# Access 2 FIX Messages Requirements Trading and Drop Copy - HiMTF

list

# LEGAL NOTICES

# T<small>ABLE OF</small> C<small>ONTENTS</small>

# HISTORY OF CHANGES

| Version | Date | Description |
|---------|------|-------------|
| 1.0 | 03/2023 | • Initial version |
| 1.1 | 05/2023 | • Fix Versions section: table added |
| 1.2 | 12/2023 | • Security definition request: 4004 and 4005 fields are Req = N |
| 1.3 | 01/2024 | • Order cancel/Replace (Type G) Workflow: ExecType "Pending Replace" bòlock added |

# 1 INTRODUCTION

## 1.1 MARKET PLATFORM OVERVIEW

## 1.2 PURPOSE

This document describes the specifications for communicating with an MTF provided by HiMTF for - negotiation via FIX protocol. FIX ("Financial Information eXchange Protocol") is a messaging standard developed specifically for the real-time electronic exchange of securities transactions.

It is a public-domain specification owned and maintained by FIX Protocol, Ltd. More information about the FIX protocol may be found at http://www.fixprotocol.org.

Clients can submit orders and quotes on a Market platform with a standardized method via FIX.

This document covers the FIX Access 2 messages and fields that are supported by an Market platform, describing the message flows and the requirements for integrating with a Market platform using FIX Access 2. When there are no specifications, clients should refer to the standard FIX protocol.

The Market platform ignores any tags that are not specified in this document (i.e. the Market platform does not manage these tags) whenever such tags are in the header of the messages or in the messages itself.

## 1.3 FIX VERSIONS

The FIX versions managed depend on the type of message as shown in the table below.

| Type of Message | Version 4.4 | Version 5 |
|---|---|---|
| New Order | ✓ | ✓ |
| Order Cancel / Cancel/Replace | ✓ | ✓ |
| Order Cancel Reject | ✓ | ✓ |
| Quote | ✓ | ✓ |
| Quote Status Report | ✓ | ✓ |
| Quote Cancel | ✓ | ✓ |
| Mass Quote Acknowledgement | ✓ | ✓ |
| Execution Report | ✓ | ✓ |

| Security Definition Request | ✓ | ✗ |
|---|---|---|
| Security Status Request | ✓ | ✗ |
| Market Data Request | ✓ | ✗ |
| Security Definition | ✓ | ✗ |
| Security Status | ✓ | ✗ |
| Market Data – Snapshot/Full Refresh | ✓ | ✗ |

The transactions sent with versions lower than 4.4 are rejected.

## 1.4 FIX SESSION

An A Market platform provides three FIX session types:

- Trading: standard users' trading
- Drop Copy: users who are allowed to receive all messages related to the member they belong to
- Deal Capture: users who are allowed to receive all trades related to the member they belong to.

Market reference data are available through a dedicated fix session.

This document only describes Trading and Drop Copy sessions. The Deal Capture session is described in the *FTX-FIX_Messages_Requirements_DealCapture.pdf* document.

## 1.5 DOCUMENT CONVENTIONS

Each message is represented as a table, where each row is a message field or component block. The following characteristics are described for each field:

- **Tag**: unique field identifier
- **Field Name**: field name
- **Content**: list of the valid values and additional information
- **Data Type**: field type
- **Req**: indicates whether the field is required or not in appropriate message or component block. The possible values are:

  ◦ '**Y**': tag is required (mandatory)
  ◦ '**N**': tag is not required (optional)
  ◦ '**C**': tag is conditionally required.

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# 2 SESSION MESSAGES

The following sections outline the standard tags used in the supported message types.

The following convention is used in this document to indicate message direction:

- **In**: a message sent to the Market platform
- **Out**: a message sent by the Market platform
- **In/Out**: a message that can be sent to or from the  Market platform

The session messages are the following:

- **Message In**: Logon, Logout, Test Request, Heartbeat, Resend Request and Sequence Reset
- **Message Out**: Logon, Logout, Test Request, Heartbeat, Session Reject.

## 2.1 STANDARD HEADER

All messages contain a standard set of header fields, described below.

| Tag | Field Name | Req | Comments |
|-----|-----------|-----|----------|
| 8 | BeginString | Y | Always the first field of the message and set to: FIX 4.4 |
| 9 | BodyLength | Y | Message length in bytes. Always the second field of the message |
| 35 | MsgType | Y | Message type. Always the third field of the message.<br>• j = Business Message Reject<br>• D = NewOrderSingle<br>• F = OrderCancelRequest<br>• G = OrderCancelReplaceRequest<br>• 9 = OrderCancelReject<br>• S = Quote<br>• AI = Quote Status Report<br>• Z = Quote Cancel<br>• 8 = Execution Report<br>• c = Security Definition Request<br>• e = Security Status Request<br>• V = market Data Request<br>• d = Security Definition<br>• f = Security Status<br>• W = Market Data – Snapshot / Full Refresh |
| 34 | MsgSeqNum | Y | Message sequence number |

| 49 | SenderCompID | Y | Assigned value used to identify message sender |
|---|---|---|---|
| 115 | OnBehalfOfCompID | N | Sender Member ID |
| 56 | TargetCompID | Y | TargetCompID For incoming orders |
| 52 | SendingTime | Y | Time of message transmission. Format: YYYYMMDD-hh:mm:ss.mmm<br><br>Format for Trading sessions:<br>YYYYMMDD-hh:mm:ss.mmmµµµ |
| 43 | PossDupFlag | N | Indicates possible retransmission of message with this sequence number.<br><br>• N = Original transmission<br>• Y = Possible duplicate<br>Not Applicable for Market Data Messages. |
| 97 | PossResend | N | Indicates that the message may contain information that has been sent under another sequence number.<br><br>• N = Original transmission<br>• Y = Possible resend.<br>Not Applicable for Market Data Messages. |

## 2.2 STANDARD TRAILER

All messages contain a standard trailer field, described below.

| Tag | Field Name | Req | Comments |
|---|---|---|---|
| 10 | CheckSum | Y | Per FIX Specification |

## 2.3 LOGON (IN)

This message is sent to initiate a FIX session to the Market Platform. The Logon message establishes the communication session, authenticates the client connecting, and initializes the message sequence number.

| Tag | Field Name | Req | Comments |
|---|---|---|---|
|  | Standard Header | Y | MsgType tag 35 = A |

| Tag | | Req | |
|-----|-----|-----|-----|
| 98 | EncryptMethod | Y | Method of encryption |
| 108 | HeartBtInt | Y | Heartbeat interval (seconds) |
| 141 | ResetSeqNumFlag | | Indicates that both sides of the FIX session should reset sequence numbers. |
| 553 | Username | Y | The username must be set as follows: operator@member |
| 554 | Password | | Password |
| | Standard Trailer | Y | |

## 2.4 HEARTBEAT (IN/OUT)

This message sent by The Market Platform during periods of application inactivity to ensure connection validity. The receiving party should always respond with a heartbeat message.

| Tag | Field Name | Req | Comments |
|-----|-----|-----|-----|
| | Standard Header | Y | MsgType tag 35 = 0 |
| 112 | TestReqID | | Identifier included in Test Request message to be returned in resulting Heartbeat |
| | Standard Trailer | Y | |

## 2.5 RESEND REQUEST (IN/OUT)

It is a request that certain messages be resent. Often used when gaps detected in the sequence numbering, when a message is lost, or during the initialization process.

| Tag | Field Name | Req | Comments |
|-----|-----|-----|-----|
| | Standard Header | Y | MsgType tag 35 = 2 |
| 7 | BeginSeqNo | Y | Message sequence number of first message in range to be resent |
| 16 | EndSeqNo | Y | Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo (7) = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0" (representing infinity) |
| | Standard Trailer | Y | |

## 2.6 SEQUENCE RESET

This message is used to skip administrative messages on resend and to reset sequence on client request.

| Tag | Field Name | Req | Comments |
|---|---|---|---|
| | Standard Header | Y | MsgType tag 35 = 4 |
| 123 | GapFillFlag | N | Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent.<br>• Y = Gap Fill message, MsgSeqNum field valid<br>• N = Sequence Reset, ignore MsgSeqNum |
| 36 | NewSeqNo | Y | New sequence number |
| | Standard Trailer | Y | |

## 2.7 TEST REQUEST (IN/OUT)

This message is used to verify session connectivity and to synchronize sequence numbers. The receiving party should always respond with a heartbeat message.

| Tag | Field Name | Req | Comments |
|---|---|---|---|
| | Standard Header | Y | MsgType tag 35 = 1 |
| 112 | TestReqID | Y | Identifier included in Test Request message to be returned in resulting Heartbeat |
| | Standard Trailer | Y | |

## 2.8 LOGOUT (IN)

This message signals the normal termination of a trading session. A session terminated without a Logout message will be considered an abnormal condition.

| Tag | Field Name | Req | Comments |
|---|---|---|---|
| | Standard Header | Y | MsgType tag 35 = 5 |
| 58 | Text | | MsgType tag 35 = 1 |
| | Standard Trailer | Y | |

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# 3 DROP COPY APPLICATION MESSAGES

The Drop Copy solution allows the connected clients to receive a carbon copy of each eligible outgoing event immediately after it has been published for orders, quotes and request for quotes transactions.

In a Drop Copy session, initiators will not be able to send transactions but will only be able to receive the messages listed in the table below.

The messages are detailed in the Section 4.

| Type | Name | Direction | Description |
|------|------|-----------|-------------|
| AI | Quote Status Report | OUT | Used as acknowledgement message to quote request, quote and quote response.<br><br>Quote Status Report status variation notified:<br><br>• Quote Request accepted/rejected<br>• Quote accepted/rejected<br>• Quote Response accepted/rejected |
| 8 | Execution Report | OUT | Used to convey order status information and Execution information.<br><br>Execution reports status variation notified:<br><br>1. Order accepted<br>2. Order rejected<br>3. Order or quote executed<br>4. Order expired<br>5. Order cancelled<br>6. Order cancel/replaced<br>7. Trade cancellation<br>8. Order status |

# 4 TRADING APPLICATION LEVEL MESSAGES

The following application level messages are currently supported.

| Type | Name | Direction | Description |
|------|------|-----------|-------------|
| j | Business Message Reject | IN | Used to reject application-level message under certain conditions |
| 8 | Execution Report | OUT | Used to convey order status information and Execution information |
| 9 | Order Cancel Reject | OUT | Used to reject a Cancel request or Cancel/replace request message that cannot be fulfilled |
| D | New Order | IN | Used to submit a new order |
| F | Order Cancel Request | IN | Used to request the cancellation of the whole remaining quantity of an existing order |
| G | Order Cancel/Replace | IN | Used to change the parameters of an existing order |
| S | Quote | IN | Used to submit a quote |
| R | Quote Request | IN | Used to submit a new RFCQ or to request the cancellation of the whole remaining quantity of an existing RFCQ [RFCQ buy-side workflow] |
| AG | Quote Request Reject | OUT | Used to reject a new RFCQ or a Cancel request that cannot be fulfilled [RFCQ buy-side workflow] |
| AJ | Quote Response | IN | Used to hit/lift Dealer's quote or to reject it |
| AI | Quote Status Report | OUT | Used either to acknowledge a Quote |
| Z | Quote Cancel | IN | Used to remove one quote or all quotes from the market |

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## 4.1 BUSINESS MESSAGE REJECT (j)

This message is used by the system to reject application-level message, which fulfills session-level rules but does not fulfill business rules that access FIX recognizes before forwarding it to the market.

| Tag | Field Name | Req | Comments |
|-----|------------|-----|----------|
| | Standard Header | Y | MsgType tag 35 = j |
| 45 | RefSeqNum | N | MsgSeqNum <34> of rejected message |
| 372 | RefMsgType | Y | The MsgType <35> of the FIX message being referenced. |
| 379 | BusinessRejectRefID | N | The value of the business-level 'ID' field on the message being referenced. Required unless the corresponding ID field (see list above) was not specified. |
| 380 | BusinessRejectReason | Y | Code to identify reason for a Business Message Reject <j> message. |
| 58 | Text | N | Where possible, message to explain reason for rejection |
| 354 | EncodedTextLen | N | Must be set if EncodedText <355> field is specified and must immediately precede it. |
| 355 | EncodedText | N | Encoded (non-ASCII characters) representation of the Text <58> field in the encoded format specified via the MessageEncoding <347> field. |
| 11 | ClOrdID | N | Unique Identifier assigned by the client |
| | Standard Trailer | Y | |

## 4.2 ORDER ENTRY

This subsection details the workflows and the messages for the order negotiations. The Market platform is called Market in the following schemas.
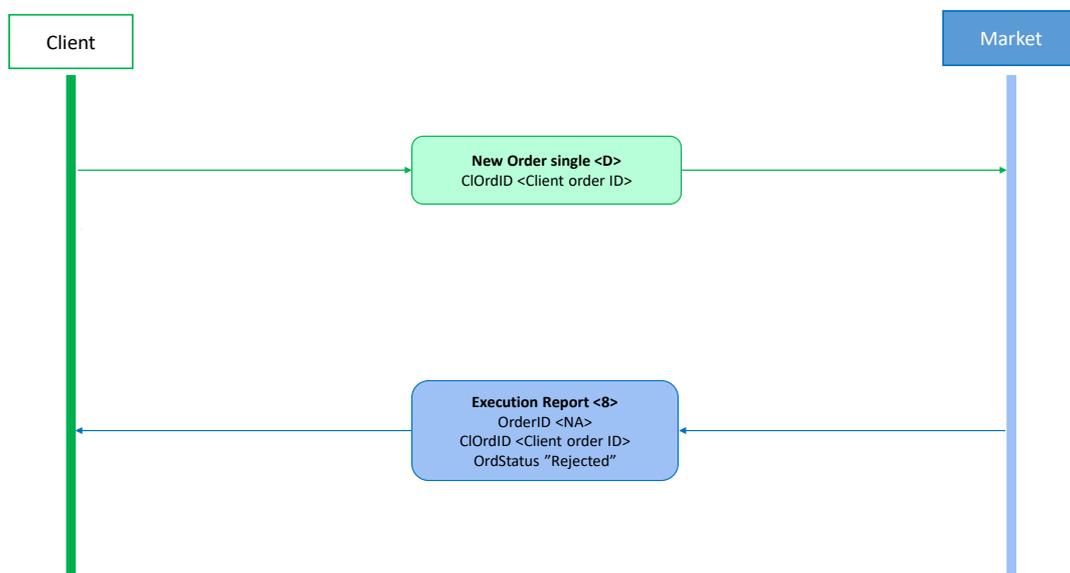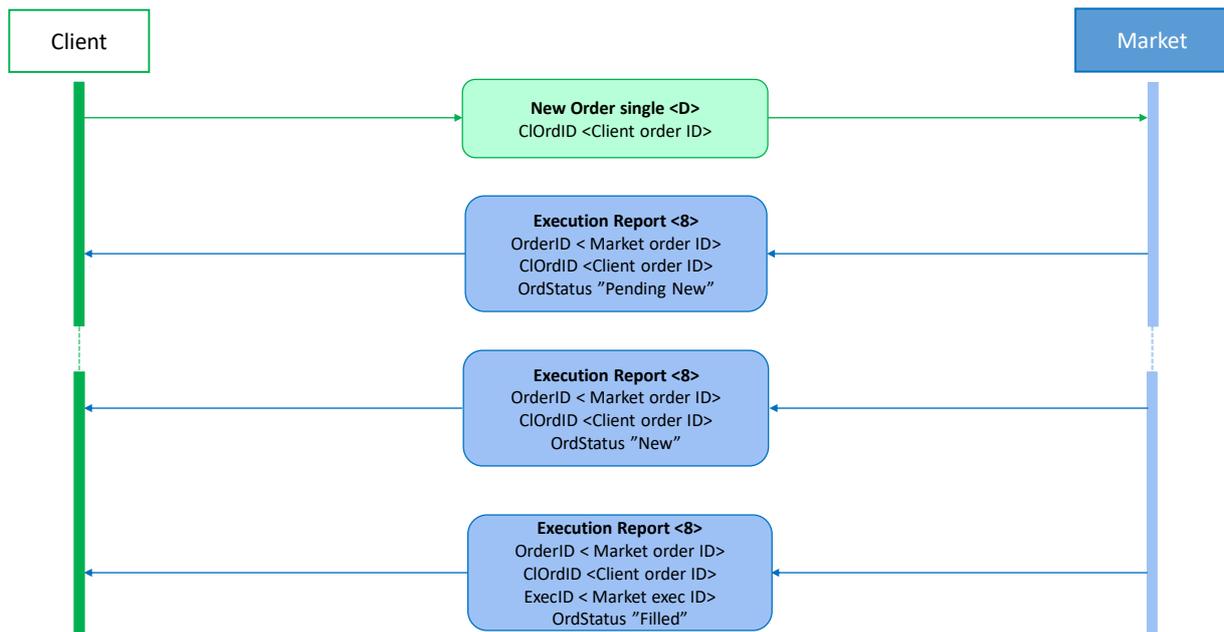
### 4.2.1 Order workflow

**New Order**

The client sends a new order. The order is accepted.
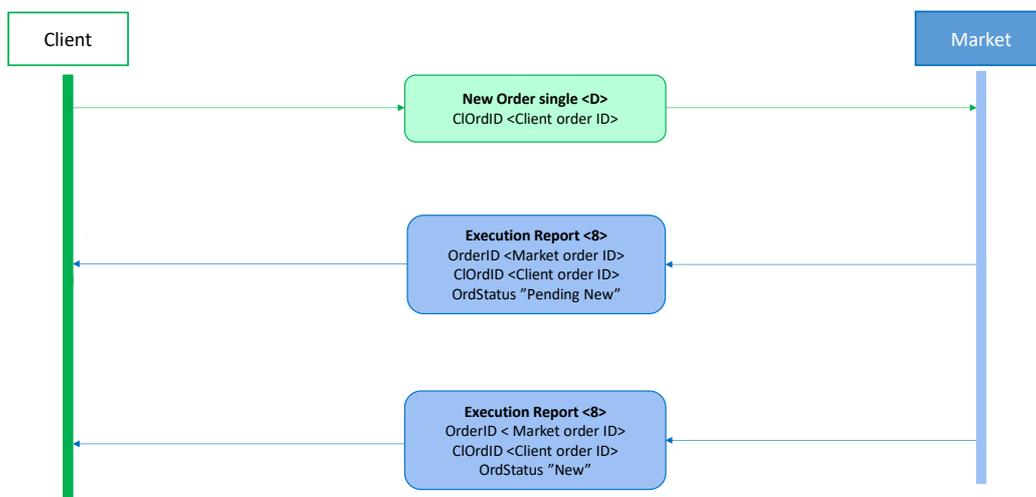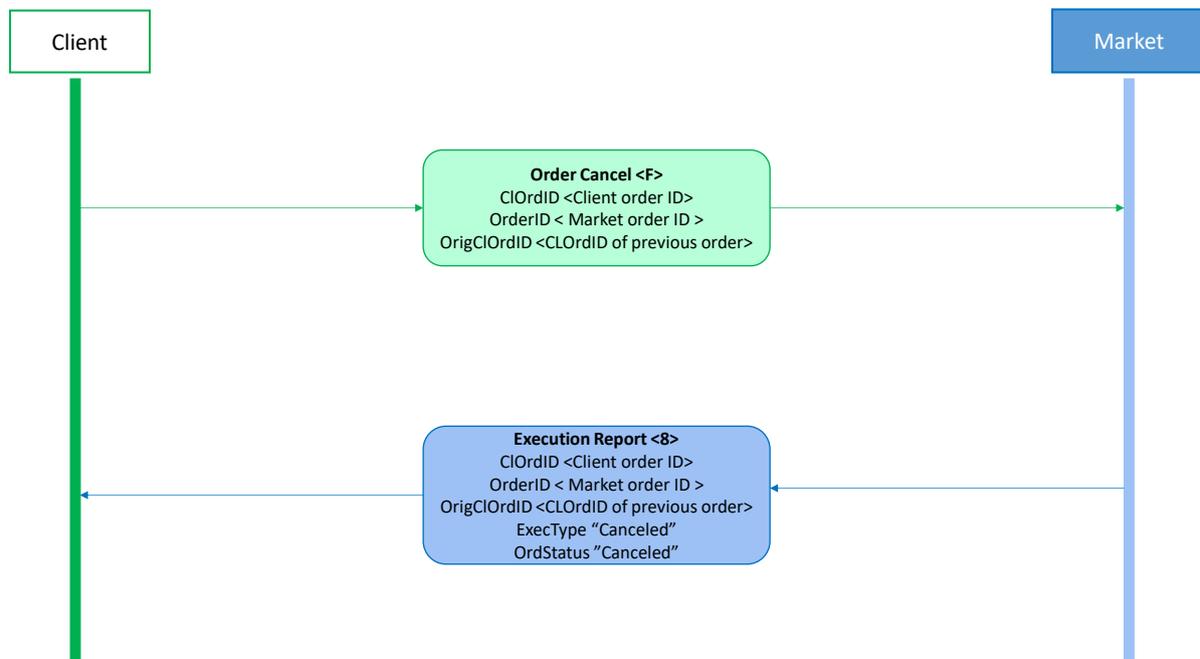


The client sends a new order. The order is rejected.

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The client sends a new order. The order is accepted. A trade is made.

```
┌────────┐                                                      ┌────────┐
│ Client │                                                      │ Market │
└────────┘                                                      └────────┘
    │                                                               │
    │         ┌──────────────────────────────────┐                 │
    │────────▶│        New Order single <D>       │────────────────▶│
    │         │      ClOrdID <Client order ID>    │                 │
    │         └──────────────────────────────────┘                 │
    │                                                               │
    │         ┌──────────────────────────────────┐                 │
    │◀────────│       Execution Report <8>        │◀────────────────│
    │         │    OrderID < Market order ID>     │                 │
    │         │    ClOrdID <Client order ID>      │                 │
    │         │    OrdStatus "Pending New"        │                 │
    │         └──────────────────────────────────┘                 │
    │                                                               │
    │         ┌──────────────────────────────────┐                 │
    │◀────────│       Execution Report <8>        │◀────────────────│
    │         │    OrderID < Market order ID>     │                 │
    │         │    ClOrdID <Client order ID>      │                 │
    │         │    OrdStatus "New"                │                 │
    │         └──────────────────────────────────┘                 │
    │                                                               │
    │         ┌──────────────────────────────────┐                 │
    │◀────────│       Execution Report <8>        │◀────────────────│
    │         │    OrderID < Market order ID>     │                 │
    │         │    ClOrdID <Client order ID>      │                 │
    │         │    ExecID < Market exec ID>       │                 │
    │         │    OrdStatus "Filled"             │                 │
    │         └──────────────────────────────────┘                 │
```
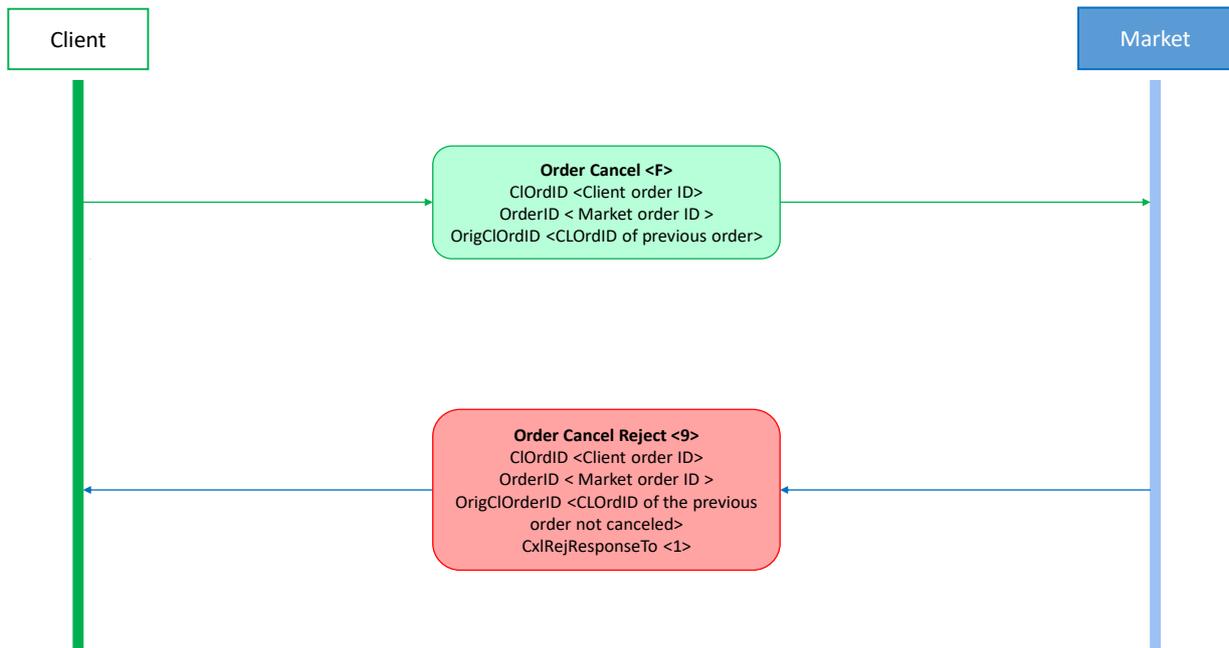
## Order Cancel (Type F) Workflow

The client cancels an existing order. The order is cancelled.

```
┌────────┐                                                      ┌────────┐
│ Client │                                                      │ Market │
└────────┘                                                      └────────┘
    │                                                               │
    │    ┌──────────────────────────────────────────┐              │
    │───▶│            Order Cancel <F>               │─────────────▶│
    │    │      ClOrdID <Client order ID>            │              │
    │    │      OrderID < Market order ID >          │              │
    │    │  OrigClOrdID <CLOrdID of previous order>  │              │
    │    └──────────────────────────────────────────┘              │
    │                                                               │
    │    ┌──────────────────────────────────────────┐              │
    │◀───│          Execution Report <8>             │◀─────────────│
    │    │      ClOrdID <Client order ID>            │              │
    │    │      OrderID < Market order ID >          │              │
    │    │  OrigClOrdID <CLOrdID of previous order>  │              │
    │    │      ExecType "Canceled"                  │              │
    │    │      OrdStatus "Canceled"                 │              │
    │    └──────────────────────────────────────────┘              │
```

The client cancels an existing order. The cancellation request is rejected.



**Order Cancel <F>**
ClOrdID <Client order ID>
OrderID < Market order ID >
OrigClOrdID <CLOrdID of previous order>

**Order Cancel Reject <9>**
ClOrdID <Client order ID>
OrderID < Market order ID >
OrigClOrderID <CLOrdID of the previous order not canceled>
CxlRejResponseTo <1>

## Order Cancel/Replace (Type G) Workflow

The client edits an existing order. The order is edited.



**Order Cancel Replace <G>**
ClOrdID <Client order ID>
OrderID < Market order ID >
OrigClOrdID <CLOrdID of previous order>

**Execution Report <8>**
ClOrdID <Client order ID>
OrderID < Market order ID >
OrigClOrdID <CLOrdID of previous order>
ExecType "Pending Replace"
OrdStatus " Replaced"

**Execution Report <8>**
ClOrdID <Client order ID>
OrderID < Market order ID >
OrigClOrdID <CLOrdID of previous order>
ExecType "Replaced"
OrdStatus " Replaced"
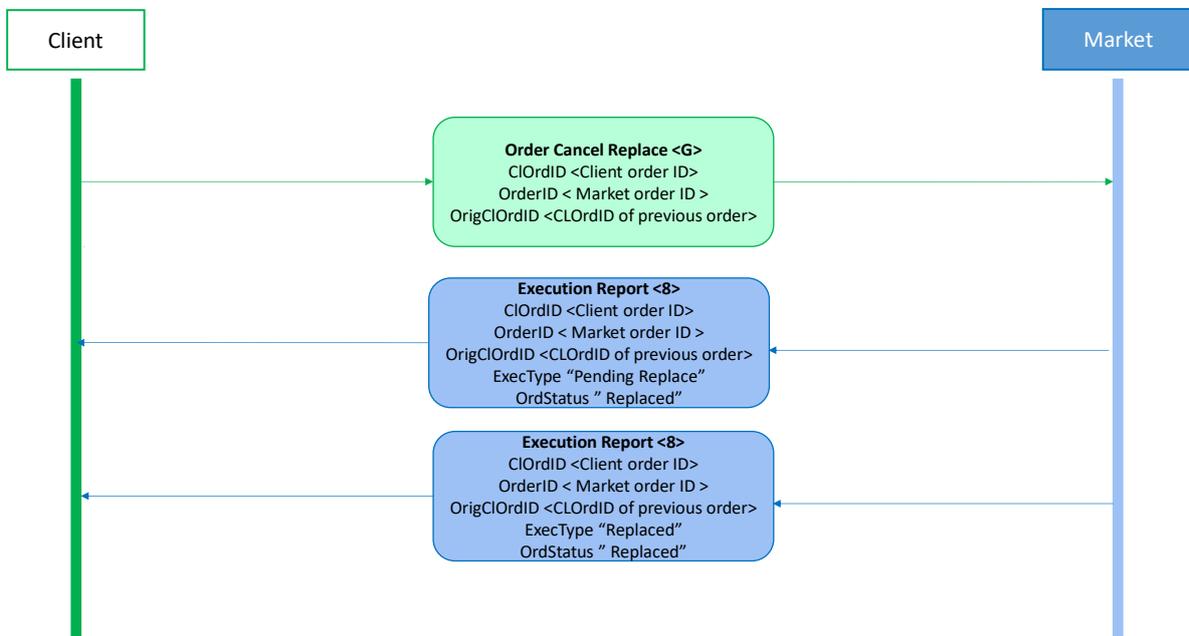
The client edits an existing order. The order edit request is rejected.
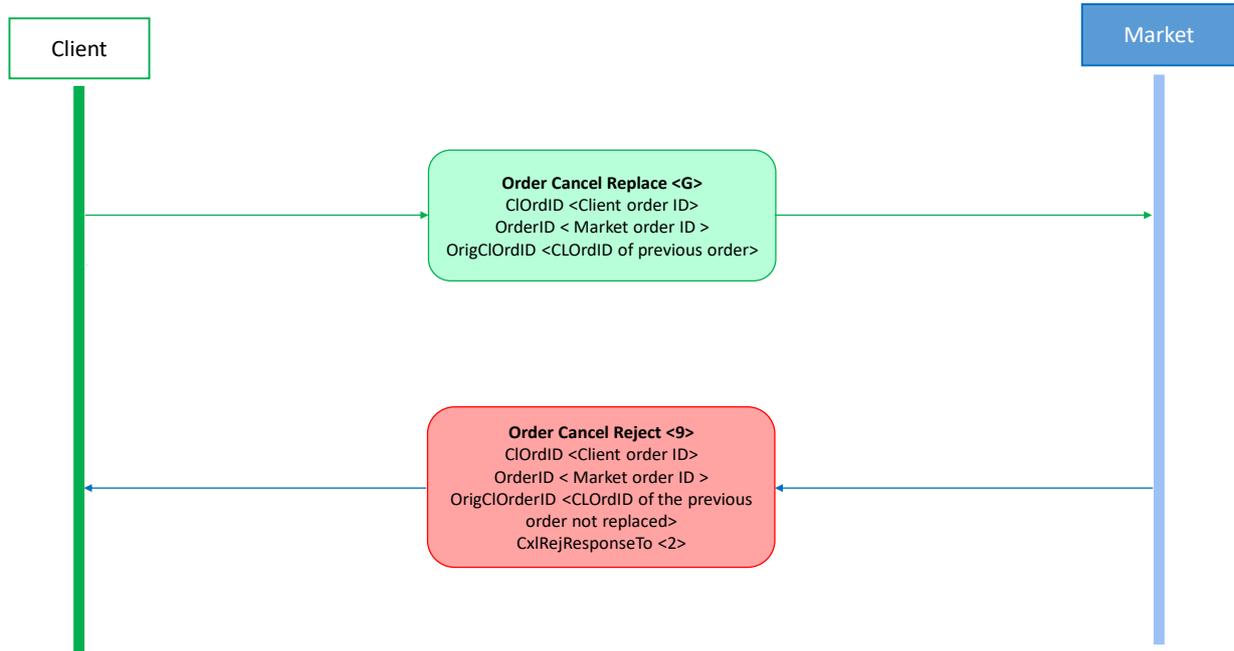


## 4.2.2 New Order (Type D)

Initiation of a new order by the client.

For the fields with a "String" data type, a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| <Standard Header> | | MsgType <35> = D | | Y |
| 11 | ClOrdID | Unique identifier assigned by the client | String (32) | Y |
| 40 | OrdType | Valid values:<br><br>• 1 = Market<br><br>• 2 = LIMIT<br><br>• K = MARKET_WITH_LEFTOVER_AS_LIMIT | Char | Y |

| 54 | Side | Valid values:<br>• 1 = Buy<br>• 2 = Sell | Char | Y |
|---|---|---|---|---|
| 100 | ExDestination | Execution destination. | String (24) | Y |
| Component Block<Instrument> | | | | |
| 55 | Symbol | Common representation of the security.<br>SecurityID <48> value can be specified if no symbol exists or if the instrument has an ISIN code.<br>Use "[N/A]" for products which do not have a symbol. | String (48) | Y |
| 48 | SecurityID | Security identifier value of SecurityIDSource (22) type, valid value ISIN.<br>Requires SecurityIDSource (22). | String (12) | Y |
| 22 | SecurityIDSource | • 4 = ISIN number | String (1) | Y |
| End Component Block<Instrument> | | | | |
| 44 | Price | Price per contract | Float | Y |
| 423 | PriceType | Code to represent the price type. Valid value:<br>• 1 = Percentage | Char | N |
| 15 | Currency | Price currency | String (3) | N |
| Component Block<OrderQtyData> | | | | |
| 38 | OrderQty | Number of contracts | Integer | Y |
| End Component Block<OrderQtyData> | | | | |
| 110 | MinQty | Minimum quantity of an order to be executed. | Integer | N |
| 111 | MaxFloor | Maximum quantity (e.g. number of shares) within an order to be shown on the Exchange floor at any given time. | Integer | N |
| 1 | Account | Account for which the contracts are to be bought or sold. | String (32) | N |

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| 59 | TimeInForce | Valid values:<br><br>• 0 = Day<br><br>• 1 = Good Till Cancel (GTC)<br><br>• 2= At the Opening (OPG) The order is valid until the next auction phase<br><br>• 3 = Immediate or Cancel (IOC)<br><br>• 4 = Fill or Kill (FOK)<br><br>• 6 = Good Till Date or Good Till Time | Char | N |
|---|---|---|---|---|
| 528 | OrderCapacity | Valid values:<br><br>• G = Proprietary<br><br>• I = Individual (Client) | Char | Y |
| 529 | OrderRestrictions | Valid values:<br><br>• 5 = Acting as Market Maker or Specialist in the security. It can be used only if OrderCapacity is G (Proprietary) | String (1) | N |
| 58 | Text | Free Text | String (64) | N |
| 9215 | LiqProvOnly | This flag is used to indicate whether the order is related to any sort of liquidity provision activity, as defined under MiFID II.<br><br>• 0 = Not Liquidity Provision (default)<br><br>• 1 = Liquidity Provision | Char | N |
| Component Block<Parties> | | | | |
| 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries. | Integer | N |
| ->448 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452).<br><br>The PartyID can contain a generic string only if PartyRole = 3 (ClientID). In this case, PartyIDSource must be D (Custom Code). For the other values of PartyIDSource, the PartyID must contain a number (number 0,1,2,3 are currently reserved for NoClient, ALGO, PNAL and CLIENT).<br><br>Note that if PartyRole = 3 or 5, the Party Identifier must be between 0 and 4294967295 | String (32) | N |

| ->447 | PartyIDSource | Identifies class or source of the PartyID (448) value<br><br>• D = Proprietary/Custom code<br>• M = Algorithm Short Code<br>• N = Natural Person Short Code<br><br>Requested for MiFID II requirements. | Char | N |
|---|---|---|---|---|
| ->452 | PartyRole | Identifies the type or role of the PartyID<br><br>Valid values:<br><br>• 3 = ClientID<br>• 5 = Investor ID (the Investment Decision Maker)<br>• 12 = Executing Trader (the Executing Decision Maker) | Integer | N |
| End Component Block<Parties> | | | | |
| 60 | TransactTime | Time this order request was initiated/released by the trader, trading system, or intermediary.<br><br>Timestamp with following format:<br><br>YYYYMMDD-hh:mm:ss.μμμμμμ<br><br>E.g.: 20200620-10:06:51.453765 | String (24) | Y |
| Component Block <OrderAttributeGrp> | | | | |
| 2593 | NoOrderAttributes | Number of OrderAttributeType (2594) and OrderAttributeValue (2595) entries. | Integer | N |
| 2594 | OrderAttributeType | Indicates if the order was sent to reduce risk in an objectively<br><br>measurable way in accordance with Article 57 of Directive 2014/65/EU<br><br>Only possible value: R | Char | N |
| 2595 | OrderAttributeValue | Mandatory if OrderAttributeType is specified.<br><br>Only possible value: Y | Char | N |
| End Component Block <TradePriceConditionGrp> | | | | |
| | | • | | |

| 432 | ExpireDate | Date the order expires which must be a future date.<br><br>Required if TimeInForce (59) is GTD (6) and ExpireTime (126) is not specified.<br><br>If the New Order message contained the ExpireDate (432), the server processes only the expire date and ignores ExpireTime (126) even if it is specified.<br><br>The value specified fro this field will be ignored for non-GTD orders<br><br>Format: YYYYMMDD | String (8) | N |
| --- | --- | --- | --- | --- |
| 126 | ExpireTime | Time the order expires which must be a future time during the current trading day. Required if TimeInForce (59) is GTD (6).<br><br>If the New Order message contained the ExpireTime (126), the server processes only the expire time and ignores ExpireDate (432) even if it is specified.<br><br>The value specified for this field will be ignored for non-GTD orders.<br><br>Format: YYYYMMDD-HH:MM:SS[.sss]. [.sss] are optional. | String (24) | N |
| <Standard Trailer> | | | | Y |

## 4.2.3 Order Cancel (Type F) / Cancel/Replace (Type G)

Client request to cancel-replace a pre-existing order.

For the fields with a data type "String", a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| | <Standard Header> | MsgType <35> = F or G | | Y |
| 11 | ClOrdID | Unique identifier assigned by the client | String (32) | Y |
| 100 | ExDestination | Execution destination. | String (24) | Y |
| Component Block<Instrument> | | | | |
| 55 | Symbol | Common representation of the security.<br><br>SecurityID <48> value can be specified if no symbol exists or if the instrument has an ISIN code.<br><br>Use "[N/A]" for products which do not have a symbol. | String (48) | N |
| 48 | SecurityID | Security identifier value of SecurityIDSource (22)<br><br>Requires SecurityIDSource. | String (12) | Y |
| 22 | SecurityIDSource | • 4 = ISIN number | Char | Y |
| End Component Block<Instrument> | | | | |
| 54 | Side | Valid values:<br>• 1 = Buy<br>• 2 = Sell | Char | Y |
| 37 | OrderID | Exchange order id | String (32) | Y |
| 41 | OrigClOrdID | CLOrdID of previous order | String (32) | Y |
| 44 | Price | Price<br><br>Used only in Order Cancel/Replace Request (type G) | Float | N |
| Component Block< OrderQtyData> | | | | |
| 38 | OrderQty | Quantity ordered | Qty | N |
| End Component Block< OrderQtyData> | | | | |

| 60 | TransactTime | Time this order request was initiated/released by the trader, trading system, or intermediary. Timestamp with following format: YYYYMMDD-hh:mm:ss.µµµµµµ E.g.: 20200620-10:06:51.453765 | String (24) | Y |
|----|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---|
| 126 | ExpireTIme | ExpirationTime when TimeInForce (59) is GTD (6). Format: YYYYMMDD HH:MM:SS[.sss] [.sss] are optional. Admitted but not required in case TimeInForce (59) is GTD (6). If TimeInForce (59) is GTD (6) and ExpireTime is not set ExpireTime of the order will not be changed. | String (24) | |
| 432 | ExpireDate | Date the order expires when it is of Good Till Date type (59=6) Format: YYYYMMDD Admitted but not required in case TimeInForce (59) is GTD (6). If TimeInForce (59) is GTD (6) and ExpireDate is not set ExpireDate of the order will not be changed. | String (8) | |
| | <Standard Trailer> | | | Y |

## 4.2.4  Order Cancel Reject (Type 9)

Market platform sends a rejection of a cancel/replace order request from the client.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| | <Standard Header> | MsgType <35>  = 9 | | Y |
| 11 | ClOrdID | Unique identifier assigned by the client | String (32) | Y |
| 41 | OrigClOrderID | It contains the ClientOrderID that has not been canceled/replaced. Please note that the ClientOrderID found in this tag is the last accepted order (NOT the initial order of the day) | String (32) | Y |
| 39 | OrdStatus | OrdStatus value after the CancelReject is applied | Char | Y |
| 37 | OrderID | Exchange order id | String (32) | Y |

| 434 | CxlRejResponseTo | Identifies the type of request that a Cancel Reject is in response to.<br><br>Valid values:<br><br>&bull; 1 = Order Cancel Request<br>&bull; 2 = Order Cancel/Replace Request | Char | Y |
|---|---|---|---|---|
| 102 | CxlRejReason | Code to identify reason for order rejection<br><br>Valid Values:<br><br>&bull; 0 = Too late to cancel<br>&bull; 1 = Unknown order<br>&bull; 3 = Order already in Pending Cancel or Pending Replace status<br>&bull; 6 = Duplicate ClOrdID (11) received<br>&bull; 99 = Other | Integer | N |
| 58 | Text | Error String | String (64) | N |
| | \<Standard Trailer\> | | | Y |

## 4.3 QUOTE ENTRY

This subsection describes the workflows and the messages for market making activities. The Market platform is called Market in the following schemas.

### 4.3.1 Quote workflow

**New Quote**

**The Market maker sends a new quote. The quote is accepted.**
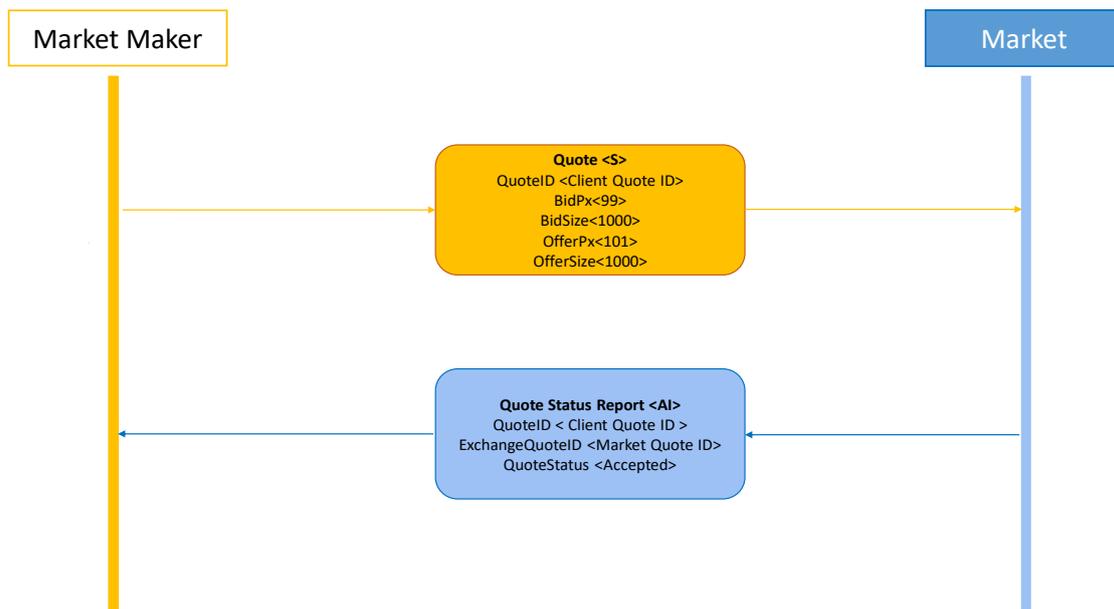


**The Market maker sends a new quote. The quote is rejected.**
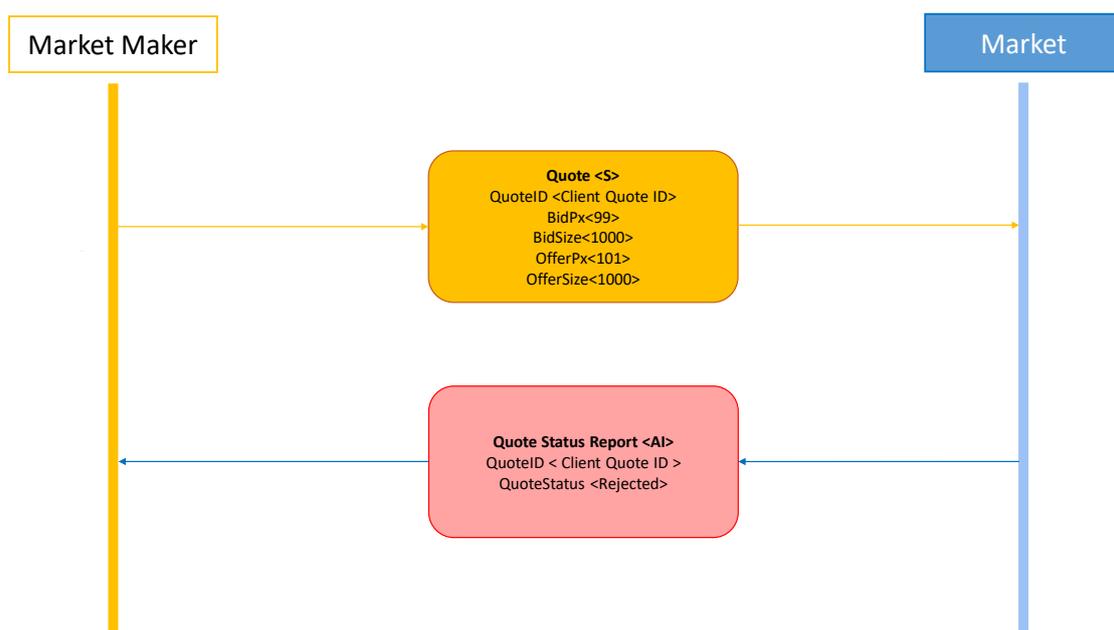
## Edit Quote

**The Market Maker edits an existing quote. The quote is accepted.** This workflow also allows the reactivation of a suspended quote, by sending an edit of the suspended quote with nonzero quantities and prices for both legs.



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## Suspend Quote

**The Market Maker suspends a quote.** To suspend a quote the market maker can send a quote edit specifying "0" in the following fields:

- BidSize
- BidPx
- OfferSize
- OfferPx

## Cancel Single Quote

The Market maker deletes an existing quote. The quote is deleted.

## Cancel All Quotes (Panic Action)

The Market Maker deletes all its outstanding quotes. All quotes are deleted.

Please note that the respective order of the QuoteStatusReport(s) and MassQuoteAcknowledgement messages is not guaranteed.
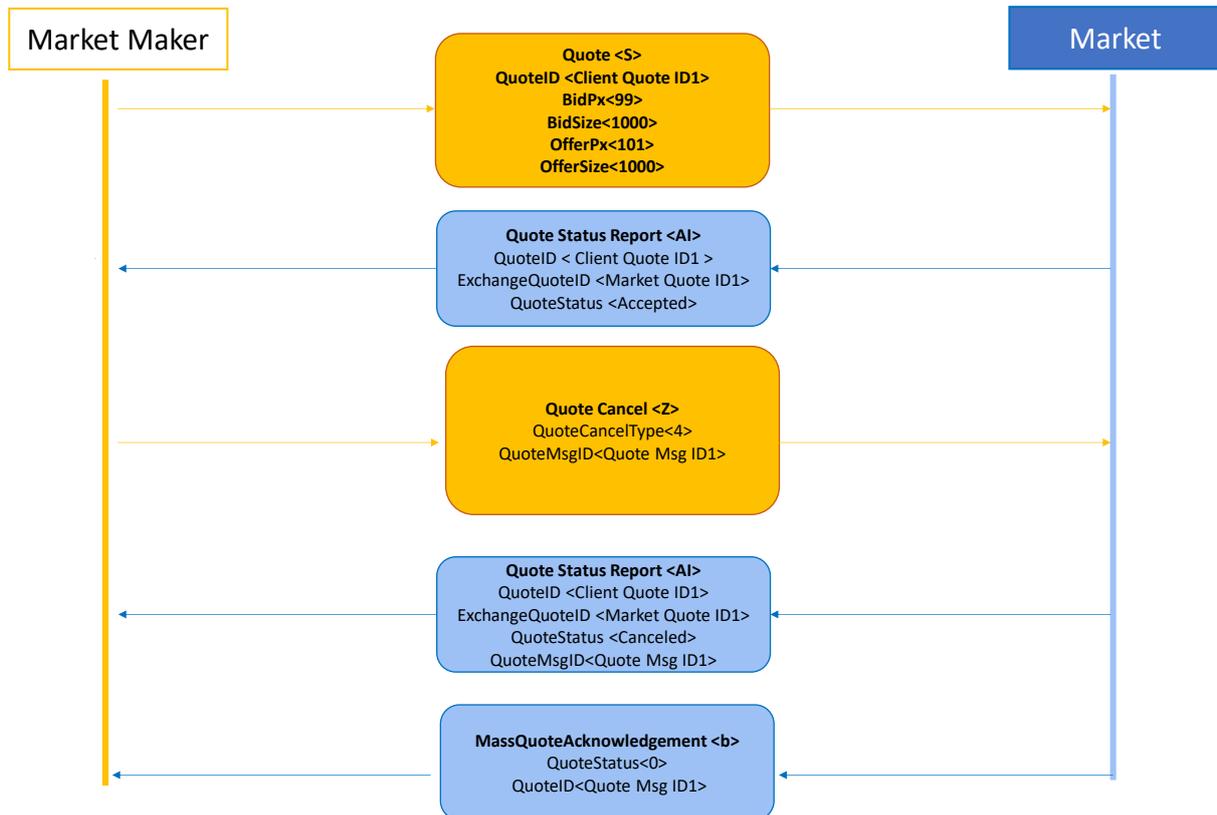
### 4.3.2 Quote (Type S)

Initiation of a new quote by the market maker.

For the fields with a "String" data type, a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| | <Standard Header> | MsgType <35> = S | | Y |
| 117 | QuoteID | Client-assigned identification of the outgoing quote (new or streaming) | String (32) | Y |
| 537 | QuoteType | Valid value:<br>• 1 = Tradable (default) | Char | Y |
| 100 | ExDestination | Code of the market section. | String (24) | Y |
| Component Block<Parties> | | | | |
| 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries. | Integer | N |
| ->448 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452).<br><br>The PartyID can contain a generic string only if PartyRole = 3 (ClientID). In this case, PartyIDSource must be D (Custom Code). For the other values of PartyIDSource, the PartyID must contain a number (number 0,1,2,3 are currently reserved for NoClient, ALGO, PNAL and CLIENT).<br><br>Note that if PartyRole = 3 or 5, the Party Identifier must be between 0 and 4294967295 | String (32) | N |
| ->447 | PartyIDSource | Identifies class or source of the PartyID (448) value<br>• D = Proprietary/Custom code<br>• M = Algorithm Short Code<br>• N = Natural Person Short Code<br>Requested for MiFID II requirements. | Char | N |
| ->452 | PartyRole | Identifies the type or role of the PartyID<br>Valid values<br>• 3 = ClientID<br>• 5 = Investor ID (the Investment Decision Maker)<br>• 12 = Executing Trader (the Executing Decision Maker) | Integer | N |

| | | | | |
|---|---|---|---|---|
| End Component Block<Parties> | | | | |
| 60 | TransactTime | TimeStamp with following format:<br><br>YYYYMMDD-hh:mm:ss.µµµµµµ<br><br>E.g.: 20200620-10:06:51.453765 | String (24) | Y |
| 58 | Text | User text | String (64) | N |
| 55 | Symbol | =[N/A] | String (12) | Y |
| 423 | PriceType | Code to represent the type of BidPx/OfferPx.<br><br>Valid values:<br><br>• 1 = Percentage (default) | Char | N |
| 15 | Currency | Price Currency | String (3) | N |
| 48 | SecurityID | Security identifier value of SecurityIDSource (22) type, valid value ISIN.<br><br>Requires SecurityIDSource. | String (12) | C |
| 22 | SecurityIDSource | Valid value:<br><br>• 4 = ISIN number | Char | C |
| 132 | BidPx | Bid Price | Float | Y |
| 133 | OfferPx | Offer Price | Float | Y |
| 647 | MinBidSize | Minimum bid quantity. Zero is an allowed value | Integer | Y |
| 134 | BidSize | Bid quantity | Integer | Y |
| 648 | MinOfferSize | Minimum offer quantity. Zero is an allowed value | Integer | Y |
| 135 | OfferSize | Offer quantity | Integer | Y |
| 5002 | RFEIndicator | Possible values:<br><br>• 0 = Subject<br>• 1 = Firm<br><br>If the quote is Firm, a trade is automatically made when the quote is hit. Otherwise, with a Subject quote, the Liquidity provider is required to confirm for a trade to be concluded. | Char | N |

| 528 | OrderCapacity | Valid value:<br><br>    G = Proprietary | Char | Y |
| 529 | OrderRestrictions | Valid value:<br><br>5 = Acting as Market Maker or Specialist in the security | String (1) | Y |
| 5001 | ExchangeQuoteID | Required to edit a Quote already in the market | String (64) | C |
| | \<Standard Trailer\> | | | Y |

### 4.3.3  Quote Status Report (AI)

Market platform uses the Quote Status Report (AI) message to acknowledge Quote (S) and QuoteCancel (Z) messages from a market maker. In case an Operator with active Quotes disconnects and is configured with the functionality "cancel on disconnect", at re-connection, he/she will receive a Quote Status Report (35=AI) message for each cancelled Quote).

| Tag | Field Name | Content | Data Type | Re q |
|---|---|---|---|---|
| | \<Standard Header\> | MsgType \<35\> = AI | | Y |
| 117 | QuoteID | Client identifier of the message to be acknowledged | String (32) | Y |
| 5001 | ExchangeQuoteID | Market assigned identifier for the quote | String (32) | N |
| 297 | QuoteStatus | <ul><li>0 = "ACCEPTED"</li><li>5 = "REJECTED"</li><li>6 = "REMOVED_FROM_MARKET"</li><li>17 = "CANCELLED"</li></ul> | char | Y |
| 58 | Text | Contains details about the reason of the rejection in case QuoteStatus = 5 | String (64) | N |
| 537 | QuoteType | Valid value:<br><br><ul><li>1 = Tradable (default)</li></ul> | Char | Y |
| 100 | ExDestination | Code of the market section. | String (24) | Y |
| Component Block\<Parties\> | | | | |

| 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries. | Integer | N |
|------|------------|------------------------------------------------------------------------------|---------|---|
| ->448 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452).<br><br>The PartyID can contain a generic string only if PartyRole = 3 (ClientID). In this case, PartyIDSource must be D (Custom Code). For the other values of PartyIDSource, the PartyID must contain a number (number 0,1,2,3 are currently reserved for NoClient, ALGO, PNAL and CLIENT).<br><br>Note that if PartyRole = 3 or 5, the Party Identifier must be between 0 and 4294967295 | String (32) | N |
| ->447 | PartyIDSource | Identifies class or source of the PartyID (448) value<br><br>• D = Proprietary/Custom code<br>• M = Algorithm Short Code<br>• N = Natural Person Short Code<br><br>Requested for MiFID II requirements. | Char | N |
| ->452 | PartyRole | Identifies the type or role of the PartyID<br><br>Valid values:<br><br>• 3 = ClientID<br>• 5 = Investor ID (the Investment Decision Maker)<br>• 12 = Executing Trader (the Executing Decision Maker) | Integer | N |
| End Component Block<Parties> | | | | |
| 60 | TransactTime | TimeStamp with following format:<br><br>YYYYMMDD-hh:mm:ss.µµµµµµ<br><br>E.g.: 20200620-10:06:51.453765 | String (24) | Y |
| 55 | Symbol | =[N/A] | String (12) | Y |
| 423 | PriceType | Code to represent the type of *BidPx*/*OfferPx*.<br><br>Valid values:<br><br>• 1 = Percentage (default)<br>• 9 = Yield | Char | N |
| 528 | OrderCapacity | Valid values:<br><br>• G = Proprietary | Char | N |

| 9215 | LiqProvOnly | This flag is used to indicate whether the order is related to any sort of liquidity provision activity, as defined under MiFID II. <br>• 0 = No Liquidity Provision (default) <br>• 1 = Liquidity Provision | Char | N |
|---|---|---|---|---|
| 5002 | RFEIndicator | Possible values: <br>• 0 = Subject <br>• 1 = Firm <br><br>If the quote is Firm, a trade is automatically made when the quote is hit. Otherwise, with a Subject quote, the Liquidity provider is required to confirm for a trade to be concluded. | Char | N |
| *The following fields must be specified for a quote related to an outright request. They will be ignored for multi-leg quotes (field NoLegs specified with value >1)* | | | | |
| 48 | SecurityID | Security identifier value of *SecurityIDSource* (22) type, valid value ISIN. Requires *SecurityIDSource*. | String (12) | C |
| 22 | SecurityIDSource | Valid value: <br>• 4 = ISIN number | Char | C |
| 132 | BidPx | Bid Price | Float | Y |
| 133 | OfferPx | Offer Price | Float | Y |
| 647 | MinBidSize | Minimum bid quantity. Zero is an allowed value | Integer | Y |
| 134 | BidSize | Bid quantity | Integer | Y |
| 648 | MinOfferSize | Minimum offer quantity. Zero is an allowed value | Integer | Y |
| 135 | OfferSize | Offer quantity | Integer | Y |
| 1166 | QuoteMsgID | Maps to tag QuoteMsgID (1166) of a QuoteCancel (35=Z) message, if related to it. | String (64) | C |
| | <Standard Trailer> | | | Y |

## 4.3.4 Quote Cancel (Z) for Single Quote Cancellation

Client requests to cancel a pre-existing quote.

For the fields with a "String" data type, a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| | \<Standard Header\> | MsgType \<35\> = Z | | Y |
| 100 | ExDestination | Execution destination | String (24) | Y |
| 298 | QuoteCancelType | • 5 = CancelSpecifiedSingleQuote | String (1) | Y |
| 5001 | ExchangeQuoteID | | String (64) | Y |
| 1166 | QuoteMsgID | Unique identifier assigned by the client. | String (64) | Y |
| Component Block\<Instrument\> | | | | |
| 48 | SecurityID | ISIN code for the Security | String (12) | Y |
| 22 | SecurityIDSource | • 4 = ISINNumber | String (1) | Y |
| End Component Block\<Instrument\> | | | | |
| | \<Standard Trailer\> | Required to cancel a quote already in the market | | |

## 4.3.5 Quote Cancel (Z) for Mass Quote Cancellation (Panic action)

Client requests to cancel all its outstanding quotes.

The platform will generate one QuoteStatusReport (35=AI) for each cancellation and a single MassQuoteAck (35=b).

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| | \<Standard Header\> | MsgType \<35\> = Z | | Y |
| 100 | ExDestination | Execution destination | String (24) | Y |
| 298 | QuoteCancelType | • 4 [CancelAllQuotes] | String (1) | Y |
| 1166 | QuoteMsgID | Unique identifier assigned by the client. | String (64) | Y |
| | \<Standard Trailer\> | | | Y |

## 4.3.6 Mass Quote Acknowledgement (35=b)

This message is sent by the platform to acknowledge the processing of a CancelAllQuotes (298=4) QuoteCancel (35=Z) message.

If the entire request is completed either successfully or unsuccessfully (meaning respectively all quotes have been cancelled or no quotes could be cancelled), then field QuoteStatus (297) is present and applies to the entire request.

If only some cancellations failed, then the QuoteEntry repeating group details the status of each quote individually.

Please note no guarantee is made about the ordering of the MassQuoteAck message itself and the QuoteStatusReport messages related to the mass cancellation request.

| Tag | | Field Name | Content | Data Type | Req |
|---|---|---|---|---|---|
| | | <Standard Header> | MsgType <35> = b | | Y |
| 117 | | QuoteID | Maps to QuoteMsgID (1166) of QuoteCancel. | String (32) | Y |
| 297 | | QuoteStatus | Required if NoQuoteEntries missing.<br>• 0 [Accepted]<br>• 5 [Rejected] | Char | C |
| 58 | | Text | Required if QuoteStatus = 5.<br>Textual explanation for rejection. | String (256) | C |
| 295 | | NoQuoteEntries | Required if QuoteStatus missing. | Integer | C |
| > | 5001 | ExchangeQuoteID | Required if NoQuoteEntries present.<br>Market assigned identifier for the quote. | String (32) | C |
| > | 1167 | QuoteEntryStatus | Required if NoQuoteEntries present.<br>• 0 [Accepted]<br>• 5 [Rejected] | Char | C |
| > | 58 | Text | Required if QuoteEntryStatus = 5.<br>Textual explanation for rejection. | String (256) | C |

| Tag | Field Name | Content | Data Type | Req |
|------|------------|---------|-----------|-----|
| | <Standard Trailer> | | | Y |

## 4.4 EXECUTION REPORT (TYPE 8)

Execution reports sent back to the client.

| Tag | Field Name | Content | Data Type | Req |
|------|------------|---------|-----------|-----|
| | <Standard Header> | MsgType <35> = 8 | | Y |
| 11 | ClOrdID | Unique identifier assigned by the client to the original request (order or RFCQ) | String (32) | Y |
| 41 | OrigClOrdID | *ClOrdID* of previous order. Required when the message is sent after order modification / cancellation | String (32) | C |
| 1 | Account | Account for which the contracts are to be bought or sold | String (32) | N |
| 54 | Side | Valid values:<br>• 1 = Buy<br>• 2 = Sell | Char | Y |
| Component Block< OrderQtyData> | | | | |
| 38 | OrderQty | Ordered quantity (Number of lots) | Integer | Y |
| End Component Block< OrderQtyData> | | | | |
| 44 | Price | Price | Float | Y |
| 423 | PriceType | Code to represent the price type.<br>Valid values:<br>• 1 = Percentage (default) | Char | N |
| 40 | OrdType | Valid values:<br>• 2 = LIMIT<br>• K = MARKET_WITH_LEFTOVER_AS_LIMIT | Char | Y |
| 37 | OrderID | Order ID to which current execution report refers. | String (32) | Y |

| 150 | ExecType | Describes the purpose of the specific Execution Report (i.e. Pending Cancel).<br><br>Note that the *OrdStatus* will always identify the current order status.<br><br>Valid values:<br>• 0 = New<br>• 4 = Canceled<br>• 5 = Replaced<br>• 6 = Pending Cancel<br>• 8 = Rejected<br>• A = Pending New<br>• E = Pending_Replace<br>• F = Trade (partial fill or fill)<br>• G = Trade Correct (formerly an ExecTransType)<br>• H = Trade Cancel (formerly an ExecTransType) | Char | Y |
|---|---|---|---|---|
| 4003 | SettlMode | Code to identify if the market sends the trade to a settlement system.<br><br>The value in this field should only be considered if the ExecType is set to (F) or (G) or (H)<br><br>Valid Values:<br>• M: Manual<br>• A: Automatic | Char | C |
| 39 | OrdStatus | Valid values:<br>• 0 = New<br>• 1 = Partially filled<br>• 2 = Filled<br>• 4 = Canceled<br>• 5 = Replaced<br>• 6 = Pending Cancel (e.g. result of Order Cancel Request)<br>• 8 = Rejected<br>• A= Pending New<br>• E = Pending_Replace | Char | Y |
| 17 | ExecID | Unique identifier of execution message as assigned by the marketplace | String (32) | Y |
| 31 | LastPx | Price of last fill | Float | N |
| 32 | LastQty | Quantity of last fill | Qty | N |

| 6 | AvgPx | Current average price of all fills on current order. This will always be set to 0. | Float | Y |
|---|---|---|---|---|
| 14 | CumQty | Total executed contracts on the current order. | Integer | Y |
| 151 | LeavesQty | Remaining contracts to be executed on the current order. | Integer | Y |
| 432 | ExpireDate | Date order expires when order type is Good Till Date (59=6). Format: YYYYMMDD | String (8) | N |
| 126 | ExpireTime | ExpirationTime, taken from the order.  Format: YYYYMMDD-hh:mm:ss.µµµµµµ | String (24) | N |
| 528 | OrderCapacity | Valid values:<br><br>• G = Proprietary<br>• I = Individual (Client) | Char | Y |
| 529 | OrderRestrictions | Valid value:<br><br>• 5 = Acting as Market Maker or Specialist in the security | String (1) | N |
| 9215 | LiqProvOnly | This flag is used to indicate whether the order is related to any sort of liquidity provision activity, as defined under MiFID II.<br><br>• 0 = No Liquidity Provision (default)<br>• 1 = Liquidity Provision | Char | N |
| Component Block<Parties> | | | | |
| 453 | NoPartyIDs | Number of *PartyID* (448), *PartyIDSource* (447), and *PartyRole* (452) entries.<br><br>Possible parties entries:<br>• 1-First Party: is the member<br>• 2-Second Party: is the member operator.<br>• 3-Third Party: is the counterpart<br>• 4-Fourth Party: is the counterpart capacity | Integer | N |
| ->448 | PartyID | Party identifier/code. See *PartyIDSource (447)* and *PartyRole (452).*<br><br>For PartyRole=37, possible values are "C" or "P". "C" is used for third accounts and "P" for Proprietary. | String (16) | N |

| | | | | |
|---|---|---|---|---|
| ->447 | PartyIDSource | Identifies class or source of the *PartyID* (448) value. Required if *PartyID* is specified. Note: applicable values depend upon *PartyRole* (452) specified. <br><br> • D = Proprietary/Custom code <br> • M = Algorithm Short Code <br> • N = Natural Person Short Code | Char | N |
| ->452 | PartyRole | Identifies the type or role of the *PartyID* (448) specified. <br><br> Valid values: <br><br> • 1 = Executing Firm <br> • 12 = Executing Trader (associated with Executing Firm - actually executes) <br> • 17 = Contra Firm <br> • 37 = Contra Trader, used to receive counterpart capacity | Integer | N |
| **End Component Block<Parties>** | | | | |
| 75 | TradeDate | Used when reporting other than current day trades | Date | N |
| 64 | SettlDate | Specific date of trade settlement (SettlementDate) in YYYYMMDD format | String (8) | Y |
| 58 | Text | Contains the free text entered by the user or error if order status = 8 <br><br> For more details see Appendix | String (64) | N |
| 60 | TransactTime | Time of execution/order creation <br><br> YYYYMMDD-hh:mm:ss.µµµµµµ <br><br> E.g. <br><br> 20200620-10:06:51.453765 | String (24) | Y |
| **Component Block<Instrument>** | | | | |
| 55 | Symbol | Common representation of the security. SecurityID <48> value can be specified if no symbol exists or if the instrument have an ISIN code. Use '[N/A]' for products which do not have a symbol. | String (48) | Y |
| 48 | SecurityID | Security identifier value of SecurityIDSource (22) type, valid value ISIN. <br><br> • Requires SecurityIDSource. | String (12) | Y |
| 22 | SecurityIDSource | • 4 = ISIN number | String (1) | Y |
| **End Component Block<Instrument>** | | | | |

| 120 | SettlCurrency | Settlement Currency | String (3) | Y |
|---|---|---|---|---|
| 9730 | TradeLiquidityIndicator | Indicates whether the order added or removed liquidity.<br><br>The value in this field should only be considered if the ExecType is Trade (F).<br><br>Valid values:<br><br>• A: Provider, Added Liquidity<br>• R: Aggressor, Removed Liquidity<br>• C: Auction | Char | N |
| Component Block <TradePriceConditionGrp> | | | | |
| 1838 | NoTradePriceConditions | Number of TradePriceCondition (1839) entries. | Integer | N |
| 1839 | TradePriceCondition | This tag, together with tag 828, maps MMT Level 3.1 "Transaction Type: Transaction Category".<br>It also maps MMT Level 3.6 "Special Dividend" and MMT Level 3.8 "Transaction Type:<br><br>Ordinary Trades or Trades Outside Price Formation/Discovery Process".<br><br>Possible values are:<br>• 13 = Special dividend<br>• 14 = Price improvement<br>• 15 = Non-price forming trade<br>• 16 = Trade exempted from trading obligation<br>• 17 = Price or strike price is pending<br><br>The mapping between MMT level values and tag values can be found in<br>the MMT document attached at the end of this document. | Integer | N |
| End Component Block <TradePriceConditionGrp> | | | | |

| 625 | TradingSessionSubID | This tag, together with tag 574, maps the MMT level 2: "Trading Mode". Possible values are: <br><br> • 8 = Any auction <br> • 2 = Opening or opening auction <br> • 4 = Closing or closing auction <br> • 6 = Intraday auction <br> • 9 = Unscheduled intraday auction <br> • 3 = (Continuous) trading <br> • 5 = Post-trading <br> • 10 = Out of main session trading <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | String | N |
|-----|---------------------|---------|--------|---|
| 574 | MatchType | This tag, together with tag 625, maps the MMT Level 2 "Trading Mode". Possible values are: <br><br> • 3 = Confirmed trade report (reporting from recognized markets) <br> • 1 = One Party Trade Report (privately negotiated trade) <br> • 9 = Systematic Internalizer <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | String | N |
| 829 | TrdSubType | This tag maps the MMT level 3.3: "Transaction Type: Agency Cross Indicator". Possible values are: <br><br> • 37 = Crossed trade <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |

| 1430 | VenueType | This tag maps the MMT level 1: "Market Mechanism".<br><br>Possible values are:<br><br>• B = Central limit order book<br>• Q = Quote driven market<br>• D = Dark order book<br>• O = Off-market<br>• A = Auction driven market<br>• N = Quote negotiation<br>• H = Hybrid Market<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Char | N |
|------|-----------|-------------|------|---|
| 1115 | OrderCategory | This tag, together with tags 2669 and tag 2670, maps Level 3.2 "Transaction Type: Negotiation Indicator".<br><br>Possible values are<br><br>• 3 = Privately negotiated trade<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Char | N |
| Component Block <TrdRegPublicationGrp> | | | | |
| 2668 | NoTrdRegPublications | Number of TrdRegPublicationType (2669) and TrdRegPublicationReason (2670) entries. | Integer | N |
| ->2669 | TrdRegPublicationType | This tag, together with tags 1115 and tag 2669, maps Level 3.2 "Transaction Type: Negotiation Indicator". It maps also MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator", MMT Level 3.9 "Transaction Type: algorithmic indicator" and MMT Level 4.1 "Publication Mode and Post Trade Deferral"<br><br>Possible values are:<br><br>• 0 = Pre-trade transparency waiver<br>• 1 = Post-trade deferral<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |

| | | | | |
|---|---|---|---|---|
| ->2670 | TrdRegPublicationRea son | This tag, together with tags 1115 and tag 2670, maps Level 3.2 "Transaction Type: Negotiation Indicator". It maps also MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator", MMT Level 3.9 "Transaction Type: algorithmic indicator" and MMT Level 4.1 "Publication Mode and Post Trade Deferral"<br><br>Possible values are:<br><br> • 1 = No preceding order in book as transaction price depends on system-set reference price for an illiquid instrument)<br><br> • 0 = No preceding order in book as transaction price set within average spread of a liquid instrument)<br><br> • 2 = No preceding order in book as transaction price is subject to conditions other than current market price<br><br> • 3 = No public price for preceding order as public reference price was used for matching orders<br><br> • 4 = No public price quoted as instrument is illiquid<br><br> • 5 = No public price quoted as order size is above standard market size<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Intege r | N |
| End Component Block \<TrdRegPublicationGrp> | | | | |
| 855 | SecondaryTrdType | This tag, together with tags 2669 and 2670, maps MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator".<br><br>Possible values are:<br><br> • 64= Benchmark<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Intege r | N |

| 2405 | ExecMethod | This tag maps Level 3.7 "Transaction Type: Off Book Automated Indicator". | Integer | N |
|---|---|---|---|---|
| | | Possible values are:<br><br>• 0 = Undefined/unspecified<br>• 1 = Manual (the transaction was executed in a manual or other non-automated manner)<br>• 2 = Automated (the transaction was executed on an automated execution platform such as an automated systematic internalizer system, broker crossing network, dark pool trading, "direct to capital" systems, broker position unwind mechanisms, etc.)<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | | |
| 2667 | AlgorithmicTradeIndicator | This tag, together with tags 2669 and tag 2670, maps MMT Level 3.9 "Transaction Type: algorithmic indicator".<br><br>Possible values are:<br><br>• 1 = Algorithmic trade<br>• 0 = Non-algorithmic trade<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| 1390 | TradePublishIndicator | This tag maps MMT Level 4.1 "Publication Mode and Post Trade Deferral".<br><br>Possible values are:<br><br>• 1 = Publish trade<br>• 2 = Deferred publication<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |

| 1934 | RegulatoryReportType | This tag maps MMT Level 4.2 "Publication Mode and Post Trade Deferral". Possible values are: <ul><li>11 = Limited details trade</li><li>12 = Daily aggregated trade</li><li>13 = Volume omission trade</li><li>14 = Four weeks aggregation trade</li><li>15 = Indefinite aggregation trade</li><li>16 = Volume omission trade, eligible for subsequent enrichment in aggregated form</li><li>17 = Full details of earlier "limited details trade"</li><li>18 = Full details of earlier "daily aggregated trade"</li><li>19 = Full details of earlier "volume omission trade"</li><li>20 = Full details of earlier "four weeks aggregation trade"</li><li>21 = Full details of earlier "volume omission trade, eligible for subsequent enrichment in aggregated form"</li></ul> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
|------|----------------------|--------------------------------------------|---------|---|
| 19 | ExecRefID | If a contract has been canceled, it contains the identifier of the canceled contract | String (32) | N |
| Component Block < RegulatoryTradeIDGrp > | | | | |
| 1903 | RegulatoryTradeID | RegulatoryTradeID populated with TVTIC | Integer | N |
| 1906 | RegulatoryTradeIDType | Populated with 5 (Trading venue transaction identifier) | Integer | N |
| End Component Block < RegulatoryTradeIDGrp > | | | | |
| 2594 | OrderAttributeType | Indicates if the order was sent to reduce risk in an objectively measurable way in accordance with Article 57 of Directive 2014/65/EU Only possible value: <ul><li>R</li></ul> | Char | N |

| 2595 | OrderAttributeValue | Mandatory if OrderAttributeType is specified.<br>Only possible value:<br><br>• Y | Char | N |
|---|---|---|---|---|
| | \<Standard Trailer\> | | | Y |

# 5 MARKET REFERENCE DATA APPLICATION MESSAGES

This chapter details the messages used by the client to request/receive market static data to/from the Market Platform. It also describes the messages that Market Platform sends automatically.

The following messages are currently supported:

| Type | Name | Direction | Description |
|------|------|-----------|-------------|
| c | Security Definition Request | In | Request for security information |
| e | Security Status Request | In | Request for the status of a security |
| d | Security Definition | Out | Response to a Security Definition Request |
| f | Security Status | Out | Response to a Security Status Request |
| V | Market Data Request | In | Request to get the latest snapshot of all the market prices for a security |
| W | Market Data Snapshot / Full Refresh | Out | Reponses to a Market Data Request and automatic refresh in case data are modified in the Market platform |

## 5.1 SECURITY DEFINITION REQUEST (TYPE C)

This message enables the client to request information about a security to Market Platform. Every valid Security Definition Request message would be responded with a Security Definition (type d) see subsection 5.4.

For the fields with a "String" data type, a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|------------|---------|-----------|-----|
| | <Standard Header> | MsgType <35> = c | | Y |
| 320 | SecurityReqID | Unique ID of a Security Definition Request assigned by the client | String (63) | Y |
| 321 | SecurityRequestType | Type of Security Definition Request.<br>Valid value:<br>• 3 – request list securities | Integer | Y |

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
|  | <Standard Trailer> |  |  | Y |

## 5.2 SECURITY STATUS REQUEST (TYPE E)

The Security Status Request message enables the client to request the status of a security. Every valid Security Status Request message would be responded with a Security Status (type f) see subsection 5.5.

For the fields with a "String" data type, a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
|  | <Standard Header> | MsgType <35> = e |  | Y |
| 324 | SecurityStatusReqID | ID of a Security Status Request assigned by the client | String (63) | Y |
| 48 | SecurityID | Exchange Security Identifier.<br><br>Valid values can be retrieved by Security Definition Request enquiry. | String (64) | Y |
| 22 | SecurityIDSource | Valid value:<br><br>• 8 = Exchange Symbol | Char | Y |
| 263 | SubscriptionRequestType | Subscription Request Type<br>Valid values:<br><br>• 0 = Snapshot<br><br>• 1 = Snapshot + Updates (Subscribe)<br><br>• 2 = Disable previous Snapshot + Update Request (Unsubscribe) | Char | Y |
|  | <Standard Trailer> |  |  | Y |

## 5.3 MARKET DATA REQUEST (TYPE V)

When the client logs on to Market Platform, it can send a Market Data Request message to get the latest snapshot of all the market prices for the security. The response message for this request will be the Market data snapshot with the latest price, see subsection 5.6. It will not send all the executed trades from the last logon.

For the fields with a "String" data type, a maximum length is specified. If a received string is longer than the maximum specified, it will be truncated to the maximum length declared it will be truncated to the maximum length declared. The message will not be rejected.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|
| | \<Standard Header\> | MsgType \<35\> = V | | Y |
| 262 | MDReqID | Request ID set by the client | String (63) | Y |
| 263 | SubscriptionRequestType | Subscription Request Type<br><br>Valid value:<br><br>&bull; 1 = Snapshot + Updates (Subscribe) | Char | Y |
| 264 | MarketDepth | Depth of market for Book Snapshot<br>Valid value:<br><br>&bull; 0 = Full Book (5 Level) | Integer | Y |
| 265 | MDUpdateType | Specifies the type of Market Data update.<br><br>Valid value:<br><br>&bull; 0 = Full Refresh | Integer | Y |
| 267 | NoMDEntryTypes | Will be set to 0: All the available market entry types will be sent | Integer | Y |
| 146 | NoRelatedSym | Number of symbols (i.e. Security) requested.<br><br>Value always set to 0 – It means that Market data response will be sent for all securities. | Integer | Y |
| 4001 | BookType | Indicates whether the client needs to subscribe the Depth (aggregated book), the Book or both. The possible values are:<br><br>&bull; P = Price book<br>&bull; O = Order Book<br>&bull; B = Both (default P). | Char | N |
| | \<Standard Trailer\> | | | Y |

## 5.4 SECURITY DEFINITION (TYPE D)

In response to a Security Definition Request, the Market Platform will send the complete list of all securities available for trading into the system. The Market Platform will respond with one message for each security.

| Tag | Field Name | Content | Data Type | Req |
|-----|-----------|---------|-----------|-----|

| | <Standard Header> | MsgType <35> = d | | Y |
|---|---|---|---|---|
| 320 | SecurityReqID | Unique ID of a Security Definition Request assigned by the client | String (63) | Y |
| 322 | SecurityResponseID | Identifier for the Security Definition message | String (63) | Y |
| 323 | SecurityResponseType | Type of Security Definition message response. Valid values:<br>• = 4 if list of securities is returned<br>• = 5 if the request is rejected. | Integer | N |
| 55 | Symbol | ISIN Code | String (12) | Y |
| 48 | SecurityID | Exchange Security Identifier | String (64) | Y |
| 22 | SecurityIDSource | Valid value:<br>• 8 = Exchange Symbol | Char | Y |
| 460 | Product | Valid values:<br>• 3 = CORPORATE<br>• 5 = EQUITY<br>• 6 = GOVERNMENT<br>• 12 = OTHER | Integer | Y |
| 231 | ContractMultiplier | Lot Size (minimum lot value of the security) | Float | Y |
| 223 | CouponRate | Coupon Rate | Float | N |
| 106 | Issuer | Name of security issuer | String (64) | N |
| 107 | SecurityDesc | Security Description | String (64) | N |
| 15 | Currency | Contain the standard international currency code, which represents the trading currency of the Security | String (3) | N |
| 58 | Text | Settlement information | String (6) | N |
| 562 | MinTradeVol | Minimum fill quantity | Qty | Y |
| 5564 | QtyTick | Qty tick | Float | Y |
| 5565 | TradingStartDate | Trading Start Date Format YYYYMMDD | String (8) | Y |

| 5566 | TradingStopDate | | Trading Stop Date Format YYYYMMDD | String (8) | Y |
|------|-----------------|--|-----------------------------------|------------|---|
| 541 | MaturityDate | | Maturity Date<br>Format YYYYMMDD | String (8) | Y |
| 5568 | MinOrderQty | | Minimum Order Qty | Qty | Y |
| 336 | TradingSessionID | | Section of the security | String (24) | Y |
| 5600 | NoTicks | | Number of tick values | Integer | Y |
| → | 5601 | MinPrice | Minimum price value for current tick | Float | Y |
| → | 5602 | MaxPrice | Maximum price value for current tick (0 means not specified) | Float | Y |
| → | 5563 | PriceTick | Tick value for price interval defined by MinPrice, MaxPrice | Float | Y |
| 64 | SettlDate | | Settlement Date in YYYYMMDD format | Date | Y |
| 461 | CFICode | | CFICode of the instrument | String (6) | Y |
| 454 | NoSecurityAltID | | The number of parties specified in the repeating group. Always 1 | Integer | Y |
| → | 455 | SecurityAltID | FISNCode | String (35) | Y |
| → | 456 | SecurityAltIDSource | FISNCode Source, value = W, this value could change when FIX protocol committee will decide about it | Char | Y |
| 4000 | RFEEnabled | | Specifies whether the liquidity provider can quote with the RFE indicator set to subject or not.<br>Possible values:<br>• 0 = No<br>• 1 = Yes | Char | N |
| 4004 | TradingStartTime | | Trading Start Time of the instrument Format: hh:mm | String (5) | N |
| 4005 | TradingStopTime | | Trading Stop Time of the instrument Format: hh:mm | String (5) | N |
| 4006 | ESG | | | String (50) | N |
| 311 | UnderlyingSymbol | | Underlying security's Symbol. | String (12) | N |

| Tag | Field Name | Content | Data Type | Req |
|---|---|---|---|---|
| | <Standard Trailer> | | | Y |

## 5.5 SECURITY STATUS (TYPE F)

The Market Platform uses this message as an answer to a security status request (type e).

| Tag | Field Name | Content | Data Type | Req |
|---|---|---|---|---|
| | <Standard Header> | MsgType <35> = f | | Y |
| 324 | SecurityStatusReqID | Request ID set by the client | String (63) | Y |
| 48 | SecurityID | Exchange Security Identifier | String (64) | Y |
| 22 | SecurityIDSource | Valid value:<br>• 8 = Exchange Symbol | Char | Y |
| 55 | Symbol | ISIN code | String (12) | Y |
| 326 | SecurityTradingStatus | Identifies the trading status applicable: it has to be defined according to Market Platform.<br>Valid values:<br>• 17 = Ready to trade (start of session)<br>• 2 = Trading Halt<br>• 18 = Not Available for trading (end of session)<br>• 30 = Request For Execution | Integer | Y |
| 336 | TradingSessionID | Identifies the phase of the market the security belongs to<br>Valid values:<br>• "CLO" = Closure<br>• "PRA" = Pre Auction<br>• "AUC" = Auction<br>• "PRT" = Pre Trading<br>• "NEG" = Negotiation<br>• "NOP" = No Operation<br>• "CRB" = Circuit Breaker<br>• "MLQ" = Missing Liquidity (Provider) | String (3) | Y |

| | | | | |
|---|---|---|---|---|
| | | • "MGT" = Management | | |
| | <Standard Trailer> | | | Y |

# 5.6 MARKET DATA - SNAPSHOT /FULL REFRESH (TYPE W)

The client will not have a mechanism to request all the market data messages sent since the last disconnection. The client can request a complete market snapshot on re-connection to have the latest market data.

Market data snapshot full refresh is used in two different ways:

1  it is the answer to a Market Data Request, see Market Data Snapshot full Refresh (type W) used as a response

2  It is an automatic refresh sent if a modification occurs in Market Platform. The modifications can generate the 3 types of messages (Market Data Snapshot full refresh) described below:

- Static market data: This message, which provides market open and closing prices, sends opening or closing price changes, see Market Data Snapshot full Refresh (type W) used as a response (**MDEntryType = 4 and 5**)

- A Market Data message is sent on every change to the order book and represents the top 5 price levels of the book, see Market Data - Snapshot / Full Refresh Sent when there is a change in the Order Book (**MDEntryType = 0 or 1**)

- When a trade occurs, it will also result in a Market Data message being sent, see Market Data - Snapshot / Full Refresh Sent following every Trade (**MDEntryType = 2**)

## 5.6.1  Market Data Snapshot full Refresh (type W) used as a response

This message will be sent in response to a Market Data request. There will be one message for every instrument in the market. The client must send a request only once during a session. If the client application re-connects, it can send a request again.

| Tag | Field Name | Content | Data Type | Req |
|---|---|---|---|---|
| | <Standard Header> | MsgType <35> = W | | Y |
| 262 | MDReqID | Request ID set by the client | String (63) | N |
| 48 | SecurityID | Exchange Security Identifier | String (64) | N |
| 22 | SecurityIDSource | Valid value: <br><br> • 8 = Exchange Symbol | String (1) | Y |

| 55 | | Symbol | ISIN Code | String (12) | Y |
|---|---|---|---|---|---|
| 268 | | NoMDEntries | Number of entries | Integer | Y |
| → | 269 | MDEntryType | Must be the first field in this repeating group.<br><br>Type Market Data entry.<br>Possible value:<br><br>• 2 = Trade | Char | Y |
| → | 270 | MDEntryPx | Last Traded Price. (Nine integer places and Five decimal places.) E.g.. 999999999.99999. For more details, see page 77 | Price | Y |
| → | 271 | MDEntrySize | Last Traded Quantity | Float | N |
| → | 272 | MDEntryDate | Trade Date<br><br>YYYYMMDD | String (8) | N |
| → | 273 | MDEntryTime | Trade Time<br><br>HH:MM:SS.µµµ, e.g.: 10:06:51.453 | String (15) | N |
| → | 274 | TickDirection | Direction of the "tick".<br>Valid values:<br><br>• 0 – Plus Tick<br>• 1 – Zero tick<br>• 2 – Minus Tick | Char | N |
| → | 1024 | MDOriginType | It maps MMT Level 1 "Market Mechanism".<br><br>Possible values are:<br><br>• 0 = Book<br>• 3 = Quote driven market<br>• 4 = Dark order book<br>• 1 = Off-book<br>• 5 = Auction driven market<br>• 6 = Quote negotiation<br>• 8 = Hybrid market<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| → | 5463 | TradeID | Unique identifier of the trade that generated | String | N |

| | 625 | TradingSessionSubID | This tag, together with tag 574, maps the MMT level 2: "Trading Mode". Possible values are: <br><br> • 8 = Any auction <br> • 2 = Opening or opening auction <br> • 4 = Closing or closing auction <br> • 6 = Intraday auction <br> • 9 = Unscheduled intraday auction <br> • 3 = (Continuous) trading <br> • 5 = Post-trading <br> • 10 = Out of main session trading <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | String | N |
|---|---|---|---|---|---|
| → | 574 | MatchType | This tag, together with tag 625, maps the MMT Level 2 "Trading Mode". Possible values are: <br><br> • 3 = Confirmed trade report (reporting from recognized markets) <br> • 1 = One Party Trade Report (privately negotiated trade) <br> • 9 = Systematic Internalizer <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | String | N |
| → | 828 | TrdType | This tag, together with tag 1839, maps the MMT Level 3.1 "Transaction Type, Transaction Category". Possible values are: <br><br> • 62 = Dark trade <br> • 65 = Package trade <br> • 2 = Exchange for physical <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| → | 829 | TrdSubType | This tag maps the MMT level 3.3: "Transaction Type: Agency Cross Indicator". Possible values are: <br><br> • 37 = Crossed trade <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |

| | | | | | |
|---|---|---|---|---|---|
| → | 1838 | NoTradePriceCondition s | Number of TradePriceCondition (1839) entries | Integ er | N |
| →<br>→ | 1839 | TradePriceCondition | This tag, together with tag 828, maps the MMT Level 3.1 "Transaction Type, Transaction Category", MMT Level 3.6 "Special Dividend", MMT Level 3.8 "Transaction Type: Ordinary Trades or Trades outside price formation".<br><br>Possible values are:<br><br>     • 13= Special Dividend<br>     • 14 = Price improvement<br>     • 15 = Non-price forming trade<br>     • 16 = Trade exempt from trading obligation<br>     • 17 = Price is pending<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integ er | N |
| → | 1115 | OrderCategory | This tag, together with tags 2669 and tag 2670, maps Level 3.2 "Transaction Type: Negotiation Indicator".<br><br>Possible values are:<br><br>     • 3 = Privately negotiated trade<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Char | N |
| → | 2668 | NoTrdRegPublications | Number of TrdRegPublicationType (2669) and TrdRegPublicationReason (2670) entries. | Integ er | N |
| →<br>→ | 2669 | TrdRegPublicationType | This tag, together with tags 1115 and tag 2669, maps Level 3.2 "Transaction Type: Negotiation Indicator". It maps also MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator", MMT Level 3.9 "Transaction Type: algorithmic indicator" and MMT Level 4.1 "Publication Mode and Post Trade Deferral"<br><br>Possible values are:<br><br>     • 0 = Pre-trade transparency waiver<br>     • 1 = Post-trade deferral<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integ er | N |

| | 2670 | TrdRegPublicationReas on | This tag, together with tags 1115 and tag 2670, maps Level 3.2 "Transaction Type: Negotiation Indicator". It maps also MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator", MMT Level 3.9 "Transaction Type: algorithmic indicator" and MMT Level 4.1 "Publication Mode and Post Trade Deferral"<br><br>Possible values are:<br><br>• 1 = No preceding order in book as transaction price depends on system-set reference price for an illiquid instrument)<br><br>• 0 = No preceding order in book as transaction price set within average spread of a liquid instrument)<br><br>• 2 = No preceding order in book as transaction price is subject to conditions other than current market price<br><br>• 3 = No public price for preceding order as public reference price was used for matching orders<br><br>• 4 = No public price quoted as instrument is illiquid<br><br>• 5 = No public price quoted as order size is above standard market size<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integ er | N |
|---|---|---|---|---|---|
| → | 277 | TradeCondition | This tag, together with tags 2669 and 2670, maps MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator".<br><br>Possible values are:<br><br>• 6= Benchmark<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Strin g | N |

| | 2405 | ExecMethod | This tag maps Level 3.7 "Transaction Type: Off Book Automated Indicator". Possible values are: <ul><li>0 = Undefined/unspecified</li><li>1 = Manual (the transaction was executed in a manual or other non-automated manner)</li><li>2 = Automated (the transaction was executed on an automated execution platform such as an automated systematic internalizer system, broker crossing network, dark pool trading, "direct to capital" systems, broker position unwind mechanisms, etc.)</li></ul> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
|---|---|---|---|---|---|
| → | 2667 | AlgorithmicTradeIndicator | This tag, together with tags 2669 and tag 2670, maps MMT Level 3.9 "Transaction Type: algorithmic indicator". Possible values are: <ul><li>1 = Algorithmic trade</li><li>0 = Non-algorithmic trade</li></ul> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| → | 1390 | TradePublishIndicator | This tag maps MMT Level 4.1 "Publication Mode and Post Trade Deferral". Possible values are: <ul><li>1 = Publish trade</li><li>2 = Deferred publication</li></ul> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |

| | 1934 | RegulatoryReportType | This tag maps MMT Level 4.2 "Publication Mode and Post Trade Deferral". | Integer | N |
|---|---|---|---|---|---|
| → | | | Possible values are:<br><br>• 11 = Limited details trade<br>• 12 = Daily aggregated trade<br>• 13 = Volume omission trade<br>• 14 = Four weeks aggregation trade<br>• 15 = Indefinite aggregation trade<br>• 16 = Volume omission trade, eligible for subsequent enrichment in aggregated form<br>• 17 = Full details of earlier "limited details trade"<br>• 18 = Full details of earlier "daily aggregated trade"<br>• 19 = Full details of earlier "volume omission trade"<br>• 20 = Full details of earlier "four weeks aggregation trade"<br>• 21 = Full details of earlier "volume omission trade, eligible for subsequent enrichment in aggregated form"<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | | |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• 4 = Theoretical Auction Price | Char | Y |
| → | 270 | MDEntryPx | Theoretical Auction Price. (Nine integer places and Five decimal places.)E.g.: 999999999.99999. For more details, see page 77 | Price | Y |
| → | 271 | MDEntrySize | Quantity traded at the Theoretical Auction Price | Float | N |
| → | 272 | MDEntryDate | Trade Date YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• 5 = Closing Price | Char | Y |
| → | 270 | MDEntryPx | Closing Price (previous day closing price).<br><br>(Nine integer places and Five decimal places.)E.g.: 999999999.99999. For more details, see page 77 | Price | Y |

| | 271 | MDEntrySize | Total volume (quantity) traded. | Float | Y |
|---|---|---|---|---|---|
| → | 272 | MDEntryDate | Trading date<br><br>YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• Q = Auction Closing Price, which is the weighted average price calculated on the basis of executed contracts during the Auction phase.<br><br>(Note: this value is not available for all instruments and is not standard in version FIX 4.4) | Char | Y |
| → | 270 | MDEntryPx | Auction Closing Price<br><br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Price | Y |
| → | 271 | MDEntrySize | Quantity traded at the Auction Closing Price | Float | N |
| → | 272 | MDEntryDate | Trading date<br><br>YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• 7 = High Price | Char | Y |
| → | 270 | MDEntryPx | Highest Price for the day.<br><br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 272 | MDEntryDate | Trading date<br><br>YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• 8 = Lowest Price | Char | Y |
| → | 270 | MDEntryPx | Lowest Price for the day<br><br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 272 | MDEntryDate | Trading date<br><br>YYYYMMDD | String (8) | N |
| | | | | | |

| → | 269 | MDEntryType | Possible value:<br>• 0 = Bid | Char | Y |
|---|-----|-------------|-----------|------|---|
| → | 270 | MDEntryPx | Bid Price level. (Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Best Bid Quantity | Float | N |
| → | 272 | MDEntryDate | Trading Date<br>YYYYMMDD | String (8) | N |
| → | 273 | MDEntryTime | Time sent from the Exchange<br>HH:MM:SS.µµµ, e.g.: 10:06:51.453 | String (15) | N |
| → | 346 | NumberOfOrders | Number of orders at this price level | Integer | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br>• 1 = Offer | Char | Y |
| → | 270 | MDEntryPx | Offer Price level.<br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Best offer quantity | Float | N |
| → | 272 | MDEntryDate | Trading Date<br>YYYYMMDD | String (8) | N |
| → | 273 | MDEntryTime | Time sent from the Exchange<br>HH:MM:SS.µµµ, e.g.: 10:06:51.453 | String (15) | N |
| → | 346 | NumberOfOrders | Number of orders at this price level | Integer | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br>• B = Trade Volume | Char | Y |
| → | 270 | MDEntryPx | Average Price<br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77d | Float | Y |
| → | 271 | MDEntrySize | Total volume (quantity) traded. | Float | Y |

| | | | | | |
|---|---|---|---|---|---|
| → | 269 | MDEntryType | Possible value:<br>• b = Order bid | Char | Y |
| → | 270 | MDEntryPx | Bid Price level.<br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Bid quantity | Float | N |
| → | 272 | MDEntryDate | Trading Date<br>YYYYMMDD | String(8) | N |
| → | 273 | MDEntryTime | Time sent from the Exchange<br>HH:MM:SS.µµµµµµ, e.g.: 10:06:51.453765 | String(15) | N |
| → | 37 | OrderID | Contains the order ID or the quote ID. This field is mandatory if tag 269 is set to "b". | String (16) | C |
| → | 290 | MDEntryPositionNo | Number that indicates the quote position in the book. | Float | C |
| → | 4002 | IsTradable | Possible values:<br>• A = Automatic<br>• M= Manual | Char | Y |
| → | 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries.<br>Possible parties entries:<br>• 1-First Party: is the member<br>• 2-Second Party: is the member operator | Integer | N |
| → | ->448 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452). | String (16) | N |
| → | ->447 | PartyIDSource | Identifies class or source of the PartyID (448) value. Required if PartyID is specified. Note: applicable values depend upon PartyRole (452) specified.<br>• D = Proprietary/Custom code | Char | N |

| | | | | | |
|---|---|---|---|---|---|
| → | -<br>>45<br>2 | PartyRole | Identifies the type or role of the PartyID (448) specified.<br><br>Valid values:<br><br>• 1 = Executing Firm<br>• 12 = Executing Trader (associated with Executing Firm - actually executes) | Integ er | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• o = Order Offer | Char | Y |
| → | 270 | MDEntryPx | Offer Price level.<br><br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Offer quantity | Float | N |
| → | 272 | MDEntryDate | Trading Date<br><br>YYYYMMDD | Strin g(8) | N |
| → | 273 | MDEntryTime | Time sent from the Exchange<br><br>HH:MM:SS.µµµµµµ, e.g.<br><br>10:06:51.453765 | Strin g(15) | N |
| → | 37 | OrderID | Contains the order ID or the quote ID. This field is mandatory if tag 269 is set to "o". | Strin g (16) | C |
| → | 290 | MDEntryPositionNo | Number that indicates the quote position in the book. | Float | C |
| → | 4002 | IsTradable | Possible values:<br><br>• A = Automatic<br>• M= Manual | Char | Y |
| → | 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries.<br><br>Possible parties entries:<br><br>• 1-First Party: is the member<br>• 2-Second Party: is the member operator | Integ er | N |
| → | -<br>>44<br>8 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452). | Strin g (16) | N |

| Tag | | Field Name | Content | Data Type | Re q |
|---|---|---|---|---|---|
| → | - >44 7 | PartyIDSource | Identifies class or source of the PartyID (448) value. Required if PartyID is specified. Note: applicable values depend upon PartyRole (452) specified. <br> • D = Proprietary/Custom code | Char | N |
| → | - >45 2 | PartyRole | Identifies the type or role of the PartyID (448) specified. <br> Valid values: <br> • 1 = Executing Firm <br> • 12 = Executing Trader (associated with Executing Firm - actually executes) | Integ er | N |
| | | <Standard Trailer> | | | Y |

## 5.6.2 Market Data - Snapshot / Full Refresh Sent following every Trade

| Tag | | Field Name | Content | Data Type | Re q |
|---|---|---|---|---|---|
| | | <Standard Header> | MsgType <35> = W | | Y |
| 262 | | MDReqID | Contains the string "dummyid" because it is sent by the system <br> unsolicited | String (63) | N |
| 48 | | SecurityID | Exchange Security Identifier | String (64) | N |
| 22 | | SecurityIDSource | Valid value: <br> • 8 = Exchange Symbol | String (1) | Y |
| 55 | | Symbol | ISIN Code | String (12) | Y |
| 268 | | NoMDEntries | Number of Entries | Intege r | Y |
| → | 269 | MDEntryType | • 2 – Trade | Char | Y |

| → | 1024 | MDOriginType | It maps MMT Level 1 "Market Mechanism". Possible values are:<br><br>• 0 = Book<br>• 3 = Quote driven market<br>• 4 = Dark order book<br>• 1 = Off-book<br>• 5 = Auction driven market<br>• 6 = Quote negotiation<br>• 8 = Hybrid market<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
|---|---|---|---|---|---|
| → | 5463 | TradeID | Unique identifier of the trade that generated | String | N |
| → | 625 | TradingSessionSubID | This tag, together with tag 574, maps the MMT level 2: "Trading Mode". Possible values are:<br><br>• 8 = Any auction<br>• 2 = Opening or opening auction<br>• 4 = Closing or closing auction<br>• 6 = Intraday auction<br>• 9 = Unscheduled intraday auction<br>• 3 = (Continuous) trading<br>• 5 = Post-trading<br>• 10 = Out of main session trading<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | String | N |
| → | 574 | MatchType | This tag, together with tag 625, maps the MMT Level 2 "Trading Mode". Possible values are:<br><br>• 3 = Confirmed trade report (reporting from recognized markets)<br>• 1 = One Party Trade Report (privately negotiated trade)<br>• 9 = Systematic Internalizer<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | String | N |

| | 828 | TrdType | This tag, together with tag 1839, maps the MMT Level 3.1 "Transaction Type, Transaction Category".<br><br>Possible values are:<br><br>• 62 = Dark trade<br>• 65 = Package trade<br>• 2 = Exchange for physical<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
|---|---|---|---|---|---|
| → | 829 | TrdSubType | This tag maps the MMT level 3.3: "Transaction Type: Agency Cross Indicator".<br><br>Possible values are:<br><br>• 37 = Crossed trade<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| → | 1838 | NoTradePriceConditions | Number of TradePriceCondition (1839) entries | Integer | N |
| →<br>→ | 1839 | TradePriceCondition | This tag, together with tag 828, maps the MMT Level 3.1 "Transaction Type, Transaction Category", MMT Level 3.6 "Special Dividend", MMT Level 3.8 "Transaction Type: Ordinary Trades or Trades outside price formation".<br><br>Possible values are:<br><br>• 13= Special Dividend<br>• 14 = Price improvement<br>• 15 = Non-price forming trade<br>• 16 = Trade exempt from trading obligation<br>• 17 = Price is pending<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| → | 1115 | OrderCategory | This tag, together with tags 2669 and tag 2670, maps Level 3.2 "Transaction Type: Negotiation Indicator".<br><br>Possible values are:<br><br>• 3 = Privately negotiated trade<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Char | N |

| | 2668 | NoTrdRegPublications | Number of TrdRegPublicationType (2669) and TrdRegPublicationReason (2670) entries. | Integer | N |
|---|---|---|---|---|---|
| →→ | 2669 | TrdRegPublicationType | This tag, together with tags 1115 and tag 2669, maps Level 3.2 "Transaction Type: Negotiation Indicator". It maps also MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator", MMT Level 3.9 "Transaction Type: algorithmic indicator" and MMT Level 4.1 "Publication Mode and Post Trade Deferral"<br><br>Possible values are:<br><br>   • 0 = Pre-trade transparency waiver<br>   • 1 = Post-trade deferral<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| →→ | 2670 | TrdRegPublicationReason | This tag, together with tags 1115 and tag 2670, maps Level 3.2 "Transaction Type: Negotiation Indicator". It maps also MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator", MMT Level 3.9 "Transaction Type: algorithmic indicator" and MMT Level 4.1 "Publication Mode and Post Trade Deferral"<br><br>Possible values are:<br><br>   • 1 = No preceding order in book as transaction price depends on system-set reference price for an illiquid instrument)<br>   • 0 = No preceding order in book as transaction price set within average spread of a liquid instrument)<br>   • 2 = No preceding order in book as transaction price is subject to conditions other than current market price<br>   • 3 = No public price for preceding order as public reference price was used for matching orders<br>   • 4 = No public price quoted as instrument is illiquid<br>   • 5 = No public price quoted as order size is above standard market size<br><br>The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |

| | 277 | TradeCondition | This tag, together with tags 2669 and 2670, maps MMT Level 3.5 "Transaction Type: Benchmark or reference price indicator". | String | N |
|---|---|---|---|---|---|
| → | | | Possible values are: | | |
| | | | • 6= Benchmark | | |
| | | | The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | | |
| → | 2405 | ExecMethod | This tag maps Level 3.7 "Transaction Type: Off Book Automated Indicator". | Integer | N |
| | | | Possible values are: | | |
| | | | • 0 = Undefined/unspecified | | |
| | | | • 1 = Manual (the transaction was executed in a manual or other non-automated manner) | | |
| | | | • 2 = Automated (the transaction was executed on an automated execution platform such as an automated systematic internalizer system, broker crossing network, dark pool trading, "direct to capital" systems, broker position unwind mechanisms, etc.) | | |
| | | | The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | | |
| → | 2667 | AlgorithmicTradeIndicator | This tag, together with tags 2669 and tag 2670, maps MMT Level 3.9 "Transaction Type: algorithmic indicator". | Integer | N |
| | | | Possible values are: | | |
| | | | • 1 = Algorithmic trade | | |
| | | | • 0 = Non-algorithmic trade | | |
| | | | The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | | |
| → | 1390 | TradePublishIndicator | This tag maps MMT Level 4.1 "Publication Mode and Post Trade Deferral". | Integer | N |
| | | | Possible values are: | | |
| | | | • 1 = Publish trade | | |
| | | | • 2 = Deferred publication | | |
| | | | The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | | |

| | 1934 | RegulatoryReportType | This tag maps MMT Level 4.2 "Publication Mode and Post Trade Deferral". Possible values are: <br><br> • 11 = Limited details trade <br> • 12 = Daily aggregated trade <br> • 13 = Volume omission trade <br> • 14 = Four weeks aggregation trade <br> • 15 = Indefinite aggregation trade <br> • 16 = Volume omission trade, eligible for subsequent enrichment in aggregated form <br> • 17 = Full details of earlier "limited details trade" <br> • 18 = Full details of earlier "daily aggregated trade" <br> • 19 = Full details of earlier "volume omission trade" <br> • 20 = Full details of earlier "four weeks aggregation trade" <br> • 21 = Full details of earlier "volume omission trade, eligible for subsequent enrichment in aggregated form" <br><br> The mapping between MMT level values and tag values can be found in the MMT document attached at the end of this document | Integer | N |
| :-: | :-: | :-- | :-- | :-- | :-: |
| → | 270 | MDEntryPx | Last Traded Price. <br><br> (Nine integer places and Five decimal places.). E.g.. 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Last Traded Quantity | Float | N |
| → | 272 | MDEntryDate | Trade Date <br> YYYYMMDD | String (8) | N |
| → | 273 | MDEntryTime | Trade Time <br> HH:MM:SS.μμμ, e.g.: 10:06:51.453 | String (15) | N |
| → | 274 | TickDirection | • 0 = Plus Tick <br> • 1 = Zero Plus tick <br> • 2 = Minus Tick | Char | N |
| | | | | | |
| → | 269 | MDEntryType | • 4 = Theoretical Auction Price | Char | Y |

| | 270 | MDEntryPx | Theoretical Auction Price. (Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
|---|---|---|---|---|---|
| → | 271 | MDEntrySize | Quantity traded at the Theoretical Auction Price | Float | N |
| → | 272 | MDEntryDate | Trading Date YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | • 5 = Closing Price | Char | Y |
| → | 270 | MDEntryPx | Closing Price (previous closing price till the day closing price is determined). (Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Price | Y |
| → | 271 | MDEntrySize | Total volume (quantity) traded. | Float | Y |
| → | 272 | MDEntryDate | Trading Date YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value: • Q = Auction Closing Price which is the weighted average price calculated on the basis of executed contracts during the Auction phase. (Note: this value is not available for all instruments and is not standard in version FIX 4.4) | Char | Y |
| → | 270 | MDEntryPx | Auction Closing Price (Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Price | Y |
| → | 271 | MDEntrySize | Quantity traded at the Auction Closing Price | Float | N |
| → | 272 | MDEntryDate | Trading date YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | • 7 = High Price | Char | Y |
| → | 270 | MDEntryPx | High Price for the day. (Nine integer places and Five decimal places.) E.g.: 999999999.99999. For more details, see page 77 | Float | Y |

| | | | | | |
|---|---|---|---|---|---|
| → | 272 | MDEntryDate | Trading Date<br><br>YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | • 8= Low Price | Char | Y |
| → | 270 | MDEntryPx | Low Price.<br><br>(Nine integer places and Five decimal places.) E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 272 | MDEntryDate | Closing Price Trading date<br><br>YYYYMMDD | String (8) | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• B = Trade Volume | Char | Y |
| → | 270 | MDEntryPx | Average Price<br><br>(Nine integer places and Five decimal places.) E.g.: 999999999.99999. For more details, see page 77d | Float | Y |
| → | 271 | MDEntrySize | Total volume (quantity) traded. | Float | Y |
| | | \<Standard Trailer\> | | | Y |

## 5.6.3 Market Data - Snapshot / Full Refresh Sent when there is a change in the Order Book

This message is sent by the Market Platform whenever there is a change in the Order Book Price levels. The group will contain bids first and then offers. If only one side of the book is available, the group will contain only bid price levels or offer price levels. Market Platform will send the best prices in bid and the best prices in ask. Depending on the configuration (market/section/member), Market Platform can send up to the first twenty price levels, in increments of five. The first twenty prices in bid are sorted in descending order; the first twenty prices in offer are sorted in ascending order. This message will only be sent if there is a price level change. The full snap shot of the price levels is always sent.

| Tag | Field Name | Content | Data Type | Req |
|---|---|---|---|---|
| | \<Standard Header\> | MsgType \<35\> =W | | Y |
| 262 | MDReqID | Contains the string "dummyid", because it is sent by the system unsolicited. | String (63) | N |

| | | | | | |
|---|---|---|---|---|---|
| 48 | | SecurityID | Exchange Security Identifier | String (64) | N |
| 22 | | SecurityIDSource | Valid value:<br><br>• 8 = Exchange Symbol | String (1) | Y |
| 55 | | Symbol | ISIN Code | String (12) | Y |
| 268 | | NoMDEntries | Sum of the price levels of bids and offers currently defined in the market.<br><br>The possible values are: 10, 20, 30, 40. | Integer | Y |
| → | 269 | MDEntryType | Possible values:<br><br>• 0 = Bid<br>• 1 = Offers | Char | Y |
| → | 270 | MDEntryPx | Bid or offer Price level.<br><br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Quantity available in this bid or offer price level | Float | N |
| → | 272 | MDEntryDate | Trading Date<br><br>YYYYMMDD | String (8) | N |
| → | 273 | MDEntryTime | Update time<br><br>HH:MM:SS.μμμ, e.g.<br><br>10:06:51.453 | String (15) | Y |
| → | 346 | NumberOfOrders | Number of orders at this price level | Integer | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br><br>• b = Order bid | Char | Y |
| → | 270 | MDEntryPx | Bid Price level.<br><br>(Nine integer places and Five decimal places.). E.g.: 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Bid quantity | Float | N |
| → | 272 | MDEntryDate | Trading Date<br><br>YYYYMMDD | String(8) | N |

| | 273 | MDEntryTime | Time sent from the Exchange HH:MM:SS.µµµµµµ, e.g. 10:06:51.453765 | String( 15) | N |
|---|---|---|---|---|---|
| → | 37 | OrderID | Contains the order ID or the quote ID. This field is mandatory if tag 269 is set to "b". | String (16) | C |
| → | 290 | MDEntryPosition No | Number that indicates the quote position in the book. | Float | C |
| → | 400 2 | IsTradable | Possible values:<br>• A = Automatic<br>• M= Manual | Char | Y |
| → | 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries.<br>Possible parties entries:<br>• 1= First Party: is the member<br>• 2= Second Party: is the member operator | Intege r | N |
| → | - >44 8 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452). | String (16) | N |
| → | - >44 7 | PartyIDSource | Identifies class or source of the PartyID (448) value. Required if PartyID is specified. Note: applicable values depend upon PartyRole (452) specified.<br>• D = Proprietary/Custom code | Char | N |
| → | - >45 2 | PartyRole | Identifies the type or role of the PartyID (448) specified.<br>Valid values:<br>• 1 = Executing Firm<br>• 12 = Executing Trader (associated with Executing Firm - actually executes) | Intege r | N |
| | | | | | |
| → | 269 | MDEntryType | Possible value:<br>• o = Order Offer | Char | Y |
| → | 270 | MDEntryPx | Offer Price level.<br>(Nine integer places and Five decimal places.). E.g. 999999999.99999. For more details, see page 77 | Float | Y |
| → | 271 | MDEntrySize | Offer quantity | Float | N |
| → | 272 | MDEntryDate | Trading Date YYYYMMDD | String( 8) | N |

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| → | 273 | MDEntryTime | Time sent from the Exchange<br><br>HH:MM:SS.µµµµµµ, e.g.: 10:06:51.453765 | String( 15) | N |
|---|---|---|---|---|---|
| → | 37 | OrderID | Contains the order ID or the quote ID. This field is mandatory if tag 269 is set to "o". | String (16) | C |
| → | 290 | MDEntryPosition No | Number that indicates the quote position in the book. | Float | C |
| → | 400 2 | IsTradable | Possible values:<br><br>• A = Automatic<br><br>• M= Manual | Char | Y |
| → | 453 | NoPartyIDs | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries.<br><br>Possible parties entries:<br><br>• 1 = First Party: is the member<br><br>• 2 = Second Party: is the member operator | Intege r | N |
| → | - >44 8 | PartyID | Party identifier/code. See PartyIDSource (447) and PartyRole (452). | String (16) | N |
| → | - >44 7 | PartyIDSource | Identifies class or source of the PartyID (448) value. Required if PartyID is specified. Note: applicable values depend upon PartyRole (452) specified.<br><br>• D = Proprietary/Custom code | Char | N |
| → | - >45 2 | PartyRole | Identifies the type or role of the PartyID (448) specified.<br><br>Valid values:<br><br>• 1 = Executing Firm<br><br>• 12 = Executing Trader (associated with Executing Firm - actually executes) | Intege r | N |
| | | <Standard Trailer> | | | Y |

**Note: Number Representation**

The floating-point representation depends on the number that needs to be represented.

1) If a number is not zero but near to zero (including between -0.0001 and 0.0001): the number is represented as a floating-point number (for example, 0.0000135) or is represented with the scientific notation (for example, 1.35 e-5). The system chooses the representation that requires the least number of characters.

2) If a number is zero, or higher than 0.0001, or smaller than -0.0001: the number always has a floating-point representation (for example 0.000135).

**Mapping between MMT Flags and FIX tags**

The document with the mapping between MMT Flags and FIX tags is available at the following path: https://www.fixtrading.org/mmt/

# APPENDIX

This subsection details the possible errors for order rejections.

| Tag 58 (Possible value) |
| --- |
| Security Not Active |
| Invalid Verb |
| Invalid Request Member |
| Invalid Request Operator |
| Invalid Validity Date |
| Invalid Validity Time |
| Invalid Request Status |
| Section Not Active |
| Order Not Found |
| Member Not Active |
| Operator Not Active |
| Undefined Section Phase |
| Undefined Security Phase |
| Invalid Security |
| Invalid Order Type |
| Price Overlap |
| Maximum Order Exceeded |
| Invalid Relative Qty |
| Invalid ConfirmFlag   (only IDP) |
| Invalid IssueOrderFlag  (only IDP) |
| Invalid TimeInForce |
| Invalid Position  (only IDP) |
| Invalid Origin  (only IDP) |

| |
|---|
| Invalid Security Phase |
| Invalid Section Phase |
| Invalid Order Status |
| Invalid Order Qty |
| Invalid DisclosedQty |
| Invalid MinQty |
| Invalid MinFillSize |
| Invalid Order Price |
| Invalid MemberID |
| Invalid Request |
| Invalid CreditLine |
| Invalid IndirectLimit |
| Invalid Qty Parameter |
| Invalid TimeInForce Parameter |
| Numeric Overflow |
| Bid Price has violated Last Price Threshold |
| Ask Price has violated Last Price Threshold |
| Bid Price has violated Close Price Threshold |
| Ask Price has violated Close Price Threshold |
| Order Already Exist |
| Best Price Threshold Violated |
| AT Send Error |
| Security Not Tradable |
| Order can not match |
| Best Price Missing |
| Tag xxx should have value = yyy |

| |
|---|
| Tag xxx has a wrong value |
| Only 1 PartyID is supported |
| Invalid Profile |
| Member not profiled on Class |
| Operator not profiled on Security Class |
| Operator not profiled on Qty Parameter |
| Operator not profiled on Capacity-TimeInForce |
| Operator not profiled for editing |
| Operator can not see other Operator Info |
| Invalid Bid MinVolQty |
| Invalid Ask MinVolQty |
| New Password Repeated |
| Invalid New Password Characters |
| New Password Too Easy |
| Insufficient New Password Length |
| Maximum Rfq exceeded |
| Maximum Rfq Quote exceeded |
| Invalid RFQ Quantity |
| Invalid RFQ Price |
| Invalid RFQ Min Qty |
| Invalid RFQ Destination Number |
| RFQ Reference Not Found |
| RFQ Type Not Allowed |
| RFQ Quote Not Found |
| RFQ Edit Not Allowed |
| Invalid RFQ Edit |

| |
|---|
| RFQ Not Found |
| Not Administrator |
| Not Enabled Member TradeOn |
| ForwardForward Label Not Found |
| Calendar Not Found |
| Section Property Not Found |
| Invalid Section Property Value |
| Invalid Broken Date |
| Not Enabled CAPS Admin |
| Min Member Qty Not Enabled" |
| RFQ Not Allowed |
| RFQ Invalid Operator Role |
| Invalid RFQ Destination |
| Quote not active |
| Member Min Qty Not Enabled |
| Member Min Qty Not Compliant With Min Prod Quantity |
| Invalid RFQ Status |
| RFQ Not Active |
| Cannot create administrator |
| Invalid Hidden Qty |
| Order not active |
| Cannot change administrator |
| Trader Connected |
| Not Allowed to send Transaction |
| Counterpart Setup Error |
| Swap Welcome ValueDenied |

| |
|---|
| Invalid Counterpart |
| Invalid Currency |
| Too Many Setup Switches |
| Invalid Section |
| Invalid Server Status |
| Invalid Equal Rate |
| Invalid Preview Initial Date |
| Invalid Preview Final Date |
| Invalid Member Status |
| Insufficient Guarantee |
| Fill Already Allocated |
| Invalid Allocation |
| Too many securities with same Issue Type |
| Too many securities with same Issue Country |
| Too many securities with same Issuer |
| Too many securities with same Rating |
| Too many securities with same Currency |
| Security Price too old for allocation |
| Security quantity too low for allocation |
| Cannot use securities issued by you |
| Invalid Initial Date |
| Invalid Final Date |
| Quote Not Tradable |
| Invalid Settlement Mode |
| Invalid Transparent Flag |
| Invalid CCP Only Flag |

| |
|---|
| Invalid Repo Class |
| RFQ Anonymous Not Allowed |
| RFQ Anonymous Member Not Allowed |
| RFQ destination member is Unwelcome |
| Invalid Spot Price |
| OtcFill Expired |
| Invalid Quantity |
| Invalid Rate |
| Rfq Reply Too Late |
| Qty Not Compliant With Member Min Qty |
| Application not available at this time |
| Invalid Operator Profile |
| Invalid Settlement System |
| Invalid Collaterals Settlement Mode |
| Not Yet Settled |
| Not Allowed to Edit Order |
| Invalid Duration |
| Invalid ClientID |
| Invalid Settlement Date |
| Cannot update, too early |
| Invalid RFQ action |
| Invalid RFQ Quote Image |
| RFQ Invalid Yield |
| Attention: Accept Not Allowed |
| There is already an exception. Please restore first |
| Planning section time earlier than security planning time |

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| |
|---|
| Invalid OTC Status |
| Not Enabled Member |
| Not Allowed AON |
| Qty Higher Than Issue Qty |
| Too many transactions per time unit |

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