DEUTSCHE BÖRSE
GROUP

Eurex Bonds Negotiation Platform

FIX Interface Specification

Version 1.2.2

Versions

Version	Date	Comment
1.0	15.12.2016	• First version for public release
1.0.1	24.12.2016	• Fixed small error in URLs
1.2.0	20.02.2017	• Fix in RFQ workflow diagram • Removed 'Req' column from tables • Added PriceType tag for yield trading. • Updated Field 60 for Execution report
1.2.1	28.02.2017	• Added TradeCaptureReportRequest • Added TradeCaptureReport • Updated diagrams
1.2.2	15.03.2017	• Leased Line Failover Procedure with Load Balancer 2.2 • Correct PartyRole in Quote Message 10.3.3. • Correct wording in MarketDataRequest Message 10.8.2

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1 Introduction

1.1 Disclaimer

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1.2 Overview

Eurex Bonds Negotiation Platform (ENP) is a platform that extends the Eurex Bonds Market Model by a Request for Quote (RFQ) functionality. The negotiation part takes place on a separate logical entity. Successfully negotiated trades are entered into the Eurex Bonds Trading System (XETRA) for clearing via Eurex Clearing and settlement, thereby relying on the straight-through-processing (STP) already implemented at Eurex Bonds Members today.

The RFQ functionality is provided to the members via an easy-to-use, state-of-the-art user-friendly web GUI. The Web GUI will support both client and dealer workflows, e.g. offer the possibility to both initiate an RFQ and respond to it. Additionally, a new FIX API interface offers the functionality of the dealer workflows. This ENP FIX API runs on endpoints independent from the currently existing Xetra FIX Gateway.

This document specifies the Message Layout and workflows of the ENP FIX API Interface. A FIX Simulator allows the possibility to test various scenarios of regular RFQ Workflows. The connectivity to the interface is provided both via internet and via leased line.

2 Connectivity

2.1 Internet

The ENP FIX API endpoint is accessible via the internet. A load balancer on Deutsche Boerse premises handles the failover procedure between the two main sites of ENP; therefore, only one endpoint needs to be accounted for in the case of internet connectivity.

The connection is encrypted using TLS with client and server certificates. Server certificates are to be validated using the regular keychain of the web-of-trust. The client certificates are provided from the Deutsche Boerse Member Section.[1]

2.1.1 Endpoint

The internet endpoints for the ENP FIX API are as follows:

Production fix-trade.eurex-bonds.com:14845

Simulation fix-trade-simu.eurex-bonds.com:14846

2.2 Leased Line

The ENP FIX API Endpoint via Leased Line is hosted on a Load Balancer within Deutsche Boerse premises. Failover is implemented within the Deutsche Boerse AG infrastructure. The connection via Leased Line is unencrypted.

The FIX API traffic is routed via the transaction channel of the Deutsche Boerse Leased Line connection.

2.2.1 Endpoints

Production Site a fix-trade-line.eurex-bonds.com:15845

Simulation Site a fix-trade-line-simu.eurex-bonds.com:15846

3 FIX Simulator

In order to decrease development effort, a FIX Simulator offers the possibility to test the implementation before connecting to the simulation or production environment.

The ENP FIX Simulator is an online tool that is available via internet at a URL that is subject to be published in the near future.

In the FIX Simulator, you can select a scenario to test and then run your application against.

This chapter is preliminary and will get updated accordingly with the upcoming releases of the simulator.

[1] See chapter 6 for details on how to request a client certificate for the ENP FIX API.

4 FIX Standard & Session Layer

This document is based upon FIX 5.0 SP2 and uses a few fields from future extension packs (see next chapter). For additional reference, you might consult the respective documents. If information about the FIX session layer and/or admin messages is required, check the document “FIX Session Protocol” (FIX_Transport_1.1.pdf), which is publicly available from the Fix Trading Community website at http://www.fixtradingcommunity.org.

ENP supports all of the FIX session level messages (also known as FIX administrative messages) as documented in the FIX Protocol specification. These messages include: Logon, Logout, ResendRequest, TestRequest, Reject, and SequenceReset/Gapfill.

Each FIX message, whether it is an administrative or application level message, is made up of three segments: header, body and trailer.

4.1 Header Fields

The FIX Header is included in every FIX message sent. Most of the data values of these fields should be taken care of by the FIX engine. However there are some fields that are based on the configuration for the specific FIX session: BeginString(8), SenderCompID(49), TargetCompID(56). Set TargetCompID always to “ENP”. Set SenderCompID as requested and provided from Eurex-Bonds.

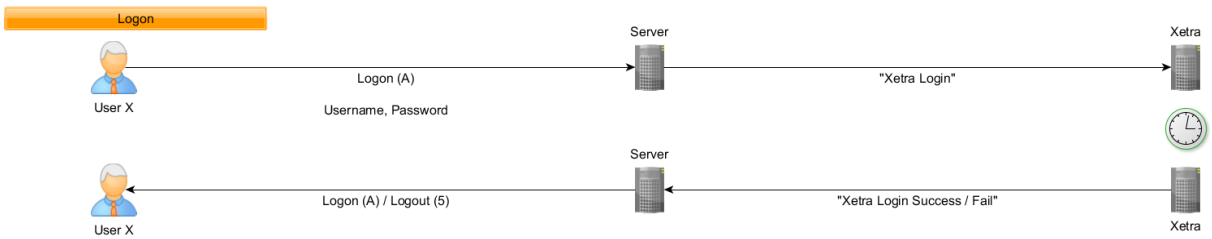
The SenderCompID will be provided by Eurex Bonds and is bound to a specific user id of the respective member institution. In FIX 5.0 the value in BeginString(8) for the classic session layer is “FIXT.1.1”.

4.2 Trailer Fields

The FIX Trailer is included on every FIX message sent. ENP does not support any of the optional fields in the Trailer, only the CheckSum field which is required. The value for the CheckSum field will be handled by the FIX engine as it is a calculated value.

4.3 Logon (A) and Logout (5)

The credentials to be submitted as username and password correspond to valid Eurex Bonds / Xetra credentials, e.g. XYZEBTRD001 / password. There is no need to specify the Market Identifier Code (MIC) within these requests as ENP is hardwired to connect only to Eurex Bonds.



Request to log on as well as confirmation of a successful logon.

Tag	Field Name	Comment
98	EncryptMethod	0 (None)
108	HeartBtInt	Interval for heartbeat in seconds.
553	Username	Eurex Bonds / Xetra username, e.g. XYZEBTRD001
554	Password	Eurex Bonds password
1137	DefaultApplVerID	The default version of FIX messages used in this session.

Request to log out, response to an unsuccessful login or successful logout.

Tag	Field Name	Comment
1409	SessionStatus	Status at logout time: • 0 = session active • 4 = session logout complete • 5 = invalid username/password • 6 = account locked • 7 = logons not allowed at this time • 8 = password expired • …

4.4 Heartbeat and TestRequest

The Heartbeat and TestRequest messages are to be used per the FIX specification. ENP will use these two messages to determine whether the counterparty connection is still live or not. In the event that a Heartbeat message is sent to the counterparty and there is no response within the agreed upon heartbeat interval (see tag 108 in Logon message), a Test Request message will be sent. The counterparty is obligated to respond immediately to the TestRequest, per the FIX specification. If ENP does not receive a response to the TestRequest message within the heartbeat interval, ENP will terminate the FIX session to the counterparty.

4.5 ResendRequest, Reject, SequenceReset – Gapfill

These administrative messages are to be used per the FIX specification.

4.6 FIX Field Ordering

The FIX Protocol standard specifies the following regarding ordering or sequence of fields within a FIX message:

Fields within a message can be defined in any sequence (relative position of a field within a message is inconsequential). The exceptions to this rule are:

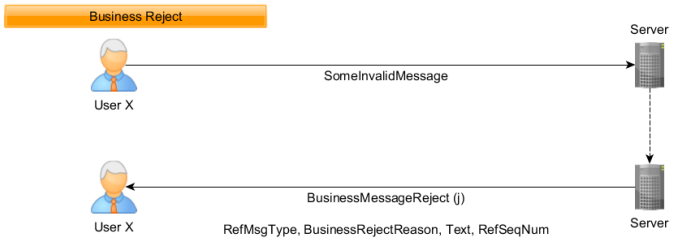
- The general message format is composed of the standard header followed by the body followed by the standard trailer.
- The first three fields in the standard header are BeginString (tag #8) followed by BodyLength (tag #9) followed by MsgType (tag #35).
- The last field in the standard trailer is the CheckSum (tag #10)
- Fields within repeating data groups must be specified in the order that the fields are specified in the message definition within the FIX specification document. The NoXXX field where XXX is the field being counted specifies the number of repeating group instances that must immediately precede the repeating group contents.
- A tag number (field) should only appear in a message once (except within a repeating data group definition). If it appears more than once in the message it should be considered an error with the specification document.

4.7 Responses and ErrorHandling

FIX Protocol is very specific in defining appropriate responses to particular messages. Only in extraordinary circumstances should this be sidestepped. The following table gives a summary of usage implemented by ENP.

Note that the BusinessMessageReject(35=j) message can be used as a rejection to any message under specific exception rules.

A BusinessMessageReject will be send when there is something wrong with one of the other messages on application level.



Tag	Field Name	Comment
45	RefSeqNum	Sequence number of rejected message.
372	RefMsgType	Message type of rejected message.
380	BusinessRejectReason	Code to identify reject reason.
58	Text	Required if the reject reason is 0.

5 Custom FIX fields

5.1 Minimum Wiretime

In order to transmit minimum and maximum wiretime to the dealer, the field "ExposureDuration" (Tag 1629) has been added. It represents a value in seconds and has to be respected by the dealer giving his quotes. Tag 1629 is part of extension pack (EP) 100 and has been updated in EP 159.

5.2 Number of Competitors

In order to tell the dealer about the competition and number of other dealers involved, the field "NumOfCompetitors" (Tag 1913) has been added. It represents the number of competitors that are part of the competition, including the dealer himself. Tag 1913 is part of EP 159.

5.3 Response Time

In order to tell the dealer how long he has to answer a quote request, the field "ResponseTime" (Tag 1914) has been added. It represents a moment in time (UTC) from which a request will no longer be valid. Tag 1914 is part of EP 159.

5.4 Maximum Wiretime

In order to transmit minimum and maximum wiretime to the dealer, the field "MaxExposureDuration" (Tag 20000) has been added. It represents a value in seconds and has to be respected by the dealer giving his quotes. Tag 20000 is NOT part of any extension pack and was created specifically to support Eurex Bonds workflows.

6 Message Index

The following table lists all used FIX messages and their possible applications. For further information about a specific message, please see the following chapters.

Tag	Message Name	Usage
j	BusinessMessageReject	• Will be sent by ENP in case of failed consistency checks or problems in the workflow execution.
A	Logon	• Client requesting login. • Answer from ENP to a successful login request.
5	Logout	• Client requesting logout from ENP. • ENP answering successful logout request. • ENP rejecting login attempt.

CB	UserNotification	• Sent automatically by ENP after successful login to the user that just logged in, listing all member currently online. • All currently logged in users will get this message when the first/last user of a member logs in/out.
R	QuoteRequest	• Initiator sending an RFQ or RFO. • ENP informing involved dealers about a starting RFQ or RFO. • ENP automatically requesting a quote update from a dealer participating in an RFQ negotiation in case of a wiretime or ordertime timeout. • ENP requesting quote updates from a dealer if the Initiator revokes his on-subject acceptance.
AG	QuoteRequestReject	• Dealer rejecting participation in an RFQ or RFO negotiation. • ENP telling the Initiator about a Dealer quitting from an RFQ or RFO negotiation. • ENP informing Initiator and Dealer about a timeout on the dealer side in respect to the response time during an RFQ or RFO.
S	Quote	• Dealer sending a new/updated quote (RFQ) or order (RFO) to ENP. • ENP informing the Initiator about an incoming new/updated quote (RFQ) or order (RFO). • ENP informing the remaining users of a counterparty/member about a quote from one of their colleagues.
AJ	QuoteResponse	• Initiator cancelling the whole RFQ/RFO negotiation as well as ENP telling all involved dealers about it. • Initiator accepting a quote in an RFQ negotiation and ENP telling the winning as well as the losing dealers about it. • Initiator accepting an on-subject quote during an RFQ negotiation and ENP telling the according dealer. • ENP telling dealer A (as well as the other users from this member/counterparty) that A accepted an on-subject request from the Initiator. • ENP communication an overall timeout. • Dealer accepting an RFO as well as ENP telling the Initiator. • Initiator rejecting an RFO counter and ENP telling the Dealer. • Initiator accepting an RFO counter and ENP telling the Dealer.
AI	QuoteStatusReport	• Answer to Initiator from ENP after a QuoteRequest (RFQ and RFO) in order to communicate the QuoteReqID. • Answer to the Initiator accepting either an RFQ on-wire quote or an on-subject quote. • Initiator revoking his on-subject RFQ accept.

		• Dealer accepting on-subject RFQ from Initiator and ENP telling the Initiator. • Answer to RFO Dealer accept. • Answer to RFQ Initiator counter accept.
8	ExecutionReport	• Execution reports for trades. Those are send out for every successful RFQ or RFO trade, no matter how the negotiation ran. In case Xetra rejects a trade, ENP will also send a (negative) execution report.
6	IOI	• The Initiator uses this message to create, update and remove Axes. • ENP sends an IOI message back to the Initiator after he sends a new or updated Axe in order to inform him about the created ID. • Every user targeted by an Axe will receive an IOI message telling him about newly created Axes as well as update and removals.
V	MarketDataRequest	• Used to request all open Axes for the senders counterparty/member (for example in case of a connection loss).
AD	TradeCaptureReportRequest	• Used to request data from a past ExecutionReport (for example after a connection loss).
AE	TradeCaptureReport	• Answer to a TradeCaptureReportRequest which contains all the information from a past ExecutionReport.

7 Workflows

7.1 Request for Quote (RFQ)

A Request for Quote (RFQ) is a negotiation process in which one party (“Initiator”) starts the workflow with one or more counterparts (“Dealers”). The Initiator requests a quote from the Dealers in an instrument for a specified volume.

Dealers can respond to the RFQ in various ways:

- Reject
- Ignore (leads to timeout)
- Provides a Quote

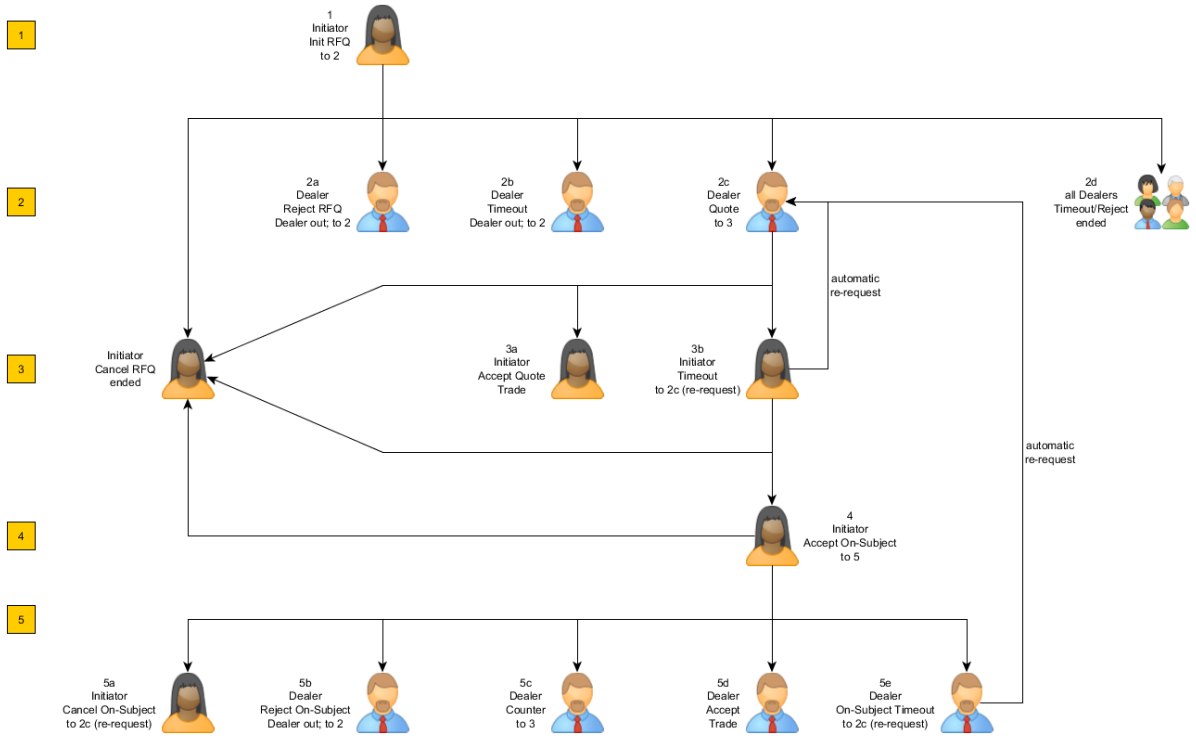
A quote is always firm for the wiretime that is sent together with the quote. After the wiretime has expired, the quote will be no longer be firm (it will be “On-Subject”).

A quote that is On-Subject can be

- Updated by the Dealer – It will then again be on-wire for the specified wiretime
- Accepted by the Initiator – The quote will then be required to be accepted by the Dealer again

See the RFQ Workflow Diagram in 7.1.1 for the detailed workflow.

7.1.1 RFQ Workflow Diagram



7.2 Request for Order (RFO)

A Request for Order (RFQ) is a negotiation process in which one party (“Initiator”) starts the workflow with exactly one counterpart (“Dealer”). The Initiator requests an order from the Dealer in an instrument for a specified volume and price.

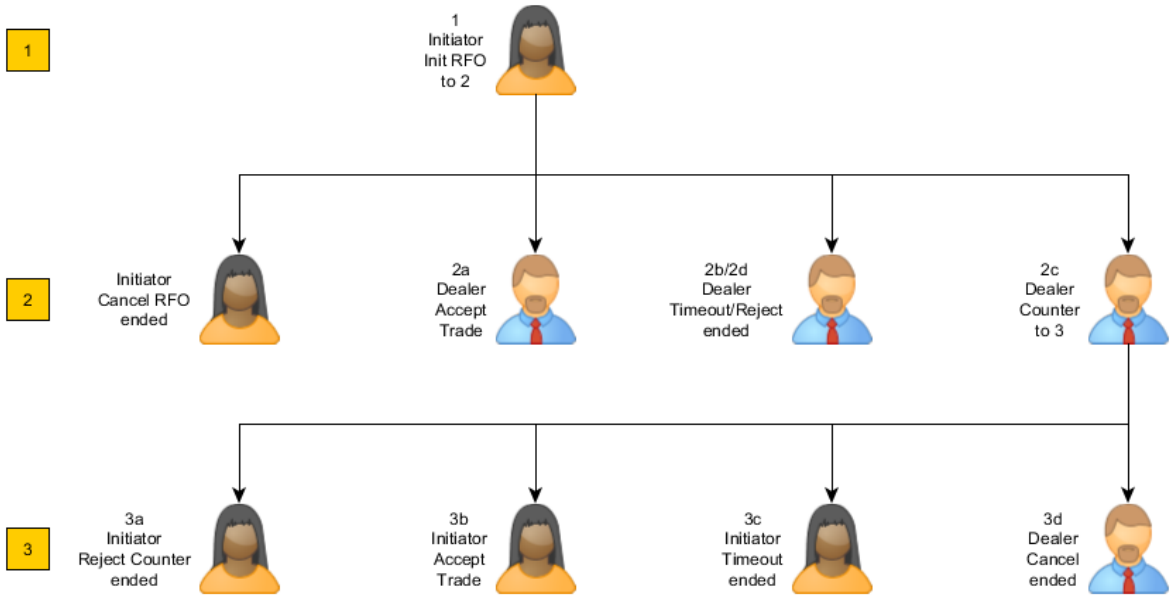
Dealers can respond to the RFO in various ways:

- Accept the RFO (leading directly to a trade)
- Reject / Ignore
- Counter

In case the Dealer counters the RFO, the Initiator has the following options:

- Accept the counter (leader to a trade)
- Reject / Ignore the Counter

7.2.1 RFO Workflow Diagram



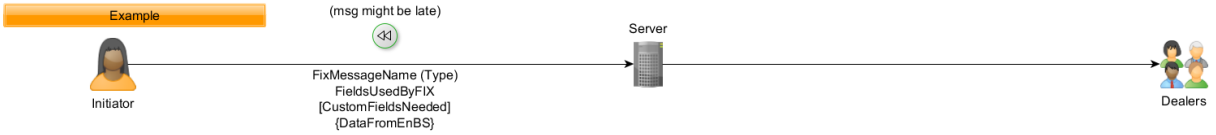
8 Message Example & Explanation

This is an example message sent by the 'Initiator' to the backend and then send on to 'Dealers'. It describes the workflow step 'Example'. The arrow symbol (below “msg might be late”) means, that this message might be sent at a time where it’s no longer valid. Therefore the receiver of this message (in this case it’s the server), must be able to handle the fact that this message might arrive when it’s not expected.

It is supposed to be a message of type 'FixMessageName' which goes by the message type 'Type'. Certain information needs to be included in this message (via the usual FIX fields like 'instrument and so on). Furthermore there are 'fields required by FIX' that are not strictly necessary for the workflow but need to be part of a valid FIX message anyway. A number of 'FieldsUsedForExtraInfo' might also be present, which in this case, are required. Some 'CustomFieldsNeeded' will be added to the current FIX5.0 SP2 specification to match our processes.

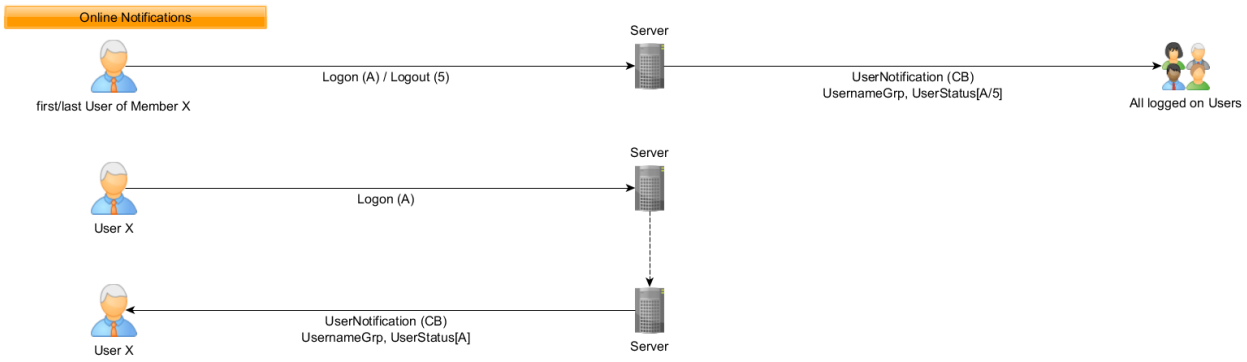
Tag	Field Name	Comment
0	ExampleField	Some example field that is either required, conditionally required or not required at all.
1111	AnotherExampleField	Another example field that is part of a repeating group.
[2222]	AndYetAnotherField	This one is part of a nested repeating group. It's also a field that has been added to the spec and therefore might be subject to change. If below 20000, the field is part of upcoming extension packs and will probably be part of the next SP.

Last but not least there might be 'DataFromEnBS' that's only available to the client over an additional EnBS interface and is NOT provided by the FIX workflow.



9 UserNotification (CB)

This message will be send out to all users online every time a member comes online (or goes offline).



Tag	Field Name	Comment

809	*NoUsernames*	List of members that are logged in at the moment or just logged in.
553	Username	Xetra-ID of a Eurex-Bonds member.
926	UserStatus	• 1 (Logged In) • 2 (Not Logged In) • …

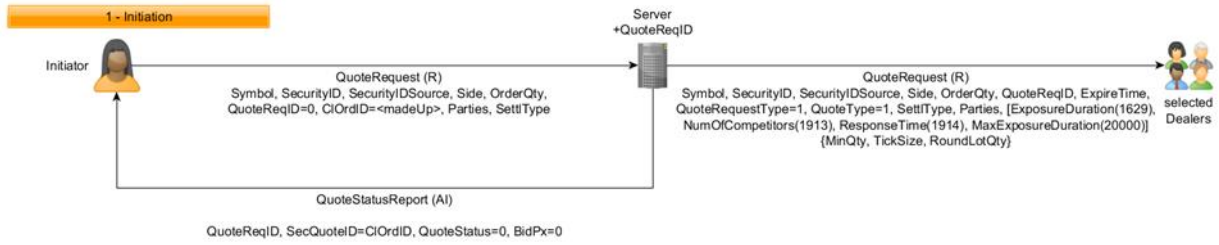
10 Trading Workflows and related messages

While both the Dealer and Initiator Workflows are accessible via FIX API, only the Dealer workflows are mandatory and initiator workflows are optional.

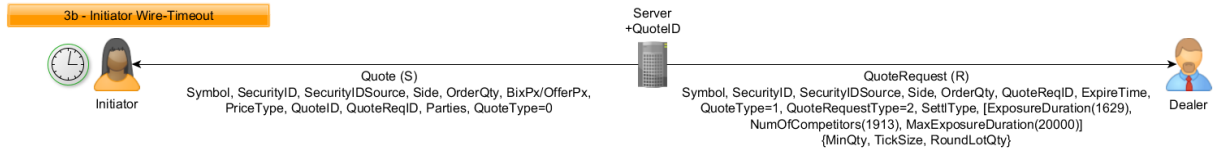
10.1 QuoteRequest (R)

Start RFQ or RFO workflows and inform dealers about them. Also used to automatically re-request updated quotes during an RFQ negotiation (even after On-Subject workflow).

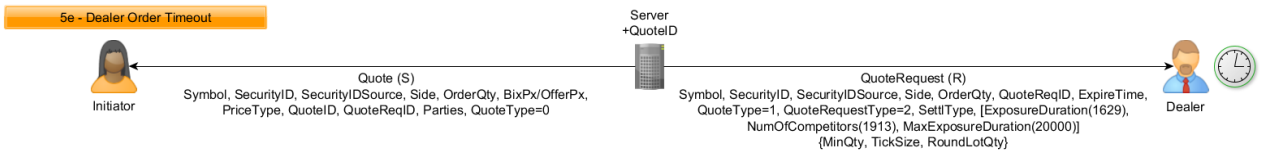
10.1.1 Workflow Diagrams RFQ



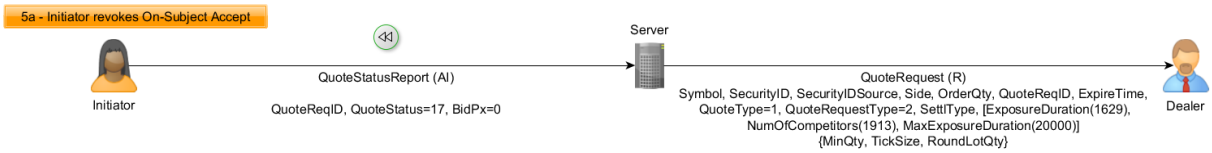
or



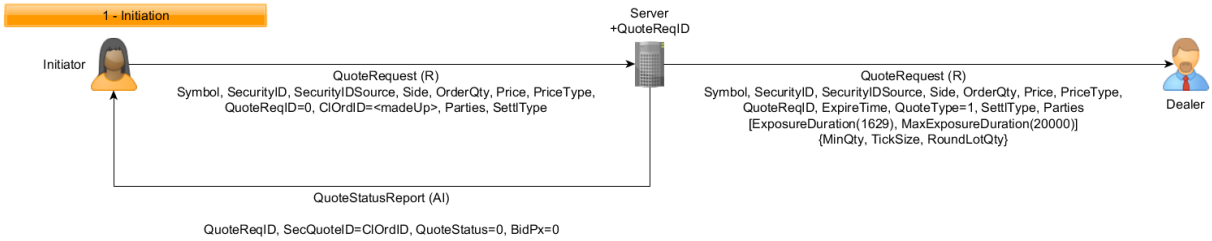
or



or



10.1.2 Workflow Diagrams RFO



10.1.3 Message Format

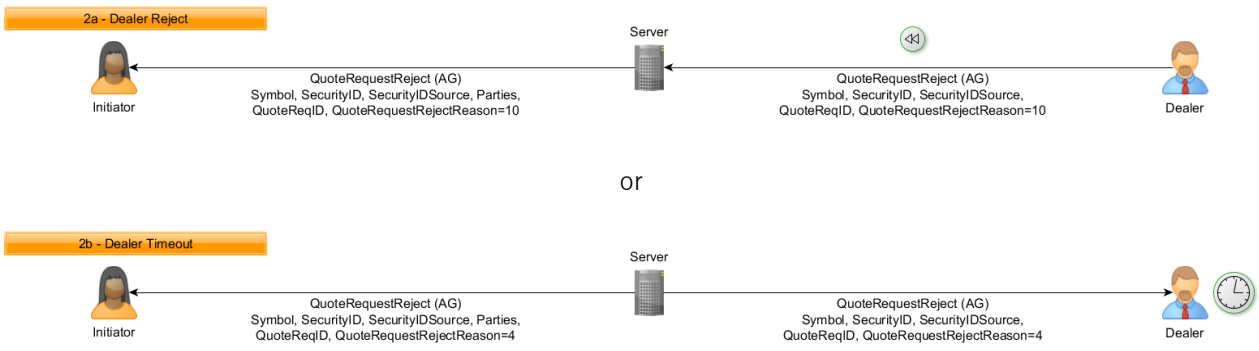
Tag	Field Name	Comment
131	QuoteReqID	Initiator sends 0 and will receive ID via acknowledgement. Dealer receives platform-generated QuoteReqID.
11	ClOrdID	Given by Initiator (to identify immediate answer; not usable later on; not saved by platform).
146	*NoRelatedSym*	
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
303	QuoteRequestType	1 = Manual (initial) 2 = Automatic (going On-Subject)
537	QuoteType	1 = Tradeable
54	Side	1 = Buy 2 = Sell
38	OrderQty	Volume to request.
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)
44	Price	Price to request. (RFO only!)
63	SettlType	Type of settlement: (must be set) • 0 = Regular • 1 = Cash/Today • 2 = Next Day (T+1)

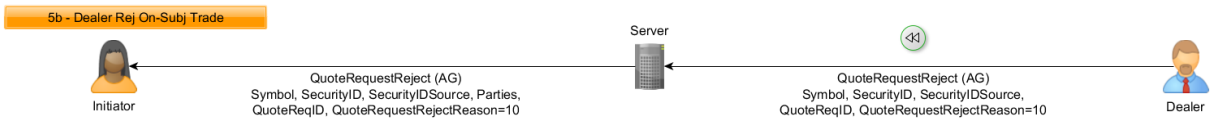
		• 3 = T+2 • 4 = T+3 • 5 = T+4 • 6 = Future • 9 = T+5
64	SettlDate	YYYYMMDD
126	ExpireTime	Overall maximum time. (UTC)
[1629]	ExposureDuration	Minimum wiretime.
[1913]	NumOfCompetitors	Information about the number of competitors. (1-5 or -1 for 'more than 5')
[1914]	ResponseTime	Response time for quotes to arrive in.
[20000]	MaxExposureDuration	Maximum wiretime.
453	*NoPartyIDs*	List of Members the initiator is initiating an RFQ with. Send only by the Initiator.
448	PartyID	Eurex Bonds / Xetra Member Ids
447	PartyIDSource	D (Custom Code)
452	PartyRole	• 7 = Entering Firm (Initiator) • 17 = Contra Firm (Dealers)

10.2 QuoteRequestReject (AG)

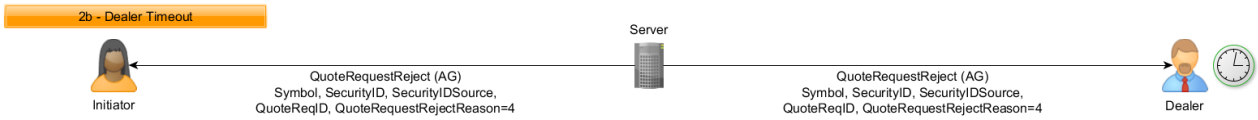
Message either send by the Dealer (and send on by the platform) if he wants to pass (10) or automatically send by the platform if Dealer or Initiator do not respond (4). This message can also be used by the Dealer to cancel an RFO, the request as well as his own quote.

10.2.1 Workflow Diagrams RFQ

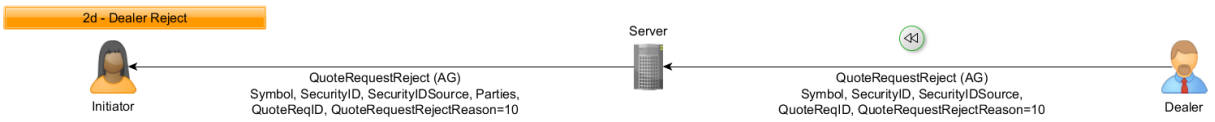




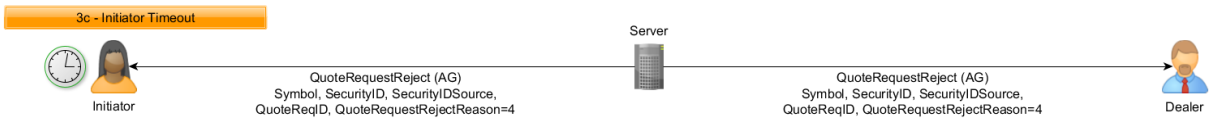
10.2.2 Workflow Diagrams RFO



or



or



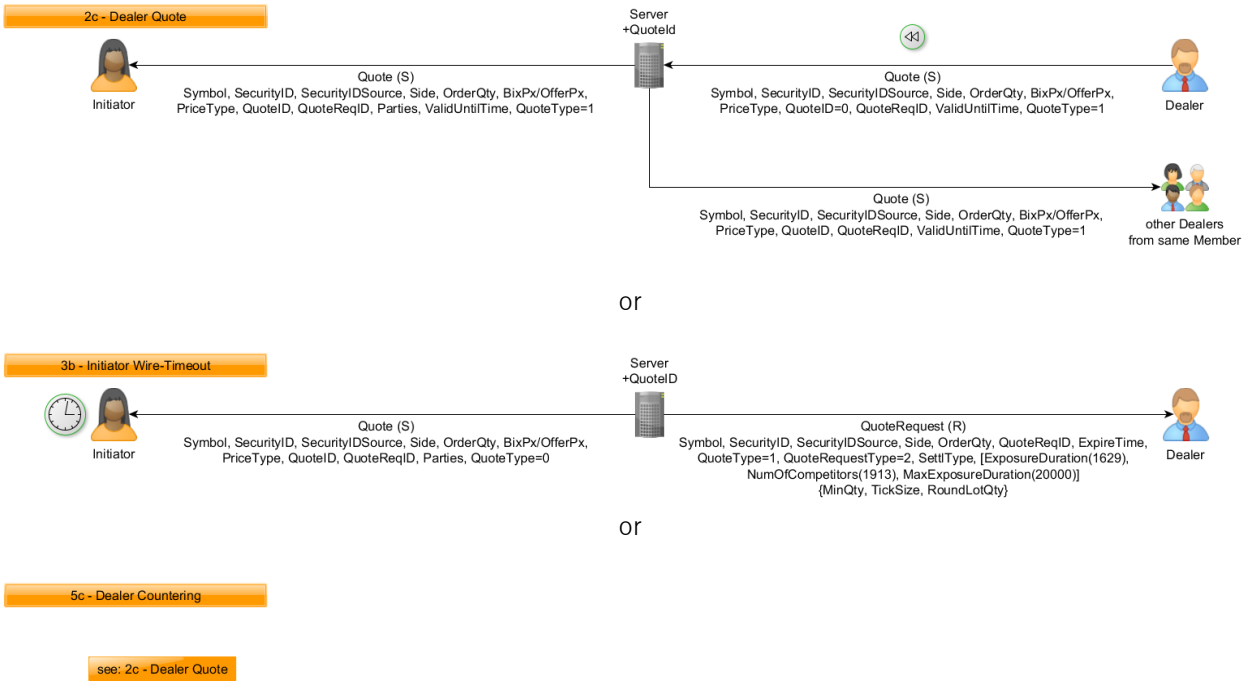
10.2.3 Message Format

Tag	Field Name	Comment
131	QuoteReqID	References QuoteReqID to cancel or quit from.
658	QuoteRequestRejectReason	4 = Too late to enter 10 = Pass
146	NoRelatedSym	
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
453	NoPartyIDs	
448	PartyID	Eurex Bonds / Xetra Member Id of the member that quit/passed.
447	PartyIDSource	D (Custom Code)
452	PartyRole	• 7 = Entering Firm (Initiator) • 17 = Contra Firm (Dealers)

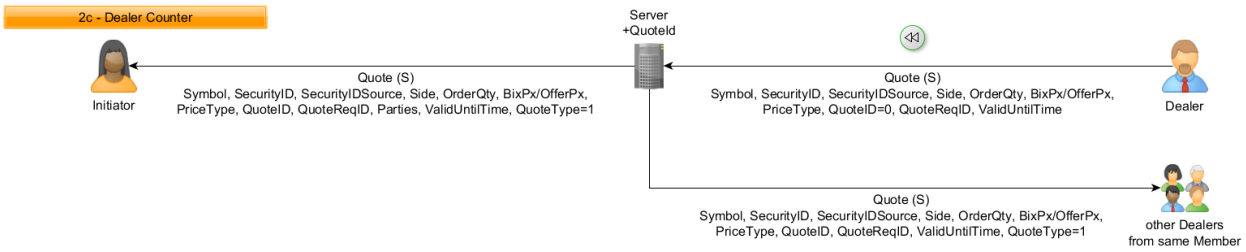
10.3 Quote (S)

Used as a positive reply to a QuoteRequest message, as update for the initiator when the wiretime runs out as well as counter to an On-Subject response (cancels the On-Subject workflow) or RFO request.

10.3.1 Workflow Diagrams RFQ



10.3.2 Workflow Diagrams RFO



10.3.3 Message Format

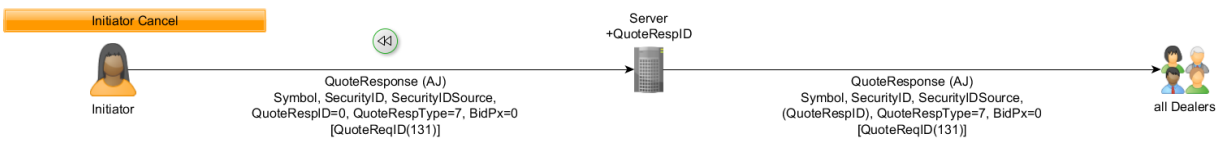
Tag	Field Name	Comment
117	QuoteID	0 when coming from Dealer, created by the platform and send to the Initiator.
131	QuoteReqID	ID of the QuoteRequest this message is the answer to.

537	QuoteType	Initially quotes are tradeable (=1), after the wiretime they become On-Subject (=0).
	NoPartyIDs	Send by the platform to identify the member sending the quote.
448	PartyID	Party identifiers.
447	PartyIDSource	D (Custom Code)
452	PartyRole	• 7 = Entering Firm (Initiator) • 17 = Contra Firm (Dealer)
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
54	Side	1 = Buy 2 = Sell
38	OrderQty	Size (Buy & Sell)
132	BidPx	Bid price for this quote. Don't specify or set to zero if no bid quote intended.
133	OfferPx	Offer price for this quote. Don't specify or set to zero if no offer quote intended.
62	ValidUntilTime	The time when the quote will expire.
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)

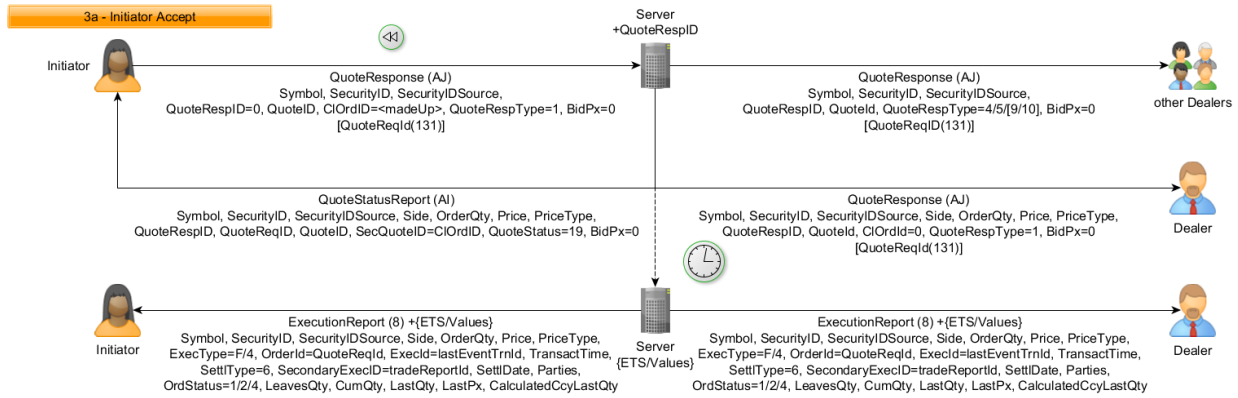
10.4 QuoteResponse (AJ)

Answer to a quote, whether to accept it or pass (does not matter if during wiretime or On-Subject). In case of an RFO it is used to accept or reject offers. The platform will send this kind of message to inform the Initiator or Dealer about changes in the quote status (mostly time-based). Also used by the Initiator (or platform) to cancel the whole negotiation.

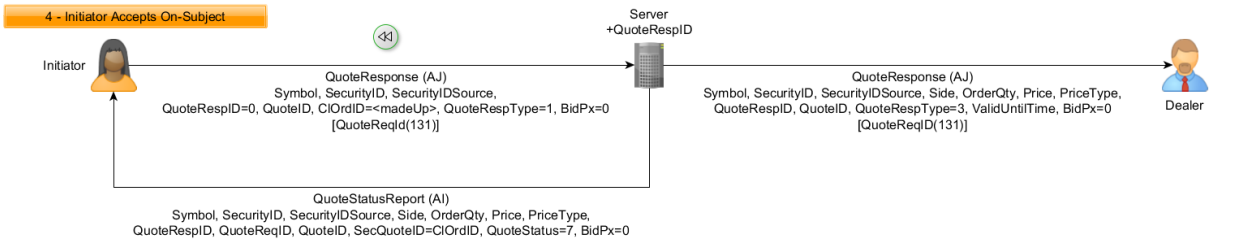
10.4.1 Workflow Diagrams RFQ



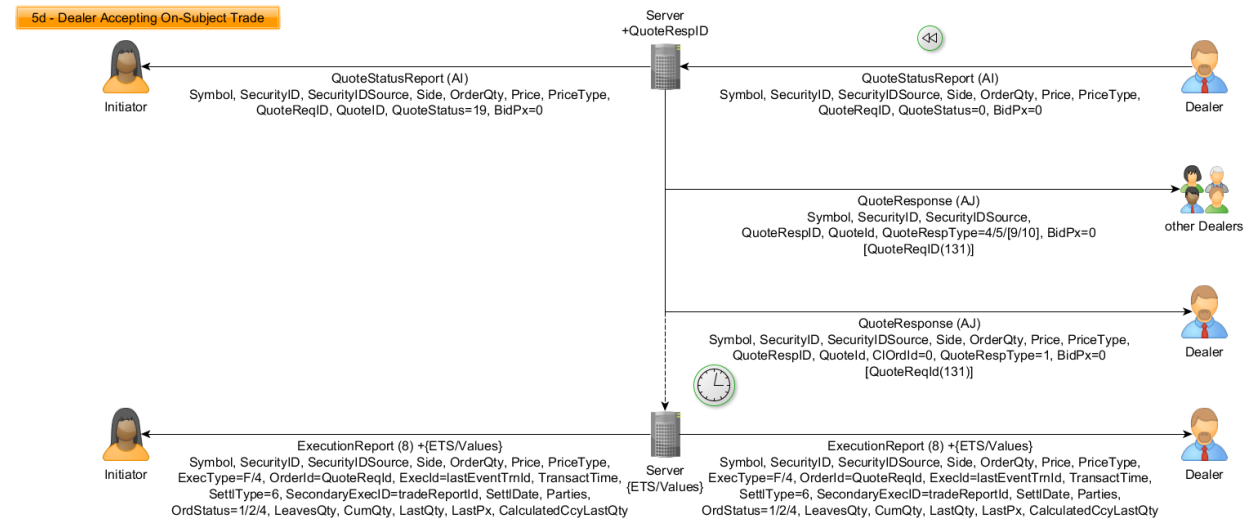
or


3a - Initiator Accept
Initiator
Server
+QuoteRespID
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource,
QuoteRespID=0, QuoteID, ClOrdID=<madeUp>, QuoteRespType=1, BidPx=0
[QuoteReqId(131)]
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource,
QuoteRespID, QuoteId, QuoteRespType=4/5/[9/10], BidPx=0
[QuoteReqID(131)]
other Dealers
QuoteStatusReport (AI)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteRespID, QuoteReqID, QuoteID, SecQuoteID=ClOrdID, QuoteStatus=19, BidPx=0
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteRespID, QuoteId, ClOrdId=0, QuoteRespType=1, BidPx=0
[QuoteReqId(131)]
Dealer
Initiator
ExecutionReport (8) +{ETS/Values}
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
ExecType=F/4, OrderId=QuoteReqId, ExecId=lastEventTrnId, TransactTime,
SettlType=6, SecondaryExecID=tradeReportId, SettlDate, Parties,
OrdStatus=1/2/4, LeavesQty, CumQty, LastQty, LastPx, CalculatedCcyLastQty
Server
{ETS/Values}
ExecutionReport (8) +{ETS/Values}
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
ExecType=F/4, OrderId=QuoteReqId, ExecId=lastEventTrnId, TransactTime,
SettlType=6, SecondaryExecID=tradeReportId, SettlDate, Parties,
OrdStatus=1/2/4, LeavesQty, CumQty, LastQty, LastPx, CalculatedCcyLastQty
Dealer

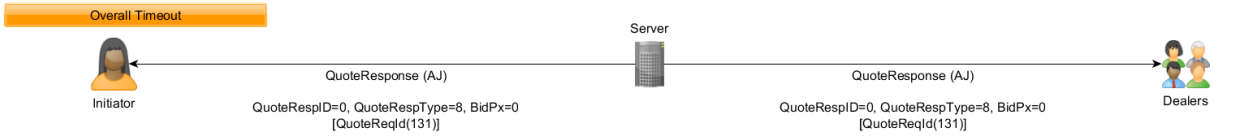
or


4 - Initiator Accepts On-Subject
Initiator
Server
+QuoteRespID
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource,
QuoteRespID=0, QuoteID, ClOrdID=<madeUp>, QuoteRespType=1, BidPx=0
[QuoteReqId(131)]
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteRespID, QuoteId, QuoteRespType=3, ValidUntilTime, BidPx=0
[QuoteReqID(131)]
Dealer
QuoteStatusReport (AI)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteRespID, QuoteReqID, QuoteID, SecQuoteID=ClOrdID, QuoteStatus=7, BidPx=0

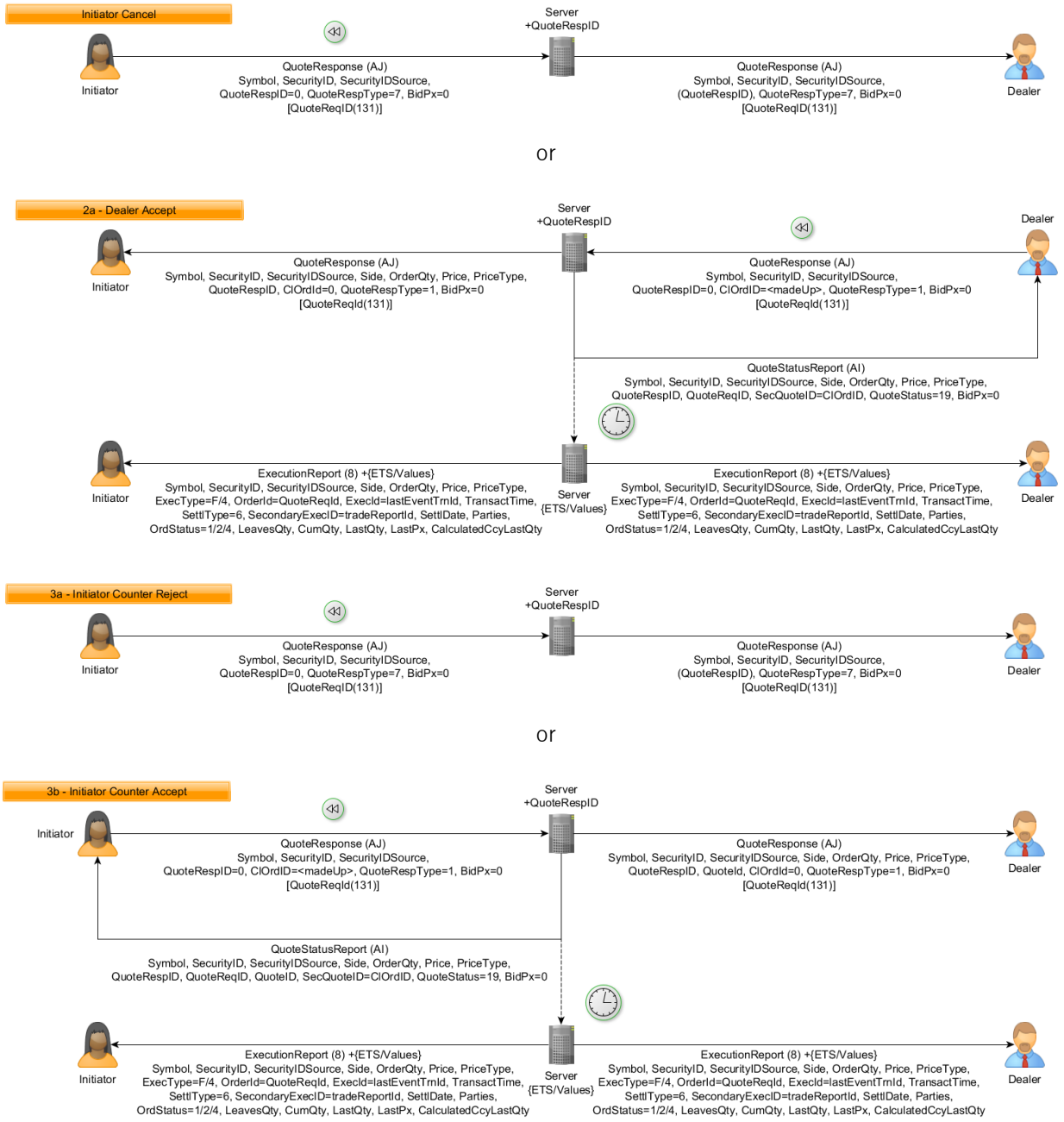
or


5d - Dealer Accepting On-Subject Trade
Initiator
Server
+QuoteRespID
QuoteStatusReport (AI)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteReqID, QuoteID, QuoteStatus=19, BidPx=0
QuoteStatusReport (AI)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteReqID, QuoteStatus=0, BidPx=0
Dealer
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource,
QuoteRespID, QuoteId, QuoteRespType=4/5/[9/10], BidPx=0
[QuoteReqID(131)]
other Dealers
QuoteResponse (AJ)
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
QuoteRespID, QuoteId, ClOrdId=0, QuoteRespType=1, BidPx=0
[QuoteReqId(131)]
Dealer
Initiator
ExecutionReport (8) +{ETS/Values}
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
ExecType=F/4, OrderId=QuoteReqId, ExecId=lastEventTrnId, TransactTime,
SettlType=6, SecondaryExecID=tradeReportId, SettlDate, Parties,
OrdStatus=1/2/4, LeavesQty, CumQty, LastQty, LastPx, CalculatedCcyLastQty
Server
{ETS/Values}
ExecutionReport (8) +{ETS/Values}
Symbol, SecurityID, SecurityIDSource, Side, OrderQty, Price, PriceType,
ExecType=F/4, OrderId=QuoteReqId, ExecId=lastEventTrnId, TransactTime,
SettlType=6, SecondaryExecID=tradeReportId, SettlDate, Parties,
OrdStatus=1/2/4, LeavesQty, CumQty, LastQty, LastPx, CalculatedCcyLastQty
Dealer

or


Overall Timeout
Initiator
Server
QuoteResponse (AJ)
QuoteRespID=0, QuoteRespType=8, BidPx=0
[QuoteReqId(131)]
QuoteResponse (AJ)
QuoteRespID=0, QuoteRespType=8, BidPx=0
[QuoteReqId(131)]
Dealers

10.4.2 Workflow Diagrams RFO



10.4.3 Message Format

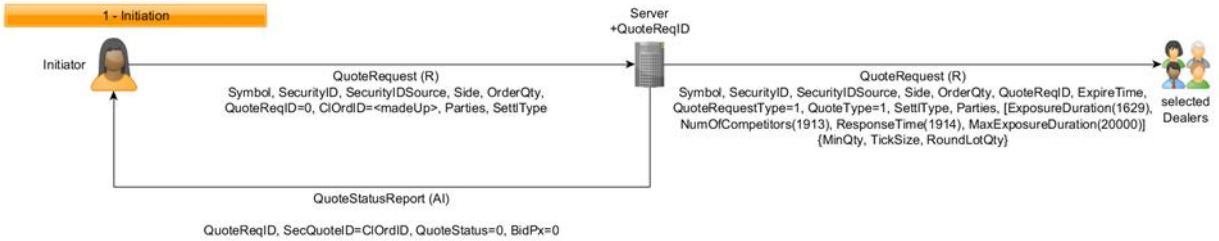
Tag	Field Name	Comment
693	QuoteRespID	Sender sets it to 0. The platform creates a new ID and passes it on to the next involved party.
11	ClOrdID	Given by Initiator (to identify the immediate answer; not usable later on; not saved by platform)

117	QuoteID	ID of the quote answered with this response. In case of an RFO, only after counter.
[131]	QuoteReqID	ID of the quote request this is in reference to.
694	QuoteRespType	1 = Hit/Lift (accept quote) 3 = Expired (Initiator accepted 'On-Subject') 4 = Cover (info for Dealer) 5 = Done Away (info for Dealer) 6 = Pass (reject quote or accept another one) 7 = End Trade (Cancel Button) 8 = Timed Out (Overall time expired) 9 = Tied (info for Dealer) 10 = Tied Cover (info for Dealer)
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
54	Side	1 = Buy; 2 = Sell
63	SettlType	Type of settlement: • 0 = Regular • 1 = Cash/Today • 2 = Next Day (T+1) • 3 = T+2 • 4 = T+3 • 5 = T+4 • 6 = Future • 9 = T+5
64	SettlDate	YYYYMMDD
38	OrderQty	Size
62	ValidUntilTime	Order time for On-Subject answers from Initiator.
44	Price	Price
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)

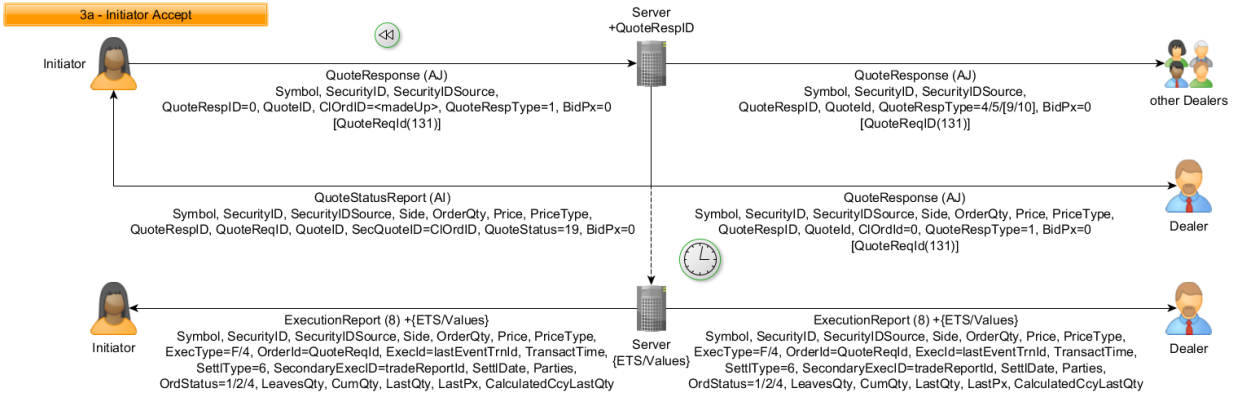
10.5 QuoteStatusReport (AI)

This message is used by the platform to acknowledge actions by the Initiator or Dealer. The Initiator himself uses this message to cancel On-Subject trades from his side and return to the normal workflow. It is also used by Initiator and Dealer to accept On-Subject trades.

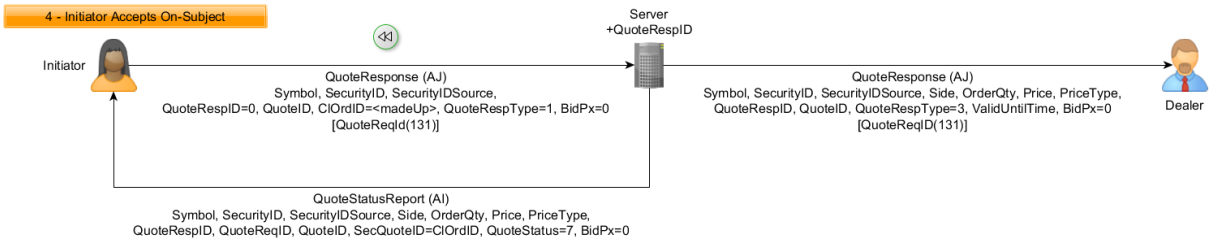
10.5.1 Workflow Diagrams RFQ



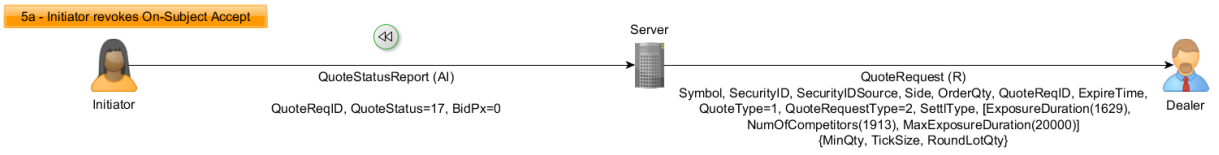
or



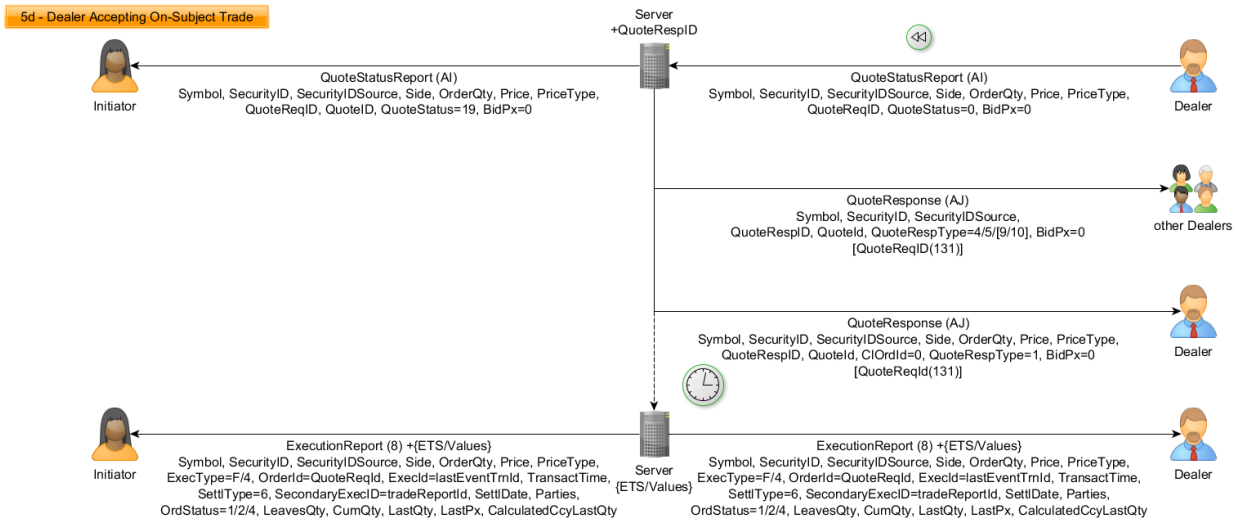
or



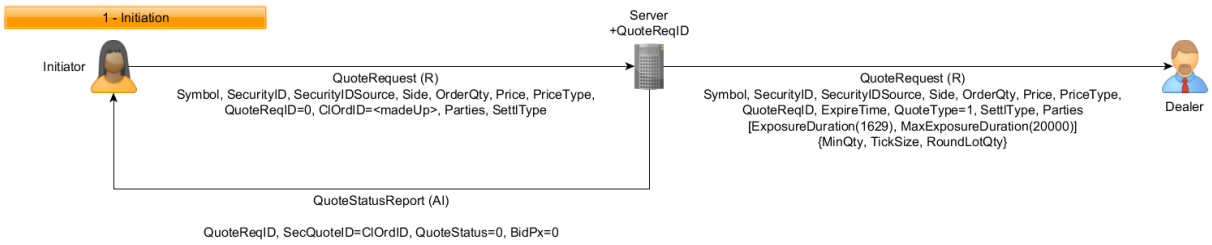
or



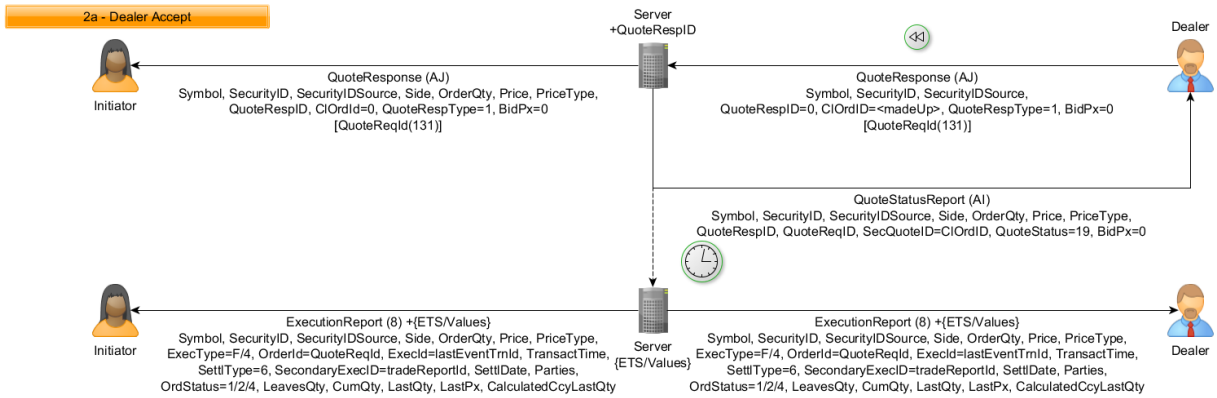
or



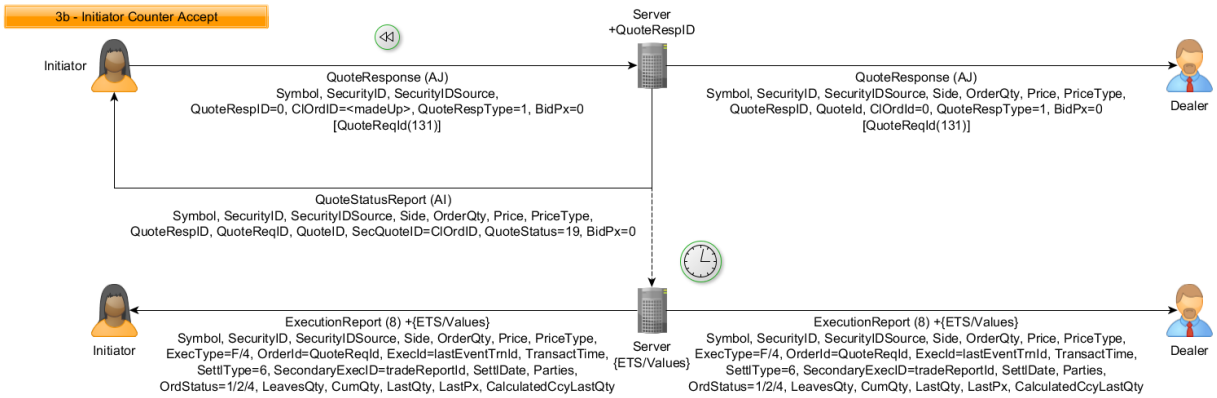
10.5.2 Workflow Diagrams RFO



or



or



10.5.3 Message Format

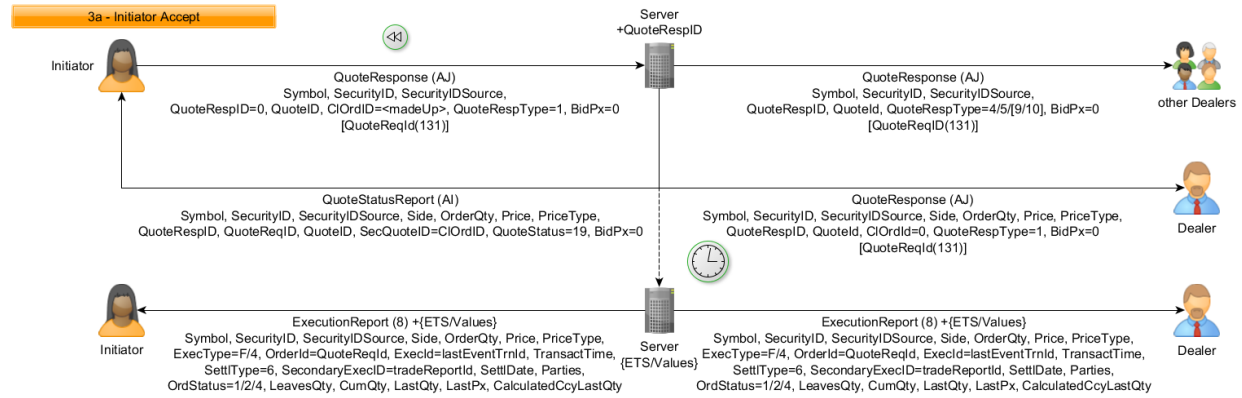
Tag	Field Name	Comment
131	QuoteReqID	ID of the QuoteRequest this message is the answer to.
117	QuoteID	ID of the Quote answered with this response.
693	QuoteRespID	Either 0 and created by platform or identical to the ID received from the system with the matching quote response.
1751	SecondaryQuoteID	Used to send ClOrdID back to Initiator (to identify response).
55	Symbol	Instrument identifier. (repeat value to accept)
48	SecurityID	Instrument identifier. (repeat value to accept)
22	SecurityIDSource	4 = ISIN (repeat value to accept)
54	Side	(repeat value to accept)
44	Price	Price
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)
38	OrderQty	Size
132	BidPx	0
297	QuoteStatus	0 = Accepted (used to acknowledge initiation) 7 = Expired (used by the system to acknowledge On-Subject accepts) 17 = Canceled (used by the system to acknowledge On-Subject cancels by the initiator) 19 = Pending End Trade (system is trying to book trade on Xetra)
537	QuoteType	1 = Tradeable (used to ack on-wire trades)

	2 = Restricted Tradeable (used to ack On-Subject trades)

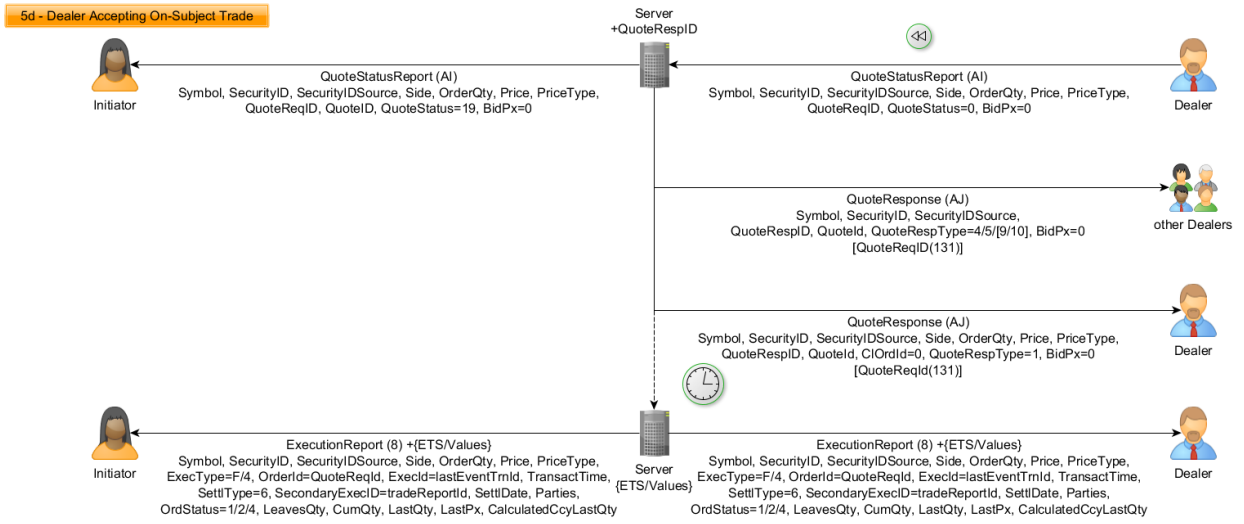
10.6 ExecutionReport (8)

This message is send when a trade was negotiated on the platform and after the backend system (Xetra) confirmed the execution.

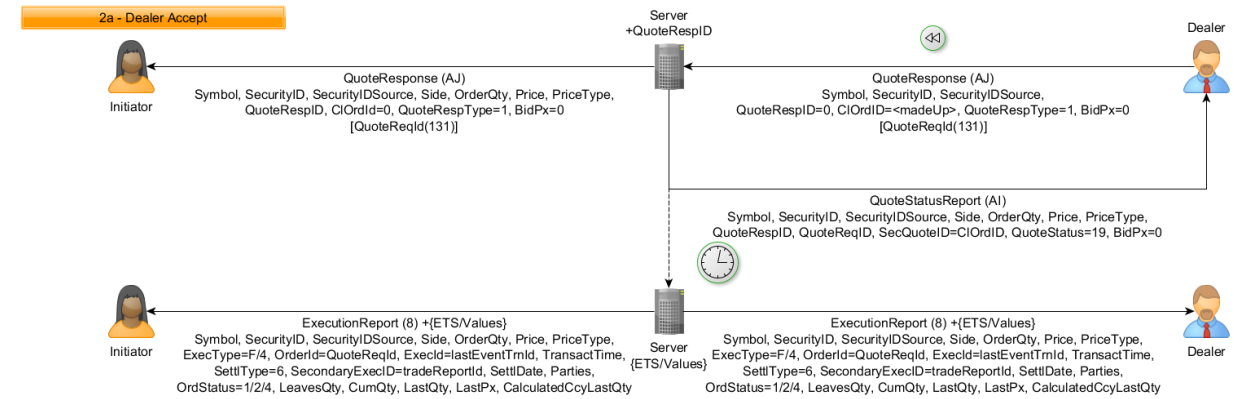
10.6.1 Workflow Diagrams RFQ



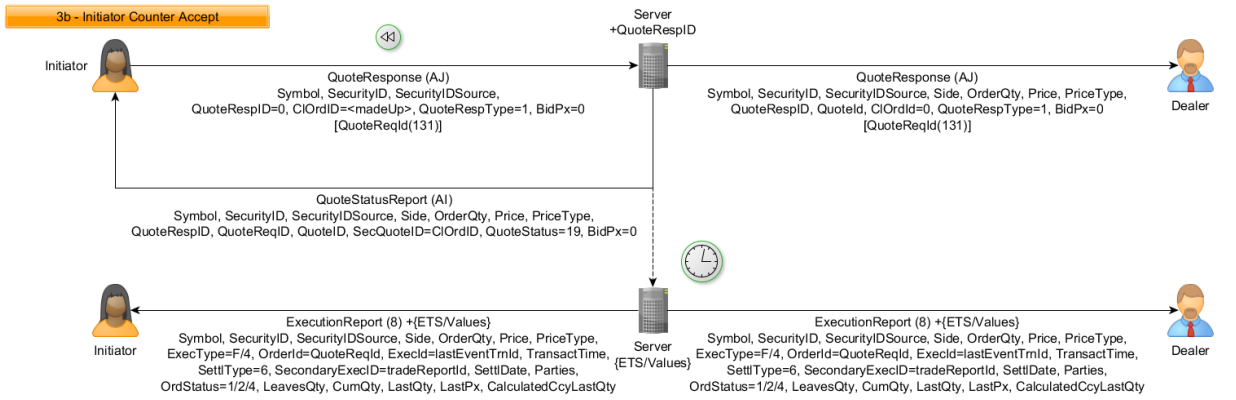
or



10.6.2 Workflow Diagrams RFO



or



10.6.3 Message Format

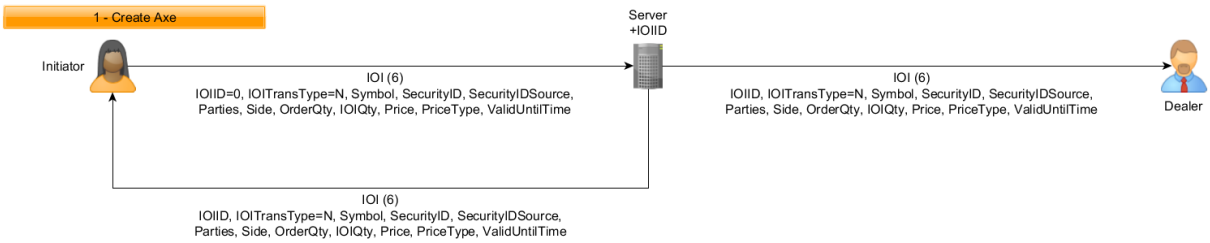
Tag	Field Name	Comment
37	OrderID	QuoteReqID this trade is based on.
527	SecondaryExecID	"tradeReportId" from Xetra system for the member receiving the message (only on success)
453	NoPartyIDs	The member the receiver traded with.
448	PartyID	Eurex Bonds / Xetra Member Id of the member that quit/passed.
447	PartyIDSource	D (Custom Code)
452	PartyRole	• 7 = Entering Firm (Initiator) • 17 = Contra Firm (Dealers)
17	ExecID	"lastEventTrnId" from Xetra system (only on success; 0 on fail)
150	ExecType	4 = Cancelled

		F = Trade
39	OrdStatus	1 = Partially filled 2 = Filled 4 = Cancelled
63	SettlType	6 = Future (only on success)
64	SettlDate	YYYYMMDD (only on success)
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
54	Side	Side
38	OrderQty	Size (only on success; 0 on fail)
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)
44	Price	Price (only on success; 0 on fail)
151	LeavesQty	0 (only on success; Size on fail)
14	CumQty	Equals OrderQty (38).
60	TransactTime	Time the transaction took place. (only on success)

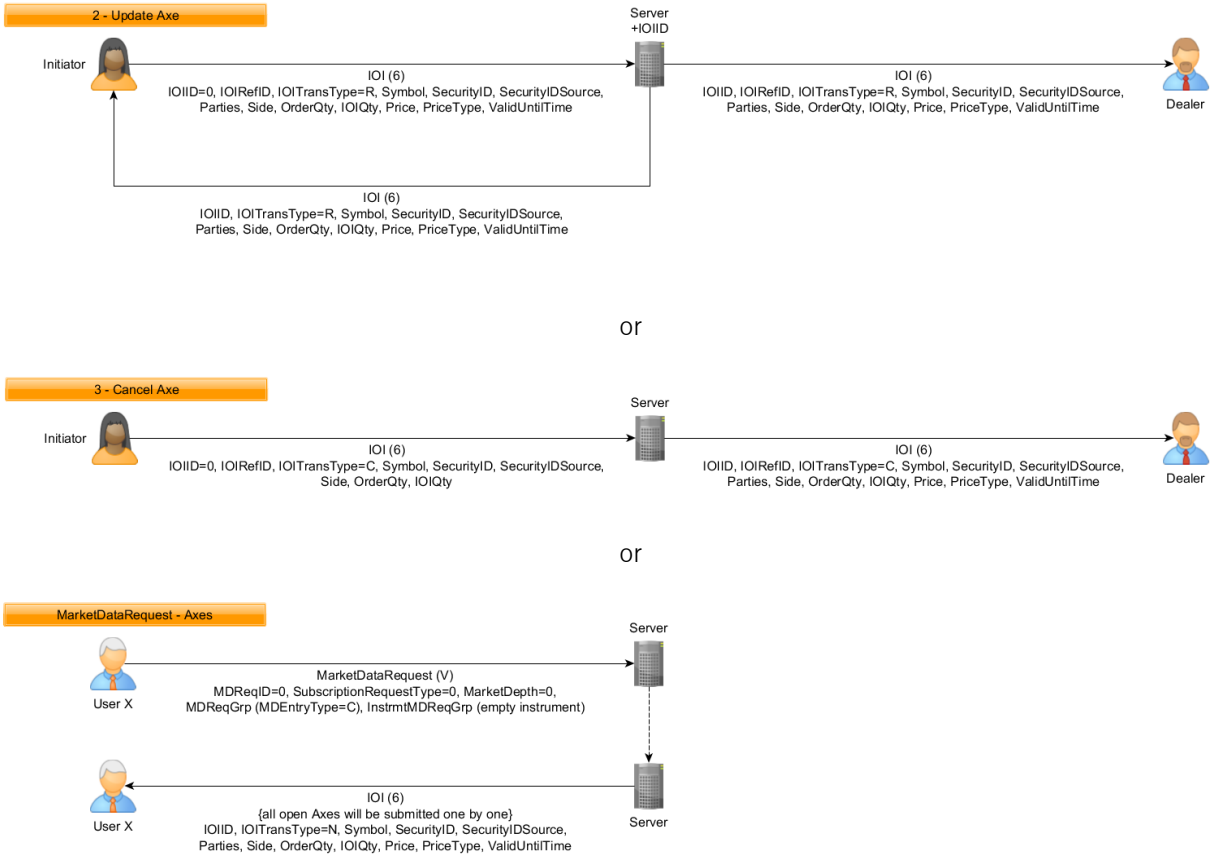
10.7 IOI (6)

An IOI allows the Dealer to communicate to other dealers an interest to buy or sell a particular instrument. IOI messages are used to broadcast Axes into the system and to all or selected participants. An Axe has a valid Instrument Identifier, Side and Size, while the Price is optional. In case the NoPartyIDs repeating group is left out, the resulting Axe will be sent to every dealer that is currently online or coming only at a later time.

10.7.1 Workflow Diagrams Axe



or



10.7.2 **Message Format**

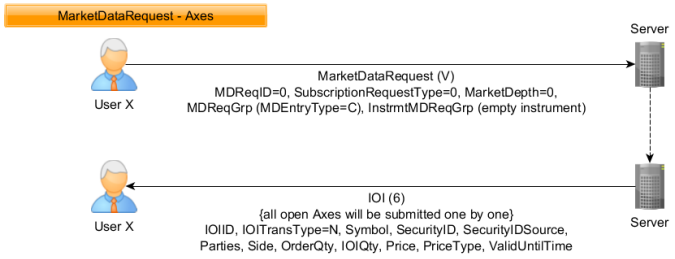
Tag	Field Name	Comment
23	IOIID	Initiating Dealer sends 0 to ENP. ENP creates an ID and sends it back to the initiating Dealer and all involved Dealers.
28	IOITransType	• N = New • R = Replace • C = Cancel
26	IOIRefID	References the replaced IOI if IOITransType=R.
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
453	NoPartyIDs	Leave out in order to send to everybody.
448	PartyID	Member ID
447	PartyIDSource	D (Custom Code)
452	PartyRole	• 7 = Entering Firm (Initiator)

		• 17 = Contra Firm (Dealers)
54	Side	Side
38	OrderQty	Size
27	IOIQty	S = Small
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)
44	Price	Price (optional)
62	ValidUntilTime	

10.8 MarketDataRequest (V)

The MarketDataRequest message can be used to request the currently open Axes for your member/counterparty (Axes that have been provided to you by other members). Axes you provided to other members/counterparties are not part of this message and will be deleted in case you disconnect from the system.

10.8.1 Workflow Diagrams Axe



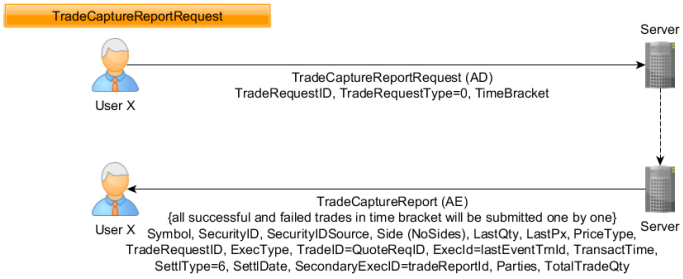
10.8.2 Message Format

Tag	Field Name	Comment
262	MDReqID	Initiator sends 0 to ENP. ID will not be saved by ENP.
263	SubscriptionRequestType	0 = snapshot
264	MarketDepth	0 = full book depth
267	NoMDEntryTypes	
269	MDEntryType	C = open interest
146	NoRelatedSym	
55	Symbol	Non empty string (will be ignored by ENP)
48	SecurityID	Non empty string (will be ignored by ENP)
22	SecurityIDSource	4 = ISIN

10.9 TradeCaptureReportRequest (AD)

After an accidental disconnect this message can be used to request execution report data that was possibly missed.

10.9.1 Workflow Diagrams TradeCaptureReportRequest



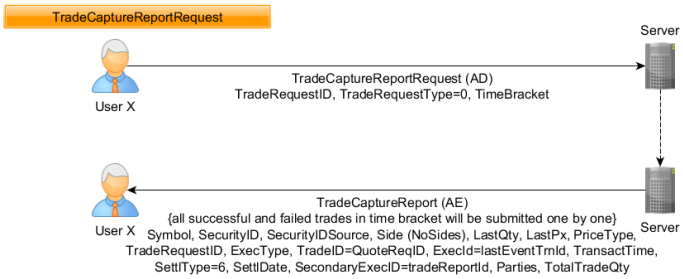
10.9.2 Message Format

Tag	Field Name	Comment
568	TradeRequestID	String identifier to recognize the answer to this request.
569	TradeRequestType	0 = All
943	TimeBracket	Two '-' separated UTC timestamps.

10.10 TradeCaptureReport (AE)

Answer to a TradeCaptureReportRequest which contains all the information from one execution report. If the request matched more than one ExecutionReport, they will be sent one after another.

10.10.1 Workflow Diagrams TradeCaptureReport



10.10.2 Message Format

Tag	Field Name	Comment

1003	TradeID	Quote Request ID this trade is based on.
568	TradeRequestID	ID of the original TradeCaptureReportRequest
150	ExecType	4 = Cancelled F = Trade
17	ExecID	"lastEventTrnId" from Xetra system (only on success; 0 on fail)
527	SecondaryExecID	"tradeReportId" from Xetra system for the member receiving the message (only on success)
423	PriceType	1 = Price (default) 9 = Yield (must be specified if bond is yield-traded)
55	Symbol	Instrument identifier.
48	SecurityID	Instrument identifier.
22	SecurityIDSource	4 = ISIN
32	LastQty	Size (only on success; 0 on fail)
2367	TotalTradeQty	Originally requested size (maybe bigger than actually traded quantity)
31	LastPx	Price (only on success; 0 on fail)
60	TransactTime	Time the transaction took place. (only on success)
63	SettlType	6 = Future (only on success)
64	SettlDate	YYYYMMDD (only on success)
552	NoSides	
54	Side	
552	NoPartyIDs	The member the receiver traded with.
448	PartyID	Eurex Bonds / Xetra Member Id of the member that quit/passed.
447	PartyIDSource	D (Custom Code)
452	PartyRole	• 7 = Entering Firm (Initiator) • 17 = Contra Firm (Dealers)