Borsa Italiana Cash and Derivatives Markets

FIX 4.2 Protocol Specification Guide

v. <del>3.0.5</del>3.0.6

September October 2017



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# **Revision History**

| Date              | Version | Description  | Author         |
|-------------------|---------|--|----------------|
| June 2017         | 3.0.0   | MiFID II adaptions, document rebranding  | Borsa Italiana |
| August 2017       | 3.0.1   | Removed unnecessary fields from the order cancel request message     Amendments to new order – cross message     Clarification on reserved values for tags 448 (PartyID) and 2376 (PartyRoleQualifier)   | Borsa Italiana |
| August 2017       | 3.0.2   | <ul> <li>Fixed tag of field WaiverFlagValue</li> <li>Added CrossID to New Order — Cross message</li> <li>Moved some fields into NoSides group in New Order — Cross Message</li> <li>Modified OrdType for New Order — Cross message</li> <li>Added specific ExecutionReport message for Cross Order entry</li> <li>PartyRoleQualifier set to non mandatory</li> </ul> | Borsa Italiana |
| September<br>2017 | 3.0.3   | <ul> <li>Removed DeferralFlag and DeferralFlagValue fields</li> <li>Fixed tag of field WaiverFlag</li> </ul>   | Borsa Italiana |

|                   |       | Fixed tag of field WaiverFlagValue number (8014)  |                |
|-------------------|-------|---|----------------|
| September<br>2017 | 3.0.4 | Tag 581 (AccountType) removed   | Borsa Italiana |
| September<br>2017 | 3.0.5 | Tag 528 (orderCapacity) replaced with<br>custom tag 6582 as 528 is not in the<br>FIX 4.2 standard | Borsa Italiana |
| October 2017      | 3.0.6 | Replaces tag 59 with tag 5251 (time in force) in the execution report messages                    | Borsa Italiana |

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### 2 Introduction

This document describes specifically the message format of the implementation of the FIX interface of the application GFIXOR.

Changes from the versions 2.X.X are highlighted in yellow.

### 2.1 References

1. FIX Protocol Specification Version 4.2. Mar 1, 2000 (see <a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>)

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### 3 User defined fields

In order to provide maximum flexibility for its users, the FIX protocol accommodates user-defined fields. These fields are intended to be implemented between consenting trading partners. The tag numbers 5000 to 9999 have been reserved for use with user defined fields and can be registered/reserved via the FIX website. The tag numbers greater than or equal to 10000 have been reserved for internal use (within a single firm) and do not need to be registered/reserved via the FIX websiteOrder entry.

In GFIXOR some user defined fields are used to provide special features implemented by the underlying markets.

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### 4 Configuration

### 4.1 Connection parameters

GFIXOR communicates with its clients by means of a TCP connection. Clients must provide a username and a password for the authentication procedure.

Borsa Italiana will provide all clients with an IP address and a TCP port number (see below), a firm code, a username and a password.

### CDS environment:

Target IP: 194.169.15.168

TCP port = 34910

### Production environment:

Target IPs: 194.169.15.134; 194.169.15.135

TCP port = 34910

### 4.2 Encryption

This release of GFIXOR does not support encryption.

### 4.3 Date and Time

All messages which require date and time values will adhere to the FIX Protocol 4.2 convention. The format is YYYYMMDD-HH:MM:SS.mmmuuu

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### 5 Message header and trailer

All messages exchanged between GFIXOR and its FIX client must contain an header and a trailer, as specified by the FIX protocol.

### 5.1 Header for messages from client to GFIXOR

| Tag | Field Name   | Req'd | Format  | Comments   |
|-----|--------------|-------|---------|--|
| 8   | BeginString  | Y     | String  | "FIX.4.2"  |
| 9   | BodyLength   | Y     | int     | Must be second field in message (see FIX protocol specification).  |
| 35  | MsgType      | Y     | String  | Must be third field in message. (see FIX protocol specification).  |
| 49  | SenderCompID | Y     | String  | Compound field in the form:  firm_id#username  where firm_id is an assigned value used to identify firm sending message and username is a code for authentication purpose (togheter with the password specified in the logon message). |
| 56  | TargetCompID | Y     | String  | Assigned value used to identify receiving market: XMILITMMDMI (IDeM)   |
| 34  | MsgSeqNum    | Y     | int     | See FIX protocol specification.  |
| 43  | PossDupFlag  | N     | Boolean | Always required for retransmitted messages, whether prompted by the sending system or as the result of a resend request (see FIX protocol specification).  |
| 97  | PossResend   | N     | Boolean | Required when message may be duplicate of another message sent under a different sequence number (see FIX protocol specification.)   |

|   | 52  | SendingTime     | Y | UTCTimestamp | Time of message transmission, with microseconds (always expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu   |
|---|-----|-----------------|---|--------------|---|
| • | 122 | OrigSendingTime | N | UTCTimestamp | Required for message resent as a result of a ResendRequest. If data is not available set to same value as SendingTime (see FIX protocol specification).  Format: YYYYMMDD-HH:MM:SS.mmmuuu |

### Header for messages from GFIXOR to client 5.2

| Tag | Field Name   | Req'd | Format  | Comments  |
|-----|--------------|-------|---------|---|
| 8   | BeginString  | Υ     | String  | "FIX.4.2"   |
| 9   | BodyLength   | Υ     | int     | Must be second field in message (see FIX protocol                         |
|     |              |       |         | specification).   |
| 35  | MsgType      | Y     | String  | Must be third field in message. (see FIX protocol                         |
|     |              |       |         | specification).   |
| 49  | SenderCompID | Υ     | String  | Underlying market identification, as specified in                         |
|     |              |       |         | the first logon message.  |
| 56  | TargetCompID | Y     | String  | Counterpart firm identification, as specified in the first logon message. |
| 34  | MsgSeqNum    | Y     | int     | See FIX protocol specification.   |
| 43  | PossDupFlag  | N     | Boolean | Always required for retransmitted messages,                               |
|     |              |       |         | whether prompted by the sending system or as the                          |
|     |              |       |         | result of a resend request (see FIX protocol                              |
|     |              |       |         | specification).   |

| 97  | PossResend      | N | Boolean      | Required when message may be duplicate of another message sent under a different sequence number (see FIX protocol specification.)  |
|-----|-----------------|---|--------------|---|
| 52  | SendingTime     | Y | UTCTimestamp | Time of message transmission, with microseconds (always expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu   |
| 122 | OrigSendingTime | N | UTCTimestamp | Required for message resent as a result of a ResendRequest. If data is not available set to same value as SendingTime (see FIX protocol specification).  Format: YYYYMMDD-HH:MM:SS.mmmuuu |

# Administrative messages

#### Logon from client to GFIXOR 6.1

| Tag | Field Name       | Req'd | Format | Comments                                     |
|-----|------------------|-------|--------|--|
|     | Standard Header  | Y     |        | MsgType = A                                  |
| 98  | EncryptMethod    | Y     | int    | Always 0 (unencrypted).                      |
| 108 | HeartBtInt       | Y     | int    | Always 30.                                   |
| 95  | RawDataLength    | Υ     | int    | Length, in bytes, of the authentication code |
|     |                  |       |        | specified in tag 96.                         |
| 96  | RawData          | Y     | data   | Authentication password                      |
|     | Standard Trailer | Y     |        |  |

#### Logon from GFIXOR to client. 6.2

| Tag | Field Name       | Req'd | Format | Comments                |
|-----|------------------|-------|--------|-------------------------|
|     | Standard Header  | Y     |        | MsgType = A             |
| 98  | EncryptMethod    | Y     | int    | Always 0 (unencrypted). |
| 108 | HeartBtInt       | Y     | int    | Always 30.              |
|     | Standard Trailer | Y     |        |                         |

#### Logout 6.3

| Tag | Field Name       | Req'd | Format | Comments                           |
|-----|------------------|-------|--------|------------------------------------|
|     | Standard Header  | Υ     |        | MsgType = 5                        |
| 58  | Text             | N     | String | Reason description for the logout. |
|     | Standard Trailer | Y     |        |                                    |

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### 6.4 Heartbeat

The Heartbeat message must have the format described in [1].

### 6.5 Test Request

The Test Request message must have the format described in [1].

### 6.6 Resend Request

The Resend Request message must have the format described in [1].

### 6.7 Reject (session level)

The Reject (session level) message must have the format described in [1].

### 6.8 Sequence Reset (Gap Fill)

The Sequence Reset (Gap Fill) message must have the format described in [1].

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### 7 Order management

GFIXOR currently supports the New Order Single, Order Modification Request and Order Cancel Request FIX messages.

### 7.1 New Order - Single

| Tag   | Field Name      | Reg'd | Format | Comments  |
|-------|-----------------|-------|--------|---|
| 1 3.9 | Standard Header | Y     |        | MsgType = D   |
| 1     | Account         | Y     | String | Account mnemonic as agreed between buy and sell sides, e.g. broker and institution or investor/intermediary and fund manager.   |
| 55    | Symbol          | Y     | String | Security code as accepted by the exchange.  - Instrument identifier [BORSA ITALIANA MIT markets]  - SICO code [SOLA IDeM]   |
| 54    | Side            | Y     | char   | Side of order Valid values:  1 = Buy 2 = Sell   |
| 38    | OrderQty        | Υ     | Qty    | Quantity ordered.   |
| 21    | Handlinst       | Y     | char   | Instructions for order handling on Broker trading floor Only valid value: 2 = Automated execution order, public, Broker intervention OK   |
| 110   | MinQty          | N     | Qty    | Minimum quantity  |
| 5251  | TimeInForce     | N     | Char   | Specifies how long the order remains in effect.  Valid values:  0 = Day  1 = Good Till Cancel (GTC)  2 = At the Opening (OPG)  3 = Immediate or Cancel (IOC)  4 = Fill or Kill (FOK)  6 = Good Till Date (GTD)  7 = At the Close (ATC)  8 = Deferred Display (DD)  9 = Display On Book (DOB)  A = Good in Closing Auction (GCA) |

| 432  | ExpireDate | N | LocalMktDate | C = Good for Intra-Day Auction (GFX) D = Good for Auction (GFA) X = Closing Price Cross (CPX) NOTE: If not specified, the field takes "0" as default value.  Date of order expiration (last day the order can trade), always expressed in terms of the local market date.   |
|------|------------|---|--------------|---|
|      |            |   |              | Conditionally required if TimeInForce = GTD and ExpireTime is not specified.  |
| 126  | ExpireTime | N | UTCTimestamp | Time/Date of order expiration with microseconds, always expressed in UTC (Universal Time Coordinated, also known as "GMT"). Format: YYYYMMDD-HH:MM:SS.mmmuuu Conditionally required if TimeInForce = GTD and ExpireDate is not specified.   |
| 5252 | QtyParam   | N | char         | Expresses the quantity condition on which the security is to be traded.  Valid values:  4 = Fill Minimum Quantity (FMQ)  A = Odd Lot (ODL)  |
| 40   | OrdType    | N | char         | Order type:  1 = Market 2 = Limit  NOTE: This field is mandatory if OrderTypeExt is not used.   |
| 5253 | OrdTypeExt | N | char         | Extended order type.  Valid values:  1 = Market 2 = Limit 3 = Stop 4 = Stop Limit J = Market If Touched (MIT) K = Market with Leftover as Limit (market order then unexecuted quantity becomes limit order at last price met) P = Exchange for Physical (SOLA IDEM only) Q = Market at Any Price with Leftover as Limit (market order that executes any price available, then unexecuted quantity |

| 337          | ContraTrader                       | N   | String  | becomes limit order at last price met) R = Interbank S = Market Limit If Touched (MIT) T = Committed Principal. NOTE: This field is mandatory if OrderType is not used.  Required if OrderType is R (Interbank/Committed). The tag is the opposite firm when entering Committed  |
|--------------|------------------------------------|-----|---------|--|
| 111          | MaxFloor                           | N   | Qty     | Order.  Maximum number of shares within an order to be shown on the exchange floor at any given time.  |
| 1084         | DisplayMethod                      | N   | int     | Valid only for BORSA ITALIANA MIT markets.  If this is populated with value 3 while a value which is greater than 0 and less than the Order Quantity is populated in MaxFloor (111), the MaxFloor (111) after a replenishment will be random.  If not sent, while a positive value less than the Order Quantity is populated in MaxFloor (111), the MaxFloor (111) after a replenishment will be the original MaxFloor (111).  Valid values:  3 = Random (randomize value) 4 = Undisclosed (Reserve Order) |
| 44           | Price                              | N   | Price   | Price per share.   |
| 99           | StopPx                             | N   | Price   | Price per share. Required for: OrdTypeExt = "Stop", OrdTypeExt = "Stop limit", OrdTypeExt = "MIT" OrdTypeExt = "MIT limit".  |
| 5255<br>1091 | StopPxCondition  PreTradeAnonymity | N   | char    | Can be used to specify the Stop Order trigger condition.  Valid values:  0 = Last trade price  1 = Best Bid Price  2 = Best Ask Price  Allows trader to explicitly request anonymity   |
| 1031         | 1 To Trade/HorryHilly              | 1 1 | Doolean | Thiows trader to explicitly request anonymity  |

|      |                   |   |      | or disclosure in pre-trade market data feeds. Anonymity is relevant in markets where counterparties are regularly disclosed in order depth feeds. Disclosure is relevant when counterparties are not normally visible. Valid values:  Y = Anonymous N = Named NOTE: If not specified, the field takes "N" as default value |
|------|-------------------|---|------|--|
| 6582 | CustOrderCapacity | N | char | Designates the capacity of the firm placing the order (BORSA ITALIANA MIT markets).  Valid values:  A = Any other trading capacity (AOTC)  P = Dealing on own account (DEAL) —  Principal  R = Matched Principal (MTCH)  NOTE: If not specified, the field takes "A" as default value                                      |
| 6529 | OrderRestrictions | N | char | Restrictions associated with an order. Valid values:  4 = Competing Market Maker (liquidity provider)  5 = Acting as Specialist in the security 8 = External Market Participant (non specialist)   |
| 5250 | CustomerType      | N | int  | Valid values:  21 = Member  22 = Institutional customer (interconnected)  23 = Private customer (interconnected)  24 = Organizational unit (interconnected)  25 = Branch of Bank  26 = Online Retail Trading   |
| 77   | PositionEffect    | N | char | For options only.  Valid Values:  O = Open C = Close N = Default for the account.  |
| 828  | TrdType           | N | int  | Type of Trade. Required for OrdTypeExt ="R".  Valid values:  0 = Regular Trade   |

|               |       |                            |   |        | 1 = Block Trade.  |
|---------------|-------|----------------------------|---|--------|---|
| 453           | NoPar | tyID                       | Y | int    | Number of PartyID repeating group   |
|               |       |                            |   |        | instances.  |
| <b>→</b>      | 448   | PartyID                    | Y | String | Identifier of the trading party. This should contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None 1 = AGGR (can be used only if PartyRole = 3) 2 = PNAL (can be used only if PartyRole = 3) 3 = CLIENT (can be used only if PartyRole = 12)  |
| <b>→</b>      | 447   | PartyIDSource              | Y | char   | Identifies class or source of the PartyID (448) value.  Valid values: P = Short Code  |
| <b>→</b>      | 452   | PartyRole                  | Υ | int    | Identifies the type or role of the PartyID (448) specified.  Valid values:  3 = Client ID  122 = Investment Decision Maker  12 = Executing Trader   |
| <b>→</b>      | 2376  | PartyRoleQualifier         | N | int    | Provides a further qualification for the value specified in the Party Role (452) Valid values:  22 = Algorithm (can be used only if PartyRole = 122 OR = 12) 23 = Firm or Legal Entity (can be used only if PartyRole = 3) 24 = Natural Person  Required only if the PartyID is a short code (i.e. 4-4294967295). |
| 2593          | NoOrd | erAttribute                | N | int    | Number of Order Attributes. For SOLA markets this field is mandatory and must be set to 2.  |
| <del>\</del>  | 2594  | OrderAttributeType         | N | int    | Provides the ability to specify if the order was generated via an algorithm.  Valid values:  2 = Liquidity Provision activity order (SOLA markets only)  4 = Algorithm  For SOLA markets this field is mandatory.   |
| $\rightarrow$ | 2595  | <b>OrderAttributeValue</b> | N | char   | Required to be specified if   |

|      |                  | 1 |        | 0 1 4 1 1 7 (0 7 0 1)                                 |
|------|------------------|---|--------|---|
|      |                  |   |        | OrderAttributeType (2594) is specified.               |
|      |                  |   |        | Valid values:   |
|      |                  |   |        | Y = Yes   |
|      |                  |   |        | N = No  |
|      |                  |   |        | For SOLA markets this field is mandatory.             |
| 1724 | OrderOrigination | N | int    | Provides the ability to indicate the                  |
|      |                  |   |        | involvement of Direct Electronic Access               |
|      |                  |   |        | (DEA).  |
|      |                  |   |        | Valid values:   |
|      |                  |   |        | 5 = DEA   |
| 423  | PriceType        | N | char   | Code to represent the price type.                     |
|      |                  |   | 3.7.3. | Valid values:   |
|      |                  |   |        | C = Committed   |
|      |                  |   |        | L = Limit (price set in message)                      |
|      |                  |   |        | M = at best opposite price (Top Order)                |
|      |                  |   |        | O = at Opening price                                  |
|      |                  |   |        | P = Exchange For Physical (SOLA IDEM                  |
|      |                  |   |        | , ,   |
|      |                  |   |        | only)   |
|      |                  |   |        | W = at any price (Market Order)                       |
|      |                  |   |        | (blank): Unknown                                      |
| 406  | FairValue        | N | String | Text for Physical Leg.                                |
|      |                  |   |        | For SOLA markets this field is mandatory.             |
| 5172 | TriggerSymbol    | N | String | Contains the symbol used to trigger the               |
|      |                  |   |        | order. Required for:                                  |
|      |                  |   |        |   |
|      |                  |   |        | OrdTypeExt = "Stop",                                  |
|      |                  |   |        | OrdTypeExt = "Stop limit",                            |
|      |                  |   |        | OrdTypeExt = "MIT"                                    |
|      |                  |   |        | OrdTypeExt = "MIT limit".                             |
| 11   | ClOrdID          | Υ | String | Unique identifier of the order as assigned by         |
|      |                  |   |        | institution.  |
|      |                  |   |        | It must be in the format:                             |
|      |                  |   |        |   |
|      |                  |   |        | [order_date_reference#]free_reference_alph            |
|      |                  |   |        | anumeric  |
|      |                  |   |        | anamene   |
|      |                  |   |        | where order_date_reference is an optional             |
|      |                  |   |        | order date reference that may not be more             |
|      |                  |   |        | than one year prior to, nor exceed, the entry         |
|      |                  |   |        | · · · · · · · · · · · · · · · · · · ·                 |
|      |                  |   |        | 1 '   |
|      |                  |   |        | free_reference_alphanumeric value cannot              |
|      |                  |   |        | exceed:   |
|      |                  | 1 | I      | <ul> <li>10 characters (BORSA ITALIANA MIT</li> </ul> |
|      |                  |   |        | markets)  |

|          |                   |                  |   |              | - 6 characters (IDeM SOLA). Examples: 01/05/2004#XhdySmm or, alternatively: uhjlOhnjba   |
|----------|-------------------|------------------|---|--------------|--|
| 109      | Client            | ID               | N | String       | Firm identifier used in third party transactions.  |
| 58       | Text              |                  | N | String       | Free format text string. The length of this value cannot exceed 16 characters. Useful only for SOLA markets: when specified, the text will be returned in the related ExecutionReport, if the order is accepted. |
| 50       | Sende             | erSubID          | N | String       | Assigned value used to identify specific message originator (desk, trader, etc.).  |
| 5392     | SenderGroupID     |                  | N | String       | Assigned value used to identify specific message originator group.   |
| 60       | Trans             | actTime          | Y | UTCTimestamp | Time, with microseconds, this order request was initiated/released by the trader or trading system (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu  |
| 386      | NoTradingSessions |                  | N | int          | Specifies the number of repeating TradingSessionIDs.   |
| <b>→</b> | 336               | TradingSessionID | N | String       | Required if NoTradingSessions is > 0. Here it specifies the <i>entry market phase</i> .  |
|          | Stand             | lard Trailer     | Y |              |  |

#### Order Modification Request 7.2

| Tag | Field Name      | Reg'd | Format | Comments  |
|-----|-----------------|-------|--------|---|
|     | Standard Header | Y     |        | MsgType = G   |
| 1   | Account         | N     | String | Account mnemonic as agreed between buy and sell sides, e.g. broker and institution or investor/intermediary and fund manager.                                     |
| 55  | Symbol          | Y     | String | Security code as accepted by the exchange. It must match the one in the original order Instrument identifier [BORSA ITALIANA MIT markets] - SICO code [SOLA IDeM] |
| 54  | Side            | Y     | char   | Side of order Valid values:  1 = Buy 2 = Sell   |

| 38   | OrderQty    | Υ | Qty          | Quantity ordered.   |
|------|-------------|---|--------------|---|
| 21   | Handlinst   | Y | char         | Instructions for order handling on Broker trading floor Only valid value: 2 = Automated execution order, public, Broker intervention OK   |
| 110  | MinQty      | N | Qty          | Minimum quantity  |
| 5251 | TimeInForce | N | Char         | Specifies how long the order remains in effect.  Valid values:  0 = Day  1 = Good Till Cancel (GTC)  2 = At the Opening (OPG)  3 = Immediate or Cancel (IOC)  4 = Fill or Kill (FOK)  6 = Good Till Date (GTD)  7 = At the Close (ATC)  8 = Deferred Display (DD)  9 = Display On Book (DOB)  A = Good in Closing Auction (GCA)  C = Good for Intra-Day Auction (GFX)  D = Good for Auction (GFA)  X = Closing Price Cross (CPX)  NOTE: If not specified, the field takes "0" as default value. |
| 432  | ExpireDate  | N | LocalMktDate | Date of order expiration (last day the order can trade), always expressed in terms of the local market date.  Conditionally required if TimeInForce = GTD and ExpireTime is not specified.  |
| 126  | ExpireTime  | N | UTCTimestamp | Time/Date of order expiration with microseconds, always expressed in UTC (Universal Time Coordinated, also known as "GMT"). Format: YYYYMMDD-HH:MM:SS.mmmuuu Conditionally required if TimeInForce = GTD and ExpireDate is not specified.   |
| 5252 | QtyParam    | N | char         | Expresses the quantity condition on which the security is to be traded.  Valid values:  4 = Fill Minimum Quantity (FMQ)  A = Odd Lot (ODL).   |
| 40   | OrdType     | N | char         | Order type:   |

|      |                   |    |       | 1 = Market 2 = Limit  NOTE: This field is mandatory if   |
|------|-------------------|----|-------|--|
| EOEO | OrdTypeFyt        | NI | char  | OrderTypeExt is not used.  |
| 5253 | OrdTypeExt        | N  | char  | Extended order type.  Valid values:  1 = Market  2 = Limit  3 = Stop  4 = Stop Limit  J = Market If Touched (MIT)  K = Market with Leftover as Limit (market order then unexecuted quantity becomes limit order at last price met)  P = Exchange for Physical (SOLA IDEM only)  Q = Market at Any Price with Leftover as Limit (market order that executes any price available, then unexecuted quantity becomes limit order at last price met)  R = Interbank  S = Market Limit If Touched (MIT)  T = Committed Principal.  NOTE: This field is mandatory if OrderType is not used. |
| 111  | MaxFloor          | N  | Qty   | Maximum number of shares within an order to be shown on the exchange floor at any given time.  |
| 44   | Price             | N  | Price | Price per share.   |
| 99   | StopPx            | N  | Price | Price per share. Required for: OrdTypeExt = "Stop", OrdTypeExt = "Stop limit", OrdTypeExt = "MIT" OrdTypeExt = "MIT limit".  |
| 5255 | StopPxCondition   | N  | Char  | Can be used to specify the Stop Order trigger condition. Valid values:  0 = Last trade price 1 = Best Bid Price 2 = Best Ask Price.  |
| 6529 | OrderRestrictions | N  | char  | Restrictions associated with an order.   |

|          |         |                    |        |        | Valid values:  4 = Competing Market Maker (liquidity provider)  5 = Acting as Specialist in the security  8 = External Market Participant (non  |
|----------|---------|--------------------|--------|--------|---|
| 5250     | Cuetor  | morTuno            | NI     | int    | specialist).  Must match original order.  |
| 77       | Positio | merType<br>nEffect | N<br>N | char   | For options only.   |
|          |         |                    |        | Onai   | Valid Values: O=Open C=Close N=Default for the account.   |
| 453      | NoPar   | tyID               | Υ      | int    | Number of PartyID repeating group instances.  |
| <b>→</b> | 448     | PartyID            | Y      | String | Identifier of the trading party. This should contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None 1 = AGGR (can be used only if PartyRole = 3) 2 = PNAL (can be used only if PartyRole = 3) 3 = CLIENT (can be used only if PartyRole = 12)  |
| <b>→</b> | 447     | PartyIDSource      | Y      | char   | Identifies class or source of the PartyID (448) value.  Valid values:  P = Short Code   |
| <b>→</b> | 452     | PartyRole          | Y      | int    | Identifies the type or role of the PartyID (448) specified.  Valid values: 3 = Client ID 122 = Investment Decision Maker 12 = Executing Trader  |
| <b>→</b> | 2376    | PartyRoleQualifier | N      | int    | Provides a further qualification for the value specified in the Party Role (452) Valid values:  22 = Algorithm (can be used only if PartyRole = 122 OR = 12) 23 = Firm or Legal Entity (can be used only if PartyRole = 3) 24 = Natural Person  Required only if the PartyID is a short code (i.e. 4-4294967295). |

| 423  | PriceType     | N | char   | Code to represent the price type.  Valid values:  C = Committed  L = Limit (price set in message)  M = at best opposite price (Top Order)  O = at Opening price  P = Exchange For Physical (SOLA IDEM only)  W = at any price (Market Order)  (blank): Unknown   |
|------|---------------|---|--------|--|
| 58   | Text          | N | String | Free format text string. The length of this value cannot exceed 16 characters. Useful only for SOLA markets: when specified, the text will be returned in the related ExecutionReport, if the order is accepted.   |
| 5172 | TriggerSymbol | N | String | Contains the symbol used to trigger the order. Required for:  OrdTypeExt = "Stop", OrdTypeExt = "Stop limit", OrdTypeExt = "MIT" OrdTypeExt = "MIT limit".   |
| 11   | CIOrdID       | Y | String | Unique identifier of replacement order as assigned by institution. Note that this identifier will be returned in the CIOrdID field of the Cancel Reject message if the replacement request has been rejected. It must be in the format:  [order_date_reference#]free_reference_alph anumeric  where order_date_reference is an optional order date reference that may not be more than one year prior to, nor exceed, the entry request date. The length of the free_reference_alphanumeric value cannot exceed:  - 10 characters (BORSA ITALIANA MIT markets) - 6 characters (IDeM SOLA).  Examples: 01/05/2004#XhdySmm |

|          |                   |                 |   |              | or, alternatively: uhjlOhnjba   |
|----------|-------------------|-----------------|---|--------------|---|
| 41       | OrigClO           | rdID            | Y | String       | ClOrdID of the previous order (NOT the initial order of the day).   |
| 109      | ClientID          |                 | N | String       | Firm identifier used in third party transactions.   |
| 50       | SenderS           | SubID           | N | String       | Assigned value used to identify specific message originator (desk, trader, etc.).   |
| 60       | Transac           | tTime           | Y | UTCTimestamp | Time, with microseconds, this order request was initiated/released by the trader or trading system (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu |
| 386      | NoTradingSessions |                 | N | int          | Specifies the number of repeating<br>TradingSessionIDs  |
| <b>→</b> | 336 Ti            | radingSessionID | N | String       | Required if NoTradingSessions is > 0. Here it specifies the <i>entry market phase</i> .   |
| 37       | OrderID           |                 | N | String       | Market–assigned code of the order to be modified.   |

#### 7.3 **Order Cancel Request**

| Tag | Field Name      | Req'd | Format | Comments   |
|-----|-----------------|-------|--------|--|
|     | Standard Header | Y     |        | MsgType = F  |
| 55  | Symbol          | Y     | String | Security code as accepted by the exchange. It must match the one in the original order.  - Instrument identifier [BORSA ITALIANA MIT markets]  - SICO code [SOLA IDeM]   |
| 41  | OrigClOrdID     | Y     | String | ClOrdID of the previous order (NOT the initial order of the day) when cancelling or replacing an order.  |
| 37  | OrderID         | N     | String | Market–assigned code of the order to be cancelled.   |
| 11  | ClOrdID         | Y     | String | Unique identifier of replacement order as assigned by institution. Note that this identifier will be returned in the ClOrdID field of the Cancel Reject message if the replacement request has been rejected. It must be in the format:  [order_date_reference#]free_reference_alpha numeric |

|      |              |   |              | where order_date_reference is an optional order date reference that may not be more than one year prior to, nor exceed, the entry request date. The length of the free_reference_alphanumeric value cannot exceed:  - 10 characters (BORSA ITALIANA MIT markets) - 6 characters (IDeM SOLA).  Examples:  01/05/2004#XhdySmm  or, alternatively: uhjlOhnjba  |
|------|--------------|---|--------------|---|
| 54   | Side         | Υ | Char         | Side.   |
| 60   | TransactTime | Y | UTCTimestamp | Time, with microseconds, this order request was initiated/released by the trader or trading system (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu   |
| 40   | OrdType      | N | char         | ler type:  1 = Market 2 = Limit  NOTE: This field is mandatory if OrderTypeExt is not used.   |
| 5253 | OrdTypeExt   | N | char         | Extended order type.  Valid values:  1 = Market  2 = Limit  3 = Stop  4 = Stop Limit  J = Market If Touched (MIT)  K = Market with Leftover as Limit (market order then unexecuted quantity becomes limit order at last price met)  P = Exchange for Physical (SOLA IDEM only)  Q = Market at Any Price with Leftover as Limit (market order that executes any price available, then unexecuted quantity becomes limit order at last price met)  R = Interbank  S = Market Limit If Touched (MIT)  T = Committed Principal. |

|    |                  |   |        | NOTE: This field is mandatory if OrderType is not used.                           |
|----|------------------|---|--------|---|
| 50 | SenderSubID      | N | String | Assigned value used to identify specific message originator (desk, trader, etc.). |
|    | Standard Trailer | Υ |        |   |

### 7.4 New Order - Cross

This type of message is not included in the FIX 4.2 standard protocol. In order to support the required functionality for the underlying markets, a non-standard message has been derived from the "New Order – Cross" adopted in the FIX 4.3 protocol.

| Tag      | Field Nam       | е       | Req'd   | Forma  | Comments  |     |  |
|----------|-----------------|---------|---------|--------|---|-----|--|
|          | Standard Header |         | Y       | t      | MsgType = s (non FIX 4.2 standard)  |     |  |
| 55       | Symbol          | 1104401 | Ý       | String | Security code   |     |  |
| 548      | CrossID         |         | Y       | String | Unique identifier of the cross-order as assigned by institution.  |     |  |
| 38       | OrderQty        |         | Y       | Qty    | Quantity  |     |  |
| 21       | Handlinst       |         | Y       | char   | Instructions for order handling on Broker trading floor Only valid value: 2 = Automated execution order, public, Broker intervention OK |     |  |
| 40       | OrdType         |         | Y       | char   | Can be used to specify the type of order the quote is for.  Valid values:  C = Committed  |     |  |
| 44       | Price           |         | N       | Price  | Price per share.  |     |  |
| 828      | TrdType         |         | TrdType |        | N   | int | Type of Trade  0 = Regular Trade  1 = Block Trade  Note: Field is mandatory for IDeM |
| 6552     | NoSides         |         | Y       | int    | Number of Side repeating group instances.  Valid values:  2 = both sides  |     |  |
| <b>→</b> | 54              | Side    | Y       | char   | Side of order<br>Valid values:  |     |  |

|          |          |          |                        |   |        | 1 = Buy<br>2 = Sell  |
|----------|----------|----------|------------------------|---|--------|--|
| =        | •        | 6582     | CustOrderCapa<br>city  | N | char   | Designates the capacity of the firm placing the order (BORSA ITALIANA MIT markets).  Valid values:  A = Any other trading capacity (AOTC)  P = Dealing on own account (DEAL) –  Principal  R = Matched Principal (MTCH)  NOTE: If not specified, the field takes "A" as default value                                |
| -3       | >        | 11       | CIOrdID                | Y | String | Unique identifier of the order as assigned by institution. It can have any alphanumeric format.  |
| <b>→</b> | 453      | NoPartyl | ID                     | Υ | int    | Number of PartyID repeating group instances.   |
| <b>→</b> | <b>→</b> | 448      | PartyID                | Y | String | Identifier of the trading party. This should contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None  1 = AGGR (can be used only if PartyRole = 3)  2 = PNAL (can be used only if PartyRole = 3)  3 = CLIENT (can be used only if PartyRole = 12)  |
| <b>→</b> | <b>→</b> | 447      | PartyIDSource          | Y | char   | Identifies class or source of the PartyID (448) value.  Valid values:  P = Short Code  |
| <b>→</b> | <b>→</b> | 452      | PartyRole              | Y | int    | Identifies the type or role of the PartyID (448) specified.  Valid values:  3 = Client ID  122 = Investment Decision Maker  12 = Executing Trader  |
| <b>→</b> | <b>→</b> | 2376     | PartyRoleQualifi<br>er | Z | int    | Provides a further qualification for the value specified in the Party Role (452)  Valid values:  22 = Algorithm (can be used only if PartyRole = 122 OR = 12)  23 = Firm or Legal Entity (can be used only if PartyRole = 3)  24 = Natural Person  Required only if the PartyID is a short code (i.e. 4-4294967295). |

| <b>→</b> | 2593     | NoOrde   | rAttribute r           | N | int    | Number of Order Attributes.   |
|----------|----------|----------|------------------------|---|--------|---|
| <b>→</b> | <b>→</b> | 2594     | OrderAttributeT<br>ype | N | int    | Provides the ability to specify if the order was generated via an algorithm.  Valid values:  2 = Liquidity Provision activity order (SOLA markets only)  4 = Algorithm  |
| <b>→</b> | <b>→</b> | 2595     | OrderAttributeV alue   | N | char   | Required to be specified if OrderAttributeType (2594) is specified.  Valid values:     Y = Yes     N = No   |
| <b>→</b> | 1724     |          | rigination             | N | int    | Provides the ability to indicate the involvement of Direct Electronic Access (DEA).  Valid values:  5 = DEA   |
| <b>→</b> | 77       | Position | nEffect                | N | char   | For options only. Valid Values:  O = Open C = Close N = Default for the account.  |
| <b>→</b> | 406      | FairValu | ıe                     | N | String | Text for Physical Leg. For SOLA markets this field is mandatory.  |
|          | 23       | PriceTyp | pe                     | N | char   | Code to represent the price type.  Valid values:  C = Committed  L = Limit (price set in message)  M = at best opposite price (Top Order)  O = at Opening price  P = Exchange For Physical (SOLA IDEM only)  W = at any price (Market Order) (blank): Unknown |
| · ·      | 58       | Text     |                        | N | String | Free format text string. The length of this value cannot exceed 16 characters. Useful only for SOLA markets: when specified, the text will be returned in the related ExecutionReport, if the order is accepted.  |
|          |          | Standar  | d Trailer              | Υ |        |   |

September October 2017

### 8 Replies to Transactions

GFIXOR notifies the replies to new order entries and to successful order modifications/cancels via Execution Report messages. It issues, instead, Order Cancel Reject messages upon receipt of order modification or cancel requests which cannot be honored.

### 8.1 Execution Report for single order entry or successful modification or cancel

| Tag  | Field Name      | Req'd | Format | Comments   |
|------|-----------------|-------|--------|--|
|      | Standard Header | Y     |        | MsgType = 8  |
| 1    | Account         | N     | String | Customer account number  |
| 57   | TargetSubID     | N     | String | In the case of the message being received<br>by the client, when the message is a<br>response to a request sent by the client  |
| 11   | ClOrdID         | Y     | String | Unique identifier of the order as assigned by institution.   |
| 55   | Symbol          | Y     | String | Security code as accepted by the exchange Instrument identifier [BORSA ITALIANA MIT markets] - SICO code [SOLA IDeM]   |
| 37   | OrderID         | N     | String | Market–assigned code of the order Required for OrdStatus = New or Replaced. NOTE: This tag value does not change for orders in BORSA ITALIANA MIT markets  |
| 41   | OrigClOrdID     | N     | String | Conditionally required for response to a modification request (ExecType=Pending Replace or Replaced). ClOrdID of the previous order (NOT the initial order of the day) when replacing an order.                |
| 5254 | OrigOrderID     | N     | String | OrderID of the previous order (NOT the initial order of the day) as assigned by the market.  Required for OrdStatus = Replaced.  NOTE: This tag value does not change for orders in BORSA ITALIANA MIT markets |

| 17  | ExecID           | Y | String       | Unique identifier for each Execution Report message. The value is in the following format: UTCDate#ExecutionReportType#Side# InstrumentCode#OrderID ExecutionReportType valid values: 0 = New order 1 = Order replaced 2 = Order canceled 6 = PendingCancel 7 = PendingReplace Example =20050218#0#1#STM#75873 In case of OrdStatus equal to "Rejected", "Pending Cancel", "Pending Replace" and "Pending New", an internal timestamp will be returned in place of OrderID. |
|-----|------------------|---|--------------|---|
| 60  | TransactTime     | Υ | UTCTimestamp | Date/time, with microseconds, the transaction represented by this ExecutionReport occurred (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu   |
| 20  | ExecTransType    | Υ | char         | Identifies transaction type Valid values: 0 = New   |
| 636 | WorkingIndicator | N | Boolean      | Indicates if the order is currently being worked.  Valid values for Stop orders are:  N = Not triggered  Y = Triggered  Applicable only for OrdStatus = "New".  |
| 39  | OrdStatus        | Y | char         | Identifies current status of order. If the order has been successfully replaced and has been totally filled, value is 2 (Totally filled) otherwise same values as ExecType.   |
| 150 | ЕхесТуре         | Υ | char         | Describes the type of execution report.  Valid values:  0 = New  4 = Canceled  5 = Replaced  6 = Pending Cancel  8 = Rejected  E = Pending Replace  |

| 103                | OrdRejReason      | N | int          | For use with ExecType = 8 (Rejected) Valid values: 0 = Broker option 1 = Unknown Symbol 3 = Order exceeds limit 6 = Duplicated order.  |
|--------------------|-------------------|---|--------------|--|
| 77                 | PositionEffect    | N | char         | For options only.  Valid Values:  O = Open  C = Close  N = Default for the account.  |
| 58                 | Text              | N | String       | If an Order is rejected, this field will contain<br>the market representation of the error.<br>Only for SOLA markets: if an order is<br>accepted, the text specified in the original<br>order.         |
| 337                | ContraTrader      | N | String       | Value submitted with the committed order. Only for SOLA markets  |
| 40                 | OrdType           | N | String       | Value submitted with the order.  |
| 5253               | OrdTypeExt        | N | String       | Value submitted with the order.  |
| 59 <u>525</u><br>1 | TimeInForce       | N | Char         | Value submitted with the order.  |
| 126                | ExpireTime        | N | UTCTimestamp | Value submitted with the order.  |
| 432                | ExpireDate        | N | LocalMktDate | Value submitted with the order.  |
| 336                | TradingSessionID  | N | String       | Value submitted with the order.  |
| 54                 | Side              | Υ | char         | Side of the order. For reply to New Order - Cross the valid value is 8 = Cross.  |
| 38                 | OrderQty          | Υ | Qty          | Quantity of the order.   |
| 151                | LeavesQty         | Y | Qty          | Amount of shares open for further execution. If the OrdStatus is Canceled or Rejected (in which case the order is no longer active) then LeavesQty will be 0, otherwise LeavesQty = OrderQty - CumQty. |
| 32                 | LastShares        | Υ | Qty          | Will be "0" (non-fills report).  |
| 31                 | LastPx            | Υ | Price        | Will be "0" (non-fills report).  |
| 14                 | CumQty            | Y | Qty          | Total number of shares filled.   |
| 6                  | AvgPx             | Y | Price        | Calculated average price of all fills on this order.   |
| 44                 | Price             | N | Price        | Required if specified on the order   |
| 99                 | StopPx            | N | Price        | Value submitted with the order.  |
| 1091               | PreTradeAnonymity | N | Boolean      | Value submitted with the order.  |
| 453                | NoPartyID         | Υ | int          | Number of PartyID repeating group instances.   |

| $\rightarrow$ | 448   | PortvID               | Υ | Ctring | Identifier of the trading party. This should  |
|---------------|-------|-----------------------|---|--------|---|
|               |       | PartyID               |   | String | contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None  1 = AGGR (can be used only if PartyRole = 3)  2 = PNAL (can be used only if PartyRole = 3)  3 = CLIENT (can be used only if PartyRole = 12)  |
| <b>→</b>      | 447   | PartyIDSource         | Y | char   | Identifies class or source of the PartyID (448) value.  Valid values:  P = Short Code   |
| <b>→</b>      | 452   | PartyRole             | Y | int    | Identifies the type or role of the PartyID (448) specified. Valid values: 3 = Client ID 122 = Investment Decision Maker 12 = Executing Trader   |
| <b>→</b>      | 2376  | PartyRoleQualifier    | N | int    | Provides a further qualification for the value specified in the Party Role (452) Valid values:  22 = Algorithm (can be used only if PartyRole = 122 OR = 12) 23 = Firm or Legal Entity (can be used only if PartyRole = 3) 24 = Natural Person  Required only if the PartyID is a short code (i.e. 4-4294967295). |
| 2593          | NoOrd | erAttribute           | N | int    | Number of Order Attributes. For SOLA markets this field is mandatory and must be set to 2.  |
| <b>→</b>      | 2594  | OrderAttributeType    | N | int    | Provides the ability to specify if the order was generated via an algorithm.  Valid values:  2 = Liquidity Provision activity order (SOLA markets only)  4 = Algorithm  For SOLA markets this field is mandatory.   |
| <b>→</b>      | 2595  | Order Attribute Value | N | char   | Required to be specified if OrderAttributeType (2594) is specified. Valid values:   |

|       |                           |     |  | Y = Yes  |
|-------|---------------------------|-----|--|--|
|       |                           |     |  | N = No   |
|       |                           |     |  | For SOLA markets this field is mandatory.      |
| 1724  | OrderOrigination          | N   | int  | Provides the ability to indicate the           |
| 1724  | OrderOrigination          | IN  | int  | involvement of Direct Electronic Access        |
|       |                           |     |  |  |
|       |                           |     |  | (DEA).   |
|       |                           |     |  | Valid values:                                  |
|       |                           |     |  | 5 = DEA  |
| 406   | FairValue                 | N   | String   | Text for Physical Leg.                         |
|       |                           |     |  | For SOLA markets this field is mandatory.      |
| 2669  | WaiverFlag                | N   | int  | For SOLA markets this field is mandatory       |
|       |                           |     |  | and is always set to 0.                        |
| 2670  | WaiverFlagValue           | N   | int  | Valid values for SOLA (derivatives)            |
|       | ŭ                         |     |  | markets:                                       |
|       |                           |     |  | 4 = Illiquid (ILQD)                            |
|       |                           |     |  | 5 = Above size (SIZE)                          |
|       |                           |     |  | 6 = Large in scale (LRGS)                      |
|       |                           |     |  | 5 (  |
|       |                           |     |  | Valid values for BORSA ITALIANA MIT            |
|       |                           |     |  | (cash) markets:                                |
|       |                           |     |  | 0 = NLIQ                                       |
|       |                           |     |  | 1 = OILQ                                       |
|       |                           |     |  | 4 = Pre-trade ILQD                             |
|       |                           |     |  | 4 = FIE-Made ILQD                              |
|       |                           |     |  | For SOLA markets this field is mandatory.      |
| 1084  | DisplayMethod             | N   | int  | Display method.                                |
|       |                           |     |  |  |
|       |                           |     |  | Populated only by BORSA ITALIANA MIT           |
|       |                           |     |  | markets.                                       |
|       |                           |     |  |  |
|       |                           |     |  | Valid values:                                  |
|       |                           |     |  | 4 = Undisclosed (reserve)                      |
| 16455 | BestPriceSetter           | N   | int  | Indicates the status of the Best Price Setter: |
| 10433 | Door Hoodeller            | - 1 | THE STATE OF THE S | indicates and status of the Best Files Setter. |
|       |                           |     |  | Populated only by SOLA markets.                |
|       |                           |     |  | top stated only by oo Er ( marrieto.           |
|       |                           |     |  | Valid values:                                  |
|       |                           |     |  | 0 = Order does not have the Best Price         |
|       |                           |     |  | Setter status                                  |
|       |                           |     |  | 1 = Order has the Best Price Setter            |
|       |                           |     |  | status   |
| 847   | CancellationAndAmendments | N   | int  | Cancellation and amendments flag.              |
| 047   | CancellationAndAmendments | IN  | III.   | Cancellation and amendments hag.               |
|       |                           |     |  | Populated only by SOLA markets.                |
|       |                           |     |  | Populated Only by SOLA Markets.                |

|       |                   |   |      | Valid values: 1 = Cancel 2 = Amend  |
|-------|-------------------|---|------|---|
| 6582  | CustOrderCapacity | N | char | The value specified in the corresponding order.  Populated only by BORSA ITALIANA MIT |
|       |                   |   |      | markets.  |
| 30001 | OrderBook         | N | int  | Identifier of the order book.   |
|       |                   |   |      | Populated only by BORSA ITALIANA MIT markets.   |
|       |                   |   |      | Valid values:   |
|       |                   |   |      | 1 = Regular   |
|       |                   |   |      | 11 = RFQ Trades   |
|       | Standard Trailer  | Υ |      |   |

#### **Execution Report for cross order entry** 8.2

| Tag | Field Name      | Req'd | Format | Comments  |
|-----|-----------------|-------|--------|---|
|     | Standard Header | Y     |        | MsgType = 8   |
| 57  | TargetSubID     | N     | String | In the case of the message being received by the client, when the message is a response to a request sent by the client                                   |
| 11  | ClOrdID         | Y     | String | Unique identifier of the order as assigned by institution.  |
| 55  | Symbol          | Y     | String | Security code as accepted by the exchange.  - Instrument identifier [BORSA ITALIANA MIT markets]  - SICO code [SOLA IDeM]                                 |
| 37  | OrderID         | N     | String | Market–assigned code of the order Required for OrdStatus = New or Replaced. NOTE: This tag value does not change for orders in BORSA ITALIANA MIT markets |

| 17  | ExecID        | Y | String        | Unique identifier for each Execution Report message. The value is in the following format: UTCDate#ExecutionReportType#Side# InstrumentCode#OrderID ExecutionReportType valid values: 0 = New order 1 = Order replaced 2 = Order canceled 6 = PendingCancel 7 = PendingReplace Example =20050218#0#1#STM#75873 In case of OrdStatus equal to "Rejected", "Pending Cancel", "Pending Replace" and "Pending New", an internal timestamp will be returned in place of OrderID. |
|-----|---------------|---|---------------|---|
| 60  | TransactTime  | Y | UTCTimest amp | Date/time, with microseconds, the transaction represented by this ExecutionReport occurred (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu   |
| 20  | ExecTransType | Y | char          | Identifies transaction type Valid values: 0 = New   |
| 39  | OrdStatus     | Υ | char          | Identifies current status of order. If the order has been successfully replaced and has been totally filled, value is 2 (Totally filled) otherwise same values as ExecType.   |
| 150 | ExecType      | Υ | char          | Describes the type of execution report.  Valid values:  0 = New  4 = Canceled  5 = Replaced  6 = Pending Cancel  8 = Rejected  E = Pending Replace  |
| 103 | OrdRejReason  | N | int           | For use with ExecType = 8 (Rejected) Valid values: 0 = Broker option 1 = Unknown Symbol 3 = Order exceeds limit 6 = Duplicated order.   |

| 6552 NoSides  |               | Sides    |                             | Υ     | int                                | Value submitted with the order.  |
|---------------|---------------|----------|-----------------------------|-------|------------------------------------|--|
| → 54          |               |          | Side                        | Υ     | char                               | Value submitted with the order.  |
| <b>→</b>      | → 6582        |          | CustOrderCapacit y          | N     | char                               | Value submitted with the order.  |
| → 11          |               |          | CIOrdID                     | Υ     | String                             | Value submitted with the order.  |
| $\rightarrow$ | 453           | NoPart   |                             | Υ     | int                                | Value submitted with the order.  |
| $\rightarrow$ | $\rightarrow$ | 448      | PartyID                     | Υ     | String                             | Value submitted with the order.  |
| <b>→</b>      | <b>→</b>      | 447      | PartyIDSource PartyIDSource | Υ     | char                               | Value submitted with the order.  |
| $\rightarrow$ | <b>→</b>      | 452      | PartyRole                   | Υ     | int                                | Value submitted with the order.  |
| $\rightarrow$ | <b>→</b>      | 2376     | PartyRoleQualifier          | Υ     | int                                | Value submitted with the order.  |
| $\rightarrow$ | 2593          |          | erAttribute                 | N     | int                                | Value submitted with the order.  |
| <b>→</b>      | <b>→</b>      | 2594     | OrderAttributeTyp<br>e      | N     | int                                | Value submitted with the order.  |
| <b>→</b>      | <b>\</b>      | 2595     | OrderAttributeVal ue        | N     | char                               | Value submitted with the order.  |
| <b>→</b>      | 1724          | Order    | <b>Drigination</b>          | N     | int                                | Value submitted with the order.  |
| $\rightarrow$ | 77            |          | nEffect                     | N     | char                               | Value submitted with the order.  |
| <b>→</b>      | 406 FairValue |          | lue                         | N     | String                             | Value submitted with the order.  |
| 58            | Tex           | t        |                             | N     | String                             | If an Order is rejected, this field will contain the market representation of the error. Only for SOLA markets: if an order is accepted, the text specified in the original order.                     |
| 40            | 40 OrdType    |          |                             | N     | String                             | Value submitted with the order.  |
| 38            | 38 OrderQty   |          |                             | Υ     | Qty                                | Quantity of the order.   |
| 151           |               | vesQty   |                             | Y     | Qty                                | Amount of shares open for further execution. If the OrdStatus is Canceled or Rejected (in which case the order is no longer active) then LeavesQty will be 0, otherwise LeavesQty = OrderQty - CumQty. |
| 32            |               |          | Υ                           | Qty   | Will be "0" (non-fills report).    |  |
|               | 31 LastPx     |          | Υ                           | Price | Will be "0" (non-fills report).    |  |
| 14            |               | CumQty   |                             | Υ     | Qty                                | Total number of shares filled.   |
| 6             |               | AvgPx    |                             | Υ     | Price                              | Calculated average price of all fills on this order.   |
| 44            | Price         |          | N                           | Price | Required if specified on the order |  |
| 2669          | 9 Wai         | iverFlag |                             | N     | int                                | For SOLA (derivatives) markets this field is mandatory and is always set to 0.   |

| 2670  | WaiverFlagValue           | N    | int    | Valid values for SOLA (derivatives)            |
|-------|---------------------------|------|--------|--|
| 2070  | vvalverFlagvalue          | IN   | III.   |  |
|       |                           |      |        | markets:                                       |
|       |                           |      |        | 4 = Illiquid (ILQD)                            |
|       |                           |      |        | 5 = Above size (SIZE)                          |
|       |                           |      |        | 6 = Large in scale (LRGS)                      |
|       |                           |      |        | Valid values for BORSA ITALIANA MIT            |
|       |                           |      |        | (cash) markets:                                |
|       |                           |      |        | 0 = NLIQ                                       |
|       |                           |      |        | 1 = OILQ                                       |
|       |                           |      |        | 4 = Pre-trade ILQD                             |
|       |                           |      |        | For SOLA markets this field is mandatory.      |
| 16455 | BestPriceSetter           | N    | int    | Indicates the status of the Best Price Setter: |
|       |                           |      |        | Populated only by SOLA markets.                |
|       |                           |      |        | Valid values:                                  |
|       |                           |      |        | 0 = Order does not have the Best Price         |
|       |                           |      |        | Setter status                                  |
|       |                           |      |        | 1 = Order has the Best Price Setter            |
|       |                           |      |        |  |
| 0.47  |                           | N.I. | in t   | status   |
| 847   | CancellationAndAmendments | N    | int    | Cancellation and amendments flag.              |
|       |                           |      |        | Populated only by SOLA markets.                |
|       |                           |      |        | Valid values:                                  |
|       |                           |      |        | 1 = Cancel                                     |
|       |                           |      |        | 2 = Amend                                      |
| 548   | CrossID                   | N    | String | The unique ID of the Cross/BTF Order.          |
|       |                           |      |        | Demulated only by DODCA ITALIANIA MIT          |
|       |                           |      |        | Populated only by BORSA ITALIANA MIT           |
| 5.40  | O T                       | N.   | Otrica | markets.                                       |
| 549   | CrossType                 | N    | String | The type of the Cross/BTF Order.               |
|       |                           |      |        | Populated only by BORSA ITALIANA MIT           |
|       |                           |      |        | markets.                                       |
| 30001 | OrderBook                 | N    | int    | Identifier of the order book.                  |
|       |                           |      |        | Populated only by BORSA ITALIANA MIT           |
|       |                           |      |        | markets.                                       |
|       |                           |      |        | markets.                                       |
|       |                           |      |        | Valid values:                                  |
|       |                           |      |        |  |
|       |                           |      |        | 1 = Regular                                    |

|     |                |   | 11 = RFQ Trades |
|-----|----------------|---|-----------------|
| Sta | andard Trailer | Υ |                 |

#### Order Cancel Reject for unsuccessful modification or cancel request 8.3

| Tag      | Field Name       | Req'd | Format       | Comments   |
|----------|------------------|-------|--------------|--|
|          | Standard Header  | Y     |              | MsgType = 9  |
| 37       | OrderID          | Y     | String       | If the order is unknown, specify "NONE".   |
| 11       | ClOrdID          | Y     | String       | Unique order id assigned by institution to the cancel request or to the <i>replacement</i> order.  |
| 41       | OrigClOrdID      | Y     | String       | ClOrdID which could not be canceled/replaced. ClOrdID of the previous order (NOT the initial order of the day) when canceling or replacing an order.                   |
| 39       | OrdStatus        | Y     | char         | OrdStatus value after this cancel reject is applied.   |
| 102      | CxlRejReason     | N     | Int          | Code to identify reason for cancel rejection. Valid values:  1 = Unknown Order. 2 = Broker Option 6 = Duplicated Order   |
| 58       | Text             | N     | String       | This field will contain the market representation of the error.  |
| 434      | CxlRejResponseTo | Y     | char         | Identifies the type of request that a Cancel Reject is in response to.  Valid values:  1 - Order Cancel Request 2 - Order Modification Request                         |
| 60       | TransactTime     | Y     | UTCTimestamp | Date/time, with microseconds, the rejection represented by this ExecutionReport occurred (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu                          |
| 453      | NoPartyID        | Y     | int          | Number of PartyID repeating group instances.   |
| <b>→</b> | 448 PartyID      | Y     | String       | Identifier of the trading party. This should contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None 1 = AGGR (can be used only if PartyRole = |

| <b>→</b> | 447     | PartyIDSource     | Y    | char | 3) 2 = PNAL (can be used only if PartyRole = 3) 3 = CLIENT (can be used only if PartyRole = 12)  Identifies class or source of the PartyID  |
|----------|---------|-------------------|------|------|---|
|          |         |                   |      |      | (448) value. Valid values: P = Short Code   |
| <b>→</b> | 452     | PartyRole         | Y    | int  | Identifies the type or role of the PartyID (448) specified. Valid values: 3 = Client ID 122 = Investment Decision Maker 12 = Executing Trader   |
| <b>→</b> | 2376    | PartyRoleQualific | er N | int  | Provides a further qualification for the value specified in the Party Role (452) Valid values:  22 = Algorithm (can be used only if PartyRole = 122 OR = 12) 23 = Firm or Legal Entity (can be used only if PartyRole = 3) 24 = Natural Person  Required only if the PartyID is a short code (i.e. 4-4294967295). |
|          | Standar | d Trailer         | Y    |      |   |

## **BTS® FIX Sell-Side Gateway**

September October 2017

### 9 Unsolicited notifications

### 9.1 Execution Report for trade execution notification

This message is generated following a trade executed by automatic matching on the market system.

| Tag | Field Name      | Reg'd | Format | Comments  |
|-----|-----------------|-------|--------|---|
|     | Standard Header | Y     |        | MsgType = 8   |
| 1   | Account         | N     | String | Customer account number   |
| 57  | TargetSubID     | Z     | String | In the case of the message being received by the client, when the message is a responce to a request sent by the client   |
| 37  | OrderID         | Υ     | String | Market–assigned number of the order that generated this trade.  |
| 11  | CIOrdID         | Y     | String | Unique id assigned by institution to the order that generated this trade.   |
| 17  | ExecID          | Y     | String | Unique identifier for this trade. The value is in the following format: UTCDate#ExecutionReportType#Side# InstrumentCode#TradeID ExecutionReportType valid values: 4 = New trade InstrumentCode shall be the SICO where applicable. Example =20050218#4#1#STM#32545 |
| 20  | ExecTransType   | Y     | char   | Identifies transaction type Valid values: 0 = New   |
| 39  | OrdStatus       | Y     | char   | Identifies current status of order. If the order has been canceled, value is 4 (Canceled), otherwise same values as ExecType.   |
| 150 | ЕхесТуре        | Y     | char   | Identifies if the trade filled the order partially or totally.  Valid values:  1 = Partially filled 2 = Filled  |

| 55       | Symbo          | ol .          | Y | String       | Security code as accepted by the exchange.  - Instrument identifier [BORSA ITALIANA MIT markets]  - SICO code [SOLA IDeM]  |
|----------|----------------|---------------|---|--------------|--|
| 54       | Side           |               | Y | char         | Side of the order that generated this trade.   |
| 77       | PositionEffect |               | N | char         | For options only. Valid Values: O = Open C = Close N = Default for the account.  |
| 58       | Text           |               | N | String       | Trade identifier assigned by the market  |
| 38       | OrderC         | Qty           | Y | Qty          | Total quantity of the order that generated the trade.  |
| 44       | Price          |               | N | Price        | Required if specified on the order   |
| 32       | LastSh         |               | Y | Qty          | Quantity of shares bought/sold on this (last) fill.  |
| 31       | LastPx         | •             | Υ | Price        | Price of this (last) fill.   |
| 151      | LeavesQty      |               | Y | Qty          | Amount of shares open for further execution. It will be: LeavesQty = OrderQty - CumQty.  |
| 5393     | Leaves         | SVisibleQty   | N | Qty          | Remaining visible size on the iceberg order  |
| 14       | CumQ           |               | Υ | Qty          | Total number of shares filled.   |
| 6        | AvgPx          |               | Y | Price        | Calculated average price of all fills on this order.   |
| 60       |                | actTime       | Y | UTCTimeStamp | Date/time, with microseconds, the trade occurred (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu  |
| 453      | NoPart         | •             | Y | int          | Number of PartyID repeating group instances.   |
| <b>→</b> | 448            | PartyID       | Y | String       | Identifier of the trading party. This should contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None 1 = AGGR (can be used only if PartyRole = 3) 2 = PNAL (can be used only if PartyRole = 3) 3 = CLIENT (can be used only if PartyRole = 12) |
| <b>→</b> | 447            | PartyIDSource | Y | char         | Identifies class or source of the PartyID (448) value.  Valid values:  |

|          |          |                     |    |        | P = Short Code   |
|----------|----------|---------------------|----|--------|--|
| <b>→</b> | 452      | PartyRole           | Υ  | int    | Identifies the type or role of the PartyID   |
|          | 732      | 1 artyrtoic         |    | III.   | (448) specified.   |
|          |          |                     |    |        | Valid values:  |
|          |          |                     |    |        | 3 = Client ID  |
|          |          |                     |    |        | 122 = Investment Decision Maker  |
|          |          |                     |    |        | 12 = Executing Trader  |
| <b>→</b> | 2376     | PartyRoleQualifier  | N  | int    | Provides a further qualification for the value specified in the Party Role (452) Valid values: |
|          |          |                     |    |        | 22 = Algorithm (can be used only if PartyRole = 122 OR = 12)                                   |
|          |          |                     |    |        | 23 = Firm or Legal Entity (can be used   |
|          |          |                     |    |        | only if PartyRole = 3)   |
|          |          |                     |    |        | 24 = Natural Person  |
|          |          |                     |    |        |  |
|          |          |                     |    |        | Required only if the PartyID is a short code   |
|          |          |                     |    |        | (i.e. 4-4294967295).   |
| 2593     | NoOrd    | erAttribute         | N  | int    | Number of Order Attributes.  |
|          |          |                     |    |        | For SOLA markets this field is mandatory   |
|          |          |                     |    |        | and must be set to 2.  |
| <b>→</b> | 2594     | OrderAttributeType  | N  | int    | Provides the ability to specify if the order   |
|          |          |                     |    |        | was generated via an algorithm.  |
|          |          |                     |    |        | Valid values:  |
|          |          |                     |    |        | 2 = Liquidity Provision activity order   |
|          |          |                     |    |        | (SOLA markets only)  |
|          |          |                     |    |        | 4 = Algorithm  |
|          | 0505     |                     |    |        | For SOLA markets this field is mandatory.  |
| <b>→</b> | 2595     | OrderAttributeValue | N  | char   | Required to be specified if  |
|          |          |                     |    |        | OrderAttributeType (2594) is specified.  |
|          |          |                     |    |        | Valid values:  |
|          |          |                     |    |        | Y = Yes<br>N = No  |
|          |          |                     |    |        | For SOLA markets this field is mandatory.  |
| 1724     | Ordor    | Drigination         | N  | int    | Provides the ability to indicate the   |
| 1724     | Orderc   | ngination           | IN | IIIC   | involvement of Direct Electronic Access  |
|          |          |                     |    |        | (DEA).   |
|          |          |                     |    |        | Valid values:  |
|          |          |                     |    |        | 5 = DEA  |
| 406      | FairVa   | lue                 | N  | String | Text for Physical Leg.   |
| 700      | i ali va | 140                 |    | Juliy  | For SOLA markets this field is mandatory.  |
| 2669     | Waive    | rFlag               | N  | int    | For SOLA (derivatives) markets this field is   |
| 2009     | vvaive   | T lag               | 14 | int    | mandatory and is always set to 0.  |
|          |          |                     |    |        | mandatory and is always set to 0.  |

| 2670  | WaiverFlagValue           | N | int    | Valid values for SOLA (derivatives) markets: 4 = Illiquid (ILQD) 5 = Above size (SIZE) 6 = Large in scale (LRGS)  Valid values for BORSA ITALIANA MIT (cash) markets: 0 = NLIQ 1 = OILQ |
|-------|---------------------------|---|--------|---|
|       |                           |   |        | 4 = Pre-trade ILQD  For SOLA markets this field is mandatory.   |
| 1084  | DisplayMethod             | N | int    | Populated only by BORSA ITALIANA MIT markets.  Valid values: 4 = Undisclosed (reserve)  |
| 16455 | BestPriceSetter           | N |        | Populated only by SOLA markets.  Returned when tag is sent for a BPS notification.  |
| 847   | CancellationAndAmendments | N | int    | Cancellation and amendments flag.  Populated only by SOLA markets.  Valid values: 1 = Cancel 2 = Amend  |
| 6582  | CustOrderCapacity         | N | char   | The value specified in the corresponding order.  Populated only by BORSA ITALIANA MIT markets.  |
| 548   | CrossID                   | N | String | The unique ID of the Cross/BTF Order.  Populated only by BORSA ITALIANA MIT markets.  |
| 549   | CrossType                 | N | String | The type of the Cross/BTF Order.  Populated only by BORSA ITALIANA MIT markets.   |
| 30001 | OrderBook                 | N | int    | Identifier of the order book.   |

|      |                         |   |      | Populated only by BORSA ITALIANA MIT markets.  Valid values: 1 = Regular 11 = RFQ Trades   |
|------|-------------------------|---|------|--|
| 828  | TradeTypeFlag           | N | int  | Valid values:  0 = None 2 = Exchange for physical (SOLA IDEM only) 65 = Trade Type Pack Trans  |
| 9730 | TradeLiquidityIndicator | N | char | Whether the order added or removed liquidity.  Populated only by BORSA ITALIANA MIT markets.  Valid values:  A = Added Liquidity  R = Removed Liquidity  C = Auction |
|      | Standard Trailer        | Υ |      |  |

#### 9.2 **Execution Report for unsolicited trade cancellation**

This message is generated following the cancellation of an executed trade on the market system.

| Tag | Field Name      | Req'd |        | Comments  |
|-----|-----------------|-------|--------|---|
|     | Standard Header | Y     |        | MsgType = 8   |
| 37  | OrderID         | Y     | String | Same value as that in the corresponding trade execution notification. |
| 11  | ClOrdID         | Y     | String | Same value as that in the corresponding trade execution notification. |

| 17  | ExecID         | Y | String | Unique identifier for each Execution Report message. The value is in the following format: UTCDate#ExecutionReportType#Side# InstrumentCode#TradeID ExecutionReportType valid values: 5 = Trade canceled by market InstrumentCode shall be the SICO where applicable. Example =20050218#5#1#STM#32545 |
|-----|----------------|---|--------|---|
| 19  | ExecRefID      | Y | String | Unique identifier of the cancelled trade.   |
| 20  | ExecTransType  |   | char   | Identifies transaction type Valid values: 1 = Cancel  |
| 39  | OrdStatus      | Y | char   | Same value as that in the corresponding trade execution notification.   |
| 150 | ExecType       | Y | char   | Same value as that in the corresponding trade execution notification.   |
| 55  | Symbol         | Y | String | Same value as that in the corresponding trade execution notification.   |
| 54  | Side           | Y | char   | Same value as that in the corresponding trade execution notification.   |
| 77  | PositionEffect | N | char   | For options only.  Valid Values:  O = Open C = Close N = Default for the account.   |
| 58  | Text           | N | String | Market assigned number of the canceled trade.   |
| 38  | OrderQty       | Y | Qty    | Same value as that in the corresponding trade execution notification.   |
| 44  | Price          | N | Price  | Same value as that in the corresponding trade execution notification.   |
| 32  | LastShares     | Y | Qty    | Will be "0" for non-fills ("fill" defined as<br>ExecTransType=New and<br>ExecType=Partial Fill or Fill)   |
| 31  | LastPx         | Y | Price  | Will be "0" for non-fills ("fill" defined as<br>ExecTransType=New and<br>ExecType=Partial Fill or Fill)   |
| 151 | LeavesQty      | Y | Qty    | Amount of shares open for further execution. It will be LeavesQty = OrderQty - CumQty.  |

| 14           | CumQt               | ty                     | Υ  | Qty  | Total number of shares filled.                                  |
|--------------|---------------------|------------------------|----|--|---|
| 6            | AvgPx               | •                      | Υ  | Price  | Calculated average price of all fills on this                   |
|              |                     |                        |    |  | order.  |
| 60           | Transa              | ctTime                 | Y  | UTCTimeStamp   | Date/time, with microseconds, the trade                         |
|              |                     |                        |    |  | cancellation occurred (expressed in UTC).                       |
| 450          | N. D.               | ID.                    |    |  | Format: YYYYMMDD-HH:MM:SS.mmmuuu                                |
| 453          | NoPart              | :yID                   | Y  | int  | Number of PartyID repeating group                               |
| <del>)</del> | 448                 | PartyID                | Y  | String   | instances.  Identifier of the trading party. This should        |
| 7            | 440                 | Partyio                | ı  | String   | contain a code/identifier (range 4 –                            |
|              |                     |                        |    |  | 4294967295) or a reserved value:                                |
|              |                     |                        |    |  | 0 = None  |
|              |                     |                        |    |  | 1 = AGGR (can be used only if PartyRole =                       |
|              |                     |                        |    |  | 3)  |
|              |                     |                        |    |  | 2 = PNAL (can be used only if PartyRole =                       |
|              |                     |                        |    |  | 3)  |
|              |                     |                        |    |  | 3 = CLIENT (can be used only if PartyRole = 12)                 |
| <b>→</b>     | 447                 | PartyIDSource          | Υ  | char   | Identifies class or source of the PartyID                       |
| -            |                     | . a. tyliz oou. oo     | ·  | orial and a second   | (448) value.  |
|              |                     |                        |    |  | Valid values:   |
|              |                     |                        |    |  | P = Short Code  |
| <b>→</b>     | 452                 | PartyRole              | Υ  | int  | Identifies the type or role of the PartyID                      |
|              |                     |                        |    |  | (448) specified. Valid values:                                  |
|              |                     |                        |    |  | 3 = Client ID   |
|              |                     |                        |    |  | 122 = Investment Decision Maker                                 |
|              |                     |                        |    |  | 12 = Executing Trader   |
| <b>→</b>     | 2376                | PartyRoleQualifier     | N  | int  | Provides a further qualification for the value                  |
|              |                     |                        |    |  | specified in the Party Role (452)                               |
|              |                     |                        |    |  | Valid values:   |
|              |                     |                        |    |  | 22 = Algorithm (can be used only if                             |
|              |                     |                        |    |  | PartyRole = 122 OR = 12) 23 = Firm or Legal Entity (can be used |
|              |                     |                        |    |  | only if PartyRole = 3)  |
|              |                     |                        |    |  | 24 = Natural Person   |
|              |                     |                        |    |  |   |
|              |                     |                        |    |  | Required only if the PartyID is a short code                    |
|              |                     |                        |    |  | (i.e. 4-4294967295).  |
| 2593         | 93 NoOrderAttribute |                        | N  | int  | Number of Order Attributes.                                     |
|              |                     |                        |    |  | For SOLA markets this field is mandatory and must be set to 2.  |
| <b>→</b>     | 2594                | OrderAttributeType     | N  | int  | Provides the ability to specify if the order                    |
|              | 2004                | C. dol Attribute 1 ype | 14 | THE STATE OF THE S | was generated via an algorithm.                                 |
|              |                     |                        |    |  | gonoratos na an algorianin                                      |

|          |         |                       |      |        | Valid values: 2 = Liquidity Provision activity order             |
|----------|---------|-----------------------|------|--------|--|
|          |         |                       |      |        | (SOLA markets only)  |
|          |         |                       |      |        | 4 = Algorithm  |
|          | 0505    | 0 1 44 11 4 14 1      |      |        | For SOLA markets this field is mandatory.                        |
| <b>→</b> | 2595    | Order Attribute Value | N    | char   | Required to be specified if                                      |
|          |         |                       |      |        | OrderAttributeType (2594) is specified. Valid values:            |
|          |         |                       |      |        | Y = Yes  |
|          |         |                       |      |        | N = No   |
|          |         |                       |      |        | For SOLA markets this field is mandatory.                        |
| 1724     | OrderC  | Drigination           | N    | int    | Provides the ability to indicate the                             |
|          |         |                       |      |        | involvement of Direct Electronic Access                          |
|          |         |                       |      |        | (DEA).   |
|          |         |                       |      |        | Valid values:  |
| 406      | FairVa  | luo                   | N    | Ctring | 5 = DEA  |
| 406      | raiiva  | lue                   | IN   | String | Text for Physical Leg. For SOLA markets this field is mandatory. |
| 2669     | Waive   | Flan                  | N    | int    | For SOLA (derivatives) markets this field is                     |
| 2009     | vvaivei | 1 lag                 | 14   | II IC  | mandatory and is always set to 0.                                |
| 2670     | Waive   | FlagValue             | N    | int    | Valid values for SOLA (derivatives)                              |
|          |         | g                     |      |        | markets:   |
|          |         |                       |      |        | 4 = Illiquid (ILQD)  |
|          |         |                       |      |        | 5 = Above size (SIZE)  |
|          |         |                       |      |        | 6 = Large in scale (LRGS)  |
|          |         |                       |      |        | Valid values for BORSA ITALIANA MIT                              |
|          |         |                       |      |        | (cash) markets:  |
|          |         |                       |      |        | 0 = NLIQ   |
|          |         |                       |      |        | 1 = OILQ   |
|          |         |                       |      |        | 4 = Pre-trade ILQD   |
|          |         |                       |      |        | For SOLA markets this field is mandatory.                        |
| 1084     | Display | Method                | N    | int    | Populated only by BORSA ITALIANA MIT                             |
|          |         |                       |      |        | markets.   |
|          |         |                       |      |        | Validualues  |
|          |         |                       |      |        | Valid values: 4 = Undisclosed (reserve)                          |
| 16455    | RestPr  | iceSetter             | N    |        | Populated only by SOLA markets.                                  |
| 10400    | DOSH 1  | lococitoi             | - 14 |        | Topdiated only by GOLA Markets.                                  |
|          |         |                       |      |        | Returned when tag is sent for a BPS                              |
|          |         |                       |      |        | notification.  |
| 847      | Cance   | llationAndAmendments  | N    | int    | Cancellation and amendments flag.                                |
|          |         |                       |      |        |  |

|       |                         |    |         | Populated only by SOLA markets.   |
|-------|-------------------------|----|---------|---|
|       |                         |    |         | Valid values: 1 = Cancel 2 = Amend  |
| 6582  | CustOrderCapacity       | N  | char    | The value specified in the corresponding order.  Populated only by BORSA ITALIANA MIT         |
| 548   | CrossID                 | N  | Otrin a | markets.  |
| 548   | CrossID                 | IN | String  | The unique ID of the Cross/BTF Order.   |
|       |                         |    |         | Populated only by BORSA ITALIANA MIT markets.   |
| 549   | CrossType               | N  | String  | The type of the Cross/BTF Order.  |
|       |                         |    |         | Populated only by BORSA ITALIANA MIT markets.   |
| 30001 | OrderBook               | N  | int     | Identifier of the order book.   |
|       |                         |    |         | Populated only by BORSA ITALIANA MIT markets.   |
|       |                         |    |         | Valid values: 1 = Regular 11 = RFQ Trades   |
| 828   | TradeTypeFlag           | N  | int     | Valid values:  0 = None 2 = Exchange for physical (SOLA IDEM only) 65 = Trade Type Pack Trans |
| 9730  | TradeLiquidityIndicator | N  | char    | Whether the order added or removed liquidity.   |
|       |                         |    |         | Populated only by BORSA ITALIANA MIT markets.   |
|       |                         |    |         | Valid values:  A = Added Liquidity  R = Removed Liquidity  C = Auction                        |
|       | Standard Trailer        | Y  |         |   |

#### 9.3 **Execution Report for unsolicited order cancellation**

This message contains information relative to a cancelled order and the reason for cancellation.

| Tag  | Field Name      | Reg'd                                 | Format       | Comments   |
|------|-----------------|---------------------------------------|--------------|--|
| rag  | Standard Header | Y                                     | Tomat        | MsgType = 8  |
| 11   | CIOrdID         | Y                                     | String       | Unique identifier of the order as assigned                                 |
|      | 0.0.0.0         | •                                     | Jg           | by institution.  |
| 55   | Symbol          | Υ                                     | String       | Security code.   |
| 37   | OrderID         | Υ                                     | String       | Market-assigned number of the order.                                       |
| 17   | ExecID          | Υ                                     | String       | Unique identifier for each Execution Report                                |
|      |                 |                                       |              | message  |
|      |                 |                                       |              | The value is in the following format:                                      |
|      |                 |                                       |              | UTCDate#ExecutionReportType#Side#  |
|      |                 |                                       |              | InstrumentCode#OrderID   |
|      |                 |                                       |              | ExecutionReportType valid values:  |
|      |                 |                                       |              | 3 = Order canceled by market   |
| 0.0  | T               | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | LITOT        | Example =20050218#3#1#STM#75873  |
| 60   | TransactTime    | Υ                                     | UTCTimestamp | Date/time, with microseconds, the order                                    |
|      |                 |                                       |              | cancellation occurred (expressed in UTC). Format: YYYYMMDD-HH:MM:SS.mmmuuu |
| 77   | PositionEffect  | N                                     | char         | For options only.  |
| ''   | FOSITIONETIECT  | IN                                    | Giai         | Valid Values:  |
|      |                 |                                       |              | O = Open   |
|      |                 |                                       |              | C = Close  |
|      |                 |                                       |              | N = Default for the account.   |
| 20   | ExecTransType   | Υ                                     | char         | Identifies transaction type  |
|      |                 |                                       |              | Valid values:  |
|      |                 |                                       |              | 0 = New  |
| 39   | OrdStatus       | Υ                                     | char         | Identifies current status of order.  |
|      | oracia:ac       | ·                                     | orial        | If ExecType is D (Restated), value is 0                                    |
|      |                 |                                       |              | (New), otherwise same values as  |
|      |                 |                                       |              | ExecType.  |
| 150  | ExecType        | Υ                                     | char         | Describes the type of execution report.                                    |
| 100  | Exect ype       |                                       | orial        | Valid values:  |
|      |                 |                                       |              | 3 = Done for Day   |
|      |                 |                                       |              | C = Expired  |
|      |                 |                                       |              | D = Restated   |
| 58   | Text            | N                                     | String       | This field will contain the market   |
|      |                 |                                       |              | representation of the cancellation reason.                                 |
| 337  | ContraTrader    | N                                     | String       | Value submitted with the committed order.                                  |
| 40   | OrdType         | N                                     | Char         | Value submitted with the order.  |
| 5253 | OrdTypeExt      | N                                     | String       | Value submitted with the order.  |

| <del>59</del> <u>525</u> | TimeIr   | Force              | N | Char         | Value submitted with the order.   |
|--------------------------|----------|--------------------|---|--------------|---|
| 126                      | Expire   | Time               | N | UTCTimestamp | Value submitted with the order.   |
| 432                      | Expire   |                    | N | LocalMktDate | Value submitted with the order.   |
| 336                      |          | gSessionID         | N | String       | Value submitted with the order.   |
| 54                       | Side     | geocalorii         | Y | char         | Side of the order.  |
| 38                       | OrderQty |                    | Y | Qty          | Quantity of the cancelled order.  |
| 151                      | Leaves   |                    | Y | Qty          | Will be 0.  |
| 32                       | LastSh   |                    | Υ | Qty          | Will be 0.  |
| 31                       | LastPx   | (                  | Υ | Price        | Will be 0.  |
| 14                       | CumQ     | ty                 | Υ | Qty          | Total number of shares filled.  |
| 6                        | AvgPx    |                    | Y | Price        | Calculated average price of all fills on this order.  |
| 44                       | Price    |                    | N | Price        | Required if specified on the order  |
| 453                      | NoPar    | tyID               | Y | int          | Number of PartyID repeating group instances.  |
| <b>→</b>                 | 448      | PartyID            | Y | String       | Identifier of the trading party. This should contain a code/identifier (range 4 – 4294967295) or a reserved value:  0 = None  1 = AGGR (can be used only if PartyRole = 3)  2 = PNAL (can be used only if PartyRole = 3)  3 = CLIENT (can be used only if PartyRole = 12) |
| <b>→</b>                 | 447      | PartyIDSource      | Y | char         | Identifies class or source of the PartyID (448) value.  Valid values: P = Short Code  |
| <del></del>              | 452      | PartyRole          | Y | int          | Identifies the type or role of the PartyID (448) specified. Valid values: 3 = Client ID 122 = Investment Decision Maker 12 = Executing Trader   |
| <b>→</b>                 | 2376     | PartyRoleQualifier | N | int          | Provides a further qualification for the value specified in the Party Role (452) Valid values:  22 = Algorithm (can be used only if PartyRole = 122 OR = 12) 23 = Firm or Legal Entity (can be used only if PartyRole = 3) 24 = Natural Person                            |

|              |                 |                       |     |          | Required only if the PartyID is a short code (i.e. 4-4294967295).                       |
|--------------|-----------------|-----------------------|-----|----------|---|
| 2593         | NoOrd           | erAttribute           | N   | int      | Number of Order Attributes.   |
| 2000         | rtoora          |                       | .,  | K        | For SOLA markets this field is mandatory  |
|              |                 |                       |     |          | and must be set to 2.   |
| <del>\</del> | 2594            | OrderAttributeType    | N   | int      | Provides the ability to specify if the order  |
|              |                 | 3,1                   |     |          | was generated via an algorithm.   |
|              |                 |                       |     |          | Valid values:   |
|              |                 |                       |     |          | 2 = Liquidity Provision activity order  |
|              |                 |                       |     |          | (SOLA markets only)   |
|              |                 |                       |     |          | 4 = Algorithm   |
|              |                 |                       |     |          | For SOLA markets this field is mandatory.   |
| <b>→</b>     | 2595            | Order Attribute Value | N   | char     | Required to be specified if   |
|              |                 |                       |     |          | OrderAttributeType (2594) is specified.   |
|              |                 |                       |     |          | Valid values:   |
|              |                 |                       |     |          | Y = Yes   |
|              |                 |                       |     |          | N = No  |
|              |                 |                       |     |          | For SOLA markets this field is mandatory.   |
| 1724         | OrderC          | Origination           | N   | int      | Provides the ability to indicate the  |
|              |                 |                       |     |          | involvement of Direct Electronic Access   |
|              |                 |                       |     |          | (DEA).  |
|              |                 |                       |     |          | Valid values:   |
| 400          | FairValue       |                       | NI. | Otalia a | 5 = DEA   |
| 406          | Fairvalue       |                       | N   | String   | Text for Physical Leg.  |
| 2000         | Mair car Floor  |                       | N   | int      | For SOLA markets this field is mandatory.  For SOLA (derivatives) markets this field is |
| 2669         | WaiverFlag      |                       | IN  | int      | mandatory and is always set to 0.   |
| 2670         | WaiverFlagValue |                       | N   | int      | Valid values for SOLA (derivatives)   |
| 2070         | vvaivei         | Flagvalue             | IN  | II IL    | markets:  |
|              |                 |                       |     |          | 4 = Illiquid (ILQD)   |
|              |                 |                       |     |          | 5 = Above size (SIZE)   |
|              |                 |                       |     |          | 6 = Large in scale (LRGS)   |
|              |                 |                       |     |          |   |
|              |                 |                       |     |          | Valid values for BORSA ITALIANA MIT   |
|              |                 |                       |     |          | (cash) markets:   |
|              |                 |                       |     |          | 0 = NLIQ  |
|              |                 |                       |     |          | 1 = OILQ  |
|              |                 |                       |     |          | 4 = Pre-trade ILQD  |
|              |                 |                       |     |          |   |
|              |                 |                       |     |          |   |
| 1651         |                 |                       |     |          | For SOLA markets this field is mandatory.   |
| 1084         | DisplayMethod   |                       | N   | int      | Display method.   |
|              |                 |                       |     |          |   |

|       |                           |   |        | Populated only by BORSA ITALIANA MIT markets.   |
|-------|---------------------------|---|--------|---|
|       |                           |   |        | Valid values: 4 = Undisclosed (reserve)   |
| 16455 | BestPriceSetter           | N | int    | Indicates the status of the Best Price Setter:  |
|       |                           |   |        | Populated only by SOLA markets.   |
|       |                           |   |        | Valid values:  0 = Order does not have the Best Price Setter status  1 = Order has the Best Price Setter status |
| 847   | CancellationAndAmendments | N | int    | Cancellation and amendments flag.   |
|       |                           |   |        | Populated only by SOLA markets.   |
|       |                           |   |        | Valid values: 1 = Cancel 2 = Amend  |
| 6582  | CustOrderCapacity         | N | char   | The value specified in the corresponding order.   |
|       |                           |   |        | Populated only by BORSA ITALIANA MIT markets.   |
| 548   | CrossID                   | N | String | The unique ID of the Cross/BTF Order.   |
|       |                           |   |        | Populated only by BORSA ITALIANA MIT markets.   |
| 549   | CrossType                 | N | String | The type of the Cross/BTF Order.  |
|       |                           |   |        | Populated only by BORSA ITALIANA MIT markets.   |
| 30001 | OrderBook                 | N | int    | Identifier of the order book.   |
|       |                           |   |        | Populated only by BORSA ITALIANA MIT markets.   |
|       |                           |   |        | Valid values: 1 = Regular 11 = RFQ Trades   |
|       | Standard Trailer          | Υ |        | THE CHANGE  |

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