Volume

10

NOVITA D.O.O.

Trading System 2.6

FIX Interface

TRADING SYSTEM 2.6

FIX Interface

© Novita d.o.o.

Pot za Brdom 21

SI-1000 Ljubljana

Tel. +386 (0) 1 423 6920 • Fax +386 (0) 1 423 6925

Revision history

14.4.2008	Draft 0.9
15.4.2008	Added field MIC (9292) to the SecurityList and TradeCaptureReport Added field HaltReason (327) to SecurityStatus
18.4.2008	TimeBracket in TradeCaptureRequest was replaced with a pair of TransactTime fields ClOrdID in TradeCaptureReport was dropped TotNumTradeReports and LastRptRequested in TradeCaptureReport were added TotNumTradeReports in TradeCaptureReportRequestAck was dropped MDEntryType in MarketData was expanded with some custom values. ▪ P = Preopen volume + price ▪ R = Reference price ▪ V = Avg price ▪ D = Dynamic limit up ▪ d = Dynamic limit down ▪ S = Static limit up ▪ s = Static limit down
14.5.2008	NewOrderSingle and NewOrderCross: if requests are rejected, the ExecType (150) in the ExecutionReport is set to 8 (= Reject) OrderStatus: ExecutionReport has additional messages if the order was involved in trade ExecID in all ExecutionReports is now OrderNumber+"_"+Sequence. ExecutionReport has new field Ticket in the case of the trade.
16.9.2008	MessageEncoding field was missing in the Header description. EncodedText and EncodedTextLength was added to many messages. ExecutionReport and TradeCaptureReport have a new field PreviousTicket (9010) to identify trades that are sent as result of modifying previously concluded trades.

	Logout message has additional fields: Text, EncodedText and EncodedTextLen Some fields had wrong tag numbers (only in doc, the implementation was ok)
12.10.2008	MarketDataRequest and SecurityStatusRequest now require asterisk (*) for specifying all securities. Empty value was in conflict with FIX spec. Changed limits for prices and volumes (see chapter Value Limits) New default values for required fields in rejected ExecutionReports.
20.10.2008	Text field in MarketDataSnapshotFullRefresh is used to signalize hidden volume.
13.11.2008	SecurityResponseID in SecurityList was changed from 0 to GUID.
28.11.2008	Field AggregatedBook (266) was added to MarketDataRequest
12.12.2008	Fields TotNoRelatedSym (393), MarketID (1301), MarketSegmentID (1300) and LastFragment (893) added to SecurityList (y) message. MarketDataSnapshotFullRefresh (W) now includes trade ticket number in Text (58) field for MDEntryType (269) = '2' (Trade)
6.1.2009	MatchType (574) field was added to SecurityList.
13.1.2009	Custom field MIC (9292) was moved outside of Instrument component in SecurityList (y) message.
16.1.2009	Block trades and repored trades are removed from MarketData. They can still be captured using TradeCapture.
7.4.2009	Symbol is no longer mandatory in any message. It may be replaced in upstream messages by SecurityID (48) and SecurityIDSource (22). If neither Symbol nor SecurityID is provided, message will be rejected with a business level rejection message. Downstream messages will contain Symbol tag as before, but they will also include security ISIN in SecurityID tag, if one is known. If SecurityID is present, SecurityIDSource tag must also be present or message will be rejected. Only ISIN (4) value is supported for SecurityIDSource. When “*” is allowed in Symbol tag, it may now be specified in SecurityID tag as well to request data for all securities.
7.4.2009	Commission (12) and CommissionType (13) fields were added to ExecutionReport and TadeCaptureReport
7.4.2009	Mapping between BTS order statuses and FIX order statuses was changed. OrdStatus Stopped is replaced by Canceled and Expired (see page 27)
9.7.2009	GrossTradeAmt (381) field was added to TradeCaptureReport PriceType (423) custom field was added to SecurityList message (from

	FIX 5.0sp1 standard) [N/A] field value for Symbol was documented
20.8.2009	ExecutionReport as result of rejection NeworderCross: ExecID is not 0 but "REJ_NEW_"+ClOrdID Following FIX standard recommendation OrdStatus 5 (Replaced) is no longer used after updating order. Instead the field reflects the new status of order (New, PartiallyFilled, Filled, Suspended, Canceled, Expired)
16.3.2010	Last trade time was added to SecurityStatus message (field TransactTime).
17.11.2010	HaltReason OrderInflux added to security status when security is halted (to distinguish from suspended)
27.12.2011	Added new values for OrdType (Stop, Stop limit, Market to limit) and TimeInForce (Immediate or cancel).

Table of Contents

Overview

Trading System FIX interface is based on FIX specification 4.4. This document is only describing implementation details for this particular version. Basic principles are explained in FIX specification that can be downloaded from http://www.fixprotocol.org/specifications.

LJSE FIX implementation is a subset of full trading system functionality. The supported features are:

- Order management for regular settlement orders
- Cross entry
- Market data dissemination

The features not supported in this release are:

- Block trading (aka negotiated trades)
- Requesting trade changes or cancelation
- Querying data from previous trading days

LJSE FIX implementation consists of three parts:

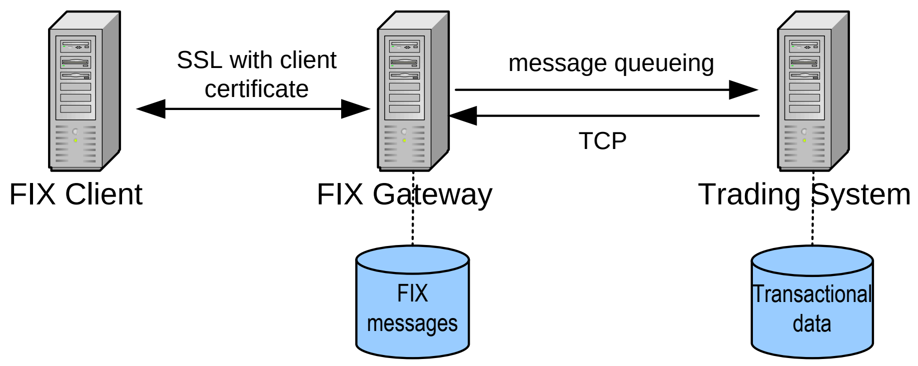
- FIX gateway – this product is installed on the stock exchange and is required to translate between FIX messages and native messages
- FIX demo client – the client is equipped with a simple user interface and can be used to enter FIX commands manually. As the source code for this program is freely available, backoffice vendors can take its code and integrate it into their systems.
- FIX implementation specification (this document)

Session Overview

Architecture

FIX Gateway enables FIX clients to connect to the trading system via standard FIX 4.4 protocol.

Standards SSL is used to ensure encrypted communications. Clients are authenticated using X.509 certificates.



FIX implementation details

Message Sequence Numbers

Message sequence numbers are always reset, when the FIX client connects for the first time "today".

Message sequence numbers can also be reset by sending a Logon message with ResetSeqNumFlag (tag 141) set to 'Y'.

Any reset of sequence numbers represents start of a new logical session.

Business level request identification

All FIX requests have some field which is used for request identification. When response is generated, this field is copied to the response to allow the client connect response to the request. These fields have different names in different messages: ClOrdID, CrossID, SecurityReqID, SecurityStatusReqID, TradSesReqID and MDReqID. As the trading system processes all these fields in the uniform manner they are required to be unique inside single member even though they have different names. This means the client can not sent NewOrderSingle with ClOrdID=1 and later NewOrderCross with CrossID=1.

In the unlikely case the member would use two FIX clients (for example one for trading and one for collecting data) they should not use the same values for request identification.

Sending time window

For a message to be considered valid, it must be received within a predefined time window from the SendingTime (tag 52) specified in its header. The default is set at within 1 minute from the message SendingTime. Any message received outside of this window will be rejected.

Unknown messages and tags

Messages that are not known to FIX standard implementation will be rejected using Session Reject message.

Messages that are known to FIX but not implemented are rejected using Business Message Request.

Messages with tags that are not known to FIX and are not custom fields are rejected using Session Reject message.

Tags that are known to FIX but not used in our implementation are simply ignored.

Custom Fields

We were not able to completely avoid use of custom fields. These fields are:

Tag	Field Name	Comments
5240	OrderSequence	
9009	Ticket	
9010	PreviousTicket	
9292	MIC	Market Identifier Code
1301	MarketID	Market code (standard field as of FIX.5.0SP1)
1300	MarketSegmentID	Tier code (standard field as of FIX.5.0SP1)
574	MatchType	Trading algorithm. This field is known in FIX 4.4 but not in SecurityList message (in this message from FIX 5.0sp1)
423	PriceType	Price type (percentage or absolute). This field is known in FIX 4.4 but not in SecurityList message (in this message from FIX 5.0sp1)

All custom fields are registered in the www.fixprotocol.org

Protocol revisions

There might come a need to modify existing protocol. In most cases these modifications are additional fields and messages that can be safely ignored by the client. We will never remove mandatory fields and we will do our best not to change the meaning of the existing fields. Mandatory fields that will not be used anymore will get default values and meaning of existing fields will be implemented using a new field.

In a rare situation where meaning of existing fields would change we will introduce additional custom field "Product Version" (ID=9682) into the Logon message and handle both old and new version for a reasonable time.

The Logon without this field would be considered "1.0". We didn't introduce this field into the protocol as we expect this situation will never occur.

Mixing order entries from Trading Workstation and FIX

When entering orders into the system each order gets its own OrderNumber and the Sequence set to 1. Whenever the order is altered by the user or the system, the Sequence is incremented. User can enter Reference field but this field is not mandatory and not required to be unique so the OrderNumber + Sequence is the only unique identifier of the order. In the trading workstation there is no way to enter the same order twice and let the system take care of the duplicates.

When entering order through FIX interface there is a special field ClOrdID (Client order identifier) that is required and must be unique. If the sender is not sure the order was received it can safely send it again.

The trading system is using internally all three fields: OrderNumber, Sequence and ClOrdID. In the case of manual entry through trading workstation, the ClOrdID is auto generated with the formula: "SYS_"+OrderNumber. To prevent situations, where desired auto generated value would already be taken by the FIX orders, the prefix "SYS_" is prohibited in this case. When referring to existing orders in actions such as update or remove, the "SYS_" prefix is allowed.

Halted orders

Halted orders are only useful for manual traders who can prepare orders in advance and release them at appropriate time. FIX interface does not have an option to release order, but you can replace halted order with the active one which is basically the same.

Value limits

Trading system is checking that no order value can exceed 10^12 (expressed in local currency).

Symbol or ISIN code

Some trading systems identify securities by trading symbols the others by ISIN codes. We are supporting both methods. When client message is received we first try to use field Symbol (55). If it is empty or contains "[N/A]" we take SecurityID (48) + SecurityIDSource (22) which must represent valid ISIN code (in SecurityID) + value "4" (in SecurityIDSource).

In outgoing messages we always populate all three fields.

Messages

Common structures

Standard Header

Tag	Field Name	Required	Comments
8	BeginString	Y	FIX.4.4, unencrypted
9	BodyLength	Y	
34	MsgSeqNum	Y	Integer message sequence number
35	MsgType	Y	One of supported message types
49	SenderCompID	Y	Unique identifier of client supplied by LJSE (username field in BTS)
52	SendingTime	Y	YYYYMMDD-HH:MM:SS (must be within *n* seconds of current time)
56	TargetCompID	Y	LJSE
347	MessageEncoding	N	UTF-8

Standard Trailer

Tag	Field Name	Required	Comments
93	SignatureLength	N	Will be added at some later stage.
89	Signature	N	Will be added at some later stage.
10	CheckSum	Y	Per FIX specifications.

Session Related

Heartbeat

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=0
112	TestReqID	N	Required when the heartbeat is the result of Test Request Message
	Standard Trailer	Y	

Test Request

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=1
112	TestReqID	Y	
	Standard Trailer	Y	

Logon

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=A
98	EncryptMethod	Y	Always 0 (no encryption on FIX level)
108	HeartBtInt	Y	Values less than 30 seconds will be rejected.
141	ResetSeqNumFlag	N	Indicates both sides of a FIX session should reset sequence numbers
	Standard Trailer	Y	

Logoff

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=5
58	Text	N	
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

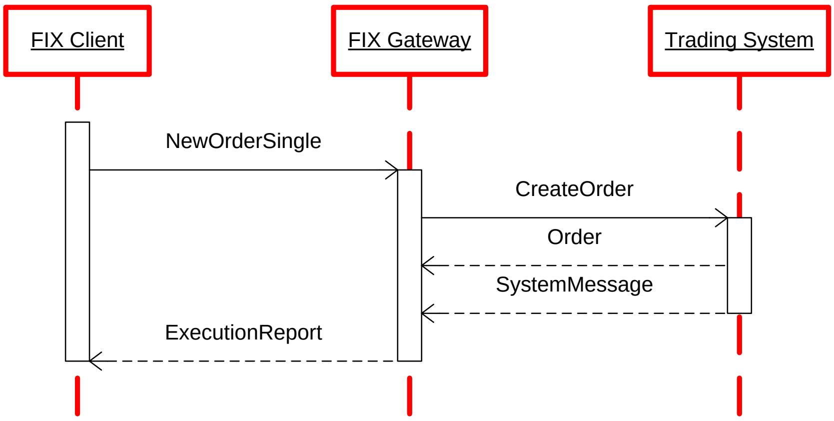
Session Reject

Tag	Field Name	Require d	Comments
	Standard Header	Y	MsgType=3
45	RefSeqNum	Y	MsgSeqNum of rejected Msg
371	RefTagID	N	The tag number of the FIX field being referenced.
372	RefMsgType	N	The MsgType (35) of the FIX

			message being referenced.
373	SessionReject Reason	Y	Code to identify reason for session-level reject 0 = Invalid tag number 1 = Required tag missing 2 = Tag not defined for this message type 3 = Undefined Tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 8 = Signature problem 9 = CompID problem 10 = SendingTime accuracy problem 11 = Invalid MsgType 16 = Incorrect NumInGroup count for repeating group 99 = Other
58	Text	N	Reason for reject if reject code is 99
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Order Management

Order Entry



NewOrderSingle (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType= D (NewOrderSingle)
11	ClOrdID	Y	This is your new and unique ID for this request (limited to 50 characters)
55	Symbol	N	1-15 character security identifier. Provide as listed.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Valid values: 1 = Buy 2 = Sell
40	OrdType	Y	Valid values: 1 = Market 2 = Limit 3 = Stop 4 = Stop limit K = Market to limit
18	ExecInst	N	Valid values:

			G = All or none
38	OrderQty	Y	Must be positive number
110	MinQty	N	Minimum acceptable execution quantity (when applicable). Must be a positive number 1<= n <= OrderQty
111	MaxFloor	N	Maximum visible quantity on the floor (when applicable). Must be a positive number greater than 1% of OrderQty. If MinQty is specified then system ignores this field.
44	Price	N	Required if OrdType = Limit; Prohibited otherwise. All precisions are not allowed, check price step table.
59	TimeInForce	N	Valid values: 0 = Day (default) 1 = Good Till Cancel (Open) 3 = Immediate or cancel 4 = Fill Or Kill 6 = Good Till Date
432	ExpireDate	N	Can be set if TimeInForce = 6; reserved Order expires at the and of trading on the specified date.
1	Account	Y	Valid account identifier (BTS AccountTypeCode + AccountNumber, where the first part is required and the second is optional).
526	SecondaryClOrdID	N	Will be returned to you in execution reports (BTS Reference field, max 10 characters)
60	TransactTime	Y	The time that you sent this request. Must be within *n* seconds of current time.
	Standard Trailer	Y	

ExecutionReport (outgoing confirmation)

Tag	Field Name	Required	Comments

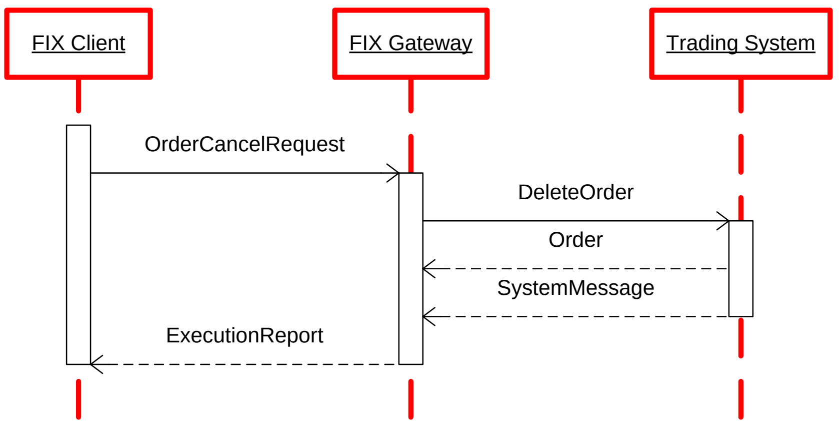
	Standard Header	Y	MsgType=8 (ExecutionReport)
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **0 = New**
39	OrdStatus	Y	Valid values: **0 = New**
17	ExecID	Y	OrderNumber + "_" + Sequence
60	TransactTime	Y	Time of last order action
11	ClOrdID	Y	Copied from request
37	OrderID	Y	OrderNumber assigned by the trading system
5240	OrderSequence	Y	Sequence (= 1)
55	Symbol	N	Copied from request
48	SecurityID	N	Copied from request
22	SecurityIDSource	N	Copied from request
54	Side	Y	Copied from request
40	OrdType	Y	Copied from request
18	ExecInst	N	Copied from request
38	OrderQty	Y	Copied from request
110	MinQty	N	Copied from request
111	MaxFloor	N	Copied from request
44	Price	N	Copied from request
59	TimeInForce	N	Copied from request
432	ExpireDate	N	Copied from request
1	Account	N	Copied from request
526	SecondaryClOrdID	N	Copied from request
151	LeavesQty	Y	Quantity left on the order, as per State Matrixes. In this case equals OrderQty
14	CumQty	Y	Currently executed quantity for chain of orders. In this case equals 0.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
	Standard Trailer	Y	

ExecutionReport (oungoing rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **8 = Reject**
39	OrdStatus	Y	Valid values: **8 = Rejected**
17	ExecID	Y	"REJ_NEW_"+ClOrdID
60	TransactTime	N	Time of last order action
11	ClOrdID	Y	Copied from request
37	OrderID	Y	NONE
5240	OrderSequence	Y	0
55	Symbol	N	Copied from request
48	SecurityID	N	Copied from request
22	SecurityIDSource	N	Copied from request
54	Side	Y	Copied from request
40	OrdType	Y	Copied from request
18	ExecInst	N	Copied from request
38	OrderQty	Y	Copied from request
110	MinQty	N	Copied from request
111	MaxFloor	N	Copied from request
44	Price	N	Copied from request
59	TimeInForce	N	Copied from request
432	ExpireDate	N	Copied from request
1	Account	N	Copied from request
526	SecondaryClOrdID	N	Copied from request
151	LeavesQty	Y	Quantity left on the order, as per State Matrixes. In this case equals 0.
14	CumQty	Y	Currently executed quantity for chain of orders. In this case equals 0.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.

103	OrdRejReason	Y	Valid values: 1 = Unknown symbol 2 = Exchange closed 3 = Order exceeds limit 4 = Too late to enter 5 = Unknown Order 6 = Duplicate Order (e.g. dupe ClOrdID (11)) 7 = Duplicate of a verbally communicated order 8 = Stale Order 11 = Unsupported order characteristic 13 = Incorrect quantity 15 = Unknown account(s) 99 = Other
58	Text	N	Further description of the rejection
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Cancel Order



OrderCancelRequest (inbound)

Tag	Field Name	Required	Comments

	Standard Header	Y	MsgType = F (OrderCancel
41	OrigClOrdID	Y	Original identification of the order to be canceled. Mandatory field.
11	ClOrdID	Y	Unique identification of cancel request.
55	Symbol	N	Must be the same as the symbol of the original order. All incoming messages will send the symbol as listed.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Must be the same as the side of the original order
60	TransactTime	Y	The time that you released this request.
38	OrderQty	Y	Total order quantity as entered (even if some was already traded)
	Standard Trailer	Y	

ExecutionReport (outgoing confirmation)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **4 = Canceled**
39	OrdStatus	Y	Valid values: **4 = Canceled**
17	ExecID	Y	OrderNumber+"_"+Sequence
60	TransactTime	Y	Time of last order action
11	ClOrdID	Y	Copied from request
41	OrigClOrdID	Y	Original identification of the canceled order.
37	OrderID	Y	OrderNumber
5240	OrderSequence	Y	OrderSequence
55	Symbol	N	Copied from order

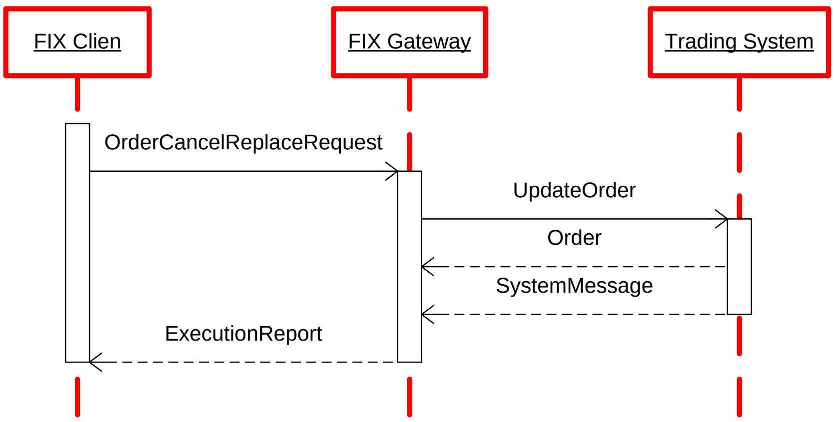
48	SecurityID	N	Copied from order
22	SecurityIDSource	N	Copied from order
54	Side	Y	Copied from order
40	OrdType	Y	Copied from order
18	ExecInst	N	Copied from order
38	OrderQty	Y	Copied from order
110	MinQty	N	Copied from order
111	MaxFloor	N	Copied from order
44	Price	N	Copied from order
59	TimeInForce	N	Copied from order
432	ExpireDate	N	Copied from order
1	Account	N	Copied from order
526	SecondaryClOrdID	N	Copied from order
151	LeavesQty	Y	Quantity left on the order, as per State Matrixes. In this case equals 0
14	CumQty	Y	Currently executed quantity for chain of orders.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
	Standard Trailer	Y	

OrderCancelReject (outgoing rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=9
37	OrderID	Y	If CxlRejReason="Unknown order", specify "NONE" otherwise BTS OrderNumber
11	ClOrdID	Y	Copied from request
41	OrigClOrdID	Y	Original identification of the order to be canceled if it was found at all. If not found this field will be set to "NONE".
39	OrdStatus	Y	Status of the order after cancel was rejected: **0 = New**

			1 = Partial filled **2 = Filled** **4 = Canceled** **9 = Suspended (Halted)** **8 = Rejected (if order not found)**
434	CxlRejResponseTo	Y	Valid values: **1 = Order cancel request**
102	CxlRejReason	N	Valid values: 0 = Too late to cancel 1 = Unknown order 6 = Duplicate ClOrdID (11) received 99 = Other
58	Text	N	Further explanation of rejection
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Update Order



OrderCancelReplaceRequest (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=G
41	OrigClOrdID	Y	This is your original ID for the order to be updated. Mandatory field.

11	ClOrdID	Y	Unique identification of update request. This will also become new client order identification for updaterd order if successfull.
55	Symbol	N	1-15 character security identifier. Provide as listed.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Valid values: 1 = Buy 2 = Sell
40	OrdType	Y	Valid values: 1 = Market 2 = Limit 3 = Stop 4 = Stop limit K = Market to limit
18	ExecInst	N	Valid values: G = All or none
38	OrderQty	Y	Must be positive number
110	MinQty	N	Minimum acceptable execution quantity (when applicable). Must be a positive number 1<= n <= OrderQty
111	MaxFloor	N	Maximum visible quantity on the floor (when applicable). Must be a positive number greater than 1% of OrderQty
44	Price	N	Required if OrdType = Limit; Prohibited otherwise. All precisions are not allowed, check price step table.
59	TimeInForce	N	Valid values: 0 = Day (default) 1 = Good Till Cancel (Open) 3 = Immediate or cancel 4 = Fill Or Kill

			6 = Good Till Date
432	ExpireDate	N	Can be set if TimeInForce = 6; reserved Order expires at the and of trading on the specified date.
1	Account	Y	Valid account identifier (BTS AccountTypeCode + AccountNumber, where the first part is required and the second is optional).
526	SecondaryClOrdID	N	Will be returned to you in execution reports (BTS Reference field, max 10 characters)
60	TransactTime	Y	The time that you sent this request. Must be within *n* seconds of current time.
	Standard Trailer	Y	

ExecutionReport (outgoing confirmation)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8 (ExecutionReport)
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **5 = Replaced**
39	OrdStatus	Y	Valid values: **0 = New** **1 = Partial filled** **9 = Suspended (Halted)**
17	ExecID	Y	OrderNumber+"_"+Sequence
60	TransactTime	Y	Time of last order action
11	ClOrdID	Y	Copied from request
37	OrderID	Y	OrderNumber assigned by the trading system at the time or entry
5240	OrderSequence	Y	Incremented sequence after change
55	Symbol	N	Copied from request
48	SecurityID	N	Copied from request
22	SecurityIDSource	N	Copied from request

54	Side	Y	Copied from request
40	OrdType	Y	Copied from request
18	ExecInst	N	Copied from request
38	OrderQty	Y	Copied from request
110	MinQty	N	Copied from request
111	MaxFloor	N	Copied from request
44	Price	N	Copied from request
59	TimeInForce	N	Copied from request
432	ExpireDate	N	Copied from request
1	Account	N	Copied from request
526	SecondaryClOrdID	N	Copied from request
151	LeavesQty	Y	Quantity left on the order, as per State Matrixes. LeavesQty = OrderQty – CumQty.
14	CumQty	Y	Currently executed quantity for chain of orders.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
	Standard Trailer	Y	

OrderCancelReject (outgoing rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=9
37	OrderID	Y	If CxlRejReason="Unknown order", specify "NONE" otherwise BTS OrderNumber
11	ClOrdID	Y	Copied from request
39	OrdStatus	Y	Status of the order after cancel was rejected: **0 = New** **1 = Partial filled** **2 = Filled** **4 = Canceled** **9 = Suspended (Halted)**

			8 = Rejected (if order not found)
434	CxlRejResponseTo	Y	Valid values: **2 = Order cancel/replace request**
102	CxlRejReason	N	Valid values: 0 = Too late to cancel 1 = Unknown order 6 = Duplicate ClOrdID (11) received 99 = Other
58	Text	N	Further explanation of rejection
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Order Status

Order status can be requested individually or globally. Individual status request has an additional option to query past order sequences. Mass status request triggers many execution reports – one for each order.

Mass status request returns only orders, that are currently active at the system. Orders that were already filled, removed or rejected are not returned.

Developers should be aware of the situation, when there are no active orders. In this situation OrderMassStatusRequest returns no answer. One way to distinguish between no data and no answer because of the communication problems is to send TestRequest immediately after OrderMassStatusRequest.

Order status request can query all orders that are active in the system now or at some point in the past. This request can also query past sequences of rhe order.

However, neither request can return orders, that were rejected. The reason is that both requests query order book database whereas rejected orders are not stored in the order book.

OrderStatusRequest (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=H
790	OrdStatusReqID	Y	Unique identifier
11	ClOrdID	Y	The ClOrdID of the order whose status is being requested.
37	OrderID	N	OrderNumber

Tag	Field Name	Required	Comments
5240	OrderSequence	N	If set, system will return past event from the order book. Must be supplied together with OrderID.
55	Symbol	N	Must be the same as the symbol of the original order
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Must be the same as the side of the original order.
	Standard Trailer	Y	

OrderMassStatusRequest (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=AF
584	MassStatusReqID	Y	This is your new and unique ID for this request (limited to 15 characters)
585	MassStatusReqType	Y	Values: 1 = status for all orders for a security (Symbol is mandatory) 7 = status for all orders
55	Symbol	N	
	Standard Trailer	Y	

ExecutionReport (outgoing confirmation)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **I = Status**
39	OrdStatus	Y	Valid values: **0 = New** **1 = Partial filled** **2 = Filled**

			4 = Canceled **9 = Suspended (Halted)** **C = Expired**
17	ExecID	Y	Always 0
60	TransactTime	Y	Time of last order action
584	MassStatusReqID	N	Only used in response to OrderMassStatusRequest
911	TotNumReports	N	Only used in response to OrderMassStatusRequest – first execution report returned has this field set
912	LastRptRequested	N	Only used in response to OrderMassStatusRequest – the last execution report has this field set
790	OrdStatusReqID	N	Only used in response to OrderStatusRequest
11	ClOrdID	Y	Copied from order
37	OrderID	Y	Copied from order
5240	OrderSequence	Y	Copied from order
55	Symbol	N	Copied from order
48	SecurityID	N	Copied from order
22	SecurityIDSource	N	Copied from order
54	Side	Y	Copied from order
40	OrdType	Y	Copied from order
18	ExecInst	N	Copied from order
38	OrderQty	Y	Copied from order
110	MinQty	N	Copied from order
111	MaxFloor	N	Copied from order
44	Price	N	Copied from order
59	TimeInForce	N	Copied from order
432	ExpireDate	N	Copied from order
1	Account	N	Copied from order
526	SecondaryClOrdID	N	Copied from order
151	LeavesQty	Y	Quantity left on the order, as per State Matrixes.
14	CumQty	Y	Currently executed quantity for

			chain of orders.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
9009	Ticket	N	Ticket (only if this is execution/trade report)
382	NoContraBrokers	N	Should be »1« if disclosure of contra traders is allowed. (only if this is execution/trade report)
375	ContraBroker	N	Set when 382 is set and greater than 0 (only if this is execution/trade report)
337	ContraTrader	N	Set when 382 is set and greater than 0 (only if this is execution/trade report)
31	LastPx	Y	Price of shares executed in this fill (only if this is execution/trade report)
32	LastQty	Y	Number of shares executed in this fill (only if this is execution/trade report)
381	GrossTradeAmt	Y	Trade value expressed in local currency (only if this is execution/trade report)
159	AccruedInterestAmt	N	Interest value expressed in local currency (only if this is execution/trade report)
	Standard Trailer	Y	

ExecutionReport (outgoing rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **I = Status**
39	OrdStatus	Y	Valid values: **8 = Rejected**
17	ExecID	Y	Always 0
584	MassStatusReqID	N	Only used in response to OrderMassStatusRequest

790	OrdStatusReqID	N	Only used in response to OrderStatusRequest
11	ClOrdID	Y	Only used in response to OrderStatusRequest
37	OrderID	Y	Field must be present per spec. Value is NONE.
5240	OrderSequence	Y	0
55	Symbol	N	Field must be present per spec. Value is not defined.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Field must be present per spec. Value is 7 (Undisclosed).
151	LeavesQty	Y	Field must be present per spec. Value is 0
14	CumQty	Y	Field must be present per spec. Value is 0.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
103	OrdRejReason	Y	Valid values: 1 = Unknown symbol 2 = Exchange closed 5 = Unknown Order 8 = Stale Order 15 = Unknown account(s) 99 = Other
58	Text	N	Further description of the rejection
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Mapping between BTS order statuses and FIX order statuses

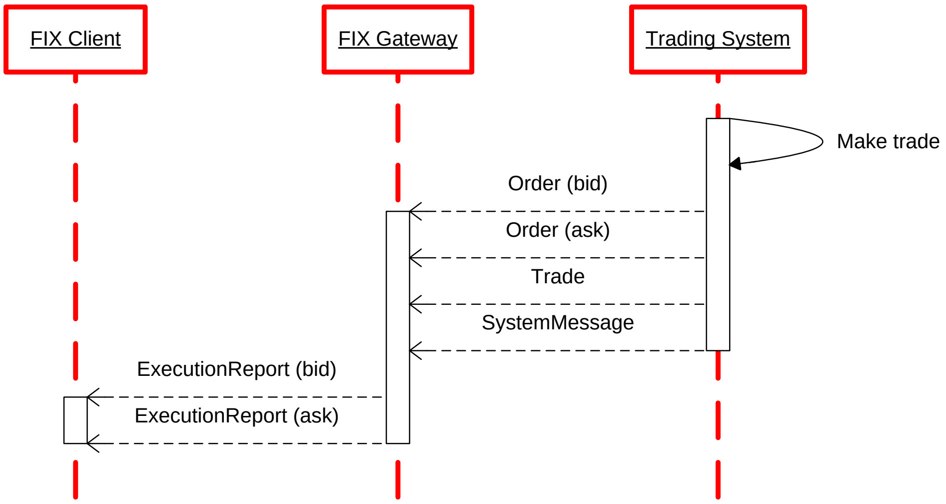
BTS Order Book	Other Condition	FIX OrdStatus
Active or	TotalTradedVolume = 0	New

Inactive		
Active or Inactive	TotalTradedVolume > 0	PartiallyFilled
Halted	-	Suspended
Removed	Action = InitDayRemove	Expired
Removed	Action = TradeFull Action = AdminTradeEntry Action = UserTradeEntry	Filled
Removed	Action = UserDelete Action = AdminDelete Action = NoTradeRemove Action = SystemHalt	Canceled

Trades

Report trade to involved party

After trade is made, the system sends two separate confirmations to the buyer and the seller.



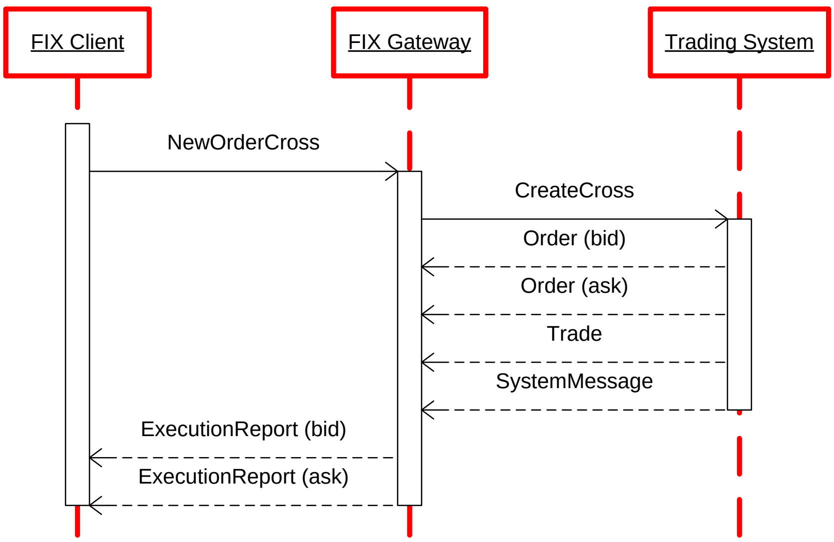
ExecutionReport (outgoing report)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **F = Trade** **G = Trade Correct** **H = Trade Cancel** *P = Pending trade (custom status, currently not used)*
39	OrdStatus	Y	Valid values: **1 = Partial filled (remaining)** **2 = Filled** **4= Canceled (partial filled & removed)**
17	ExecID	Y	OrderNumber+"_"+Sequence (not unique as possible trade cancel get the same key as original)
9009	Ticket	Y	Ticket

9010	PreviousTicket	N	If the surveillance changes the trade, we get 2 trades in the system – the old has status "modified" and the new has a link to the original one. In FIX protocol we would get 2 messages - the original ExecutionReport with the ExecType = G and new ExecutionReport with PreviousTicket set to Ticket of original one.
60	TransactTime	Y	Time of last order action
11	ClOrdID	Y	Copied from order
37	OrderID	Y	Copied from order
5240	OrderSequence	Y	Sequence that was involved in the trade
55	Symbol	N	Copied from order
48	SecurityID	N	Copied from order
22	SecurityIDSource	N	Copied from order
54	Side	Y	Copied from order
40	OrdType	Y	Copied from order
18	ExecInst	N	Copied from order
38	OrderQty	Y	Copied from order
110	MinQty	N	Copied from order
111	MaxFloor	N	Copied from order
44	Price	N	Copied from order
59	TimeInForce	N	Copied from order
432	ExpireDate	N	Copied from order
1	Account	N	Copied from order
526	SecondaryClOrdID	N	Copied from order
151	LeavesQty	Y	Quantity left on the order, as per State Matrixes. In this case equals 0
14	CumQty	Y	Currently executed quantity for chain of orders.
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
382	NoContraBrokers	N	Should be »1« if disclosure of contra traders is allowed. Otherwise 0.
375	ContraBroker	N	Set when 382 is set and greater than

			0
337	ContraTrader	N	Set when 382 is set and greater than 0
31	LastPx	Y	Price of shares executed in this fill (only if this is execution/trade report)
32	LastQty	Y	Number of shares executed in this fill (only if this is execution/trade report)
381	GrossTradeAmt	Y	Trade value expressed in local currency
159	AccruedInterestAmt	N	Interest value expressed in local currency
12	Commission	N	
13	CommissionType	N	Valid values: 3 = Absolute
	Standard Trailer	Y	

Cross Entry



NewOrderCross (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=s

Tag	Field Name	Required	Comments
548	CrossID	Y	This is your new and unique ID for this request (limited to 15 characters)
549	CrossType	Y	Valid value: 1 = Cross All Or None
550	CrossPrioritization	Y	Valid value: 0 = None
55	Symbol	N	1-15 character security identifier.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
44	Price	Y	
552	NoSides	Y	Must be 2
54	Side	Y	Must be 1 (=Buy)
11	ClOrdID	Y	This is your new and unique ID for bid side
1	Account	Y	AccountType + AccountNumber
38	OrderQty	Y	Order quantity
526	SecondaryClOrdID	N	Reference, max 10 characters
54	Side	Y	Must be 2 (=Sell)
11	ClOrdID	Y	This is your new and unique ID for ask side
1	Account	Y	AccountType + AccountNumber
38	OrderQty	Y	Order quantity
526	SecondaryClOrdID	N	Reference, max 10 characters
60	TransactTime	Y	
40	OrdType	Y	Valid value: 2 = Limit
	Standard Trailer	Y	

ExecutionReport (outgoing confirmation)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8

150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **F = Trade**
39	OrdStatus	Y	Valid values: **2 = Filled**
548	CrossID	Y	Copied from request
17	ExecID	Y	OrderNumber+"_"+Sequence
9009	Ticket	Y	Ticket
60	TransactTime	Y	Time of last order action
11	ClOrdID	Y	Copied from order
37	OrderID	Y	Copied from order
5240	OrderSequence	Y	= 1
55	Symbol	N	Copied from request
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Copied from request
40	OrdType	Y	Copied from request
38	OrderQty	Y	Copied from request
110	MinQty	N	= 1.
111	MaxFloor	N	= OrderQty.
44	Price	N	Copied from request
59	TimeInForce	N	= 0 (Day)
1	Account	N	Copied from request
526	SecondaryClOrdID	N	Copied from request
151	LeavesQty	Y	= 0
14	CumQty	Y	= OrderQty
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
382	NoContraBrokers	N	Should be »1« if disclosure of contra traders is allowed.
375	ContraBroker	N	Set when 382 is set and greater than 0
337	ContraTrader	N	Set when 382 is set and greater than 0

31	LastPx	Y	Price of shares executed in this fill (only if this is execution/trade report)
32	LastQty	Y	Number of shares executed in this fill (only if this is execution/trade report)
381	GrossTradeAmt	Y	Trade value expressed in local currency
159	AccruedInterestAmt	N	Interest value expressed in local currency
	Standard Trailer	Y	

ExecutionReport (outgoing rejection for each side)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=8
150	ExecType	Y	Purpose of the ExecutionReport: Valid values: **8 = Reject**
39	OrdStatus	Y	Valid values: **8 = Rejected**
548	CrossID	Y	Copied from request
17	ExecID	Y	"REJ_NEW_"+ClOrdID
60	TransactTime	Y	Time of rejection
11	ClOrdID	Y	Copied from request
55	Symbol	N	Copied from request
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
54	Side	Y	Copied from request
40	OrdType	Y	Copied from request
38	OrderQty	Y	Copied from request
110	MinQty	N	= 1.
111	MaxFloor	N	= OrderQty.
44	Price	N	Copied from request
59	TimeInForce	N	= 0 (Day)
1	Account	N	Copied from request

526	SecondaryClOrdID	N	Copied from request
151	LeavesQty	Y	= 0
14	CumQty	Y	= OrderQty
6	AvgPx	Y	Field must be present in FIX 4.x. Always 0.
382	NoContraBrokers	N	Should be »1« if disclosure of contra traders is allowed.
375	ContraBroker	N	Set when 382 is set and greater than 0
337	ContraTrader	N	Set when 382 is set and greater than 0
	Standard Trailer	Y	

Securities

Security list

FIX interface supports simple querying of active securities. Securities that are not yet listed or the ones that are delisted for more that 1 week are not returned.

If subscribing to updates, please have in mind that subscription works slightly different in this case – after SecurityList response is sent, the client remains subscribed to SecurityStatus packets. There is no subscription to SecurityList as per FIX standard.

SecurityListRequest (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=x
320	SecurityReqID	Y	Unique Identifier
559	SecurityListRequestType	Y	0 = Symbol 4 = All securities
55	Symbol	N	Required if SecurityListRequestType=0 Ignored otherwise
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
263	SubscriptionRequestType	N	0 = Snapshot 1 = Snapshot + Updates 2 = Disable previous Snapshot + Updates request (Unsubscribe)
	Standard Trailer	Y	

SecurityList (outgoing confirnation or rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=y
320	SecurityReqID	Y	Same identifier as specified in SecurityListRequest message
322	SecurityResponseID	Y	Required field, GUID.
560	SecurityRequestResult	Y	Valid values:

Tag	Field Name	Required	Comments
			0 = ValidReq **1 = InvalidReq** **2 = NoInstrumentsFound** **3 = NotAuthorized**
393	TotNoRelatedSym	N	Used to indicate the total number of securities being returned for this request. Specified in the first fragment only.
1301	MarketID	N	Market code.
1300	MarketSegmentID	N	Tier code.
9292	MIC	N	Market Identifier Code
893	LastFragment	N	Indicates whether this is the last fragment in a sequence of message fragments. Specified in the last fragment only.
146	NoRelatedSym	N	Number of securities to follow
55	Symbol	N	
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
48	SscurityID	N	ISIN Code
22	SecurityIDSource	N	Valid values: 4 = ISIN
461	CFICode	N	6 letter clasification of financial instruments (ISO 10962).
225	IssueDate	N	
541	MaturityDate	N	
106	Issuer	Y	ASCII
348	EncodedIssuerLen	N	
349	EncodedIssuer	N	Unicode
107	SecurityDesc	Y	ASCII
350	EncodedSecurityDescLen	N	
351	EncodedSecurityDesc	N	Unicode
423	PriceType	Y	Valid values:

Tag	Field Name	Required	Comments
			1 = Percentage 3 = Absolute value
574	MatchType	Y	Trading algorithm used for this security: 4 = Continuous trading 5 = Fixing 7 = Auction 1:1 8 = Auction 1:N
15	Currency	Y	
	Standard Trailer	Y	

Security status

SecurityStatusRequest (incoming)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=e
324	SecurityStatusReqID	Y	Unique identifier or previous value if disabling subscription
55	Symbol	N	As Instument component is required you must set this field to * if you want statuses of all securities. Ignored on unsubscribe.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
263	SubscriptionRequestType	Y	0 = Snapshot 1 = Snapshot + updates 2 = Disable previous snapshot + updates
	Standard Trailer	Y	

SecurityStatus (outgoing confirmation and rejection)

Tag	Field Name	Required	Comments

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=f
324	SecurityStatusReqID	N	Unique identifier
55	Symbol	N	
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
325	UnsolicitedIndicator	N	Set to 'Y' if this is sent as a result of subscription
326	SecurityTradingStatus	Y	Valid values: **2 = Trading halt (dynamically halt/halt/suspend)** **19 = Not traded on this market (entered, delisted)** **21 = Pre open (enter orders)** **17 = Ready to trade (make trades)** **18 = Not available for trading (not enter orders and not make trades)** **20 = Unknown (means rejection of the request)**
336	TradingSessionID	Y	ScheduleCode in BTS
327	HaltReason	N	Valid values: I = Order imbalance (volatility interruption) E = OrderInflux (halted)
332	HighPx	N	
333	LowPx	N	
31	LastPx	N	Last trade price
60	TransactTime	N	Last trade time
14	CumQty	N	Total traded volume today
	Standard Trailer	Y	

Trading Session Status

Trading session in BTS system has slightly more information than we can put into standard FIX message. There are two noticable differences:

- BTS allows multiple openings in a day. When creating FIX TradingSessionStatus message we use the times of the first opening and the last closing. Check with the stock exchange if they are using multiple trading sessions per day.
- If security breaks price limits it is dynamically halted for X minutes, after that opening auction occurs. When this happens BTS internally generates special schedule that is used for this security until it comes back to the normal trading schedule. It is possible that halt occurs close to the end of the trading and auction occurs after the end of the original trading session. We are currently not disseminating information about those temporary schedules. You should check News messages for halted securities.

TradingSessionStatusRequest (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=g
335	TradSesReqID	Y	Unique identifier or previous value if disabling subscription
336	TradingSessionID	N	Trading Session for which status is being requested (null means all)
263	SubscriptionRequestType	Y	0 = Snapshot 1 = Snapshot + updates 2 = Disable previous snapshot + updates
	Standard Trailer	Y	

TradingSessionStatus (outgoing confirmation or rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=h
335	TradSesReqID	Y	Unique identifier
336	TradingSessionID	Y	ScheduleCode in BTS
340	TradSesStatus	Y	Valid values:

Tag	Field Name	Required	Comments
			0 = Unknown **2 = Open** **3 = Closes** **4 = Preopen** **6 = Request rejected**
341	TradSesStartTime	N	
342	TradSesOpenTime	N	
344	TradSesCloseTime	N	
345	TradSesEndTime	N	
58	Text	N	Further description on schedule or reject reason
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Market Data

Market data message is carrying essential market situation details. Normal usage is subscription to this message. In this case system sends new data every 10 seconds if there was any change.

Please note the Market By Order data is limited to depth of 10 and the trade list includes last 10 trades. If you want to build a list of all concluded trades you should use Trade Capture message.

All those numbers are system parameters and can be set differently by the stock exchange.

Market by order data consists of 4 columns:

- Bid orders (limit orders, maket orders, iceberg orders)
- Ask orders (limit orders, maket orders, iceberg orders)
- Special term bid orders (all or none and minimum volume)
- Special term ask orers (all or none and minimum volume)

All 4 columns have positions starting from 0. Special term orders can be distinguished from normal orders by the fields MinQty and ExecInst.

MarketDataRequest (inbound)

Tag	Field Name	Required	Comments

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=V
262	MDReqID	Y	Unique identifier or previous value if disabling subscription
263	SubscriptionRequestType	Y	Valid values: 0 = Snapshot 1 = Snapshot + updates 2 = Unsubscribe
264	MarketDepth	Y	Currently limited to max 5 positions
265	MDUpdateType	N	Required if SubscriptionRequestType = Snapshot + updates (1). Valid values: 0 = Full *1 = Incremental (currently notused)*
266	AggregatedBook	N	If present and set to 'Y', market-by-price data is sent; otherwise market-by-order data is sent.
267	NoMDEntryTypes	Y	Number of data types to follow.
269	MDEntryType	Y	Valid values: 0 = Bid 1 = Offer (Ask) 2 = Trade 3 = IndexValue 4 = Open price 5 = Close price 7 = High price 8 = Low price B = Traded volume P = Preopen volume + price R = Reference price V = Avg price D = Dynamic limit up d = Dynamic limit down

Tag	Field Name	Required	Comments
			S = Static limit up s = Static limit down
146	NoRelatedSym	Y	Number of instruments to follow
55	Symbol	N	Security trading code or index code (if MDEntryType = 3). Asterisk (*) means all.
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
	Standard Trailer	Y	

MarketDataSnapshotFullRefresh (outgoung data)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=W
262	MDReqID	N	Identifier of the request or subscription
55	Symbol	N	
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
451	NetChgPrevDay	N	Net change from previous day's closing price vs. last traded price.
268	NoMDEntries	Y	Number of market data entries to follow
269	MDEntryType	Y	Valid values: 0 = Bid 1 = Offer (Ask) 2 = Trade (only Regular trades of Valid status; no blocks, cancels,…) 3 = IndexValue 4 = Open price

Tag	Field Name	Required	Comments
			5 = Close price 7 = High price 8 = Low price B = Traded volume P = Preopen volume + price R = Reference price V = Avg price D = Dynamic limit up d = Dynamic limit down S = Static limit up s = Static limit down
290	MDEntryPositionNo	N	Display position for bid or offer
270	MDEntryPx	N	Price (missing value means market price)
271	MDEntrySize	N	Visible volume
110	MinQty	N	
58	Text	N	If MDEntryType = '2' (Trade), this field contains trade ticket number.
18	ExecInst	N	Valid values: G = All Or Nothing S = Suspended (out of static limits)
37	OrderID	N	Only visible for your orders
272	MDEntryDate	N	Trade date (for trades)
273	MDEntryTime	N	Trade time (for trades)
288	MDEntryBuyer	N	Buyer member code (for trades)
289	MDEntrySeller	N	Seller member code (for trades)
	Standard Trailer	Y	

MarketDataRequestReject (outgoing rejection)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=Y
262	MDReqID	Y	= MDReqID from request

Tag	Field Name	Required	Comments
281	MDReqRejReason	N	Valid values: 0 = UnknownSymbol 1 = Duplicate ID 2 = Insufficient bandwidth 3 = Insuffucient permission
58	Text	N	Further description of the rejection
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

Trade capture report

Trade capture report is intended for building a list of trades on the client side. This message does not include ClOrdID nor is available for previous days so it is not suitable for own trade confirmations.

TradeCaptureReportRequestAck is sent only in the following cases:

- confirmation of the subscription or unsubscription
- rejection of the TradeCaptureReportRequest
- as result of the snapshot request if there are no results to return.

TradeCaptureReportRequest (inbound)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=AD
568	TradeRequestID	Y	Unique identifier or previous value if disabling subscription
569	TradeRequestType	Y	Valid values: 0 = AllTrades
263	SubscriptionRequestType	N	0 = Snapshot (default) 1 = Snapshot + updates 2 = Disable previous snapshot + updates
55	Symbol	N	null means all securities
48	SecurityID	N	Security ISIN

Tag	Field Name	Required	Comments
22	SecurityIDSource	N	Valid value: 4 = ISIN
17	ExecID	N	Ticket or null for all
828	TrdType	N	Valid values: 0 = RegularTrade 1 = BlockTrade 3 = Transfer (Reported)
580	NoDates	N	Valid values: 0 = all trades for the day 1 = from 2 = from – to
75	TradeDate	Y	From date
60	TransactTime	N	From time in UTC, null means beginning of current day. If specified this DateTime field must belong to the same day as specified in TradeDate.
75	TradeDate	Y	To date
60	TransactTime	N	To time in UTC, null means until now. If specified this DateTime field must belong to the same day as specified in TradeDate.
	Standard Trailer	Y	

TradeCaptureReportRequestAck (outgoing confirmation)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=AQ
568	TradeRequestID	Y	Unique identifier or previous value if disabling subscription
569	TradeRequestType	Y	Valid values: 0 = AllTrades
263	SubscriptionRequestType	N	0 = Snapshot 1 = Snapshot + updates 2 = Disable previous snapshot + updates

Tag	Field Name	Required	Comments
749	TradeRequestResult	Y	Valid values: **0 = Successfull** **1 = Invalid or unknown instrument** **9 = Unauthorized** **99 = Other**
750	TradeRequestStatus	Y	Valid values: 0 = Accepted 1 = Completed 2 = Rejected
58	Text	N	Further information
354	EncodedTextLen	N	
355	EncodedText	N	
	Standard Trailer	Y	

TradeCaptureReport (outgoing confirmation)

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=AE
571	TradeReportID	Y	Ticket
568	TradeRequestID	N	Request ID if the Trade Capture Report is in response to a Trade Capture Report Request
828	TrdType	Y	Valid values: 0 = RegularTrade 1 = BlockTrade 3 = Transfer (Reported)
150	ExecType	N	Valid values: **F = Trade** **G = Trade Correct** **H = Trade Cancel** *P = Pending trade (custom status, currently not used)*
17	ExecID	Y	Ticket

Tag	Field Name	Required	Comments
9010	PreviousTicket	N	If the surveillance changes the trade, we get 2 trades in the system – the old has status "modified" and the new has a link to the original one. In FIX protocol we would get 2 messages - the original ExecutionReport with the ExecType = G and new ExecutionReport with PreviousTicket set to Ticket of original one.
748	TotNumTradeReports	N	Returned in the first result of snapshot
912	LastRptRequested	N	Returned in the last result of snapshot
570	PreviouslyReported	Y	Always N.
55	Symbol	N	
48	SecurityID	N	Security ISIN
22	SecurityIDSource	N	Valid value: 4 = ISIN
32	LastQty	Y	Trade volume
31	LastPx	Y	Trade price
75	TradeDate	Y	
60	TransactTime	Y	
63	SettlType	N	0 = Regular 1 = Cash (DVP)
64	SettlDate	N	
9292	MIC	N	
552	NoSides	N	2
54	Side	Y	1 = Buy
37	OrderID	Y	OrderNumber. If you don't have permission to see trade details this field will be 0.
453	NoPartyIDs	N	1 if next field is specified
448	PartyID	N	Member code
1	Account	N	Account type + number

Tag	Field Name	Required	Comments
526	SecondaryClOrdID	N	Reference
12	Commission	N	
13	CommissionType	N	Valid values: 3 = Absolute
381	GrossTradeAmt	Y	Trade value expressed in local currency
54	Side	Y	2 = Sell
37	OrderID	Y	OrderNumber. f you don't have permission to see trade details this field will be 0.
453	NoPartyIDs	N	1 if next field is specified
448	PartyID	N	Member code
1	Account	N	Account type + number
526	SecondaryClOrdID	N	Reference
12	Commission	N	
13	CommissionType	N	Valid values: 3 = Absolute
381	GrossTradeAmt	Y	Trade value expressed in local currency
	Standard Trailer	Y	

Other

News

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType=B
148	Headline	Y	ASCII
358	EncodedHeadlineLen	N	
359	EncodedHeadline	N	Unicode
61	Urgency	N	0 = Normal, 1 = Flash
33	NoLinesOfText	Y	Specifies the number of text lines to follow
58	Text	Y	Repeating field, number of instances defined in 33
354	EncodedTextLen	N	
355	EncodedText	N	Unicode
149	URLLink	N	URL
	Standard Trailer	Y	