

## **FAGSE BT-FIX Gateway**

### **Rules of Engagement**

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**FAGSE**

**BT-FIX Gateway**

**Rules of Engagement**

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August 01<sup>st</sup>, 2019

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**Related Documents**

**XONTRO**

- [1] Kreditinstitute - Technical Connection, Release 5.5
- [2] Systemanschluss Makler XONTRO VALUES API, Release 30

**FIX**

- [3] FIX protocol limited: FIX Documentation Version 4.4 with Errata 20030618, Volumes 1-7 - as of June 18, 2003
- [4] FIX protocol limited: FIX Documentation Version 4.2 with Errata 20010501 - as of May 1, 2001
- [5] FIX protocol limited: Exchanges / ECN Working Group Recommended Best Practices Phase 1 - as of January 25, 2007

**Useful Web Pages**

[www.xontro.de](http://www.xontro.de)

[www.deutsche-boerse.com](http://www.deutsche-boerse.com)

[www.fixprotocol.org](http://www.fixprotocol.org)

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**1 Introduction**

This document describes all modifications, restrictions and extensions of the FIX protocol versions 4.2 and 4.4 implemented by the **FAGSE BT-FIX Gateway** product which controls the FIX order routing interface to

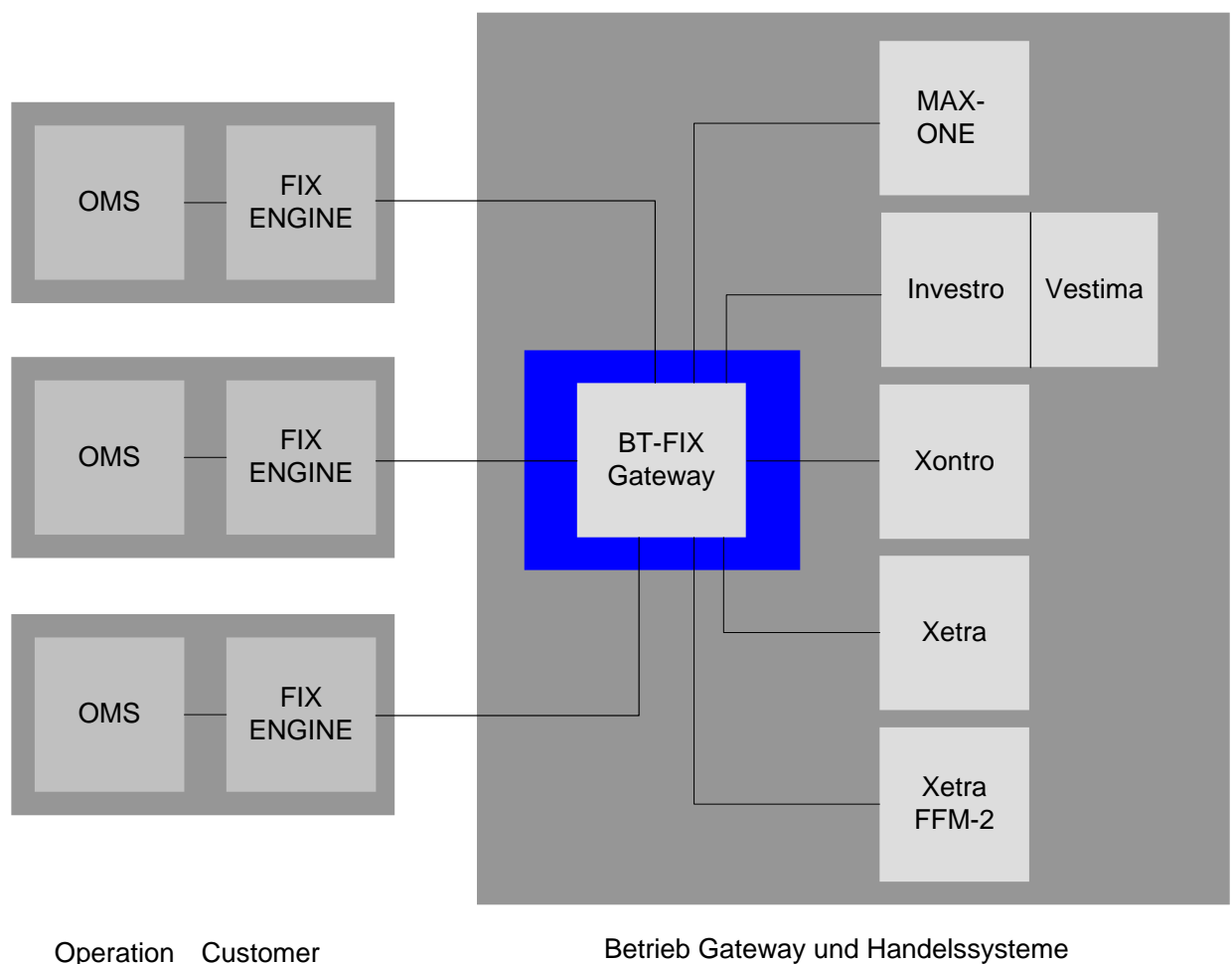
- the XONTRO, MAX-ONE, Xetra and Xetra Frankfurt 2 trading systems
- the contract processing in the Funds-settlement systems INVESTRO and Vestima
- the trade processing in the XONTRO trade system

Within the present document, the term “order(s)” is, in connection with Investro / Vestima, always to be understood as “instruction(s)”.

The same is valid in combination with the usage of the term “trading system”. This is to be understood as “settlement system” within the same context.

Requirements, assumptions, message layouts and most of the common message flows will be discussed. All customers planning to use the new FIX interface for routing orders to the trading systems mentioned should thoroughly read the whole document.

The following figure explains the interaction between the systems involved.



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**1.1 Abbreviations and Definitions**

<b>Item</b>	<b>Description</b>
FAGSE	Name of the product providing access to the trading systems, acronym for “ <b>F</b> IX <b>A</b> ccess to <b>G</b> erman <b>S</b> tock <b>E</b> xchanges”. The product consists of two components: the BT-FIX Gateway and the BT-FIX Connector
FIX	The <b>F</b> inancial <b>I</b> nformation <b>e</b> Xchange protocol – created and enhanced over time by banks, brokers, stock exchanges and service providers – is an open standard for transmitting information. Usage of the FIX protocol substantially simplifies the exchange of information between different applications
MAX-ONE	The trading system of the Munich stock exchange
OMS	Acronym for <b>O</b> rders <b>M</b> anagement <b>S</b> ystem
RoE	Acronym for <b>R</b> ules <b>o</b> f <b>E</b> ngagement. A contract describing all the rules of a specific variant of the FIX protocol used by the parties signing the contract to exchange information. Usually the following details will be stipulated: network connections, partner identification, encryption of messages, supported message types, message layouts, handling of duplicate messages, etc.
TCP/IP	<b>T</b> ransmission <b>C</b> ontrol <b>P</b> rotocol / <b>I</b> nternet <b>P</b> rotocol (TCP/IP). FIX Versions 4.x rely on TCP/IP as communications protocol
OHA	Order handling agent Vestima: receiver of orders in Vestima
OMS	Order Management System (customer)

## 2 Assumptions

### 2.1 Supported FIX Protocol Versions

Only FIX protocol versions V4.2 and V4.4 are supported. Some of the message layouts described contain substantial extensions of the standard message layouts defined by the fix protocol version under consideration. There is a standard procedure for extending message layouts: Additional tags as well as additional values for a specific tag will be adopted – if possible – from one of the newer FIX protocol versions up to and including V5.0 SP2<sup>1</sup>. If this is not possible, user-defined, registered tags will be used. Individual tags ~~(Tag numbers > 10000) will not be needed or supported.~~ FIXML will not be supported.

As only FIX versions 4.x are implemented, communications protocols are restricted to TCP/IP.

### 2.2 Clients and Order Management Systems

The FIX engine of a party/customer operating a connection is called a **Client** or a **FIX client**. FIX clients are identified by using a CompID. CompIDs will be specified and distributed by BrainTrade GmbH.

Due to reliability considerations a customer may decide to set up two FIX Clients. In this case FIX Clients may be organized as two independent instances or into a single cluster.

The customer's environment must support one of the failover variants listed below. All variants need exactly one SenderCompID at the customer's site.

1. The FIX engine is installed on several computers of a given cluster. The FIX engine supports the cluster's failover procedures. Sessions will be resumed automatically.
2. The FIX engine is installed on several independent computers. Failover procedures will have to be launched manually. The information needed for resuming the FIX message traffic (Sequence numbers, sent messages,..) are kept on a shared SAN storage subsystem. As soon as the failover procedure has ended, the active FIX engine may start a new session and resume the message exchange.
3. The FIX engine is installed on several independent computers. No shared storage subsystem is available. Failover procedures will be launched manually. The customer's FIX engine then must provide the following logon procedure for re-initiating the message exchange: The engine must assure that the logon request's sequence number definitely exceeds the sequence numbers of all preceding messages sent. Gaps of any size are allowed. The following resend request issued by the BT-FIX gateway must then be answered by a reset message with GapFillFlag set to "Y". Thus the gap will be closed and standard message traffic may be resumed.

The BT-FIX Gateway also will be identified by using a CompID defined by BrainTrade GmbH.

A customer will be connected to the BT-FIX Gateway by one or two leased lines. The communications protocol will be TCP/IP<sup>2</sup>.

Sessions will always be initiated by the Client.

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<sup>1</sup> So Version 4.2 layouts may be enhanced by using 4.4 and/or 5.0 items, and version 4.4 layouts by using version 5.0 items. Please check: Appendix D: 4.2 Extensions and Appendix E: 4.4 Extensions.

<sup>2</sup> As of now it is not intended to support version 5.0, therefore FIXT will not be supported either.

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Any Client must support FIX version 4.2 or version 4.4 and must additionally meet all requirements for the target version specified in this document.

An order management system may be operated by a customer or by a provider offering services to several customers. For an OMS run by a single customer, headquarters/branch relationships (also known as “Zentrale/Filiale” relationships as implemented by the “Systemanschluss Kreditinstitute” component) may be defined for a specific FIX connection.

The party running the connection, as well as the parties which intend to use the connection for order routing purposes, must have valid XONTRO IDs (CBF Account Number also known as “Kassenvereinsnummer” or “KVNr”). Those IDs must be granted special rights to access the FIX interface, see chapter 2.3 Security.

## 2.3 Security

The BT-FIX Gateway will not support encryption at FIX message level.

Secure network connections (router to router) may be provided by using IPSec. An additional agreement between the party operating the FIX connection and the party running the BT-FIX Gateway is needed to set up the features needed.

The FIX Engines on either side will use the tags SenderCompID and TargetCompID for partner identification.

Every FIX Party operating a connection must ensure that only requests along with the agreed SenderCompID are sent.

Request with an invalid SenderCompID will be rejected.

Requests with an invalid SenderCompID sent after a successful login are valued as an attack. In this case, the session will be logged out. The party running the connection (customer, entering firm) must have a valid XONTRO ID.

If further parties are to be entitled to use the fix connection for order routing purposes (as executing form/owner of an order), they must have valid XONTRO IDs as well. Those IDs must be granted special rights to access the FIX interface.

The BT-FIX Gateway will support standard FIX retransmission procedures (duplicate and resend).

## 2.4 Target Trading Systems

The BT-FIX Gateway will cooperate with the following application systems:

- XONTRO
- Xetra (XETR) \*\*
- Xetra Frankfurt 2 (XFRA) \*\*
- MAX-ONE

\*\*The XONTRO FIX order routing towards the Xetra trading platforms will be terminated by the end of the year 2017, according to a Deutsche Börse AG statement. Therefore, within these structures, no more MiFID II adaptations will be conducted.

The following settlement systems are supported:

- INVESTRO / Vestima
-

## 2.5 Financial Instruments

There are no limitations with reference to the instruments of a trading resp. settlement-system. Instruments will solely be identified by using the corresponding ISIN. Other ways of identifying financial instruments (e.g. WKN, mnemonic) will not be supported.

It is possible to use the mandatory tag 55 (Symbol), but any value provided will completely be ignored. Messages provided by the BT-FIX Gateway will always have tag 55 set to “[N/A]”. Exceptions are the messages called realtime trade confirmation (UserMessage TradeCaptureReportSno). Tag 55 includes the ticker symbol (if available) or value “[N/A]”.

## 2.6 Trading Systems Offering Multiple interfaces

Basically, access via FIX and SAKI (*Systemanschluss Kreditinstitute*, system connection for banks) offer the same functionality. These functionalities are divided into the following groups:

- Orderrouting
- OTC- and MiFID-entry
- Realtime trade confirmation

It is possible to use both interfaces simultaneously with the following restriction: in each group a Xontro ID can be used either for FIX or for SAKI. This rule is valid for the FIX central office (resp. party) and every branch office.

Example of a possible configuration for Xontro ID 1766:

- Orderrouting with SAKI-access of central office 7066
- OTC- and MiFID-entry with FIX central office 3766
- Delivery of realtime trade confirmations by FIX with central office 3766

A party operating a fix connection to the BT-FIX Gateway **must not** use the SAKI interface for order routing purposes simultaneously if the same KVNr is used for party identification. The usage of other SAKI services not implemented by the FIX interface is, however, not restricted.

Further interfaces (XONTRO front end application, VALUES interface) are not affected.

It should be kept in mind that using one of those interfaces admitted may cause FIX messages to be generated and disseminated.

Xetra and Xetra Frankfurt 2 provide techniques to avoid simultaneous order manipulation via different interfaces by restricting access to the interfaces to different (user) subgroups.

Please note that there is no sensible way to delimit a member's VALUES broadcast messages.

Therefore, FIX input may cause a substantial contribution to the Xetra and Xetra Frankfurt 2 broadcast streams.

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## 2.7 Implementation Of The MiFID II Requirements

Beginning with version 2.3.2 of this document, the requirements of the MiFID II rules and regs have been implemented. In connection with these requirements, we would particularly like you to focus on the areas listed below.

### 2.7.1 MiFID II Data Fields Provision

Entry fields bearing a direct connection with the MiFID II regulatory acts are specially marked along with their first mention within this document.

What follows is an example for such a flag: "(ESMA RTS24 Field 3)".

In case lack of clarity is detected in connection with the usage of these tags, then the corresponding documentation of the competent regulatory authorities is referred to.

### 2.7.2 Shortcode Procedure

Shortcode data are used for the purpose of containment of the identification data of participating parties to be submitted towards the trading venues, according to MiFID II.

Within XONTRO, the shortcode procedure is relevant only for the FIX order routing participants.

All contents (according to the MiFID II requirements) of the data fields <client identification code>, <investment decision maker>, and <execution within firm> are regarded as relevant for the safeguarded submission of the shortcode files. They may essentially be seen as personalized legitimization data.

The shortcode is a numeric data field.

As a general rule, a daily singular data transfer of all shortcodes used by per each relevant participant (resp. per each technical main branch), formatted as comma-separated CSV file(s) and having a header row, is assumed.

The files submitted are included into the XONTRO business transaction documentation periodically via batch processing, saved in a separate instance, and submitted onto the competent authorities (CAs) upon an explicit request only. Within the framework of these procedures, the transmitting institutes will receive qualified response files.

Participants using the trading venue MAX-ONE via XONTRO SAKI-FIX may also send their MAX-ONE shortcode data using the XONTRO infrastructure. As a convenience, XONTRO and MAX-ONE shortcode data may be transferred together in a common file in this case.

Further details regarding the shortcode procedure may be taken from the XONTRO MiFID Newsletter 03, whose publication launch is scheduled for the end of June 2017.

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## 2.8 Order resp. Instruction-Functionality

### 2.8.1 Order Identification

The BT-FIX Gateway will support the common FIX task “chaining” concept based on the usage of ClOrdID and OrigClOrdID respectively and will check for ClOrdID uniqueness. Uniqueness must be ensured across the entire life cycle of the corresponding order. New order single requests using an already existing ClOrdID, as well as Cancel or Cancel/Replace Requests providing an unknown ClOrdID as OrigClOrdID, will be rejected.

The BT-FIX Gateway provides a second method for cancelling/replacing orders: A Cancel/Cancel Replace Request may deliver the trading system's OrderID using tag 37 and may explicitly rule out the common addressing method by setting OrigClOrdID to “[N/A]”.

If both keys of an order are known, either method for accessing and manipulating orders may be used. It does not matter how an order was entered into the system or which access method was used last. Still the chain of tasks/requests will only reflect requests entered via the FIX interface.

Please note that identifying orders by OrderID relies on positive trading system responses (while on the contrary the “chaining” method does not).

No further methods for identifying orders will be supported. It should especially be kept in mind that Tag 526 is no valid key.

It is not intended to standardize methods for identifying orders across interfaces.

### 2.8.2 Recommendations

Customers who intend to make simultaneous, unrestricted use of all interfaces of the trading systems under consideration should set up their own scheme for identifying orders. Using the trading systems' order numbers is **no sensible approach**. The order management system will be responsible for any (order) key mapping. If an order management system uses the FIX interface, special care should be taken when handling one of the situations listed below:

- Modification of an order – the trading system's order number may change. The related FIX message sent by the BT-FIX Gateway to the order management system will only provide the new **(modified) order number** (Xetra, Xetra Frankfurt 2).
- Modification or cancellation (via the FIX interface) of an order entered via an interface other than FIX. The FIX Request must provide the trading system's order number (Tag 37), if it is immediately subsequent to the operation creating the order.
- Modification or cancellation of an order (via any interface other than FIX). The resulting FIX message(s) sent to an order management system will contain no OrigClOrdID information and will have ClOrdID set to the corresponding value of the last successfully processed FIX request related to this order. So an order management system must always be able to identify any order by its **OrderID or the ClOrdID of the last successfully processed request entered via the FIX interface**.

If an order management system changes interfaces at random when processing an order the common FIX “chaining” mechanism will be perturbed. Additionally the order management system must be prepared to switch procedures for order identification permanently.

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Therefore one of the interfaces should be selected to support the order management system's standard procedures. The alternate usage of further interfaces should be restricted to emergency situations.

### 2.8.3 INVESTRO / Vestima

The contract processing in INVESTRO and Vestima is represented via the existing message flows and processes for order routing to the trading systems already supported.

Regarding the unambiguity of the ClOrdID of an instruction (cf. Chapter 2.7.1 Order Identification), for INVESTRO/Vestima the special fact should be noted that the ClOrdID must still be unambiguous for another 10 trading days, even after a successful execution or deletion. This is caused by a potential execution cancellation by Vestima.

The specifics for Vestima are represented via the existing messages:

- Status information of an order

A formally correct message is reported to the FIX member in an Execution Report with pending reason 5 (verification pending) – a provisional acknowledgement. Within the message, detailed information about the order status is delivered in tag 5048 (OrdSubStatus) and 5476 (PrivateReference).

If the OHA (order handling agent) in Vestima acknowledges the order, a final order status is delivered in the Execution Report to the FIX member

Details are described in chapter: 7.3.2 Order Routing to INVESTRO Including Vestima ISINs.

- Order confirmation (MT515)

MT515 messages (confirmations) from Vestima are converted into Execution Reports with tag 150 (ExecType) = F (Trade) and tag 39 (OrdStatus) = 2 (filled).

Settlement data delivered in the MT515 are not included in the Execution Report. These data can be obtained from the contract notes (Schlussnoten) delivered in the TradeCaptureReportSNO.

- Cancellation of order confirmation (MT515 CANCEL)

This message is converted into an Execution Report with tag 150 (ExecType) = D (Restated), tag 39 (OrdStatus) = 2 (filled), tag 5048 (OrdSubStatus) = H (disabled) and tag 11 (ClOrdID) = [N/A].

- Order confirmation after cancellation (MT515 CANCEL)

This message is converted into an Execution Report with tag 150 (ExecType) = D (Restated), tag 39 (OrdStatus) = 2 (filled), and tag 11 (ClOrdID) = [N/A].

### 2.8.4 Particular Request Behavior

The Order Cancel Requests will need a second order type (Tag 5253).

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## 2.9 Trade Functionality

### 2.9.1 Supported Messages

The following Trade Messages are supported:

- TradeCaptureReport Request: OTC- and MiFID Functionality
- TradeCaptureReportAck Response to a TradeCaptureReport
- TradeCaptureReportSno Information to a Trade Confirmation (contract note)

The following FIX-Tags are used as identification criteria for supported messages:

- Functionality (OTC, MiFID, SNO)
  - 6556 BusinessTransactionType
  - 487 TradeReportTransType
  - 856 TradeReportType
- Identification of a trade resp. report
  - 880 TrdMatchID
  - 6555 OrigTrdMatchID
- More identification criteria
  - 571 TradeReportID
  - 572 TradeReportRefID
  - 150 ExecType

Details can be found in chapter 7.5 Trade Functionality

### 2.9.2 Trade identification

Each message includes the field TradeReportID (tag 571) as unique identifier. In addition, messages with reference to a previous action include the field TradeReportRefID (tag 572).

There is no chaining mechanism for these fields on the BT-FIX Gateway. Furthermore, there is no examination implemented for checking the uniqueness of the concerning field TradeReportID. Also, there is no examination if a TradeReportRefID includes an existing TradeReportID having already been delivered.

The uniqueness resp. correctness of these fields in the request messages must be secured by the client.

Within a response message, the fields TradeReportID and TradeReportRefID (if available) are provided using the content of the request message.

For the TradeCaptureReportSno XONTRO will generate an unique TradeReportID.

Keys for trade messages identification in the BT-FIX Gateway are only XONTRO defined report- resp. trade-numbers. Their content will be delivered in TrdMatchID (tag 880) and OrigTrdMatchID (tag 6555).

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## 2.10 General Comments on Rejecting Requests

If the BT-FIX Gateway is incapable to transform an OMS Request into a message accepted by the target trading resp. settlement-system (because of faulty or inconsistent message content), it will always respond with a reject message at session level (MsgType 3).

Common examples are

- missing mandatory or conditionally mandatory tags
- invalid tags
- invalid tag values
- invalid combinations of tag values

If RoE requirements differ from standard FIX conventions, then the former will hold.

Errors detected by a trading resp. settlement-system will lead to reject messages of type Execution Report, Cancel Reject or Business Message Reject.

If a trading resp. settlement-system is unavailable, then the BT-FIX Gateway will generate a Business Message Reject message with ReasonCode set to 4 (“Application not available”).

**Business Message Reject** and **Reject** messages are described in chapter no: 6 Reject and Business Message Reject. They may be used for a negative response concerning **all kinds of** requests. Clients and OMS’s should be able to handle these responses.

## 2.11 Behaviour along with ResendRequest

In case a sequence number (MsgSeqNum) gap has arisen within the requests sent by the OMS, then the BT-FIX Gateway asks for the missing sequence number(s) using a ResendRequest. The gap must then be filled immediately by the OMS.

In case more than 500 further requests are sent instead, without filling the gap, then an immediate automated Logout by the BT-FIX Gateway will occur. By this means, all requests having been after the gap will be discarded.

## 2.12 Production Launch

Potential customers must participate in a monitored simulation prior to being admitted to the production environment. The terms and conditions of the monitored simulation will be published by BrainTrade.

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### 3 Characteristics

#### 3.1 Incoming and Outgoing Messages

“Incoming message” (request) will indicate a message sent by the customer's order management resp. settlement-system. Those definitions will also be used for messages which do not pass every possible segment of the application chain.

Transmission of incoming messages:

OMS → FIX engine (customer) → BT-FIX Gateway → trading resp. settlement-system

“Outgoing message” (response, broadcast) will be used to identify messages transmitted from the trading system to the customer's order management resp. settlement-system.

Transmission of outgoing messages:

trading resp. settlement-system → BT-FIX Gateway → FIX engine (customer) → OMS

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**3.2 Scenarios and Messages of Session Levels****3.2.1 Processing of FIX Requests**

Scenario	Incoming Message	Outgoing Message
<b>Technical Requests</b>		
logon	Logon	Logon (positive) Logon + Logout (negative)
logon with simultaneous password change	Logon	Logon (positive) Logon + Logout (negative)
logout	Logout	Logout
password change	User Request (4.4) User Defined Request (4.2)	User Response (4.4) User Defined Response (4.2)
<b>General Rejections (possible for every request)</b>		
session level reject	All Request Messages	Reject
General rejection through a trading system or BT-FIX Gateway	All Request Messages	Business Message Reject

**3.2.2 System Generated Messages**

Scenario	Incoming Message	Outgoing Message
<b>System Shutdown</b>		
logout	-	Logout
status message	-	News "End-of-Day Processing" "End-of-Day Cut-off"
<b>Technical Messages</b>		
checkup of the physical connection	-	Heartbeat
request of a heartbeats	-	Test Request
request of messages	-	Resend Request

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**3.3 Scenarios and Messages at Application Level****3.3.1 Processing of FIX Requests**

Scenario	Incoming Message	Outgoing Message
<b>Order Functionality, Contract Processing</b>		
New order	New Order Single	Execution Report
Order cancellation	Order Cancel	Execution Report (positive, preliminary) Order Cancel Reject (negative)
Order modification	Order Cancel/Replace	Execution Report (positive, preliminary) Order Cancel Reject (negative)
New contract	New Order Single	Execution Report
Contract cancellation	Order Cancel	Execution Report (positive) Order Cancel Reject (negative)
Contract modification	Order Cancel/Replace	Order Cancel Reject (negative)
<b>Trade Functionality</b>		
New OTC trade	TradeCaptureReport	TradeCaptureReportAck
OTC trade cancellation	TradeCaptureReport	TradeCaptureReportAck
OTC trade routing	TradeCaptureReport	TradeCaptureReportAck
New MiFID Report	TradeCaptureReport	TradeCaptureReportAck
MiFID Report Cancellation	TradeCaptureReport	TradeCaptureReportAck

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**3.3.2 External Inputs / Messages Generated at System Level**

Scenario	Incoming message	Outgoing message
<b>Order Functionality, Contract Processing</b>		
New Order	-	Execution Report
Order cancellation	-	Execution Report (positive, preliminary) Order Cancel Reject (negative)
Order modification	-	Execution Report (positive, preliminary) Order Cancel Reject (negative)
Order execution	-	Execution Report
New contract	-	Execution Report
Contract cancellation	-	Execution Report (positive, preliminary) Order Cancel Reject (negative)
Contract execution	-	Execution Report
Message to contract recipient	-	Execution Report
Status modification of contract (only Vestima)	-	Execution Report
Cancellation of contract execution (only Vestima)	-	Execution Report
<b>Trade-Functionality</b>		
OTC Trade Information (Realtime contract note)	-	TradeCaptureReportSno
<b>News</b>		
Event messages	-	News

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### 3.4 Differences Between FIX Versions 4.2 and 4.4

The RoE described in this document are established using the FIX Version 4.4 specification. The differences when using FIX version 4.2 – which will also be supported by the BT-FIX Gateway – will particularly affect order status concepts, parties' component block concepts, and some other message types not implemented by version 4.2, like User Request and User Response messages.

#### 3.4.1 Order Routing

Execution reports produced for a FIX client running version 4.2 will provide ExecTransType (Tag 20). Their value will always be set to 0 ("New").

The party component block implemented for sessions running version 4.4 cannot be set up for version 4.2 sessions. A party component block will not be present; the repeating groups will be mapped to single tags, which will solely carry the PartyID information<sup>3</sup>:

<parties>	Tag 4.2	field name	comments
<entering firm>	6031	EnteringFirm	String(4), KVNr of the party operating the connection
<executing firm>	76	ExecBroker	String(4), KVNr of the owner of the order
<market maker>	9318	MktMkerID	String(4), KVNr of intermediary
<systematic internaliser>	9318	MktMkerID	String(5), Xetra MemberID
<session>	5177	Source	String, KVNr resp. MemberID of the originator from any other interface
<executing system>	7931	VenuelD	String, possible values: "XETRA" "XETRA-2" "XONTRO" "MAX-ONE" "INVESTRO"
<intermediary>	109	ClientID	String(10), INVESTRO intermediary
<client identification code>	20003	PartyIDClientID	Char(20), Shortcode. (ESMA RTS24 Field 3) Special values: 1 = AGGR 2 = PNAL
	21103	PartyIDClientIDQualifier	Integer Tag is ignored. The qualifier for the ClientID specifies if the Shortcode given in Tag 20003 represents a LEI or a natural person. 23 = LEI (Legal Entity Identifier) 24 = Nat. Person
	21303	PartyIDClientIDSource	Char Classification of Tag 20003. P = Shortcode The indication of Tag 21303 is not necessary.
<investment decision maker>	20122	PartyIDInvestmentDecision Maker	Char(20), Shortcode or Algorithm. (ESMA RTS24 Field 4)

<sup>3</sup> Names included in angle brackets will refer to the <parties> component block's occurrence names used in this document, not to FIX field names.

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<parties>	Tag 4.2	field name	comments
	21222	PartyIDInvestmentDecisionMakerQualifier	Integer The qualifier for the InvestmentDecisionMaker specifies if the PartyID in Tag 20122 represents an algorithm or the Shortcode for a natural person. 22 = Algorithm 24 = Shortcode for a nat. person In case Tag 21222 is missing, then a Shortcode representation is assumed.
	21422	PartyIDInvestmentDecisionMakerSource	Char Classification of Tag 20122. P = Shortcode or in conjunction with Tag 21222 also Algorithm The indication of Tag 21422 is not necessary.
<Execution within firm>	20012	PartyIDExecutingTrader	Char(20), Shortcode or Algorithm. (ESMA RTS24 Field 5) Special values: 3 = NORE
	21112	PartyIDExecutingTraderQualifier	The qualifier for the ExecutingTrader indicates if the PartyID in Tag 20012 represents an algorithm or the Shortcode for a natural person. 22 = Algorithm 24 = Shortcode for natural person In case 21112 is missing, then a Shortcode representation is assumed.
	21312	PartyIDExecutingTraderSource	Char Classification of Tag 20012. P = Shortcode or in conjunction with Tag 21112 also Algorithm The indication of Tag 21312 is not necessary.

At first glance the usage of tag 9318 might appear to be conflicting, but <market maker> and <systematic internalizer> will never be included in the same message, so this potential conflict can safely be ignored.

### 3.4.2 Password Change

Message types “BE” - User Request - and “BF” - User Response – will not be provided by version 4.2. They will be replaced by message types “UBE” and “UBF” respectively. Message layouts will remain unchanged.

It should be kept in mind that FIX 4.2 message layouts and tags have been extended by FIX 4.4.

### 3.4.3 Trade Messages

MsgTypes “AE” - TradeCaptureReport and “AR” - TradeCaptureReportAck are not defined in FIX Version 4.2. Using the same message structures, “AE” will be replaced by “UAE” and “AR” by “UAR”. Within the user-defined TradeCaptureReport message and TradeCaptureReportSno message, all Party-Repeating Groups will not be replaced – description above.

## 4 Message Layouts

### 4.1 FIX Header / Trailer

<b>Legend</b>	<b>FIX Header / Trailer</b>
<u>Sort sequence:</u>	Information items (Tag=Value<SOH>) within a FIX message usually can be defined in any order. Some FIX Header and Trailer structures, however, bear exceptions, as some tags cannot be defined in any sequence: The corresponding rows of the table below will be grey-shaded. The tags will be shown at their proper position within the table/message structure. The remaining (standard) tags are sorted ascending by tag number.
<u>Column headers:</u>	RF will indicate if a tag is required with respect to the FIX protocol version, R will indicate if a tag is required with respect to the RoE. All other column headers are self-explanatory.
<u>Content:</u>	Columns “R” and “RF” will indicate if a tag is <u>M</u> andatory or <u>O</u> ptional; “Comment” will contain the tag's FIX data type, admitted values (optional) and further explanatory remarks. All other content is self-explanatory. If cell values for “R” and “RF” are contradictory, the value presented by column “R” will be valid .

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**4.2 FIX Header <standard message header>****Incoming Messages**

Tag	Field Name	RF	R	Comment
8	BeginString	M	M	String FIX version Valid values: FIX.4.4 FIX.4.2 Must always be the first field in the header structure
9	BodyLength	M	M	Length Message length Must always be the second field in the header structure
35	MsgType	M	M	String Message type Must conform to the RoE. Must always be the third field in the header structure
34	MsgSeqNum	M	M	SeqNum Message sequence number. Must be provided and maintained by the sending system. The number must be unique per session. Must start at "1", gaps are not allowed. Intraday termination and restart of a session will not automatically reset MsgSeqNum
43	PossDupFlag	O	O	Boolean If a FIX engine repeats transmission of identical content (including MsgSeqNum) it will set PossDupFlag to "Y"
49	SenderCompID	M	M	String ID of the sending system Used for partner identification. Values will be defined by BrainTrade GmbH. If the party operating the connection owns multiple SenderCompIDs, only one of them may be active. SenderCompID values are identical for all computers
52	SendingTime	M	M	UTC Time stamp
56	TargetCompID	M	M	String ID of the receiving system Used for partner identification. Values will be defined by BrainTrade GmbH
97	PossResendFlag	O	O	Boolean If a FIX engine repeats transmission of identical content ( <b>not</b> including MsgSeqNum), it will set PossResendFlag to "Y". The receiving application must examine the situation. This functionality is not fully supported: PossResends are only allowed for NewOrderSingle. If a Request has already been received using the same ClOrdID, then the same ExecutionReport resp. Reject will be transferred to the Client again. Otherwise the Request will not be processed, but replied to with a Reject.
122	OrigSendingTime	O	O	UTCTimestamp May be used when answering a resend request of the BT-FIX gateway Timestamp of the original message Included due to compatibility reasons This tag will be ignored
369	LastMsgSeqNumProcessed	O	O	SeqNum Last MsgSeqNum processed by the sending system

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**Outgoing Messages**

Tag	Field Name	RF	R	Comment
8	BeginString	M	M	String FIX version Valid values: FIX.4.4 FIX.4.2 Must always be the first field in the header structure
9	BodyLength	M	M	Length Message length Must always be the second field in the header structure
35	MsgType	M	M	String Message type Must conform to the RoE. Must always be the third field in the header structure
34	MsgSeqNum	M	M	SeqNum Message sequence number Must be provided and maintained by the sending system. The number must be unique per session. Must start at "1", gaps are not allowed. Intraday termination and restart of a session will not automatically reset MsgSeqNum
43	PossDupFlag	O	O	Boolean If a FIX engine repeats transmission of identical content (including MsgSeqNum) it will set PossDupFlag to "Y". Will always be set to "Y" when responding to a Resend Request
49	SenderCompID	M	M	String ID of the BT-FIX Gateway system Used for partner identification. Values will be defined by BrainTrade GmbH
52	SendingTime	M	M	UTC Time stamp
56	TargetCompID	M	M	String ID of the receiving system Used for partner identification. Values will be defined by BrainTrade GmbH
97	PossResendFlag	O	O	Boolean If a FIX engine repeats transmission of identical content ( <b>not</b> including MsgSeqNum), it will set PossResendFlag to "Y". The receiving application must examine the situation
122	OrigSendingTime	O	O	UTCTimestamp May be used when answering a resend request of the BT-FIX gateway Timestamp of the original message

**4.3 FIX Trailer <standard message trailer>**

Tag	Field Name	RF	R	Comment
10	Checksum	M	M	3 Bytes Checksum Must always be the last field in the trailer structure



## 5 FIX Messages of Session Levels

### 5.1 Explanation of the FIX Message Body

Column headers: RF will indicate if a tag is required resp. how a tag is handled with respect to the FIX protocol version, R will indicate if a tag is required resp. how a tag is handled with respect to the RoE. All other column headers are self-explanatory. XEOMI will detail tag handling for all target trading systems. All other column headers are self-explanatory.

XEOMI (Xetra<sup>4</sup>/XEtra Ffm-2<sup>5</sup>/XONTRO/MAX-ONE/INVESTRO) will detail tag handling at trading resp. settlement-system level. This column will additionally allow “N” (Tag Not allowed). When discussing a Cancel/Replace Request, the values chAngeable or Unchanged (no modification possible) will also be used.

For INVESTRO in some cases a “-” is shown as a hint that the respective action is not relevant (not possible), e.g. partial execution.

All other headers are self-explanatory.

Content: Columns “R” and “RF” will indicate if a tag is Mandatory or Conditionally mandatory. Cell content will only be set to “M” or “C”, if tag handling is identical across all trading systems. In this case column XEOMI will be left blank.

“Comment” will contain the tag's FIX data type, admitted values (optional) and further explanatory remarks.

Integer(5) means that the tag's value may have 5 significant digits (after leading zeroes have been removed), Float(10,3) means that tag's value may have 10 significant digits including at most 3 decimal places. Those are **not FIX data type definitions** but mere conventions of writing and valid only for this document.

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<sup>4</sup> cf. chapter 2.4 Target Trading Systems, too, for this purpose

<sup>5</sup> cf. chapter 2.4 Target Trading Systems, too, for this purpose

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**5.2 Logon / Logon With Simultaneous Password Change**

Please note that a Logon request message will **always** be answered by a Logon response message issued by the FIX engine (possibly with simultaneous password change). If the Logon request is finally rejected, then an additional Logout response will be sent.

**Logon Request**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "A" (MsgType)
98	EncryptMethod	M	M		Integer Method of encryption <b>Must be set to 0 = "none / other"</b>
108	HeartBtInt	M	M		Integer Heartbeat interval Will be checked against a BT-FIX Gateway configuration file value
141	ResetSeqNumFlag	O	O	OOOOO	Boolean "Y" indicates that the both sides of the FIX session should reset sequence numbers
383	MaxMessageSize	O	O	OOOOO	Length Maximum number of bytes supported for a single message
553	Username	O	M		String(10) UserID or username Must be identical to the <entering firm> PartyID value Only integer values will be accepted
554	Password	O	M		String(8) Password
789	NextExpectedMsgSeqNum	O	O	OOOOO	SeqNum Next expected MsgSeqNum value to be received Reserved for future use Will be ignored
925	NewPassword	O	O	OOOOO	String(8) New password If the new password is available, then a password change will be done during Logon-processing.
	<standard message trailer>	M	M		

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**Logon Response**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "A" (MsgType)
98	EncryptMethod	M	M		Integer Method of encryption Will be set to 0 = "none / other"
108	HeartBtInt	M	M		Integer Heartbeat interval
141	ResetSeqNumFlag	O	O	OOOOO	Boolean "Y" indicates that the both sides of the FIX session should reset sequence numbers
383	MaxMessageSize	O	O	OOOOO	Length Maximum number of bytes supported for a single message
553	Username	O	O	OOOOO	String(10) UserID or username The tag will not be supplied at present
789	NextExpectedMsgSeqNum	O	O	OOOOO	SeqNum Next expected MsgSeqNum value to be received Reserved for future use Will not be supplied
	<standard message trailer>	M	M		

The following additional message will be sent. Please note that you cannot expect SessionStatus always to be supplied.

**Logout Response**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "5" (MsgType)
58	Text		O	OOOOO	String Error text
1409	SessionStatus		O	OOOOO	Integer Error code Valid values: 5 = Invalid username or password 7 = Logons are not allowed at this time 8 = Password expired
	<standard message trailer>	M	M		

If a Logon Request is rejected with tag 1409 set to "8", the customer may immediately try to send an extended Logon Request including a new password. This second message format of the Logon Request may be used anytime.

If tag 925 is present one of the following situations may occur:

- The old password provided is invalid. The request will be rejected
- The old password provided is valid. The request will be accepted and the old password will be replaced by the new one. It does not matter if the old password has expired or not.

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**5.3 Password Change**

The request may only be used if a valid FIX session has been established. Therefore **it cannot be used when a password has expired.**

**User Request**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "BE" (MsgType) <sup>6</sup>
553	Username	M	M		String(10) UserID or username Must be identical to the <entering firm> PartyID value
554	Password	O	M		String(8) Password
923	UserRequestID	M	M		String(16) Unique identifier for a User Request
924	UserRequestType	M	M		Integer Indicates the action required by a User Request message Must be set to "3" (ChangePasswordForUser)
925	NewPassword	O	M		String(8) New password
	<standard message trailer>	M	M		

**User Response**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "BF" (MsgType) <sup>7</sup>
553	Username	M	M		String UserID
923	UserRequestID	M	M		String(16) Unique identifier for a User Request
926	UserStatus	O	M		Integer  Indicates the status of a user  Password change successful: 5 = "Password Changed successful"  Password change not successful: 2 = "Not Logged In" 3 = "User Not Recognized" 4 = "Password Incorrect" 6 = "Other"  Further information along with password change without success may be found on tag 927

<sup>6</sup> FIX 4.2 sessions will use "UBE"

<sup>7</sup> FIX 4.2 sessions will use "UBF"

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Tag	Field Name	RF	R	XEOMI	Comment
927	UserStatusText	O	O	OOOOO	String If password change successful then tag will be not filled A text description associated with a user status (tag 926)
<standard message trailer>		M	M		

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## 5.4 Logout

### Logout Request

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		Tag 35 = "5" (MsgType)
<standard message trailer>		M	M		

### Logout Response

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		Tag 35 = "5" (MsgType)
58	Text		O	OOOOO	String A text description for logout
<standard message trailer>		M	M		

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**5.5 System Shutdown**

From the customer's point of view an incoming News message where status is set to 002 = "End of Business Day" indicates that a system shutdown has been initiated by the BT-FIX Gateway. No more incoming requests will be accepted, but outgoing messages waiting for delivery will still be transmitted. Trading resp. settlement-systems may also generate further messages, which will also be distributed. As soon as all trading systems have finished to do so, the BT-FIX Gateway will disseminate a News message where status is set to 003 = "End of Business Day Cutoff" and – after a short delay – a logout message for every active connection. Then all sessions/connections will be terminated unconditionally.

No.	System Shutdown	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	News ("2", "End of Business Day") <i>Further client requests</i>		← ●	
2	NewOrderSingle <i>Declined to requests after "End of Business Day"</i>	● →		
3	Business Message Reject (4) <i>Message from system</i>		← ●	
4	Execution Report ("Trade", "Partially filled")		← ●	← ●
5	News ("3", "End of Business Day Cut-Off")		← ●	
6	Logout		← ●	
8	Session termination		← ●	

**News Messages**

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		Tag 35 = "B" (MsgType)
33	LinesOfText		M		NumInGroup Identifies number of lines of text body Will be set to "1"
58	Text		M		String Message text  End of Business Day "End of Day Processing – No more Input Messages"  End of Business Day Cut-Off "End of Business Day Cutoff, System unavailable"
148	Headline		M		String System status "002" = End of Business Day "003" = End of Business Day Cut-Off
<standard message trailer>		M	M		

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**6 Reject and Business Message Reject**

Only tags of the message body will be discussed. No party or instrument information will be present in either message.

Reject (MsgType = 3)

Tag	Field Name	RF	R	XEOMI	Comment
45	RefSeqNum	M	M		SeqNum Sequence number of the request being rejected
58	Text	O	O	OOOOO	String Error text
371	RefTagID	O	M		Integer Tag number of the FIX field being referenced
372	RefMsgType	O	M		String MsgType of the FIX message being referenced
373	SessionRejectReason	O	O	OOOOO	Integer Reject reason
5555	ReturnCode		O	OOOOO	Integer Return code
9803	TradingSystemID		O	OOOOO	Integer Identifies the system generating the return code

If an appropriate FIX error code is provided in tag 373 (SessionRejectReason), tag 58 (Text) may be present or not. If no such code can be determined, Tags 5555 (ReturnCode), 9803 (TradingSystemID) and 58 (Text) will be present, but **tag 373 (SessionRejectReason) will be missing**. If field relationship has been evaluated, tag 371 (RefTagID) will contain the tag number of the tag which is missing or not allowed.

Business Message Reject (MsgType = j)

Tag	Field Name	RF	R	XEOMI	Comment
45	RefSeqNum	O	M		String MsgType of the FIX message being referenced
58	Text	O	O	OOOOO	String Error text
372	RefMsgType	M	M		Integer MsgType of the FIX message being referenced
380	BusinessRejectReason	M	M		Integer Reject reason
5555	ReturnCode		O	OOOOO	String Return code
9803	TradingSystemID		O	OOOOO	Integer Identifies the system generating the return code

If an appropriate FIX error code is provided in tag 380 (BusinessRejectReason), tag 58 (Text) may be present or not. If no such code can be determined, tags 5555 (ReturnCode), 9803 (TradingSystemID) and 58 (Text) will be present; **tag 380 (BusinessRejectReason) will, however, be set to "0"**.



## 7 FIX Messages at Application Levels

### 7.1 Explanation of the FIX Message Body

- Sorting: The elements of <instrument> Component Blocks may be transferred in any order. Elements do not need any ascending or descending order rule. The same rule is valid for messages sent by the BT-FIX Gateway.
- Repeating Groups contain fields with a fixed start position, and other ones at any position within the Repeating Group.
- A Repeating Group always starts with the tag containing the number of groups, then the first tag of this group follows. Fields with a fixed position are highlighted in grey and are at the same position as in the Repeating Group. All other fields are sorted ascending by tags, but may be transferred without any sequence order. The same rule is valid for Repeating Groups generated by the BT-FIX-Gateway.
- Column headers: XEOMI: These details (**M**andatory/**O**ptional/**C**onditional/**N**ot allowed) are listed for the trading systems **X**etra/**XE**tra Ffm-2/**XO**NTRO/**M**AX-ONE/**I**NVESTRO. RF will indicate if a tag is required resp. how a tag is handled with respect to the FIX protocol version, R will indicate if a tag is required resp. how a tag is handled with respect to the RoE. XEOMI will detail tag handling for all target trading resp. settlement-systems. When discussing a Cancel/Replace Request, the values **chA**ngeable and **U**nchanged (no modification possible) will also be used. EnterOTC, DeleteOTC, ReverseOTC, EnterMiFID, DeleteMiFID contain **M**andatory/**O**ptional/**C**onditional/**N**ot allowed/**I**gnore for the Requests: Enter order, deletion, OTC-routing and OTC-trades, cancellation of MiFID-reports.
- All other column headers are self-explanatory. For INVESTRO, in some cases a “-” is shown as a hint that the respective action is not relevant (not possible), e.g. partial execution.
- Content: Columns “R” and “RF” will indicate if a tag is **M**andatory or **C**onditionally mandatory. Cell content will only be set to “M” or “C” if the tag handling is identical across all trading systems. In this case column XEOMI will be left blank. If the field is part of a repeating group or component block, then “M” means that the field within the superior structure is mandatory. The corresponding attribute concerning the message is then a part of the structure. When a tag within one target-system is mandatory in one system and optional in another one, then code “O” will be default .
- All fields are marked with a “C” when depending from another field. Example: StopPx depends on OrdType. In this case StopPx is filled with Code “C”.
- “Comment” will contain the tag's FIX data type, admitted values (optional) and further explanatory remarks.
- Integer(5) means that the tag's value may have up to 5 significant digits (after leading zeroes have been removed), Float(10,3) means that tag's value may have up to 10 significant digits including up to 3 decimal places. Those are **not FIX data type definitions** but mere conventions of writing and valid only for this document.

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**7.2 Order Functionality****7.2.1 Order Entry / Submission resp. Instructions****7.2.1.1 Operations – Orders**

No.	Successful Submission of an Order	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	New Order Single			
	<i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
2	Execution Report ("Pending New", "Pending New")			
	<i>Final confirmation positive</i>			
3	Execution Report ("New", "New")			

No.	Unsuccessful Submission of an Order	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	New Order Single			
	<i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
2	Execution Report ("Pending New", "Pending New")			
	<i>Final confirmation negative with error information (tags 5555, 9320, 9803)</i>			
3	Execution Report ("Rejected", "Rejected")			

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No.	Submission of an Order Without Final Confirmation	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	New Order Single			
				
2	Execution Report ("Pending New", "Pending New") <i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
				
3	Execution Report ("Pending New", "Pending New") <i>End of day: Preliminary confirmation with PendingReason 4 = "order status unknown (end of day)"</i>			
				

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**7.2.1.2 Operations – Funds Settlement (INVESTRO / Vestima)**INVESTRO “classic”

No.	Successful Submission of an Order	Message Flow		
		FE Customer	BT FIX Gateway	INVESTRO
1	New Order Single			
2	<i>Final confirmation positive</i> Execution Report ("New", "New")			
				
3	<i>Message to the contract recipient</i> Execution Report ("Order Status", "New")			
				

No.	Unsuccessful Submission of an Order	Message Flow		
		FE Customer	BT FIX Gateway	INVESTRO
1	New Order Single			
2	<i>Final confirmation negative with error information (tags 5555, 9320, 9803)</i> Execution Report ("Rejected", "Rejected")			
				

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INVESTRO / Vestima

No.	Successful Submission of an Order to INVESTRO / Vestima	Message Flow			
		FE Customer	BT FIX Gateway	INVESTRO	Vestima
1	New Order Single				
					MT502
2	<i>Validation INVESTRO</i> Execution Report ("Pending New", "Pending New")				
				MT509	
3	<i>Validation Vestima</i> Execution Report ("Pending New", "Pending New")				
				MT509	
4	<i>Optional provision check</i> Execution Report ("Pending New", "Pending New")				
				MT 509	
5	<i>Optionally, if OHA finally confirms the order</i> Execution Report ("New", "New")				

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**Explanatory Notes:**

**Nos. 1 – 4:** After every „pending new“ message a rejection is possible to occur.

**Digression: Provision Check:**

Two options can be configured within Vestima for the INVESTRO participant:

Option 1: If the provision check is not successful, then the order will be rejected immediately.

Option 2: If the provision check fails, then the order remains valid, but is held as pending with sufficient provision for 5 days. If a further provision check is successful, then a “pending new” message is generated and the normal flow is resumed. If no provision check (after 5 days) is successful, the order is rejected.

According to option 2, the following messages can be forwarded:

- Status change of an order in Vestima because of unsuccessful provision check
- Status change in Vestima because of successful provision check

**No. 5:** The final status is only generated if the OHA (order handling agent) in Vestima acknowledges the order. (This behavior may be configured within Vestima. Not every OHA acknowledges an order.)

- Submission of an order is acknowledged by Vestima OHA
  - Submission of an order is rejected by Vestima OHA
-

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**7.2.1.3 NewOrderSingle Request**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "D" (MsgType)
	<parties>	O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 1 – 6 The value must correspond to the number of parties (repeating groups) provided
	<entering firm>	O	M		The participant operating the connection
	<executing firm>	O	O	OOOOO	The participant being in charge of the order If the repeating group is missing, "entering firm" will become the owner of the order
	<market maker>	O	O	NOOOO	The market maker Only valid for XONTRO and MAX-ONE. Will be ignored otherwise
	<intermediary>	O	O	NNNNO	Data for intermediary (sales institution) only allowed for INVESTRO
	<systematic internalizer>	O	O	ONNNN	Xetra Best Executor Only valid for Xetra
	<client identification code>	O	O	NNOON	Identification of the customer
	<investment decision maker>	O	O	NNOON	Trading member employee or algorithm being responsible for the investment decision.
	<Execution within firm>	O	O	NNOON	Trading member employee or algorithm being responsible for the order execution.
	end <parties>				
	<instrument>	M	M		Financial instrument, given as ISIN
	<trading sessions>	O	O	ONOOO	Trading Session Information Only TradingSessionSubID will carry useful information Alternatively single tags 336 and 625 may be used This also holds for FIX 4.2 messages. Please note that FIX 4.4 definitions hold, which are not compliant with FIX 4.2
	<OrderAttributes>	O	O	NNOON	Repeating Group for attributes of orders
	<ValueChecksGrp>	O	O	NNOON	Check flag for the market value permitted as a maximum for one order on the trading venue.
1	Account	O	O	MMOOO	String(2) Consists of Account Type and Account Type Number Possible values: P1 – bank's own-account trading A1 – bank's customer (agent) business
11	CIOrdID	M	M		String(16) Unique key of an order related task (request) Will be provided by the sending system. As long as the corresponding order is active, no task (request) referring to it will be allowed to use the identical CIOrdID value. So uniqueness must be guaranteed across the entire life cycle of an order. Uniqueness will be verified by the BT-FIX Gateway

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Tag	Field Name	RF	R	XEOMI	Comment
21	HandlInst	M / O	M / O		Char for "FIX 4.2" mandatory for "FIX 4.4" optional  Instructions for order handling on Broker trading floor Valid values: 1 = Automated execution order, private, no Broker intervention 2 = Automated execution order, public, Broker intervention OK 3 = Manual order, best execution  <b>This tag is ignored</b>
38	OrderQty	O	M		Qty, Float(12,3) Total quantity ordered
40	OrdType	M	M		Char Valid values Xetra 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit" K = "Market with Leftover" P = "Pegged"  Xetra Ffm-2, MAX-ONE 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit"  XONTRO 1 = "Market" 2 = "Limit" 3 = "Stop"  INVESTRO / Vestima 1 = "Market"
44	Price	C	C		Price, Float(13,5) Order limit, must be present if Tag 40 (OrdType) is set to "2", "4" or "P", must not be present otherwise
54	Side	M	M		Char Side of order Valid values: 1 = "Buy" 2 = "Sell"
58	Text	O	O	OOOOO	String(25) Text Please note that only the first twelve bytes will be passed to Xetra and Xetra Ffm-2



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Tag	Field Name	RF	R	XEOMI	Comment
59	TimeInForce	O	O	00000	Char Valid values:  Xetra 0 = "Day" 3 = "Immediate or Cancel" 4 = "Fill or Kill" 6 = "Good till Date"  INVESTRO /Vestima: this tag will be ignored  all other trading systems  0 = "Day" 6 = "Good till Date"  Default: "0"
60	TransactTime	M	M		UTC Timestamp Provided by the sending system or the owner of the order. <b>This tag will be ignored</b>
99	StopPx	C	C		Price, Float(13,5) Stop Limit, must be present if tag 40 (OrdType) is set to "3" or "4", must not be present otherwise
100	ExDestination	O	M		Target exchange MIC Code
110	MinQty	O	O	CNNNN	Qty, Float(12,3) Minimum quantity to be executed. Required for midpoint Orders (OrdType = "P"), must not be present otherwise
432	ExpireDate	C	C		LocalMktDate Order expiration date Must be present if Tag 59 is set to "6", must not be present otherwise  XONTRO In case of subscription orders the ExpireDate is ignored. The expire date will be set by the system to a maximum order validity of 360 calendar days or the date of the last redemption date.  Funds segment Hanover For contracts of the funds segment Hanover, the field ExpireDate is ignored. The expire date will be set from the trading system to the least of the following values: - maximum order validity of 360 calendar days - last redemption date (last maturity)  The response message (execution report) is signed unique by the value of tag 9933 (CombinedOrderType)  INVESTRO / Vestima For contracts of the funds, the field ExpireDate is ignored. The expire date will be set by the system to a maximum order validity of 360 calendar day.
526	SecondaryClOrdID	O	O	00000	String(16) Bank internal order number  User defined key of the order (Order number) May be defined by the sending system or the owner of the order. Will not be validated by the BT-FIX Gateway. However, the rules of the respective trading resp. settlement system will be valid.

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Tag	Field Name	RF	R	XEOMI	Comment
1094	PegPriceType		O	CNNNN	Integer Valid values: 2 = Mid-price peg Only valid for Xetra midpoint orders, must not be present otherwise
1138	DisplayQty		O	CNNNN	Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders, must not be present otherwise, OrdType must be set to "2"
1724	OrderOrigination	O	O	NNOON	Integer Flag for DEA (Direct Electronic Access). (ESMA RTS 24, Field 2) 5 = DEA (Direct Electronic Access) Missing Tag means „no DEA“.
1815	TradingCapacity	O	O	NNOON	Integer Trading function. (ESMA RTS 24, Field 7)  1 = AOTC (trading for customer) 5 = DEAL (trading for his own account) 6 = DEAL (trading as Market Maker) 9 = MTCH (matching of corresponding customer orders) Missing tag means „1=AOTC“
5076	FundReinvestIncome		O	NNNNO	Char Y = subscription with reinvestment price Space = other Only for INVESTRO
5078	FundSpecialDealDiscount		O	NNNNO	Char Y = subscription with NAV Space = other Only for INVESTRO
5156	UnreleasedDate		O	NNOON	LocalMktDate Attribute for orders valid from this date. Must be filled with date >= current business date Every date > current business date is valid, even if the date is not a trading day The actual value valid-from will be set by the trading system internally. The used value will be delivered in the response message (also in tag 5156 - field unreleased date).
5253	OrdTypeExt		C	NNOON	Char XONTRO, MAX-ONE <b>E = "EG-Order"</b> Used only for EG-Orders (XONTRO). This flag is not allowed for "Next day orders".
<standard message trailer>		M	M		

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**7.2.1.4 Response “Execution Report” – Identification Criteria**

FIX tags within the Execution Report for the identification of responses for order submissions:

FIX tags		Response for Order submission			
Tag	Field	Preliminary	Positive	Negative	Negative (Vestima only)
39	OrdStatus	A = "Pending New"	0 = "New"	8 = "Rejected"	4 = "Cancelled"
150	ExecType	A = "Pending New"	0 = "New"	8 = "Rejected"	4 = "Cancelled"
5946	PendingReason	1 = "buffered" 2 = "locked stock" 3 = "response delayed" 4 = "order status unknown (end of day)" 5 = "verification pending"	-	-	-
Contracts for Vestima securities only					
5048	OrdSubStatus	D = "provision check negative" E = "provision check positive" I = "order entry received in Vestima"	F = "enter confirmation from OHA"	-	G = "delete from Vestima"
5476	PrivateReference	"Order Entry received in Vestima" "Provision check"	"OHA Confirmation - successful Order Entry"	-	Text from Vestima (Comment for cancellation)

**7.2.1.5 Response “Execution Report” – Message Data**

A New Order Single Request may provide only one entry in the <parties> component block, if entering firm and executing firm are identical. Yet, the BT-FIX gateway will nevertheless set up two entries in the Execution Report. If a market maker is involved, an additional entry will be generated.

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		Tag 35 = "8" (MsgType)
<parties>		O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 2 ... 4 The value must correspond to the number of parties (repeating groups) provided
<entering firm>		O	M		The participant operating the connection
<executing firm>		O	O	MMMMM	The participant having issued the order If the repeating group is missing, "entering firm" will become the owner of the order
<market maker>		O	O	NOOOO	The market maker Only valid for XONTRO and MAX-ONE
<intermediary>		O	O	NNNNO	Data for intermediary (sales institution) Only allowed for INVESTRO

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Tag	Field Name	RF	R	XEOMI	Comment
<systematic internalizer>		O	O	ONNNN	Xetra Best Executor Only valid for Xetra
end <parties>					
<instrument>		M	M		Financial instrument given as ISIN
1	Account	O	O	MMOMO	String(2) Consists of Account Type and Account Type Number Trading systems may provide default values
6	AvgPx	M	M		Price Average price Will be set to "0"
11	ClOrdID	O	M		String(16) Unique key of an order related task (request)
14	CumQty	M	M		Qty, Float(12,3) Total quantity executed Will be set to "0"
17	ExecID	M	M		String Unique key of the Execution Report Uniqueness must be guaranteed within a single trading day
37	OrderID	M	M		String(13) Unique order number of the trading system If no order number is available, "[N/A]" will be set. This happens in case of rejections and preliminary confirmations.
38	OrderQty	O	M		Qty, Float(12,3) Total quantity ordered
39	OrdStatus	M	M		Char Order status  0 = "New" Submission positive  A = "Pending New" Submission preliminarily accepted (further information can be found in tag 5946 – PendingReason)  8 = "Rejected" Submission rejected  Vestima 4 = "Cancelled" Cancellation of contract through Vestima depository bank (transferred as cancellation of contract)
40	OrdType	O	M		Char Order type
44	Price	C	C		Price, Float(13,5) Order limit Filled for OrdType = "2", "4" or "P"
54	Side	M	M		Char Side of order 1 = "buy" 2 = "sell"
58	Text	O	O	OOOOO	String(25) Text Only the first twelve bytes will be returned by Xetra and Xetra Frankfurt 2
59	TimeInForce	O	M		Char

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Tag	Field Name	RF	R	XEOMI	Comment
60	TransactTime	O	M		UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Time of execution/order creation
99	StopPx	C	O	CCCCN	Price, Float(13,5) Stop limit, filled for OrdType = "3" or "4"
100	ExDestination	O	M		Exchange MIC Code Will always be supplied by the BT-FIX Gateway
110	MinQty	O	O	CNNNN	Qty, Float(12,3) Minimum quantity to be executed Only supplied in case of a midpoint Order (OrdType = "P")
150	ExecType	M	M		Char Type of Report  0 = "New" Submission positive  A = "Pending New" Submission preliminarily accepted (further information to be seen via tag 5946 – PendingReason)  8 = "Rejected" Submission rejected  INVESTRO I = "OrderStatus" Message to contract recipient in case of positive submission (OrdStatus "New")  Vestima 4 = "Cancelled" Cancellation of contract through Vestima depository bank (transferred as cancellation of contract)
151	LeavesQty	M	M		Qty, Float(12,3) Quantity open for further execution Will be set to OrderQty
336	TradingSessionID	O	O	ONOOO	String(1) Valid value 1 = "Day" Will always be used from a New Order Single Request together with tag 625
432	ExpireDate	O	M		LocalMktDate Order expiration date Will always be supplied with TimInForce = "6" (tag 59)
526	SecondaryClOrdID	O	O	OOOOO	String(16) Bank internal order number User defined key of the order (Order number)
625	TradingSessionSubID	O	O	CNCCO	String Will always be used together with tag 336
1094	PegPriceType		O	CNNNN	Integer Will be set to "2" if present. Only valid for Xetra midpoint orders (OrdType "P")
1138	DisplayQty		O	CNNNN	Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders

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Tag	Field Name	RF	R	XEOMI	Comment
5048	OrdSubStatus		O	NNNNC	String Only given for contract messages for Vestima securities  Vestima <u>Preliminary</u> (OrdStatus A = "Pending New" PendingReson 5 = "verification pending")  I = "order entry received in Vestima" Order entry received in Vestima  D = "provision check negative" Contract modification through Vestima by negative provision check  E = "provision check positive" Contract modification through Vestima by positive provision check  <u>Positive</u> (OrdStatus 0 = "New") F = "enter confirmation from OHA" Contract submission to Vestima by Vestima depository bank; positively confirmed  <u>Negative</u> (OrdStatus 4 = "Cancelled") G = "delete from Vestima" Cancellation contract through Vestima depository bank. In this case, OrdStatus = 4 and ExecType = 4 ("Cancelled")
5076	FundReinvestIncome		O	NNNNO	Char Y = buy at reinvestment price Space = other Only for INVESTRO
5078	FundSpecialDealDiscount		O	NNNNO	Char Y = buy at NAV price Space = other Only for INVESTRO
5156	UnreleasedDate		O	NNOOO	LocalMktDate Will be used to set up a "valid from" condition  XONTRO, INVESTRO, MAX-ONE Date valid from for orders which become valid in the future.  Tag contains exchange day from which the order will be valid.  XONTRO Next day orders, cut off time Fundssegement Hanover  MAX-ONE Next day orders  INVESTRO Orders after cut off time If necessary under consideration of issuer or ISIN holiday schedule.

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Tag	Field Name	RF	R	XEOMI	Comment
5253	OrdTypeExt		C	NNOON	Char Second order type Will be set to "E" if present. Used only for EG-Orders  XONTRO, MAX-ONE E = EG Order
5476	PrivateReference		O	NNNNC	String Addition to OrdSubStatus  Vestima <u>Preliminary</u> "Order Entry received in Vestima" "Provision check"  <u>Positive</u> "OHA Confirmation – successful Order Entry"  <u>Negative</u> Text by Vestima – comment to decline of contract
5689	VersionID		O	MMNNN	Integer(18)  Xetra, Xetra Frankfurt 2 Update control key
5946	Pending Reason		O	CCCCC	String Delivery by BT-FIX Gateway; only integer(1)  This field is only filled in case of preliminary confirmation ("Pending New" - OrdStatus = A, ExecType = A)  1 = "buffered" Order submission held on because of unavailable trading system (Xetra, Xetra Frankfurt 2)  2 = "locked stock" Order submission held on because of a locked order book (XONTRO, MAX-ONE) resp. "Locked Stock" (Xetra, Xetra Frankfurt 2).  3 = "response delayed (intraday)" No confirmation of the trading system during a defined time period received (Xetra, Xetra Frankfurt 2)  4 = "order status unknown (end of day)" No confirmation of order submission until end of day (either positive nor negative). Status of the order is unknown.  5 = "verification pending" XONTRO EG-order preliminarily accepted  INVESTRO / Vestima Contract for Vestima securities temporarily accepted

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Tag	Field Name	RF	R	XEOMI	Comment
9933	CombinedOrderType		O	NNONN	Char "Z" = submission of a subscription order "H" = Funds segment "Hanover"  If the tag is sent, then the expire date will filled by the trading system. Field ExpireDate (Tag 432) will then be used. The ExpireDate of the request will be ignored. For more details see the description of tag 432 (ExpireDate) of request message from the "NewOrderSingle".
The following fields are only filled in the case of a rejection ("Rejected" - OrdStatus = 8, ExecType = 8)					
5555	ReturnCode		O	CCCCC	Integer Return code
9320	OrderRejectReasonTxt		O	CCCCC	String Error text delivered by the trading system
9803	TradingSystemID		O	CCCCC	Integer Identification ID of the system generating the return code
<standard message trailer>		M	M		



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
**7.2.2 Order resp. Instruction-Cancellation****7.2.2.1 Operations**

No.	Successful Cancellation of an Order	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Order Cancel ("ClOrdID", "OrigClOrdID")			
	<i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
2	Execution Report ("Pending Cancel", "Pending Cancel")			
	<i>Confirmation</i>			
3	Execution Report ("Cancelled", "Cancelled")			

No.	Rejected Cancellation of an Order	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Order Cancel ("ClOrdID", "OrigClOrdID")			
	<i>Optionally: Preliminary confirmation with PendingReason (Tag 5946)</i>			
2	Execution Report ("Pending Cancel", "Pending Cancel")			
	<i>Final negative confirmation with error information (tags 5555, 9320, 9803)</i>			
3	Order Cancel Reject ("Rejected")			

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Nr.	<b>Preliminarily Accepted Cancellation of an Order</b>	<b>Message Flow</b>		
		FE Customer	BT FIX Gateway	Trading System
1	Order Cancel ("CIOrdID", "OrigCIOrdID")			
	<i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
2	Execution Report ("Pending Cancel", "Pending Cancel")			
	<i>End of day: Preliminary confirmation with PendingReason 4 = "order status unknown (end of day)"</i>			
3	Execution Report ("Pending Cancel", "Pending Cancel")			

**Explanatory Notes:**

The Execution Report "Pending Replace" or "Pending Cancel", in connection with the Completion Code 127650 (MODIFICATION/CANCELLATION ACCEPTED BUT TEMPORARILY POSTPONED), means that an order modification resp. order deletion has already become logically final, but has been temporarily postponed due to technical reasons. The final Execution Report of the Acknowledement "Replace" or "Cancel" will follow.

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**7.2.2.2 Operations – Funds Settlement (INVESTRO / Vestima)**INVESTRO “classic”

No.	Successful Cancellation of an Order	Message Flow		
		FE Customer	BT FIX Gateway	INVESTRO
1	Order Cancel ("CLOrdID", "OrigCLOrdID")			
	<i>Final confirmation</i>			
2	Execution Report ("Cancelled", "Cancelled")			
	<i>Message to contract recipient</i>			
3	Execution Report ("Cancelled", "Cancelled")			

No.	Rejected Cancellation	Message Flow		
		FE Customer	BT FIX Gateway	INVESTRO
1	Order Cancel ("CLOrdID", "OrigCLOrdID")			
	<i>Final negative confirmation with error information (tags 5555, 9320, 9803)</i>			
3	Order Cancel Reject ("Rejected")			

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INVESTRO / Vestima

No.	Successful Cancellation of a Contract in INVESTRO / Vestima	Message Flow			
		FE Customer	BT FIX Gateway	INVESTRO	Vestima
1	Order Cancel ("ClOrdID", "OrigClOrdID")				
					MT502
2	Execution report ("Pending Cancel", "Pending Cancel") <i>Validation INVESTRO</i>				
					MT509
3	Execution Report ("Pending Cancel", "Pending Cancel") <i>Validation Vestima</i>				
					MT509
4	Execution Report ("Cancelled", "Cancelled") <i>Cancellation acknowledged from OHA (Cancellation successful)</i>				
					MT509

No.	Negative Cancellation of a contract in INVESTRO / Vestima	Message Flow			
		FE Customer	BT FIX Gateway	INVESTRO	Vestima
1	Ordercancel ("ClOrdID", "OrigClOrdID")				
					MT502
2	Execution report ("Pending Cancel", "Pending Cancel") <i>Validation INVESTRO</i>				
					MT509
3	Execution Report ("Pending Cancel", "Pending Cancel") <i>Validation Vestima</i>				
					MT509
4	Execution Report ("Rejected", "Rejected") <i>Cancellation rejected from OHA (Cancellation negative)</i>				
					MT509

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**Explanatory Notes:**

All cancellations are treated as a request for cancellation by Vestima. Only the acknowledge of the OHA in Vestima leads to the cancellation of the instruction in INVESTRO. A rejection can occur after any „Pending Cancel” message.

**No 2:** Cancellation was received in INVESTRO and was forwarded to Vestima.

**No 3:** Cancellation in Vestima received.

**No 4:** Cancellation of an order in Vestima

**7.2.2.3 Order Cancel Request**

If OrigClOrdID is used for order identification, then ExDestination may be omitted, but must be set to the original value if present. If OrderID is used for identification, then ExDestination must have a value. Inclusion of ExDestination will improve performance.

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "F" (MsgType)
	<parties>	O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 1 – 5 The value must correspond to the number of parties (repeating groups) provided
	<entering firm>	O	M		The participant operating the connection
	<executing firm>	O	O	OOOOO	The participant being in charge of the order If the repeating group is missing, "entering firm" will become the owner of the order
	<client identification code>	O	O	NNOON	Identification of the customer
	<investment decision maker>	O	O	NNOON	Trading member employee or algorithm being responsible for the investment decision.
	<Execution within firm>	O	O	NNOON	Trading member employee or algorithm being responsible for the order execution.
	end <parties>				
	<instrument>	M	M		Financial instrument given as ISIN
	<OrderAttributes>	O	O	NNOON	Repeating Group for attribute of orders
11	ClOrdID	M	M		String(16) Unique key of an order related task (request) Will be provided by the sending system. For as long as the corresponding order is active, no other task (request) referring to it will be allowed to use the identical ClOrdID value. So the uniqueness must be guaranteed across all trading days. Uniqueness will be verified by the BT-FIX Gateway.
37	OrderID	O	C		String(13) Unique order number of the trading system May be used for order identification. If so, then OrigClOrdID must be set to "[N/A]".

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Tag	Field Name	RF	R	XEOMI	Comment
38	OrderQty	M	M		Qty, Float(12,3) Total quantity ordered <b>This tag will be ignored</b>
41	OrigClOrdID	M	M		String(16) ClOrdID of the previous successful FIX request corresponding to the order, used to identify the order. If OrigClOrdID is set to "[N/A]", OrderID (Tag 37) must be present and will be used for order identification.
54	Side	M	M		Char Side of order 1 = "buy" 2 = "sell" MAX-ONE also accepts cancel requests including errors but using the correct format.
60	TransactTime	M	M		UTC Timestamp Provided by the sending system or the owner of the order. <b>This tag will be ignored.</b>
100	ExDestination		O		Exchange location MIC Code
5253	OrdTypeExt		OC	COOOO	Char Second Order Type Will be ignored by XONTRO MAX-ONE and INVESTRO. The Request will be processed anyway. Must be set to a correct value or must be omitted in case of a Xetra Frankfurt 2 order. Must be set to a correct value or must be omitted in case of a Xetra order. For Xetra stop, stop limit, midpoint and iceberg orders the correct value must be provided.  Valid values: Xetra: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit" K = "Market with Leftover" M = "Midpoint" I = "Iceberg" Xetra Frankfurt 2: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit"
6042	CxlReason	O	O	NNOON	Integer Identification of deleting an order by kill-functionality (MIFID II). 1 = Cancel by kill-functionality
	<standard message trailer>	M	M		

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**7.2.2.4 Response Execution Report (Preliminary, Positive, Negative by Vestima)**

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "8" (MsgType)
	<parties>	O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid value: only "2" The value must correspond to the number of parties (repeating groups) provided
	<entering firm>	O	M		The participant operating the connection
	<executing firm>	O	O	MMMMM	The participant having sent the order If the repeating group is missing, "entering firm" will become the owner of the order
	end <parties>				
	<instrument>	M	M		Financial instrument
6	AvgPx	M	M		Price Average price Will be set to "0"
11	ClOrdID	O	M		String(16) The value provided by the request will be returned
14	CumQty	M	M		Qty, Float(12,3) Total quantity executed
17	ExecID	M	M		String Unique key of the Execution Report Uniqueness must be maintained across the entire trading day.
37	OrderID	M	M		String(13) Unique order number of the trading system
38	OrderQty	M	M		Qty, Float(12,3) Total quantity ordered
39	OrdStatus	M	M		Char Order status  4 = successfully cancelled 6 = cancellation pending Cancellation preliminarily accepted (more information see Tag 5946 – PendingReason).  Vestima 8 = "Rejected" Cancellation of a contract rejected by Vestima OHA
41	OrigClOrdID	O	M		String(16) The values provided by the request will be returned
44	Price	O	O	NNCCO	Price, Float(13,5) Order limit, will be provided if OrdType is set to "2", "4" or "P"
54	Side	M	M		Char Side of order
60	TransactTime	O	M		UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.sssss] Time of execution/order cancellation
100	ExDestination		M		Exchange location MIC Code

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Tag	Field Name	RF	R	XEOMI	Comment
150	ExecType	M	M		Char Type of Report  4 = "Cancelled" Cancellation positive  6 = "Cancellation Pending" Cancellation preliminarily accepted (further information on tag 5946 – PendingReason).  INVESTRO I = "OrderStatus" Message to recipient of contract in case of positive submission (OrdStatus "Cancelled")  Vestima 8 = "Rejected" Cancellation of a contract rejected by Vestima OHA
151	LeavesQty	M	M		Qty, Float(12,3) Quantity open for further execution Will be set to "0"
526	SecondaryClOrdID	O	O	OOOOO	String(16) Bank internal order number
5048	OrdSubStatus		O	NNNNC	String Only for messages in case of contracts for Vestima securities  Vestima <u>Preliminary</u> (OrdStatus A = "Pending New" PendingReson 5 = "verification pending")  A = "deletion received by Vestima" Cancellation in Vestima received  Positive (OrdStatus 4 = "Cancelled") B = "deletion executed by Vestima" Cancellation contract through Vestima OHA  Negative (OrdStatus 8 = "Rejected") C = "deletion rejected by Vestima" Cancellation contract through Vestima OHA rejected
5476	PrivateReference		O	NNNNC	String Supplement to OrdSubStatus  Vestima <u>Preliminary</u> "delete request received in Vestima"  <u>Positive</u> "deletion processing by Vestima / OHA"  <u>Negative</u> Text by Vestima – comment to decline of contract



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Tag	Field Name	RF	R	XEOMI	Comment
5946	Pending Reason		O	CCCCC	String Delivery by BT-FIX Gateway; only integer(1)  This field will only be filled when preliminarily confirmed ("Pending Cancel" – OrdStatus = 6, ExecType = 6)  1 = "buffered" Order submission held on due to an unavailable trading system (Xetra, Xetra Ffm-2).  2 = "locked stock" Order submission held due to a locked order book (XONTRO, MAX-ONE) resp. Locked Stock (Xetra, Xetra Frankfurt 2).  3 = "response delayed (intraday)" No confirmation from the trading system received across a defined time period (Xetra, Xetra Ffm-2).  4 = "order status unknown (end of day)" No confirmation of order submission until end of day (neither positive nor negative). Status of the order is unknown.  5 = "verification pending" INVESTRO / Vestima Contract for Vestima securities preliminarily accepted
	<standard message trailer>	M	M		

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**7.2.2.5 Response “Order Cancel Reject” (Negative from Vestima)**

Instead of an Execution Report, an Order Cancel Reject message will be sent.

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		Tag 35 = “9” (MsgType)
<parties>			M		
453	NoPartyIDs		M		NumInGroup Number of parties involved Valid value “2” The value must correspond to the number of parties (repeating groups) provided.
<entering firm>			M		The participant operating the connection
<executing firm>			O	OOOOO	The participant having sent the order. If the repeating group is missing, “entering firm” will become the owner of the order.
end <parties>					
11	ClOrdID	M	M		String(16) Unique key of an order related task (request). The value provided by the request will be returned.
37	OrderID	M	M		String(13) Unique order number of the trading system. May be missing or set to “[N/A]”
39	OrdStatus	M	M		Char Order status <b>Will be set to “8” (Rejected).</b>
41	OrigClOrdID	M	M		String(16) ClOrdID of the previous successful FIX request corresponding to the order, or set to “[N/A]”. The value provided by the request will be returned.
60	TransactTime	O	M		UTC Timestamp Time of execution/rejection
100	ExDestination		M		Exchange location MIC Code
102	CxlRejReason	O	M		Integer Will be set to 99 = “Other” if no appropriate FIX reason code is available. Tag 5555 will then contain an error code, and tag 9320 contains the related error text.
434	CxlRejResponseTo	M	M		Char Will be set to “1” (Order Cancel Request)
5555	ReturnCode		M		Integer Return code
9320	OrdRejectReasonText		M		String Error text issued by the trading system
9803	TradingSystemID		M		Integer Will identify the system generating the return code.
<standard message trailer>		M	M		

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**7.2.3 Order resp. Instructions-Modification****7.2.3.1 Operations – Orders**

No.	Immediate Successful Order Modification	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Order Cancel/Replace ("ClOrdID", "OrigClOrdID")			
2	Execution Report ("Pending Replace", "Pending Replace") <i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
3	Execution Report ("replace", actual order status) <i>Confirmation positive</i>			

No.	Rejected Modification of an Order	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Order Cancel/Replace ("ClOrdID", "OrigClOrdID")			
2	Execution Report ("Pending Replace", "Pending Replace") <i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
3	Order Cancel Reject ("Rejected") <i>Final negative confirmation with error information (tags 5555, 9320, 9803)</i>			

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No.	Temporarily Accepted Modification of an Order	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Order Cancel/Replace ("CLOrdID", "OrigCLOrdID")			
2	Execution Report ("Pending Replace", "Pending Replace") <i>Optionally: Preliminary confirmation with PendingReason (tag 5946)</i>			
3	Execution Report ("Pending Replace", "Pending Replace") <i>End of day: Preliminary confirmation with PendingReason 4 = "order status unknown (end of day)"</i>			

**Explanatory Notes:**

The Execution Report "Pending Replace" or "Pending Cancel", in connection with the Completion Code 127650 (MODIFICATION/CANCELLATION ACCEPTED BUT TEMPORARILY POSTPONED), means that an order modification resp. order deletion has already become logically final, but has been temporarily postponed due to technical reasons. The final Execution Report of the Acknowledgement "Replace" or "Cancel" will follow.

**7.2.3.2 Operations – Funds Settlement (INVESTRO / Vestima)**

No.	Rejected Modification of an Order	Message Flow		
		FE Customer	BT FIX Gateway	INVESTRO
1	Order Cancel/Replace ("CLOrdID", "OrigCLOrdID")			
3	Order Cancel Reject ("Rejected") <i>Final negative confirmation with error information (tags 5555, 9320, 9803)</i>			

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**7.2.3.3 Order Cancel / Replace Request**

As a rule, a Cancel/Replace Request should deliver all information items of an order. The BT-FIX Gateway supports this standard behavior, but will in addition accept messages which only include those tags whose values need to be changed – as far as optional tags are concerned. Of course all mandatory tags must always be present. The request description will discuss in detail how conditionally mandatory tags will be handled. “Unchangeable”, “May not be changed”, etc. merely constitute remarks. The BT-FIX Gateway will always pass the tags’ values to the trading system without further examination.

Modification of an INVESTRO order is not possible. Order cancel/Replace requests with ExDestination “XINV” (INVESTRO) will always be rejected.

If OrigClOrdID is used for order identification, ExDestination may be missing. If ExDestination is present, then it must contain the correct value. If OrderID is used, then ExDestination must be provided.

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		Tag 35 = “G” (MsgType)
<parties>		O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 2 – 6 The value must correspond to the number of parties (repeating groups) provided.
<entering firm>		O	M		The participant operating the connection
<executing firm>		O	O	MMMM-	The participant being in charge of the order. If the repeating group is missing, then “entering firm” will become the owner of the order.
<market maker>		O	O	N000-	The market maker. Only valid for XONTRO and MAX-ONE. Will be ignored otherwise.
<systematic internalizer>		O	O	ONNN-	Xetra Best Executor Only valid for Xetra
<client identification code>		O	O	NNOON	Identification of the customer
<investment decision maker>		O	O	NNOON	Trading member employee or algorithm being responsible for the investment decision.
<Execution within firm>		O	O	NNOON	Trading member employee or algorithm being responsible for the order execution.
end <parties>					
<instrument>		M	M		Financial instrument given as ISIN
<trading sessions>		O	O	ONOO-	Trading Session Information Only TradingSessionSubID will contain useful information Alternatively, single tags 336 and 625 may be used. This also holds for FIX 4.2 messages. Please note that in this case FIX 4.4 definitions hold, which are not compliant to FIX 4.2.
<OrderAttributes>		O	O	NNOON	Repeating Group for attribute of orders
<ValueChecksGrp>		O	O	NNOON	Check flag for the maximum market value permitted for one order an the trading venue.
1	Account	O	O	MMNN-	String(2) Consists of Account Type and Account Type Number. Possible values: P1 – bank’s own-account trading A1 – bank’s customer (agent) business

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Tag	Field Name	RF	R	XEOMI	Comment
11	ClOrdID	M	M		String(16) Unique key of an order related task (request). Will be provided by the sending system. For as long as the corresponding order is active, no task (request) referring to it will be allowed to use the identical ClOrdID value. So uniqueness must be guaranteed across the entire life span of an order. Uniqueness will be verified by the BT-FIX Gateway.
21	HandlInst	M / O	M / O		Char "FIX.4.2" mandatory "FIX.4.4" optional  Instructions for order handling on Broker trading floor. Valid values: 1 = Automated execution order, private, no Broker intervention 2 = Automated execution order, public, Broker intervention OK 3 = Manual order, best execution This tag will be ignored
37	OrderID	O	C		String(13) Unique order number of the trading system May be used for order identification. If filled, OrigClOrdID must be set to "[N/A]".
38	OrderQty	O	M		Qty, Float(12,3) Total quantity ordered (incl. total quantity filled). For orders addressing XONTRO or MAX-ONE, this value is identical to the original order quantity. A modification of the QTY is not possible.  XONTRO: The request is declined if OrderQty and quantity of the original order are unequal.  Xetra, Xetra Frankfurt 2, MAX-ONE: This tag will be ignored.
40	OrdType	M	M		Char Valid values: Xetra: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit" K = "Market with Leftover" P = "Pegged" Xetra Frankfurt 2, MAX-ONE: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit" XONTRO: 1 = "Market" 2 = "Limit" 3 = "Stop"
41	OrigClOrdID	M	M		String(16) ClOrdID of the previous successful FIX request corresponding to the order, used to identify the order. If OrigClOrdID is set to "[N/A]", OrderID (Tag 37) must be present and will be used for order identification.

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Tag	Field Name	RF	R	XEOMI	Comment
44	Price	O	C		Price, Float(13,5) Order limit Must be present if Tag 40 (OrdType) is set to "2", "4" or "P", is not allowed otherwise.
54	Side	M	M		Char Side of order Valid values: 1 = "Buy" 2 = "Sell" May not be changed
58	Text	O	O	OOOO-	String(25) Text Please note that only the first twelve digits will be passed on to Xetra and Xetra Frankfurt 2.
59	TimeInForce	O	O	OOOO-	Char Valid value:  6 = Good till Date  There is no default value for this tag. If the expiration date of an order must be changed, Tag 59 must be set to "6", and tag 432 must contain the (new) expiration date.
60	TransactTime	M	M		UTC Timestamp Provided by the sending system or the owner of the order. This tag will be ignored.
99	StopPx	O	O	CCCC-	Price, Float(13,5) Stop Limit Must be present if tag 40 (OrdType) is set to "3" or "4", is not allowed otherwise.
100	ExDestination	O	M	OOOO-	Exchange location MIC Code May not be changed.
432	ExpireDate	O	C		LocalMktDate Order expiration date Must be present if Tag 59 is set to "6".
526	SecondaryClOrdID	O	O	OOOO-	String(16) Bank internal order number User defined key of the order (Order number). May be defined by the sending system or the owner of the order. Will not be examined by the BT-FIX Gateway.
1094	PegPriceType		O	CNNN-	Integer Valid values: 2 = Mid-price peg Only valid for Xetra midpoint orders
1138	DisplayQty		O	CNNN-	Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders
1724	OrderOrigination	O	O	NNOON	Integer Flag for DEA (Direct Electronic Access). (ESMA RTS 24, Field 2) 5 = DEA (Direct Electronic Access) Missing Tag means „no DEA“.
5689	VersionID		O	OONN-	Integer(18)  Xetra, Xetra Frankfurt 2 Update control key

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Tag	Field Name	RF	R	XEOMI	Comment
6126	OrigLeavesQty		O	NNOO-	Qty, Float(12,3) Quantity open for further execution Update control information item If it is desired to have the quantity remaining for execution checked, the expected value must be entered into Tag 6126 (XONTRO only). Otherwise the tag may be omitted.
<standard message trailer>		M	M		



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**7.2.3.4 Response Execution Report (Preliminary, Positive)**

A Cancel/Replace Request may provide only one entry in the <parties> component block, if entering firm and executing firm are identical. The BT-FIX gateway will, however, still set up two entries in the Execution Report. If a market maker is involved, then an additional entry will be generated.

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = "8" (MsgType)
	<parties>	O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 2 ... 3 The value must correspond to the number of parties (repeating groups) provided
	<entering firm>	O	M		The participant operating the connection
	<executing firm>	O	O	O000-	The participant being in charge of the order. If the repeating group is missing, "entering firm" will become the owner of the order.
	<market maker>	O	O	N000-	The market maker Only valid for XONTRO and MAX-ONE
	end <parties>				
	<instrument>	M	M		Financial instrument given as ISIN
1	Account	M	M		String(2) Consists of Account Type and Account Type Number
6	AvgPx	M	M		Price Average price Will be set to "0"
11	ClOrdID	O	M		String(16) Unique key of an order related task (request) copied from the related request
14	CumQty	M	M		Qty, Float(12,3) Total quantity executed
17	ExecID	M	M		String Unique key of the Execution Report Uniqueness must be guaranteed for the entire trading day
37	OrderID	M	M		String(13) Unique order number of the trading system <b>Order numbers may change.</b> In this case, the chain of ClOrdIDs already existing will stay with the old order number. The "new" order can only be intensified by using tag 37.
38	OrderQty	O	M		Qty, Float(12,3) Total quantity ordered
39	OrdStatus	M	M		Char Order status 0 = "New" Will reflect the current status of the order. Modification done (finally) Filled in reference to the status of the order  Modification done (preliminary) E = "Pending Replace" (for further information cf. tag 5946 – PendingReason)

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Tag	Field Name	RF	R	XEOMI	Comment
40	OrdType	O	M		Char Order type
41	OrigClOrdID	O	M		String(16) Copied from the related request ClOrdID of the previous successful FIX request related to the order, if Tag 41 was used to identify the order. Will contain "[N/A]", if Tag 37 was used for order identification.
44	Price	C	C		Price, Float(13,5) Order limit
54	Side	M	M		Char Side of order
58	Text	O	O	OOOO-	String(25) Text Please note that only the first twelve digits will be returned by Xetra and Xetra Frankfurt 2.
59	TimeInForce	O	O	MMOO-	Char
60	TransactTime	O	M		UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Time of execution/order modification
99	StopPx	C	O	CCCC-	Price, Float(13,5) Stop limit
100	ExDestination		M		Exchange location MIC Code Will always be supplied by the BT-FIX Gateway
150	ExecType	M	M		Char Type of Report will be set to "5" (Replace) Modification done (finally) 5 = "Replace"  Modification done (preliminary) E = "Pending Replace" (for further information cf. tag 5946 – PendingReason)
151	LeavesQty	M	M		Qty, Float(12,3) Quantity open for further execution
336	TradingSessionID	O	O	OOOO-	String(1) Valid value 1 = "Day" Will always be used together with tag 625
432	ExpireDate	O	C		LocalMktDate Order expiration date
526	SecondaryClOrdID	O	O	OOOO-	String(16) Bank internal order number  User defined key of the order (Order number).
625	TradingSessionSubID	O	O	CNCC-	String Will always be used together with tag 336
1094	PegPriceType		O	CNNN-	Integer Only valid for Xetra midpoint orders
1138	DisplayQty		O	CNNN-	Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders.
5689	VersionID		O	MMNN-	integer(18) Update control key Will be provided by the trading system.

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Tag	Field Name	RF	R	XEOMI	Comment
5946	Pending Reason		O	CCCCC	String Delivery by BT-FIX Gateway only as an integer(1)  This field is only filled in case of preliminary confirmation ("Pending Replace" - OrdStatus = E, ExecType = E) 1 = "buffered" Order submission in hold due to trading system (Xetra, Xetra Frankfurt 2) not being available 2 = "locked stock" Order submission in hold due to locked order book (XONTRO, MAX-ONE) resp. Locked Stock (Xetra, Xetra Frankfurt 2). 3 = "response delayed (intraday)" No confirmation from the trading system received within a defined time period received (Xetra, Xetra Ffm-2) 4 = "order status unknown (end of day)" No confirmation of order submission received until end of day (neither positive nor negative). Status of the order is unknown.
	<standard message trailer>	M	M		

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**7.2.3.5 Response “Order Cancel Reject” (Negative)**

Instead of an Execution Report, an Order Cancel Reject message is sent. It is almost identical to an Execution Report responding to a rejected Order Cancel Request. The tags listed below have differing values.

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = “9” (MsgType)
	<parties>		M		
453	NoPartyIDs		M		NumInGroup Number of parties involved Valid value “2” The value must correspond to the number of parties (repeating groups) provided.
	<entering firm>		M		The participant operating the connection
	<executing firm>		O	MMMMM	The participant owning the order If the repeating group is missing, “entering firm” will become the owner of the order.
	end <parties>				
11	ClOrdID	M	M		String(16) Unique key of an order related task (request). The value provided by the Order Cancel/Replace Request will be returned.
37	OrderID	M	M		String(13) Unique order number of the trading system May be missing or set to “[N/A]”.
39	OrdStatus	M	M		Char Order status Will be set to “8” (Rejected).
41	OrigClOrdID	M	M		String(16) ClOrdID of the previous successful FIX request corresponding to the order or set to “[N/A]”. The value provided by the Order Cancel/Replace Request will be returned.
60	TransactTime	O	M		UTC Timestamp Time of execution/rejection
100	ExDestination		M		Exchange MIC Code Will always be supplied by the BT-FIX Gateway
102	CxlRejReason	O	M		Integer Will be set to 99 = “Other” if no appropriate FIX reason code is available. Tag 5555 will then contain an error code and tag 9320 the related error text.
434	CxlRejResponseTo	M	M		Char Will be set to “2” (Order Cancel/Replace Request)
5555	ReturnCode		M		Integer Return code
9320	OrdRejectReasonText		M		String Error text issued by the trading system
9803	TradingSystemID		M		Integer Will identify the system generating the return code
	<standard message trailer>	M	M		

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**7.2.4 Order resp. instruction-Execution****7.2.4.1 Operations – Orders**

No.	Partial Fill	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Execution Report ("Trade", "Partially Filled")			

No.	Complete Fill	Message Flow		
		FE Customer	BT FIX Gateway	Trading System
1	Execution Report ("Trade", "Filled")			

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**7.2.4.2 Operations – Funds Settlement (INVESTRO / Vestima)**INVESTRO “classic”

No.	Complete Fill	Message Flow		
		FE Customer	BT FIX Gateway	INVESTRO
1	<i>Complete Fill</i> Execution Report (“Trade”, “Filled”)			←●
			←●	
2	<i>Message to the Contract Recipient</i> Execution Report (“Order Status”, “Filled”)			←●
			←●	

INVESTRO/Vestima

No.	Order Execution and Cancellation	Message Flow			
		FE Customer	BT FIX Gateway	INVESTRO	Vestima
1	<i>Confirmation</i> Execution Report (“Trade”; “Filled”)			MT 515 ←●	←●
			←●		
2	<i>Cancellation Confirmation</i> Execution Report (“Restated”, “Filled”)			MT 515 ←●	←●
			←●		
3	<i>New Confirmation</i> Execution Report (“Restated”, “Filled”)			MT515 ←●	←●
			←●		

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**7.2.4.3 Response “Execution Report” Order Execution**

The corresponding New Order Single Request may provide only one entry in the <parties> component block, if entering firm and executing firm are identical. The BT-FIX gateway will, however, still set up two entries in the Execution Report. If a market maker is involved, an additional entry will be generated.

Tag	Field Name	RF	R	XEOMI	Comment
	<standard message header>	M	M		Tag 35 = “8” (MsgType)
	<parties>	O	M		
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 1 – 3 The value must correspond to the number of parties (repeating groups) provided.
	<entering firm>	O	M		The participant operating the connection
	<executing firm>	O	O	OOOOO	The participant being in charge of the order. If the repeating group is missing, “entering firm” will become the owner of the order.
	<market maker>	O	O	NOOOO	The market maker Only valid for XONTRO and MAX-ONE
	<systematic internalizer>	O	O	ONNNN	Xetra Best Executor Only valid for Xetra
	end <parties>				
	<instrument>	M	M		Financial instrument given as ISIN
	<RegulatoryTradeIDGrp>	O	O	NNMMN	TVTIC (Trading venue transaction identification code)
6	AvgPx	M	M		Price Average price Will be set to “0”
11	ClOrdID	O	M		String(16) Unique key of an order related task (request). The key value of the last successfully processed FIX request.  Vestima Messages with Tag 150 (ExecType) = “D” (Restated) always with ClOrdID = “[N/A]”
14	CumQty	M	M		Qty, Float(12,3) Total quantity executed
15	Currency	O	O	OOOOO	Currency Trading currency used at trading exchange location
17	ExecID	M	M		String Unique key of the Execution Report Uniqueness must be guaranteed for the entire trading day.
31	LastPx	M	M		Price, Float(13,5) Market value
32	LastQty	M	M		Qty, Float(12,3) Quantity bought/sold on this execution.
37	OrderID	M	M		String(13) Unique order number of the trading system
38	OrderQty	O	M		Qty, Float(12,3) Total quantity ordered

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Tag	Field Name	RF	R	XEOMI	Comment
39	OrdStatus	M	M		Char Order status Will be set to "2" (Filled) XONTRO, MAY-ONE, Xetra, Xetra Frankfurt 2 1 = "Partially Filled" 2 = "Filled"  INVESTRO / Vestima 2 = "Filled" (partially filled not possible)
44	Price	C	O	CCCNN	Price, Float(13,5) Order limit, will be provided if OrdType is set to "2", "4" or "P". Will not be delivered by MAX-ONE.
54	Side	M	M		Char Side of order 1 = "buy" 2 = "sell"
59	TimeInForce	O	M		Char
60	TransactTime	O	M		UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Time of execution/order creation
64	SettlDate	O	O	NNOOO	LocalMktDate Settlement date  XONTRO, MAX-ONE Value date for orders, if executed before issue date.  INVESTRO / Vestima Settlement Date delivered by Vestima  Xetra, Xetra Frankfurt 2 Field is not delivered
99	StopPx	C	C		Price, Float(13,5) Stop limit, will be provided if OrdType is set to "3" or "4"
100	ExDestination		M		Exchange location MIC Code Will always be supplied by the BT-FIX Gateway
110	MinQty	O	O	CNNNN	Qty, Float(12,3) Minimum quantity to be executed. Will only be provided if OrdType is set to "P"
150	ExecType	M	M	MMMMC	Char Type of report  All trading systems: F = "Trade" (message directed to the owner of the order)  INVESTRO classic: Message to the recipient of the contract I = "OrderStatus"  Vestima: In the following cases filled with D = "Restated": - identification of execution cancellation by Vestima or - identification of a new execution by Vestima after cancellation of a previous execution  If ExecType = D then tag 11 (ClOrdID) is filled with "[N/A]"



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Tag	Field Name	RF	R	XEOMI	Comment
151	LeavesQty	M	M		Qty, Float(12,3) Quantity open for further execution 0 when filled completely
157	NumDaysInterest	O	O	OOOON	Integer Number of accrued interest days Like FIX 4.4 Tag 157; also for FIX.4.2
432	ExpireDate	O	M		LocalMktDate Order expiration date
526	SecondaryClOrdID	O	O	OOOOO	String(16) Bank internal order number User defined key of the order (Order number).
1094	PegPriceType		O	CNNNN	Integer Will be set to "2" if present. Only valid for Xetra midpoint orders (OrdType "P").
1138	DisplayQty		O	CNNNN	Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders
5048	OrdSubStatus		O	NNNNC	Char <b>Only INVESTRO / Vestima:</b> "H" = disabled for cancellation of order confirmation Tag 150 (ExecType) = D. Tag 11 (ClOrdID) is then filled with [N/A].
5689	VersionID		O	MMNNN	Integer(18)  Xetra, Xetra Frankfurt 2 Update control key
5944	InitialDisplayQty		O	CNNNN	Qty, Float(12,3) Maximum visible volume of the order initially entered Only valid for Xetra iceberg orders
6584	SpreadPctPremium		O	NNNNO	Float(5,3) Selling commission (deduction of front end load)
6585	SpreadPctDiscount		O	NNNNO	Float(10,7) Reinvestment discount in percent
6611	TotalAccruedInterestAmt		O	NNNNO	Float(17,8) Accumulated dividend equivalent income („Akkumulierter ausschüttungsgleicher Ertrag“ in German).
6893	Profit		O	NNNNO	Float(15,8) Mid-way profit
7491	CustomPrice1		O	NNNNO	Float(15,8) Unit offering price Only used if tags 5076 or 5078 were used by the order/contract.
7680	OTCInd		M		Integer Indicator trade is exchange related 0 = On exchange trade 1 = Off exchange trade
9583	MIFIDInternalizationIndicator		O	OONNN	Char Xetra Best Trade Indicator
<standard message trailer>		M	M		

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**7.2.5 Requests Using Any Other Interface Than FIX****7.2.5.1 Submission, Modification and Cancellation of Orders resp. Instructions**

Submissions, modifications and cancellations of Orders resp. Instructions via an interface other than the FIX interface may generate FIX Execution Reports, whenever an entering firm/executing firm using the FIX connection is affected.

- Dialog (GUI, SCREEN) XONTRO, INVESTRO, MAX-ONE
- System Connection Makler XONTRO
- MAX-ONE GUIs MAX-ONE
- Xetra GUIs Xetra, Xetra Frankfurt 2
- SAKI Input INVESTRO
- Input by Vestima OIs INVESTRO

Execution Reports will be distributed whenever the first request triggering the workflow has been accepted. They will be generated for all events included in the workflow. E.g., for an order modification entered during a locked stock period, which was subsequently rejected when the locked stock period had ended, a positive (Pending Replace) and a negative (Reject) Execution Report will be transmitted. Only Execution Reports are affected, differing tag values are discussed below.

Execution Reports will additionally include the <session> repeating group in the <parties> component block. OrigClOrdID (Tag 41) will be set to “[N/A]”. ClOrdID (Tag 11) will reflect the last successfully processed request entered via the FIX interface (if any).

If a request entered via an interface other than the FIX interface is rejected, no information will be passed onto the BT-FIX Gateway.

Tag	Field Name	RF	R	XEOMI	Comment
<parties> component block, NoPartyIDs will be increased					
448	<session> PartyID		M		String KVNr or MemberID of the originator
447	PartyIDSource		M		Char Will always be set to “D”
452	PartyRole		M		Integer Will be set to 55 = “Session ID”
802	NoPartySubIDs		M		NumInGroup Will be set to “1”
523	PartySubID		M		String(6) The last six Characters of the originator’s user identifier
803	PartySubIDType		M		Integer Will be set to “4040” (User identifier)
11	ClOrdID	M	M		String(16) ClOrdID of the previous successfully processed FIX request corresponding to the order or set to “[N/A]”. The value provided by the request will be returned.
41	OrigClOrdID	M	M		String(16) Set to “[N/A]”

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**7.2.5.2 Entries Using The Investro Function “Collective Entry of Orders”**

Along with entries using the Investro function “Collective Entry of Orders”, ExecutionReports will be sent, if the order issuer is a FIX participant.

This occurs independently from the fact if the order issuer is an Investro participant or not.

The field assignment within the ExecutionReport follows the description in chapter 7.2.5.1

Submission, Modification and Cancellation of Orders resp. Instructions

**7.2.5.3 Triggering a Stop Order**

The trading system will generate an Execution Report almost identical to the Execution Report responding to an unconditionally accepted Order Cancel/Replace Request. OrdStatus will always be set to “0” (New). In addition, the TriggerIndicator (tag 6489) will be set to “Y”, and a party instance of type <executing system> – see chapter 7.2.3.4 Response Execution Report (Preliminary, Positive) – will be added to the <parties> repeating group. OrigClOrdID (Tag 41) will be set to “[N/A]”. ClOrdID (Tag 11) will reflect the last successfully processed request entered via the FIX interface (if any). Tag 6489 (TriggerIndicator) will be delivered.

Tag	Field Name	RF	R	XEOMI	Comment
<parties> component block, tag 453 will be increased					
448	<executing system> PartyID		M		String Valid values:  XETRA XETRA-2 XONTRO MAX-ONE
447	PartyIDSource		M		Char Will always be set to “D”
452	PartyRole		M		Integer Will be set to 16 = “Executing System”
802	NoPartySubIDs		M		NumInGroup Will be set to “1”
523	PartySubID		M		String Will be set to “[N/A]”
803	PartySubIDType		M		Integer Will be set to “3” (System)
11	ClOrdID		M		String(16) ClOrdID of the previously successful FIX request corresponding to the order or set to “[N/A]”. The value provided by the request will be returned
39	OrdStatus		M		Char Order status Valid values: 0 = “new”
41	OrigClOrdID		M		String(16) Will be set to “[N/A]”

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Tag	Field Name	RF	R	XEOMI	Comment
6489	TriggerIndicator		C	CCCC-	Always set to "Y". "Y" = Trigger Stop Order Will never be present when responding to a Cancel/Replace request

**7.2.5.4 Activation of an EG Order**

If the rule for the activation of an EG-order is fulfilled, then it will be activated by the intermediary.

In this case an Execution Report is transmitted, which is similar to the Execution Report for a modification from any other interface (cf. chapter "Order Submission, Modification and Cancellation").

In this case Tag 6489 (TriggerIndicator) will be delivered in addition:

Tag	Field Name	RF	R	XEOMI	Comments
6489	TriggerIndicator		C	NNCC-	Char  XONTRO and MAX-ONE "A" = activation of an EG-Order

**7.2.5.5 Reset of an Activated EG Order to the Original State "EG"**

An EG order which has been activated can later be reset by the pricing in XONTRO intermediary. Its state will then be reset to the original „EG“.

For this end, an Execution Report is sent which largely conforms to the one sent via another interface (7.2.5.1 Order Submission, Modification and Cancellation).

In this case, Tag 5253 (OrdTypeExt) and 6489 (TriggerIndicator) will be delivered in addition.

Tag	Field Name	RF	R	XEOMI	Comments
5253	OrdTypeExt		C	NNCN-	String  Only XONTRO "E" = EG-Order
6489	TriggerIndicator		C	NNCN-	String  Only XONTRO "B" = Order reset to EG

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**7.2.6 System Generated Order Modifications and Cancellations**

In certain specific situations orders will be modified and cancelled by the relevant trading system:

- Master data modification modification, cancellation
- Suspended trading cancellation
- Ancillary rights modification, cancellation
- EG orders not accepted (XONTRO, MAX-ONE) cancellation
- Order decline (MAX-ONE, Xetra, Xetra Frankfurt 2) cancellation
- Spot price peak because of partial execution (XONTRO) modification, cancellation
- FOK, IOC, Market-to-Limit Orders (Xetra, Xetra Ffm-2) cancellation (remaining nominal amount)
- Input of system administrator (superuser) modification, cancellation

In these cases Execution Reports are also generated. These Reports are similar to Cancel/Replace resp. Cancel Requests, with the following differences:

- An additional entry for PartyRole **executing system** at the <parties> Component Block is generated
- An additional Tag 5862 UpdateReason is created, which includes the reason for the modification or cancellation of the order
- Cancellations due to validity FIX messages include an additional differing OrdStatus "C" ("expired") and ExecType "C" ("expired")

According to the end of day processing, some orders are modified and cancelled by XONTRO. These orders will be transferred to the relevant OMS at the next morning.

No modifications or cancellations of any orders during "Subscription Order Freeze".

Tag	Field Name	RF	R	XEOMI	Comment
<parties> Component Block (tag 453 will be increased)					
448	<executing system> PartyID		M		String Valid values are XETRA XETRA-2 XONTRO MAX-ONE
447	PartyIDSource		M		Char Will be set to = "D"
452	PartyRole		M		Integer Will be set to 16 = "Executing System"
802	NoPartySubIDs		M		NumInGroup Will be set to "1"
523	PartySubID		M		String Will be set to "[N/A]"
803	PartySubIDType		M		Integer Will be set to "3" (by system)
39	OrdStatus		M		Char OrderStatus Will be set to "C" (expired) in case of cancellation due to order validity expiration.

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Tag	Field Name	RF	R	XEOMI	Comment
150	ExecType		M		Char Type of record Will be set to "C" (expired) in case of cancellation due to order validity expiration.
5862	UpdateReason		O	OOOON	String(15) Reason of order modification or deletion by the system  <u>Master data modifications:</u> "SBSL" = Loss of SB/SL ability of securities "MSEG" = Change of market segment "EREO" = Date of redenomination "ENOT" = Suspension of price fixing "MBKS" = Modification of single price quotation flag, smallest tradeable unit, minimum amount or increment "MBVA" = Modification variable trading flag, smallest tradeable unit, minimum amount or increment "KSVA" = Change of single price fixing to continuous price "KSKH" = Change of single price fixing into no trading "VAKS" = Change from continuous price fixing without single price fixing to single price fixing "VAKH" = Change from continuous price fixing without single price fixing to no trading "VKKS" = Change from continuous price fixing with single price fixing to single price fixing "VKVA" = Change from continuous price fixing with single price fixing to continuous price fixing without single price fixing "VKKH" = Change from continuous price fixing with single price fixing to no trading "LHBR" = End of subscription rights trading  <u>Ancillary rights:</u> "EXBR" = Ex subscription rights "EXBA" = Ex bonus shares "EXDI" = Ex dividend "EXAG" = Ex dividend distribution "EXDA" = Ex dividend (with foreign shares) "EXSP" = Division (split) with foreign shares "EXRS" = "Reverse split" (merge) for shares "EXZS" = Ex interest (with redemption) "EXAZ" = Ex compensation payments (with shares) "EXBO" = Ex bonus rights (with shares) "EABC" = Ex various rights "HL" = Comment (order deletion) "HA" = Comment (limit markup) "WKNA" = ISIN change  <u>Miscellaneous events:</u> "SYSV" = Deletion of not accepted EG order "AUSG" = Suspended trading "_Z" = Suspended trading with additional item "cancelled drawing" "XETRABATCH" = Xetra Batch (deletion, order-expiry) "XETRAGENERATED" = deletion remaining amount (FOK, IOC or MTL orders) "SUPERUSER" = Input by superuser "KASSASPITZE" = spot market overhead due to partial execution "ORDEREXPIRED" = MAX-ONE Order decline

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**7.2.7 Component Blocks**

Only the following component blocks defined by FIX version 4.4 message specifications will be used:

- Instrument
- Parties
- Trading Sessions
- Order Attributes
- Value Checks
- Regulatory TradeID

**7.2.7.1 Instrument Component Block <instrument>****Incoming Messages**

Tag	Field Name	RF	R	XEOMI	Comment
55	Symbol	O	M		String <b>Will always be ignored</b>
48	SecurityID	O	M		String ISIN
22	SecurityIDSource	O	M		String Must be set to "4"

**Outgoing Messages**

Tag	Field Name	RF	R	XEOMI	Comment
55	Symbol	O	M		String Will always be set to "[N/A]"
48	SecurityID	O	M		String ISIN
22	SecurityIDSource	O	M		String Will always be set to "4"

The instrument component block will be referred to by <instrument>.

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**7.2.7.2 Party Concept <parties>**

The party component block is used to describe all parties participating in a transaction. For each party a separate repeating group is set up.

The parties component block is referred to by <parties>, the repeating groups by <entering firm>, <executing firm>, <market maker>, <systematic internalizer>, <executing system>, <Client Identification Code>, <Execution within Firm>, <Investment Decision Maker> and <session>, respectively.

**Incoming Messages**

Tag	Field Name	RF	R	XEOMI	Comment
453	NoPartyIDs	O	M		NumInGroup Number of parties concerned Valid values are 1 – 6 The value must correspond to the number of parties (repeating groups) provided.
448	PartyID	O	M		String <b>PartyRole = 1 (Executing Firm)</b> String(4), KVNr of the <b>owner of the order</b> <b>PartyRole=3 (Client Identification Code)</b> String(20), Shortcode. (ESMA RTS24 Field 3) Special values: 1 = AGGR 2 = PNAL <b>PartyRole = 7 (Entering Firm)</b> String(4), KVNr of party/customer <b>PartyRole=12 (Execution within Firm)</b> String(20), Shortcode or algorithm. (ESMA RTS24 Field 5) Special values: 3 = NORE <b>PartyRole = 29 (Intermediary)</b> String(10) integer, INVESTRO sales institution <b>PartyRole = 63 (Systematic Internaliser)</b> String(5), Xetra Member ID <b>PartyRole = 66 (Market Maker)</b> String(4), KVNr of intermediary <b>PartyRole=122 (Investment Decision Maker)</b> String(20), Shortcode or algorithm. (ESMA RTS24 Field 4)
447	PartyIDSource	O	M		Char PartyIDSource=D (KVNr), if PartyRole equal to 1 = "Executing Firm" 7 = "Entering Firm" 29 = "Intermediary" 63 = "Systematic Internaliser" 66 = "Market Maker"  PartyIDSource=P (Shortcode), if PartyRole equal to 3 = "Client Identification Code" 12 = "Execution within Firm" 122 = "Investment Decision Maker"



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Tag	Field Name	RF	R	XEOMI	Comment
452	PartyRole	O	M		Integer Valid values: 1 = "Executing Firm" 3 = "Client Identification Code" 7 = "Entering Firm" 12 = "Execution within Firm" 29 = "Intermediary" 63 = "Systematic Internaliser" 66 = "Market Maker" 122 = "Investment Decision Maker"
2376	PartyIDRoleQualifier	O	O	NNOON	Integer The indication of this qualifiers is only necessary if „PartyID“ represents an algorithm (22) and not a shortcode (default). The differentiation of a shortcode as LEI (23) or natural person (24) ist not necessary and will be ignored. 22 = „Algorithmus“ PartyID as algorithm. Only valid for PartyRoles 12 = "Execution within Firm" 122 = "Investment Decision Maker" 23 = „LEI (Legal Entity Identifier)“ PartyID as Shortcode for LEI Only valid for PartyRole 3 = "Client Identification Code" 24 = „Nat. Person“ PartyID as Shortcode for a natural person Only valid for PartyRole 3 = "Client Identification Code" 12 = "Execution within Firm" 122 = "Investment Decision Maker"

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**Outgoing Messages**

Tag	Field Name	RF	R	XEOMI	Comment
453	NoPartyIDs	O	M		NumInGroup Number of parties concerned Valid values are 1 – 5 The value must correspond to the number of parties (repeating groups) provided.
448	PartyID	O	M		String <b>PartyRole = 1 (Executing Firm)</b> String(4), KVNr of the <b>owner of the order</b> <b>PartyRole = 7 (Entering Firm)</b> String(4), KVNr of party/customer <b>PartyRole = 16 (Executing System)</b> Valid values: "XETRA" "XETRA-2" "XONTRO" "MAX-ONE" "INVESTRO" <b>PartyRole = 29 (Intermediary)</b> String(10) numerisch, Investro-Sales-Institution <b>PartyRole = 55 (Session ID)</b> String(4), KVNr of originator String(5), Xetra MemberID of the originator <b>PartyRole = 63 (Systematic Internaliser)</b> String(5), Xetra MemberID <b>PartyRole = 66 (Market Maker)</b> String(4), KVNr of the intermediary
447	PartyIDSource	O	M		Char Will always be set to "D"
452	PartyRole	O	M		Integer  Valid values:  1 = "Executing Firm" 7 = "Entering Firm" 16 = "Executing system" 55 = "Session ID" 63 = "Systematic Internaliser" 66 = "Market Maker"  "55" will only be used for an order entry/modification via any interface other than FIX. "16" will indicate a message generated by a trading system.
802	NoPartySubIDs	O	C		NumInGroup Will be set to "1" if PartyRole = "55" or "16", or will be missing.
523	PartySubID	O	C		String(11) Will contain the user identifier of the person/role who caused the original action. Only valid if PartyRole is set to "55".
803	PartySubIDType	O	C		Integer Will be set tot "4040" (user identifier), if PartyRole is set to "55". Will be set tot "3" (system), if PartyRole is set to "16"

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**7.2.7.3 Trading Sessions Repeating Group <trading sessions>**

## Incoming Messages

Tag	Field Name	RF	R	XEOMI	Comment
386	NoTradingSessions	O	O	OOOOO	NumInGroup <b>will be ignored</b> Must always be set to "1" If this tag is available, the tags 336 and 625 will follow.
336	TradingSessionID	O	O	OOOOO	String(1) <b>will be ignored</b> Must always be set to "1" mandatory if tag 386 is available mandatory if tag 625 is available
625	TradingSessionSubID	O	O	OOOOO	String mandatory if tag 336 is available  Valid values: Xetra, Xetra Frankfurt 2: 2 = "Opening auction only" 3 = "Main trading" 4 = "Closing auction only" 6 = "Main auction" 100 = "Auction only" 101 = "End-of-day auction" 102 = "Pending for next auction" 103 = "Closing crossing" 104 = "Accept surplus" 105 = "Special auction"  XONTRO: 2 = "Opening auction only" (EK - EK-Order) 6 = "Main auction" (KS - Kassa-Order)  MAX-ONE 6 = "Main auction" (KS - Kassa-Order)  INVESTRO / Vestima: will be ignored  The assignment corresponds to FIX 5.0 definitions.

Instead of Repeating Group <trading sessions> – which always exist with one instance only – the Single Tags TradingSessionID (336) and TradingSessionSubID (625) can be used. Tag NoTradingSessions (386) is not allowed.

The Trading Sessions Repeating Group will be referred to with <trading sessions>.

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**7.2.7.4 Order Attribute Repeating Group <OrderAttributes>**

Only valid for inbound messages

Tag	Field Name	RF	R	XEOMI	Comment
2593	NoOrderAttributes	○	○	NNOON	NumInGroup Number of order attributes. Only the values 1 .. 3 are permitted. The value indicated must match the number of the repeating groups that follow.
2594	OrderAttributeType	○	○	NNOON	Integer Type of attribute. 0 = AGGR (Aggregated Order) The inclusion of this attribute excludes the concurrent inclusion of the party <client identification code> (ESMA RTS 24 Field 3) 1 = PNAL (Pending Allocation) The inclusion of this attribute excludes the concurrent inclusion of the party <client identification code> (ESMA RTS 24 Field 3) 2 = Liquidity provision activity order (ESMA RTS 24 Field 8) Only permitted in NewOrderSingle message. 6 = NORE The inclusion of this attribute excludes the concurrent inclusion of the party <Execution within firm> (ESMA RTS 24 Field 5)
2595	OrderAttributeValue	○	○	NNOON	String(1) Value for OrderAttributeType Y = Yes

**7.2.7.5 Value Checks Repeating Group <ValueChecksGrp>**

Only valid for inbound messages

Tag	Field Name	RF	R	XEOMI	Comment
1868	NoValueChecks	○	○	NNOON	NumInGroup Number of ValueCheck entries contained. Only the value „1“ is permitted.
1869	ValueCheckType	○	○	NNOON	Integer Type of attribute. 1 = Value check for market value permitted as a maximum on the trading venue (ESMA RTS 7 Opt-Out-Flag)
1870	ValueCheckAction	○	○	NNOON	Integer Value for ValueCheckType 0 = no value check 1 = perform value check (Default)

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**7.2.7.6 Regulatory TradeID Repeating Group <RegulatoryTradeIDGrp>**

<u>Tag</u>	<u>Field Name</u>	<u>RE</u>	<u>R</u>	<u>XEOMI</u>	<u>Comments</u>
1907	<u>NoRegulatoryTradeID</u>	<u>0</u>	<u>0</u>		<u>NumInGroup</u> <u>Only „1“ is valid.</u>
1903	<u>RegulatoryTradeID</u>	<u>0</u>	<u>0</u>		<u>String(52)</u> <u>TVTIC (Trading venue transaction identification code)</u> <u>The TVTIC is a concatenation of:</u> <u>Segment MIC (4 digits) + ISIN (12 digits) +</u> <u>Trading day (8 digits) + time of price fixing termination (12 digits)</u>
1906	<u>RegulatoryTradeIDType</u>	<u>0</u>	<u>0</u>		<u>Integer</u> <u>Type of Regulatory TradeID</u> <u>5 = TVTIC (Trading venue transaction identification code)</u>

**7.2.8 Particular Tag Behavior**

Faulty tags of New Order Single Requests are always returned in the Execution Report.

Default values of a New Order Single are taken onto the Execution Report. Optional tags of the Execution Report are only filled if they are used in the request, too.

If an order is sent by an interface other than FIX, in defined cases optional tags can be transferred if they include no significant values. In this case the client must be capable to handle content like 12 = 0 or 526 = " " .

This can occur in case of Cancel/Replace Requests – in the case of less information of an Cancel Reject message.

Multiple blanks are deleted by the BT-FIX Gateway. If a tag consists of blanks only, then only one blank will be left.

Example:

An order will be changed: the text of the order will be adjusted from “dissimilar blank” to “blank”.

This modification is communicated as an ExecutionReport with Tag 58 = " ". For this reason it is obvious that the new order text is blank.

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**7.3 Fund Settlement (INVESTRO / Vestima) – Specificities****7.3.1 Message to Recipient of Contract (INVESTRO “Classic”)**

As a result of positive contracts submissions and cancellations, and in case of contract executions, an “Execution Report” is generated for the OHA.

Contracts submissions and cancellations can also be send via NON-FIX interfaces. This is also true for executions (cf. 7.2.4 Order Execution, 7.2.5 Requests Using Any Other Interface Than FIX), with the following differences:

1. Identification of the message towards the recipient:

Tag 150 (ExecType) = I (Order Status)

In the <parties> Component Block an additional entry for PartyRole **Executing System** with PartyID “INVESTRO” is generated.

Thus, the rule of the bank becomes clear – they are either sender or receiver of the contract.

2. The following fields are not delivered to the recipient:

SecondaryCIOrdID	tag 526	Bank internal order number
Text	tag 58	Text of order
PartyID / PartySubID (FIX 4.4)	tags 448 / 523	ID-KZ of originator (User Identifier)
Source (FIX 4.2)	tag 5177	ID-KZ of originator (User Identifier)
SpreadPctPremium	tag 6584	Selling commission
SpreadPctDiscount	tag 6585	Reinvestment discount in percent
TotalAccruedInterestAmt	tag 6611	Accumulated dividend equivalent earnings
Profit	tag 6893	Mid-way profit
CustomPrice1	tag 7491	Unit offering price

Tag	Field Name	RF	R	XEOMI	Comment
<parties> Component Block (tag 453 will be extended)					
448	<executing system> PartyID		M		String INVESTRO
447	PartyIDSource		M		Char Will always be set to "D"
452	PartyRole		M		Integer Will be set to 16 = "Executing System"
802	NoPartySubIDs		M		NumInGroup Will be set to "1"
523	PartySubID		M		String Will be set to "[N/A]"
803	PartySubIDType		M		Integer Will be set to "3" (system)
150	ExecType		M		Char Type of Report Will be set to "I" (order status)

## **7.3.2 Routing of Instructions to INVESTRO Including Vestima ISINs**

### **7.3.2.1 Rejections in INVESTRO**

Along with the submission of orders or cancellations into Vestima ISINs, these messages are formally verified in INVESTRO.

In case of formal errors (e.g. missing mandatory fields) occurring, these messages are not transferred to Vestima but rejected. (cf. 7.2.1 Order Entry / Submission and 7.2.2 Order resp. Instruction-Cancellation).

### **7.3.2.2 Transfer to Vestima**

Generally, messages in Vestima ISINs are acknowledged temporarily. After the reply from Vestima a final acknowledge (successful or unsuccessful) is sent to the FIX member.

In addition, Vestima sends status changes (provision check) for an order. They are forwarded to the FIX member as provisional messages.

The acknowledge messages mentioned above are converted into Execution Reports (pending messages) with pending reason = 5 (Verification pending).

Further information about the order status can be extracted from the FIX tags 5048 (OrdSubStatus) and 5476 (PrivateReference).

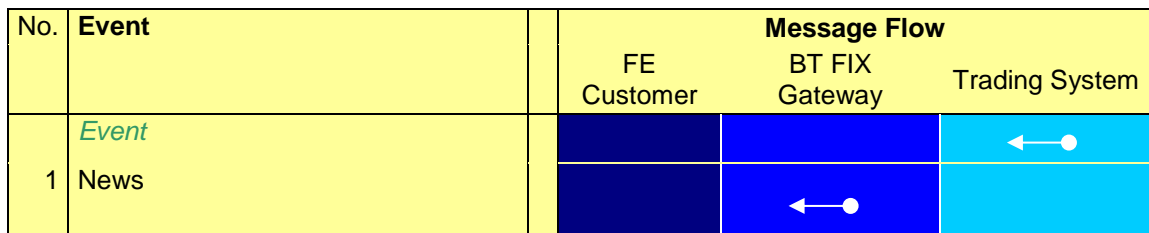
It is possible that a confirmed order (message MT515) may be cancelled by Vestima (MT515 CANCEL). After the cancellation message, another (new) confirmation is sent.

The SWIFT MT515 / MT515 CANCEL messages are converted into Execution Reports, with special values created for the tags 39 (OrdStatus), 150 (ExecType) and 5048 (OrdSubStatus).

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**7.4 Notification of Events****7.4.1 Operations****7.4.2 Component Blocks****News Messages**

Tag	Field Name	RF	R	XEOMI	Comment
<standard message header>		M	M		tag 35 = "B" (MsgType)
<LinesOfTextGrp>		O	M		
<InstrmtGrp>		O	O		
148	Headline		M		String event key - FIXOF Suspension of price fixing resp. "Subscription Order Freeze" - FIXON Withdrawal of price fixing suspension resp. "Subscription Order Freeze" - TRESP Information on extension of the trading hours - TRINT Interruption of the price determination - TRSTA Restart of the price determination - BOINT Interruption of the trading sessions - NBSTA restart of the trading sessions - BOEND, EHEND, XEBAT End of trading session
<routingGrp>		O	M		
6255	EndTime		O	OOOOO	String end of trading hours (event TRESP) Format "HHMM0000"
6516	NewsValidUntil		O	OOOOO	LocalMktDate date until the news is valid
6517	NewsEventDate		O	OOOOO	LocalMktDate date for resp. date from which the news is valid
<standard message trailer>		M	M		



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**7.4.3 NoLinesOfText Repeating Group <LinesOfTextGrp>**

Tag	Field Name	RF	R	XEOMI	Comment
33	LinesOfText		M		NumInGroup Number of lines filled with "1" or "2"
58	Text		M		String 1. line: text for event 2. line optional: " _Z" = Suspended trading with additional item "cancelled drawing" "PO" = Subscription Order Freeze with additional item "Public Offering"

**7.4.4 NoRelatedSym Repeating Group <InstrmtGrp>**

Tag	Field Name	RF	R	XEOMI	Comment
146	NoRelatedSym	O	O		NumInGroup Number of lines filled with "1" If this tag is available, the tags 55, 22 and 48 will follow
55	Symbol	O	C		String available if tag 146 is present Will be set to "[N/A]" by the BT-FIX Gateway
22	SecurityIDSource	O	C		String must be present if tag 146 contains a value Will be set to "4" by the BT-FIX Gateway
48	SecurityID	O	C		String must be present if tag 146 contains a value ISIN

**7.4.5 NoRoutingIDs Repeating Group <RoutingGrp>**

Tag	Field Name	RF	R	XEOMI	Comment
215	NoRoutingIDs	O	O		NumInGroup Valid values are "1", "2" or "3". If this tag is available, then tags 216 and 217 will follow.
216	RoutingType	O	C		Integer Available if tag 215 is present Will be set to "1" by the BT-FIX Gateway.
217	RoutingID	O	C		String Available if tag 215 is present contains - 1st Group-Element always trading system - 2nd Group-Element always trading exchange location - 3rd Group-Element always receiver  Note: If a receiver is available, then the trading system and trading exchange location will be given, too. Their content value may, however, be "[N/A]". If a trading exchange location is available, then the trading system will be given, too. This content may, however, assume the value of "[N/A]".



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**7.5 Trade Functionality****7.5.1 Supported Events**

Scenario	Incoming Message	Outgoing Message	Recipient of Outgoing Message
OTC trade entry	TradeCaptureReport	TradeCaptureReportAck	Originator
OTC trade cancellation	TradeCaptureReport	TradeCaptureReportAck	Originator
OTC trade reversal	TradeCaptureReport	TradeCaptureReportAck	Originator
New MiFID report	TradeCaptureReport	TradeCaptureReportAck	Originator
MiFID report cancellation	TradeCaptureReport	TradeCaptureReportAck	Originator
Trade information (realtime contract notes)	-	TradeCaptureReportSno	Both counterparties (depending on the connections configuration)

In case of an OTC trade entry, cancellation or reversal, the originator receives a confirmation.

In addition, contract notes for the trade are send to both counterparties.

For 3270 dialog or SAKI entries the FIX member gets a FIX message about the generated contract note.

For trades generated out of a price fixing or trade entries, all FIX members affected will get a FIX message about the generated contract note. The messages for the contract notes include information about the affected orders and the so called "half trades".

The transmission of contract note information (TradeCaptureReportSno) depends on the configuration of the member. These will only delivered to FIX members who have been set up for the reception of realtime contract notes.

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**7.5.2 Operations**

Nr.	OTC Requests MiFID Requests	Message Flow		
		FE Customer	BT FIX Gateway	XONTRO
1	Trade Capture Report			
	<i>Confirmation (always final)</i>			
3	Trade Capture Report Ack			

Nr.	SNO Realtime	Message Flow		
		FE Customer	BT FIX Gateway	XONTRO
	Contract note			
1	Trade Capture Report SNO (for counterpart 1)			
2	Trade Capture Report SNO (for counterpart 2)			

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**7.5.3 OTC Trades and MiFID Reports – Requests****7.5.3.1 Request “TradeCaptureReport” – Identification Criteria**

The following FIX tags within the TradeCaptureReport for identification of trade requests will be given:

	<b>6556 BusinessTransactionType</b>	<b>487 TradeReportTransType</b>	<b>856 TradeReportType</b>
OTC trade entry (EnterOTC)	Tag not available	0 (new)	0 (submit)
OTC trade cancellation (DeleteOTC)	Tag not available	1 (cancel)	6 (TradeReportCancel)
OTC trade reversal (ReverseOTC)	Tag not available	4 (reverse)	0 (submit)
New MiFID report (EnterMifid)	1 (TradeAdvice)	0 (new) 2 (replace) Amendment	0 (submit)
MiFID report cancellation (DeleteMifid)	1 (TradeAdvice)	1 (cancel)	6 (TradeReportCancel)

In all cases tag 571 (TradeReportID) is filled with a unique value (Unique identifier of trade capture report). The uniqueness must be ensured by the FIX member. There is no check within the FIX Gateway.

The field TradeReportID in the request message is returned back with the response message.

For cancellations of MiFID reports, and for cancellations as well as reversals of OTC trades, the trade number will be filled in tag 880 (TrdMatchID).

In the following chapter the message format of the cases supported will be described.

Columns “R” and “RF” will indicate if a tag is **M**andatory or **C**onditionally mandatory. The columns EnterOTC to DeleteMifid contain information about **M**andatory/**O**ptional/**C**onditional/**N**ot allowed/**I**gnored.

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**7.5.3.2 Request "TradeCaptureReport" – Message Data**

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
<standard message header>		M	M						Tag 35 = "AE" (MsgType)
30	LastMkt	O	M						Stock Exchange Location MIC Code
31	LastPx	M	M						Price, Float(10,4)
32	LastQty	M	M						Quantity, Float(13,3)
60	TransactTime	M	M						UTCTimestamp
64	SettlDate	O		C	I	I	I	I	LocalMktDate Date of fixed value Always used in combination with tag 5053
75	TradeDate	M	M						LocalMktDate Trade date (AS) Date of trade having been transacted
487	TradeReportTransType	O	M						Integer 0 = new           EnterOTC EnterMIFID 1 = cancel       DeleteOTC DeleteMIFID 2 = replace      EnterMIFID (amendment) 4 = reverse      ReverseOTC
570	PreviouslyReported	M	M	C	C	C	C	C	Boolean If Tag 487 = new (0), then Tag 570 = N, otherwise = Y N =   EnterOTC EnterMIFID Y =   ReverseOTC EnterMIFID (amendment) DeleteOTC DeleteMIFID
571	TradeReportID	M	M						String(16) Unique Identifier of trade, assigned by the FIX Client. Not checked by the BT FIX Gateway
572	TradeReportRefID	O	O	N	M	M	N	M	String(16) Key of a trade related task, assigned by the FIX Client
818	SecondaryTradeReportID	O	O	O	I	I	O	I	String(13) bank internal OTC number, assigned by the FIX Client. Not checked by the BT FIX Gateway
880	TrdMatchID	O	O	N	M	M	N	M	String(16) Original trade number

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Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
856	TradeReportType	O	M						Integer 0 (submit)  6 = TradeReportCancel  EnterOTC ReverseOTC EnterMiFID DeleteOTC DeleteMiFID
	<instrument>	M	M						
	<TrdRegTimestamps>	O		O	I	I	O	I	Deviating trade contraction date (code "AA")
5053	TradeType2	O		C	I	I	I	I	Integer Identification code of fixed value date 1 (DVP) = FZ Always used in combination with tag 64
5179	TradeTime	O		O	I	I	O	I	String Trade time (hhmmss)  <u>EnterOTC / EnterMiFID</u> The current trade entry time is used as default.
5681	ExchangeTradeType	O		C	I	I	I	I	Char Identification issue of securities = "1" In combination with tag 9473, only 1 = AC is allowed.
6556	BusinessTransactionType	O	O	N	N	N	M	M	String 1 = TradeAdvice
5458	MDDelayed	O	O	I	I	I	O	I	Boolean Delay-Indicator
7017	VolumeIndicator	O	O	I	I	I	M	I	Integer Quotation unit 1 = "unit", 2 = "percentage", 3 = "per thousand", 4 = "scores", 9 = "other"
7566	TimezoneOffset	O	O	I	I	I	M	I	signed Integer Difference between UTC Time Stamp and actual (local) trade time.
7567	ReportedPxDiff	O	O	I	I	I	O	I	Boolean Deviant price indicator
7568	ReportedPxReason	O	O	I	I	I	O	I	Char Negotiated price indicator "N" = negotiated Trade
7680	OTCInd	O	O	O	I	I	I	I	Integer OTC (Off Exchange order) indicator 0 = On-exchange 1 = Off-exchange (default)
	<TrdCaptRptSideGrp>	M	M						
	<standard message trailer>	M	M						

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**7.5.3.3 Instrument Component Block <instrument>**

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
55	Symbol	O	M						String Ticker symbol This tag will be ignored by the BT FIX Gateway.
48	SecurityID	M	M						String ISIN
22	SecurityIDSource	M	M						String Always set to "4"

The instrument component block is referenced with <instrument>.

**7.5.3.4 NoTrdRegTimestamps Repetition Group <TrdRegTimestamps>**

The "TrdRegTimestamps" component block contains the Repeating Group NoTrdRegTimestamps.

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
768	NoTrdRegTimestamps	O	O	O	I	I	O	I	NumInGroup Valid value "1" If available then tags 769 and 770 will follow.
769	TrdRegTimestamp	O	C	C	I	I	C	I	UTCTimestamp Following tag 768, if Tag 768 is available. This field contains the deviant trade date resp. date of MiFID reporting.  Enter-OTC Permitted are off-exchange days in past (max. 90 days). If the field is not filled, the current exchange day is used.  Enter- MiFID Permitted are calendar days. If the field is not filled, then the MiFID report will contain the actual trading day.
770	TrdRegTimestampType	O	C	C	I	I	C	I	Integer Available if tag 768 is present Valid values 1 = "Execution Time"



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**7.5.3.5 NoTransactionCosts Repeating Group <courtage>**

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
9471	NoTransactionCosts	O	O	O	I	I	I	I	NumInGroup Valid value = "1" If available, then tag 9473 will follow; possibly tag 9476 will follow.
9473	TransactionCostCode	O	O	C	I	I	I	I	Char Available if tag 9471 is present. Valid values: 1 = AC (different brokerages fee) 2 = FC (free of brokerage fee) 3 = FR (free of any fees) 4 = HC (half of brokerage fee) In combination with tag 5681, only "1" = AC is valid. In combination with tag 12, only "3" = FR is valid.
9476	TransactionCostAmt	O	O	C	I	I	I	I	Float(9,2) Amount of brokerage fees Available if tag 9473 contains "1" = AC.

**7.5.3.6 NoSides Repeating Group <TrdCaptRptSideGrp>**

The "TrdCaptRptSideGrp" component block contains Repeating Group NoSides, which contains Repeating Groups NoTransactionCosts and NoPartyIDs.

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
552	NoSides	M	M	2	1	1	1	1	NumInGroup For EnterOTC: Valid value = "2" For other requests: Valid value = "1"  Tag 54 will follow (Side).
<Side 1>		M	M						<Side 1> trade details of the originator
<Side 2>		O	O	M	N	N	N	N	<Side 2> trade details of the counterparty

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## &lt;Side1&gt;

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
54	Side	M	M						Char Side of trade 1 = Buy 2 = Sell
37	OrderID	M	M						String Will be set to "[N/A]"
<parties>		O	M						
453	NoPartyIDs	O	M						NumInGroup Valid values are 1 – 4.
<entering firm>		O	M						
<executing firm>		O	O	O	O	O	O	O	
<report originator>		O	O	N	N	N	M	N	
<execution venue>		O	O	N	N	N	M	N	
end <parties>		O	M						
12	Commission	O	O	O	I	I	I	I	Float(9,2) Commission Not allowed for short-term financing treasury bonds ("Finanzierungsschaetze").
15	Currency	O	O	M	I	I	M	I	Currency Currency of price fixing This tag will be ignored for EnterOTC.
58	Text	O	O	O	I	I	I	I	String(30) Arbitrary text
155	SettlCurrFxRate	O	O	C	I	I	I	I	Float(10,5) Currency exchange rate of trade Only valid with tag 156
156	SettlCurrFxRateCalc	O	O	C	I	I	I	I	Char D = divide Only valid with tag 155
6584	SpreadPctPremium	O	O	O	I	I	I	I	Float(5,3) Selling commission in percentage values Must be filled for short-term financing treasury bonds (Finanzierungsschaetze). Otherwise only allowed for the issue of securities.
6586	CashOffset	O	O	O	I	I	I	I	Float(9,2) Reinvestment discount in percent For investment trust certificates only.
<courtage>		O	O	O	I	I	I	I	
9596	ClientFreeField1	O	O	C	I	I	I	I	String Provision Float(10,3) > 0 Only valid with tag 9597 If tag 9597 = "PM" then value <= 99,999 If tag 9597 = "PD" then value <= 9999999,990 (3rd decimal digit = 0)

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Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
9597	ClientFreeField2	O	O	C	I	I	I	I	String(2) Key for provision Only valid with tag 9596 Valid values: PD = "Amount in Euro" PM = "per mille of market value"

**<Side2>**

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
54	Side	M	M	M	N	N	N	N	Char Side of trade for counterpart 1 = Buy 2 = Sell
37	OrderID	M	M	M	N	N	N	N	String Will be set to "[N/A]"
	<parties>	O	O						
453	NoPartyIDs	O	O						NumInGroup Valid value = "1"
	<contra firm>	O	O	M	N	N	N	N	
	end <parties>	O	M						

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**7.5.3.7 Party Concept <parties>**

The “parties” component block is used for the specification of all members of an operation.

The TradeCaptureReport for FIX 4.2 is an user defined message. The message structure is identical to the TradeCaptureReport of FIX 4.4. If a FIX 4.2 member obtains trade messages, too, then they must consider the NoPartyIDs Repeating Group.

Tag	Field Name	RF	R	Comments
453	NoPartyIDs	O	M	NumInGroup Number of involved entities Valid values are 1 – 4. The value used must conform to the numbers of the following Repeating Groups. Tags following are 448, 447, 452.
448	PartyID	O	M	String PartyRole = 1 (Executing Firm) String(4), KVNr of the owner <b>originator</b> PartyRole = 7 (Entering Firm) String(4), KVNr of the party/customer PartyRole = 17 (Contra Firm) String(4), KVNr of the counterparty PartyRole = 62 (Report Originator) String(11), Code for the identification of the reporting institution PartyRole = 73 (Execution Venue) String(12)  Information about the features of a reported trade: <ul style="list-style-type: none"> <li>• OTC-trade</li> <li>• internalised trade or</li> <li>• used platform for the trade (if used)</li> <li>• character String "OTC" for OTC trades</li> <li>• character String "SI" for systematic internaliser</li> </ul> Identification of the trading platform used: <ul style="list-style-type: none"> <li>• 12-digit starting with "B" (ISO 9662): BIC</li> <li>• 5 - digit starting with "M" (ISO 10383): MIC</li> <li>• 11-digit starting with "I" (ISO 16327): IBEI</li> </ul>
447	PartyIDSource	O	M	Char Valid value = "D" only
452	PartyRole	O	M	Integer Valid values: 1 = "Executing Firm" 7 = "Entering Firm" 17 = "Counterparty Firm" 62 = "Report Originator" 73 = "Execution Venue"

The parties component block will be referred to as <parties>, the repeating groups as <entering firm>, <executing firm>, <contra firm>, <report originator>, <execution venue>.

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**7.5.4 OTC Trades and MiFID Reports – Responses****7.5.4.1 Response “TradeCaptureReportAck” – Identification Criteria**

The following FIX tags within the TradeCaptureReportAck serve as an identification of trade responses.

**TradeCaptureReportAck (confirmation)**

	<b>6556</b> Business TransactionType	<b>487</b> TradeReport TransType	<b>856</b> TradeReportType	<b>150</b> ExecType
OTC trade entry	Tag not available	0 (new)	0 (submit)	0 (new)
OTC trade cancellation	Tag not available	1 (cancel)	6 (TradeReportCancel)	4 (cancelled)
OTC trade reversal	Tag not available	4 (reverse)	0 (submit)	0 (new)
New MiFID report	1 (TradeAdvice)	0 (new)	0 (submit)	0 (new)
MiFID report cancellation	1 (TradeAdvice)	1 (cancel)	6 (TradeReportCancel)	4 (cancelled)

In all cases tag 571 (TradeReportID) and tag 572 (TradeReportRefID) are filled with the content of the request message.

Tag 880 (TrdMatchID) contains the trade entry (OTC, MiFID) generated trade number resp. report number. In case of a trade reversal the trade number of the newly generated trade is returned.

For reversals, tag 6555 (OrigTrdMatchID) is filled with the trade number of the request message (tag 880).

For reversals, both trade numbers are provided:

- tag 880 (TrdMatchID) new trade number
- tag 6555 (OrigTrdMatchID) old trade number

**TradeCaptureReportAck (Negative Confirmation)**

The field assignment will have the same content as with a positive confirmation, but tag 150 (ExecType) = 8 (rejected).

In all cases tag 571 (TradeReportID) and tag 572 (TradeReportRefID) are filled with the content of the request message.

For reversals tag 6555 (OrigTrdMatchID) is filled with the trade number of the request message (tag 880). For all other requests the trade number of the request-message in tag 880 is used.

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**7.5.4.2 Response “TradeCaptureReportAck” – Message Data**

Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMiFid	DeleteMiFid	Comments
	<standard message header>	M	M						Tag 35 = “AR” (MsgType)
	<instrument>	M	M						
30	LastMkt	O	M						Exchange location MIC Code Used by the FIX Client. Similar to the FIX 5.0 definition of TradeCaptureReportAck.
58	Text	O	C	C	C	C	C	C	String Error text of trading system Relates to tags 751, 5555, 9803.
60	TransactTime	M							UTCTimestamp
150	ExecType	M	M						Char Type of report: 0 = “New”, when successful EnterOTC ReverseOTC EnterMiFid, 4 = “Cancelled”, when successful DeleteOTC DeleteMiFid 8 = “ Rejected”, when not successful
487	TradeReportTransType	O	M						Integer 0 = “new”, in answer to EnterOTC EnterMiFID 1 = “cancel”, in answer to DeleteOTC DeleteMiFID 2 = “replace”, in answer to EnterMiFID 4 = “reverse”, in answer to ReverseOTC
571	TradeReportID	M	M						String(16) Unique identifier of trade which is assigned by the FIX client. String(16) Unique identifier of trade, assigned by FIX Client. Not checked by the BT FIX Gateway.
572	TradeReportRefID	O	O	N	M	M	N	M	String(16) Unique identifier for trade which is assigned by the FIX client. Not checked by the BT FIX Gateway.
751	TradeReportRejectReason	O	O	O	O	O	O	O	Integer Reason for Rejection Only if tag 150 = “8”, then set to 99 = “Other” Combined with tags 58, 5555, 9803

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Tag	Field Name	RF	R	EnterOTC	DeleteOTC	ReverseOTC	EnterMifid	DeleteMifid	Comments
818	SecondaryTradeReportID	O	O	O	-	-	O	-	String(13) Bank internal OTC number which is assigned by the FIX client. Not checked by the BT FIX Gateway.
856	TradeReportType	O	M						Integer 0 = "submit", in answer to EnterOTC ReverseOTC EnterMiFID 6 = "TradeReportCancel", in answer to DeleteOTC DeleteMiFID
880	TrdMatchID	O	M						String(16) Trade number In case of a positive answer: Unique identifier for trade which is assigned by the trade system. In case of a negative answer: "[N/A]".
5555	ReturnCode	O	C	C	C	C	C	C	Integer Error code (e.g. 3730) Related to tags 58, 751, 9803
6555	OrigTrdMatchID	O	O	-	-	M	-	-	String(16) Old trade number used by the FIX client's request as TrdMatchID.
6556	BusinessTransactionType	O	O	N	N	N	M	M	String 1 = TradeAdvice
9591	PriceCheckingFlag	O	O	-	-	-	O	-	Integer Indicator for price alert. 2 = severe (PriceAlert)
9803	TradingSystemID	O	C	C	C	C	C	C	Integer Identification of the system which generated the error code. Relates to tags 58, 751, 5555
<standard message trailer>		M	M						

**7.5.4.3 Instrument Component Block <instrument>**

Tag	Field Name	RF	R	Comments
22	SecurityIDSource	O	M	String Will always be set to "4"
48	SecurityID	O	M	String ISIN Format
55	Symbol	O	M	String Will always be set to "[N/A]"

### 7.5.5 Realtime Contract Notes

The contract notes are transferred with a user defined message "TradeCaptureReportSno" (MsgType "USN").

Likewise, the FIX 4.4 defined TradeCaptureReport (MsgType AE), but without any restriction for tag 552 (NoSides). In FIX 4.4 and FIX 5.0 the only values valid are "1" and "2". For the new message "TradeCaptureReportSno" for tag 552 (NoSides), values  $\geq$  "2" are possible.

For one given contract note more than one message can be sent.

Every "TradeCaptureReportSno" can include up to max. 15 order references.

The order references are transferred as additional "Sides" within the repeating group "NoSides" (tag 552).

The number of "TradeCaptureReportSno" messages for one contract note depends on the number of order references. For 1 to 15 order references, one message will send. For more than 15 order references another message with max. 15 additional order references will be send.

Order references are generated when the trade originated from an order, and when the member is configured for receiving order numbers. This is adjustable by the member configuration. Depending from the configuration, either the DWZ number or the bank internal order number will be delivered.

This rule is valid for the manual input of subscription rights, too.

The last message for a contract note is marked with "N" in tag 9954 (NextMsgFlag). All previous messages are marked with "Y" (if available).

All associated messages for a contract note are delivered one after the other (no other message in between).

Different messages for one contract note are only differing by the order reference. The general data (counterpart, business data...) will be delivered with each message (redundantly). Tag 880 (TrdMatchID) contains the trade number.

In each message, for tag 571 (TradeReportID) a unique value will be inserted by XONTRO.

The logic operation of the associated messages are formed by trade number, transaction type and record type. These combinations are provided in every "TradeCaptureReportSno" on tag 880 (TrdMatchID) and 54 (Side) as well as 829 (TrdSubType).

Tag 6732 (DealerNote) will be delivered only once in the first message.

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**7.5.5.1 Trade Information "TradeCaptureReportSno"**

Tag	Field Name	RF	R	Comments
	<standard message header>	M		Tag 35 = "USN" (MsgType)
	<instrument>	M		
30	LastMkt	O	M	Exchange location MIC Code
31	LastPx	M		Price, Float(10,4) rate
32	LastQty	M		Quantity, Float(13,3) Nominal value
75	TradeDate	M		LocalMktDate Trade date (possibly deviant trade date)
60	TransactTime	M		UTCTimestamp
64	SettlDate	O	C	LocalMktDate Fixed value date Always used in combination with tag 5053.
283	LocationID	O	M	String Exchange trading place of registration. Is provided as FIX Data Type Exchange_  <u>XONTRO-Exchange</u> "XBER" = Berlin "XMUN" = Muenchen "XINV" = Investro "XDUS" = Duesseldorf "XFRA" = Frankfurt "XHAM" = Hamburg "XHAN" = Hanover "XETR" = Xetra "XSTU" = Stuttgart <del>"XQTS" = Quotrix</del>  <u>Non-XONTRO-Exchange</u> "BAAD" = Unterschleißheim - Baader Bank "BMTF" = London - Bloomberg Trading Facility "BTFE" = Amsterdam - Bloomberg Trading Facility "CATS" = Stuttgart - cats "EUWA" = Stuttgart - EUWAX AG "HAML" = Hamburg - Hanseatische Wertpapierbörse Hamburg - Lang & Schwarz Exchange "LSSI" = Düsseldorf - Lang & Schwarz - Wertpapierhandel "MAEL" = London - MarketAxess Europe "TGAT" = Berlin - Tradegate Exchange "TQEX" = Amsterdam - Turquoise Europe "TREU" = London - Tradeweb Europe "TRQX" = London - Turquoise "XEQT" = Berlin - Börse Berlin Equiduct Trading "XMUN" = München - Börse München - gettex "XQTX" = Düsseldorf - Börse Düsseldorf - Quotrix "XSTF" = Stuttgart - Baden-Württembergische Wertpapierbörse - <u>Technical Platform 2</u> "XSTU" = Stuttgart - Baden-Württembergische Wertpapierbörse
487	TradeReportTransType	O	M	Integer 0 = new
570	PreviouslyReported	M	M	Boolean N = no
571	TradeReportID	M	M	String(16) Unique identifier, delivered by XONTRO

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Tag	Field Name	RF	R	Comments
	<TrdRegTimestamps>	O		- date of transaction + differing time of transaction (AU) If a differing date of transaction (AA) was used then this date will be used as date of transaction. Otherwise the date of transaction is always like tag 75 (trade date) - input time
820	TradeLinkID	O	O	String(16) "Wegen" trade number
828	TrdType	O	O	Integer OTC Post-trade indicator Indicator for type of transaction according to ESMA RTS 22 Field 63. 9001 = ACTX (Agency cross transaction) 9002 = CANC (Cancellation) 9101 = ACTX CANC (Agency cross transaction and Cancellation)
829	TrdSubType	O	M	Integer record type See chapter 14 Appendix G: Possible Values Tag 829 TrdSubType (Record Type) e.g. 9012 = "Buy – direct trade"
856	TradeReportType	O	M	Integer 0 = submit
880	TrdMatchID	O	O	String(16) Trade number
1125	OrigTradeDate	O	O	LocalMktDate Date of the original trade (in case of forwarding/closing <i>Aufgaben</i> , i.e. pending trades)
1126	OrigTradeID	O	O	String(16) Original trade number (in case of forwarding/closing <i>Aufgaben and reversal</i> )
	<RegulatoryTradeIDGrp>	O	O	TVTIC (Trading venue transaction identification code)
5053	TradeType2	O	C	Integer indicator for fixed value date 1 (DVP) = FZ 7 (When Issued) = FE Always used in combination with tag 64
5494	LastTrader	O	O	Integer Original intermediary (in case of forwarding/closing <i>Aufgaben</i> )
5665	MKTXPriceDiff	O	O	Float(15,2) Price difference If negative, then the intermediary transfers the money, otherwise, he/she charges it.
6034	ConcessionAmt	O	O	Float(9,2) Bonus differential amount If negative, then the intermediary transfers the money, otherwise the intermediary charges the money
6475	ClientIndicator	O	O	Char Y = "IW-trade"

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Tag	Field Name	RF	R	Comments
6732	DealerNote	O	O	String(350) different content of SAKI-Fields separated by “\”s. All relevant tags of a trade are defined in the TradeCaptureReportSno. The new tag 6732 includes the additional data content of the SAKI SNO Message respectively by the reason of additional requirements.  Label delivery release (valid from 03.06.2013 always space)\ Different counterparty price \ Indicator for deviant trade date \ Type of security \ Type of custody \ Coupon date \ Constant ‘APMT’ \ Currency code of contract price \ Currency code of market value \ Currency code of price difference \ Currency code of interest accrued \ Flag brokerage \ Flag fees \ Indicator for reinvestment discount \ Indicator for bonus \ Indicator for bonus difference \ Indicator for commission \ Currency code of brokerage \ Currency code of fees \ Currency code of reinvestment discount \ Currency code of bonus \ Currency code of bonus difference \ Currency code of commission \ Indicator for reinvestment discount \ Indicator for bonus \ Bonus key \ Indicator for bonus difference \ Indicator for order reference \ Entering Party-ID \  Formats and values see Appendix C: User Defined Tags
7017	VolumIndicator	O	O	Integer Unit of security quotation 1 = unit quotation, 2 = percentage quotation, 3 = per thousand quotation
7680	OTCInd	O	M	Integer OTC (Off Exchange) indicator 0 = on-exchange trade 1 = off-exchange trade
9954	NextMsgFlag	O	M	Boolean Y = (more) records to follow will be delivered N = no (more) following records
9807	RegFeeFlag	O	O	Char Amount of brokerage fees from the respective brokerage fee scales. Please note that contract notes having been created by a nominal distribution routine are not allocated a key for brokerage fees, since in these cases the original nominal may have been changed.
9893	DiscountRate	O	O	Float(9,7) Discount amount (only for short term financing treasury bonds – <i>Finanzierungsschaetze</i> )
	<SnoRealtimeSideGrp>	M		
	<standard message trailer>	M	M	

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**7.5.5.2 Instrument Component Block <instrument>**

The “instrument” component block contains the repeating group NoSecAltID.

Tag	Field Name	RF	R	Comments
55	Symbol	O	M	String Ticker symbol Will be set to “[N/A]” by the BT-FIX Gateway
48	SecurityID	O	M	String ISIN format
22	SecurityIDSource	O	M	String Will be set to “4” by the BT-FIX Gateway
223	CouponRate	O	O	Float(13,9) Interest rate
228	Factor	O	C	Float(10,9) Pool factor/conversion factor Will always be used together with tag 691
240	RedemptionDate	O	O	LocalMktDate Last redemption date (last maturity)
<SecAltIDGrp>		O	O	
691	Pool	O	C	String Indicator for tag 228. 1 = PF (pool factor) 2 = FS (Public-Bonds, municipal) 3 = IK (index coefficient)
6611	TotalAccruedInterestAmt	O	O	Float(17,8) Accumulated dividend equivalent earnings  The accumulated dividend equivalent earnings must be deposited in WSS, or, if accumulated dividend equivalent earnings, only in an INVESTRO trade entry.  In case of Vestima trades, no value is assigned to this field.
6893	Profit	O	O	Float(15,8) Mid-way profit  A value will be allocated to the field whenever a mid-way profit is contained in WSS, or in those cases where a mid-way profit has been entered in an INVESTRO trade entry.  In case of Vestima trades, no value is assigned to this field.
7491	CustomPrice1	O	O	Float(15,8) Initial offering price  A value will be allocated to the field in case buy orders were marked for reinvestment price or redemption price, or in those cases where the initial offering price has been entered in an INVESTRO trade entry (short code “AP”).  In case of Vestima trades, no value is assigned to this field.

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**7.5.5.3 NoSecAltID Repeating Group <SecAltIDGrp>**

The SecAltIDGrp component block contains the repeating group NoSecAltID.

Tag	Field Name	RF	R	Comments
454	NoSecAltID	O	O	NumInGroup Will always be set to "1", "2" or "3". If present, tags 455 and 456 must follow immediately.
455	SecurityAltID	O	C	String Ticker symbol WKN ISIN Available, if tag 454 is present
456	SecurityAltIDSource	O	C	String Will be set to "8" = "Ticker symbol" "B" = "Security" (WKN) "4" = "ISIN" by the BT-FIX Gateway Available if tag 454 is present

**7.5.5.4 NoTrdRegTimestamps Repeating Group <TrdRegTimestamps>**

The "TrdRegTimestamps" component block contains the repeating group NoTrdRegTimestamps.

Tag	Field Name	RF	R	Comments
768	NoTrdRegTimestamps	O	O	NumInGroup Valid values are "1" or "2". If present, tags 769 and 770 must follow immediately.
769	TrdRegTimestamp	O	C	UTCTimestamp [microseconds YYYYMMDD-HH:MM:SS.sssss] Available if tag 768 is present.
770	TrdRegTimestampType	O	C	Integer Must be present if tag 768 has a value. Valid values 1 = "Execution Time" 2 = "Time In"

**7.5.5.5 NoMiscFees Repeating Group <gebuehren>**

The "MiscFeesGrp" component block contains repeating group NoMiscFees.

Tag	Field Name	RF	R	Comments
136	NoMiscFees	O	O	NumInGroup Valid value "1" If present, tags 137, 138 and 139 must follow immediately.
137	MiscFeeAmt	O	C	Float(9,2) Fees, difference between settlement amount and market value. In case no fees were calculated, the field contains a value of 0. Available if tag 136 is present.
138	MiscFeeCurr	O	C	Currency Available, if tag 136 is present Currency code for fees
139	MiscFeeType	O	C	String "7" = Other

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**7.5.5.6 NoTransactionCosts Repeating Group <courtage>**

Tag	Field Name	RF	R	Comments
9471	NoTransactionCosts	O	O	NumInGroup Valid value = "1" If present, tag 9473 and when indicated 9476 follow immediately.
9473	TransactionCostCode	O	C	Char Available if tag 9471 is present. Valid values: 0 = brokerage fee 1 = AC (different brokerage fee in Euro) 2 = FC (free of brokerage fee) 3 = FR (free of any fees) 4 = HC (half the brokerage fee) 5 = PC (percentage brokerage fee in case of trades mediated by brokers)
9476	TransactionCostAmt	O	C	Float(9,2) Brokerage fee Available if tag 9471 is present

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**7.5.5.7 NoSides Repeating Group <SnoRealtimeSideGrp>**

The Repeating Group NoSides contains Repeating Groups NoTransactionCosts, NoMiscFees and NoPartyIDs.

Tag	Field Name	RF	R	Comments
552	NoSides	M	M	NumInGroup Only values ≥ "2" are possible Tag 54 (Side) will follow
<Side 1>		M	M	<Side 1> trade details of the originator
<Side 2>		O	O	<Side 2> trade details of the counterpart
<Side #>		O	O	<Side 3> to <Side n> for order references

**<Side1>**

Tag	Field Name	RF	R	Comments
54	Side	M	M	Char Side of trade for <entering firm> 1 = Buy 2 = Sell
37	OrderID	M	M	String Will always be set to "[N/A]"
<parties>		O	M	
453	NoPartyIDs	O	M	NumInGroup Valid values "1" to "6"
<customer account>		O	M	Data which specify the recipient of the contract notes
<executing firm>		O	O	Data which specify the originator
<buyerseller>		O	O	Data which specify buyer / seller
<order origination trader>		O	O	Trader ID
<clearing firm>		O	O	KVNR of clearer
<clearing organization>		O	O	KVNr of the recipient of the trade confirmations in the case of internal settlement to be applied. KVNr of the recipient of the trade confirmations in the case of aggregated settlement to be applied
end <parties>		O	M	
1	Account	O	O	String(2), Based on account type code and account type number.  The 'indicator proprietary trading' of the recipient of the trade confirmation is shown. Exceptions are contract notes for the intermediary's proprietary trading. In such cases, the originator's 'indicator own-account trading' will be shown instead of the 'indicator own-account trading' of the recipient of the trade confirmation.  In case of interbank trades, the indicator field will remain blank.  Possible values: EA – intermediary's proprietary trading in case of <i>Aufgaben</i> closing generated by the system EE – intermediary's own-account trading P1 – bank's own-account trading A1 – bank's customer (agent) business

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Tag	Field Name	RF	R	Comments
12	Commission	O	O	Float(9,2) Charges This field contains the description of charges. For "Finanzierungsschätze", no charges are permitted.
58	Text	O	O	String(35) Arbitrary text, if necessary with prefix included: "BOSS/", In case of trades coming from XONTRO order "INVESTRO/", In case of INVESTRO trades "EUFO/" In case of EUFO trades "MAX/" In case of MAX-ONE trades "FIX/" In case of OTC-trades inserted by FIX "FIXF/" In case of OTC-trades inserted by another FIX counter part
119	SettlCurrAmt	O	O	Amt, Float(12,2) Actual amount
120	SettlCurrency	O	O	Currency Currency of actual amount
155	SettlCurrFxRate	O	C	Float(10,5) Foreign exchange rate of trade. Always used in combination with tag 156
156	SettlCurrFxRateCalc	O	C	Char D = divide Always used in combination with tag 155
157	NumDaysIntegererest	O	C	Integer Days of interest, if tag 5427 = I Days of discount, if tag 5427 = D
159	AccruedIntegererestAmt	O	C	Amt, Float(12,2) Amount of interest, if tag 5427 = I Amount of discount, if Tag 5427 = D
381	GrossTradeAmount	O	O	Amt, Float(15,2) Market value
5427	IntegerAttribType	O	C	Char Attribute if tag 157 and 159 will be delivered I = Interest D = Discount
6583	SpreadPremium	O	O	Float(9,2) Bonus amount
6584	SpreadPctPremium	O	O	Float(5,3) Selling commission Selling commission in percentage values for the calculation of the commission.
6585	SpreadPctDiscount	O	O	Float(10,7) Reinvestment discount in percentage
6586	CashOffset	O	O	Float(9,2) Reinvestment discount in percent
7493	CustomRate1	O	O	Float(4,2) selling markup
9596	ClientFreeField1	O	O	String Fee Only Float(10,3) > 0 will be accepted Always used in combination with tag 9597. Tag 9597 must not be set to "PS" If tag 9597 is set to "PM", the value must not exceed 99,999 If tag 9597 is set to "PD", the value must not exceed 9999999,990 (last decimal place = 0)



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Tag	Field Name	RF	R	Comments
9597	ClientFreeField2	O	O	String(2) Fee code Always used in combination with tag 9596 Valid values: PD = "Amount in Euro" PM = "per mille" PS = "Standard"
9938	ClearingHandlingType	O	O	Char Character indicating internal or aggregated settlement. Flagged trades are not delivered to Clearstream. "I" = internal settlement "A" = aggregated settlement  Contract note out of trading. Flagged trades are not delivered to Clearstream. "B" = aggregated settlement
	<gebühren>	O	O	
	<courtage>	O	O	

**<Side2>**

Tag	Field Name	RF	R	Comments
54	Side	M	M	Char Side of trade for "contra firm" 1 = Buy 2 = Sell
37	OrderID	M	M	String Will be set to "[N/A]"
	<parties>	O	M	
453	NoPartyIDs	O	M	NumInGroup Valid values are "2" .. "7"
	<contra firm>	O	M	Data describing the counterparty
	<contra firm>	O	O	LEI (Legal Entity Identifier) of counterpart.
	<buyerseller>	O	M	Data describing the buyer / seller If tag 54 (Side) from <Side2> = sell, then seller If tag 54 (Side) from <Side2> = buy, then buyer
	<settlement location>	O	O	PSET, Vestima BIC of Place of Settlement.
	<agent>	O	O	DEAG / REAG, Vestima BIC of delivering / receiving agent If tag 54 (Side) from <Side2> = sell, then DEAG If tag 54 (Side) from <Side2> = buy, then REAG
	<custodian>	O	O	DECU / RECU, Vestima BIC of delivering / receiving custodian If tag 54 (Side) from <Side2> = sell, then DECU If tag 54 (Side) from <Side2> = buy, then RECU
	<buyerseller>	O	O	BUY / SELL, Vestima BIC of buyer / seller If tag 54 (Side) from <Side2> = sell, then SELL If tag 54 (Side) from <Side2> = buy, then BUY
	end <parties>	O	M	

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**<Side 3 through n>**

Tag	Field Name	RF	R	Comments
54	Side	M	M	Char Side of trade for <entering firm> 1 = Buy 2 = Sell
37	OrderID	M	C	String(16) System order number or bank internal order number (SecondaryClOrdID) or bank internal OTC number (SecondaryTradeReportID) or manual trade reference (initiated with MAN) together with tag 6141.
119	SettlCurrAmt	O	C	Float(10,4) proportional settlement amount
6141	TradeQty	O	C	Qty, Float(12,3) Total quantity filled together with tag 37 (OrderID)

**7.5.5.8 Party Concept <parties>**

The party component block will be used to describe all parties participating in a transaction.

The TradeCaptureReportSno for FIX 4.2 and FIX 4.4 is an user defined message. If a FIX 4.2 – member wants to receive trade messages, then they must be able to process the NoPartyIDs repeating group.

The parties component block will be referred to by <parties>. The repeating groups will be referred to by <executing firm>, <clearing firm>, <settlement location>, <order origination trader>, <contra firm>, <clearing organization>, <customer account>, <buyer seller>, <custodian>, <agent>, <report originator>, <execution venue>.

**Outgoing Messages**

Tag	Field Name	RF	R	XEOMI	Comments
453	NoPartyIDs	O	M		NumInGroup Number of parties involved Valid values are 2 .. 7 The value must correspond to the number of parties (repeating groups) provided.

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Tag	Field Name	RF	R	XEOMI	Comments
448	PartyID	O	M		String <b>PartyRole = 1 (Executing Firm)</b> String(4), KVNr of the <b>originator or owner of the order</b> <b>PartyRole = 4 (Clearing Firm)</b> String(4), KVNr of the clearer <b>PartyRole = 10 (Settlement Location)</b> String(11), Vestima BIC of the counterpart (PSET) <b>PartyRole = 11 (Order Origination Trader)</b> String(6), Trader ID <b>PartyRole = 17 (Contra Firm)</b> String(4), KVNr of the counterpart, if PartyIDSource = D String(20), LEI (Legal Entity Identifier) of counterpart, PartyIDSource = N <b>PartyRole = 21 (Clearing Organization)</b> KVNr of recipient of trade confirmations in the case of internal settlement to be applied KVNr of recipient of trade confirmations in the case of agrigated settlement to be applied <b>PartyRole = 24 (Customer Account)</b> String(4), KVNr of the contract note- recipient <b>PartyRole = 27 (Buyer Seller)</b> String(4), KVNr of buyer/seller, when PartyIDSource = D String(11), Vestima BIC of counterpart (SELL/BUY), when PartyIDSource = B <b>PartyRole = 28 (Custodian)</b> String(11), Vestima BIC of counterpart (DECU/RECU) <b>PartyRole = 30 (Agent)</b> String(11), Vestima BIC of counterpart (DEAG/REAG)
447	PartyIDSource	O	M		Char always = "D", if PartyRole = 1, 4, 11, 21, or 24 or = "B", if PartyRole = 10, 28, or 30 or = "D" or "B", if PartyRole = 27 or = „D“ or „N“ if PartyRole 17
452	PartyRole	O	M		Integer Valid values 1 = "Executing Firm" 4 = "Clearing Firm" 10 = "Settlement Location" 11 = "Order Origination Trader" 17 = "Contra Firm" 21 = "Clearing Organization" 24 = "Customer Account" 27 = "Buyer Seller" 28 = "Custodian" 30 = "Agent"
PtysSubGrp		O	C		Only valid for PartyRole = 27, 28 or 30

**7.5.5.9 NoPartySubIDs Repeating Group <PtysSubGrp>**

Tag	Field Name	RF	R	XEOMI	Comments
802	NoPartySubIDs	O	C		NumInGroup Will be set to "1" or "2" Only valid for PartyRole = 27, 28, or 30
523	PartySubID	O	C		String(35) For PartyRole = 27, 28, or 30 with further identification attribute of safe-accounts

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Tag	Field Name	RF	R	XEOMI	Comments
803	PartySubIDType	O	C		Integer If PartyRole = 27 then set to "4050" (buy/sell safe account) If PartyRole = 30 and tag 54 (Side) from <Side2> = sell then set to "4060" (DEAG-safe-account), If PartyRole = 30 and tag 54 (Side) from <Side2> = buy then set to "4070" (REAG-safe-account), If PartyRole = 28 and tag 54 (Side) from <Side2> = buy then set to "4080" (DECU-safe-account), If PartyRole = 28 and tag 54 (Side) aus <Side2> = sell then set to "4090" (RECU-safe-account).

**7.5.5.10 Regulatory TradeID Repeating Group <RegulatoryTradeIDGrp>**

Tag	Field Name	RF	R	XEOMI	Comments
1907	NoRegulatoryTradeID	O	O		NumInGroup Only „1“ is valid.
1903	RegulatoryTradeID	O	O		String(52) TVTIC (Trading venue transaction identification code) The TVTIC is a concatenation of: Segment MIC (4 digits) + ISIN (12 digits) + Trading day (8 digits) + time of price fixing termination (12 digits)
1906	RegulatoryTradeIDType	O	O		Integer Type of Regulatory TradeID 5 = TVTIC (Trading venue transaction identification code)

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**8 Appendix A: Examples**

Tags 9 (message length) and 10 (Checksum) are not calculated in the examples below. These tags are marked grey in the message with **9=** und **10=**.

<SOH> describes the separator (hexadecimal X'01').

The values of the ReturnCodes (5555), as well as the content of OrderRejectReasonTxt (9320), comply to real values.

The following examples use KVNRS (CBF account numbers) 7766 as the FIX central office, 6766 as the branch office, FS7766I7 and FSRH99I7 as ComplIDs and, DE0005810055 as the instrument traded. The messages are built for the FIX-Version 4.4, and the trading date is "31.08.2011" (August 31<sup>st</sup>, 2011).

**Successful logon****Logon**

Logon of the FIX central office 7766.

```
8=FIX.4.4 <SOH> 9= <SOH> 35=A <SOH> 34=13 <SOH> 49=FS7766I9 <SOH> 52=20110831-07:00:00.000 <SOH>
56=FSRH99I7 <SOH> 98=0 <SOH> 108=3600 <SOH> 553=7766 <SOH> 554=11111111 <SOH> 10= <SOH>
```

**Successful Submission of an Order****NewOrderSingleRequest**

The central FIX office 7766 enters an buy order for branch 6766. Nominal unit 2000, limit 9.85 EUR, validation Good-Till-Date 05.09.2011.

```
8=FIX.4.4 <SOH> 9= <SOH> 35=D <SOH> 34=1342 <SOH> 49=FS7766I7 <SOH> 52=20110831-07:00:01.000 <SOH>
56=FSRH99I7 <SOH> 453=2 <SOH> 448=7766 <SOH> 447=D <SOH> 452=7 <SOH> 448=6766 <SOH> 447=D <SOH> 452=1
<SOH> 55=[N/A] <SOH> 48=DE0005810055 <SOH> 22=4 <SOH> 11=CLORDINS1 <SOH> 38=2000 <SOH> 40=2 <SOH>
44=9.85 <SOH> 54=1 <SOH> 59=6 <SOH> 60=20110831-07:00:01.000 <SOH> 100=XSTU <SOH> 432=20110905 <SOH>
526=SECORDID1 <SOH> 10= <SOH>
```

**Execution Report**

```
8=FIX.4.4 <SOH> 9= <SOH> 35=8 <SOH> 34=2551342 <SOH> 49=FSRH99I7 <SOH> 52=20110831-07:00:01.000 <SOH> 56=
FS7766I7 <SOH> 453=2 <SOH> 448=7766 <SOH> 447=D <SOH> 452=7 <SOH> 448=6766 <SOH> 447=D <SOH> 452=1
<SOH> 55=[N/A] <SOH> 48=DE0005810055 <SOH> 22=4 <SOH> 6=0 <SOH> 11=CLORDINS1 <SOH> 14=0 <SOH>
17=20110831000040 <SOH> 37=1108314990012 <SOH> 38=2000 <SOH> 39=0 <SOH> 40=2 <SOH> 44=9.85 <SOH> 54=1
<SOH> 59=6 <SOH> 60=20110831-07:00:01.3411811 <SOH> 100=XSTU <SOH> 150=0 <SOH> 151=2000 <SOH>
432=20110905 <SOH> 526=SECORDID1 <SOH> 10= <SOH>
```

**Rejected Cancellation of an Order****OrderCancelRequest**

Cancellation with tag 41 (OrigClOrdID) with declaration of a wrong value in tag 54 (Side):

```
8=FIX.4.4 <SOH> 9= <SOH> 35=F <SOH> 34=1343 <SOH> 49=FS7766I7 <SOH> 52=20110831-07:00:01.000 <SOH>
56=FSRH99I7 <SOH> 453=2 <SOH> 448=7766 <SOH> 447=D <SOH> 452=7 <SOH> 448=6766 <SOH> 447=D <SOH> 452=1
```

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<SOH> 55=[N/A] <SOH> 48=DE0005810055<SOH> 22=4 <SOH> 11=CLORDDEL1 <SOH> 38=2000 <SOH> 41=**CLORDINS1**  
<SOH> 54=2 <SOH> 60=20110831-07:00:01.000<SOH> 100=XSTU <SOH> 5253=2 <SOH> **10=** <SOH>

**Order Cancel Reject**

8=FIX.4.4 <SOH> **9=** <SOH> 35=9 <SOH> 34=49 <SOH> 49=FSRH9917 <SOH> 52=20110831-07:00:01.000 <SOH> 56=FS776617 <SOH> 11=CLORDDEL1 <SOH> 37=1108314990012 <SOH> 39=8 <SOH> 41=CLORDID001 <SOH> 60=20110831-07:00:01.000 <SOH> 100=XSTU <SOH> 102=99 <SOH> 434=1 <SOH> 5555=2730 <SOH> 9320=PLEASE REVISE SIDE / SIDE (BUY/SELL) <SOH> 9803=212 <SOH> 453=2 <SOH> 448=7766 <SOH> 447=D <SOH> 452=7 <SOH> 448=6766 <SOH> 447=D <SOH> 452=1 <SOH> **10=** <SOH>

**Notification of events**

Withdrawal of price fixing suspension for instrument DE0005557508

8=FIX.4.4 <SOH> **9=** <SOH> 35=B <SOH> 34=254967 <SOH> 43=Y <SOH> 49=FSRH9917 <SOH> 52=20110831-07:00:01.000 <SOH> 56=FS776617 <SOH> 122=20110831-07:00:01.000 <SOH> 148=**FIXON** <SOH> 6517=20110831 <SOH> 33=1 <SOH> 58=Withdrawal of price fixing suspension <SOH> 146=1 <SOH> 55=[N/A] <SOH> 48=**DE0005557508** <SOH> 22=4 <SOH> 215=2 <SOH> 216=1 <SOH> 217=XON <SOH> 216=1 <SOH> 217=XSTU <SOH> **10=** <SOH>

**Submission of an OTC-Trade**

The central FIX office 7766 enters an OTC-buy-trade with counterparty 6766.

**TradeCaptureReport**

8=FIX.4.4 <SOH> **9=** <SOH> 35=AE <SOH> 34=15 <SOH> 49=FS776617 <SOH> 52=20110831-07:00:01.000 <SOH> 56=FSRH9917 <SOH> 22=4 <SOH> 30=XFRA <SOH> 31=9.5 <SOH> 32=1000 <SOH> 48=DE0005810055 <SOH> 55=DB1 <SOH> 60=20110831-07:00:00 <SOH> 75=20110831 <SOH> 487=0 <SOH> 570=N <SOH> 571=OTC\_RepID\_1 <SOH> 856=0 <SOH> 5179=070001 <SOH> 552=2 <SOH> 54=1 <SOH> 453=1 <SOH> 448=**7766** <SOH> 447=D <SOH> 452=7 <SOH> 37=[N/A] <SOH> 15=EUR <SOH> 54=2 <SOH> 453=1 <SOH> 448=**6766** <SOH> 447=D <SOH> 452=17 <SOH> 37=[N/A] <SOH> **10=** <SOH>

**TradeCaptureReportAck**

8=FIX.4.4 <SOH> **9=** <SOH> 35=AR <SOH> 34=24 <SOH> 49=FSRH9917 <SOH> 52=20110831-07:00:01.000 <SOH> 56=FS776617 <SOH> 22=4 <SOH> 30=XFRA <SOH> 48=DE0005810055 <SOH> 55=[N/A] <SOH> 60=20110831-07:00:01.000 <SOH> 150=0 <SOH> 487=0 <SOH> 571=OTC\_RepID\_1 <SOH> 856=0 <SOH> 880=EDF1108310150002 <SOH> **10=** <SOH>

**OTC-Trade as contract note**

The central FIX office 7766 get an OTC-buy-trade confirmation with the counterparty 6766.

**TradeCaptureReportSno**

8=FIX.4.4 <SOH> **9=** <SOH> 35=USN <SOH> 34=25 <SOH> 49=FSRH9919 <SOH> 52=20110831-07:00:01.000 <SOH> 56=**FS776619** <SOH> 22=4 <SOH> 30=XFRA <SOH> 31=9.5 <SOH> 32=1000 <SOH> 48=DE0005810055 <SOH> 55=DB1 <SOH> 60=20110831-07:00:01.987 <SOH> 75=20110831 <SOH> 283=XFRA <SOH> 487=0 <SOH> 570=N <SOH> 571=0831130332945860 <SOH> 829=9012 <SOH> 856=0 <SOH> 880=EDF1108310150002 <SOH> 7017=1 <SOH> 7680=1 <SOH> 9954=N <SOH> 454=2 <SOH> 455=DEUTSCHE BOERSE NA O.N. <SOH> 456=8 <SOH> 455=581005 <SOH> 456=B <SOH> 552=2 <SOH> 54=1 <SOH> 37=[N/A] <SOH> 453=4 <SOH> 448=7766 <SOH> 447=D <SOH> 452=24 <SOH> 448=7766 <SOH> 447=D <SOH> 452=1 <SOH> 448=7766 <SOH> 447=D <SOH> 452=27 <SOH> 448=199999 <SOH> 447=D <SOH> 452=11 <SOH> 381=9500 <SOH> 119=9496.2 <SOH> 120=EUR <SOH> 58=FIX/ <SOH> 9471=1 <SOH> 9473=0 <SOH> 9476=-

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3.8 <SOH> 54=2 <SOH> 37=[N/A] <SOH> 453=3 <SOH> 448=6766 <SOH> 447=D <SOH> 452=17 <SOH>  
448=529900FU4WJ2XT7BVE31 <SOH> 447=N <SOH> 452=17 <SOH> 448=6766 <SOH> 447=D <SOH> 452=27 <SOH> 768=2  
<SOH> 769=20110831-07:00:01.000000 <SOH> 770=1 <SOH> 769=20110831-07:00:01.153521 <SOH> 770=2 <SOH> **10=**  
<SOH>

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**9 Appendix B: Restrictions Concerning Data Types and Component Blocks****Legend**

Sort sequence: Sorted ascending by column "Data type/Structure"

Column headers: I/O indicates incoming/outgoing messages (from the BT-FIX Gateway's point of view). All other column headers are self-explanatory.

Content: An entry in column I/O will only be present if the information provided is not valid for either direction. Entries in restrictions/values will detail usage of an item. If a trading or settlement-system is not listed in column "trading system", it will not allow the usage of the tag.

Tag	Data type/Structure	I/O	Restrictions/Values	Trading System
	KVNr		Valid "Kassenvereinsnummer"	uniform across systems
	Party		The structure will be restricted to three tags PartyID PartyIDSource PartyRole If the repeating group is not of type "session", "Executing System", „Execution within firm" and „Investment Decision Maker", "Settlement Location" or "Buyer Seller"	uniform across systems



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Tag	Data type/Structure	I/O	Restrictions/Values	Trading System
		O	<p>Exception: If PartyRole is set to "session ID", the full structure will be used; in this case, additionally, the following tags will be present:</p> <p>NoPartySubIDs (Tag 802, set to "1" more)  PartySubID (Tag 523) (identifier)  PartySubIDType (Tag 803, always set to "4040").</p> <p>For type "Executing System", the following tags will be used in addition:  NoPartySubIDs (tag 802, set to "1" more)  PartySubID (tag 523) = "[N/A]"  PartySubIDType (tag 803) always = "3".</p> <p>For type "Settlement Location", the following tags will be used in addition:  NoPartySubIDs (tag 802), set to "2" more  PartySubID (tag 523) = "identifier"  PartySubIDType (tag 803) = "4060"  PartySubID (tag 523) = "identifier"  PartySubIDType (tag 803) = "4080"  or  NoPartySubIDs (tag 802), set to "2" more  PartySubID (tag 523) = "identifier"  PartySubIDType (tag 803) = "4070"  PartySubID (tag 523) = "identifier"  PartySubIDType (tag 803) = "4090"  is used.</p> <p>For type "Buyer Seller", the following tags will be used in addition:  NoPartySubIDs (Tag 802) set to "1" more  PartySubID (Tag 523) = " identifier "  PartySubIDType (Tag 803) = "4050"  is used.</p> <p>For type „Execution within firm“ the following qualifier will be used in addition:  PartyIDRoleQualifier (Tag 2376) = „22“ (algorithm) or „24“ (natural person)</p> <p>For type „Investment Decision Maker“ the following qualifier will be used in addition:  PartyIDRoleQualifier (Tag 2376) = „22“ (algorithm) or „24“ (natural person)</p> <p>For type "Client Identification Code" the following qualifier will be used in addition:  PartyIDRoleQualifier (Tag 2376) = „23“ (LEI) or „24“ (Nat. Person)</p>	uniform across systems
	Price		<p>The FIX Price data type (15 digits with optional decimal point and sign) is restricted.  Float (13,5) order message  Float (10,4) trade message</p>	uniform across systems
	Qty		<p>The FIX Qty data type (15 digits with optional decimal point and sign) is limited. It is always Float (12,3).</p>	uniform across systems

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**10 Appendix C: User Defined Tags****Legend**Sort sequence: Sorted ascending by tag numberColumn headers: I/O indicates incoming/outgoing messages (from the BT-FIX Gateway's point of view). All other column headers are self-explanatory.Content: An entry in column I/O will only be present if the information provided is not valid for either direction. Entries in restrictions/values will detail usage of an item. Optionally a reference to a common "base" data type will be present. If a trading or settlement-system is not listed in column "trading system", it will not allow usage of the tag.

Tag	Field Name	I/O	Restrictions/Values	Trading System
5048	OrdSubStatus	O	Char Values corresponding to SAKI GV-Codes in case of Vestima orders A = Cancellation from Vestima received B = Cancellation from Vestima / OHA forwarded C = Cancellation from Vestima / OHA rejected D = Provision check failed in Vestima E = Successful provision check in Vestima F = Successful submission of order from OHA acknowledged G = Cancellation from Vestima OHA H = Disabled I = Order entry received in Vestima	INVESTRO/Vestima
5053	TradeType2	I	1 (DVP) = FZ	XONTRO, for TradeCaptureReport
		O	1 (DVP) = FZ 7 (when issued) = FE	XONTRO, for TradeCaptureReportSno
5076	FundReinvestIncome		Char Y = Subscription with reinvestment price Space = other	INVESTRO
5078	FundSpecialDealDiscount		Char Y = Subscription with NAV Space = other	INVESTRO
5156	UnreleasedDate		LocalMktDate "Valid from" date	XONTRO, MAX-ONE INVESTRO
5177	Source	O	<session>	Uniform across systems, 4.2 only
5179	TradeTime	I	Trade time (hhmmss)	XONTRO, for TradeCaptureReport
5253	1OrdTypeExt Usage is restricted to Xetra and Xetra Frankfurt 2 Order Cancel requests and XONTRO New Order Single requests		Valid value: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit" K = "Market with Leftover" M = "Midpoint" I = "Iceberg"	Xetra

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Tag	Field Name	I/O	Restrictions/Values	Trading System
			1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit"	Xetra Frankfurt 2
5273	This field is only used for Order Cancel Requests and EG orders		Valid value: <b>E = EG-Order</b>	XONTRO, MAX-ONE
5427	IntegerrAttribType	O	I = Interest D = Discount	XONTRO, for TradeCaptureReportSno
5458	MDDelayed	I	Delay-Indicator	XONTRO, for TradeCaptureReport
5476	PrivateReference	O	String Supplement to OrdSubStatus Text for tag 5048	INVESTRO/Vestima
5494	LastTrader	O	Format <b>KVNr.</b> Permitted CBF account number (intermediary only) for XONTRO.	XONTRO, for TradeCaptureReportSno
5555	ReturnCode	O	Error code	Uniform across systems
5862	UpdateReason	A	Reason for modification or deletion of an order by system	XONTRO, MAX-ONE, Xetra, Xetra Frankfurt 2
5665	MKTXPriceDiff	O	Price difference	XONTRO for TradeCaptureReportSno
5681	ExchangeTradeType	I	Identification issue of securities	XONTRO for TradeCaptureReport
5689	VersionID		Integer(18), unsigned Used to transmit Xetra / Xetra Frankfurt 2 dateLstUpdDat item. Value must be provided by the next subsequent Cancel/Replace request referring to the same order	Xetra, Xetra Frankfurt 2
5944	InitialDisplayQty	O	see <b>Qty</b>	Xetra
5946	PendingReason	O	Valid values: 1 = buffered 2 = locked stock 3 = response delayed (intraday) 4 = order status unknown (end of day)	Xetra, Xetra Frankfurt 2, MAX-ONE
		O	Valid values: 1 = buffered 2 = locked stock 3 = response delayed (intraday) 4 = order status unknown (end of day) 5 = verification pending	XONTRO
		O	4 = "order status unknown (end of day)" 5 = "verification pending" Vestima only	INVESTRO
6031	EnteringFirm		<entering firm>	Uniform across systems, version 4.2 only
6034	ConcessionAmt	O	bonus differential amount	XONTRO for TradeCaptureReportSno
6042	CxlReason	I	1 = Cancel by kill function	XONTRO, MAX-ONE
6126	OrigLeavesQty	I	see Qty	XONTRO

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Tag	Field Name	I/O	Restrictions/Values	Trading System
6141	TradeQty	O	see Qty	XONTRO for TradeCaptureReportSno
6255	EndTime		end of trading hours	XONTRO
6475	ClientIndicator	O	Y = IW-trade	XONTRO for TradeCaptureReportSno
6489	TriggerIndicator	O	A = Activation of an EG Order B = Order reset to EG Y = Trigger Stop Order	XONTRO, MAX-ONE XONTRO XONTRO, MAX-ONE, Xetra, Xetra Ffm-2
6516	NewsValidUntil		date until	XONTRO
6517	NewsEventDate		date respectively date from	XONTRO
6555	OrigTrdMatchID	O	Old trade number	XONTRO for TradeCaptureReportAck
6556	BusinessTransactionType		"1" = TradeAdvice	XONTRO for TradeCaptureReport and TradeCaptureReportAck
6583	SpreadPremium	O	bonus amount	XONTRO for TradeCaptureReportSno
6584	SpreadPctPremium		bonus amount (percent), Float(5,3)	INVESTRO, XONTRO if EnterOTC
6585	SpreadPctDiscount	O	Reinvestment discount (percent) Float(10,7)	INVESTRO, XONTRO for TradeCaptureReportSno
6586	CashOffset		Reinvestment discount	XONTRO, for TradeCaptureReport and TradeCaptureReportSno
6611	TotalAccruedInterestAmt	O	Accumulated dividend equivalent earnings Float(17,8)	INVESTRO, XONTRO for TradeCaptureReportSno
6732	DealerNote	O	Different sub fields separated by "\". The description follows at the end of this table.	INVESTRO, XONTRO for TradeCaptureReportSno
6893	Profit	O	Mid-way profit Float(15,8)	INVESTRO, XONTRO for TradeCaptureReportSno
7017	VolumeIndicator	I	1 = "unit" 2 = "percentage" 3 = "per thousand" 4 = "scores" 9 = "other"	XONTRO for TradeCaptureReport
		O	1 = "unit" 2 = "percentage" 3 = "per thousand"	XONTRO for TradeCaptureReportSno
7491	CustomPrice1		Unit offering price Float(15,8) if tag 5076 or 5078 is used	INVESTRO, XONTRO for TradeCaptureReportSno
7493	CustomRate1	O	selling markup	XONTRO
7566	TimezoneOffset	I	Differing UTC Time stamp to trade time	XONTRO for TradeCaptureReport
7567	ReportedPxDiff	I	Y = Deviant price indicator	XONTRO for TradeCaptureReport
7568	ReportedPxReason	I	N = negotiated Trade	XONTRO for TradeCaptureReport
7680	OTCInd		0 = on-exchange trading 1 = off-exchange trading (default)	uniform across systems

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Tag	Field Name	I/O	Restrictions/Values	Trading System
7931	VenuelD		<executing system>	uniform across systems, version 4.2 only
9318	MktMkerID		<systematic internalizer> <market maker>	uniform across systems, version 4.2 only
9320	OrderRejectReasonTxt	O	Error text	uniform across systems
9471	NoTransactionCosts		<courtage>	XONTRO for TradeCaptureReport and TradeCaptureReportSno
9473	TransactionCostCode		<courtage>	XONTRO for TradeCaptureReport and TradeCaptureReportSno
9476	TransactionCostAmt		<courtage>	XONTRO for TradeCaptureReport and TradeCaptureReportSno
9583	MIFIDInternalizationIndicator		Valid values: 1 = Facilitation 4 = No	Xetra
9591	PriceCheckingFlag	O	2 = Severe (PriceAlert)	XONTRO for TradeCaptureReportAck
9596	ClientFreeField1		String restricted to Float(10,3) > 0 Tag 9597 must not be set to "PS" If tag 9597 is set to "PM", the value must not exceed 99,999 If tag 9597 is set to "PD", the value must not exceed 9999999,990 (last decimal place = 0)	XONTRO
9597	ClientFreeField2		Valid values: PD = Amount (in Euro) PM = Per mille (from market value) space = None	XONTRO
9803	TradingSystemID	O	0 = Gateway 4 = Xetra 5 = Xetra Ffm-2 111 = Connector 112 = Connector 120 = XEO MAX-ONE 121 = XEO Xetra 122 = XEO Xetra Ffm-2 212 = XONTRO 312 = MAX-ONE 313 = MAX-ONE	uniform across systems
9807	RegFeeFlag	O	Key for brokerage fees	XONTRO for TradeCaptureReportSno
9893	DiscountRate	O	Discount amount	XONTRO for TradeCaptureReportSno
9933	CombinedOrderType	O	"Z" = submission of a subscription order "H" = Funds segment "Hanover"  If the tag is sent, then the expire date will filled by the trading system. Field ExpireDate (Tag 432) is used.	XONTRO

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Tag	Field Name	I/O	Restrictions/Values	Trading System
9938	ClearingHandlingType	O	I = internal settlement A = aggregated settlement  The trade will be not delivered to Clearstream individually. In case of internal settlement ("I") it is the recipient's responsibility to forward the position to Clearstream. In case of aggregated settlement ("A") the trades are forwarded to Clearstream as an aggregated position.	XONTRO
9954	NextMsgFlag	O	Y = (more) records to follow will be delivered N = no (more) following records	XONTRO for TradeCaptureReportSno
20003	PartyIDClientID	E	<client identification code>	XONTRO, MAX-ONE
21103	PartyIDClientIDQualifier	E	<client identification code>	XONTRO, MAX-ONE
21303	PartyIDClientIDSource	E	<client identification code>	XONTRO, MAX-ONE
20122	PartyIDInvestmentDecisionMaker	E	<Investment Decision Maker>	XONTRO, MAX-ONE
21222	PartyIDInvestmentDecisionMakerQualifier	E	<Investment Decision Maker>	XONTRO, MAX-ONE
21422	PartyIDInvestmentDecisionMakerSource	E	<Investment Decision Maker>	XONTRO, MAX-ONE
20012	PartyIDExecutingTrader	E	<Execution within firm>	XONTRO, MAX-ONE
21112	PartyIDExecutingTraderQualifier	E	<Execution within firm>	XONTRO, MAX-ONE
21312	PartyIDExecutingTraderSource	E	<Execution within firm>	XONTRO, MAX-ONE

**Description of tag 6732 DealerNote**

Tag 6732 contains different sub-fields which are separated by "\". The initial values of these sub-fields are generally spaces. For sub-field 'different counterparty price' the initial value is „000000,0000“.

Tag	Fieldname	Sub-Fieldname	Format	Restriction/Value
6732	DealerNote	Label delivery release	Char	"J", "N"
		Separator	Char	\
		Different counterparty price	String(11)	6 places before the decimal point, 4 decimal places
		Separator	Char	\
		Indicator for deviant trade date	String(2)	constant "AS"
		Separator	Char	\
		Type of security	String(3)	constant "SHS" = shares "BON" = bonds "BCE" = bonds, similar to certificates "WTS" = warrants "CER" = certificates "FUN" = funds "SUB" = subsidiary rights "RTE" = profit-sharing rights "UNT" = units "MSC" = others
Separator	Char	\		
Type of custody	String(3)			
Separator	Char	\		

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Tag	Fieldname	Sub-Fieldname	Format	Restriction/Value
		Coupon date Separator	String(8) Char	e.g. "21.07.G" \ 
		Constant 'APMT' Separator	String(4) Char	"APMT" = against payment \ 
		Currency code of contract price Separator	String(3) Char	\ 
		Currency code of market value Separator	String(3) Char	\ 
		Currency code of price difference Separator	String(3), Char	\ 
		Currency code of interest accrued Separator	String(3), Char	\ 
		Flag brokerage Separator	String(6), Char	constant /BROK/ \ 
		Flag fees Separator	String(6) Char	constant /FEES/ \ 
		Indicator for reinvestment discount Separator	String(6) Char	constant /MISC/ \ 
		Indicator for bonus Separator	String(6) Char	constant /MISC/ \ 
		Indicator for bonus difference Separator	String(6) Char	constant /MISC/ \ 
		Indicator for commission Separator	String(6) Char	constant /COMM/ \ 
		Currency code of brokerage Separator	String(3) Char	= settlement currency \ 
		Currency code of fees Separator	String(3) Char	= settlement currency \ 
		Currency code of reinvestment discount Separator	String(3) Char	= settlement currency \ 
		Currency code of bonus Separator	String(3) Char	= settlement currency \ 
		Currency code of bonus differential Separator	String(3) Char	= settlement currency \ 
		Currency code of commission Separator	String(3) Char	= settlement currency \ 
		Indicator for reinvestment discount Separator	String(2) Char	constant "WA" \ 
		Indicator for bonus Separator	String(2) Char	constant "BO" \ 
		Bonus key Separator	String(2) Char	01 = % on market value, 02 = EO per unit, 03 = % on face value \ 
		Indicator for bonus difference	String(2)	constant "BD"

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Tag	Fieldname	Sub-Fieldname	Format	Restriction/Value
		Separator	Char	\
		Indicator for order reference	String(5)	constant „MT599“ (indicator from MT512 that a MT599 is following
		Separator	Char	\
		Entering Party-ID	String(6)	Six-digit Entering Party-ID of the broker
		Separator	Char	\



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**11 Appendix D: 4.2 Extensions**Sorted ascending by tag number

Tag	Field Name
447	PartyIDSource
448	PartyID
452	PartyRole
453	NoPartyIDs
454	NoSecAltID
455	SecurityAltID
456	SecurityAltIDSource
487	TradeReportTransType
523	PartySubID
526	SecondaryClOrdID
552	NoSides
553	Username
554	Password
570	PreviouslyReported
571	TradeReportID
572	TradeReportRefID
625	TradingSessionSubID
691	Pool
751	TradeReportRejectReason
768	NoTrdRegTimestamps
769	TrdRegTimestamp
770	TrdRegTimestampType
789	NextExpectedMsgSeqNum
802	NoPartySubIDs
803	PartySubIDType
818	SecondaryTradeReportID
820	TradeLinkID
829	TrdSubType
856	TradeReportType
880	TrdMatchID
923	UserRequestID
924	UserRequestType
925	NewPassword
926	UserStatus
927	UserStatusText
1094	PegPriceType
1125	OrigTradeDate

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<b>Tag</b>	<b>Field Name</b>
1126	OrigTradeID
1138	DisplayQty
1409	SessionStatus
20003	PartyIDClientID
21103	PartyIDClientIDQualifier
21303	PartyIDClientIDSource
20122	PartyIDInvestmentDecisionMaker
21222	PartyIDInvestmentDecisionMakerQualifier
21422	PartyIDInvestmentDecisionMakerSource
20012	PartyIDExecutingTrader
21112	PartyIDExecutingTraderQualifier
21312	PartyIDExecutingTraderSource

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## 12 Appendix E: 4.4 Extensions

Sorted ascending by tag number

Tag	Field Name
1094	PegPriceType
1125	OrigTradeDate
1126	OrigTradeID
1138	DisplayQty
1409	SessionStatus
6042	CxlReason

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**13 Appendix F: Restricted Use of Standard Tags****Legend**Sort sequence: Sorted ascending by tag numberColumn headers: I/O indicates incoming/outgoing messages (from the BT-FIX Gateway's point of view). All other column headers are self-explanatory.Content: An entries in column I/O will only be present if the information provided is not valid for either direction. Entries in restrictions/values will detail usage of an item. Optionally a reference to a common base data type will be present. If a trading or settlement-system is not listed in column "trading system", it will not allow usage of the tag.

Tag	Field Name	I/O	Restrictions/Values	Trading System
1	Account		See <b>AcctTypCod</b> and <b>AcctTypNo</b>	
	AcctTypCod		Valid values: A = Agent E = BEST Executor I = Issuer (Quote Provider) L = Liquidity Provider M = Sponsor P = Proprietary Q = Liquidity Manager <b>mandatory</b>	Xetra, Xetra Frankfurt 2
			Valid values: A = Agent P = Proprietary <b>optional</b>	XONTRO (order routing), MAX-ONE
			<b>optional</b> <i>ignored</i>	INVESTRO/Vestima
			"A" = Agent (Client) "P" = Proprietary (bank's own-account trading) "E" = Proprietary (intermediary's own-account trading) <b>optional</b>	XONTRO for contract notes
	AcctTypNo		<b>mandatory</b>	Xetra, Xetra Frankfurt 2
			Valid value: Only "1" will be accepted <b>optional</b>	XONTRO Order, MAX-ONE
			"A" = intermediary's own-account trading in case of <i>Aufgaben</i> closing generated by the system, only possible with AcctTypCod="E" "E" = intermediary's own-account trading, only possible with AcctTypCod="E" "1" = proprietary trading, only possible with AcctTypCod="A" or "P" <b>optional</b>	XONTRO for contract notes
			<b>optional</b> <i>ignored</i>	INVESTRO/Vestima
8	BeginString		Valid values: FIX.4.2 FIX.4.4	

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Tag	Field Name	I/O	Restrictions/Values	Trading System
11	ClOrdID		String(16) must be unique for as long as the corresponding order is active	uniform across systems
12	Commission		The FIX "Amt" data type(15 digits with optional decimal point and sign) will internally be mapped to a "XEO+" data type Snum(10,2) of fixed length providing exactly 2 decimal places. If such mapping is not possible, a request providing such data will be rejected.	XONTRO
21	HandInst	I	Char "FIX.4.2" <b>mandatory</b> "FIX.4.4" <b>optional</b> <i>ignored</i>	uniform across systems
22	SecurityIDSource		Valid value: 4 = ISIN number	uniform across systems
33	LinesOfText	O	Valid value: Only "1" will be accepted Along with application level messages the values „1" or „2" are permitted.	uniform across systems
35	MsgType	I	Valid values: "0", "1", "2", "4", "5", "A", "D", "F", "G", "BE", "AE" 4.2 sessions will accept "UBE" instead of "BE" and "AE" instead of "UAR"	uniform across systems
		O	Valid values: "0", "1", "2", "3", "4", "5", "8", "9", "A", "B", "J", "BF" 4.2 sessions will accept "UBF" instead of "BF"	uniform across systems
37	OrderID		String(13) Unique order number of the trading system	uniform across systems
38	OrderQty		see <b>Qty</b>	uniform across systems
39	OrdStatus	O	Valid values: 0 = "New" 1 = "Partially filled" 2 = "Filled" 4 = "Cancelled" 6 = "Pending Cancel" 8 = "Rejected" A = "Pending New" C = "Expired" E = "Pending Replace"	XONTRO, Xetra, Xetra Frankfurt 2, MAX-ONE
		O	0 = "New" 1 = "Partially filled" 2 = "Filled" 4 = "Cancelled" 6 = "Pending Cancel" 8 = "Rejected" A = "Pending New"	INVESTRO/Vestima
40	OrdType		Valid values: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit" K = "Market with Leftover" P = "Pegged"	Xetra
			1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Limit"	Xetra Frankfurt 2, MAX-ONE

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Tag	Field Name	I/O	Restrictions/Values	Trading System
			1 = "Market" 2 = "Limit" 3 = "Stop"	XONTRO
			1 = Market	INVESTRO/Vestima
44	Price		see <b>Price</b>	uniform across systems
55	Symbol	I	<i>ignored</i>	uniform across systems
		O	always set to "[N/A]"	uniform across systems
58	Text		Length is restricted to 25 Characters Please note that only the first twelve digits will be passed to/returned by Xetra and Xetra Frankfurt 2	uniform across systems
59	TimeInForce		0 = "Day" 3 = "Immediate or Cancel" 4 = "Fill or Kill" 6 = "Good till Date"	Xetra
			0 = "Day" 6 = "Good till Date"	Xetra Frankfurt 2, MAX-ONE, XONTRO
			<i>ignored</i>	INVESTRO
60	TransactTime	I	<i>ignored</i>	uniform across systems
98	EncryptMethod		Valid value: Only "0" will be accepted	uniform across systems
99	StopPx		see <b>Price</b>	uniform across systems
100	ExDestination		MIC Code XBER, XDUS, XETR, XHAN, XHAM, XMUN, XSTU, XFRA XINV will address INVESTRO/Vestima	uniform across systems
110	MinQty		See <b>Qty</b> For midpoint orders only	Xetra
150	ExecType	O	0 = "New" 4 = "Cancelled" 5 = "Replace" 6 = "Pending Cancel" 8 = "Rejected" A = "Pending New" C = "Expired" E = "Pending Replace" F = "Trade"	XONTRO, Xetra, Xetra Frankfurt 2, MAX-ONE
		O	0 = "New" 4 = "Cancelled" 6 = "Pending Cancel" 8 = "Rejected" A = "Pending New" D = "Restated" F = "Trade" I = "Order Status"	INVESTRO/Vestima
156	SettlCurrFxRateCalc		Valid value: D = "divide"	XONTRO
336	TradingSessionID		Valid value: 1 = Day	uniform across systems
447	PartyIDSource		Valid value: For TradeCaptureReportSno "D", "N" and "B" will be accepted. Otherwise "D" and "P" will be accepted.	uniform across systems
448	<agent> PartyID		String(11), Vestima BIC of counterpart (DEAG/REAG)	INVESTRO/Vestima

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Tag	Field Name	I/O	Restrictions/Values	Trading System
448	<buyer seller> PartyID		In combination with PartyIDSource = D KVNr base data type is necessary KVNr (Buyer/Seller) must be permitted by XONTRO  In combination with PartyIDSource = B String(11) Vestima BIC of counterpart (SELL/BUY)	uniform across systems  INVESTRO/Vestima
448	<client> PartyID		Must be of data type <b>KVNr</b> Must be admitted at the XONTRO security system. Must represent a bank.	XONTRO, MAX-ONE
448	<clearing firm> PartyID		KVNr base data type is necessary. KVNr (clearer) must be permitted by XONTRO.	uniform across systems
448	<clearing organization> PartyID		KVNr base data type is necessary. KVNr must be permitted by XONTRO	uniform across systems
448	<contra firm> PartyID		KVNr base data type is necessary. KVNr (counterpart) must be permitted by XONTRO. Exception: in TradeCaptureReportSno the <contra firm> will be sent as <b>KVNr</b> and as <b>LEI</b> .	uniform across systems
448	<custodian> PartyID		String(11), Vestima BIC of counterpart (DECU/RECU)	INVESTRO/Vestima
448	<customer account> PartyID		KVNr base data type is necessary. KVNr (recipient of contract notes) must be permitted by XONTRO.	uniform across systems
448	<entering firm> PartyID		In opposition to the FIX standard, this field is mandatory.  KVNr base data type is necessary. KVNr must be party/customer of the delivered SenderCompID. If only one "Party" is delivered, all restrictions of the ExecutingFirm format must be fulfilled.	uniform across systems
448	<executing firm> PartyID		KVNr base data type is necessary.	
			KVNr must be permitted by XONTRO with an adequate userID	XONTRO, MAX-ONE
			KVNr must conform to a MemberID which has been defined in Xentric.	Xetra, Xetra Frankfurt 2
448	<executing system> PartyID	O	String Possible values: "XETRA" "XETRA-2" "XONTRO" "MAX-ONE" "INVESTRO"	Xetra, Xetra Frankfurt 2, XONTRO, MAX-ONE, INVESTRO
448	<execution venue> PartyID		String(12), Code for identification of a reported trade.  Possible values: <ul style="list-style-type: none"> <li>Character String "OTC" for OTC trades</li> <li>Character String "SI" for systematic internaliser</li> </ul> Identification for the platform used: <ul style="list-style-type: none"> <li>12-digit starting with "B" (ISO 9662): BIC</li> <li>5 -digit starting with "M" (ISO 10383): MIC</li> <li>11-digit starting with "I" (ISO 16327): IBEI</li> </ul>	INVESTRO/Vestima

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Tag	Field Name	I/O	Restrictions/Values	Trading System
448	[Intermediary] PartyID		String(10), INVESTRO intermediary	INVESTRO
448	[MarketMaker] PartyID		Must be of data type KVNr	
			Must be admitted at the XONTRO security system. Must represent a market maker.	XONTRO, MAX-ONE
			Not needed, ignored	INVESTRO/Vestima, Xetra, Xetra Frankfurt 2
448	<order origination trader> PartyID		String(6), trader ID	XONTRO, MAX-ONE
448	<report originator> PartyID		String(11), Code of identification of reporting institute	INVESTRO/Vestima
448	<session> PartyID	O	String(5), Xetra MemberID	Xetra, Xetra Frankfurt 2
			String(4), KVNr of originator	XONTRO, MAX-ONE, INVESTRO/Vestima
448	<settlement location> PartyID		String(11), Vestima BIC of counterpart (PSET)	INVESTRO/Vestima
448	<systematic internaliser> PartyID		String(5), Xetra MemberID	Xetra
448	<client identification code> PartyID		String(20), client identification code	XONTRO, MAX-ONE
448	<Execution within firm> PartyID		String(20), Execution within firm	XONTRO, MAX-ONE
448	<Investment Decision Maker> PartyID		String(20), Investment Decision Maker	XONTRO, MAX-ONE
452	PartyRole		1 = "Executing Firm" 3 = "Client Identification Code" 4 = "Clearing Firm" 7 = "Entering Firm" 10 = "SettlementLocation" 12 = "Execution within Firm" 11 = "Order Origination Trader" 16 = "Executing System" 17 = "Contra Firm" 21 = "Clearing Organization" 24 = "Customer Account" 27 = "Buyer Seller" 28 = "Custodian" 29 = "Intermediary" 30 = "Agent" 55 = "Session ID" 62 = "Report Originator" 63 = "Systematic Internaliser" 66 = "Market Maker" 73 = "Execution Venue" 122 = "Investment Decision Maker"	
453	NoPartyIDs		Values 1 .. 6 are valid (Incoming messages)	uniform across systems
			Values 1 .. 7 are valid (Outgoing messages)	uniform across systems



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Tag	Field Name	I/O	Restrictions/Values	Trading System
487	TradeReportTransType		Valid values: "0", "1", "2" or "4" for TradeCaptureReport and TradeCaptureReportAck. "0" for TradeCaptureReportSno	XONTRO
523	PartySubID	O	String(6) Last 6 digits of the XONTRO UserID for <session>	XONTRO, MAX-ONE, INVESTRO
			String(35) Vestima Safe Account	INVESTRO/Vestima
			Subgroup + TraderID for <session>	Xetra, Xetra Frankfurt 2
			[N/A] for <executing system>	uniform across systems
526	SecondaryClOrdID		String(16)	uniform across systems
553	Username		see <b>EnteringFirm</b> (Tag 448)	uniform across systems
554	Password		String(8)	uniform across systems
625	TradingSessionSubID		Valid values: 2 = "Opening auction only" 3 = "Main trading" 4 = "Closing auction only" 6 = "Main auction" 100 = "Auction only" 101 = "End-of-day auction" 102 = "Pending for next auction" 103 = "Closing crossing" 104 = "Accept surplus" 105 = "Special auction"	Xetra, Xetra Frankfurt 2
			Valid values: 2 = "Opening auction only" (EK - EK-Order) 6 = "Main auction" (KS - Kassa-Order)	XONTRO
			Valid values: 6 = "Main auction" (KS - Kassa-Order)	MAX-ONE
			<i>ignored</i>	INVESTRO/Vestima
751	TradeReportRejectReason		Valid value: 99 = "Other"	XONTRO
768	NoTrdRegTimestamps		Valid value: "1" for TradeCaptureReport "1" or "2" for TradeCaptureReportSno	uniform across systems
770	TrdRegTimestampType		Valid value: "1" for TradeCaptureReport "1" or "2" for TradeCaptureReportSno	uniform across systems
802	NoPartySubIDs	O	Missing or set to "1" (PartyRole 55)	uniform across systems
803	PartySubIDType	O	Will be set to "4040" (User Identifier) for PartyRole = 55 Will be set to "3" (System) for PartyRole = 16	uniform across systems
		O	Tag will be set to "4080" (DECU safe account or "4090" (RECU safe account) for PartyRole = 28 and will be set to "4060" (DEAG safe account) or "4070" (REAG safe account) for PartyRole = 30 and will be set to "4050" (BUY/Sell Safe Account) for PartyRole = 27	INVESTRO/Vestima

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Tag	Field Name	I/O	Restrictions/Values	Trading System
828	TrdType	O	OTC Post-trade indicator 9001 = ACTX (Agency cross transaction) 9002 = CANC (Cancellation) 9101 = ACTX CANC (Agency cross transaction and Cancellation)	XONTRO, MAX-ONE
829	TrdSubType		See chapter 14 Appendix G: Possible Values Tag 829 TrdSubType (Record Type)	XONTRO
923	UserRequestID		String(16)	uniform across systems
924	UserRequestType		Valid value: 3 = "ChangePasswordForUser"	uniform across systems
925	NewPassword		String(8)	uniform across systems

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**14 Appendix G: Possible Values Tag 829 TrdSubType (Record Type)**

<b>TrdSubType</b>	<b>Description</b>
9011	Buy – contract note
9012	Buy – direct trade
9013	Buy – Aufgabe (“pending trade”)
9014	Buy – Aufgabe closing
9015	Buy – Aufgabe forwarding
9016	Buy – reversal
9017	Buy – INVESTRO
9019	Buy – EUFO
9021	Sell – contract note
9022	Sell – direct trade
9023	Sell – Aufgabe
9024	Sell – <i>Aufgabe</i> closing
9025	Sell – <i>Aufgabe</i> forwarding
9026	Sell – reversal
9027	Sell – INVESTRO
9029	Sell – EUFO
9511	Cancellation/Buy – contract note
9512	Cancellation/Buy – direct trade
9513	Cancellation/Buy – <i>Aufgabe</i>
9514	Cancellation/Buy – <i>Aufgabe</i> closing
9515	Cancellation/Buy – <i>Aufgabe</i> forwarding
9517	Cancellation/Buy – INVESTRO
9519	Cancellation/Buy – EUFO
9521	Cancellation/Sell – contract note
9522	Cancellation/Sell – direct trade
9523	Cancellation/Sell – <i>Aufgabe</i>
9524	Cancellation/Sell – <i>Aufgabe</i> closing
9525	Cancellation/Sell – <i>Aufgabe</i> forwarding
9527	Cancellation/Sell – INVESTRO
9529	Cancellation/Sell – EUFO
9611	Same-day cancellation/Buy – contract note
9612	Same-day cancellation/Buy – direct trade
9613	Same-day cancellation/Buy – <i>Aufgabe</i>
9614	Same-day cancellation/Buy – <i>Aufgabe</i> closing
9617	Same-day cancellation/Buy – INVESTRO
9621	Same-day cancellation/Sell – contract note
9622	Same-day cancellation/Sell – direct trade
9623	Same-day cancellation/Sell – <i>Aufgabe</i>

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9624	Same-day cancellation/Sell – <i>Aufgabe</i> closing
9627	Same-day cancellation/Sell – INVESTRO
9913	Deletion/Buy – <i>Aufgabe</i>
9915	Deletion/Buy – <i>Aufgabe</i> forwarding
9923	Deletion/Sell – <i>Aufgabe</i>
9925	Deletion/Sell – <i>Aufgabe</i> forwarding

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