

# **BUCHAREST STOCK EXCHANGE**

## **FIX SPECIFICATION**

**Version 1.8.5.01**

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<b>1. INTRODUCTION</b>	<b>4</b>
1.1. Purpose	4
1.2. What is FIX?	4
1.3. Version History	4
1.4. Mifid II Specific fields	5
1.4.1 Order relevant parties, algorithmic order flags and direct electronic access flag (DEA).	5
1.4.2 Client Code	5
1.4.3 Transparency requirement for trade flags	6
<b>2. SESSION MANAGEMENT</b>	<b>7</b>
2.1. Counterparty Identification - SenderCompID, TargetCompID	7
2.2. Encryption - not supported	7
2.3. Fix Version Identification	7
2.4. Session Life	7
2.5. Message Acknowledgment	7
2.6. Recovery after disconnections	8
2.7. Drop Copy Session	8
2.8. Throttling	9
2.9. Password handling	9
<b>3. SESSION LAYER MESSAGES</b>	<b>9</b>
3.1. Message Header format and Standard Trailer	9
3.2. Logon (A)	9
3.3. Logout (5)	10
3.4. Heart Beat (0)	10
3.5. Test Request (1)	10
3.6. Sequence Reset (4)	10
3.7. Resend Request (2)	10
3.8. Reject Message (3)	10
<b>4. APPLICATION LAYER INTERFACE</b>	<b>11</b>
4.1. Supported Application Level Message Types	11
4.2. Symbology	11
4.3. Order Handling	11
4.3.1 Order Identification	11
4.3.2 Contingent Orders	11
4.3.3 Orders with undisclosed volumes	12
4.3.4 Order validity and open orders	12
4.3.5 New Order Single Message (D)	13
4.3.6 Order Cancel Request Message (F)	15
4.3.7 Order Replace Request Message (G)	16
4.3.8 New Order Cross (s)	19
4.3.9 Execution Report Message (8)	21
4.3.10 Order Cancel Reject Message (9)	25
4.4. Quote handling for market making and liquidity provider activity	26
4.4.1 Full Quote and Half Quote	26
4.4.2 Quote Entry and Quote Update	26
4.4.3 Quote Cancel	27
4.4.4 Quote Acknowledgement	27
4.4.5 Quote Execution	27

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4.4.6	Quote Cancellation, Expiration	27
4.4.7	Quote Message (S)	27
4.4.8	Quote Cancel Message (Z)	28
4.4.9	Quote Status Report Message(AI)	29
<b>5.</b>	<b>OTHER ADMINISTRATIVE MESSAGES</b>	<b>31</b>
5.1.	User Request Message (BE)	31
5.2.	User Response Message(BF)	31
<b>6.</b>	<b>ANNEX 1 – BUSINESS ERROR CODES</b>	<b>32</b>
<b>7.</b>	<b>MESSAGE FLOW DIAGRAMS</b>	<b>34</b>
7.1.	Add new order	34
7.2.	Fill order	34
7.3.	Cancel order	35
7.4.	Change order	36
7.5.	Suspend and Release order (unsolicited)	38
7.6.	Add order with hidden volume	38
7.7.	Add and Activate contingent order	40
7.8.	Reject order at end of day	41

# 1. Introduction

## 1.1. Purpose

This document contains a conceptual overview of the FIX protocol and provides technical guidance on adopting FIX to connect to Bucharest Stock Exchange.

Bucharest Stock Exchange provides FIX connectivity for versions 4.4 and 5.0 of the FIX protocol.

This document is intended to supplement the FIX Protocol Specification ([www.fixprotocol.org](http://www.fixprotocol.org)). It is assumed that the reader is familiar with the FIX protocol as described at <http://www.fixprotocol.org>.

In this document **FIX** is a synonym for FIX protocol. And **EXCHANGE** is a synonym for Bucharest Stock Exchange.

## 1.2. What is FIX?

The Financial Information eXchange (FIX) Protocol is a messaging standard developed specifically for the real-time electronic exchange of securities transactions. FIX is a public-domain specification owned and maintained by FIX Protocol, Ltd.

For further information, see the FIX specification: <http://www.fixprotocol.org>

## 1.3. Version History

Version	Date	Description
1.0	February 2010	Initial document release
1.1	May 2010	Second draft
1.2	December 2010	Add Short Sell Exempt for Side tag
1.3	March 2011	Add Quote Message, Quote Cancel Message, Quote Status Report Message
1.4	October 2011	Add internal account
1.5	December 2011	Add custom field: ExchangeQuoteID(5001)
1.6	January 2012	Password handling
1.7	January 2012	Half Quote
1.8	May 2012	Add TotalOfferSize and TotalBidSize for quotes
1.8.1	September 2012	Add business error code 74 in Annex 1
1.8.2	August 2013	Add LastLiquidityInd ( 851) in Execution Report
1.8.3	June, 2014	WorkingIndicator – aplicable only for OrdStatus = New Extend order validity term and TimeInForce (59) field. Add NewOrderCross message. Extend Triggering Instruction with “Valid For TAL” order type Update business error code (annex 1)
1.8.4	September, 2015	Add new business error code ( annex 1)
1.8.5	September, 2017	Add MIFID II specific fields. Implement FIX5.0. SP2 EP222  Execution Report (8) report user information ( mnemonic and location) who trigger the execution in Parties Repetitive Group: 53= Trader mnemonic 54= Sender location Reverved value „system“ means order characteristic is change by trading system automatically, (this include contingent order activation, reject order due to out of term, cancel at logon, change price of market order). Fills and Partial fills are not triggered by „system“.
1.8.5.01	December, 2017	Add description for error code 59, 89-97-

## 1.4. Mifid II Specific fields

### 1.4.1 Order relevant parties, algorithmic order flags and direct electronic access flag (DEA).

Trading Venues have systematic record keeping requirements with regards to orders submitted by their participants. In order to comply with Delegated Regulation 580 (RTS 24) requirements, BSE will add new fields for all order entry commands for relevant parties (client, execution decision, investment decision) , for algorithmic order flags and for direct electronic access flag (DEA). For relevant parties we adopt industry practice short code- long code mapping.

Relevant parties, algorithmic order flags and DEA flag are reported back in Execution Report (8) and in Quotes Status Report (AI)

FIX 5.0 clients should adopt FIX.5.0SP2 EP222 dictionary.

FIX 4.4 clients should update FIX standard dictionary with tags and values added by FIX.5.0SP2 EP222.

Tag	Filed Name	R e q , d	Description	Notes for FIX 4.4	Notes for FIX 5.0
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRol		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ 452	PartyRole	Y	3 = Client ID 12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179 Updated FIX.5.0SP2 EP222
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222 Quotes(S) and Quotes Status Report (AI) dictionary should be updated with OrderOrigination (1724)

### 1.4.2 Client Code

For NewOrderSingle(D), NewOrderCross(s) and Quote (S) messages, the client code (aka internal account) could be specified in any of the following ways-

1. In Account(1) IN FORMAT {EXCHAGE\_ACC}/{INTERNAL\_ACC}
2. In Repeating Group Parties (453)

- PartyID(448) = Client Code
- PartyIDSource(447)= P (Short code identifier)
- PartyRole(452) = 3 (Client ID)

If client code is specified in both ways, exchange will read it from Party Group.  
Exchange will report back client code in both Account(1) and in Repeating Group Parties (453)

### 1.4.3 Transparency requirement for trade flags

Due to MiFIR transparency requirement, exchange must populate waiver indicator and algorithmic transaction flag for executions. We use MMT guideline to specify trade flags in Execution Report (8)

Tag	Filed Name	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
1115	OrderCategory	N	Defines the type of interest behind a trade (only for OrdStatus(39) filled and partial filled). 1 = Order 3 = Privately Negotiated Trade 8 = Cross Order	Added FIX.4.4 EP22	
2667	AlgorithmicTradeIndicator	N	Indicates that the order or trade originates from a computer program or algorithm requiring little-to-no human intervention. Only for OrdStatus(39) filled and partial filled).  0 = Non-algorithmic trade 1 = Algorithmic trade	Added tag	Added FIX.5.0SP2 EP216
Group 2668	NoTrdRegPublicationGrp	N	Number of regulatory publication rules in repeating group. Only for OrdStatus(39) filled and partial filled).	Added tag	Added FIX.5.0SP2 EP216
→ 2669	TrdRegPublicationType	Y	0 = Pre-trade transparency waiver	Added tag	Added FIX.5.0SP2 EP216
→ 2670	TrdRegPublicationReason	N	0 = No preceding order in book as transaction price set within average spread of a liquid instrument (NLIQ) 1 = No preceding order in book as transaction price depends on system-set reference price for an illiquid instrument (OLIQ) 2 = No preceding order in book as transaction price is for transaction subject to conditions other than current market price(PRIC)	Added tag	Added FIX.5.0SP2 EP216

## 2. Session Management

### 2.1. Counterparty Identification - SenderCompID, TargetCompID

Clients should identify themselves in the SenderCompID(49) and should insert the EXCHANGE identifier in the TargetCompID(56). The client will receive messages with SenderCompID(49) filled with the EXCHANGE identifier and TargetCompID(56) filled with his own identifier.

Client CompIDs are defined by the EXCHANGE ( as the user code) and can have up to 10 alphanumeric characters. Client CompIDs are case sensitive. Client CompIDs could be bound to an IP address.

One client can have only one open session at a time.

Note then OnBehalfOf functionality is not used.

### 2.2. Encryption - not supported

Bucharest Stock Exchange does not support encryption of FIX messages.

### 2.3. Fix Version Identification

The EXCHANGE supports both FIX4.4. and FIX5.0. SP2 EP222 versions of FIX protocol. A client can connect with only one of the supported versions of FIX.

FIX 4.4 protocol requires that an identifier is inserted into the BeginString (8) field of the Standard Header of all messages and must be "FIX.4.4".

FIX 5.0 protocol separates the session layer from the application layer and each has its own identifier. The identifier that has to be inserted into the BeginString (8) field of the Standard Header of all messages is "FIXT.1.1". In addition to this, the Logon (35=A) message must contain the default application version in use, DefaultAppVerID (1137) which must be set to "7".

The FIX version of every client has to be recognized and agreed upon with the EXCHANGE.

### 2.4. Session Life

A FIX session life will begin with the sequence number 1 and it is valid for one trading day.

A new session can start in one of the following cases:

- 1) When a client sends a Logon message with ResetSeqNumFlag(141) = Y.
- 2) At the beginning of a new trading day when the trading session is scheduled to begin by the EXCHANGE.
- 3) By request, when the client asks the EXCHANGE to reset the entire session.

In exceptional cases, if a client loses the FIX session messages, can ask the EXCHANGE to reset the FIX session and resend all the lost messages in the middle of the trading day. Note that after a session is reset, the old messages will have different sequence numbers than the original ones and will not have PossResend=Y.

### 2.5. Message Acknowledgment

The FIX session protocol is based on an optimistic model: normal delivery of data is assumed (i.e. no acknowledgment of individual messages) with errors in delivery identified by message sequence number gaps. Each message is identified by a unique sequence number. It is the receiving application's responsibility to monitor incoming sequence numbers to identify message gaps for response with resend request messages.

The FIX protocol does not support individual message acknowledgment.

However, a message could be rejected at the session level due to a syntactical rule violation. If it's not rejected, it is assumed that the message was passed to the application level. A number of application messages require explicit application level acceptance or rejection.

Fix Messages	Session level Reject	Session level Accept	Application level Acceptance/rejection
New Order Single (35=D)	Reject (35=3) or Business Message Reject(j)	Implicit	Execution Report (35 =8)
Order Cancel Request (35=F)	Reject (35=3) or Business Message Reject(j)	Implicit	Execution Report (35 =8), Order Cancel Reject (35=9)
Order Cancel Replace Request( 35=G)	Reject (35=3) or Business Message Reject(j)	Implicit	Execution Report (35 =8), Order Cancel Reject (35=9)
UserRequest (35 = BE)	Reject (35=3)	Implicit	UserResponse (35 = BF)
New Order Cross	Reject (35=3) or Business Message Reject(j)	Implicit	Execution Report (35 =8)
Quote(S)	Reject (35=3) or Business Message Reject(j)	Implicit	QuoteStatusReport(AI)
QuoteCancel(Z)	Reject (35=3) or Business Message Reject(j)	Implicit	QuoteStatusReport(AI)

A Reject Message (35=3) is paired with his corresponding message by RefSeqNum(45) which will contain the MsgSeqNum(34) of the original message.

A Business Message (35=j) is paired with his corresponding message by RefSeqNum(45) which will contain the MsgSeqNum(34) of the original message.

Execution Report (35 =8) and Order Cancel Reject (35=9) are paired with the corresponding messages by ClordId(11) and/or OrigClOrdID(41).

UserRequest (35 = BE) is matched with the next UserResponse (35 = BF) by message type (35).

## 2.6. Recovery after disconnections

If the connection with the FIX server ends it is advisable to reestablish the connection, detect and fill the gaps according with the FIX protocol (the FIX protocol states that if a gap is detected in the received sequence, the client or the server can request retransmission of either a specified range or all of the received messages).

Do not resend any order that has not been acknowledged by an execution report. PossResend flag is ignored by the EXCHANGE.

In exceptional cases, for any order that has not been acknowledged the client can request further information from the EXCHANGE using other communication means (trading terminal, etc).

## 2.7. Drop Copy Session

Not implemented yet



## 2.8. Throttling

The EXCHANGE can limit the rate of incoming messages.

## 2.9. Password handling

Password can be changed using User Request Message (BE)

Password expires and must be changed periodically. Expired password is marked in Logon Response Message (A) in Password (554) field with text "password expired".

As long as password is expired all application messages except User Request Message (BE) are rejected by EXCHANGE with Business Message Reject (j). All Session layer messages are accepted.

## 3. Session layer messages

### 3.1. Message Header format and Standard Trailer

The EXCHANGE processes only the following fields from the message header and ignores the others:

Tag	Filed Name	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
8	BeginString	Y		FIX.4.4	FIXT.1.1
9	BodyLength	Y	Must be the second field in the message.		
34	MsgSeqNum	Y	See standard FIX explanation.		
35	MsgType	Y	Must be the third field in the message.		
43	PossDupFlag	N	Always required for retransmissions.		
49	SenderCompID	Y	The value must be recognized and agreed to by EXCHANGE		
52	SendingTime	Y	Indicates the time the message was sent by the client.		
56	TargetCompID	Y	The value must be recognized and agreed to by EXCHANGE		
1137	DefaultAppVerID	N	Specifies the service pack release being applied, by default, to message at the session level. Enumerated field with values assigned at time of service pack release. Uses same values as AppVerID	Not supported	Required by FIXT 1.1 Supported values: 7= FIX50

Each message is terminated by a standard trailer as per FIX protocol.

### 3.2. Logon (A)

The first messages exchanged in a FIX session are the Logon Request and the Logon Response.

The Logon Request is sent by the client, and will be followed by the Logon Response sent by the EXCHANGE.

The Logon Request is used to authenticate the client ( SenderCompID (49) will contain the user code and Password(554) will contain the user's password ), to agree on the sequence numbers and on the heartbeat interval.

A client has to wait for a Logon Response before starting to send business messages to the EXCHANGE.

### 3.3. Logout (5)

FIX clients should terminate a session by logging out.

If a Logon Request is rejected due to authentication or authorization reasons, a Logout message will be sent to the client communicating the reason for the logout and the FIX session will be disconnected.

### 3.4. Heart Beat (0)

The Heartbeat monitors the status of the communication link. The Heartbeat interval can be specified using the HeartBtInt( tag 108 ) from the Logon message. Heartbeats must be sent from both sides and must be greater than zero.

### 3.5. Test Request (1)

The Test Request message can be sent by any FIX counterparty and forces a Heartbeat response from the opposing application. Test Request could be sent by the EXCHANGE in order to check the communication line status and sequence numbers. The opposite application responds to the Test Request with a Heartbeat containing the TestReqID.

### 3.6. Sequence Reset (4)

Sequence Reset is used to reset the incoming sequence number on the opposing side. This message can be used in the following scenarios:

- 1) Gap Fill mode which will be used as the response to a Resend Request
- 2) Reset mode which will be used to reset the sequence number after an unrecoverable application failure. Sequence Reset can only increase the sequence number

### 3.7. Resend Request (2)

A Resend Request is sent to initiate the retransmission of messages, used for example if a sequence number gap is detected.

### 3.8. Reject Message (3)

A Session Reject (35=3 ) is sent by the EXCHANGE when a standard session message cannot be properly processed due to a session-level rule violation.

Also, a Session Reject (35=3 ) is sent by the EXCHANGE when an application message is rejected due to syntactical reasons. An application message can be rejected in one of the following cases:

- A field required by the FIX protocol or by the EXCHANGE is missing
- One or more fields contain unsupported values
- One or more fields have invalid format
- An incoming message doesn't have a FIX format

In these cases RefTagID(371) will contain the tag number violating the syntactical rule and Text(58) will contain a more detailed description of the rule being violated.

All Session Reject (35=3) messages will have RefSeqNum(45) filled with the MsgSeqNum(34) of the rejected message.

## 4. Application Layer Interface

### 4.1. Supported Application Level Message Types

Fix Messages	FIX Message Type	Inbound/ Outbound
New Order Single	D	Incoming
Order Cancel Request	F	Incoming
Order Cancel Replace Request	G	Incoming
Execution Report	8	Outgoing
Order Cancel Reject	9	Outgoing
Quote	S	Incoming
QuoteCancel	Z	Incoming
QuoteStatusReport	AI	Outgoing
BusinessMessageReject	J	Outgoing
NewOrderCross	s	Incoming

### 4.2. Symbology

Instruments are identified within the EXCHANGE by the Symbol(55) field. The client has to provide in the Symbol (55) field both the symbol code and the market code as defined at the EXCHANGE separated by dot (.)

Tag	Field Name	Data Type	Required	Description
55	Symbol	String	Yes	The format is SYMBOL.MARKET (eg. TLV.REGS)

Please note that the EXCHANGE ignores the Currency (15) field.

### 4.3. Order Handling

#### 4.3.1 Order Identification

According with best practices, ClOrdID (11) must be unique for each order across all instruments and sides for the same FIX Session ID. The EXCHANGE does not verify the uniqueness of this field. It is strongly recommended that the client assigns an unique value to ClOrdID (11) across all trading sessions. ClOrdID must have maximum 15 characters (alphanumeric and punctuation, no spaces).

OrderID (37) is an unique identifier of the order and is generated by the EXCHANGE.

When replacing/canceling an order the client must specify the OrigClOrdID(41), the OrderID(37) and the Symbol (55) tags so that the target order is identified by the EXCHANGE.

Any Execution Report carries the last known ClOrdID (11) and OrderID (37) of the order.

#### 4.3.2 Contingent Orders

The EXCHANGE allows participants to place contingent orders. Contingent orders are order that are parked until the specified trigger hit.

Permitted contingent order type are: Stop Limit, Stop , Limit if touch. Market if touch

Contingent orders use different tags in FIX 4.4. and FIX5.0. Below is a table showing the differences between the FIX versions.

Message / Event	Relevant FIX 4.4. fields	Relevant FIX 5.0. fields
NewOrderSingle	OrdType (40)	OrdType (40)
Order Cancel	3 = Stop	2 = Limit
Replace Request	4 = Stop Limit J = Market If Touched	K = Market With Leftover As Limit
	Price (44)	Price (44)
	Side(54)	Side(54)
	Side(54)	TriggerType (1100) = 4 ( price movement)

	StopPX (99) = The price at which the trigger should hit  Note that in FIX 4.4 doesn't support LIMIT IF TOUCH order type.	TriggerAction (1101) = 1 ( activate) TriggerPrice (1102) = The price at which the trigger should hit. TriggerPriceType (1107) = 2 (Last Trade) TriggerPriceDirection (1109) = D, U
ExecutionReport when acknowledged	OrdType (40) Price (44) Side(54) StopPX (99) WorkingIndicator(636) = N ExecType(150) = 0 (New )	OrdType (40) Price (44) Side(54) TriggerType (1100) = 4 ( price movement) TriggerAction (1101) = 1 ( activate) TriggerPrice (1102) = The price at which the trigger should hit. TriggerPriceType (1107) = 2 (Last Trade) TriggerPriceDirection (1109) = D or U WorkingIndicator(636) = N ExecType(150) = 0 ( New )
ExecutionReport when activated	Price (44) OrdType (40) Side(54) WorkingIndicator(636) = Y ExecType (150) = 0 (New)	Price(44) OrdType(40) Side(54) WorkingIndicator(636) = Y ExecType (150) = L (Activated )

The TriggerPriceDirection has to be filled as follows:

Order Side / Trigger Type	Stop	If Touched
Buy	TriggerPriceDirection(1109) = U (The order is activated if the price goes up or through the stop price)	TriggerPriceDirection(1109) = D (The order is activated if the price goes down or through the stop price)
Sell	TriggerPriceDirection(1109) = D (The order is activated if the price goes down or through the stop price)	TriggerPriceDirection(1109) = U (The order is activated if the price goes up or through the stop price)

#### 4.3.3 Orders with undisclosed volumes

The EXCHANGE allows participants to place orders with an undisclosed volume. Orders with an undisclosed volume use different tags in FIX 4.4. and FIX5.0. Below are the differences:

Message	FIX 44 Description	FIX 50 Description
NewOrderSingle and Order Cancel / Replace Request	OrderQty (38) MaxShow (210)	OrderQty (38) DisplayQty (1138)

#### 4.3.4 Order validity and open orders

The EXCHANGE supports open (GTC) orders. At the end of the day, open orders remain in the trading system. A GTC order is not restated at the beginning of the day.

During system initialization at midnight, some orders are expired due to validity term. These execution reports are the first to be reported for the new day.

The EXCHANGE do not support DayOrderQty(424), DayCumQty(425) and DayAvgPx(426) tags.

EXCHANGE support next validity types:

Order validity	Relevant FIX tag	Notes
Day orders	TimeInForce (59) = 0 ( Day)	Unexecuted part of day order is expired at midnigt. Execution report(8) for expired orders are send at the beginnig of next

		day.
Open order	TimeInForce (59) = 1 ( GTC)	
Good till date	TimeInForce (59) = 6 ( GTD) ExpireDate(432) or ExpireTime(126)	
Immediate or Cancel (IOC)	TimeInForce (59) = 3 (IOC)	
Fill or Kill(FOK)	TimeInForce (59) = 4 (FOC)	
Valid for open (VFA)	TimeInForce (59) = 2 (OPG)	An order that may only be executed only in the opening auction.
Valid for close(VFC)	TimeInForce (59) = 7(At the Close)	An order that may only be executed only in the closing auction.
Valid for auction (VFA)	TimeInForce (59) = 9 (At the auction)	An order that may only be executed only in a single auction (e.g.opening, closing, etc.). Value 9 is added FIX.5.0 EP61. In order to use VFA order with FIX 44 should update FIX dictionary.
Valid for TAL(VFTAL)	OrdType(40) = K TriggerAction(1101) = 1 TriggerType(1100) = 2 TriggerTradingSessionID(1113)= 7 TriggerPrice(1102) = The price at which the trigger should hit.	Order may be only executed only in Trading at Last phase. Available only in FIX 5.0 . Not supported in FIX 4.4

#### 4.3.5 New Order Single Message (D)

Tag	FiledName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
1	Account	Y	Account	Exchange account and internal account EXCHANGE_ACC/ INTERNAL_ACC Internal account is optional	Exchange account and internal account EXCHANGE_ACC/ INTERNAL_ACC Internal account is optional
11	ClOrdID	Y	According with best practices, this field must be unique for each order across all instruments and sides from the same FIX Session ID. The EXCHANGE does not verify the uniqueness of this field.		
38	OrderQty	Y	Order quantity(integer, less than 2000000000)		
40	OrdType	Y		Supported values: 2 = Limit 3 = Stop 4 = Stop Limit J = Market If Touched K = Market With Leftover As Limit	Supported values: 2 = Limit K = Market With Leftover As Limit
44	Price	N	Mandatory if OrdType(40) is Limit or Stop Limit  0 (zero) is interpreted as „unpriced order“		

54	Side	Y	Supported values: 1 = Buy 2 = Sell 5 = Short Sell 6 = Short Sell Exempt		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
58	Text	N	Free text		
59	TimeInForce	N	Supported 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 9=At Crossing The absence of this field is interpreted as Day		
60	TransactTime	Y	The time this order request was initiated/released by the trader, trading system, or intermediary; required by FIX; ignored by the EXCHANGE.		
63	SettleType	y	Supported values: 1 = Cash 2 = Next Day 3 = T_PLUS_2 4 = T_PLUS_3 5 = T_PLUS_4 9 = T_PLUS_5 Required by the EXCHANGE		
64	SettlDate	N	Settlement date; if does not exist or if it's empty the settlement date will be standard settlement date.		
99	StopPX	N	Required if OrdType(40) is Stop (3), Stop Limit (4) or Market If Touched (J)	Trigger price for contingent orders	Not supported
126	ExpireTime	N	Time/Date of order expiration in GMT. Valid when TimeInForce(59) = 6 (Good Till Date). ExpireDate(432), if specified, overrides this field.		
210	MaxShow	N	Disclosed volume for a hidden order	Supported only for FIX 44	Not supported
1100	TriggerType	N	Required if at least one field of Triggering Instruction group is specified	Not supported	Supported values: 4 = Price Movement 2 = Specified trading session
1101	TriggerAction	N	Required if at least one field of Triggering Instruction is specified	Not supported	Supported values: 1 = Activate
1102	TriggerPrice	N	Required if at least one field of Triggering Instruction is specified	Not supported	The price at which the trigger should hit
1107	TriggerPrice Type	N	Required for TriggerType = 4 ( Price Movement)	Not supported	Supported values: 2 = Last Trade
1109	TriggerPrice Direction	N	Required for TriggerType = 4 ( Price Movement)	Not supported	Supported value:  U = TRIGGER IF THE PRICE OF THE SPECIFIED TYPE GOES UP TO OR

					THROUGH THE SPECIFIED TRIGGER PRICE  D = TRIGGER IF THE PRICE OF THE SPECIFIED TYPE GOES DOWN TO OR THROUGH THE SPECIFIED TRIGGER PRICE
1113	TriggerTradingSessionID	N	Required for TriggerType = 2 (Specified trading session)	Not supported	Supported value: 7 = Trading at last
1138	DisplayQty	N	Disclosed volume for a hidden order	Not supported	
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRole		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ 452	PartyRole	Y	3 = Client ID 12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222

#### 4.3.6 Order Cancel Request Message (F)

The EXCHANGE processes the quantity of a Cancel Request as the full remaining quantity. The EXCHANGE does not support partial cancels.

When canceling an order the ClOrdID(11) field must be unique at least across the order chain and the OrigClOrdID(41) must contain the ClOrdID(11) of the order you are trying to cancel. Also OrderID(37) must be filled with the OrderID(37) assigned by the EXCHANGE.

Tag	FileName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
1	Account	Y	Account	Exchange account and internal account	Exchange account and internal account EXCHANGE_ACC/IN

				EXCHAGE_ACC/ INTERNAL_ACC Internal account is optional	TERNAL_ACC Internal account is optional
11	ClOrdID	Y	According to best practices, this field must be unique for each order across all instruments and sides for the same FIX Session ID. The EXCHANGE does not verify the uniqueness of this field.		
37	OrderID	Y	Unique ID of order generated by the EXCHANGE.		
38	OrderQty	Y	Required by FIX. Cancel requests are for full remaining quantity.		
41	OrigClOrdId	Y	ClOrdID of the previous non-rejected order (NOT the initial order of the day) when canceling or replacing an order.		
54	Side	Y	Required by FIX; ignored by the EXCHANGE		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
58	Text	N	Free text		
60	TransactTime	Y	Time this order request was initiated/released by the trader or trading system; required by FIX; ignored by the EXCHANGE		
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRol		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ 452	PartyRole	Y	12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifie r	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA.	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222

#### 4.3.7 Order Replace Request Message (G)

Cancel/Replace requests will be handled as per the FIX protocol. Cancel/Replace requests that cannot be processed will be rejected using the Cancel Reject message.

When replacing an order the ClOrdID field must be unique at least across the order chain and the OrigClOrdID must contain the ClOrdID of the order you are trying to modify. OrderID must be filled with the OrderId assigned by the EXCHANGE.



Tag	FiledName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
11	ClOrdID	Y	According with best practices, this field must be unique for each order across all instruments and sides from the same FIX Session ID. The EXCHANGE does not verify the uniqueness of this field.		
18	ExecInst	N	Supported values: 1 = Not Held 2 = Work S = Suspend  Absence of this field is interpreted as Work		
37	OrderID	Y	Unique ID of the order generated by the EXCHANGE		
38	OrderQty	Y	Required by FIX. If ExecInst(18) is Work this field represents the new order quantity. Otherwise it's ignored.		
40	OrdType	Y	Required by FIX. Ignored if ExecInst(18) is Suspended or Not Held.	Supported Value: 2 = Limit 3 = Stop 4 = Stop Limit J = Market If Touched K = Market With Leftover As Limit	Supported Value: 2 = Limit K = Market With Leftover As Limit
41	OrigClOrdId	Y	ClOrdID of the previous non-rejected order (NOT the initial order of the day) when canceling or replacing an order.		
44	Price	N	Mandatory if OrdType(40) is Limit or Stop Limit  Ignored if ExecInst(18) is Suspended or Not Held.  0(zero) is interpreted as „unpriced order“		
54	Side	Y	Required by FIX; ignored by the EXCHANGE		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
58	Text	N	Free text		
59	TimeInForce	N	Supported 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 9=At Crossing The absence of this field is interpreted as Day. Ignored if ExecInst(18) is Suspended or Not Held.		
60	TransactTime	Y	Required By FIX; ignored by the EXCHANGE Time this order request was		

			initiated/released by the trader, trading system, or intermediary.		
63	SettleType	Y	Ignored if ExecInst(18) is Suspended or Not Held. Supported values: 1 = Cash 2 = Next Day 3 = T_PLUS_2 4 = T_PLUS_3 5 = T_PLUS_4 9 = T_PLUS_5		
64	Set tIDate	N	Ignored if ExecInst(18) is Suspended or Not Held. Settlement date; if not exist or if it is empty settlement date will be standard settlement date.		
99	StopPX	N	Ignored if ExecInst(18) is Suspended or Not Held. Required if OrdType(40) is 3 = Stop or 4 = Stop Limit or J = Market If Touched	Trigger price for contingent orders	Not supported
126	ExpireTime	N	Ignored if ExecInst(18) is Suspended or Not Held. Time/Date of order expiration in GMT. Only valid when TimeInForce = 6 (Good Till Date). ExpireDate(432), if specified, overrides this field.		
210	MaxShow	N	Disclosed volume for an hidden order Ignored if ExecInst(18) is Suspended or Not Held.	Supported only for FIX 44	Not supported
1100	TriggerType	N	Ignored if ExecInst(18) is Suspended or Not Held. Required if at least one field of Triggering Instruction is specified	Not supported	Supported value: 4 = Price Movement 2 = Specified trading session
1101	TriggerAction	N	Ignored if ExecInst(18) is Suspended or Not Held. Required if at least one field of Triggering Instruction is specified	Not supported	Supported value: 1 = Activate
1102	TriggerPrice	N	Ignored if ExecInst(18) is Suspended or Not Held. Required if at least one field of Triggering Instruction is specified	Not supported	Trigger price for contingent orders
1107	TriggerPrice Type	N	Ignored if ExecInst(18) is Suspended or Not Held. Required only for TriggerType = 4 (Price Movement)	Not supported	Supported value: 2 = Last Trade
1109	TriggerPrice Direction	N	Ignored if ExecInst(18) is Suspended or Not Held. Required only for TriggerType = 4 (Price Movement)	Not supported	Supported value:  U = TRIGGER IF THE PRICE OF THE SPECIFIED TYPE GOES UP TO OR THROUGH THE SPECIFIED TRIGGER PRICE  D = TRIGGER IF THE PRICE OF THE SPECIFIED TYPE GOES DOWN TO OR THROUGH THE

					SPECIFIED TRIGGER PRICE
1113	TriggerTradingSessionID	N	Required only for TriggerType = 2 (Specified trading session)	Not supported	Supported value: 7 = Trading at last
1138	DisplayQty	N	Ignored if ExecInst(18) is Suspended or Not Held. Disclosed volume for a hidden order	Not supported	
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRole		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ 452	PartyRole	Y	12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222

#### 4.3.8 New Order Cross (s)

The trading system will acknowledge an accepted NewOrderCross(s) message via the two Execution report (8) messages, one Execution Report(8) for each side. Both ExecutionReport(8) will have the same ClOrdId(11) equal with Cross Id(548) specified in NewOrderCross(s). Further executions of two orders will be send also via Execution report (8) messages.

An rejected NewOrderCross(s) is send via one Execution Report (8) message with ExecType(150) = 8 (Rejected)

Tag	FiledName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
548	CrossID	Y	Unique identifier of the order as assigned by the intermediary with closest association with the investor. Will be loopback in ClOrdId(11) of ExecutionReport(8)		
549	CrossType	Y	1=Cross AON		
50	CrossPrioritization	Y	0=None		
	SideCrossOrdModGrp	Y			
Group 552	Noside		Repeating Group 552; Number of sides. Always '2'.		
→54	Side	Y	Supported values: 1 = Buy 2 = Sell		

			5 = Short Sell 6 = Short Sell Exempt		
→11	ClOrdID	Y	Required by FIX. Ignored by EXCHANGE.		
→1	Account	Y	Account	Exchange account and internal account EXCHANGE_ACC/ INTERNAL_ACC Internal account is optional	Exchange account and internal account EXCHANGE_ACC/ INTERNAL_ACC Internal account is optional
→38	OrderQty	Y	Total order quantity of the cross order. Both sides should have the same OrderQty.		
→58	Text	N	Free text		
→ → Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRol		
→ → 448	PartyID	Y			
→ → 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ → 452	PartyRole	Y	3 = Client ID 12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ → 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
40	OrdType	Y	Type of order. 2 = Limit		
44	Price	Y	Price of order		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
60	TransactTime	Y	The time this order request was initiated/released by the trader, trading system, or intermediary; required by FIX; ignored by the EXCHANGE.		
63	SettleType	Y	Supported values: 1 = Cash 2 = Next Day 3 = T_PLUS_2 4 = T_PLUS_3 5 = T_PLUS_4 9 = T_PLUS_5 Required by the EXCHANGE		
64	SettlDate	N	Settlement date; if does not exist or if it's empty the settlement date will be standard settlement date.		
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222

### 4.3.9 Execution Report Message (8)

The Execution Report message is used to:

- Confirm the receipt of an order ( NewOrderSingle, NewOrderCross)
- Confirm changes to an existing order (i.e. accept cancel and replace requests)
- Relay fill information on working orders
- Activate an parked order when a trigger hit
- Reject/Expire orders
- Report trade cancel
- Report trade correct

During system initialization at midnight, some orders are expired or rejected by the system for different reasons (exceed price tunnel, expired orders due to validity, etc) . These execution reports are the first to be reported for the new day.

Each execution, except Trade Cancel and Trade Correct messages contains information that will describe the current state of the order and execution status.

Tag	Filed Name	R e q , d	Description	Notes for FIX 4.4	Notes for FIX 5.0
1	Account	N	account	Exchange account and internal account EXCHAGE_ACC/ INTERNAL_ACC	Exchange account and internal account EXCHAGE_ACC/ INTERNAL_ACC
6	AvgPX	Y	Required by FIX. Calculated. Average price of all fills on this order. It's not updated by ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		
11	ClOrdID	N			
14	CumQty	Y	Required by FIX. Cumulated filled quantity for the chain of orders It's not updated by ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		
17	ExecID	Y	Unique identifier of execution message as assigned by EXCHANGE		
19	ExecRefID	N	Required for Trade Cancel and Trade Correct ExecType messages		
21	HandInst	N	Supported values: 1=Automated Execution Order Private		
22	SecurityID Source	N	Supported values: 8= Exchange Symbol		
31	LaspPX	N	Required if ExecType(150) = Trade. It's not updated by ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		
32	LastQty		Quantity bought/sold on this fill. Required if ExecType(150) = Trade. It's not updated by ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		

37	OrderID	Y	Unique ID of order assign by the EXCHANGE		
38	OrderQty	Y	Order quantity It's not updated by: ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		
39	OrdStatus	Y	Supported values: 0=New 1=Partially filled 2=Filled 4=Canceled 7=Stopped 8=Rejected 9=Suspended C=Expired Is not updated by: ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		
40	OrdType	Y		Supported Value: 2 = Limit 3 = Stop 4 = Stop Limit J = Market If Touched K = Market With Leftover As Limit	Supported Value: 2 = Limit K = Market With Leftover As Limit
41	OrigClOrdId	Y	Conditionally required for response to an electronic Cancel or Cancel/Replace request		
44	Price	N	Mandatory if OrdType(40) is Limit or Stop Limit Ignored if ExecInst(18) is Suspended or Not Held.		
54	Side	Y	Supported values: 1 = Buy 2 = Sell 5 = Short Sell 6 = Short Sell Exempt		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
58	Text	N	Free text; Could contain a description of the reject or cancel in format: [REJECT_CODE]/[REJECT_DESCRIPTION]. REJECT_CODE – numeric code of reject reason REJECT_DESCRIPTION – description of reject reason See <a href="#">Annex1</a>		
59	TimeInForce	N	Supported values: Supported 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 9=At Crossing Absence of this field is interpreted as Day.		
60	TransactTime	Y	Time the transaction represented		

			by this ExecutionReport occurred If ExecType(150)=Trade or ExecType(150)=TradeCancel or ExecType(150)=TradeCorrect or or represent time of trade		
63	SettleType	Y	Supported values: 1 = Cash 2 = Next Day 3 = T_PLUS_2 4 = T_PLUS_3 5 = T_PLUS_4 9 = T_PLUS_5		
64	SettleDate	N	Settlement date; if not exist settlement date will be standard settlement date.		
75	TradeDate	N	Date the transaction represented by this ExecutionReport occurred If ExecType(150)=Trade or ExecType(150)=TradeCancel or ExecType(150)=TradeCorrect or or represent date of trade		
99	StopPX	N	Ignored if ExecInst(18) is Suspended or Not Held. Required if OrdType(40) is 3 = Stop or 4 = Stop Limit or J = Market If Touched	Trigger price for contingent orders	Not supported
103	OrderRejectReason	N	For optional use with ExecType = 8 (Rejected)		
150	ExecType	Y	Execution report type	Supported values: 0= New 4=Canceled 5=Replace F=Trade 8=Rejected 9=Suspended C=Expired G=Trade Correct G=Trade Cancel	Supported values: 0= New 4=Canceled 5=Replace F=Trade 8=Rejected 9=Suspended C=Expired G=Trade Correct G=Trade Cancel L= Triggered Or Activated By System
151	LeavesQty	Y	Required by FIX. Quantity open for further execution  Is not updated by ExecType(150)=TradeCorrect or ExecType(150)=TradeCancel		
210	MaxShow	N	Disclosed volume for an hidden order	Supported only for FIX 44	Not supported
432	ExpireDate		Date of order expiration in GMT. Only valid when TimeInForce = 6 (Good Till Date).		
636	Working Indicator	N	Applicable only for OrdStatus = "New" Y value indicate that order is in regular book; N value indicate that order is accepted in contingent book		
1100	TriggerType	N		Not supported	Supported value: 4 = Price Movement 2 =Specified trading session
1101	TriggerAction	N		Not supported	Supported value:

					1 = Activate
1102	TriggerPrice	N		Not supported	Trigger price for contingent orders
1107	TriggerPrice Type	N	Required only for TriggerType = 4 (Price Movement)	Not supported	Supported value: 2 = Last Trade
1109	TriggerPrice Direction	N	Required only for TriggerType = 4 (Price Movement)	Not supported	Supported value:  U = TRIGGER IF THE PRICE OF THE SPECIFIED TYPE GOES UP TO OR THROUGH THE SPECIFIED TRIGGER PRICE  D = TRIGGER IF THE PRICE OF THE SPECIFIED TYPE GOES DOWN TO OR THROUGH THE SPECIFIED TRIGGER PRICE
1113	TriggerTradingSessionID	N	Required only for TriggerType = 2	Not supported	Supported values: 7 = Trading at last
1138	DisplayQty	N	Disclosed volume for an hidden order	Not supported	
851	LastLiquidityInd	N	Last trade liquidity indicator Available only for OrdStatus(39) filled and partial filled 1 - add liquidity 2 - remove liquidity 3 - Routed out 4 - Auction trade	Added value: 4 - Auction trade	Value 4 - Auction trade Added FIX.5.0 EP57
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRol		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier D = Proprietary ( used for PartyRole = 53 or 54)	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222 D = Proprietary Added FIX.4.3 Updated FIX.5.0SP2 EP192
→ 452	PartyRole	Y	3 = Client ID 12 = Executing Trader 122 = Investment Decision Maker 53= Trader mnemonic 54= Sender location	Added values: 122= Investment Decision Maker-  53= Trader mnemonic 54= Sender location Added FIX.4.4 EP8	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179



1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222
1115	OrderCategory	N	Defines the type of interest behind a trade (only for OrdStatus(39) filled and partial filled). 1 = Order 3 = Privately Negotiated Trade 8 = Cross Order	Added FIX.4.4 EP22	
2667	AlgorithmicTradeIndicator	N	Indicates that the order or trade originates from a computer program or algorithm requiring little-to-no human intervention. Only for OrdStatus(39) filled and partial filled).  0 = Non-algorithmic trade 1 = Algorithmic trade	Added tag	Added FIX.5.0SP2 EP216
Group 2668	NoTrdRegPublicationGrp	N	Number of regulatory publication rules in repeating group. Only for OrdStatus(39) filled and partial filled).	Added tag	Added FIX.5.0SP2 EP216
→ 2669	TrdRegPublicationType	Y	0 = Pre-trade transparency waiver	Added tag	Added FIX.5.0SP2 EP216
→ 2670	TrdRegPublicationReason	N	0 = No preceding order in book as transaction price set within average spread of a liquid instrument (NLIQ) 1 = No preceding order in book as transaction price depends on system-set reference price for an illiquid instrument (OLIQ) 2 = No preceding order in book as transaction price is for transaction subject to conditions other than current market price(PRIC)	Added tag	Added FIX.5.0SP2 EP216

#### 4.3.10 Order Cancel Reject Message (9)

Tag	Filed Name	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
11	ClOrdID	N			
37	OrderID	Y	Unique ID of the order assigned by the EXCHANGE		
39	OrdStatus	Y	Supported values: 0=New 1=Partially filled 2=Filled 4=Canceled 7=Stopped 8=Rejected 9=Suspended C=Expired		
41	OrigClOrdId	Y	Conditionally required for response to an electronic Cancel or Cancel/Replace request		
58	Text	N	Free text; The FIX Text field(tag 58) will be returned within all reject and cancel messages and will contain a		

			description of the reject or cancel in format: [REJECT_CODE]/[REJECT_DESCRIPTION]. REJECT_CODE – numeric code of reject reason REJECT_DESCRIPTION – description of reject reason See <a href="#">Annex1</a> .		
434	CxlRejResponseTo	Y			
102	CxlRejReason	N	Code to identify the reason for cancel rejection.	1 = Unknown Order 99 = Other	1 = Unknown Order 18 = Invalid Price Increment 99 = Other

#### 4.4. Quote handling for market making and liquidity provider activity

##### 4.4.1 Full Quote and Half Quote

Market maker provides liquidity by offering half quote (one side quote) or full quote (both buy and sell side) submitting Quote Message(S).

Full quote consists of two orders, on the same account, one for buy side and one for and sell side, providing BidSize(134)/TotalBidSize(1749), BidPx(132), OfferSize(135)/TotalOfferSize(1750), OfferPx (133).

Half quote consists in a single order (buy or sell) and have only price and quantity only for buy side ( BidSize(134)/TotalBidSize(1749) and BidPx(132) ) or only for sell side ( OfferSize(135)/TotalOfferSize(1750) and OfferPx(133) )

When submitting a Full Quote Message(S), clients may:

- Entry or update both side of quote
- update on side with price and quantity provided in Quote Message and insert a new order for the other side which isn't outstanding anymore .

When submitting a Half Quote Message(S), clients may:

- update specified side of quote if exist an outstanding order for specific side. The other side of the quote remains unchanged.
- insert a new order if it isn't an outstanding order for specific side.

In case of Full Quote, if one side of a quote fails the validations (e.g. price tick, spread, etc.) of the trading system, neither the other side will be accepted be trading system.

In case of Half Quote, if specified side of a quote fails the validations (e.g. price tick, spread, etc.) of the trading system, is rejected. The other side, if exist in trading system remain unchanged.

The trading system will acknowledge an accepted Quote message (S) via the Quote Status Report(AI) message with QuoteStatus (297) field set to Accepted (1).

Full Quote (S) is acknowledged by the Quote Status Report (AI) with price and size specified for both sides.

Half Quote (S) is acknowledged by the Quote Status Report (AI) with price and size for one side of a quote.

If a quote is accepted, it is treated as two separate and independent limit orders. One side of a quote will not be automatically cancelled if the other side is fully filled.

##### 4.4.2 Quote Entry and Quote Update

If TotalBidSize and/or TotalOfferSize are specified the quote is being modified, in which case a previous quote is expected. When BidSize and/or OfferSize are specified the quote is a quote entry, and the previous quote is replaced if it exists. Only one of the two sets of size fields is allowed when entering a new quote or updating an existing quote.

### 4.4.3 Quote Cancel

A client may use the Quote Cancel Message(Z) to cancel a quote entry. The message should include a QuoteCancelType (298) of Cancel for Instruments (1). The instrument to which the cancellation applies should also be specified. It is required to include the QuotCxlEntriesGrp (295) block in the message and the field Symbol (55) should be filled with symbol (see Symbology).

The server will explicitly acknowledge or reject such a Quote Cancel(Z) message via the Quote Status Report(AI) message. The QuoteStatus (297) field will indicate whether the quote is Cancelled For Symbol (1) or whether the quote cancel request is Rejected (5).

If only one side of quote is outstanding, this side will be canceled and QuoteStatus (297) will be set to Cancelled For Symbol (1).

### 4.4.4 Quote Acknowledgement

The trading system will explicitly acknowledge or reject each Quote message(S) and Quote Cancel Message(Z) via the Quote Status Report(AI) message. The QuoteStatus (297) field will indicate whether the quote is Accepted (0) or Rejected (5). If a quote is rejected, the reason will be specified in the Text (58) field.

In a Quote Status Report(AI) the TotalBidSize(1749) corresponds to the OrderQty(38) while the BidSize(134) corresponds to LeavesQty(115) of buy side of quote. Similar, TotalOfferSize(1750) corresponds to the OrderQty(38) and the OfferSize(135) corresponds to LeavesQty(115) of sell side of quote.

### 4.4.5 Quote Execution

The Execution Report (8) message is used to notify the client if a quote is executed. The ClOrdID (11) of the message will contain the QuoteID (117) of the last Quote message that updated the executed quote. The side, quantity and price fields (i.e.Side (54), LastQty (32), LastPx (31), LeavesQty (151), OrderQty (38), Price (44), etc.) will contain information for the executed side.

### 4.4.6 Quote Cancellation, Expiration

If one side of quote is expired or is updated or canceled in another way then using one of the Quote Message or Quote Cancel Message, an unsolicited Execution Report will be sent to the client to reflect last change.

The ClOrdID (11) of the message will contain the QuoteID (117) of the last Quote message that updated the executed quote

All active quotes will expire at the end of the trading day

### 4.4.7 Quote Message (S)

Tag	FiledName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
1	Account	Y	Account	Exchange account and internal account EXCHAGE_ACC/ INTERNAL_ACC Internal account is optional.	Exchange account and internal account EXCHAGE_ACC/ INTERNAL_ACC Internal account is optional.
54	Side	N	Supported values: 2 = Sell 5 = Short Sell 6 = Short Sell Exempt It is used only to mark a short sell quote		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
58	Text	N	Free text		
63	SettleType	Y	Supported values:		

			1 = Cash 2 = Next Day 3 = T_PLUS_2 4 = T_PLUS_3 5 = T_PLUS_4 9 = T_PLUS_5 Required by the EXCHANGE		
64	SettlDate	N	Settlement date; if does not exist or if it's empty the settlement date will be standard settlement date.		
117	QuoteID	Y	Unique identifier for quote		
132	BidPX	N	Bid price. Require if BidSize(134) is specified.		
133	OfferPX	N	Offer price. Require if OfferSize(135) is specified		
134	BidSize	N	Remaining bid size. Only one of BidSize(134) and TotalBidSize(1749) should exist.		
135	OfferSize	N	Remaning Offer size. Only one of OfferSize(135) and TotalOfferSize(1750) should exist.		
1749	TotalBidSize	N	Total Bid size. Only one of BidSize(134) and TotalBidSize(1749) should exist.	Custom field	Added FIX.5.0SP2 EP126
1750	TotalOfferSize	N	Offer size. Only one of OfferSize(135) and TotalOfferSize(1750) should exist	Custom field	Added FIX.5.0SP2 EP126
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRol		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ 452	PartyRole	Y	3 = Client ID 12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added tag

#### 4.4.8 Quote Cancel Message (Z)

Tag	FiledName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
1	Account	Y	Account	Exchange account and internal account	Exchange account and internal account EXCHAGE_ACC/IN

				EXCHAGE_ACC/ INTERNAL_ACC Internal account is optional.	TERNAL_ACC Internal account is optional.
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
117	QuoteID	Y	Unique identifier for quote		
295	NoQuoteEntries	Y	1		
298	QuoteCancelType	Y	1 = CxlSym		
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRole		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222
→ 452	PartyRole	Y	12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2 EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added tag

#### 4.4.9 Quote Status Report Message(AI)

Tag	FieldName	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
1	Account	Y	Account	Exchange account and internal account EXCHAGE_ACC/ INTERNAL_ACC	
54	Side	N	Only for acknowledgement of a Quote Message Supported values: 2 = Sell 5 = Short Sell 6 = Short Sell Exempt It is used only to mark a short sell quote		
55	Symbol	Y	The symbol-market defined at the EXCHANGE as SYM.MKT		
58	Text	N	Free text		
60	TransactTime	N	Time the transaction represented by this QuoteStatusReport occurred		
63	SettleType	N	Supported values: 1 = Cash 2 = Next Day		

			3 = T_PLUS_2 4 = T_PLUS_3 5 = T_PLUS_4 9 = T_PLUS_5		
64	SettlDate	N	Settlement date; if not exist settlement date will be standard settlement date.		
117	QuoteID	Y	Unique identifier for quote		
132	BidPX	N	Bid price. It as absent if Quote Status Report(AI) acknowledge an half Quote for sell side.		
133	OfferPX	N	Offer price. It as absent if Quote Status Report(AI) acknowledge an half Quote for buy side		
134	BidSize	N	Remaining Bid size. It as absent if Quote Status Report(AI) acknowledge an half Quote for sell side.		
135	OfferSize	N	Remaining Offer size. It as absent if Quote Status Report(AI) acknowledge an half Quote for buy side		
297	QuoteStatus	Y	Supported values: 0 = Accepted 1 = Canceled for symbol 5 = Rejected		
5001	Exchange QuoteID	N	Unique IDs of the buy order and the sell order assigned by the EXCHANGE. Ex: buyOrderID/sellOrderID (separated from '/' character) buyOrderID or sellOrderID could be an empty string if the quote has only one leg.	Custom field	Custom field
1749	TotalBidSize	N	Total Bid size. It as absent if Quote Status Report(AI) acknowledge an half Quote for sell side	Custom field	Added FIX.5.0SP2 EP126
1750	TotalOfferSize	N	Total Offer size. It as absent if Quote Status Report(AI) acknowledge an half Quote for buy side	Custom field	Added FIX.5.0SP2 EP126
Group 453	NoPartyIDs		Repeating group 453 below should contain unique combinations of PartyID, PartyIDSource, and PartyRol		
→ 448	PartyID	Y			
→ 447	PartyIDSource	N	P= Short code identifier D = Proprietary Added FIX.4.3 Updated FIX.5.0SP2 EP192	Added value: P= Short code identifier	P= Short code identifier Added FIX.5.0SP2 EP222 D = Proprietary Added FIX.4.3 Updated FIX.5.0SP2 EP192
→ 452	PartyRole	Y	3 = Client ID 12 = Executing Trader 122 = Investment Decision Maker	Added values: 122= Investment Decision Maker-	122= Investment Decision Maker- Added FIX.5.0SP2

			53= Trader mnemonic 54= Sender location		EP222
→ 2376	PartyRoleQualifier	N	0 = None (applicable only for the reserved Party IDs) 22 = Algorithm (applicable to PartyRole values 12 or 122)	Added tag	Added FIX.5.0SP2 EP179
1724	OrderOrigination	N	Identifies the origin of the order. 5 = DEA flag Other values or absent means NON DEA	Added tag	Added FIX.5.0SP2 EP135 Updated FIX.5.0SP2 EP222

## 5. Other Administrative Messages

### 5.1. User Request Message (BE)

User Request is used to change the password of the user.

Tag	Filed Name	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
923	UserRequestID	Y	Required by FIX; ignored by the EXCHANGE		
924	UserRequestType	Y	Supported values: 3= Change Password For User		
553	UserName	Y	User code ( case sensitive)		
554	Password	N	Old password		
925	NewPassword	N	New password		

### 5.2. User Response Message(BF)

The EXCHANGE responds to an UserRequest with an UserResponse as per FIX protocol.

Note that an User Response does not have UserRequestID filled with the original one supplied in UserRequest.

Tag	Filed Name	Req'd	Description	Notes for FIX 4.4	Notes for FIX 5.0
923	UserRequestID	Y	Required by FIX		
553	UserName	Y	User code ( case sensitive)		
926	UserStatus	N	Supported values: 5 = Password Changed 6 = Other ( password not changed )		
927	UserStatustText	N	Description of error		

## 6. Annex 1 – Business Error codes

The FIX Text field(tag 58) returned within all reject and cancel messages and contains a description of the reject or cancel using the format: [REJECT\_CODE] / [REJECT\_DESCRIPTION].

REJECT\_CODE – numeric code of reject reason

REJECT\_DESCRIPTION – description of reject reason

Reject Code	Reject description
1	order not found
2	order not permitted
3	deal not permitted
4	quote not permitted
5	unpriced order not permitted
6	market order not permitted
7	cross order type not permitted
8	invalid timestamp
9	compute market price error
10	invalid price step
11	price computing error
12	price is out of range
13	duplicate level price
14	only one of order quantity fields could be filled (siz/oty)
15	invalid order size
16	invalid order quantity
17	order value exceeds maximum value
18	order value is lower than minimum value
19	invalid order type
20	Invalid price spread for quote
21	price balancing error for quote
30	contingent order not permitted
31	hidden order not permitted for contingent orders
32	special execution not permitted for contingent orders
33	invalid term and trigger type combination
34	unpriced order not permitted for contingent orders
35	invalid trigger price
36	invalid tgp/lastprice relation
37	price is out of best bid-ask spread
40	hidden order not permitted
41	invalid disclosed order size
42	special terms order not permitted
43	order volume must be multiple of disclosed volume
50	Use only default settlement term
51	Use only standard settlement term
52	invalid date in term field
53	please use only open-term for order
54	open order not permitted
55	only day orders permitted
56	cannot change account
57	operation not permitted on oddlot market
58	Use only permitted settlement term
59	Invalid settlement date
61	fill or kill order not permitted
62	fill conditions are not met
63	invalid symbol-market status for order
64	<fill or kill> conditions are not met because cross account
65	wrong volume for this matching type
66	IOC order not permitted



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67	IOC conditions are not met
70	short-selling not permitted
71	cross account
72	out of term
73	uptick rule restriction
74	invalid order type (order/deal/quote)
80	cannot activate non-contingent order
82	order book change is not permitted
83	VFO order is not permitted
84	VFA order is not permitted
85	VFC order is not permitted
86	Trigger type TAL order is not permitted
87	invalid trigger type TAL conditions
88	Cancel orders at disconnect/ Bulk orders cancelation
89	Maximum order book depth exceeded
90	Invalid usage of short code
91	client code is mandatory
92	T settlement not permitted"
93	Target deal user not connected
94	Deal value exceed maximum net value
95	Deal value lower than minimum value
96	Deal price is out of spread
97	deal not found
99	business error
9999	check acces error

## 7. Message Flow diagrams

### 7.1. Add new order

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Share	FIX Message
1	NewOrder(X)				1000				8=FIXT.1.1 9=162 35=D 34=247 49=U04QFX50 52=20100301-11:43:18.688 56=BUX 1=1000572 11=1267443798691 21=1 38=1000 40=2 44=1.05 54=1 55=SIF1.REGS 59=0 60=20100301-11:43:18.688 63=4 10=228
2		<i>Execution(X)</i>	<i>Rejected</i>	<i>Rejected</i>	1000	0	0	0	8=FIXT.1.1 9=375 35=8 34=248 49=BUX 52=20100301-11:42:54.297 56=U04QFX50 1128=7 1=1000573 6=0 11=1267443781634 14=0 17=T10000024484201003011342541930000000000 21=1 22=8 30=REGS 31=0 32=0 37=24484 38=1000 39=8 40=2 44=1.14 48=SIF1 54=1 55=SIF1.REGS 58=99/account 1000573 not found at member 0 59=0 60=20100301-11:42:54.193 63=4 75=20100301 103=99 150=8 151=0 636=Y 1100=4 1101=1 1102=0 1107=2 10=068
2		Execution(X)	New	New	1000	0	0	0	8=FIXT.1.1 9=327 35=8 34=249 49=BUX 52=20100301-11:43:11.303 56=U04QFX50 1128=7 1=1000572 6=0 11=1267443798691 14=0 17=T10000024485201003011343112510000000000 21=1 22=8 30=REGS 31=0 32=0 37=24485 38=1000 39=0 40=2 44=1.05 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100301-11:43:11.251 63=4 75=20100301 150=0 151=1000 636=Y 1100=4 1101=1 1102=0 1107=2 10=032

### 7.2. Fill order

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Share	FIX Message
1	NewOrder(X)				1000				
2		<i>Execution(X)</i>	<i>Rejected</i>	<i>Rejected</i>	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	

3		Execution(X)	Trade	Partially Filled	1000	500	500	500	8=FIXT.1.1 9=348 35=8 34=356 49=BUX 52=20100301-12:36:31.303 56=U04QFX50 1128=7 1=1000572 6=1.05 11=1267443798691 14=500 17=T10000024485201003011436311650000009891 21=1 22=8 30=REGS 31=1.05 32=500 37=24485 38=1000 39=1 40=2 44=1.05 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100301-12:36:31.165 63=4 75=20100301 150=F 151=500 574=4 636=Y 851=3 1100=4 1101=1 1102=0 1107=2 10=082
4		Execution(X)	Trade	Filled	1000	1000	0	500	8=FIXT.1.1 9=347 35=8 34=360 49=BUX 52=20100301-12:38:24.523 56=U04QFX50 1128=7 1=1000572 6=1.05 11=1267443798691 14=1000 17=T10000024485201003011438245100000009892 21=1 22=8 30=REGS 31=1.05 32=500 37=24485 38=1000 39=2 40=2 44=1.05 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100301-12:38:24.510 63=4 75=20100301 150=F 151=0 574=4 636=Y 851=3 1100=4 1101=1 1102=0 1107=2 10=025

### 7.3. Cancel order

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Share	FIX Message
1	NewOrder(X)				1000				
2		Execution(X)	Rejected	Rejected	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	
4	Cancel Request(Y)								8=FIXT.1.1 9=150 35=F 34=767 49=U04QFX50 52=20100302-15:44:03.178 56=BUX 11=1267544643185 37=24523 38=1000 41=1267544634024 54=1 55=SIF1.REGS 60=20100302-15:44:03.178 10=041
3		Cancel Reject(Y,X)							8=FIXT.1.1 9=149 35=9 34=807 49=BUX 52=20100302-15:52:50.723 56=U04QFX50 1128=7 11=1267545181111 37=123 39=8 41=1267544935129 58=1/order 24523 - not found! 102=1 434=1 10=174
3		Execution(Y,X)	Canceled	Canceled	1000	0	0	0	8=FIXT.1.1 9=341 35=8 34=778 49=BUX 52=20100302-15:43:52.742 56=U04QFX50 1128=7 1=1000572 6=0 11=1267544643185 14=0 17=T10000024523201003021743527370000000000 21=1 22=8 30=REGS 31=0 32=0 37=24523 38=1000 39=4 40=2 41=1267544634024 44=1.01 48=SIF1 54=1 55=SIF1.REGS 59=1 60=20100302-15:43:52.737 63=4 75=20100302 150=4 151=0 636=Y

										1100=4 1101=1 1102=0 1107=2 10=249
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#### 7.4. Change order

Find order by OrderId and ClordId, Symbol-Market

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Share	FIX Message
1	NewOrder(X)				1000				
2		<i>Execution(X)</i>	<i>Rejected</i>	<i>Rejected</i>	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	8=FIXT.1.1 9=328 35=8 34=147 49=BUX 52=20100303-10:09:09.364 56=U04QFX50 1128=7 1=1000577 6=0 11=1267610961541 14=0 17=T10000024586201003031209094000000000000 21=1 22=8 30=REGS 31=0 32=0 37=24586 38=1000 39=0 40=2 44=1.025 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100303-10:09:09.400 63=4 75=20100303 150=0 151=1000 636=Y 1100=4 1101=1 1102=0 1107=2 10=102
3	Cancel Replace Request(Y,Z)				1000	0	0	0	8=FIXT.1.1 9=173 35=G 34=132 49=U04QFX50 52=20100303-10:09:46.593 56=BUX 11=1267610986599 37=24586 38=1000 40=2 41=1267610986598 44=1.03 54=1 55=SIF1.REGS 59=0 60=20100303-10:09:46.593 63=4 10=072
4		<i>CanceReplace Reject(Y,Z)</i>							8=FIXT.1.1 9=167 35=9 34=148 49=BUX 52=20100303-10:09:34.463 56=U04QFX50 1128=7 11=1267610986599 37=24586 39=8 41=1267610986598 58=1/order #24586 not found by OrigClOrdI 102=1 434=2 10=118
5	Cancel Replace Request(W,X)				1500	0	0	0	8=FIXT.1.1 9=174 35=G 34=151 49=U04QFX50 52=20100303-10:18:57.710 56=BUX 11=1267611537700 37=24586 38=1500 40=2 41=1267610961541 44=1.055 54=1 55=SIF1.REGS 59=0 60=20100303-10:18:57.709 63=4 10=081
6		Execution(W)			1500	0	0	0	8=FIXT.1.1 9=345 35=8 34=168 49=BUX 52=20100303-10:18:45.590 56=U04QFX50 1128=7 1=1000577 6=0 11=1267611537700 14=0 17=T100000245862010030312184554000000000000 21=1 22=8 30=REGS 31=0 32=0 37=24586 38=1000 39=0 40=2 41=1267610961541 44=1.055 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100303-10:18:45.540 63=4 75=20100303 150=5 151=1000 636=Y 1100=4 1101=1 1102=0 1107=2 10=188

## Change follows by executions

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Share	FIX Message
1	NewOrder(X)				1000				
2		Execution(X)	Rejected	Rejected	1500	0	0	0	
2		Execution(X)	New	New	1500	0	0	0	8=FIXT.1.1 9=327 35=8 34=180 49=BUX 52=20100303-10:24:11.903 56=U04QFX50 1128=7 1=1000657 6=0 11=1267611864006 14=0 17=T20000024590201003031224118240000000000 21=1 22=8 30=REGS 31=0 32=0 37=24590 38=1500 39=0 40=2 44=1.15 48=SIF1 54=2 55=SIF1.REGS 59=0 60=20100303-10:24:11.824 63=4 75=20100303 150=0 151=1500 636=Y 1100=4 1101=1 1102=0 1107=2 10=038
3		Execution(X)	Trade	Partially Filled	1500	1000	500	1000	8=FIXT.1.1 9=350 35=8 34=182 49=BUX 52=20100303-10:24:11.913 56=U04QFX50 1128=7 1=1000657 6=1.15 11=1267611864006 14=1000 17=T20000024590201003031224118390000009919 21=1 22=8 30=REGS 31=1.15 32=1000 37=24590 38=1500 39=1 40=2 44=1.15 48=SIF1 54=2 55=SIF1.REGS 59=0 60=20100303-10:24:11.839 63=4 75=20100303 150=F 151=500 574=4 636=Y 851=2 1100=4 1101=1 1102=0 1107=2 10=159
4	Cancel Replace Request(W,X)				2000	0	0	0	8=FIXT.1.1 9=172 35=G 34=173 49=U04QFX50 52=20100303-10:29:00.337 56=BUX 11=1267612140345 37=24590 38=2000 40=2 41=1267611864006 44=1.15 54=2 55=SIF1.REGS 59=0 60=20100303-10:29:00.337 63=4 10=214
5		Cancel Replace Reject(Y,Z)							8=FIXT.1.1 9=149 35=9 34=192 49=BUX 52=20100303-10:28:48.152 56=U04QFX50 1128=7 11=1267612140345 37=24590 39=1 41=1267611864006 58=15/invalid order size 102=99 434=2 10=145
5		Execution(W)	Trade	Partially Filled	2000	1000	100	0	8=FIXT.1.1 9=350 35=8 34=204 49=BUX 52=20100303-10:34:06.938 56=U04QFX50 1128=7 1=1000657 6=1.15 11=1267612459131 14=1000 17=T20000024590201003031234069270000009919 21=1 22=8 30=REGS 31=0 32=0 37=24590 38=2000 39=1 40=2 41=1267611864006 44=1.15 48=SIF1 54=2 55=SIF1.REGS 59=0 60=20100303-10:34:06.927 63=4 75=20100303 150=5 151=1000 636=Y 1100=4 1101=1 1102=0 1107=2 10=192

### 7.5. Suspend and Release order (unsolicited)

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Qty	FIX Message
1	NewOrder(X)				1000				
2		<i>Execution(X)</i>	<i>Rejected</i>	<i>Rejected</i>	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	
3		Execution(X)	Trade	Partially Filed	1000	500	500	500	
4		Execution(X)	Suspended	Suspended	1000	0	0	0	8=FIXT.1.1 9=329 35=8 34=762 49=BUX 52=20100302-15:37:42.323 56=U04QFX50 1128=7 1=1000577 6=1.14 11=1267543569456 14=500 17=T10000024508201003021737423310000009895 21=1 22=8 30=REGS 31=0 32=0 37=24508 38=1000 39=9 40=2 44=1.14 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100302-15:37:42.331 63=4 75=20100302 150=9 151=0 636=Y 1100=4 1101=1 1102=0 1107=2 10=217
5		Execution(X)	New	Partially Filed	1000	500	500	0	8=FIXT.1.1 9=331 35=8 34=763 49=BUX 52=20100302-15:38:07.373 56=U04QFX50 1128=7 1=1000577 6=1.14 11=1267543569456 14=500 17=T10000024508201003021738073990000009895 21=1 22=8 30=REGS 31=0 32=0 37=24508 38=1000 39=1 40=2 44=1.14 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100302-15:38:07.399 63=4 75=20100302 150=0 151=500 636=Y 1100=4 1101=1 1102=0 1107=2 10=078

### 7.6. Add order with hidden volume

Add hidden order in FIX4.4

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty/ Max Show	Cum Qty	Leaves Qty	Last Qty	FIX Message
1	NewOrder(X)				10000/ 500				8=FIX.4.4 9=130 35=D 1=1000572 11=127233360d1 38=10000 40=2 44=1208 54=2 55=DB1.RGSI 58=test hidden 44 59=0 60=20100303-08:45:22.060 63=4 210=500 10=193
2		<i>Execution(X)</i>	<i>Rejected</i>	<i>Rejected</i>	10000/ 500	0	0	0	8=FIX.4.4 9=334 35=8 34=4 49=BUX 52=20100303-08:45:10.540

					500				56=U04QFX44 1=1000572 6=0 11=127233360d1 14=0 17=T20000024568201003031045104870000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24568 38=1000 39=8 40=2 44=1389 48=DB1 54=2 55=DB1.RGSI 58=41/invalid disclosed order size, 1 59=0 60=20100303-08:45:10.487 63=4 75=20100303 103=11 150=8 151=0 210=500 636=Y 10=185
2		Execution(X)	New	New	10000/ 500	0	0	0	8=FIX.4.4 9=296 35=8 34=2 49=BUX 52=20100303-08:45:10.239 56=U04QFX44 1=1000572 6=0 11=127233360d1 14=0 17=T20000024567201003031045101720000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24567 38=10000 39=0 40=2 44=1208 48=DB1 54=2 55=DB1.RGSI 59=0 60=20100303-08:45:10.172 63=4 75=20100303 150=0 151=10000 210=500 636=Y 10=073
3		Execution(X)	Trade	Partially Filled	10000/ 500	800	9200	800	8=FIX.4.4 9=338 35=8 34=4 43=Y 49=BUX 52=20100303- 08:53:25.535 56=U04QFX44 122=20100303-08:50:17 1=1000572 6=1208 11=127233360d1 14=800 17=T20000024569201003031050176090000009917 21=1 22=8 30=RGSI 31=1208 32=800 37=24567 38=10000 39=1 40=2 44=1208 48=DB1 54=2 55=DB1.RGSI 59=0 60=20100303- 08:50:17.609 63=4 75=20100303 150=F 151=9200 210=500 636=Y 851=3 10=231

## Add hidden order in FIX 5.0

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty/ Display Qty	Cum Qty	Leaves Qty	Last Qty	FIX Message
1	NewOrder(X)				10000/ 500				8=FIXT.1.1 9=131 35=D 1=1000572 11=1272341aba6 38=10000 40=2 44=1208 54=2 55=DB1.RGSI 58=test hidden 50 59=0 60=20100303-09:00:58.764 63=4 1138=500 10=177
2		Execution(X)	Rejected	Rejected	10000/5 00	0	0	0	8=FIXT.1.1 9=370 35=8 34=3 49=BUX 52=20100303-09:00:47.039 56=U04QFX50 1128=7 1=1000572 6=0 11=1272341aba6 14=0 17=T20000024572201003031100470740000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24572 38=1000 39=8 40=2 44=1389 48=DB1 54=2 55=DB1.RGSI 58=41/invalid disclosed order size, 1 59=0 60=20100303-09:00:47.074 63=4 75=20100303 103=11 150=8 151=0 636=Y 1100=4 1101=1 1102=0 1107=2 1138=500 10=146
2		Execution(X)	New	New	10000/ 500	0	0	0	8=FIXT.1.1 9=332 35=8 34=2 49=BUX 52=20100303-09:00:46.880 56=U04QFX50 1128=7 1=1000572 6=0 11=1272341aba6 14=0 17=T20000024571201003031100469080000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24571 38=10000 39=0 40=2 44=1208

									48=DB1 54=2 55=DB1.RGSI 59=0 60=20100303-09:00:46.908 63=4 75=20100303 150=0 151=10000 636=Y 1100=4 1101=1 1102=0 1107=2 1138=500 10=062
3		Execution(X)	Trade	Partially Filled	10000/500	800	9200	800	8=FIXT.1.1 9=380 35=8 34=5 43=Y 49=BUX 52=20100303-09:07:40.360 56=U04QFX50 122=20100303-09:03:35 1128=7 1=1000572 6=1208 11=1272341aba6 14=800 17=T20000024571201003031103359380000009918 21=1 22=8 30=RGSI 31=1208 32=800 37=24571 38=10000 39=1 40=2 44=1208 48=DB1 54=2 55=DB1.RGSI 59=0 60=20100303-09:03:35.938 63=4 75=20100303 150=F 151=9200 574=4 636=Y 851=3 1100=4 1101=1 1102=0 1107=2 1138=500 10=168

### 7.7. Add and Activate contingent order

Add contingent order in FIX 5.0 – IF Touch Sell Limit

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Qty	FIX Message
1	NewOrder(X)				1000				8=FIXT.1.1 9=154 35=D 1=1000572 11=1271fa1cc86 38=10000 40=2 44=1208 54=2 55=DB1.RGSI 58=test tig 59=0 60=20100302-16:07:29.670 63=4 1100=4 1101=1 1102=1208 1107=2 1109=U 10=106
2		Execution(X)	Rejected	Rejected	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	RCV: 8=FIXT.1.1 9=333 35=8 34=5 49=BUX 52=20100302-16:07:19.150 56=U04QFX50 1128=7 1=1000572 6=0 11=1271fa1cc86 14=0 17=T20000024557201003021807191730000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24557 38=10000 39=0 40=2 44=1208 48=DB1 54=2 55=DB1.RGSI 59=0 60=20100302-16:07:19.173 63=4 75=20100302 150=0 151=10000 636=N 1100=4 1101=1 1102=1208 1107=2 1109=U 10=207
3		Execution(X) (Activate order)	Activate	New	1000	0	0	0	8=FIXT.1.1 9=323 35=8 34=8 49=BUX 52=20100302-16:07:19.449 56=U04QFX50 1128=7 1=1000572 6=0 11=1271fa1cc86 14=0 17=T20000024557201003021807194330000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24557 38=10000 39=0 40=2 44=1208 48=DB1 54=2 55=DB1.RGSI 59=0 60=20100302-16:07:19.433 63=4 75=20100302 150=L 151=10000 636=Y 1100=4 1101=1 1102=0 1107=2 10=008
4		Execution(X)	Trade	Filled	1000	1000	0	1000	8=FIXT.1.1 9=346 35=8 34=10 49=BUX 52=20100302-



									16:07:19.457 56=U04QFX50 1128=7 1=1000572 6=1208 11=1271falcc86 14=9100 17=T20000024557201003021807194410000009912 21=1 22=8 30=RGSI 31=1208 32=9100 37=24557 38=10000 39=1 40=2 44=1208 48=DB1 54=2 55=DB1.RGSI 59=0 60=20100302- 16:07:19.441 63=4 75=20100302 150=F 151=900 574=4 636=Y 851=2 1100=4 1101=1 1102=0 1107=2 10=117
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## Add contingent order in FIX 4.4 –Stop buy Limit

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Qty	FIX Message
1	NewOrder(X)				1000				8=FIX.4.4 9=124 35=D 1=1000572 11=1271fabf713 38=10000 40=4 44=1208 54=1 55=DB1.RGSI 58=test tig 59=0 60=20100302- 16:18:35.923 63=4 99=1208 10=201
2		Execution(X)	Rejected	Rejected	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	8=FIX.4.4 9=296 35=8 34=4 49=BUX 52=20100302-16:18:25.370 56=U04QFX44 1=1000572 6=0 11=1271fabf713 14=0 17=T10000024564201003021818254020000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24564 38=10000 39=0 40=4 44=1208 48=DB1 54=1 55=DB1.RGSI 59=0 60=20100302-16:18:25.402 63=4 75=20100302 99=1208 150=0 151=10000 636=N 10=236
3		Execution(X)  (Activate order)	New	New	1000	0	0	0	RCV: 8=FIX.4.4 9=288 35=8 34=5 49=BUX 52=20100302- 16:18:25.600 56=U04QFX44 1=1000572 6=0 11=1271fabf713 14=0 17=T10000024564201003021818255980000000000 21=1 22=8 30=RGSI 31=0 32=0 37=24564 38=10000 39=0 40=2 44=1208 48=DB1 54=1 55=DB1.RGSI 59=0 60=20100302-16:18:25.598 63=4 75=20100302 150=0 151=10000 636=Y 10=152
4		Execution(X)	Trade	Filled	1000	1000	0	1000	RCV: 8=FIX.4.4 9=303 35=8 34=6 49=BUX 52=20100302- 16:18:25.604 56=U04QFX44 1=1000572 6=1208 11=1271fabf713 14=900 17=T10000024564201003021818256030000009916 21=1 22=8 30=RGSI 31=1208 32=900 37=24564 38=10000 39=1 40=2 44=1208 48=DB1 54=1 55=DB1.RGSI 59=0 60=20100302- 16:18:25.603 63=4 75=20100302 150=F 151=9100 636=Y 851=1 10=149

## 7.8. Reject order at end of day

## Expire an out of term order ( zero filled order)

Time	Message Receive	Message Sent	ExecType	OrdStatus	Order	Cum	Leaves	Last	FIX Message
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	(ClOrdId, OrigClOrdID)	(ClOrdId, OrigClOrdID)			Qty	Qty	Qty	Qty	
1	NewOrder(X)				1000				
2		Execution(X)	Rejected	Rejected	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	
3		Execution(X)	Expired	Expired	1000	0	0	0	8=FIXT.1.1 9=367 35=8 34=1 43=Y 49=BUX 52=20100302-09:12:05.144 56=U04QFX50 122=20100301-22:50:05 1128=7 1=1000572 6=0 11=1267449725253 14=0 17=T10000024491201003020000174540000000000 21=1 22=8 30=REGS 31=0 32=0 37=24491 38=1000 39=C 40=2 44=1.05 48=SIF1 54=1 55=SIF1.REGS 58=72/out of term 59=0 60=20100301-22:00:17.454 63=4 75=20100302 150=C 151=0 636=Y 1100=4 1101=1 1102=0 1107=2 10=220

## Expire an out of term order ( partially filled order)

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Qty	FIX Message
1	NewOrder(X)				1000				
2		Execution(X)	Rejected	Rejected	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	
		Execution(X)	Trade	Partially Filled	1000	500	500	500	8=FIXT.1.1 9=348 35=8 34=733 49=BUX 52=20100302-15:26:21.850 56=U04QFX50 1128=7 1=1000577 6=1.14 11=1267543569456 14=500 17=T10000024508201003021726216670000009895 21=1 22=8 30=REGS 31=1.14 32=500 37=24508 38=1000 39=1 40=2 44=1.14 48=SIF1 54=1 55=SIF1.REGS 59=0 60=20100302-15:26:21.667 63=4 75=20100302 150=F 151=500 574=4 636=Y 851=3 1100=4 1101=1 1102=0 1107=2 10=106
3		Execution(X)	Expired	Expired	1000	0	0	0	8=FIXT.1.1 9=372 35=8 34=8 43=Y 49=BUX 52=20100303-06:45:11.231 56=U04QFX50 122=20100302-22:50:05 1128=7 1=1000577 6=1.14 11=1267543569456 14=500 17=T10000024508201003030000173630000009895 21=1 22=8 30=REGS 31=0 32=0 37=24508 38=1000 39=C 40=2 44=1.14 48=SIF1 54=1 55=SIF1.REGS 58=72/out of term 59=0 60=20100302-22:00:17.363 63=4 75=20100303 150=C 151=0 636=Y 1100=4 1101=1 1102=0 1107=2 10=000

## Reject out of price order

Time	Message Receive (ClOrdId, OrigClOrdID)	Message Sent (ClOrdId, OrigClOrdID)	ExecType	OrdStatus	Order Qty	Cum Qty	Leaves Qty	Last Qty	FIX Message
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	OrigClOrdID)	OrigClOrdID)							
1	NewOrder(X)				1000				
2		Execution(X)	Rejected	Rejected	1000	0	0	0	
2		Execution(X)	New	New	1000	0	0	0	
3		Execution(X)	Cancel	Cancel	1000	0	0	0	8=FIXT.1.1 9=378 35=8 34=10 43=Y 49=BUX 52=20100303-06:45:11.232 56=U04QFX50 122=20100302-22:50:05 1128=71=1000572 6=0 11=1267543781884 14=017=T10000024518201003030000173860000000000 21=1 22=830=REGS 31=0 32=0 37=24518 38=1000 39=4 40=2 44=1.3148=SIF1 54=1 55=SIF1.REGS 58=12/price is out of range 59=160=20100302-22:00:17.386 63=4 75=20100303 150=4 151=0 636=Y1100=4 1101=1 1102=0 1107=2 10=128