note, whenever a protection response is triggered, the corresponding trading user will be notified by a News (40) message.

Once MMP is reset order and quote submission can resume.

3.19 Inflight Order Processing

The gateway will accept a single inflight amend or cancellation request whilst processing a new order. The amend is queued until the preceding request has been processed. Multiple inflight messages will be rejected.

For example, a New Order Single (12) is submitted followed immediately afterwards by an Amend Order (13). An Execution Report (8) is returned for the order submission and then the amend.



Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
...

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1210
...

Client Order ID = 1000
Order ID = 2000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1200
...
Exec ID = 1001
Exec Type = '0' New
Order Status = '0' New
...

Client Order ID = 1001
Order ID = 2000
Original Client Order ID = 1000
Security ID = 342323455 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1210
...
Exec ID = 1002
Exec Type = '5' Replaced
Order Status = '0' New
...

3.20 Trade Reporting

When an order matches, a trade half will be assigned an identifier which will be reported in the Trade ID on the Execution Report (8).

A strategy trade half will be reported in a single Execution Report including the leg details. The legs of strategy trade will be assigned a Leg Allocation ID.

4 Message Definitions

4.1 Inbound Messages

- Logon (5)
- Heartbeat (0)
- Test Request (1)
- Resend Request (2)
- Sequence Reset (4)
- Logout (6)
- Security Definition Request (10)
- New Order Single (12)
- Amend Order (13)
- Cancel Order (15)
- Mass Cancel Request (17)
- Mass Quote (22)
- Quote Request (20)
- MMP Reset Request (30).

4.2 Outbound Messages

- Logon (5)
- Heartbeat (0)
- Test Request (1)
- Resend Request (2)
- Sequence Reset (4)
- Logout (6)
- Reject (3)
- Business Message Reject (7)
- News (40)
- Security Definition (11)
- Order Amend Rejected (14)
- Order Cancel Rejected (16)
- Execution Report (8)
- Mass Cancel Report (18)
- Quote Request Rejected (21)

- MMP Reset Ack (31).

4.3 Data Types

Data Type	Size (bytes)	Format
Char	1	ASCII Alphanumeric Permitted ASCII characters are A-Z, a-z, 0-9, underscore('_') and space(' ')
String	*(n)*	Fixed length. These fields use standard Char bytes. All fields of this data type will be null terminated and the length of the field will include this null character. If the field value does not occupy the full length of the field, data after the null termination should be discarded. For incoming messages to the gateway: • If the field value occupies the full length of the field and does not include null character, the gateway will override the last character with null value. • In case the field is empty, the first byte will be null filled. This is to indicate that the field is not applicable / not filled in.
UInt8	1	Unsigned integer. Minimum value = 0 Maximum value = 254 Null value = 255
Int8	1	Signed integer. Minimum value = -127 Maximum value = 127 Null value = -128
UInt16	2	Little Endian encoded unsigned integer. Minimum value = 0 Maximum value = 65,534 Null value = 65,535
Int16	2	Little Endian encoded signed integer. Minimum value = -32,767 Maximum value = 32,767

Data Type	Size (bytes)	Format
		Null value = -32,768
UInt32	4	Little Endian encoded unsigned integer Minimum value = 0 Maximum value = 4,294,967,294 Null value = 4,294,967,295
Int32	4	Little Endian encoded signed integer. Minimum value = -2,147,483,647 Maximum value = 2,147,483,647 Null value = -2,147,483,648
UInt64	8	Little Endian encoded 64 bits signed integer Minimum value = 0 Maximum value = 18,446,744,073,709,551,614 Null value = 18,446,744,073,709,551,615 Note: Timestamps will be represented as UTC up to microsecond precision with the nanosecond element being represented by trailing zeros.
Int64	8	Little Endian encoded 64 bits unsigned integer Minimum value = -9,223,372,036,854,775,807 Maximum value = 9,223,372,036,854,775,807 Null value = -9,223,372,036,854,775,808 Note: Prices will support 6 implied decimals.
Bitmap Fixed Length	32	Bitmap Fixed Length provides up to 256 representation options. To indicate availability, set 1 to the applicable bit position and 0 for unavailability. Each bit in the presence map will represent a field and the sequence in which the fields should be included into the message will be based on the bit position (starting from the most significant bit position).
Bitmap Variable Length	*(n)*	Bitmap Variable Length is used to indicate the presence of fields and nested repeating blocks in a repeating block. To indicate availability set 1 to the applicable bit position and 0 for unavailability. The length of the bitmaps used for different repeating blocks may vary.

4.4 Message Composition

Each message comprises of the following logical components:

1. Header
2. Body
3. Trailer

Fields within a message are formed in the same order as the composition given above.

The header has a Fields Presence Map which is used to indicate the fields that are present in the body of the message.

Fields that are part of the header and the trailer are considered mandatory.

4.4.1 Fields Presence Map

The binary protocol provides a concept of fields presence maps per each message type where using these bitmap fields present in the message, the message sender could indicate actual fields that are present within the message in a dynamic nature.

Each bit in the presence map will represent a field and the sequence in which the fields should be included into the message will be based on the bit position (starting from the most significant bit position). All fields applicable to a particular presence map should be included in the message immediately following the applicable presence map.

For example, consider an 8 bit presence map. 1st, 2nd and 3rd positions indicate Security ID, Client Order ID and Order Quantity respectively where rest of the positions have not been assigned to a field.

To indicate the presence of the fields Security ID and Order Quantity the presence map will be set as shown below:

Bit Position (BP)	0	1	2	3	4	5	6
Represented field	Security ID	Client Order ID	Order Quantity	N/A	N/A	N/A	N/A
Bit value (presence)	1	0	1	0	0	0	0

Message view:

Preceding fields of the message							
Presence Map	1	0	1	0	0	0	0
Security ID	12345						
Order Quantity	1000						

Succeeding fields of the message

The applicable data types and lengths of the body fields are provided in each message. Based on the available fields as indicated by the fields presence map, the recipient of the message is expected to decode the message accordingly.

Bit position for a field that commonly appears in multiple messages may be different; each message may have its own bit position for individual fields present in that message.

4.4.2 Repeating Blocks and Nested Repeating Blocks

The binary message protocol supports repeating blocks within the message body while also allowing nested repeating blocks within a repeating block.

When indicating a repeating block, the fields presence map will only indicate the presence of the repeating block. Based on the repeating block construct, the receiving party is expected to evaluate the field contents and the numbers of repeating blocks.

This specification describes the repeating block construct and the relevant field information such as the data types required to identify the message contents and also to calculate header and trailer information such as message length and checksums.

Each repeating block construct will have a repeating block header field which is immediately followed by a fields presence map which will indicate the presence of the applicable fields in that repeating block and any nested repeating blocks included within.

For example, consider an 8-bit fields presence map included in the message header of a Mass Quote:

BP	0	1	2	3	4	5	6
Represented field	Quote ID	Transaction Time	No Quote Sets	N/A	N/A	N/A	N/A
Bit value (presence)	1	1	1	0	0	0	0

Position 2 indicates a repeating block which indicates the number of quote sets (i.e. number of quote pairs) present in the Mass Quote message.

A sample No Quote Sets repeating block construct is given below:

No Quote Sets	Number of Quote Set repeating blocks. Valid values are 1 or n. (Repeating block header field)
Quote Set Repeating Group Fields Presence Map	This will indicate the fields/nested repeating blocks present in this repeating block

0	Security ID		Tradable Instrument identifier.
1	No Quote Entries		Number of Quote Entry repeating blocks. Valid values are 1 to 3. (Repeating block header field)
	Quote Entry Fields Presence Map		This will indicate the fields/nested repeating blocks present in this repeating block
	0	Quote Entry ID	
	1	Quote Price Level	
	2	Bid Size	
	3	Offer Size	
	4	Bid Price	
	5	Offer Price	

In the above message construct, No Quote Entries is a nested repeating block within the No Quote Sets repeating block.

4.5 Required Fields

The following conventions are used for fields in the message definitions:

Y	Mandatory
C	Required based on a specified condition or presence of another field
N	Not required / optional

4.6 Message Header

Seq	Field Name	Req	Data Type	Description
1	Start of Message	Y	UInt8	Indicates the starting point of a message. Always set to the ASCII STX character (0x02).
2	Length	Y	UInt16	Length of the message including all the fields in the message (i.e. length of all header, body and trailer fields)
3	Message Type	Y	UInt8	Defines the message type.

Seq	Field Name	Req	Data Type	Description
4	Sequence Number	Y	UInt32	Message sequence number.
5	PossDup	Y	UInt8	Indicates whether the message was previously transmitted with the same sequence number: Valid values: 0 = No (original transmission) 1 = Yes (possible duplicate)
6	PossResend	Y	UInt8	Indicates whether the message was previously transmitted under a different sequence number: Valid values: 0 = No (original transmission) 1 = Yes (possible resend)
7	Comp ID	Y	String (11)	Identifies the sender of the message.
8	Sending Time	Y	UInt64	Time the message is transmitted.
9	Original Sending Time	Y	UInt64	Time the message was originally transmitted. Applicable only if PossDup 1 = Yes (possible duplicate). If the original time is not available, this will be the same value as Sending Time. 0 value otherwise.
10	Body Fields Presence Map	Y	Bitmap Fixed Length	Indicates the list of fields that would be present immediately after this Body Fields Presence Map field.

4.7 Message Trailer

Seq	Field Name	Req	Data Type	Description
1	Checksum	Y	UInt32	CRC32C based checksum.

4.8 Administrative Messages

4.8.1 Logon (5)

The Logon request and response are used to authenticate the client and agree on the sequence numbers.

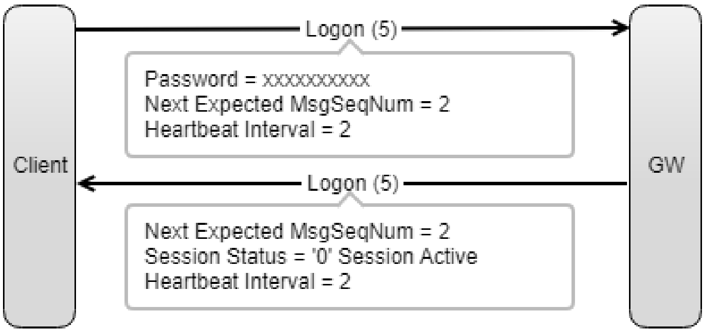
On initial logon the status of persisted orders is communicated by the publication of Execution Reports for all open orders.

The list of available tradable instruments for the current trading day will be published by the Market Data service independently.

BP	Field Name	Req	Data Type	Description
0	Password	C	String (450)	Encrypted Password assigned to the Comp ID. Conditionally required in the Logon message initiated by the client. Absent in the Logon message sent by the gateway.
1	New Password	N	String (450)	New encrypted Password for the Comp ID. May be present only in the Logon message initiated by the client
2	Next Expected MsgSeqNum	Y	UInt32	Next expected message sequence number to be received.
3	Session Status	C	UInt8	Status of the binary session. Valid values: 0 = Session active 1 = Session password change Conditionally required in the Logon message initiated by the gateway.
4	Heartbeat Interval	Y	UInt32	Heartbeat interval in seconds.

Example Message Flow

Initial Logon



4.8.2 Heartbeat (0)

Heartbeat is sent at the interval specified in Logon (5). It is also sent in response to a Test Request (1).

BP	Field Name	Req	Data Type	Description
0	Reference Test Request ID	C	String (21)	Conditionally required if the Heartbeat is in response to a Test Request. The value in this field will echo the Test Request ID received in the Test Request.

4.8.3 Test Request (1)

Test Request can be sent by either the client or gateway to verify a connection is active. The recipient responds with a Heartbeat (0).

BP	Field Name	Req	Data Type	Description
0	Test Request ID	Y	String (21)	Identifier included in Test Request message to be returned in resulting Heartbeat.

4.8.4 Resend Request (2)

Resend Request is used to initiate the retransmission of messages if a sequence number gap is detected.

To request a single message. The Start Sequence and End Sequence should be the same.

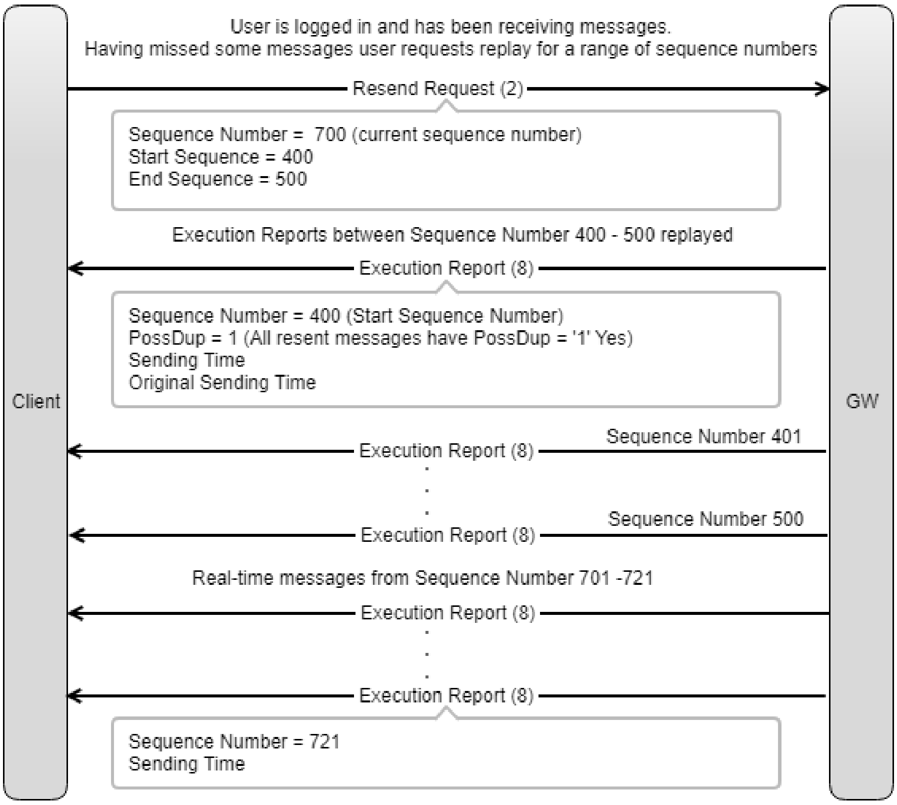
To request a specific range of messages. The Start Sequence should be the first message of the range and the End Sequence should be the last of the range.

To request all messages after a particular message. The Start Sequence should be the sequence number immediately after that of the last processed message and the End Sequence should be zero (0)

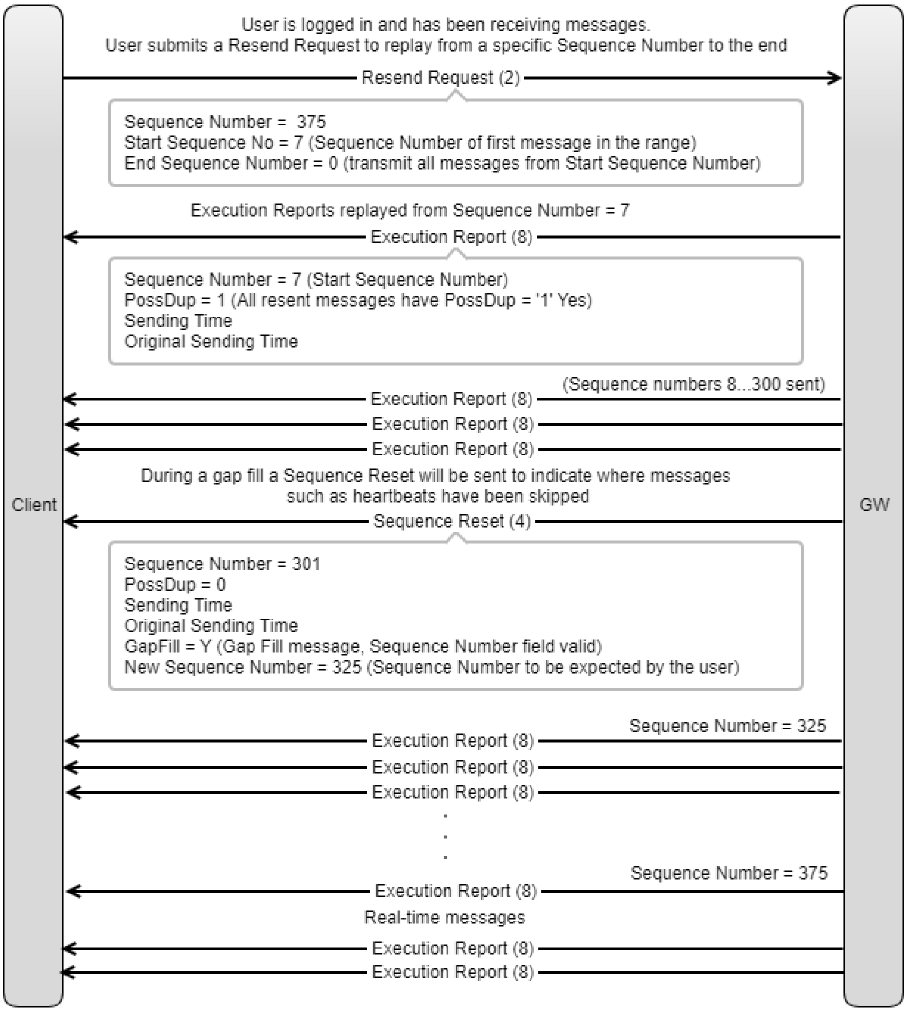
BP	Field Name	Req	Data Type	Description
0	Start Sequence	Y	UInt32	Sequence number of the first message expected to be resent.
1	End Sequence	Y	UInt32	Sequence number of the last message expected to be resent. This may be set to 0 to request the sender to transmit ALL messages starting from Start Sequence Number.

Example Message Flows

Resend Request for a range of messages

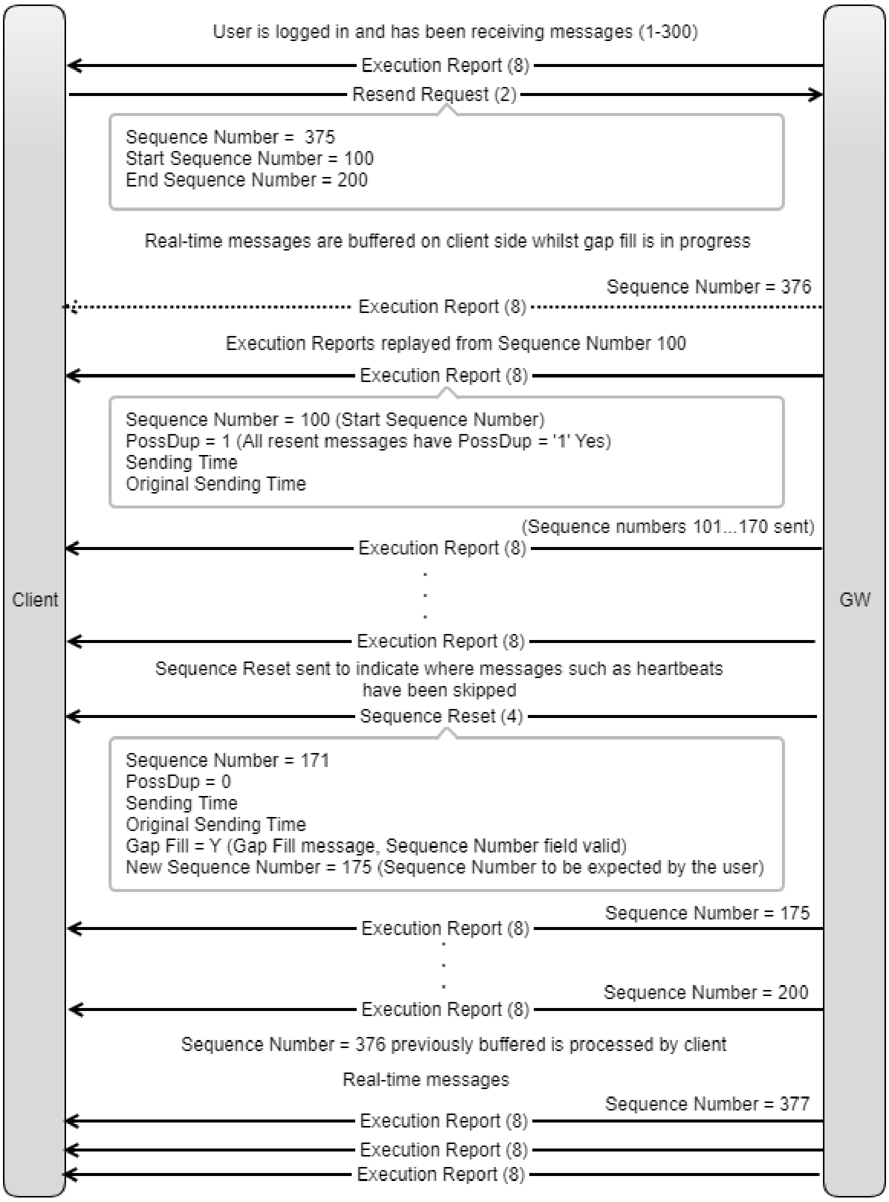

User is logged in and has been receiving messages.
Having missed some messages user requests replay for a range of sequence numbers
Resend Request (2)
Sequence Number = 700 (current sequence number)
Start Sequence = 400
End Sequence = 500
Execution Reports between Sequence Number 400 - 500 replayed
Execution Report (8)
Sequence Number = 400 (Start Sequence Number)
PossDup = 1 (All resent messages have PossDup = '1' Yes)
Sending Time
Original Sending Time
Client
GW
Execution Report (8)
Sequence Number 401
Execution Report (8)
Sequence Number 500
Real-time messages from Sequence Number 701 -721
Execution Report (8)
Execution Report (8)
Sequence Number = 721
Sending Time

Resend Request for all messages after a particular message


Client
GW
User is logged in and has been receiving messages.
User submits a Resend Request to replay from a specific Sequence Number to the end
Resend Request (2)
Sequence Number = 375
Start Sequence No = 7 (Sequence Number of first message in the range)
End Sequence Number = 0 (transmit all messages from Start Sequence Number)
Execution Reports replayed from Sequence Number = 7
Execution Report (8)
Sequence Number = 7 (Start Sequence Number)
PossDup = 1 (All resent messages have PossDup = '1' Yes)
Sending Time
Original Sending Time
(Sequence numbers 8...300 sent)
Execution Report (8)
Execution Report (8)
Execution Report (8)
During a gap fill a Sequence Reset will be sent to indicate where messages
such as heartbeats have been skipped
Sequence Reset (4)
Sequence Number = 301
PossDup = 0
Sending Time
Original Sending Time
GapFill = Y (Gap Fill message, Sequence Number field valid)
New Sequence Number = 325 (Sequence Number to be expected by the user)
Sequence Number = 325
Execution Report (8)
Execution Report (8)
Execution Report (8)
Sequence Number = 375
Execution Report (8)
Real-time messages
Execution Report (8)
Execution Report (8)

Resend Request - incoming message buffered by Client

A Resend Request is submitted but before gap fill messages have been transmitted an incoming message is received. The client will hold the message until all the gap fill messages have been received and then process the buffered message. All messages should be processed in sequence number order.


User is logged in and has been receiving messages (1-300)
Execution Report (8)
Resend Request (2)
Sequence Number = 375
Start Sequence Number = 100
End Sequence Number = 200
Real-time messages are buffered on client side whilst gap fill is in progress
Sequence Number = 376
Execution Report (8)
Execution Reports replayed from Sequence Number 100
Execution Report (8)
Sequence Number = 100 (Start Sequence Number)
PossDup = 1 (All resent messages have PossDup = '1' Yes)
Sending Time
Original Sending Time
(Sequence numbers 101...170 sent)
Execution Report (8)
Client
GW
Execution Report (8)
Sequence Reset sent to indicate where messages such as heartbeats have been skipped
Sequence Reset (4)
Sequence Number = 171
PossDup = 0
Sending Time
Original Sending Time
Gap Fill = Y (Gap Fill message, Sequence Number field valid)
New Sequence Number = 175 (Sequence Number to be expected by the user)
Sequence Number = 175
Execution Report (8)
Sequence Number = 200
Execution Report (8)
Sequence Number = 376 previously buffered is processed by client
Real-time messages
Sequence Number = 377
Execution Report (8)
Execution Report (8)
Execution Report (8)

4.8.5 Sequence Reset (4)

Sequence Reset allows the client or the gateway to increase the expected incoming sequence number of the other party.

In a Gap Fill it is sent as notification of the next sequence number to be transmitted.

BP	Field Name	Req	Data Type	Description

0	Gap Fill	N	Char	Indicates whether the sequence number is to be interpreted in Reset mode or Gap Fill mode:
				Valid values:
				N = Reset (ignore Sequence Number)
				Y = Gap Fill (Sequence Number valid)

1	New Sequence Number	Y	UInt32	Sequence number of the next message to be transmitted.

4.8.6 Logout (6)

Logout initiates or confirms the termination of a client session. Clients should terminate their sessions gracefully by logging out.

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

If a user has their password reset by LME Market Operations and attempts to login with their previous password, the user will receive a Logout with Session Status = ‘100’ Password change is required.

BP	Field Name	Req	Data Type	Description
0	Session Status	C	UInt8	Status of the binary session. Valid values: 3 = New session password does not comply with the policy 4 = Session logout complete 5 = Invalid username or password 6 = Account locked 7 = Logons are not allowed at this time 100 = Password change is required 101 = Other Conditionally required only if the message is generated by the gateway.
1	Logout Text	C	String (76)	Reason for the Logout.

BP	Field Name	Req	Data Type	Description
				Conditionally required if Session Status = ‘101’ Other

4.8.7 Reject (3)

Reject will be sent when a message is received but cannot be properly processed by the gateway due to a session level rule violation.

BP	Field Name	Req	Data Type	Description
0	Message Reject Code	Y	UInt16	Code specifying the reason for the session level rejection: Valid values: 1 = Required field missing 2 = Field not defined for this message 3 = Undefined field 4 = Field specified without a value 5 = Value is incorrect for this field 6 = Incorrect data format for value 9 = Comp ID problem 10 = Sending Time Accuracy problem 11 = Invalid message type 13 = Field appears more than once 99 = Other
1	Reference Message Type	N	UInt8	Message type of the rejected message.
2	Reference Field Name	N	String (50)	Name of the field which caused the rejection.
3	Reference Sequence Number	Y	UInt32	Sequence number of the message which caused the rejection.
4	Reason Text	N	String (76)	Text specifying the reason for the rejection.

4.9 Other Messages

4.9.1 Business Message Reject (7)

Once an application level message passes validation at session level it will then be validated at business level. If business level validation detects an error condition then a rejection should be issued. Many business level messages have specific fields for rejection handling where a specific field is not available the Business Message Reject message will be returned.

BP	Field Name	Req	Data Type	Description
0	Business Reject Code	Y	UInt16	Code specifying the reason for the rejection of the message: Valid values: 0 = Other 1 = Unknown ID 2 = Unknown Security 3 = Unspecified Message Type 4 = Application not available 5 = Conditionally required field missing 8 = Throttle limit exceeded 9 = Throttle limit exceeded, session will be disconnected
1	Reason Text	N	String (76)	Text specifying the reason for the rejection.
2	Reference Message Type	Y	UInt8	Message type of the rejected message.
3	Reference Field Name	N	String (50)	Name of the field which caused the rejection.
4	Reference Sequence Number	N	UInt32	Sequence number of the message which caused the rejection.
5	Business Reject Reference ID	N	String (21)	Client specified unique identifier on the message that was rejected.

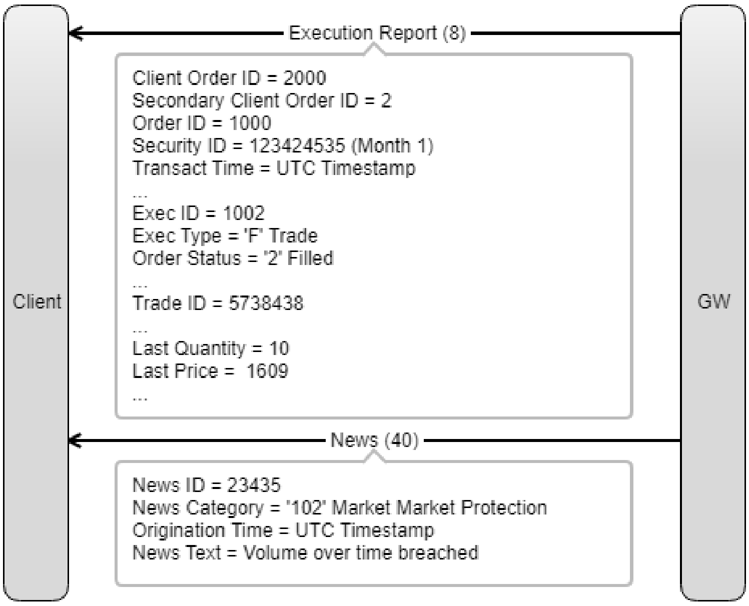
4.9.2 News (40)

A News message is a general free format message from the exchange.

BP	Field Name	Req	Data Type	Description
0	News ID	Y	String (21)	Unique identifier assigned for the News message.
1	News Category	Y	UInt8	Category of the News. Valid values: 101 = Market message 102 = Market Maker Protection
2	Origination Time	Y	UInt64	Time of message origination. UTC Timestamp

BP	Field Name	Req	Data Type	Description
3	News Text	Y	String (251)	Free text field for Market message or one of the following for Market Maker Protection: • Cumulative percent over time breached • Volume over time breached • Number of tradable instruments traded over time breached

Example Message Flow



Client Order ID = 2000
Secondary Client Order ID = 2
Order ID = 1000
Security ID = 123424535 (Month 1)
Transact Time = UTC Timestamp
...
Exec ID = 1002
Exec Type = 'F' Trade
Order Status = '2' Filled
...
Trade ID = 5738438
...
Last Quantity = 10
Last Price = 1609
...

News ID = 23435
News Category = '102' Market Market Protection
Origination Time = UTC Timestamp
News Text = Volume over time breached

4.10 Application Messages

4.10.1 Security Definition Request (10)

Security Definition Request is used to request the creation of either an option strike or a strategy.

BP	Field Name	Req	Data Type	Description
0	Security Request ID	Y	String (19)	Client specified unique identifier of the Security Definition Request.
1	Security Exchange	Y	String (5)	The market which is used to identify the security. XLME

2	Product Complex	Y	String (5)	Identifies an entire suite of products for a given market.
				Valid values:
				LME = Base
				LMEP = Precious

3	Symbol	Y	String (21)	Symbol for the LME contract code e.g. CADF (Copper Future) or OCDF (Copper Monthly Average Future).
4	Security Type	Y	UInt8	Indicates the type of security whether outright or strategy. Valid values: 2 = Option 3 = Multi-leg instrument
5	Security Sub Type	Y	UInt8	Indicates the type of instrument to be created. Valid values: 0 = Outright 1 = Carry 2 = Custom (Futures) 3 = 3 Months Average 4 = 6 Months Average 5 = 12 Months Average 6 = Carry Average 7 = Call Spread 8 = Put Spread 9 = Custom (Delta Hedge) 10 = Custom (Options)

BP	Field Name		Req	Data Type	Description
6	Maturity Date		C	UInt32	Expiration date for options. Conditionally required for Security Type = ‘2’ Option.
7	Strike Price		C	Int64	Strike price for an option. Conditionally required for Security Type = ‘2’ Option.
8	Put or Call		C	UInt8	Used to express option right Valid values: 0 = Put 1 = Call Conditionally required for Security Type = ‘2’ Option.
9	No Legs		C	UInt8	Number of legs repeating blocks. Cannot be less than 2 or more than 5. Note this will only be 1 for a 3 Month Average, 6 Month Average and 12 Month Average. Conditionally required for Security Type = ‘3’ Multi-leg instrument.
	Legs Body Fields Presence Map		C	Bitmap Variable Length (1)	Conditionally required if No Legs > 0 where each repeating group represents a leg in the multi-leg instrument.
	0	Leg Security ID	Y	UInt64	Security ID of the leg. For an Average strategy, only the Security ID of the first leg of the strategy is provided as the other months are consecutive.
	1	Leg Side	Y	UInt8	The side of this individual leg. Valid values: 1 = Buy 2 = Sell
	2	Leg Ratio	Y	UInt32	With 3 implied decimals. For a delta hedge custom strategy, this is the delta used to determine the covering quantity.

BP	Field Name		Req	Data Type	Description
					For all other strategies and also for an options leg in a delta hedge custom strategy this is the ratio of quantity for this individual leg relative to the entire multi-leg instrument. For example, for a custom strategy such as a Butterfly the leg ratio would be 1:2:1, for the first leg Leg Ratio = 1 (buy near contract month), second leg Leg Ratio = 2 (sell two contracts in far month) and third leg Leg Ratio = 1 (buy one contract in yet farther month). For a Carry Average the front leg must include a ratio for the number of average legs. For example, 3M-3Q (Jul/Aug/Sep) Carry Average, 3M leg Leg Ratio = 3, legs 2/3/4 would have Leg Ratio = 1.
	3	Leg Price	C	Int64	Used to specify an anchor price for a leg. Not used for execution price. Conditionally required for the futures legs of Security Sub Type = '9' Custom (Delta Hedge) to specify the underlying futures price.

4.10.2 Security Definition (11)

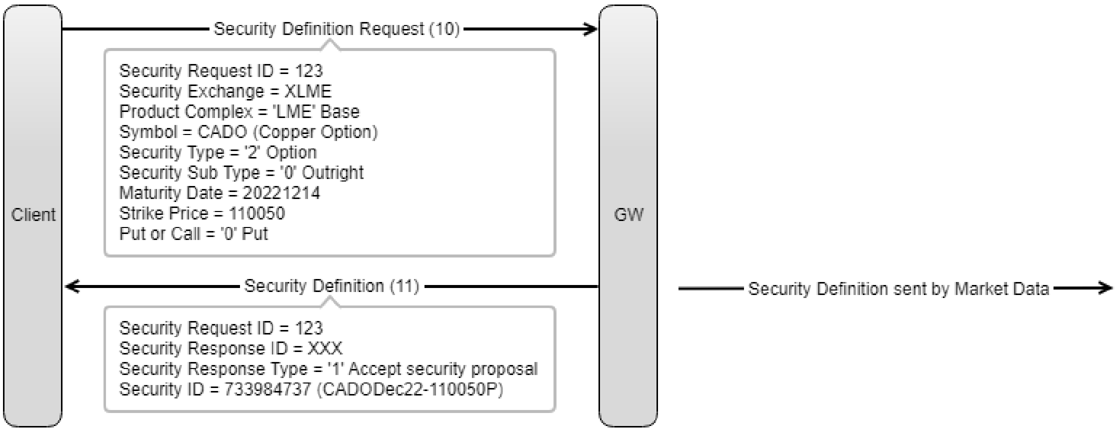
Security Definition will be returned to the originator of the Security Definition Request (10) to accept, accept with revisions or reject the creation of a tradable instrument. Market participants will be notified of a newly created instrument by the Market Data service.

BP	Field Name	Req	Data Type	Description
0	Security Request ID	Y	String (19)	Client specified unique identifier of the Security Definition Request.
1	Security Response ID	Y	String (21)	Unique ID assigned to Security Definition message.
2	Security Response Type	Y	UInt8	Type of Security Definition message response. Valid values: 1 = Accept security proposal

BP	Field Name	Req	Data Type	Description
				2 = Accept security proposal with revisions as indicated in the message 5 = Reject security proposal
3	Security Reject Reason	C	UInt8	Identifies the reason a security definition request is being rejected. Valid values: 12 = Invalid instrument structure specified 99 = Other 101 = Throttle limit exceeded 102 = Invalid strike price 103 = LegSecurityID (602) does not exist 104 = Invalid prompt date 105 = Invalid SecuritySubType. Conditionally required if Security Response Type = '5' Reject security proposal.
4	Security ID	C	UInt64	Tradable Instrument identifier. Conditionally required if Security Response Type = '1' Accept security proposal or '2' Accept security proposal with revisions as indicated in the message.
5	Reason Text	C	String (76)	Text specifying the reason for the rejection. Conditionally required if Security Reject Reason = '99' Other.

Example Message Flows

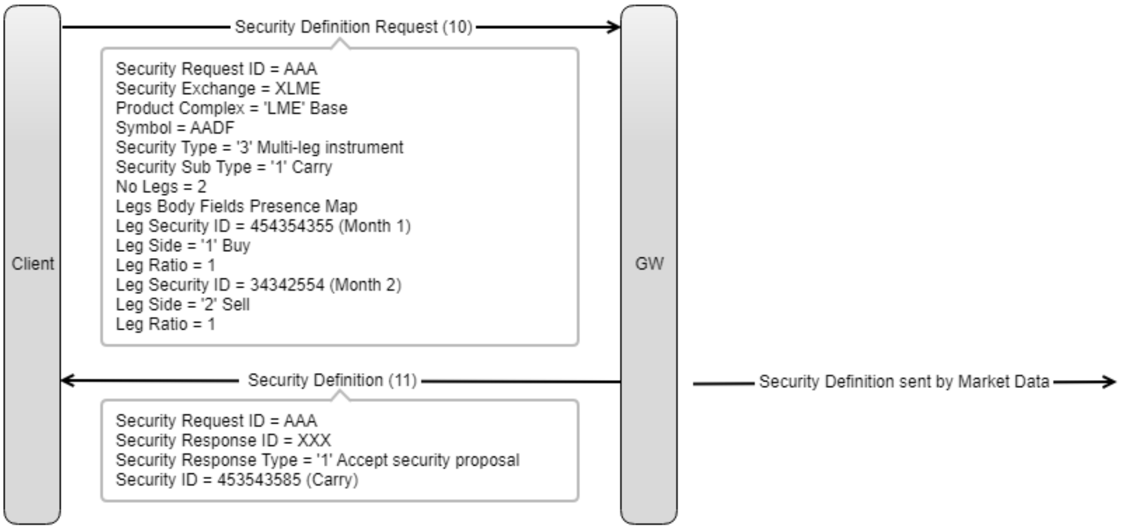
Option Strike Request


Client
Security Definition Request (10)
GW
Security Definition (11)
Security Definition sent by Market Data

Security Request ID = 123
Security Exchange = XLME
Product Complex = 'LME' Base
Symbol = CADO (Copper Option)
Security Type = '2' Option
Security Sub Type = '0' Outright
Maturity Date = 20221214
Strike Price = 110050
Put or Call = '0' Put

Security Request ID = 123
Security Response ID = XXX
Security Response Type = '1' Accept security proposal
Security ID = 733984737 (CADODec22-110050P)

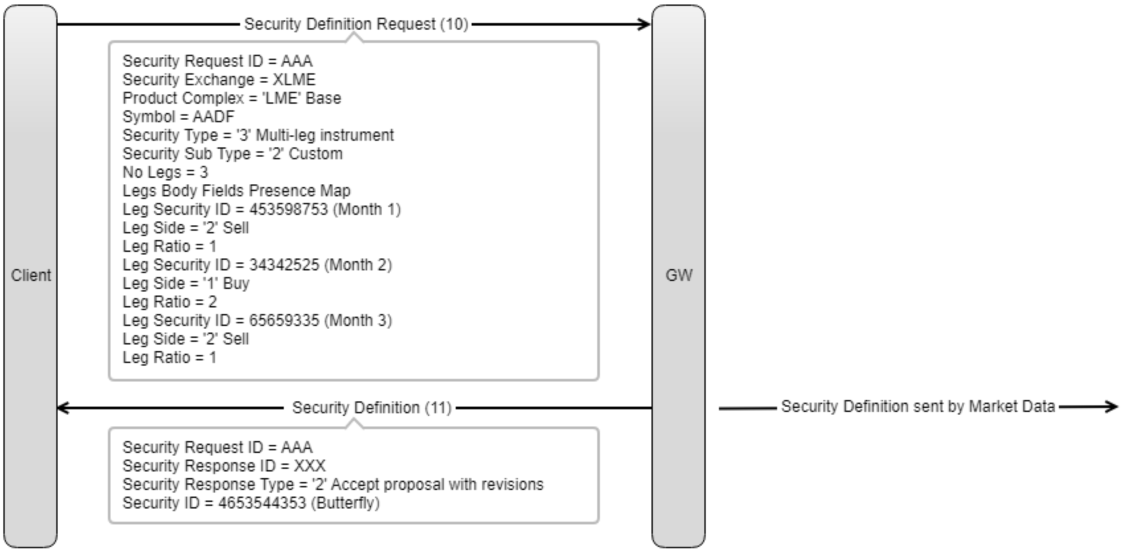
Futures Strategy Request


Client
GW
Security Definition Request (10)
Security Definition (11)
Security Definition sent by Market Data

Security Request ID = AAA
Security Exchange = XLME
Product Complex = 'LME' Base
Symbol = AADF
Security Type = '3' Multi-leg instrument
Security Sub Type = '1' Carry
No Legs = 2
Legs Body Fields Presence Map
Leg Security ID = 454354355 (Month 1)
Leg Side = '1' Buy
Leg Ratio = 1
Leg Security ID = 34342554 (Month 2)
Leg Side = '2' Sell
Leg Ratio = 1

Security Request ID = AAA
Security Response ID = XXX
Security Response Type = '1' Accept security proposal
Security ID = 453543585 (Carry)

Inverse Custom Strategy Request


Client
GW
Security Definition Request (10)
Security Definition (11)
Security Definition sent by Market Data

Security Request ID = AAA
Security Exchange = XLME
Product Complex = 'LME' Base
Symbol = AADF
Security Type = '3' Multi-leg instrument
Security Sub Type = '2' Custom
No Legs = 3
Legs Body Fields Presence Map
Leg Security ID = 453598753 (Month 1)
Leg Side = '2' Sell
Leg Ratio = 1
Leg Security ID = 34342525 (Month 2)
Leg Side = '1' Buy
Leg Ratio = 2
Leg Security ID = 65659335 (Month 3)
Leg Side = '2' Sell
Leg Ratio = 1

Security Request ID = AAA
Security Response ID = XXX
Security Response Type = '2' Accept proposal with revisions
Security ID = 4653544353 (Butterfly)

4.10.3 New Order Single (12)

New Order Single is used to submit a new order for execution. An Execution Report (8), Reject (3) or Business Message Reject (7) is sent in response.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	Client specified identifier of the order.
4	Security ID	Y	UInt64	Tradable Instrument identifier.
5	Transact Time	Y	UInt64	Time when the message was generated.

BP	Field Name	Req	Data Type	Description
6	Side	Y	UInt8	Side of the order. Valid values: 1 = Buy 2 = Sell
7	Order Quantity	Y	Int32	Total quantity of the order.
8	Order Type	Y	UInt8	Order type applicable to the order. Valid values: 2 = Limit 3 = Stop Loss 4 = Stop Limit 10 = Market to Limit 11 = Iceberg 12 = Post Only 13 = One Cancels Other Market to Limit 14 = One Cancels Other Limit
9	Order Price	Y	Int64	Price of the order. Must be null value if: Order Type = ‘3’ Stop Loss Order Type = ‘10’ Market to Limit.
10	Time in Force	Y	UInt8	Specifies how long the order remains in effect. Valid values: 0 = Day 1 = Good Till Cancel (GTC) 3 = Immediate Or Cancel (IOC) 4 = Fill Or Kill (FOK) 6 = Good Till Date (GTD)

11	Order Restrictions	Y	Char	Restrictions associated with an order.
				Valid values:
				D = Non-algorithmic (human)
				E = Algorithmic (algo)

12	Order Capacity	Y	Char	Indicates the trading capacity. Valid values: A (agency) = AOTC P (principal) = DEAL

BP	Field Name	Req	Data Type	Description
				R (riskless principal) = MTCH
13	Account Type	Y	UInt8	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 3 = House 8 = Joint back office account (JBO) = Gross OSA 101 = Client OSA
14	Executing Firm	N	String (4)	Identifier of the executing firm.
15	Client ID Short Code	C	UInt64	Client short code identifier. If that is not available, should be populated with the value ‘0’ = No Client. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
16	Legal Entity ID	C	String (41)	LEI. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
17	Proprietary Client ID	C	String (41)	Proprietary or Custom Client ID as assigned by the member. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
18	Entering Firm	N	String (4)	Identifier of the entering firm.
19	Origination Trader	Y	String (41)	Order origination trader.
20	Customer Account	C	String (61)	Identification of the client account code where the Account Type = 1, 8 or 101.
21	Correspondent Broker	N	String (4)	ID of the firm or trader. Used for order routing. Identifier of the trader who submits an order for a member through another member.
22	Liquidity Provider	N	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative.

BP	Field Name	Req	Data Type	Description
23	Market Maker	N	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative.
24	Decision Maker	C	UInt64	Decision maker short code, required on client orders to identify the investment decision maker. Also used under the power of representation clause where the investment decision maker may be a third party. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
25	Investment Decision within Firm (IDM)	N	UInt64	Short code to identify the individual who is responsible for the investment decision.
26	Execution Decision within Firm (EDM)	Y	UInt64	Short code to identify the execution decision maker with the firm.
27	Investment Decision Country Code	N	String (3)	ISO Country Code of the branch responsible for the person making the investment decision.
28	Execution Decision Country Code	N	String (3)	ISO Country Code of the branch responsible for the person making the execution decision.
29	Client Branch Country Code	C	String (3)	ISO Country Code to identify the branch that received the client order or made an investment decision for a client. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
30	Broker Client ID	Y	String (17)	Identifier of the entity in a risk group.
31	Text	N	String (51)	Free text
32	Self Match Prevention ID	N	UInt32	Identifies an order that should not be matched to an opposite order if both buy and sell orders for the trade contain the same Self Match Prevention ID and are submitted by the same member.
33	Display Quantity	C	UInt32	Visible quantity of an Iceberg order.

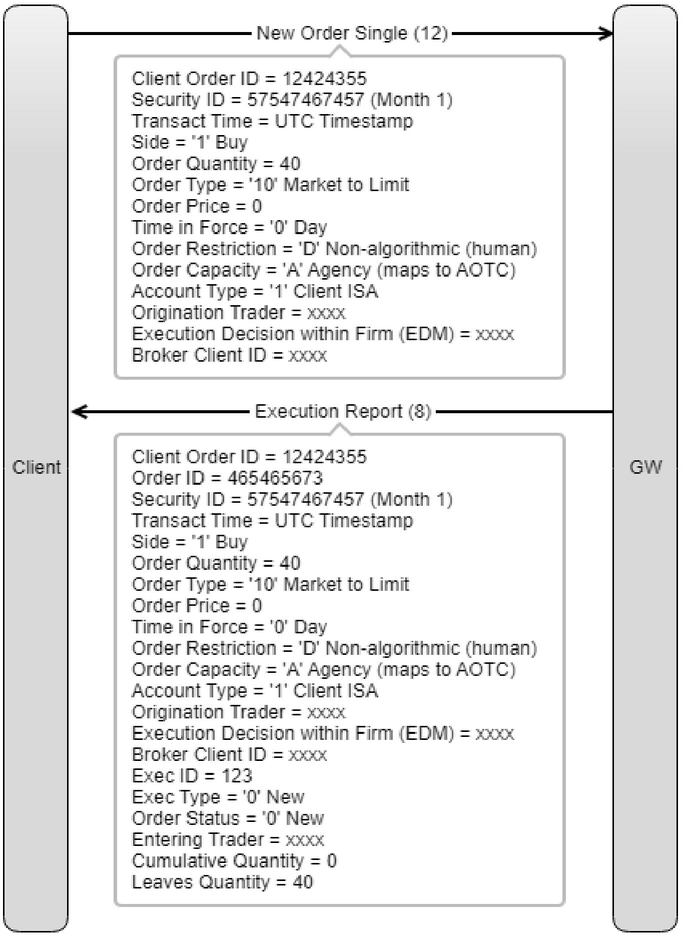
BP	Field Name	Req	Data Type	Description
				Conditionally required if Order Type = '11' Iceberg. If present, must be < Order Quantity.
34	Expiry Date	C	UInt32	The expiry date of an order. Conditionally required if Time In Force = '6' Good 'til Date. Format is YYYYMMDD.
35	Trigger Price	C	Int64	Trigger price for stop orders. Conditionally required if: Order Type = '3' Stop Loss Order Type = '4' Stop Limit Order Type = '13' OCO Market to Limit Order Type = '14' OCO Limit
36	Trigger Price Type	C	UInt8	Type of price event that triggers the stop order: Valid values: 2 = Last Trade 4 = Best Bid or Last Trade 5 = Best Offer or Last Trade Conditionally required if: Order Type = '3' Stop Loss Order Type = '4' Stop Limit Order Type = '13' OCO Market to Limit Order Type = '14' OCO Limit
37	Trigger Type	C	UInt8	Trigger prompt for stop order elements. Valid value: 4 = Price Movement
38	Trigger New Price	C	Int64	Limit order price of the stop once triggered. Conditionally required if Order Type = '14' OCO Limit.
40	Cancel on Disconnect	N	Char	Specifies whether the order should be cancelled on system disconnection: Valid values: Y = Yes

BP	Field Name	Req	Data Type	Description
				N = No (default)
41	Direct Electronic Access	N	Char	Signifies order received from a direct access or sponsored access (the trader has direct electronic access). Valid value: Y = Yes Absence of this field infers No (default)
42	Aggregated Order	N	Char	In the context of ESMA RTS 24 Article 2(3), it signifies that the order consists of several orders aggregated together. This maps to ESMA RTS value "AGGR". Valid value: Y = Yes Absence of this field infers No (default). Not valid if Client ID Short Code = ‘0’ No Client.
43	Pending Allocation Order	N	Char	In the context of ESMA RTS 24 Article 2(2), it signifies that the order submitter "is authorized under the legislation of a Member State to allocate an order to its client following submission of the order to the trading venue and has not yet allocated the order to its client at the time of the submission of the order". This maps to ESMA RTS value "PNAL". Valid value: Y = Yes Absence of this field infers No (default). Not valid if Client ID Short Code = ‘0’ No Client.
44	Liquidity Provision Order	N	Char	In the context of ESMA RTS 24 Article 3, it signifies that the order was submitted "as part of a market making strategy pursuant to Articles 17 and 18 of Directive 2014/65/EU, or is submitted as part of another activity in accordance with Article 3" (of RTS 24). Valid value:

BP	Field Name	Req	Data Type	Description
				Y = Yes Absence of this field infers No (default).
45	Risk Reduction Order	N	Char	In the context of ESMA RTS 22 Article 4(2)(i), it signifies that the commodity derivative order is a transaction "to reduce risk in an objectively measurable way in accordance with Article 57 of Directive 2014/65/EU". Valid value: Y = Yes Absence of this field infers No (default).

Example Message Flow

Market to Limit order



Client Order ID = 12424355
Security ID = 57547467457 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 40
Order Type = '10' Market to Limit
Order Price = 0
Time in Force = '0' Day
Order Restriction = 'D' Non-algorithmic (human)
Order Capacity = 'A' Agency (maps to AOTC)
Account Type = '1' Client ISA
Origination Trader = xxxx
Execution Decision within Firm (EDM) = xxxx
Broker Client ID = xxxx

Client Order ID = 12424355
Order ID = 465465673
Security ID = 57547467457 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 40
Order Type = '10' Market to Limit
Order Price = 0
Time in Force = '0' Day
Order Restriction = 'D' Non-algorithmic (human)
Order Capacity = 'A' Agency (maps to AOTC)
Account Type = '1' Client ISA
Origination Trader = xxxx
Execution Decision within Firm (EDM) = xxxx
Broker Client ID = xxxx
Exec ID = 123
Exec Type = '0' New
Order Status = '0' New
Entering Trader = xxxx
Cumulative Quantity = 0
Leaves Quantity = 40

4.10.4 Amend Order (13)

Amend Order is used to change the parameters of an existing order. If successful an Execution Report (8) is returned to confirm replacement of the order otherwise an Order Amend Rejected (14) is returned if the request is rejected and the order remains unchanged.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	Client specified identifier of the order.
2	Order ID	N	UInt64	Unique order identifier assigned by the trading system.
3	Original Client Order ID	Y	String (19)	Original order identified as the order to be amended.
4	Security ID	Y	UInt64	Tradable Instrument identifier. Must be the same as the original order.
5	Transact Time	Y	UInt64	Time when the message was generated.
6	Side	Y	UInt8	Side of the order. Valid values: 1 = Buy 2 = Sell Must be the same as the original order.
7	Order Quantity	Y	Int32	Total quantity of the order.
8	Order Type	Y	UInt8	Order type applicable to the order. Valid values: 2 = Limit 3 = Stop Loss 4 = Stop Limit 10 = Market to Limit 11 = Iceberg 12 = Post Only 13 = One Cancels Other Market to Limit 14 = One Cancels Other Limit. Must be the same as the original order.
9	Order Price	Y	Int64	Price of the order. Must be null value if: Order Type = ‘3’ Stop Loss

BP	Field Name	Req	Data Type	Description
				Order Type = ‘10’ Market to Limit.
10	Time in Force	Y	UInt8	Specifies how long the order remains in effect. Valid values: 0 = Day 1 = Good Till Cancel (GTC) 3 = Immediate Or Cancel (IOC) 4 = Fill Or Kill (FOK) 6 = Good Till Date (GTD). Must be the same as the original order.

11	Order Restrictions	Y	Char	Restrictions associated with an order.
				Valid values:
				D = Non-algorithmic (human)
				E = Algorithmic (algo)

12	Order Capacity	Y	Char	Indicates the trading capacity. Valid values: A (agency) = AOTC P (principal) = DEAL R (riskless principal) = MTCH
13	Account Type	Y	UInt8	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 3 = House 8 = Joint back office account (JBO) = Gross OSA 101 = Client OSA. Must be the same as the original order.
14	Executing Firm	C	String (4)	Identifier of the executing firm. Present only if specified on the original order and must be the same as the original order.
15	Client ID Short Code	C	UInt64	Client short code identifier. If that is not available, should be populated with the value ‘0’ = No Client.

BP	Field Name	Req	Data Type	Description
				Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Present only if specified on the original order and must be the same as the original order.
16	Legal Entity ID	C	String (41)	LEI. Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Present only if specified on the original order and must be the same as the original order.
17	Proprietary Client ID	C	String (41)	Proprietary or Custom Client ID as assigned by the member. Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Present only if specified on the original order and must be the same as the original order.
18	Entering Firm	C	String (4)	Identifier of the entering firm. Present only if specified on the original order and must be the same as the original order.
19	Origination Trader	Y	String (41)	Order origination trader. Must be the same as the original order.
20	Customer Account	C	String (61)	Identification of the client account code where the Account Type = 1, 8 or 101. Present only if specified on the original order and must be the same as the original order.
21	Correspondent Broker	C	String (4)	ID of the firm or trader. Used for order routing. Identifier of the trader who submits an order for a member through another member.

BP	Field Name	Req	Data Type	Description
				Present only if specified on the original order and must be the same as the original order.
22	Liquidity Provider	C	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative. Present only if specified on the original order and must be the same as the original order.
23	Market Maker	C	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative. Present only if specified on the original order and must be the same as the original order.
24	Decision Maker	C	UInt64	Decision maker short code, required on client orders to identify the investment decision maker. Also used under the power of representation clause where the investment decision maker may be a third party. Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Present only if specified on the original order and must be the same as the original order.
25	Investment Decision within Firm (IDM)	N	UInt64	Short code to identify the individual who is responsible for the investment decision.
26	Execution Decision within Firm (EDM)	Y	UInt64	Short code to identify the execution decision maker with the firm.
27	Investment Decision Country Code	N	String (3)	ISO Country Code of the branch responsible for the person making the investment decision.
28	Execution Decision Country Code	N	String (3)	ISO Country Code of the branch responsible for the person making the execution decision.

BP	Field Name	Req	Data Type	Description
29	Client Branch Country Code	C	String (3)	ISO Country Code to identify the branch that received the client order or made an investment decision for a client. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
30	Broker Client ID	Y	String (17)	Identifier of the entity in a risk group. Must be the same as the original order.
31	Text	N	String (51)	Free text
32	Self Match Prevention ID	C	UInt32	Identifies an order that should not be matched to an opposite order if both buy and sell orders for the trade contain the same Self Match Prevention ID and are submitted by the same member. Present only if specified on the original order and must be the same as the original order.
33	Display Quantity	C	UInt32	Visible quantity of an Iceberg order. Conditionally required if Order Type = ‘11’ Iceberg. If present, must be < Order Quantity.
34	Expiry Date	C	UInt32	The expiry date of an order. Conditionally required if Time In Force = ‘6’ Good ‘til Date. Format is YYYYMMDD.
35	Trigger Price	C	Int64	Trigger price for stop orders. Conditionally required if: Order Type = ‘3’ Stop Loss Order Type = ‘4’ Stop Limit Order Type = ‘13’ OCO-M2L Order Type = ‘14’ OCO-Limit
36	Trigger Price Type	C	UInt8	Type of price event that triggers the stop order: Valid values:

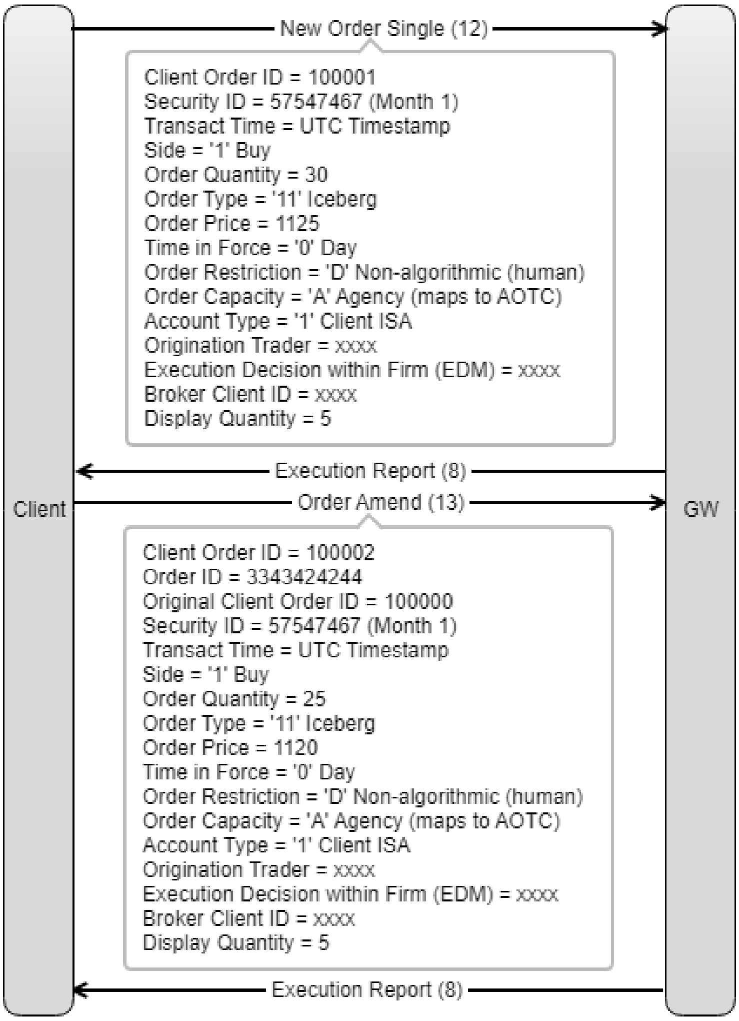
BP	Field Name	Req	Data Type	Description
				2 = Last Trade 4 = Best Bid or Last Trade 5 = Best Offer or Last Trade Conditionally required if: Order Type = ‘3’ Stop Loss Order Type = ‘4’ Stop Limit Order Type = ‘13’ OCO-M2L Order Type = ‘14’ OCO-Limit. Present only if specified on the original order and must be the same as the original order.
37	Trigger Type	C	UInt8	Trigger prompt for stop order elements. Valid value: 4 = Price Movement. Present only if specified on the original order and must be the same as the original order.
38	Trigger New Price	C	Int64	Limit order price of the stop once triggered. Conditionally required if Order Type = ‘14’ OCO-Limit.
40	Cancel on Disconnect	N	Char	Specifies whether the order should be cancelled on system disconnection: Valid values: Y = Yes N = No Default N = No. Present only if specified on the original order and must be the same as the original order.
41	Direct Electronic Access	N	Char	Signifies order received from a direct access or sponsored access (the trader has direct electronic access). Valid value: Y = Yes Absence of this field infers No (default)

BP	Field Name	Req	Data Type	Description
42	Aggregated Order	N	Char	In the context of ESMA RTS 24 Article 2(3), it signifies that the order consists of several orders aggregated together. This maps to ESMA RTS value "AGGR". Valid value: Y = Yes Absence of this field infers No (default). Not valid if Client ID Short Code = ‘0’ No Client.
43	Pending Allocation Order	N	Char	In the context of ESMA RTS 24 Article 2(2), it signifies that the order submitter "is authorized under the legislation of a Member State to allocate an order to its client following submission of the order to the trading venue and has not yet allocated the order to its client at the time of the submission of the order". This maps to ESMA RTS value "PNAL". Valid value: Y = Yes Absence of this field infers No (default). Not valid if Client ID Short Code = ‘0’ No Client.
44	Liquidity Provision Order	N	Char	In the context of ESMA RTS 24 Article 3, it signifies that the order was submitted "as part of a market making strategy pursuant to Articles 17 and 18 of Directive 2014/65/EU, or is submitted as part of another activity in accordance with Article 3" (of RTS 24). Valid value: Y = Yes Absence of this field infers No (default).
45	Risk Reduction Order	N	Char	In the context of ESMA RTS 22 Article 4(2)(i), it signifies that the commodity derivative order is a transaction "to reduce risk in an objectively measurable way in accordance with Article 57 of Directive 2014/65/EU".

BP	Field Name	Req	Data Type	Description
				Valid value: Y = Yes Absence of this field infers No (default).

Example Message Flow

Amend Order



Client Order ID = 100001
Security ID = 57547467 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 30
Order Type = '11' Iceberg
Order Price = 1125
Time in Force = '0' Day
Order Restriction = 'D' Non-algorithmic (human)
Order Capacity = 'A' Agency (maps to AOTC)
Account Type = '1' Client ISA
Origination Trader = xxxx
Execution Decision within Firm (EDM) = xxxx
Broker Client ID = xxxx
Display Quantity = 5

Client Order ID = 100002
Order ID = 3343424244
Original Client Order ID = 100000
Security ID = 57547467 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 25
Order Type = '11' Iceberg
Order Price = 1120
Time in Force = '0' Day
Order Restriction = 'D' Non-algorithmic (human)
Order Capacity = 'A' Agency (maps to AOTC)
Account Type = '1' Client ISA
Origination Trader = xxxx
Execution Decision within Firm (EDM) = xxxx
Broker Client ID = xxxx
Display Quantity = 5

4.10.5 Order Amend Rejected (14)

Order Amend Rejected is returned when an Amend Order (13) request or an amendment instruction for a quote side in a Mass Quote (22) is rejected.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	Client specified identifier of the order. For a quote this is the Quote ID in a Mass Quote (22).
1	Secondary Client Order ID	N	UInt8	Quote Entry ID in a Mass Quote (22).
2	Order ID	N	UInt64	Unique order identifier assigned by the trading system.
3	Original Client Order ID	Y	String (19)	Original order identified as the order to be amended. Not populated for a Mass Quote.
4	Transact Time	Y	UInt64	Time when the message was generated.
5	Order Status	Y	UInt8	Order status as at the time of rejection: Valid values: 0 = New 1 = Partially Filled 2 = Filled 3 = Done for Day 4 = Cancelled 6 = Pending Cancel 8 = Rejected 10 = Pending New 12 = Expired 14 = Pending Amend
6	Amend Reject Code	N	UInt16	Code that identifies the reason for the rejection. Valid values: 0 = Too late to amend 1 = Unknown order 3 = Order already in Pending Cancel or Pending Replace Status 6 = Duplicate Client Order ID received 99 = Other
7	Reason Text	C	String (76)	Text specifying the reason for the rejection. Conditionally required if Amend Reject Code = ‘99’ Other

4.10.6 Cancel Order (15)

Cancel Order is used to cancel the remaining quantity of an existing order. An Execution Report (8) is returned to confirm cancellation or an Order Cancel Rejected (16) if the cancel is rejected.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	Unique identifier set by the entering firm.
2	Order ID	N	UInt64	Unique order identifier assigned by the trading system.
3	Original Client Order ID	Y	String (19)	Original order identified as the order to be cancelled.
4	Security ID	Y	UInt64	Tradable Instrument identifier. Must be the same as the original order.
5	Transact Time	Y	UInt64	Time when the message was generated.
6	Side	Y	UInt8	Side of the order. Valid values: 1 = Buy 2 = Sell Must be the same as the original order.

4.10.7 Order Cancel Rejected (16)

Order Cancel Rejected is returned when a Cancel Order (15) request or a cancellation instruction for a quote side in a Mass Quote (22) is rejected.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	Client specified identifier of the order.
1	Secondary Client Order ID	N	UInt8	Quote Entry ID in a Mass Quote (22).
2	Order ID	N	UInt64	Unique order identifier assigned by the trading system.
3	Original Client Order ID	Y	String (19)	Original order identified as the order to be cancelled. Not populated for a Mass Quote.
4	Transact Time	Y	UInt64	Time when the message was generated.

BP	Field Name	Req	Data Type	Description
5	Order Status	Y	UInt8	Order status as at the time of rejection: Valid values: 0 = New 1 = Partially Filled 2 = Filled 3 = Done for Day 4 = Cancelled 6 = Pending Cancel 8 = Rejected 10 = Pending New 12 = Expired 14 = Pending Amend
6	Cancel Reject Code	Y	UInt16	Code that identifies the reason for the rejection. Valid values: 0 = Too late to amend 1 = Unknown order 3 = Order already in Pending Cancel or Pending Replace Status 6 = Duplicate Client Order ID received 99 = Other
7	Reason Text	C	String (76)	Text specifying the reason for the rejection. Conditionally required if Cancel Reject Code = ‘99’ Other

4.10.8 Execution Report (8)

Execution Report is used to:

- confirm the receipt of an order submitted using New Order Single or Mass Quote
- confirm changes to an existing order (i.e. accept cancel and replace requests)
- confirm or convey an order cancellation or expiration
- convey order or trade cancellation by Market Operations
- convey triggering of a stop order
- convey fill information
- reject orders
- convey speed bump processing
- convey information about restated persisted orders carried from one trading day to the next.

Exec Type identifies the purpose of the execution report message and Order Status conveys the current state of the order.

The attributes that can be returned in an Execution Report for each execution type are listed in the Execution Report Matrix.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	The client specified identifier in the message that caused this Execution Report. For quotes this is mapped to Quote ID in a Mass Quote (22)
1	Secondary Client Order ID	N	UInt8	Quote Entry ID in a Mass Quote (22). Conditionally required according to the Execution Report Matrix.
2	Order ID	Y	UInt64	Unique order identifier assigned by the trading system.
3	Original Client Order ID	C	String (19)	Client Order ID of the previous order (NOT the initial order of the day) as assigned by the institution. Identifies the previous order in cancel and cancel/replace requests. Conditionally required according to the Execution Report Matrix.
4	Security ID	Y	UInt64	Tradable Instrument identifier.
5	Transact Time	Y	UInt64	Time when the message was generated.
6	Side	Y	UInt8	Side of the order. Valid values: 1 = Buy 2 = Sell
7	Order Quantity	Y	Int32	Total quantity of the order.
8	Order Type	Y	UInt8	Order type applicable to the order. Valid values: 2 = Limit 3 = Stop Loss 4 = Stop Limit 10 = Market to Limit

BP	Field Name	Req	Data Type	Description
				11 = Iceberg 12 = Post Only 13 = One Cancels Other Market to Limit 14 = One Cancels Other Limit
9	Order Price	Y	Int64	Price of the order.
10	Time in Force	Y	UInt8	Specifies how long the order remains in effect. Valid values: 0 = Day 1 = Good Till Cancel (GTC) 3 = Immediate Or Cancel (IOC) 4 = Fill Or Kill (FOK) 6 = Good Till Date (GTD)

11	Order Restrictions	Y	Char	Restrictions associated with an order.
				Valid values:
				D = Non-algorithmic (human)
				E = Algorithmic (algo)

12	Order Capacity	Y	Char	Indicates the trading capacity. Valid values: A (agency) = AOTC P (principal) = DEAL R (riskless principal) = MTCH
13	Account Type	Y	UInt8	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 3 = House 8 = Joint back office account (JBO) = Gross OSA 101 = Client OSA
14	Executing Firm	C	String (4)	Identifier of the executing firm. Conditionally required according to the Execution Report Matrix.
15	Client ID Short Code	C	UInt64	Client short code identifier. If that is not available, should be populated with the value ‘0’ = No Client.

BP	Field Name	Req	Data Type	Description
				Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Conditionally required according to the Execution Report Matrix.
16	Legal Entity ID	C	String (41)	LEI. Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Conditionally required according to the Execution Report Matrix.
17	Proprietary Client ID	C	String (41)	Proprietary or Custom Client ID as assigned by the member. Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Conditionally required according to the Execution Report Matrix.
18	Entering Firm	C	String (4)	Identifier of the entering firm. Conditionally required according to the Execution Report Matrix.
19	Origination Trader	Y	String (41)	Order origination trader.
20	Customer Account	C	String (61)	Identification of the client account code where the Account Type = 1, 8 or 101. Conditionally required according to the Execution Report Matrix.
21	Correspondent Broker	C	String (4)	ID of the firm or trader. Used for order routing. Identifier of the trader who submits an order for a member through another member. Conditionally required according to the Execution Report Matrix.
22	Liquidity Provider	C	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative. Conditionally required according to the Execution Report Matrix.

BP	Field Name	Req	Data Type	Description
23	Market Maker	C	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative. Conditionally required according to the Execution Report Matrix.
24	Decision Maker	C	UInt64	Decision maker short code, required on client orders to identify the investment decision maker. Also used under the power of representation clause where the investment decision maker may be a third party. Conditionally required for client orders i.e., Account Type = 1, 8 or 101. Conditionally required according to the Execution Report Matrix.
25	Investment Decision within Firm (IDM)	C	UInt64	Short code to identify the individual who is responsible for the investment decision. Conditionally required according to the Execution Report Matrix.
26	Execution Decision within Firm (EDM)	Y	UInt64	Short code to identify the execution decision maker with the firm.
27	Investment Decision Country Code	C	String (3)	ISO Country Code of the branch responsible for the person making the investment decision. Conditionally required according to the Execution Report Matrix.
28	Execution Decision Country Code	C	String (3)	ISO Country Code of the branch responsible for the person making the execution decision. Conditionally required according to the Execution Report Matrix.
29	Client Branch Country Code	C	String (3)	ISO Country Code to identify the branch that received the client order or made an investment decision for a client. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.

BP	Field Name	Req	Data Type	Description
				Conditionally required according to the Execution Report Matrix.
30	Broker Client ID	Y	String (17)	Identifier of the entity in a risk group.
31	Text	C	String (51)	Free text. Conditionally required according to the Execution Report Matrix.
32	Self Match Prevention ID	N	UInt32	Identifies an order that should not be matched to an opposite order if both buy and sell orders for the trade contain the same Self Match Prevention ID and are submitted by the same member. Conditionally required according to the Execution Report Matrix.
33	Display Quantity	C	UInt32	Visible quantity of an Iceberg order. Conditionally required if Order Type = ‘11’ Iceberg. If present, must be < Order Quantity.
34	Expiry Date	C	UInt32	The expiry date of an order. Conditionally required if Time In Force = ‘6’ Good ‘til Date. Format is YYYYMMDD.
35	Trigger Price	C	Int64	Trigger price for stop orders. Conditionally required if: Order Type = ‘3’ Stop Loss Order Type = ‘4’ Stop Limit Order Type = ‘13’ OCO Market to Limit Order Type = ‘14’ OCO Limit
36	Trigger Price Type	C	UInt8	Type of price event that triggers the stop order: Valid values: 2 = Last Trade 4 = Best Bid or Last Trade 5 = Best Offer or Last Trade

BP	Field Name	Req	Data Type	Description
				Conditionally required if: Order Type = ‘3’ Stop Loss Order Type = ‘4’ Stop Limit Order Type = ‘13’ OCO Market to Limit Order Type = ‘14’ OCO Limit
37	Trigger Type	C	UInt8	Trigger prompt for stop order elements. Valid value: 4 = Price Movement
38	Trigger New Price	C	Int64	Limit order price of the stop once triggered. Conditionally required if Order Type = ‘14’ OCO Limit.
40	Cancel on Disconnect	N	Char	Specifies whether the order should be cancelled on system disconnection: Valid values: Y = Yes N = No Default N = No
41	Direct Electronic Access	N	Char	Signifies order received from a direct access or sponsored access (the trader has direct electronic access). Valid value: Y = Yes Absence of this field infers No (default)
42	Aggregated Order	N	Char	In the context of ESMA RTS 24 Article 2(3), it signifies that the order consists of several orders aggregated together. This maps to ESMA RTS value "AGGR". Valid value: Y = Yes Absence of this field infers No (default). Not valid if Client ID Short Code = ‘0’ No Client.
43	Pending Allocation Order	N	Char	In the context of ESMA RTS 24 Article 2(2), it signifies that the order submitter "is authorized under the legislation of a

BP	Field Name	Req	Data Type	Description
				Member State to allocate an order to its client following submission of the order to the trading venue and has not yet allocated the order to its client at the time of the submission of the order". This maps to ESMA RTS value "PNAL". Valid value: Y = Yes Absence of this field infers No (default). Not valid if Client ID Short Code = ‘0’ No Client.
44	Liquidity Provision Order	N	Char	In the context of ESMA RTS 24 Article 3, it signifies that the order was submitted "as part of a market making strategy pursuant to Articles 17 and 18 of Directive 2014/65/EU, or is submitted as part of another activity in accordance with Article 3" (of RTS 24). Valid value: Y = Yes Absence of this field infers No (default).
45	Risk Reduction Order	N	Char	In the context of ESMA RTS 22 Article 4(2)(i), it signifies that the commodity derivative order is a transaction "to reduce risk in an objectively measurable way in accordance with Article 57 of Directive 2014/65/EU". Valid value: Y = Yes Absence of this field infers No (default).
46	Quote Price Level	N	UInt8	Indicates the price level being quoted. Valid values are 1, 2 or 3 (i.e. up to 3 price levels).
65	Exec ID	Y	String (21)	Unique identifier assigned by the trading system to the execution message.
66	Exec Ref ID	C	String (21)	Reference identifier used with Trade Cancel execution type.

BP	Field Name	Req	Data Type	Description
				Conditionally required if Exec Type = 'H' Trade Cancel.
67	Exec Type	Y	Char	Describes the specific Execution Report. Valid values: 0 = New 3 = Done 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected C = Expired D = Restated E = Pending Replace F = Trade H = Trade Cancel L = Triggered or Activated by the System
68	Order Status	Y	UInt8	Identifies current status of order. Valid values: 0 = New 1 = Partially Filled 2 = Filled 3 = Done for day 4 = Cancelled 6 = Pending Cancel 8 = Rejected C = Expired E = Pending Replace
69	Entering Trader	Y	String (11)	Identifier of the trader entering the order.
70	Clearing Firm	C	String (4)	Identifier of the clearing firm. Conditionally required if Exec Type = 'F' Trade.
71	Trade ID	C	UInt64	Identifier assigned to a trade by the trading system for the trade half. Conditionally required if Exec Type = 'F' Trade.
72	Exec Restatement Reason	C	UInt16	The reason for restatement. Valid values:

BP	Field Name	Req	Data Type	Description
				1 = GT renewal / restatement 99 = Other. See Exec Type Reason for speed bump handling. Conditionally required if Exec Type = 'D' Restated.
73	Exec Type Reason	C	UInt8	The initiating event for the Execution Report. Conditionally required to report unsolicited cancellation and order status in speed bump processing. Valid values: 4 = Unsolicited order cancellation 101 = Order accepted but speed bump applied 102 = Order added after speed bump 103 = Order cancelled whilst in speed bump delay 104 = Original order is in speed bump enforced delay 105 = Order updated after speed bump delay 106 = Amend is in speed bump delay 107 = Order amended after speed bump delay 108 = Order rejected after speed bump delay 109 = Unsolicited cancel while in speed bump
74	Order Category	C	UInt8	Defines the type of interest behind a trade (fill or partial fill). Valid value: 7 = Implied Order Conditionally required for a trade from an implied order when Exec Type = 'F' Trade.

75	Aggressor Indicator	C	Char	Indicates if a matching order is an aggressor or not in the trade.
				Y = Aggressor
				N = Passive

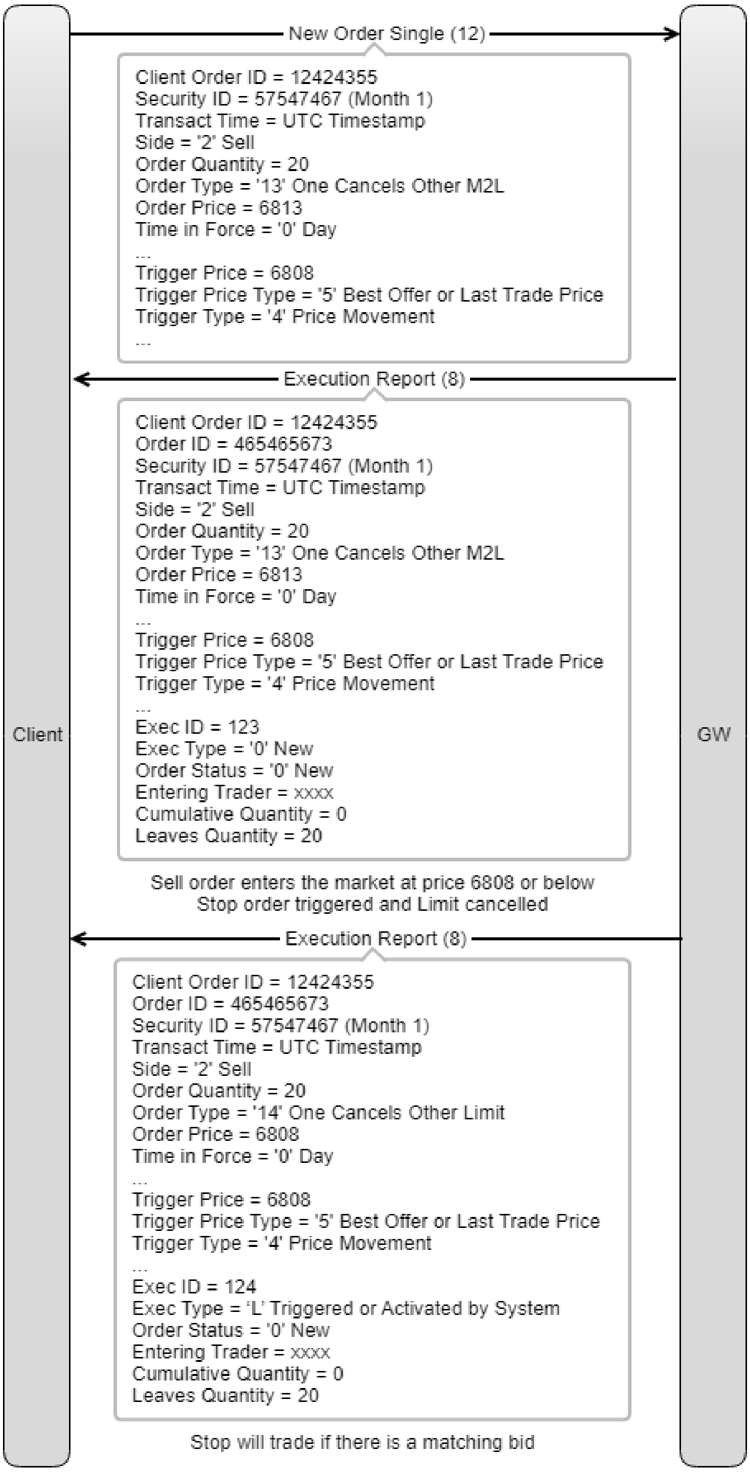
BP	Field Name	Req	Data Type	Description
				Conditionally required if Exec Type = ‘F’ Trade.
76	Order Reject Reason	N	UInt16	Code to identify reason for order rejection. Valid values: 6 = Duplicate Order 15 = Unknown Account(s) 18 = Invalid price increment 99 = Other. Conditionally required if Exec Type = ‘8’ Rejected.
77	Reason Text	N	String (76)	Text specifying the reason for the rejection. Conditionally required if Exec Type Reason = '4' Unsolicited order cancellation or Order Reject Reason = ‘99’ Other.
78	Last Quantity	C	UInt32	The total volume of this trade. Conditionally required if Exec Type = ‘F’ Trade.
79	Last Price	C	UInt64	The price of this trade. Conditionally required if Exec Type = ‘F’ Trade.
80	Cumulative Quantity	Y	UInt32	The quantity of the order that has been executed so far.
81	Leaves Quantity	Y	UInt32	The quantity open for further execution.
82	No Legs	C	UInt8	Number of Instrument Leg repeating group instances. Conditionally required if Exec Type = ‘F’ Trade on a multileg tradable instrument.
	Legs Body Fields Presence Map	C	Bitmap Variable Length (1)	Conditionally required if No Legs > 0 where each repeating group represents a leg in the multileg instrument.
	0 Leg Security ID	Y	UInt64	Multileg tradable instrument's individual Security ID.

BP	Field Name		Req	Data Type	Description
	1	Leg Side	Y	UInt8	The side of this individual leg (multileg security). Valid values: 1 = Buy 2 = Sell
	2	Leg Alloc ID	Y	UInt64	Strategy leg trade identifier.
	3	Leg Last Price	Y	Int64	Execution price assigned to the leg of the multileg tradable instrument.
	4	Leg Last Quantity	Y	UInt32	Fill quantity for the instrument leg.

Example Message Flows

OCO submitted, Stop triggered and Limit cancelled

An OCO order is submitted as a Limit offer with a Market Stop trigger price of 6808, an incoming offer triggers the Stop order and cancels Limit element of the OCO. An Execution Report is not sent for cancellation. The triggered Market Stop is converted to a Limit order at a trigger new price of 6808.



New Order Single (12)

Client Order ID = 12424355
Security ID = 57547467 (Month 1)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity = 20
Order Type = '13' One Cancels Other M2L
Order Price = 6813
Time in Force = '0' Day
...
Trigger Price = 6808
Trigger Price Type = '5' Best Offer or Last Trade Price
Trigger Type = '4' Price Movement
...

Execution Report (8)

Client Order ID = 12424355
Order ID = 465465673
Security ID = 57547467 (Month 1)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity = 20
Order Type = '13' One Cancels Other M2L
Order Price = 6813
Time in Force = '0' Day
...
Trigger Price = 6808
Trigger Price Type = '5' Best Offer or Last Trade Price
Trigger Type = '4' Price Movement
...
Exec ID = 123
Exec Type = '0' New
Order Status = '0' New
Entering Trader = xxxx
Cumulative Quantity = 0
Leaves Quantity = 20

Sell order enters the market at price 6808 or below
Stop order triggered and Limit cancelled

Execution Report (8)

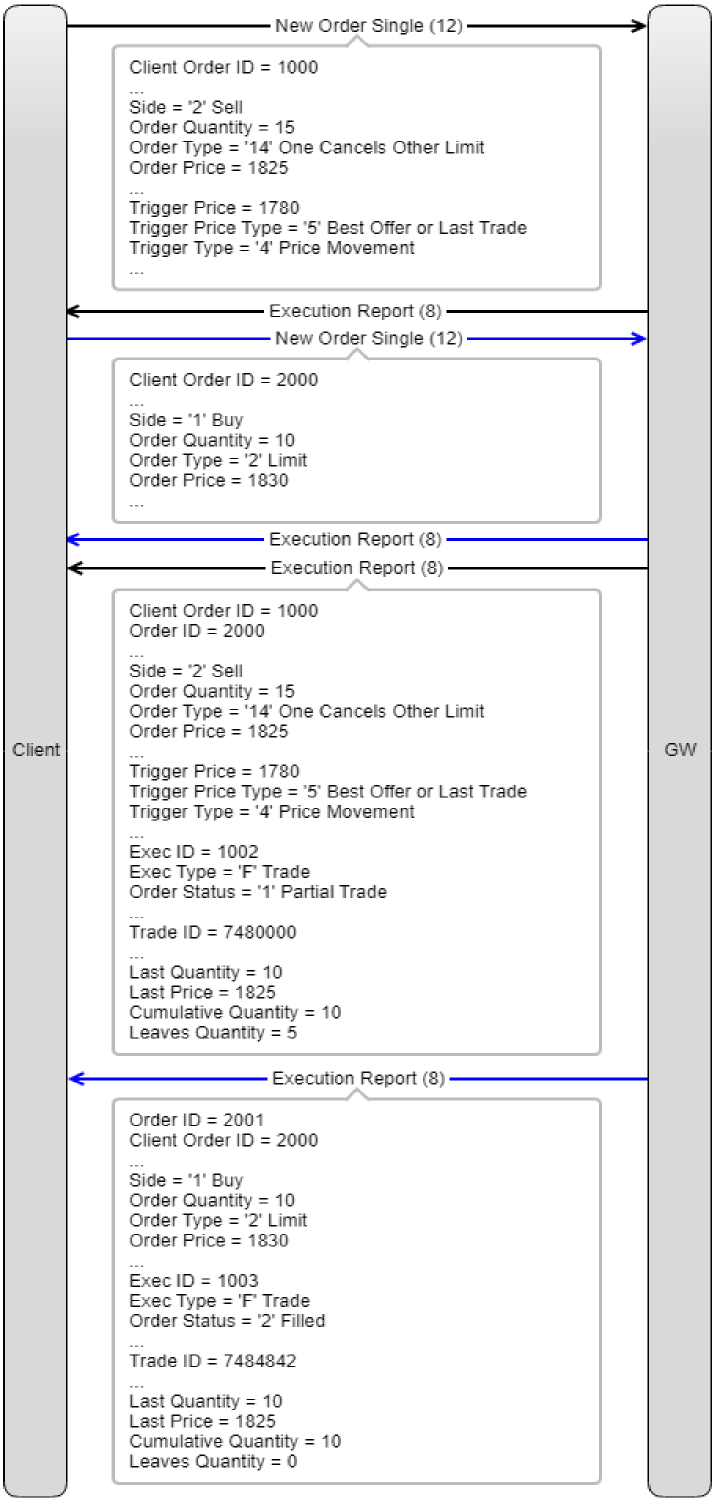
Client Order ID = 12424355
Order ID = 465465673
Security ID = 57547467 (Month 1)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity = 20
Order Type = '14' One Cancels Other Limit
Order Price = 6808
Time in Force = '0' Day
...
Trigger Price = 6808
Trigger Price Type = '5' Best Offer or Last Trade Price
Trigger Type = '4' Price Movement
...
Exec ID = 124
Exec Type = 'L' Triggered or Activated by System
Order Status = '0' New
Entering Trader = xxxx
Cumulative Quantity = 0
Leaves Quantity = 20

Stop will trade if there is a matching bid

OCO Partial Trade

OCO is submitted as Limit offer for 15 lots at 1825 with a Market Stop Loss trigger price of 1780.

A Limit bid is submitted at 1830 for 10 lots. The OCO order is not triggered but trades 10 lots with the incoming order. The OCO remains in the order book with a residual volume of 5 lots



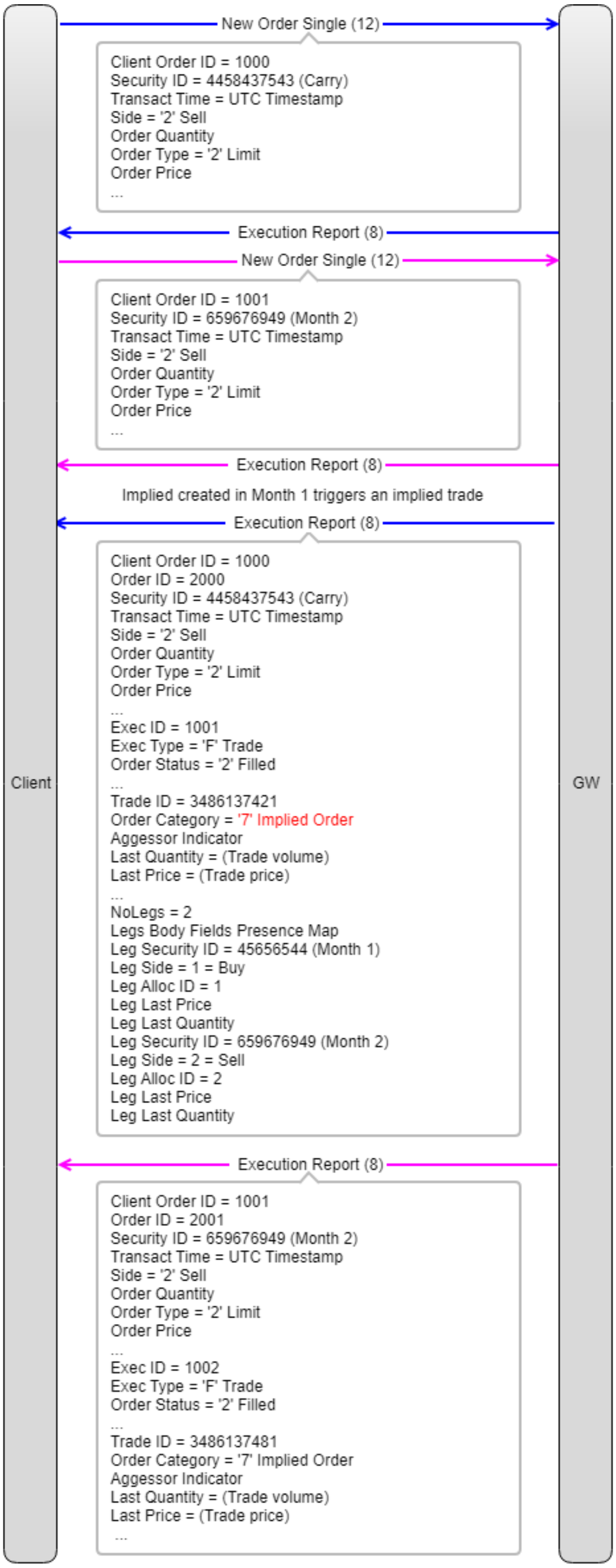
Client Order ID = 1000
...
Side = '2' Sell
Order Quantity = 15
Order Type = '14' One Cancels Other Limit
Order Price = 1825
...
Trigger Price = 1780
Trigger Price Type = '5' Best Offer or Last Trade
Trigger Type = '4' Price Movement
...

Client Order ID = 2000
...
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1830
...

Client Order ID = 1000
Order ID = 2000
...
Side = '2' Sell
Order Quantity = 15
Order Type = '14' One Cancels Other Limit
Order Price = 1825
...
Trigger Price = 1780
Trigger Price Type = '5' Best Offer or Last Trade
Trigger Type = '4' Price Movement
...
Exec ID = 1002
Exec Type = 'F' Trade
Order Status = '1' Partial Trade
...
Trade ID = 7480000
...
Last Quantity = 10
Last Price = 1825
Cumulative Quantity = 10
Leaves Quantity = 5

Order ID = 2001
Client Order ID = 2000
...
Side = '1' Buy
Order Quantity = 10
Order Type = '2' Limit
Order Price = 1830
...
Exec ID = 1003
Exec Type = 'F' Trade
Order Status = '2' Filled
...
Trade ID = 7484842
...
Last Quantity = 10
Last Price = 1825
Cumulative Quantity = 10
Leaves Quantity = 0

Implied trade



New Order Single (12)

Client Order ID = 1000
Security ID = 4458437543 (Carry)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity
Order Type = '2' Limit
Order Price
...

Execution Report (8)

New Order Single (12)

Client Order ID = 1001
Security ID = 659676949 (Month 2)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity
Order Type = '2' Limit
Order Price
...

Execution Report (8)

Implied created in Month 1 triggers an implied trade

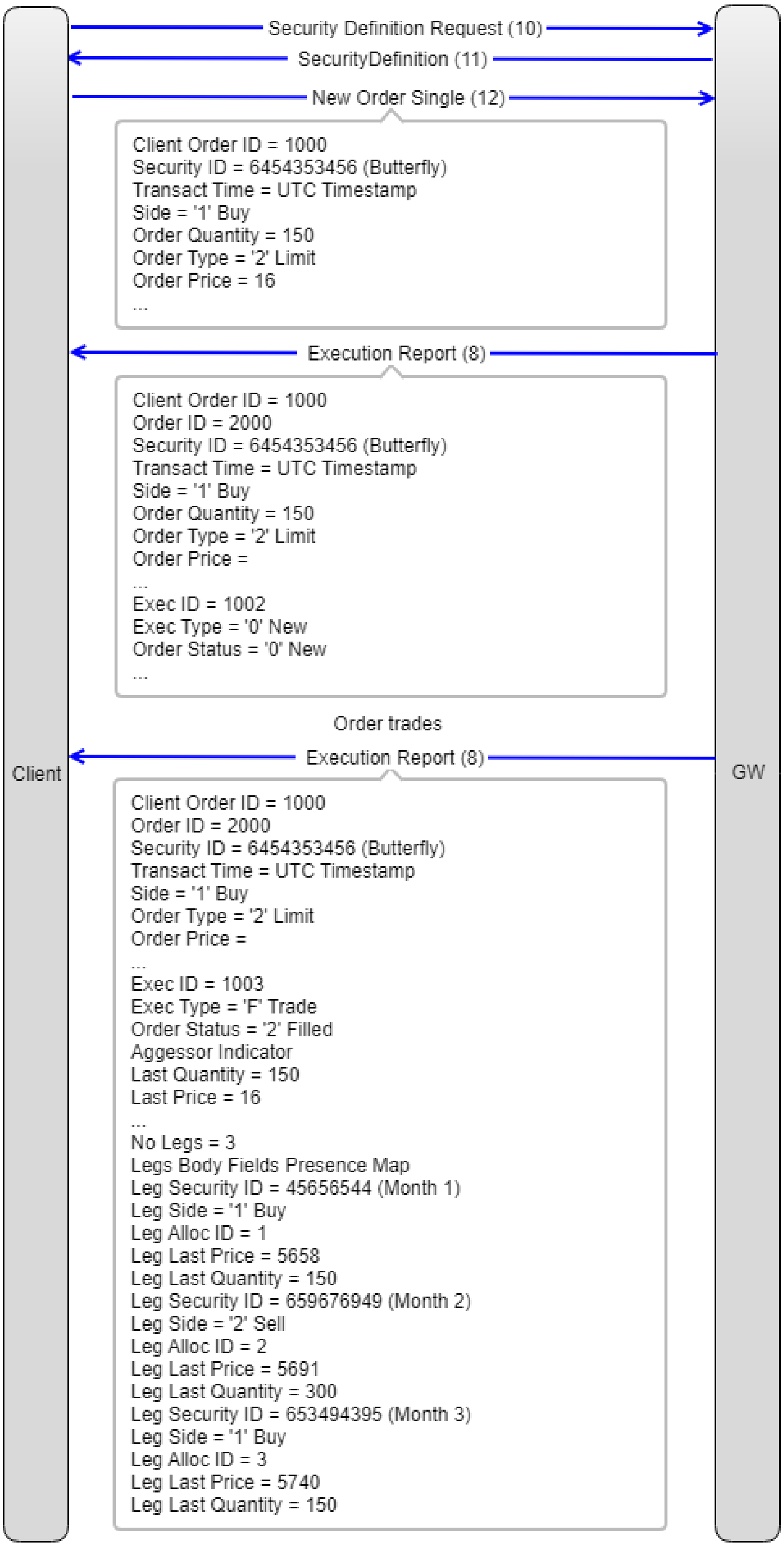
Execution Report (8)

Client Order ID = 1000
Order ID = 2000
Security ID = 4458437543 (Carry)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity
Order Type = '2' Limit
Order Price
...
Exec ID = 1001
Exec Type = 'F' Trade
Order Status = '2' Filled
...
Trade ID = 3486137421
Order Category = '7' Implied Order
Aggessor Indicator
Last Quantity = (Trade volume)
Last Price = (Trade price)
...
NoLegs = 2
Legs Body Fields Presence Map
Leg Security ID = 45656544 (Month 1)
Leg Side = 1 = Buy
Leg Alloc ID = 1
Leg Last Price
Leg Last Quantity
Leg Security ID = 659676949 (Month 2)
Leg Side = 2 = Sell
Leg Alloc ID = 2
Leg Last Price
Leg Last Quantity

Execution Report (8)

Client Order ID = 1001
Order ID = 2001
Security ID = 659676949 (Month 2)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity
Order Type = '2' Limit
Order Price
...
Exec ID = 1002
Exec Type = 'F' Trade
Order Status = '2' Filled
...
Trade ID = 3486137481
Order Category = '7' Implied Order
Aggessor Indicator
Last Quantity = (Trade volume)
Last Price = (Trade price)
...

Custom strategy Butterfly trades

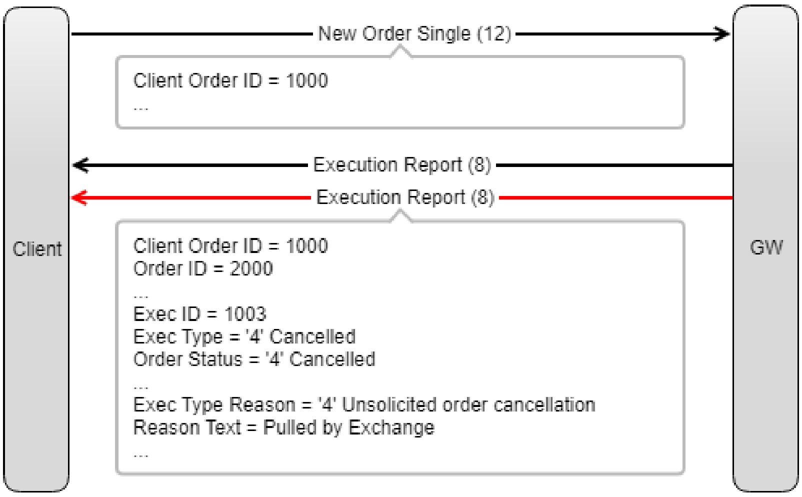


Client Order ID = 1000
Security ID = 6454353456 (Butterfly)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 150
Order Type = '2' Limit
Order Price = 16
...

Client Order ID = 1000
Order ID = 2000
Security ID = 6454353456 (Butterfly)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 150
Order Type = '2' Limit
Order Price =
...
Exec ID = 1002
Exec Type = '0' New
Order Status = '0' New
...

Client Order ID = 1000
Order ID = 2000
Security ID = 6454353456 (Butterfly)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Type = '2' Limit
Order Price =
...
Exec ID = 1003
Exec Type = 'F' Trade
Order Status = '2' Filled
Aggessor Indicator
Last Quantity = 150
Last Price = 16
...
No Legs = 3
Legs Body Fields Presence Map
Leg Security ID = 45656544 (Month 1)
Leg Side = '1' Buy
Leg Alloc ID = 1
Leg Last Price = 5658
Leg Last Quantity = 150
Leg Security ID = 659676949 (Month 2)
Leg Side = '2' Sell
Leg Alloc ID = 2
Leg Last Price = 5691
Leg Last Quantity = 300
Leg Security ID = 653494395 (Month 3)
Leg Side = '1' Buy
Leg Alloc ID = 3
Leg Last Price = 5740
Leg Last Quantity = 150

Order cancellation by Exchange



Client Order ID = 1000
...

Client Order ID = 1000
Order ID = 2000
...
Exec ID = 1003
Exec Type = '4' Cancelled
Order Status = '4' Cancelled
...
Exec Type Reason = '4' Unsolicited order cancellation
Reason Text = Pulled by Exchange
...

4.10.8.1 Execution Report Matrix

An Execution Report can be returned in response to a request e.g. New Order Single (12) or unsolicited in response to a particular action.

The fields that can be included are contingent on the purpose of the message and any mandatory or conditionally supplied tags specified by the originator in the initiating request or returned response to a particular action.

Legend:

M = Mandatory

C = Conditional

O = Optional

P = Returned in first outbound message if present in original message.

The following table indicates the field that will be returned for specific execution types:

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Executing Firm	P	P										P	P	P	
Client ID Short Code	P	P										P	P	P	
Legal Entity ID	P	P										P	P	P	
Proprietary Client ID	P	P										P	P	P	
Entering Firm	P	P										P	P	P	

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Origination Trader	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Customer Account	P	P										P	P	P	
Correspondent Broker	P	P										P	P	P	
Liquidity Provider	P	P										P	P	P	
Market Maker	P	P										P	P	P	
Broker Client ID	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Decision Maker	P	P										P	P	P	
Investment Decision within Firm (IDM)	P	P			P		P					P	P	P	
Execution Decision within Firm (EDM)	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Investment Decision Country Code	P	P			P		P					P	P	P	
Execution Decision Country Code	P	P			P		P					P	P	P	

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Client Branch Country Code	P	P			P		P					P	P	P	
Order Capacity	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Order Restrictions	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Direct Electronic Access	P	P			P		P					P	P	P	P
Aggregated Order	P	P			P		P					P	P	P	P
Pending Allocation Order	P	P			P		P					P	P	P	P
Liquidity Provision Order	P	P			P		P					P	P	P	P
Risk Reduction Order	P	P			P		P					P	P	P	P
Entering Trader	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Clearing Firm												M	M	M	
Account Type	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Order ID	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Client Order ID	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Secondary Client Order ID	O				O			O	O			O	O	O	O
Original Client Order ID					M	M	M	M							
Security ID	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Side	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Order Quantity	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Order Type	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Order Price	C	C	M	C	C	C	C	C	C	C	C	M	M	M	C
Expiry Date	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Cancel on Disconnect	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Transact Time	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Display Quantity	C	C		C	C	C	C	C	C	C	C	C	C	C	C
Text	P	P			P		P					P	P	P	P
Time in Force	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Self Match Prevention ID	P	P							P						P
Trigger Type	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Trigger Price	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Trigger Price Type	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Trigger New Price	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Quote Price Level	C														C
Trade ID												M	M	M	
Exec ID	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Exec Ref ID														M	
Exec Type	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Exec Type Reason	C			M		M	M	C	M						
Order Status	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Order Reject Reason															M

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Exec Restatement Reason		M		M											
Order Category												C	C	C	
Aggressor Indicator												M	M	M	
Last Quantity												M	M	M	
Last Price												M	M	M	
Leaves Quantity	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Cumulative Quantity	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Reason Text									C	C					C
No Legs													M	C	
Legs Body Fields Presence Map													M	C	
Leg Security ID													M	C	
Leg Side													M	C	
Leg Alloc ID													M	C	

Field Name	Order Accepted	Order Restated (GTC/GTD)	Order Triggered	Order Restated (Speed Bump)	Order Replaced	Order Pending Replace	Order Replaced (after Speed Bump)	Order Cancelled (Solicited)	Order Cancelled (Unsolicited)	Order Expired	Done for Day	Outright Filled	Strategy Filled	Trade Busted	Order Rejected
Leg Last Price													M	C	
Leg Last Quantity													M	C	

4.10.9 Mass Cancel Request (17)

Mass Cancel Request is used to cancel the remaining quantity of a group of orders and/or quotes matching criteria specified within the message. Persisted orders will be included in the cancellation request.

If the request is accepted, an Execution Report (8) will be sent for each order cancelled followed by Mass Cancel Report (18).

If the request is rejected, Mass Cancel Report (18) will be returned indicating the reason.

BP	Field Name	Req	Data Type	Description
0	Client Order ID	Y	String (19)	Unique ID of Mass Cancel Request as assigned by the institution.
2	Mass Cancel Request Type	Y	UInt8	Specifies the type of cancellation requested. Valid values: 1 = Cancel orders/quotes for a Security ID (tradable instrument) 3 = Cancel orders/quotes for a Product (contract e.g. CADF - Copper Future) 7 = Cancel all orders/quotes 101 = Cancel quotes specified in Quote ID
3	Mass Cancel Scope	Y	UInt8	Specifies the scope of the cancellation requested. Valid values: 1 = Cancel orders only 2 = Cancel quotes only 3 = Cancel orders and quotes. Must be 2 = Cancel quotes if Mass Cancel Request Type = ‘101’ Cancel quotes specified in Quote ID.
5	Transact Time	Y	UInt64	Time when the message was generated.
7	Security Exchange	C	String (5)	Market which is used to identify the security: XLME Conditionally required if Symbol is specified.
8	Product Complex	C	String (5)	Identifies an entire suite of products for a given market.

BP	Field Name	Req	Data Type	Description

				Valid values:
				LME = Base
				LMEP = Precious
				Conditionally required if Symbol is specified.

9	Symbol	C	String (21)	Symbol for the LME contract code e.g. CADF (Copper Future) or OCDF (Copper Monthly Average Future). Conditionally required if Mass Cancel Request Type = ‘3’ Cancel orders/quotes for a Product.
10	Security ID	C	UInt64	Tradable Instrument identifier. Conditionally required if Mass Cancel Request Type = ‘1’ Cancel orders/quotes for a Security ID.
11	Quote ID	C	String (19)	Mass Quote Identifier. Conditionally required if Mass Cancel Request Type = ‘101’ Cancel quotes specified in Quote ID.
12	Broker Client ID	N	String (17)	Identifier of the entity in a risk group. Can be used with Mass Cancel Request Type = ‘7’ Cancel all orders/quotes.
13	Side	N	UInt8	Optional qualifier to indicate the side of the market for which orders are to be cancelled. Can be used if Mass Cancel Request Type = '3' Cancel orders/quotes for a Product. Absence of this field indicates that orders/quotes are to be cancelled regardless of side.

4.10.10 Mass Cancel Report (18)

Mass Cancel Report is returned in response to a Mass Cancel Request (17).

Each affected order that is cancelled is acknowledged with a separate Execution Report (8).

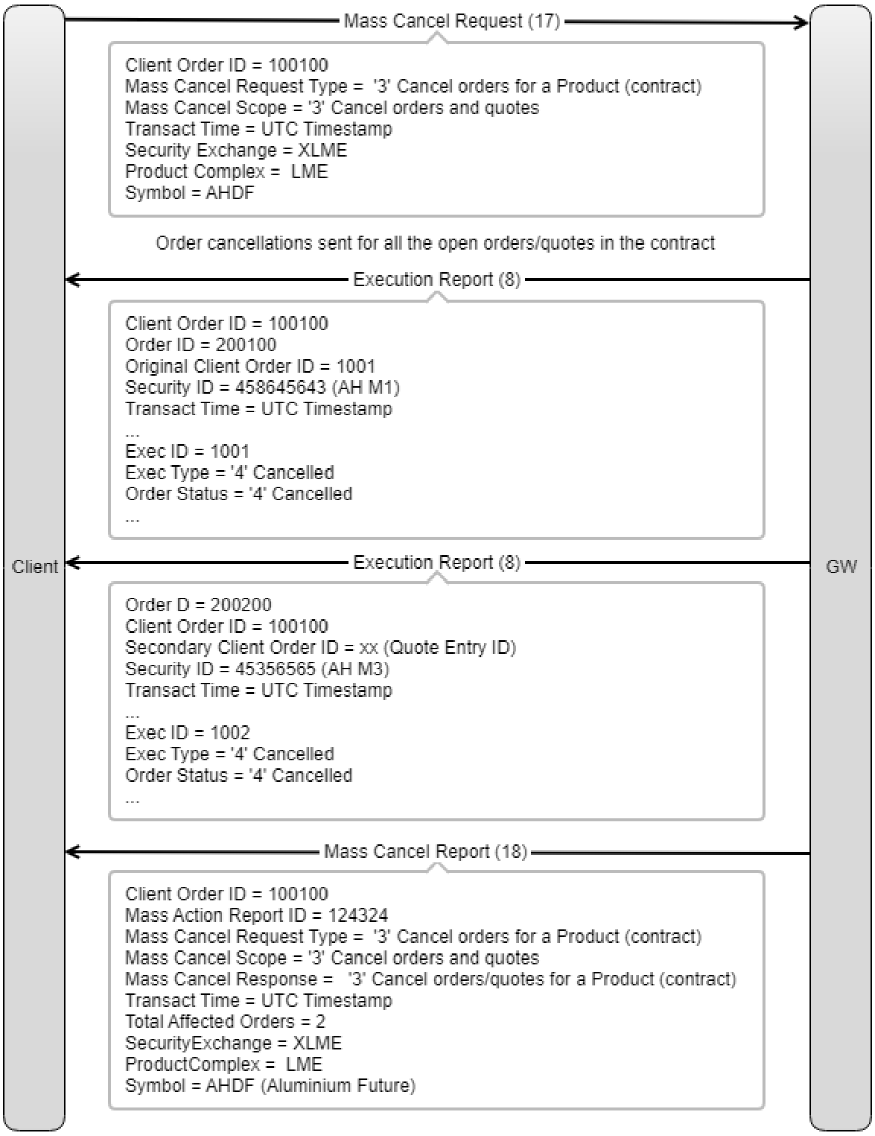
BP	Field Name	Req	Data Type	Description
0	Client Order ID	N	String (19)	Unique ID of Mass Cancel Request as assigned by the institution.
1	Mass Action Report ID	Y	String (21)	Unique Identifier for the Order Mass Cancel Report assigned by the system.
2	Mass Cancel Request Type	Y	UInt8	Specifies the type of cancellation requested. Valid values: 1 = Cancel orders/quotes for a Security ID (tradable instrument) 3 = Cancel orders/quotes for a Product (contract e.g. CADF - Copper Future) 7 = Cancel all orders/quotes 101 = Cancel quotes specified in Quote ID
3	Mass Cancel Scope	Y	UInt8	Specifies the scope of the cancellation requested. Valid values: 1 = Cancel orders only 2 = Cancel quotes only 3 = Cancel orders and quotes. Must be 2 = Cancel quotes if Mass Cancel Request Type = ‘101’ Cancel quotes specified in Quote ID.
4	Mass Cancel Response	Y	UInt8	Indicates the action taken on the cancel request: Valid values: 0 = Cancel Request Rejected 1 = Cancel orders/quotes for a Security ID 3 = Cancel orders/quotes for a Product 7 = Cancel all orders/quotes 101 = Cancel quotes specified in Quote ID
5	Transact Time	Y	UInt64	Time when the message was generated.
6	Total Affected Orders	Y	UInt32	Indicates the total number of orders affected by the Mass Cancel Request.

BP	Field Name	Req	Data Type	Description
7	Security Exchange	C	String (5)	Market which is used to identify the security: XLME Conditionally required if Symbol is specified.
8	Product Complex	C	String (5)	Identifies an entire suite of products for a given market. Valid values: LME = Base LMEP = Precious Conditionally required if Symbol is specified.
9	Symbol	C	UInt64	Tradable Instrument identifier. Conditionally required if Mass Cancel Request Type = ‘1’ Cancel orders/quotes for a Security ID.
10	Security ID	C	UInt64	Tradable Instrument identifier. Conditionally required if Mass Cancel Request Type = ‘1’ Cancel orders/quotes for a Security ID.
11	Quote ID	C	String (19)	Mass Quote Identifier. Conditionally required if Mass Cancel Request Type = ‘101’ Cancel quotes specified in Quote ID.
12	Broker Client ID	C	String (17)	Identifier of the entity in a risk group. Can be used with Mass Cancel Request Type = ‘7’ Cancel all orders/quotes.
13	Side	C	UInt8	Optional qualifier to indicate the side of the market for which orders are to be cancelled. Can be used if Mass Cancel Request Type = '3' Cancel orders/quotes for a Product. Absence of this field indicates that orders/quotes are to be cancelled regardless of side.
14	Mass Cancel Reject Reason	C	UInt16	Code specifying the reason for the rejection. Valid values:

BP	Field Name	Req	Data Type	Description
				1 = Invalid or Unknown Security 3 = Invalid or Unknown Product 99 = Other. Conditionally required if Mass Cancel Response = ‘0’ Cancel Request Rejected
15	Reason Text	C	String (76)	Text specifying the reason for the rejection. Conditionally required if Mass Cancel Reject Reason = ‘99’ Other.

Example Message Flow

Mass cancel orders and quotes in a contract



Client Order ID = 100100
Mass Cancel Request Type = '3' Cancel orders for a Product (contract)
Mass Cancel Scope = '3' Cancel orders and quotes
Transact Time = UTC Timestamp
Security Exchange = XLME
Product Complex = LME
Symbol = AHDF

Client Order ID = 100100
Order ID = 200100
Original Client Order ID = 1001
Security ID = 458645643 (AH M1)
Transact Time = UTC Timestamp
...
Exec ID = 1001
Exec Type = '4' Cancelled
Order Status = '4' Cancelled
...

Order D = 200200
Client Order ID = 100100
Secondary Client Order ID = xx (Quote Entry ID)
Security ID = 45356565 (AH M3)
Transact Time = UTC Timestamp
...
Exec ID = 1002
Exec Type = '4' Cancelled
Order Status = '4' Cancelled
...

Client Order ID = 100100
Mass Action Report ID = 124324
Mass Cancel Request Type = '3' Cancel orders for a Product (contract)
Mass Cancel Scope = '3' Cancel orders and quotes
Mass Cancel Response = '3' Cancel orders/quotes for a Product (contract)
Transact Time = UTC Timestamp
Total Affected Orders = 2
SecurityExchange = XLME
ProductComplex = LME
Symbol = AHDF (Aluminium Future)

4.10.11 Mass Quote (22)

Mass Quote is used to enter and manage (amend and/or cancel) multiple orders submitted as quotes in a single contract.

BP	Field Name	Req	Data Type	Description
0	Quote ID	Y	String (19)	Client specified unique identifier for the Mass Quote. This maps to the Client Order ID in the Execution Report.
1	Transact Time	Y	UInt64	Time when the message was generated.
2	Account Type	Y	UInt8	Specifies the type of account associated with the order. Valid values: 1 = Client ISA 3 = House 8 = Joint back office account (JBO) = Gross OSA 101 = Client OSA

3	Order Restrictions	Y	Char	Restrictions associated with an order.
				Valid values:
				D = Non-algorithmic (human)
				E = Algorithmic (algo)

4	Order Capacity	Y	Char	Indicates the trading capacity. Valid values: A (agency) = AOTC P (principal) = DEAL R (riskless principal) = MTCH
5	Executing Firm	N	String (4)	Identifier of the executing firm.
6	Client ID Short Code	C	UInt64	Client short code identifier. If that is not available, should be populated with the value ‘0’ = No Client. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
7	Legal Entity ID	C	String (41)	LEI. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.

BP	Field Name	Req	Data Type	Description
8	Proprietary Client ID	C	String (41)	Proprietary or Custom Client ID as assigned by the member. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
9	Entering Firm	N	String (4)	Identifier of the entering firm.
10	Origination Trader	Y	String (41)	Order origination trader.
11	Customer Account	C	String (61)	Identification of the client account code where the Account Type = 1, 8 or 101.
12	Correspondent Broker	N	String (4)	ID of the firm or trader. Used for order routing. Identifier of the trader who submits an order for a member through another member.
13	Liquidity Provider	N	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative.
14	Market Maker	N	String (41)	This should be submitted if the trader qualifies for a Liquidity Provider initiative.
15	Decision Maker	C	UInt64	Decision maker short code, required on client orders to identify the investment decision maker. Also used under the power of representation clause where the investment decision maker may be a third party. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
16	Investment Decision within Firm (IDM)	N	UInt64	Short code to identify the individual who is responsible for the investment decision.
17	Execution Decision within Firm (EDM)	Y	UInt64	Short code to identify the execution decision maker with the firm.
18	Investment Decision Country Code	N	String (3)	ISO Country Code of the branch responsible for the person making the investment decision.

BP	Field Name		Req	Data Type	Description
19	Execution Decision Country Code		N	String (3)	ISO Country Code of the branch responsible for the person making the execution decision.
20	Client Branch Country Code		C	String (3)	ISO Country Code to identify the branch that received the client order or made an investment decision for a client. Conditionally required for client orders i.e., Account Type = 1, 8 or 101.
21	Broker Client ID		Y	String (17)	Identifier of the entity in a risk group.
22	Self Match Prevention ID		N	UInt32	Identifies an order that should not be matched to an opposite order if both buy and sell orders for the trade contain the same Self Match Prevention ID and are submitted by the same member.
23	Direct Electronic Access		N	Char	Signifies order received from a direct access or sponsored access (the trader has direct electronic access). Valid value: Y = Yes Absence of this field infers No (default)
24	Total Quote Entries		Y	UInt8	Total number of Quote entries (pairs) in this message. Must be ≥ 1 and ≤ 20.
25	No Quote Sets		Y	UInt8	The number of sets of quotes contained in the message. Must be ≥ 1 but ≤ Total Quote Entries.
	Quote Sets Fields Presence Map		Y	Bitmap Variable Length (1)	This will indicate the fields/nested repeating blocks present in this repeating block.
	1	Security ID	Y	UInt64	Tradable Instrument identifier.
	2	No Quote Entries	Y	UInt8	Number of Quote Entry repeating blocks. Must be ≥ 1 but ≤ 3.

BP	Field Name			Req	Data Type	Description
		Quote Entry Fields Presence Map		Y	Bitmap Variable Length (1)	This will indicate the fields/nested repeating blocks present in this repeating block.
		0	Quote Entry ID	Y	UInt8	Quote pair ID in a Mass Quote message. Starts from 1 and incremented by 1 for each quote pair in the message. The last value must be the same as Total Quote Entries in this message.
		1	Quote Price Level	Y	UInt8	Indicates the price level that is being submitted or modified. Valid values are 1, 2 or 3. Value of zero indicates this is a dummy quote to make up for minimum quote size in a mass quote.
		2	Bid Size	Y	Int32	Bid quantity. Value 0 indicates cancellation of this side. Value -1 indicates no change to this side. Null value indicates dummy quote.
		3	Offer Size	Y	Int32	Offer quantity. Value 0 indicates cancellation of this side. Value -1 indicates no change to this side. Null value indicates dummy quote.
		4	Bid Price	Y	Int64	Bid price. Null value indicates dummy quote.
		5	Offer Price	Y	Int64	Offer price. Null value indicates dummy quote.

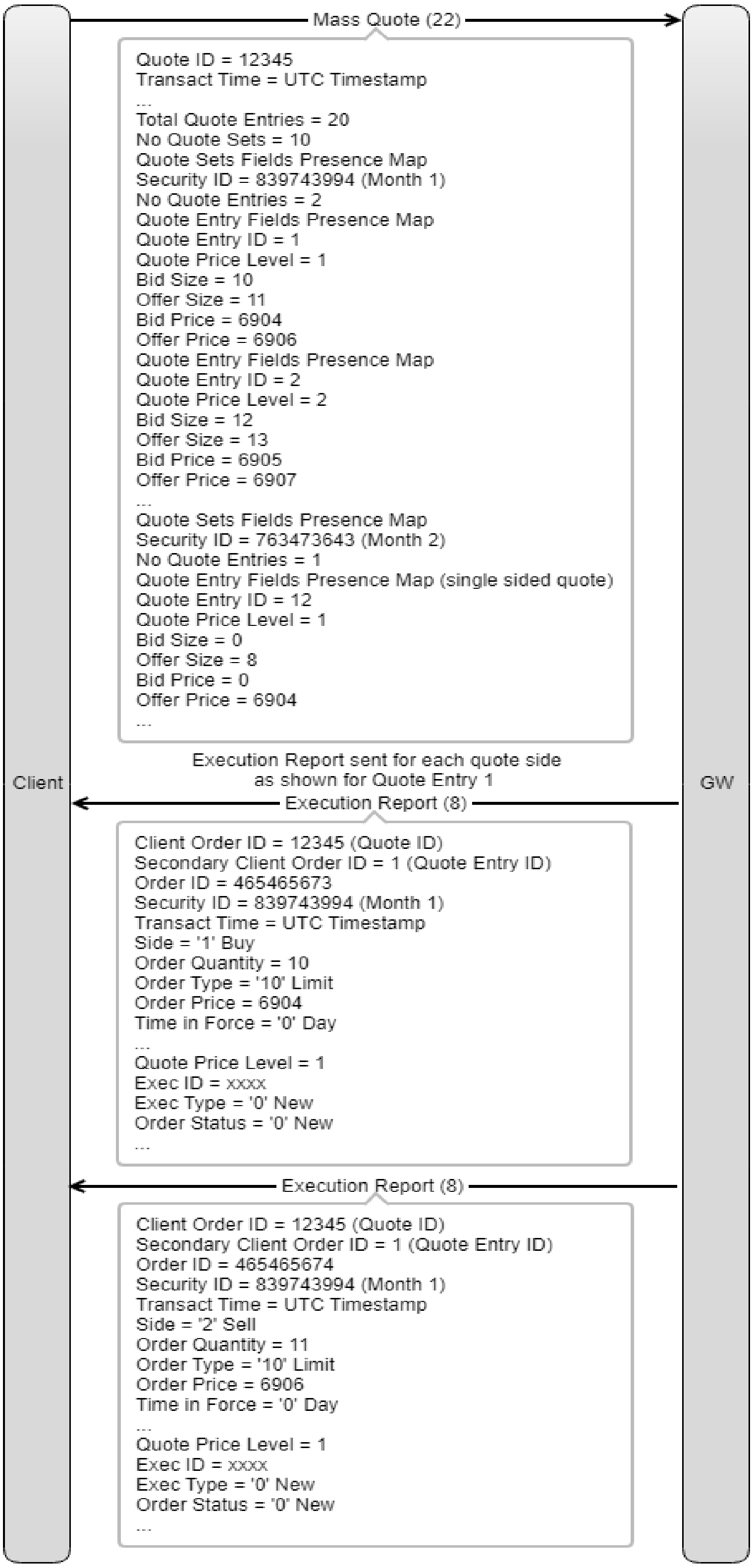
4.10.12 Mass Quote Ack (23)

Mass Quote Ack reports the rejection of a Mass Quote (22) at message level.

BP	Field Name	Req	Data Type	Description
0	Quote ID	Y	String (19)	Client specified unique identifier for the Mass Quote. This maps to the Client Order ID in the Execution Report.
1	Transact Time	Y	UInt64	Time when the message was generated.
2	Quote Status	Y	UInt8	Status of the Mass Quote acknowledgement. Valid value: 5 = Rejected
3	Quote Reject Reason	Y	UInt16	Code specifying the reason for the rejection. Valid values: 6 = Duplicate quote 9 = Not authorized to quote security 11 = Quote Locked - Unable to Update/Cancel 99 = Other
4	Reason Text	C	String (76)	Text specifying the reason for the rejection. Conditionally required if Quote Reject Reason = ‘99’ Other.

Example Message Flows

Mass Quote submission



Mass Quote (22)

Quote ID = 12345
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = 10
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 2
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 10
Offer Size = 11
Bid Price = 6904
Offer Price = 6906
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = 12
Offer Size = 13
Bid Price = 6905
Offer Price = 6907
...
Quote Sets Fields Presence Map
Security ID = 763473643 (Month 2)
No Quote Entries = 1
Quote Entry Fields Presence Map (single sided quote)
Quote Entry ID = 12
Quote Price Level = 1
Bid Size = 0
Offer Size = 8
Bid Price = 0
Offer Price = 6904
...

Execution Report sent for each quote side
as shown for Quote Entry 1

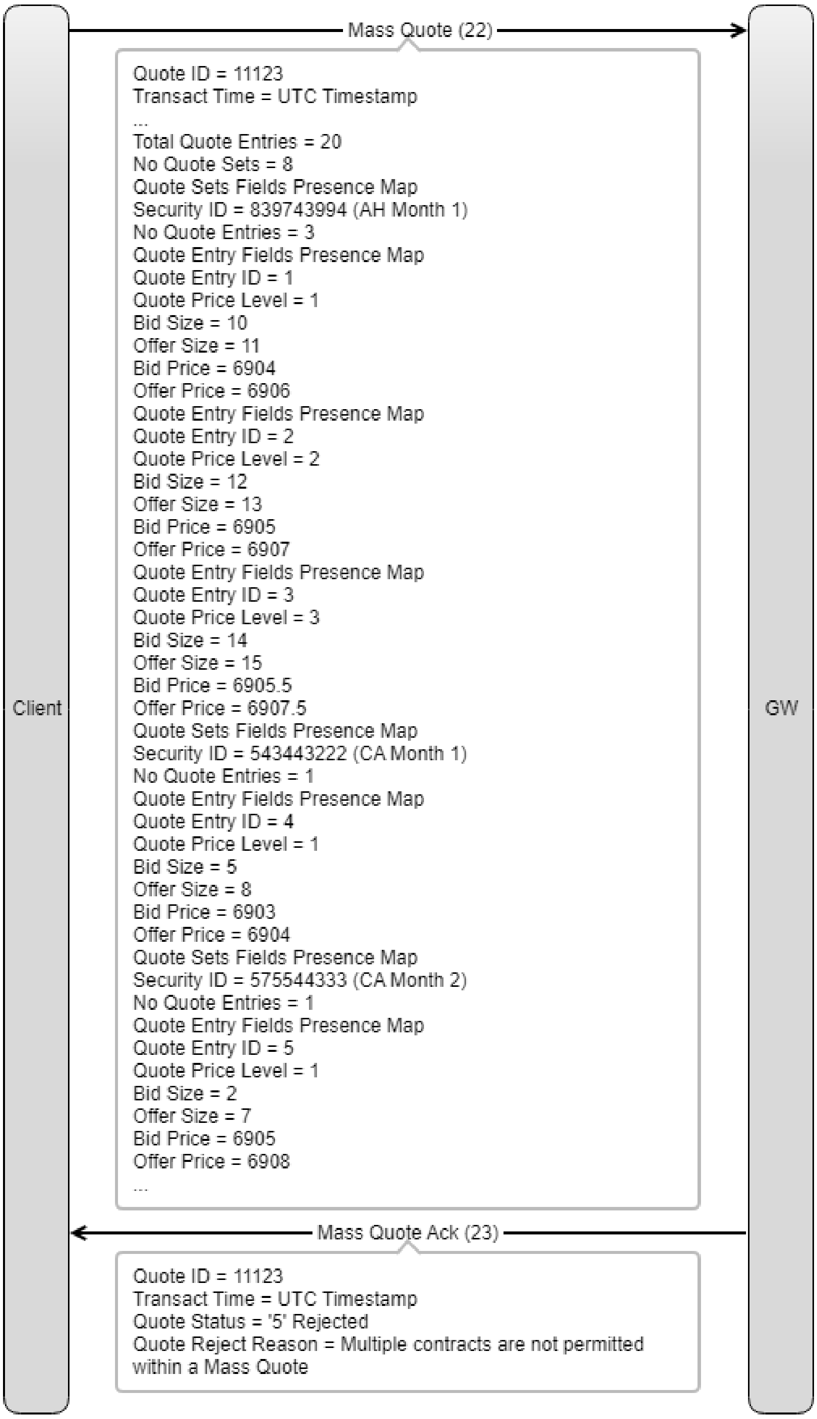
Execution Report (8)

Client Order ID = 12345 (Quote ID)
Secondary Client Order ID = 1 (Quote Entry ID)
Order ID = 465465673
Security ID = 839743994 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 10
Order Type = '10' Limit
Order Price = 6904
Time in Force = '0' Day
...
Quote Price Level = 1
Exec ID = xxxx
Exec Type = '0' New
Order Status = '0' New
...

Execution Report (8)

Client Order ID = 12345 (Quote ID)
Secondary Client Order ID = 1 (Quote Entry ID)
Order ID = 465465674
Security ID = 839743994 (Month 1)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity = 11
Order Type = '10' Limit
Order Price = 6906
Time in Force = '0' Day
...
Quote Price Level = 1
Exec ID = xxxx
Exec Type = '0' New
Order Status = '0' New
...

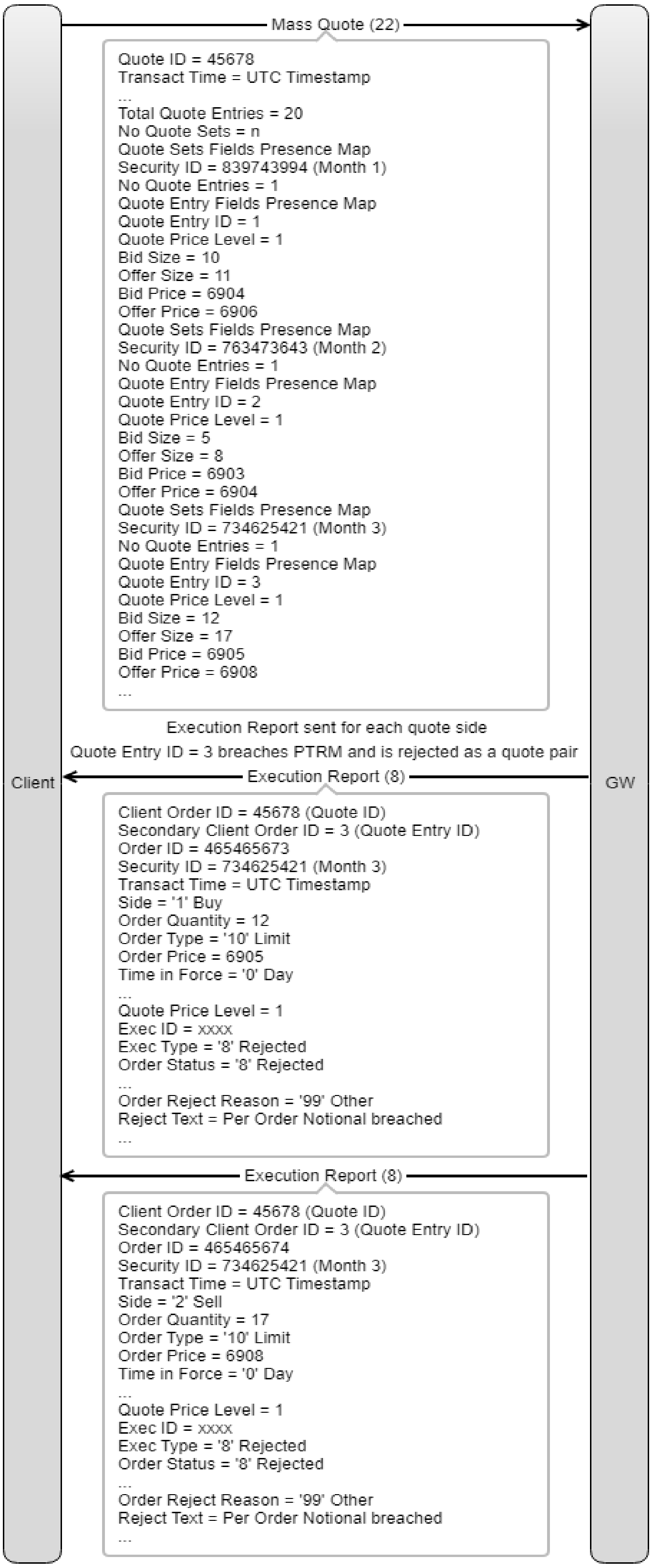
Entire Mass Quote rejected



Quote ID = 11123
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = 8
Quote Sets Fields Presence Map
Security ID = 839743994 (AH Month 1)
No Quote Entries = 3
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 10
Offer Size = 11
Bid Price = 6904
Offer Price = 6906
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = 12
Offer Size = 13
Bid Price = 6905
Offer Price = 6907
Quote Entry Fields Presence Map
Quote Entry ID = 3
Quote Price Level = 3
Bid Size = 14
Offer Size = 15
Bid Price = 6905.5
Offer Price = 6907.5
Quote Sets Fields Presence Map
Security ID = 543443222 (CA Month 1)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 4
Quote Price Level = 1
Bid Size = 5
Offer Size = 8
Bid Price = 6903
Offer Price = 6904
Quote Sets Fields Presence Map
Security ID = 575544333 (CA Month 2)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 5
Quote Price Level = 1
Bid Size = 2
Offer Size = 7
Bid Price = 6905
Offer Price = 6908
...

Quote ID = 11123
Transact Time = UTC Timestamp
Quote Status = '5' Rejected
Quote Reject Reason = Multiple contracts are not permitted within a Mass Quote

Mass Quote – individual quote rejections



Quote ID = 45678
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = n
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 10
Offer Size = 11
Bid Price = 6904
Offer Price = 6906
Quote Sets Fields Presence Map
Security ID = 763473643 (Month 2)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 1
Bid Size = 5
Offer Size = 8
Bid Price = 6903
Offer Price = 6904
Quote Sets Fields Presence Map
Security ID = 734625421 (Month 3)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 3
Quote Price Level = 1
Bid Size = 12
Offer Size = 17
Bid Price = 6905
Offer Price = 6908
...

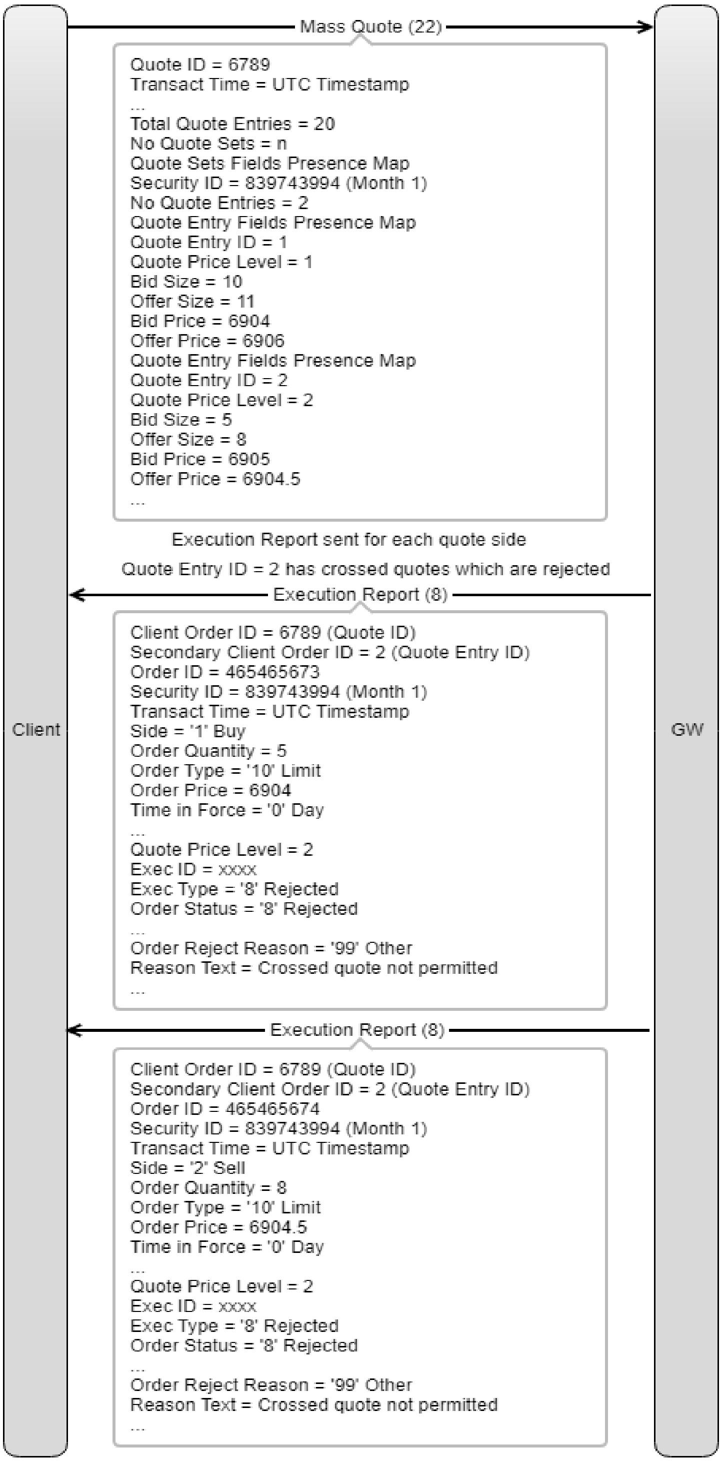
Execution Report sent for each quote side
Quote Entry ID = 3 breaches PTRM and is rejected as a quote pair

Client Order ID = 45678 (Quote ID)
Secondary Client Order ID = 3 (Quote Entry ID)
Order ID = 465465673
Security ID = 734625421 (Month 3)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 12
Order Type = '10' Limit
Order Price = 6905
Time in Force = '0' Day
...
Quote Price Level = 1
Exec ID = xxxx
Exec Type = '8' Rejected
Order Status = '8' Rejected
...
Order Reject Reason = '99' Other
Reject Text = Per Order Notional breached
...

Client Order ID = 45678 (Quote ID)
Secondary Client Order ID = 3 (Quote Entry ID)
Order ID = 465465674
Security ID = 734625421 (Month 3)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity = 17
Order Type = '10' Limit
Order Price = 6908
Time in Force = '0' Day
...
Quote Price Level = 1
Exec ID = xxxx
Exec Type = '8' Rejected
Order Status = '8' Rejected
...
Order Reject Reason = '99' Other
Reject Text = Per Order Notional breached
...

Crossed quotes within a Quote Entry rejected

The bid at 6905 for 5 lots and offer at 6904.5 for 8 lots in Quote Entry ID = 2 can trade with each other. The matching engine will reject a cross quote pair within a single Quote Entry. The originator of the Mass Quote will be notified of the rejection by an Execution Report for each quote pair.



Quote ID = 6789
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = n
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 2
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 10
Offer Size = 11
Bid Price = 6904
Offer Price = 6906
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = 5
Offer Size = 8
Bid Price = 6905
Offer Price = 6904.5
...

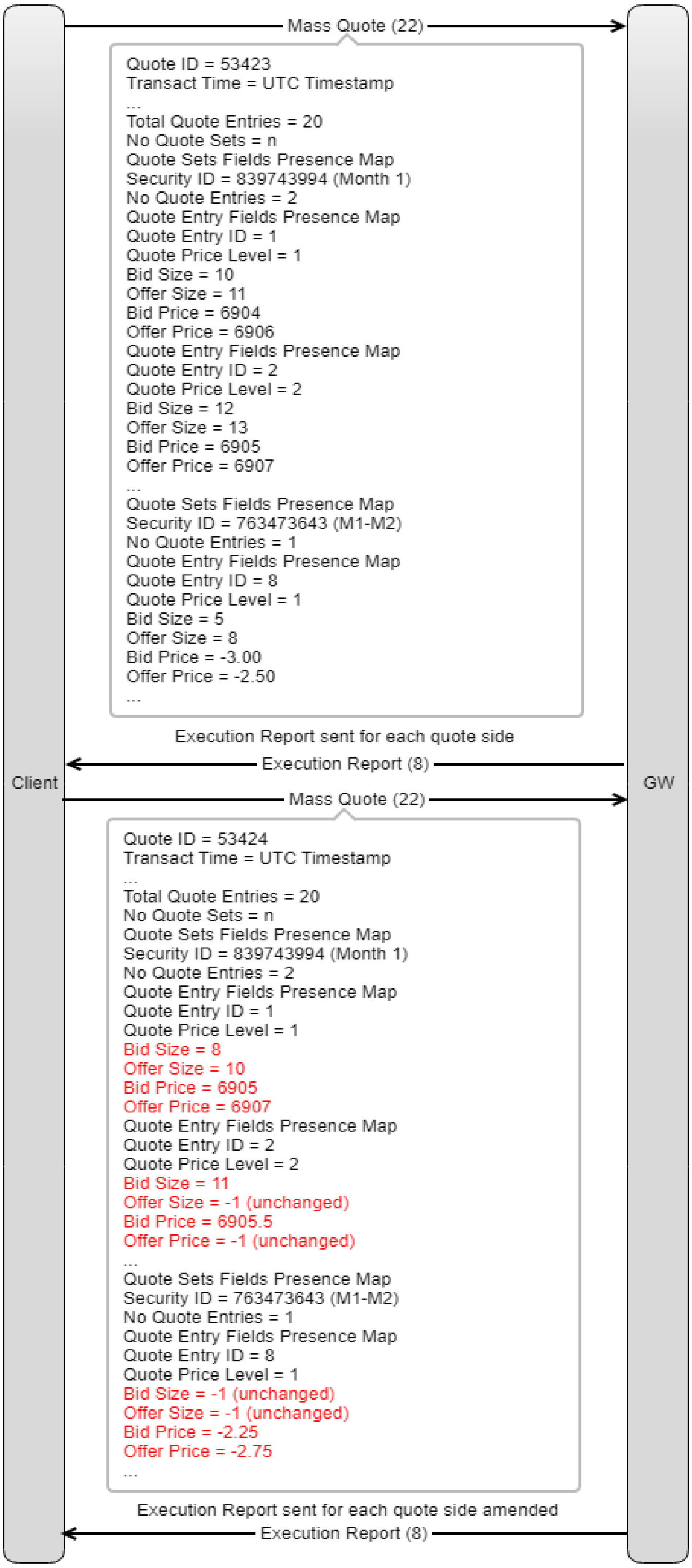
Execution Report sent for each quote side

Quote Entry ID = 2 has crossed quotes which are rejected

Client Order ID = 6789 (Quote ID)
Secondary Client Order ID = 2 (Quote Entry ID)
Order ID = 465465673
Security ID = 839743994 (Month 1)
Transact Time = UTC Timestamp
Side = '1' Buy
Order Quantity = 5
Order Type = '10' Limit
Order Price = 6904
Time in Force = '0' Day
...
Quote Price Level = 2
Exec ID = xxxx
Exec Type = '8' Rejected
Order Status = '8' Rejected
...
Order Reject Reason = '99' Other
Reason Text = Crossed quote not permitted
...

Client Order ID = 6789 (Quote ID)
Secondary Client Order ID = 2 (Quote Entry ID)
Order ID = 465465674
Security ID = 839743994 (Month 1)
Transact Time = UTC Timestamp
Side = '2' Sell
Order Quantity = 8
Order Type = '10' Limit
Order Price = 6904.5
Time in Force = '0' Day
...
Quote Price Level = 2
Exec ID = xxxx
Exec Type = '8' Rejected
Order Status = '8' Rejected
...
Order Reject Reason = '99' Other
Reason Text = Crossed quote not permitted
...

Mass Quote amended



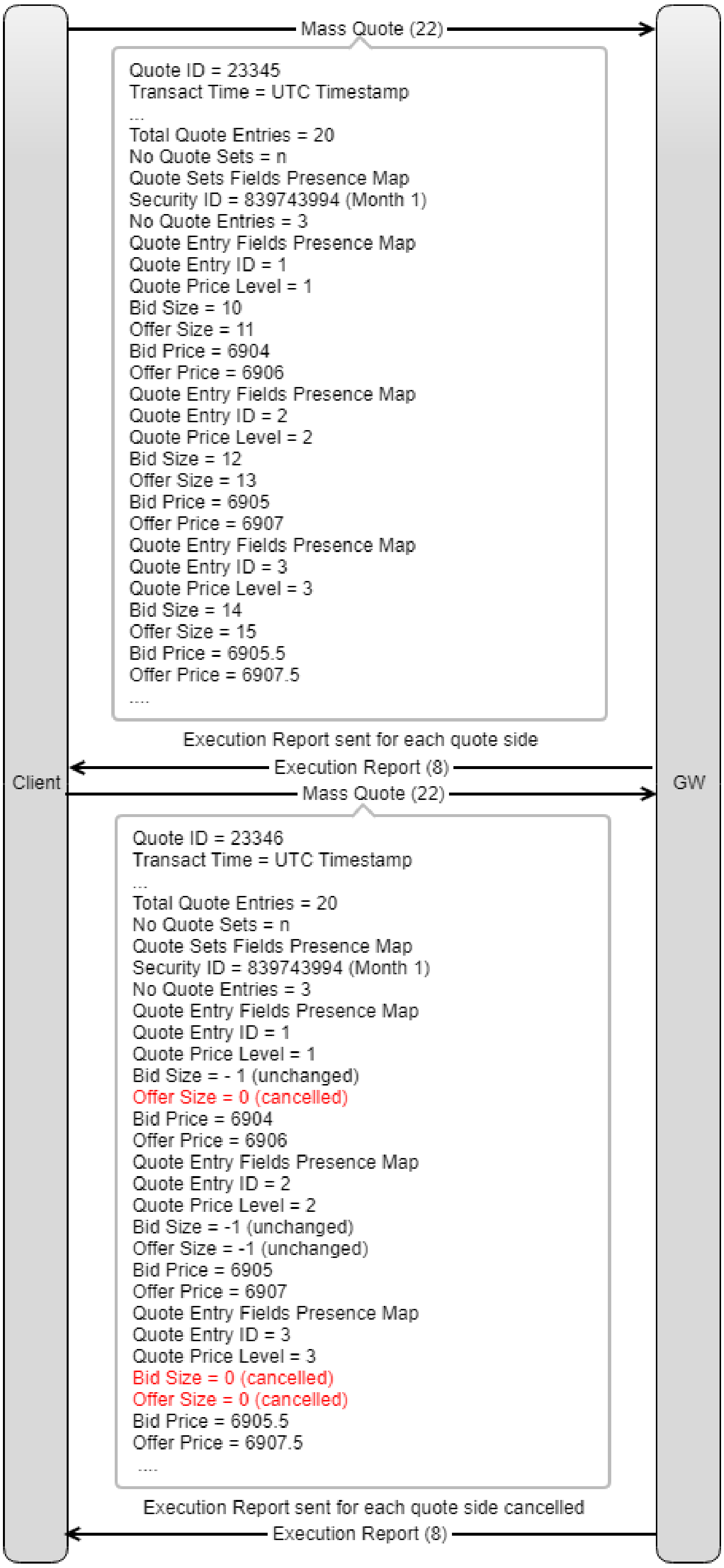
Quote ID = 53423
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = n
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 2
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 10
Offer Size = 11
Bid Price = 6904
Offer Price = 6906
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = 12
Offer Size = 13
Bid Price = 6905
Offer Price = 6907
...
Quote Sets Fields Presence Map
Security ID = 763473643 (M1-M2)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 8
Quote Price Level = 1
Bid Size = 5
Offer Size = 8
Bid Price = -3.00
Offer Price = -2.50
...

Execution Report sent for each quote side

Quote ID = 53424
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = n
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 2
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 8
Offer Size = 10
Bid Price = 6905
Offer Price = 6907
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = 11
Offer Size = -1 (unchanged)
Bid Price = 6905.5
Offer Price = -1 (unchanged)
...
Quote Sets Fields Presence Map
Security ID = 763473643 (M1-M2)
No Quote Entries = 1
Quote Entry Fields Presence Map
Quote Entry ID = 8
Quote Price Level = 1
Bid Size = -1 (unchanged)
Offer Size = -1 (unchanged)
Bid Price = -2.25
Offer Price = -2.75
...

Execution Report sent for each quote side amended

Individual quotes cancelled



Quote ID = 23345
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = n
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 3
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = 10
Offer Size = 11
Bid Price = 6904
Offer Price = 6906
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = 12
Offer Size = 13
Bid Price = 6905
Offer Price = 6907
Quote Entry Fields Presence Map
Quote Entry ID = 3
Quote Price Level = 3
Bid Size = 14
Offer Size = 15
Bid Price = 6905.5
Offer Price = 6907.5
....

Execution Report sent for each quote side

Quote ID = 23346
Transact Time = UTC Timestamp
...
Total Quote Entries = 20
No Quote Sets = n
Quote Sets Fields Presence Map
Security ID = 839743994 (Month 1)
No Quote Entries = 3
Quote Entry Fields Presence Map
Quote Entry ID = 1
Quote Price Level = 1
Bid Size = - 1 (unchanged)
Offer Size = 0 (cancelled)
Bid Price = 6904
Offer Price = 6906
Quote Entry Fields Presence Map
Quote Entry ID = 2
Quote Price Level = 2
Bid Size = -1 (unchanged)
Offer Size = -1 (unchanged)
Bid Price = 6905
Offer Price = 6907
Quote Entry Fields Presence Map
Quote Entry ID = 3
Quote Price Level = 3
Bid Size = 0 (cancelled)
Offer Size = 0 (cancelled)
Bid Price = 6905.5
Offer Price = 6907.5
....

Execution Report sent for each quote side cancelled

4.10.13 Quote Request (20)

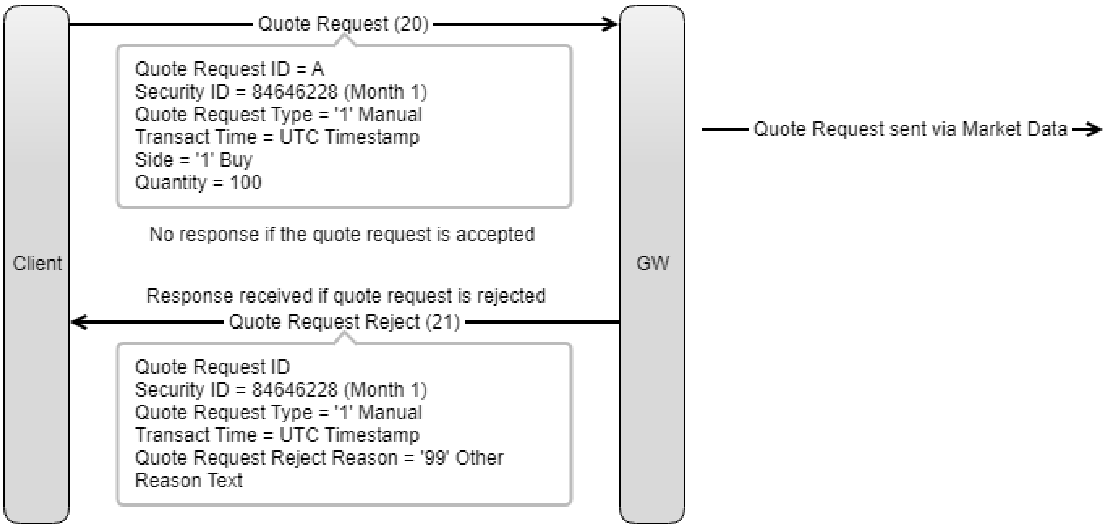
Quote Request is used to requests prices from market participants.

The Quote Request is disseminated via the Market Data service to market participants. The originator of the Quote Request will not receive any acknowledgement unless the quote request is rejected.

BP	Field Name	Req	Data Type	Description
0	Quote Request ID	Y	String (19)	Client specified identifier for the quote request.
1	Security ID	Y	UInt64	Tradable Instrument identifier.
2	Quote Request Type	Y	UInt8	Indicates the type of Quote Request being generated. Valid values: 1 = Manual - used to indicate a single quote request 2 = Automatic - used to indicate a streaming quote request
3	Transact Time	Y	UInt64	Time when the message was generated.
4	Side	N	UInt8	Side of order. If not defined indicates a two-sided quote is required. Valid values: 1 = Buy 2 = Sell
5	Quantity	N	Int32	Order quantity. If not entered, a volume of 0 will be published.

Example Message Flow

RFQ Submission


Client
GW
Quote Request (20)
Quote Request ID = A
Security ID = 84646228 (Month 1)
Quote Request Type = '1' Manual
Transact Time = UTC Timestamp
Side = '1' Buy
Quantity = 100
Quote Request sent via Market Data
No response if the quote request is accepted
Response received if quote request is rejected
Quote Request Reject (21)
Quote Request ID
Security ID = 84646228 (Month 1)
Quote Request Type = '1' Manual
Transact Time = UTC Timestamp
Quote Request Reject Reason = '99' Other
Reason Text

4.10.14 Quote Request Rejected (21)

Quote Request Rejected notifies the originator that their Quote Request (20) has been rejected.

BP	Field Name	Req	Data Type	Description
0	Quote Request ID	Y	String (19)	Client specified identifier for the quote request.
1	Security ID	Y	UInt64	Tradable Instrument identifier.
2	Quote Request Type	Y	UInt8	Indicates the type of Quote Request being generated. Valid values: 1 = Manual - used to indicate a single quote request 2 = Automatic - used to indicate a streaming quote request
3	Transact Time	Y	UInt64	Time when the message was generated.
4	Side	C	UInt8	Side of order. If not defined indicates a two-sided quote is required. Valid values: 1 = Buy 2 = Sell.

BP	Field Name	Req	Data Type	Description
				Conditionally required if specified on the original message.
5	Quantity	C	Int32	Order quantity. Conditionally required if specified on the original message.
6	Quote Request Reject Reason	Y	UInt8	Code that identifies the reason for the rejection. Valid value: 99 = Other
7	Reason Text	C	String (76)	Text specifying the reason for the rejection. Conditionally required if Quote Request Reject Reason = ‘99’ Other

4.10.15 MMP Reset Request (30)

MMP Reset Request is used to reinstate a trader (i.e. Comp ID) that has breached a Market Maker Protection type.

BP	Field Name	Req	Data Type	Description
0	MMP Reset Request ID	Y	String (21)	Client specified identifier for the MMP Reset request.
1	Transact Time	Y	UInt64	Time when the message was generated.
2	Security Exchange	Y	String (5)	Market which is used to identify the security: XLME

3	Product Complex	Y	String (5)	Identifies an entire suite of products for a given market.
				Valid values:
				LME = Base
				LMEP = Precious

4	Symbol	Y	String (21)	Symbol for the LME contract code e.g. CADF (Copper Future) or OCDF (Copper Monthly Average Future).

4.10.16 MMP Reset Ack (31)

MMP Reset Ack is returned in response to an MMP Reset Request (30).

BP	Field Name	Req	Data Type	Description
0	MMP Reset Request ID	Y	String (21)	Client specified identifier for the MMP Reset request.
1	Transact Time	Y	UInt64	Time when the message was generated.
2	Security Exchange	Y	String (5)	Market which is used to identify the security: XLME

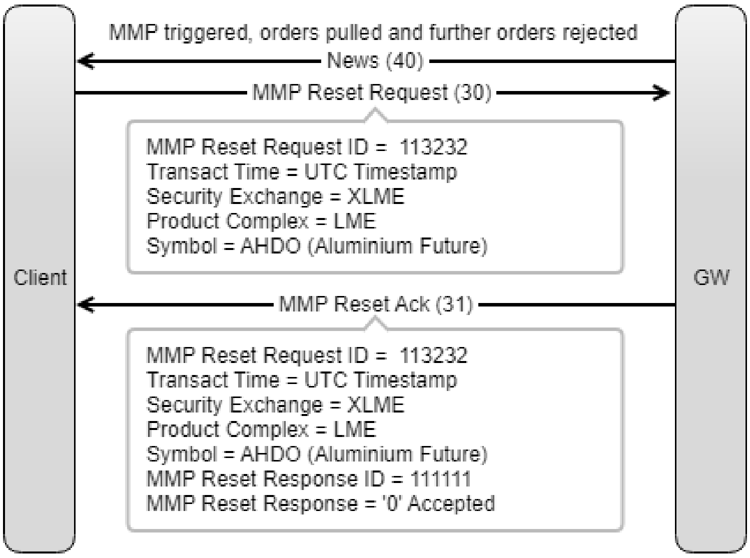
3	Product Complex	Y	String (5)	Identifies an entire suite of products for a given market.
				Valid values:
				LME = Base
				LMEP = Precious

4	Symbol	Y	String (21)	Symbol for the LME contract code e.g. CADF (Copper Future) or OCDF (Copper Monthly Average Future).
5	MMP Reset Response ID	Y	String (21)	Unique identifier for the MMP Reset Response Ack assigned by the system.
6	MMP Reset Response	Y	UInt8	Specifies the action taken as a result of the MMP Reset Request message. Valid values: 0 = Accepted 2 = Rejected
7	MMP Reset Reject Reason	C	UInt8	Code that identifies the reason for the rejection. Conditionally required when MMP Reset Response = ‘2’ Rejected Valid values: 0 = Invalid party or parties 98 = Not authorised 99 = Other
8	Reason Text	C	String (76)	Text specifying the reason for the rejection.

BP	Field Name	Req	Data Type	Description
				Conditionally required if MMP Reset Reject Reason = ‘99’ Other.

Example Message Flow

MMP Reset requested



MMP Reset Request ID = 113232
Transact Time = UTC Timestamp
Security Exchange = XLME
Product Complex = LME
Symbol = AHDO (Aluminium Future)

MMP Reset Request ID = 113232
Transact Time = UTC Timestamp
Security Exchange = XLME
Product Complex = LME
Symbol = AHDO (Aluminium Future)
MMP Reset Response ID = 111111
MMP Reset Response = '0' Accepted