

# **FAGSE BT-FIX Gateway**

# **Rules of Engagement**

Version: 2.3.8

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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

www.deutsche-boerse.com

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

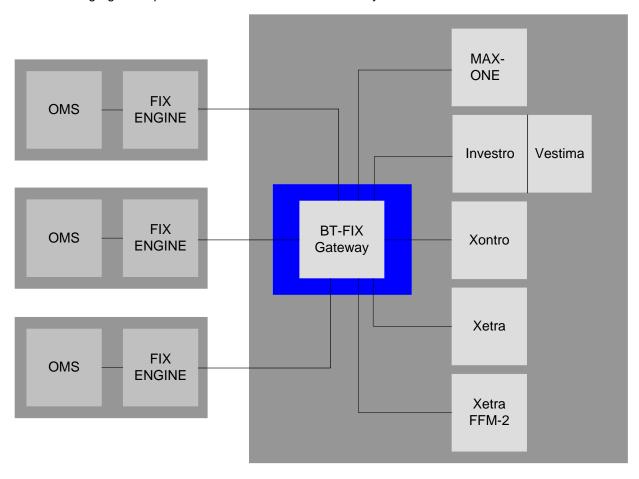
- the XONTRO, MAX-ONE, Xetra and Xetra Frankfurt 2 trading systems
- the contract processing in the Funds-settlement systems INVESTRO and Vestima
- the trade processing in the XONTRO trade system

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.



Operation Customer

Betrieb Gateway und Handelssysteme

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## 1.1 Abbreviations and Definitions

| Item    | Description   |
|---------|---|
| FAGSE   | Name of the product providing access to the trading systems, acronym for "FIX Access to German Stock Exchanges". The product consists of two components: the BT-FIX Gateway and the BT-FIX Connector  |
| FIX     | The <u>F</u> inancial <u>I</u> nformation e <u>X</u> change 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> rder <b>M</b> anagement <b>S</b> ystem   |
| RoE     | Acronym for Rules of Engagement.  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  | <u>Transmission</u> <u>Control</u> <u>Protocol</u> / <u>Internet</u> <u>Protocol</u> (TCP/IP). FIX Versions 4.x rely on TCP/IP as communications protocol   |
| ОНА     | Order handling agent Vestima: receiver of orders in Vestima   |
| OMS     | Order Management System (customer)  |

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#### 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 SP2¹. If this is not possible, user-defined, registered tags will be used.

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.

<sup>&</sup>lt;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>&</sup>lt;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

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#### 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 simulaneously 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 legitimation 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 lauch 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 OrigCIOrdID 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 CIOrdID of an instruction (cf. Chapter 2.7.1 Order Identification), for INVESTRO/Vestima the special fact should be noted that the CIOrdID must still be unambigous 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 BusinessTransactionType487 TradeReportTransType856 TradeReportType

· Identification of a trade resp. report

880 TrdMatchID6555 OrigTrdMatchID

· More identification criteria

571 TradeReportID572 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 sequnce 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                                   |
|--|--|--|
|  |  |  |
| Technical Requests   |  |  |
| logon  | Logon  | Logon (positive)<br>Logon + Logout (negative)      |
| logon with simultaneous password change                      | Logon  | Logon (positive)<br>Logon + Logout (negative)      |
| logout   | Logout   | Logout   |
| password change  | User Request (4.4)<br>User Defined Request (4.2) | User Response (4.4)<br>User Defined Response (4.2) |
|  |  |  |
| General Rejections (possible for every request)              |  |  |
| 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                                  |
|------------------------------------|------------------|---|
|                                    |                  |   |
| System Shutdown                    |                  |   |
| logout                             | -                | Logout  |
| status message                     | -                | News "End-of-Day Processing" "End-of-Day Cut-off" |
|                                    |                  |   |
| Technical Messages                 |                  |   |
| 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  |
|-------------------------------|----------------------|---|
| Order Functionality, Contract | t Processing         |   |
| 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)  |
| Trade Functionality           |                      |   |
| 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  |
|---|------------------|---|
| Order Functionality, Contract P                   | Processing       |   |
| 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  |
| Trade-Functionality                               |                  |   |
| OTC Trade Information<br>(Realtime contract note) | -                | TradeCaptureReportSno   |
| News  |                  |   |
| 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></parties>                            | Tag 4.2 | field name                         | comments  |  |
|--|---------|------------------------------------|---|--|
| <entering firm=""></entering>                  | 6031    | EnteringFirm                       | String(4), KVNr of the party operating the connection   |  |
| <executing firm=""></executing>                | 76      | ExecBroker                         | String(4), KVNr of the owner of the order   |  |
| <market maker=""></market>                     | 9318    | MktMkerID                          | String(4), KVNr of intermediary   |  |
| <systematic internaliser=""></systematic>      | 9318    | MktMkerID                          | String(5), Xetra MemberID   |  |
| <session></session>                            | 5177    | Source                             | String, KVNr resp. MemberID of the originator from any other interface  |  |
| <executing system=""></executing>              | 7931    | VenueID                            | String, possible values: "XETRA" "XETRA-2" "XONTRO" "MAX-ONE" "INVESTRO"  |  |
| <intermediary></intermediary>                  | 109     | ClientID                           | String(10), INVESTRO intermediary   |  |
| <cli>ent identification code&gt;</cli>         | 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=""></investment> | 20122   | PartyIDInvestmentDecision<br>Maker | Char(20), Shortcode or Algorithm.<br>(ESMA RTS24 Field 4)   |  |

<sup>&</sup>lt;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></parties>  | Tag 4.2 | field name                                  | comments  |  |
|--|---------|---|---|--|
|  | 21222   | PartyIDInvestmentDecision<br>MakerQualifier | 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   | PartyIDInvestmentDecision<br>MakerSource    | Char Classification of Tag 20122. P = Shortcode or in conjunction with Tag 21222 also Algorithm The indication of Tag 21422 is not necessary.   |  |
| 21112 PartyIDExecutingTrader Qualifier  Property of the proper |         | PartyIDExecutingTrader                      | Char(20), Shortcode or Algorithm.<br>(ESMA RTS24 Field 5)<br>Special values: 3 = NORE   |  |
|  |         |   | 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.                   |  |
|  |         | , ,   | 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.

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### 4 Message Layouts

#### 4.1 FIX Header / Trailer

Legend FIX Header / Trailer

<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.

Column headers: 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.

Content: Columns "R" and "RF" will indicate if a tag is Mandatory or Optional; "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            | М  | M | String FIX version Valid values: FIX.4.4 FIX.4.2 Must always be the first field in the header structure   |
| 9   | BodyLength             | М  | M | Length Message length Must always be the second field in the header structure   |
| 35  | MsgType                | М  | М | String Message type Must conform to the RoE. Must always be the third field in the header structure   |
| 34  | MsgSeqNum              | М  | М | 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            | 0  | 0 | Boolean If a FIX engine repeats transmission of identical content (including MsgSeqNum) it will set PossDupFlag to "Y"  |
| 49  | SenderCompID           | М  | М | 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            | М  | М | UTC Time stamp  |
| 56  | TargetCompID           | М  | М | String ID of the receiving system Used for partner identification. Values will be defined by BrainTrade GmbH  |
| 97  | PossResend             | 0  | 0 | Boolean If a FIX engine repeats transmission of identical content (not 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        | 0  | 0 | 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 | 0  | 0 | SeqNum<br>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      | М  | М | 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       | М  | М | 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     | 0  | 0 | 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    | М  | М | String ID of the BT-FIX Gateway system Used for partner identification. Values will be defined by BrainTrade GmbH  |
| 52  | SendingTime     | М  | М | UTC Time stamp   |
| 56  | TargetCompID    | М  | M | String ID of the receiving system Used for partner identification. Values will be defined by BrainTrade GmbH   |
| 97  | PossResend      | 0  | 0 | 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 | 0  | 0 | 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   | М  |   | 3 Bytes Checksum Must always be the last field in the trailer structure |

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#### **FIX Messages of Session Levels** 5

#### **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 selfexplanatory.

> XEOMI (Xetra4/XEtra Ffm-25/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.

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

<sup>&</sup>lt;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  |
|--|-----------------------|----|---|-------|--|
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "A" (MsgType)</td></standa<> | ard message header>   | М  | М |       | Tag 35 = "A" (MsgType)   |
| 98   | EncryptMethod         | М  | М |       | Integer Method of encryption Must be set to 0 = "none / other"   |
| 108  | HeartBtInt            | M  | М |       | Integer<br>Heartbeat interval<br>Will be checked against a BT-FIX Gateway configuration<br>file value  |
| 141  | ResetSeqNumFlag       | 0  | 0 | 00000 | Boolean "Y" indicates that the both sides of the FIX session should reset sequence numbers   |
| 383  | MaxMessageSize        | 0  | 0 | 00000 | Length Maximum number of bytes supported for a single message  |
| 553  | Username              | 0  | М |       | String(10) UserID or username Must be identical to the <entering firm=""> PartyID value Only integer values will be accepted</entering>  |
| 554  | Password              | 0  | М |       | String(8) Password Value must contain numeric digits and letters. Special characters are not allowed.  |
| 789  | NextExpectedMsgSeqNum | 0  | 0 | 00000 | SeqNum Next expected MsgSeqNum value to be received Reserved for future use Will be ignored  |
| 925  | NewPassword           | 0  | 0 | 00000 | String(8) New password If the new password is available, then a password change will be done during Logon-processing. Value must contain numeric digits and letters. Special characters are not allowed. |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<>                      | ard message trailer>  | М  | М |       |  |

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### Logon Response

| Tag  | Field Name            | RF | R | XEOMI | Comment  |
|--|-----------------------|----|---|-------|--|
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "A" (MsgType)</td></standa<> | ard message header>   | М  | М |       | Tag 35 = "A" (MsgType)   |
| 98   | EncryptMethod         | M  | М |       | Integer Method of encryption Will be set to 0 = "none / other"                                   |
| 108  | HeartBtInt            | М  | М |       | Integer<br>Heartbeat interval  |
| 141  | ResetSeqNumFlag       | 0  | 0 | 00000 | Boolean "Y" indicates that the both sides of the FIX session should reset sequence numbers       |
| 383  | MaxMessageSize        | 0  | 0 | 00000 | Length Maximum number of bytes supported for a single message                                    |
| 553  | Username              | 0  | 0 | 00000 | String(10) UserID or username The tag will not be supplied at present                            |
| 789  | NextExpectedMsgSeqNum | 0  | 0 | 00000 | SeqNum Next expected MsgSeqNum value to be received Reserved for future use Will not be supplied |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<>                      | ard message trailer>  | М  | М |       |  |

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  |
|--|----------------------|----|---|-------|--|
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "5" (MsgType)</td></standa<> | ard message header>  | М  | М |       | Tag 35 = "5" (MsgType)   |
| 58   | Text                 |    | 0 | 00000 | String<br>Error text   |
| 1409   | SessionStatus        |    | 0 | 00000 | Integer Error code Valid values: 5 = Invalid username or password 7 = Logons are not allowed at this time 8 = Password expired |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<>                      | ard message trailer> | М  | М |       |  |

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  |
|---|----------------------|----|---|-------|--|
| <stand< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "BE" (MsgType)<sup>6</sup></td></stand<> | ard message header>  | М  | М |       | Tag 35 = "BE" (MsgType) <sup>6</sup>   |
| 553   | Username             | М  | М |       | String(10) UserID or username Must be identical to the <entering firm=""> PartyID value</entering>         |
| 554   | Password             | 0  | M |       | String(8) Password Value must contain numeric digits and letters. Special characters are not allowed.      |
| 923   | UserRequestID        | М  | М |       | String(16) Unique identifier for a User Request  |
| 924   | UserRequestType      | М  | M |       | Integer Indicates the action required by a User Request message Must be set to "3" (ChangePasswordForUser) |
| 925   | NewPassword          | 0  | M |       | String(8) New password Value must contain numeric digits and letters. Special characters are not allowed.  |
| <stand< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></stand<>                                   | ard message trailer> | М  | М |       |  |

### User Response

| Tag   | Field Name        | RF | R | XEOMI | Comment   |
|---|-------------------|----|---|-------|---|
| <standard< td=""><td>d message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "BF" (MsgType)<sup>7</sup></td></standard<> | d message header> | М  | М |       | Tag 35 = "BF" (MsgType) <sup>7</sup>            |
| 553   | Username          | М  | М |       | String<br>UserID                                |
| 923   | UserRequestID     | М  | М |       | String(16) Unique identifier for a User Request |

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

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

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| Tag  | Field Name          | RF | R | XEOMI | Comment  |
|--|---------------------|----|---|-------|--|
| 926  | UserStatus          | 0  | М |       | 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  |
| 927  | UserStatusText      | 0  | 0 | 00000 | String   |
|  |                     |    |   |       | If password change successful then tag will be not filled  |
|  |                     |    |   |       | A text description associated with a user status (tag 926)   |
| <standa< td=""><td>rd message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<> | rd message trailer> | М  | М |       |  |

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# 5.4 Logout

# **Logout Request**

| Tag  | Field Name         | RF | R | XEOMI | Comment                |
|--|--------------------|----|---|-------|------------------------|
| <standar< td=""><td>d message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "5" (MsgType)</td></standar<> | d message header>  | М  | М |       | Tag 35 = "5" (MsgType) |
| <standar< td=""><td>d message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standar<>                      | d message trailer> | М  | М |       |                        |

## Logout Response

| Tag   | Field Name         | RF | R | XEOMI | Comment                                 |
|---|--------------------|----|---|-------|---|
| <standard header="" message=""></standard>  |                    | М  | М |       | Tag 35 = "5" (MsgType)                  |
| 58  | Text               |    | 0 | 00000 | String<br>A text description for logout |
| <standar< td=""><td>d message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standar<> | d message trailer> | М  | М |       |   |

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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<br>Gateway | Trading<br>System |  |
| 1   | News ("2", "End of Business Day")                   |              | <b>←</b> •        |                   |  |
|     | Further client requests                             |              |                   |                   |  |
| 2   | NewOrderSingle                                      | •            |                   |                   |  |
|     | Declined to requests after<br>"End of Business Day" |              |                   |                   |  |
| 3   | Business Message Reject (4)                         |              | ←•                |                   |  |
|     | Message from system                                 |              |                   | ←•                |  |
| 4   | Execution Report ("Trade", "Partially filled")      |              | ←•                |                   |  |
| 5   | News ("3", "End of Business Day Cut-Off")           |              | <b>←</b> •        |                   |  |
| 6   | Logout  |              | ←•                |                   |  |
| 8   | Session termination                                 |              | ←•                |                   |  |

#### News Messages

| Tag  | Field Name           | RF | R | XEOMI | Comment   |
|--|----------------------|----|---|-------|---|
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "B" (MsgType)</td></standa<> | ard message header>  | М  | М |       | Tag 35 = "B" (MsgType)  |
| 33   | LinesOfText          |    | М |       | NumInGroup<br>Identifies number of lines of text body<br>Will be set to "1"   |
| 58   | Text                 |    | М |       | 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             |    | М |       | String System status "002" = End of Business Day "003" = End of Business Day Cut-Off  |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<>                      | ard message trailer> | М  | М |       |   |

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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           | М  | М |       | SeqNum<br>Sequence number of the request being rejected  |
| 58   | Text                | 0  | 0 | 00000 | String<br>Error text                                     |
| 371  | RefTagID            | 0  | М |       | Integer Tag number of the FIX field being referenced     |
| 372  | RefMsgType          | 0  | М |       | String MsgType of the FIX message being referenced       |
| 373  | SessionRejectReason | 0  | 0 | 00000 | Integer<br>Reject reason                                 |
| 5555 | ReturnCode          |    | 0 | 00000 | Integer<br>Return code                                   |
| 9803 | TradingSystemID     |    | 0 | 00000 | 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            | 0  | М |       | String MsgType of the FIX message being referenced       |
| 58   | Text                 | 0  | 0 | 00000 | String<br>Error text                                     |
| 372  | RefMsgType           | М  | М |       | Integer MsgType of the FIX message being referenced      |
| 380  | BusinessRejectReason | М  | М |       | Integer<br>Reject reason                                 |
| 5555 | ReturnCode           |    | 0 | 00000 | String<br>Return code                                    |
| 9803 | TradingSystemID      |    | 0 | 00000 | 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".

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#### **FIX Messages at Application Levels**

#### **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.

<u>Column headers:</u> XEOMI: These details (<u>Mandatory</u>) <u>Optional</u> <u>Conditional</u> <u>Not allowed</u>) are listed for the trading systems Xetra/XEtra Ffm-2/XONTRO/MAX-ONE/INVESTRO. 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. settlementsystems. When discussing a Cancel/Replace Request, the values chAngeable and Unchanged (no modification possible) will also be used. EnterOTC, DeleteOTC, ReverseOTC, EnterMiFID, DeleteMiFID contain Mandatory/Optional/Conditional/Not allowed/Ignore 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 Mandatory or Conditionally 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<br>Gateway | Trading<br>System |
| 1   | New Order Single   | •           |                   |                   |
|     |  |             | •                 |                   |
|     | Optionally: Preliminary confirmation with PendingReason (tag 5946) |             |                   | <b>←</b> •        |
| 2   | Execution Report ("Pending New")                                   |             | ←•                |                   |
|     | Final confirmation positive  |             |                   | <b>+</b>          |
| 3   | Execution Report ("New", "New")                                    |             | ←•                |                   |

| No. | Unsuccessful Submission of an Order   | ٠ | FE Customer | Message Flow<br>BT FIX<br>Gateway | Trading<br>System |
|-----|---|---|-------------|-----------------------------------|-------------------|
| 1   | New Order Single  |   | •           | •                                 |                   |
| 2   | Optionally: Preliminary confirmation with PendingReason (tag 5946)  Execution Report ("Pending New", "Pending New") |   |             | <b>←</b>                          | ←•                |
|     | Final confirmation negative with error information (tags 5555, 9320, 9803)  |   |             |                                   | ←•                |
| 3   | Execution Report ("Rejected")   |   |             | ←•                                |                   |

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

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# 7.2.1.2 Operations – Funds Settlement (INVESTRO / Vestima)

# INVESTRO "classic"

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

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

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### INVESTRO / Vestima

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

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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   |
|---|----------------------|----|---|-------|---|
| <stand< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "D" (MsgType)</td></stand<>  | ard message header>  | М  | М |       | Tag 35 = "D" (MsgType)  |
| <partie< td=""><td>S&gt;</td><td>0</td><td>М</td><td></td><td></td></partie<>   | S>                   | 0  | М |       |   |
| 453   | NoPartyIDs           | 0  | M |       | NumInGroup Number of parties involved Valid values are 1 – 6 The value must correspond to the number of parties (repeating groups) provided   |
| <enteri< td=""><td>ng firm&gt;</td><td>0</td><td>М</td><td></td><td>The participant operating the connection</td></enteri<>   | ng firm>             | 0  | М |       | The participant operating the connection  |
| <execu< td=""><td>ting firm&gt;</td><td>0</td><td>0</td><td>00000</td><td>The participant being in charge of the order If the repeating group is missing, "entering firm" will become the owner of the order</td></execu<>  | ting firm>           | 0  | 0 | 00000 | The participant being in charge of the order If the repeating group is missing, "entering firm" will become the owner of the order  |
| <marke< td=""><td>et maker&gt;</td><td>0</td><td>0</td><td>N0000</td><td>The market maker Only valid for XONTRO and MAX-ONE. Will be ignored otherwise</td></marke<>  | et maker>            | 0  | 0 | N0000 | The market maker Only valid for XONTRO and MAX-ONE. Will be ignored otherwise   |
| <interm< td=""><td>nediary&gt;</td><td>0</td><td>0</td><td>NNNNO</td><td>Data for intermediary (sales institution) only allowed for INVESTRO</td></interm<>   | nediary>             | 0  | 0 | NNNNO | Data for intermediary (sales institution) only allowed for INVESTRO   |
| <system< td=""><td>matic internalizer&gt;</td><td>0</td><td>0</td><td>ONNNN</td><td>Xetra Best Executor<br/>Only valid for Xetra</td></system<>   | matic internalizer>  | 0  | 0 | ONNNN | Xetra Best Executor<br>Only valid for Xetra   |
| <cli>client</cli>   | identification code> | 0  | 0 | NNOON | Identification of the customer  |
| <invest< td=""><td>ment decision maker&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Trading member employee or algorithm being responsible for the investment decision.</td></invest<>   | ment decision maker> | 0  | 0 | NNOON | Trading member employee or algorithm being responsible for the investment decision.   |
| <execu< td=""><td>ition within firm&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Trading member employee or algorithm being responsible for the order execution.</td></execu<>   | ition within firm>   | 0  | 0 | NNOON | Trading member employee or algorithm being responsible for the order execution.   |
| end <p< td=""><td>arties&gt;</td><td></td><td></td><td></td><td></td></p<>  | arties>              |    |   |       |   |
| <instru< td=""><td>ment&gt;</td><td>М</td><td>М</td><td></td><td>Financial instrument, given as ISIN</td></instru<>   | ment>                | М  | М |       | Financial instrument, given as ISIN   |
| <tradin< td=""><td>g sessions&gt;</td><td>0</td><td>0</td><td>ONOOO</td><td>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</td></tradin<> | g sessions>          | 0  | 0 | 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  |
| <order< td=""><td>Attributes&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Repeating Group for attributes of orders</td></order<>   | Attributes>          | 0  | 0 | NNOON | Repeating Group for attributes of orders  |
| <value< td=""><td>ChecksGrp&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Check flag for the market value permitted as a maximum for one order on the trading venue.</td></value<>  | ChecksGrp>           | 0  | 0 | NNOON | Check flag for the market value permitted as a maximum for one order on the trading venue.  |
| 1   | Account              | 0  | 0 | ММООО | 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 ClOrdID 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  This tag is ignored |
| 38  | OrderQty   | 0   | М   |       | Qty, Float(12,3)<br>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      | С   | С   |       | Price, Float(13,5)<br>Order limit, must be present if Tag 40 (OrdType) is set to<br>"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       | 0   | 0   | 00000 | 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      | 0  | 0 | 00000 | Char  |
| 59  | TimeinForce      | U  | 0 | 00000 | 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"<br>6 = "Good till Date"   |
|     |                  |    |   |       | Default: "0"  |
| 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  | С |       | 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    | 0  | М |       | Target exchange<br>MIC Code   |
| 110 | MinQty           | 0  | 0 | CNNNN | Qty, Float(12,3) Minimum quantity to be executed. Required for midpoint Orders (OrdType = "P"), must not be present otherwise   |
| 432 | ExpireDate       | С  | С |       | 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 | 0  | 0 | 00000 | String(16)<br>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            |    | 0 | CNNNN | Integer Valid values: 2 = Mid-price peg Only valid for Xetra midpoint orders, must not be present otherwise   |
| 1138   | DisplayQty              |    | 0 | 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        | 0  | 0 | 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         | 0  | 0 | 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      |    | 0 | NNNNO | Char Y = subscription with reinvestment price Space = other Only for INVESTRO   |
| 5078   | FundSpecialDealDiscount |    | 0 | NNNNO | Char Y = subscription with NAV Space = other Only for INVESTRO  |
| 5156   | UnreleasedDate          |    | 0 | 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              |    | С | NNOON | Char XONTRO, MAX-ONE E = "EG-Order" Used only for EG-Orders (XONTRO). This flag is not allowed for "Next day orders".   |
| <standa< td=""><td>rd message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<> | rd message trailer>     | М  | М |       |   |

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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         | Res   | ponse for Order s                                 | ubmission      |  |
|-------|------------------|---|---|----------------|--|
| Tag   | Field            | Preliminary   | Positive  | Negative       | Negative<br>(Vestima only)                         |
| 39    | OrdStatus        | A = "Pending New"   | 0 = "New"   | 8 = "Rejected" | 4 = "Cancelled"                                    |
| 150   | ЕхесТуре         | 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" | -   | -              | -  |
| Contr | acts for Vestima | securities only   |   |                |  |
| 5048  | OrdSubStatus     | D = "provision check<br>negative"<br>E = "provision check positive"<br>I = "order entry received in<br>Vestima"             | F = "enter confir-<br>mation from OHA"            | -              | G = "delete from<br>Vestima"                       |
| 5476  | PrivateReference | "Order Entry received in<br>Vestima"<br>"Provision check"   | "OHA Confirmation -<br>successful Order<br>Entry" | -              | Text from Vestima<br>(Comment for<br>cancellation) |

### 7.2.1.5 Response "Execution Report" - Message Data

| Tag  | Field Name         | RF | R | XEOMI | Comment   |
|--|--------------------|----|---|-------|---|
| <standa< td=""><td>rd message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "8" (MsgType)</td></standa<>  | rd message header> | М  | М |       | Tag 35 = "8" (MsgType)  |
| <pre><parties< pre=""></parties<></pre>  | <b>&gt;</b>        | 0  | М |       |   |
| 453  | NoPartyIDs         | 0  | М |       | NumInGroup Number of parties involved Valid values are 2 4 The value must correspond to the number of parties (repeating groups) provided |
| <enterir< td=""><td>ng firm&gt;</td><td>0</td><td>М</td><td></td><td>The participant operating the connection</td></enterir<>  | ng firm>           | 0  | М |       | The participant operating the connection  |
| <execut< td=""><td>ing firm&gt;</td><td>0</td><td>0</td><td>МММММ</td><td>The participant having issued the order If the repeating group is missing, "entering firm" will become the owner of the order</td></execut<> | ing firm>          | 0  | 0 | МММММ | The participant having issued the order If the repeating group is missing, "entering firm" will become the owner of the order             |
| <marke< td=""><td>t maker&gt;</td><td>0</td><td>0</td><td>N0000</td><td>The market maker Only valid for XONTRO and MAX-ONE</td></marke<>   | t maker>           | 0  | 0 | N0000 | The market maker Only valid for XONTRO and MAX-ONE  |
| <interm< td=""><td>ediary&gt;</td><td>0</td><td>0</td><td>NNNNO</td><td>Data for intermediary (sales institution) Only allowed for INVESTRO</td></interm<>   | ediary>            | 0  | 0 | NNNNO | Data for intermediary (sales institution) Only allowed for INVESTRO   |

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| Tag   | Field Name          | RF | R | XEOMI | Comment  |
|---|---------------------|----|---|-------|--|
| <syste< th=""><th>matic internalizer&gt;</th><th>0</th><th>0</th><th>ONNNN</th><th>Xetra Best Executor<br/>Only valid for Xetra</th></syste<> | matic internalizer> | 0  | 0 | ONNNN | Xetra Best Executor<br>Only valid for Xetra  |
| end <p< td=""><td>arties&gt;</td><td></td><td></td><td></td><td></td></p<>  | arties>             |    |   |       |  |
| <instru< td=""><td>ment&gt;</td><td>M</td><td>М</td><td></td><td>Financial instrument given as ISIN</td></instru<>                            | ment>               | M  | М |       | Financial instrument given as ISIN   |
| 1   | Account             | 0  | 0 | ММОМО | String(2) Consists of Account Type and Account Type Number Trading systems may provide default values  |
| 6   | AvgPx               | М  | М |       | Price Average price Will be set to "0"   |
| 11  | ClOrdID             | 0  | М |       | String(16) Unique key of an order related task (request)   |
| 14  | CumQty              | М  | М |       | Qty, Float(12,3) Total quantity executed Will be set to "0"  |
| 17  | ExecID              | М  | M |       | String Unique key of the Execution Report Uniqueness must be guaranteed within a single trading day  |
| 37  | OrderID             | М  | М |       | 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            | 0  | М |       | Qty, Float(12,3)<br>Total quantity ordered   |
| 39  | OrdStatus           | М  | М |       | 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             | 0  | М |       | Char<br>Order type   |
| 44  | Price               | С  | С |       | Price, Float(13,5) Order limit Filled for OrdType = "2", "4" or "P"  |
| 54  | Side                | М  | M |       | Char<br>Side of order<br>1 = "buy"<br>2 = "sell"   |
| 58  | Text                | 0  | 0 | 00000 | String(25) Text Only the first twelve bytes will be returned by Xetra and Xetra Frankfurt 2  |
| 59  | TimeInForce         | 0  | М |       | Char   |

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| Tag  | Field Name          | RF | R | XEOMI | Comment  |
|------|---------------------|----|---|-------|--|
| 60   | TransactTime        | 0  | М |       | UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Time of execution/order creation                                     |
| 99   | StopPx              | С  | 0 | CCCCN | Price, Float(13,5)<br>Stop limit, filled for OrdType = "3" or "4"  |
| 100  | ExDestination       | 0  | М |       | Exchange MIC Code Will always be supplied by the BT-FIX Gateway  |
| 110  | MinQty              | 0  | 0 | CNNNN | Qty, Float(12,3) Minimum quantity to be executed Only supplied in case of a midpoint Order (OrdType = "P")                 |
| 150  | ЕхесТуре            | М  | М |       | Char<br>Type of Report   |
|      |                     |    |   |       | 0 = "New"<br>Submission positive   |
|      |                     |    |   |       | A = "Pending New" Submission preliminarily accepted (further information to be seen via tag 5946 – PendingReason)          |
|      |                     |    |   |       | 8 = "Rejected"<br>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           | М  | М |       | Qty, Float(12,3) Quantity open for further execution Will be set to OrderQty   |
| 336  | TradingSessionID    | 0  | 0 | ONOOO | String(1) Valid value 1 = "Day" Will always be used from a New Order Single Request together with tag 625                  |
| 432  | ExpireDate          | 0  | М |       | LocalMktDate Order expiration date Will always be supplied with TimeInForce = "6" (tag 59)                                 |
| 526  | SecondaryClOrdID    | 0  | 0 | 00000 | String(16) Bank internal order number User defined key of the order (Order number)   |
| 625  | TradingSessionSubID | 0  | 0 | CNCCO | String Will always be used together with tag 336   |
| 1094 | PegPriceType        |    | 0 | CNNNN | Integer Will be set to "2" if present. Only valid for Xetra midpoint orders (OrdType "P")                                  |
| 1138 | DisplayQty          |    | 0 | CNNNN | Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders                                   |

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|      | 1                       |    | ı | ı     |  |
|------|-------------------------|----|---|-------|--|
| Tag  | Field Name              | RF | R | XEOMI | Comment  |
| 5048 | OrdSubStatus            |    | 0 | 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"<br>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   |
|      |                         |    |   |       | Positive (OrdStatus 0 = "New")  F = "enter confirmation from OHA"  Contract submission to Vestima by Vestima depositary bank; positively confirmed                                   |
|      |                         |    |   |       | Negative (OrdStatus 4 = "Cancelled")  G = "delete from Vestima"  Cancellation contract through Vestima depositary bank.  In this case, OrdStatus = 4 and ExecType = 4  ("Cancelled") |
| 5076 | FundReinvestIncome      |    | 0 | NNNNO | Char Y = buy at reinvestment price Space = other Only for INVESTRO   |
| 5078 | FundSpecialDealDiscount |    | 0 | NNNNO | Char Y = buy at NAV price Space = other Only for INVESTRO  |
| 5156 | UnreleasedDate          |    | 0 | 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<br>Next day orders, cut off time Fundssegement Hanover  |
|      |                         |    |   |       | MAX-ONE<br>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       |    | С | 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 |    | 0 | NNNC       | String Addition to OrdSubStatus  Vestima Preliminary "Order Entry received in Vestima" "Provision check"  Positive "OHA Confirmation – successful Order Entry"  Negative   |
| 5690 | VersionID        |    | 0 | NANANININI | Text by Vestima – comment to decline of contract   |
| 5689 | Versionid        |    | O | MMNNN      | Integer(18)  Xetra, Xetra Frankfurt 2  Update control key  |
| 5946 | Pending Reason   |    | 0 | cccc       | 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 | l in the c | ase of a | rejection ("R | Rejected" - OrdStatus = 8, ExecType = 8)  |
| 5555  | ReturnCode                           |            | 0        | cccc          | Integer<br>Return code  |
| 9320  | OrderRejectReasonTxt                 |            | 0        | cccc          | String<br>Error text delivered by the trading system  |
| 9803  | TradingSystemID                      |            | 0        | cccc          | Integer Identification ID of the system generating the return code  |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<> | ard message trailer>                 | М          | М        |               |   |

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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<br>Gateway | Trading<br>System |
| 1   | Order Cancel ("ClOrdID", "OrigClOrdID")                            | •            |                   |                   |
|     |  |              | •                 |                   |
|     | Optionally: Preliminary confirmation with PendingReason (tag 5946) |              |                   | ←•                |
| 2   | Execution Report ("Pending Cancel")                                |              | ←•                |                   |
|     | Confirmation   |              |                   | ←•                |
| 3   | Execution Report ("Cancelled", "Cancelled")                        |              | ←•                |                   |

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

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

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"

| ٨ | 10. | Successful Cancellation of an Order         |             | Message Flow<br>BT FIX |          |
|---|-----|---|-------------|------------------------|----------|
|   |     |   | FE Customer | Gateway                | INVESTRO |
|   | 1   | Order Cancel<br>("ClOrdID", "OrigClOrdID")  | •           |                        |          |
|   |     |   |             | •                      |          |
|   |     | Final confirmation                          |             |                        | <b>—</b> |
|   | 2   | Execution Report ("Cancelled", "Cancelled") |             | ←•                     |          |
|   |     | Message to contract recipient               |             |                        | <b>←</b> |
|   | 3   | Execution Report ("Cancelled", "Cancelled") |             | -                      |          |

| No. | Rejected Cancellation  | Message Flow |                   |          |
|-----|--|--------------|-------------------|----------|
|     |  | FE Customer  | BT FIX<br>Gateway | INVESTRO |
| 1   | Order Cancel ("ClOrdID", "OrigClOrdID")                                    | •            |                   |          |
|     |  |              | •                 |          |
|     | Final negative confirmation with error information (tags 5555, 9320, 9803) |              |                   | ←•       |
| 3   | Order Cancel Reject<br>("Rejected")  |              | ••                |          |

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### INVESTRO / Vestima

| No. | Successful Cancellation of a                                 | Message Flow |                   |          |          |
|-----|--|--------------|-------------------|----------|----------|
|     | Contract in INVESTRO / Vestima                               | FE Customer  | BT FIX<br>Gateway | INVESTRO | Vestima  |
| 1   | Order Cancel   |              |                   |          |          |
|     | ("ClOrdID", "OrigClOrdID")                                   |              |                   |          |          |
|     |  |              |                   | •        | MT502    |
|     | Validation INVESTRO  |              |                   | <b>←</b> | WIT 302  |
| 2   | Execution report   |              |                   |          |          |
|     | ("Pending Cancel", "Pending Cancel")                         |              | ←•                |          |          |
|     | Validation Vestima   |              |                   | MT509    | <b>←</b> |
|     |  |              |                   | <b>←</b> |          |
| 3   | Execution Report ("Pending Cancel", "Pending Cancel")        |              | ←•                |          |          |
|     | Cancellation acknowledged from OHA (Cancellation successful) |              |                   | MT509    |          |
|     |  |              |                   | <b>←</b> |          |
| 4   | Execution Report   |              |                   |          |          |
|     | ("Cancelled", "Cancelled")                                   |              | •                 |          |          |

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

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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 header="" message=""></standard>   |                     | М  | М |       | Tag 35 = "F" (MsgType)  |
| <parties< td=""><td>S&gt;</td><td>0</td><td>М</td><td></td><td></td></parties<>  | S>                  | 0  | М |       |   |
| 453  | NoPartyIDs          | 0  | M |       | NumInGroup Number of parties involved Valid values are 1 – 5 The value must correspond to the number of parties (repeating groups) provided   |
| <enterir< td=""><td>ng firm&gt;</td><td>0</td><td>М</td><td></td><td>The participant operating the connection</td></enterir<>  | ng firm>            | 0  | М |       | The participant operating the connection  |
| <execu< td=""><td>ting firm&gt;</td><td>0</td><td>0</td><td>00000</td><td>The participant being in charge of the order If the repeating group is missing, "entering firm" will become the owner of the order</td></execu<> | ting firm>          | 0  | 0 | 00000 | The participant being in charge of the order If the repeating group is missing, "entering firm" will become the owner of the order  |
| <cli>client</cli>  | dentification code> | 0  | 0 | NNOON | Identification of the customer  |
| <investment decision="" maker=""></investment>   |                     | 0  | 0 | NNOON | Trading member employee or algorithm being responsible for the investment decision.   |
| <execution firm="" within=""></execution>  |                     | 0  | 0 | NNOON | Trading member employee or algorithm being responsible for the order execution.   |
| end <pa< td=""><td>arties&gt;</td><td></td><td></td><td></td><td></td></pa<>   | arties>             |    |   |       |   |
| <instrur< td=""><td>nent&gt;</td><td>М</td><td>М</td><td></td><td>Financial instrument given as ISIN</td></instrur<>   | nent>               | М  | М |       | Financial instrument given as ISIN  |
| <order< td=""><td>Attributes&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Repeating Group for attribute of orders</td></order<>   | Attributes>         | 0  | 0 | NNOON | Repeating Group for attribute of orders   |
| 11   | CIOrdID             | M  | М |       | 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             | 0  | С |       | String(13) Unique order number of the trading system May be used for order identification. If so, then OrigCIOrdID must be set to "[N/A]".  |

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| 41 OrigClOrdID M M String(16) ClOrdID of the corresponding lift OrigClOrd present and  54 Side M M Char Side of orde 1 = "buy" 2 = "sell" MAX-ONE a but using the but using the lift order. This to the lift of the lift of the lift of the lift or the lift of the lift of the lift or th |   |
|--|---|
| ClOrdID of the corresponding of the corresponding of the corresponding of the corresponding present and  54 Side M M Char Side of orden to a "Side |   |
| Side of orde 1 = "buy" 2 = "sell" MAX-ONE a but using the solution of the solu | ne previous successful FIX requesting to the order, used to identify the order. ID is set to "[N/A]", OrderID (Tag 37) must be will be used for order identification. |
| Provided by order. This t   100  | r<br>Iso accepts cancel requests including errors<br>e correct format.  |
| MIC Code           5253         OrdTypeExt         OC         COOOO         Char   | amp<br>the sending system or the owner of the<br>ag will be ignored.  |
|  | cation  |
| Will be ignor The Reques Must be set of a Xetra Fr Must be set of a Xetra or For Xetra st the correct v  Valid values Xetra: 1 = "Market" 2 = "Limit" 3 = "Stop" 4 = "Stop Li  | op, stop limit, midpoint and iceberg orders alue must be provided.  : mit" with Leftover" nt" urt 2:  |
| 6042 CxlReason O O NNOON Integer Identification (MIFID II).  |   |
| <standard message="" trailer=""> M M</standard>  | of deleting an order by kill-functionality by kill-functionality  |

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

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

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| Tag  | Field Name       | RF | R | XEOMI | Comment   |
|------|------------------|----|---|-------|---|
| 150  | ЕхесТуре         | 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"   |
| 151  | LeavesQty        | М  | М |       | Cancellation of a contract rejected by Vestima OHA  Qty, Float(12,3)  Quantity open for further execution  Will be set to "0"   |
| 526  | SecondaryClOrdID | 0  | 0 | 00000 | String(16) Bank internal order number   |
| 5048 | OrdSubStatus     |    | 0 | NNNC  | String Only for messages in case of contracts for Vestima securities  Vestima  Preliminary (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 |    | 0 | NNNNC | String Supplement to OrdSubStatus  Vestima Preliminary "delete request received in Vestima" Positive "deletion processing by Vestima / OHA" Negative Text by Vestima – comment to decline of contract   |

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| Tag   | Field Name     | RF | R | XEOMI | Comment   |
|---|----------------|----|---|-------|---|
| 5946  | Pending Reason |    | 0 | 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=""></standard> |                | М  | М |       |   |

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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   |
|--|----------------------|----|---|-------|---|
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "9" (MsgType)</td></standa<>   | ard message header>  | М  | М |       | Tag 35 = "9" (MsgType)  |
| <parties< td=""><td>S&gt;</td><td></td><td>М</td><td></td><td></td></parties<>   | S>                   |    | М |       |   |
| 453  | NoPartyIDs           |    | M |       | NumInGroup Number of parties involved Valid value "2" The value must correspond to the number of parties (repeating groups) provided.                                       |
| <enterii< td=""><td>ng firm&gt;</td><td></td><td>М</td><td></td><td>The participant operating the connection</td></enterii<>   | ng firm>             |    | М |       | The participant operating the connection  |
| <execu< td=""><td>ting firm&gt;</td><td></td><td>0</td><td>00000</td><td>The participant having sent the order. If the repeating group is missing, "entering firm" will become the owner of the order.</td></execu<> | ting firm>           |    | 0 | 00000 | The participant having sent the order. If the repeating group is missing, "entering firm" will become the owner of the order.   |
| end <pa< td=""><td>arties&gt;</td><td></td><td></td><td></td><td></td></pa<>   | arties>              |    |   |       |   |
| 11   | CIOrdID              | M  | М |       | String(16) Unique key of an order related task (request). The value provided by the request will be returned.   |
| 37   | OrderID              | М  | М |       | String(13) Unique order number of the trading system. May be missing or set to "[N/A]"  |
| 39   | OrdStatus            | М  | М |       | Char Order status Will be set to "8" (Rejected).  |
| 41   | OrigClOrdlD          | М  | M |       | String(16) CIOrdID 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         | 0  | М |       | UTC Timestamp<br>Time of execution/rejection  |
| 100  | ExDestination        |    | М |       | Exchange location MIC Code  |
| 102  | CxlRejReason         | 0  | 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     | М  | М |       | Char<br>Will be set to "1" (Order Cancel Request)   |
| 5555   | ReturnCode           |    | М |       | Integer<br>Return code  |
| 9320   | OrdRejectReasonText  |    | М |       | String<br>Error text issued by the trading system   |
| 9803   | TradingSystemID      |    | М |       | Integer Will identify the system generating the return code.  |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<>  | ard message trailer> | М  | М |       |   |

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### 7.2.3 Order resp. Instructions-Modification

### 7.2.3.1 Operations - Orders

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

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

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

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.

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

| No. | Rejected Modification of an Order  |             | Message Flow      |          |
|-----|--|-------------|-------------------|----------|
|     |  | FE Customer | BT FIX<br>Gateway | INVESTRO |
| 1   | Order Cancel/Replace<br>("ClOrdID", "OrigClOrdID")                         | •           |                   |          |
|     |  |             | •                 |          |
|     | Final negative confirmation with error information (tags 5555, 9320, 9803) |             |                   | <b>+</b> |
| 3   | Order Cancel Reject<br>("Rejected")  |             | <b>←</b> •        |          |

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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 OrigCIOrdID 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 header="" message=""></standard>  |                     | М  | М |       | Tag 35 = "G" (MsgType)   |
| <partie:< td=""><td>S&gt;</td><td>0</td><td>М</td><td></td><td></td></partie:<>   | S>                  | 0  | М |       |  |
| 453   | NoPartyIDs          | 0  | М |       | NumInGroup Number of parties involved Valid values are 2 – 6 The value must correspond to the number of parties (repeating groups) provided.   |
| <enteri< td=""><td>ng firm&gt;</td><td>0</td><td>М</td><td></td><td>The participant operating the connection</td></enteri<>   | ng firm>            | 0  | М |       | The participant operating the connection   |
| <execu< td=""><td>ting firm&gt;</td><td>0</td><td>0</td><td>MMMM-</td><td>The participant being in charge of the order. If the repeating group is missing, then "entering firm" will become the owner of the order.</td></execu<> | ting firm>          | 0  | 0 | 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.  |
| <marke< td=""><td>et maker&gt;</td><td>0</td><td>0</td><td>NOOO-</td><td>The market maker. Only valid for XONTRO and MAX-ONE. Will be ignored otherwise.</td></marke<>  | et maker>           | 0  | 0 | NOOO- | The market maker. Only valid for XONTRO and MAX-ONE. Will be ignored otherwise.  |
| <syster< td=""><td>matic internalizer&gt;</td><td>0</td><td>0</td><td>ONNN-</td><td>Xetra Best Executor<br/>Only valid for Xetra</td></syster<>   | matic internalizer> | 0  | 0 | ONNN- | Xetra Best Executor<br>Only valid for Xetra  |
| <cli>dentification code&gt;</cli>   |                     | 0  | 0 | NNOON | Identification of the customer   |
| <investment decision="" maker=""></investment>  |                     | 0  | 0 | NNOON | Trading member employee or algorithm being responsible for the investment decision.  |
| <execution firm="" within=""></execution>   |                     | 0  | 0 | NNOON | Trading member employee or algorithm being responsible for the order execution.  |
| end <p< td=""><td>arties&gt;</td><td></td><td></td><td></td><td></td></p<>  | arties>             |    |   |       |  |
| <instru< td=""><td>ment&gt;</td><td>М</td><td>М</td><td></td><td>Financial instrument given as ISIN</td></instru<>  | ment>               | М  | М |       | Financial instrument given as ISIN   |
| <trading sessions=""></trading>   |                     | 0  | 0 | 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. |
| <order< td=""><td>Attributes&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Repeating Group for attribute of orders</td></order<>  | Attributes>         | 0  | 0 | NNOON | Repeating Group for attribute of orders  |
| <value< td=""><td>ChecksGrp&gt;</td><td>0</td><td>0</td><td>NNOON</td><td>Check flag for the maximum market value permitted for one order an the trading venue.</td></value<>   | ChecksGrp>          | 0  | 0 | NNOON | Check flag for the maximum market value permitted for one order an the trading venue.  |
| 1   | Account             | 0  | 0 | 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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|     |             | 1   | l   |       | T  |
|-----|-------------|-----|-----|-------|--|
| Tag | Field Name  | RF  | R   | XEOMI | Comment  |
| 11  | CIOrdID     | M   | М   |       | 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     | 0   | С   |       | 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    | 0   | М   |       | 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 unuequal.  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 Limit"   |
| 41  | OrigClOrdID | М   | 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            | 0  | С |       | 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             | 0  | 0 | 0000- | String(25) Text Please note that only the first twelve digits will be passed on to Xetra and Xetra Frankfurt 2.   |
| 59   | TimeInForce      | 0  | 0 | 0000- | 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     | М  | M |       | UTC Timestamp Provided by the sending system or the owner of the order. This tag will be ignored.   |
| 99   | StopPx           | 0  | 0 | 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    | 0  | М | 0000- | Exchange location MIC Code May not be changed.  |
| 432  | ExpireDate       | 0  | С |       | LocalMktDate Order expiration date Must be present if Tag 59 is set to "6".   |
| 526  | SecondaryClOrdID | 0  | 0 | 0000- | 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     |    | 0 | CNNN- | Integer Valid values: 2 = Mid-price peg Only valid for Xetra midpoint orders  |
| 1138 | DisplayQty       |    | 0 | CNNN- | Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders  |
| 1724 | OrderOrigination | 0  | 0 | 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        |    | 0 | OONN- | Integer(18)  Xetra, Xetra Frankfurt 2 Update control key  |

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| Tag   | Field Name    | RF | R | ХЕОМІ | Comment   |
|---|---------------|----|---|-------|---|
| 6126  | OrigLeavesQty |    | 0 | 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=""></standard> |               | М  | М |       |   |

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

| Tag  | Field Name                                 | RF | R | XEOMI | Comment   |
|--|--|----|---|-------|---|
| <standa< td=""><td colspan="2"><standard header="" message=""></standard></td><td>М</td><td></td><td>Tag 35 = "8" (MsgType)</td></standa<>   | <standard header="" message=""></standard> |    | М |       | Tag 35 = "8" (MsgType)  |
| <partie:< td=""><td>S&gt;</td><td>0</td><td>М</td><td></td><td></td></partie:<>  | S>   | 0  | М |       |   |
| 453  | NoPartyIDs                                 | 0  | M |       | NumInGroup Number of parties involved Valid values are 2 3 The value must correspond to the number of parties (repeating groups) provided   |
| <enteri< td=""><td>ng firm&gt;</td><td>0</td><td>М</td><td></td><td>The participant operating the connection</td></enteri<>  | ng firm>                                   | 0  | М |       | The participant operating the connection  |
| <execu< td=""><td>ting firm&gt;</td><td>0</td><td>0</td><td>0000-</td><td>The participant being in charge of the order. If the repeating group is missing, "entering firm" will become the owner of the order.</td></execu<> | ting firm>                                 | 0  | 0 | 0000- | The participant being in charge of the order. If the repeating group is missing, "entering firm" will become the owner of the order.  |
|  | t maker>                                   | 0  | 0 | N000- | The market maker Only valid for XONTRO and MAX-ONE  |
| end <p< td=""><td></td><td> </td><td>_</td><td>1</td><td>1</td></p<>   |  |    | _ | 1     | 1   |
| <instru< td=""><td>ment&gt;</td><td>M</td><td>М</td><td></td><td>Financial instrument given as ISIN</td></instru<>   | ment>                                      | M  | М |       | Financial instrument given as ISIN  |
| 1  | Account                                    | М  | M |       | String(2) Consists of Account Type and Account Type Number  |
| 6  | AvgPx                                      | М  | М |       | Price<br>Average price<br>Will be set to "0"  |
| 11   | ClOrdID                                    | 0  | М |       | String(16) Unique key of an order related task (request) copied from the related request  |
| 14   | CumQty                                     | М  | М |       | Qty, Float(12,3) Total quantity executed  |
| 17   | ExecID                                     | М  | M |       | String Unique key of the Execution Report Uniqueness must be guaranteed for the entire trading day  |
| 37   | OrderID                                    | М  | M |       | String(13) Unique order number of the trading system Order numbers may change. 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                                   | 0  | М |       | Qty, Float(12,3)<br>Total quantity ordered  |
| 39   | OrdStatus                                  | М  | М |       | 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             | 0  | М |       | Char<br>Order type   |  |
| 41   | OrigClOrdID         | 0  | М |       | 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               | С  | С |       | Price, Float(13,5)<br>Order limit  |  |
| 54   | Side                | М  | М |       | Char<br>Side of order  |  |
| 58   | Text                | 0  | 0 | 0000- | String(25) Text Please note that only the first twelve digits will be returned by Xetra and Xetra Frankfurt 2.   |  |
| 59   | TimeInForce         | 0  | 0 | MMOO- | Char   |  |
| 60   | TransactTime        | 0  | М |       | UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Time of execution/order modification   |  |
| 99   | StopPx              | С  | 0 | CCCC- | Price, Float(13,5)<br>Stop limit   |  |
| 100  | ExDestination       |    | М |       | Exchange location MIC Code Will always be supplied by the BT-FIX Gateway   |  |
| 150  | ExecType            | M  | М |       | 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           | М  | М |       | Qty, Float(12,3) Quantity open for further execution   |  |
| 336  | TradingSessionID    | 0  | 0 | 0000- | String(1) Valid value 1 = "Day" Will always be used together with tag 625  |  |
| 432  | ExpireDate          | 0  | С |       | LocalMktDate Order expiration date   |  |
| 526  | SecondaryClOrdID    | 0  | 0 | 0000- | String(16) Bank internal order number User defined key of the order (Order number).  |  |
| 625  | TradingSessionSubID | 0  | 0 | CNCC- | String Will always be used together with tag 336   |  |
| 1094 | PegPriceType        |    | 0 | CNNN- | Integer Only valid for Xetra midpoint orders   |  |
| 1138 | DisplayQty          |    | 0 | CNNN- | Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders.  |  |
| 5689 | VersionID           |    | 0 | 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      |    | 0 | 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. |
| <standa< td=""><td>rd message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<> | rd message trailer> | М  | М |       |  |

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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  |
|--|----------------------|----|---|-------|--|
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td>Tag 35 = "9" (MsgType)</td></standa<>   | ard message header>  | М  | М |       | Tag 35 = "9" (MsgType)   |
| <pre><parties< pre=""></parties<></pre>  | S>                   |    | М |       |  |
| 453  | NoPartyIDs           |    | М |       | NumInGroup<br>Number of parties involved<br>Valid value "2"<br>The value must correspond to the number of parties<br>(repeating groups) provided.                                |
| <enterir< td=""><td>ng firm&gt;</td><td></td><td>М</td><td></td><td>The participant operating the connection</td></enterir<>   | ng firm>             |    | М |       | The participant operating the connection   |
| <execu< td=""><td>ting firm&gt;</td><td></td><td>0</td><td>MMMMM</td><td>The participant owning the order If the repeating group is missing, "entering firm" will become the owner of the order.</td></execu<> | ting firm>           |    | 0 | MMMMM | The participant owning the order If the repeating group is missing, "entering firm" will become the owner of the order.  |
| end <pa< td=""><td>arties&gt;</td><td></td><td></td><td></td><td></td></pa<>   | arties>              |    |   |       |  |
| 11   | CIOrdID              | М  | М |       | String(16) Unique key of an order related task (request). The value provided by the Order Cancel/Replace Request will be returned.   |
| 37   | OrderID              | М  | М |       | String(13) Unique order number of the trading system May be missing or set to "[N/A]".   |
| 39   | OrdStatus            | М  | М |       | Char<br>Order status<br>Will be set to "8" (Rejected).   |
| 41   | OrigClOrdID          | М  | М |       | 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         | 0  | М |       | UTC Timestamp<br>Time of execution/rejection   |
| 100  | ExDestination        |    | М |       | Exchange MIC Code Will always be supplied by the BT-FIX Gateway  |
| 102  | CxlRejReason         | 0  | М |       | 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     | М  | М |       | Char<br>Will be set to "2" (Order Cancel/Replace Request)  |
| 5555   | ReturnCode           |    | М |       | Integer<br>Return code   |
| 9320   | OrdRejectReasonText  |    | М |       | String<br>Error text issued by the trading system  |
| 9803   | TradingSystemID      |    | М |       | Integer Will identify the system generating the return code  |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<>  | ard message trailer> | М  | М |       |  |

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# 7.2.4 Order resp. instruction-Execution

### 7.2.4.1 Operations - Orders

| No. | Partial Fill                                   | Message Flow   |                   |                |  |
|-----|--|----------------|-------------------|----------------|--|
|     |  | FE<br>Customer | BT FIX<br>Gateway | Trading System |  |
|     | Partial Fill                                   |                |                   | <b>←</b>       |  |
| 1   | Execution Report ("Trade", "Partially Filled") |                | <b>—</b>          |                |  |

| No. | Complete Fill                        |  | Message Flow   |                   |                |  |  |
|-----|--------------------------------------|--|----------------|-------------------|----------------|--|--|
|     |                                      |  | FE<br>Customer | BT FIX<br>Gateway | Trading System |  |  |
|     | Complete fill                        |  |                |                   | ••             |  |  |
| 1   | Execution Report ("Trade", "Filled") |  |                |                   |                |  |  |

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### 7.2.4.2 Operations – Funds Settlement (INVESTRO / Vestima)

# INVESTRO "classic"

| No. | Complete Fill  | FE<br>Customer | Message Flow<br>BT FIX<br>Gateway | INVESTRO |
|-----|--|----------------|-----------------------------------|----------|
| 1   | Complete Fill  Execution Report  |                |                                   | -        |
|     | ("Trade", "Filled")  |                | •••                               |          |
|     | Message to the Contract Recipient  Execution Report ("Order Status", "Filled") |                |                                   | ←•       |
| 2   |  |                | <b>←</b>                          |          |

### INVESTRO/Vestima

| No. | Order Execution and Cancellation        | Message Flow   |                   |          |          |  |
|-----|---|----------------|-------------------|----------|----------|--|
|     |   | FE<br>Customer | BT FIX<br>Gateway | INVESTRO | Vestima  |  |
|     | Confirmation                            |                |                   | MT 515   | <b>←</b> |  |
|     |   |                |                   | ←-•      |          |  |
| 1   | Execution Report ("Trade"; "Filled")    |                | ←•                |          |          |  |
|     | Cancellation Confirmation               |                |                   | MT 515   | <b>←</b> |  |
|     |   |                |                   | ←•       |          |  |
| 2   | Execution Report ("Restated", "Filled") |                | <b></b>           |          |          |  |
|     | New Confirmation                        |                |                   | MT515    | <b>←</b> |  |
|     |   |                |                   | ←•       |          |  |
| 3   | Execution Report ("Restated", "Filled") |                | ←                 |          |          |  |

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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 header="" message=""></standard>  |                     | М  | М |       | Tag 35 = "8" (MsgType)   |
| <partie< td=""><td>PS&gt;</td><td>0</td><td>М</td><td></td><td></td></partie<>  | PS>                 | 0  | М |       |  |
| 453   | NoPartyIDs          | 0  | M |       | NumInGroup Number of parties involved Valid values are 1 – 3 The value must correspond to the number of parties (repeating groups) provided. |
| <enter< td=""><td>ing firm&gt;</td><td>0</td><td>М</td><td></td><td>The participant operating the connection</td></enter<>  | ing firm>           | 0  | М |       | The participant operating the connection   |
| <exec< td=""><td>uting firm&gt;</td><td>0</td><td>0</td><td>00000</td><td>The participant being in charge of the order. If the repeating group is missing, "entering firm" will become the owner of the order.</td></exec<> | uting firm>         | 0  | 0 | 00000 | The participant being in charge of the order. If the repeating group is missing, "entering firm" will become the owner of the order.         |
| <mark< td=""><td>et maker&gt;</td><td>0</td><td>0</td><td>N0000</td><td>The market maker Only valid for XONTRO and MAX-ONE</td></mark<>   | et maker>           | 0  | 0 | N0000 | The market maker Only valid for XONTRO and MAX-ONE   |
| <syste< td=""><td>matic internalizer&gt;</td><td>0</td><td>0</td><td>ONNNN</td><td>Xetra Best Executor<br/>Only valid for Xetra</td></syste<>   | matic internalizer> | 0  | 0 | ONNNN | Xetra Best Executor<br>Only valid for Xetra  |
| end <p< td=""><td>parties&gt;</td><td></td><td></td><td>1</td><td></td></p<>  | parties>            |    |   | 1     |  |
| <instru< td=""><td>iment&gt;</td><td>М</td><td>М</td><td></td><td>Financial instrument given as ISIN</td></instru<>   | iment>              | М  | М |       | Financial instrument given as ISIN   |
| <regu< td=""><td>latoryTradeIDGrp&gt;</td><td>0</td><td>0</td><td>NNMMN</td><td>TVTIC (Trading venue transaction identification code)</td></regu<>  | latoryTradeIDGrp>   | 0  | 0 | NNMMN | TVTIC (Trading venue transaction identification code)  |
| 6   | AvgPx               | М  | М |       | Price<br>Average price<br>Will be set to "0"   |
| 11  | CIOrdID             | 0  | 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            | 0  | 0 | 00000 | 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              | М  | М |       | Price, Float(13,5)<br>Market value   |
| 32  | LastQty             | М  | М |       | Qty, Float(12,3)<br>Quantity bought/sold on this execution.  |
| 37  | OrderID             | М  | М |       | String(13) Unique order number of the trading system   |
| 38  | OrderQty            | 0  | М |       | Qty, Float(12,3)<br>Total quantity ordered   |

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| Tag | Field Name    | RF | R | XEOMI | Comment  |
|-----|---------------|----|---|-------|--|
| 39  | OrdStatus     | М  | M |       | Char Order status Will be set to "2" (Filled) XONTRO, MAY-ONE, Xetra, Xetra Frankfurt 2 1 = "Partially Filled" 2 = "Filled"  |
|     |               |    |   |       | INVESTRO / Vestima<br>2 = "Filled" (partially filled not possible)   |
| 44  | Price         | С  | 0 | 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          | М  | М |       | Char Side of order 1 = "buy" 2 = "sell"  |
| 59  | TimeInForce   | 0  | М |       | Char   |
| 60  | TransactTime  | 0  | М |       | UTC Timestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Time of execution/order creation   |
| 64  | SettlDate     | 0  | 0 | NNOOO | LocalMktDate<br>Settlement date  |
|     |               |    |   |       | XONTRO, MAX-ONE<br>Value date for orders, if executed before issue date.   |
|     |               |    |   |       | INVESTRO / Vestima<br>Settlement Date delivered by Vestima   |
|     |               |    |   |       | Xetra, Xetra Frankfurt 2<br>Field is not delivered   |
| 99  | StopPx        | С  | С |       | Price, Float(13,5)<br>Stop limit, will be provided if OrdType is set to "3" or "4"   |
| 100 | ExDestination |    | М |       | Exchange location MIC Code Will always be supplied by the BT-FIX Gateway   |
| 110 | MinQty        | 0  | 0 | CNNNN | Qty, Float(12,3) Minimum quantity to be executed. Will only be provided if OrdType is set to "P"   |
| 150 | ЕхесТуре      | М  | М | ММММС | Char<br>Type of report   |
|     |               |    |   |       | All trading systems: F = "Trade" (message directed to the owner of the order)  |
|     |               |    |   |       | INVESTRO classic:<br>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                     | М  | М |       | Qty, Float(12,3) Quantity open for further execution 0 when filled completely   |
| 157   | NumDaysInterest               | 0  | 0 | OOOON | Integer<br>Number of accured interest days<br>Like FIX 4.4 Tag 157; also for FIX.4.2  |
| 432   | ExpireDate                    | 0  | М |       | LocalMktDate<br>Order expiration date   |
| 526   | SecondaryClOrdID              | 0  | 0 | 00000 | String(16) Bank internal order number User defined key of the order (Order number).   |
| 1094  | PegPriceType                  |    | 0 | CNNNN | Integer Will be set to "2" if present. Only valid for Xetra midpoint orders (OrdType "P").  |
| 1138  | DisplayQty                    |    | 0 | CNNNN | Qty, Float(12,3) Maximum visible volume of the order Only valid for Xetra iceberg orders  |
| 5048  | OrdSubStatus                  |    | 0 | NNNNC | Char Only INVESTRO / Vestima: "H" = disabled for cancellation of order confirmation Tag 150 (ExecType) = D. Tag 11 (ClOrdID) is then filled with [N/A]. |
| 5689  | VersionID                     |    | 0 | MMNNN | Integer(18)   |
|   |                               |    |   |       | Xetra, Xetra Frankfurt 2<br>Update control key  |
| 5944  | InitialDisplayQty             |    | 0 | CNNNN | Qty, Float(12,3) Maximum visible volume of the order initially entered Only valid for Xetra iceberg orders  |
| 6584  | SpreadPctPremium              |    | 0 | NNNNO | Float(5,3)<br>Selling commission (deduction of front end load)  |
| 6585  | SpreadPctDiscount             |    | 0 | NNNNO | Float(10,7)<br>Reinvestment discount in percent   |
| 6611  | TotalAccruedInterestAmt       |    | 0 | NNNNO | Float(17,8) Accumulated dividend equivalent income ("Akkumulierter ausschüttungsgleicher Ertrag" in German).  |
| 6893  | Profit                        |    | 0 | NNNNO | Float(15,8)<br>Mid-way profit   |
| 7491  | CustomPrice1                  |    | 0 | NNNNO | Float(15,8) Unit offering price Only used if tags 5076 or 5078 were used by the order/contract.   |
| 7680  | OTCInd                        |    | М |       | Integer Indicator trade is exchange related 0 = On exchange trade 1 = Off exchange trade  |
| 9583  | MIFIDInternalizationIndicator |    | 0 | OONNN | Char<br>Xetra Best Trade Indicator  |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<> | ard message trailer>          | М  | М |       |   |

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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 XONTROMAX-ONE GUIS MAX-ONE

Xetra GUIs
 Xetra, Xetra Frankfurt 2

SAKI Input
 Input by Vestima Ols
 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   |
|---|------------------------------------|-----------|-------|-------|---|
| <partie:< td=""><td>s&gt; component block, NoPartyIDs wil</td><td>l be incr</td><td>eased</td><td></td><td></td></partie:<> | s> component block, NoPartyIDs wil | l be incr | eased |       |   |
| 448   | <session><br/>PartyID</session>    |           | М     |       | String KVNr or MemberID of the originator   |
| 447   | PartyIDSource                      |           | М     |       | Char<br>Will always be set to "D"   |
| 452   | PartyRole                          |           | М     |       | Integer Will be set to 55 = "Session ID"  |
| 802   | NoPartySubIDs                      |           | М     |       | NumInGroup Will be set to "1"   |
| 523   | PartySubID                         |           | М     |       | String(6) The last six Characters of the originator's user identifier   |
| 803   | PartySubIDType                     |           | М     |       | Integer Will be set to "4040" (User identifier)   |
| 11  | ClOrdID                            | M         | М     |       | String(16) CIOrdID 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         | М     |       | String(16)<br>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

| Tag   | Field Name                                | RF              | R  | XEOMI | Comment  |
|---|---|-----------------|----|-------|--|
| <partie< td=""><td>s&gt; component block, tag 453 w</td><td>ill be increase</td><td>ed</td><td></td><td></td></partie<> | s> component block, tag 453 w             | ill be increase | ed |       |  |
| 448   | <executing system=""> PartyID</executing> |                 | M  |       | String Valid values:  XETRA XETRA-2 XONTRO MAX-ONE   |
| 447   | PartyIDSource                             |                 | М  |       | Char<br>Will always be set to "D"  |
| 452   | PartyRole                                 |                 | М  |       | Integer Will be set to 16 = "Executing System"   |
| 802   | NoPartySubIDs                             |                 | М  |       | NumInGroup Will be set to "1"  |
| 523   | PartySubID                                |                 | М  |       | String Will be set to "[N/A]"  |
| 803   | PartySubIDType                            |                 | М  |       | Integer Will be set to "3" (System)  |
| 11  | ClOrdID                                   |                 | M  |       | String(16) CIOrdID 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                                 |                 | М  |       | Char Order status Valid values: 0 = "new"  |
| 41  | OrigClOrdID                               |                 | М  |       | String(16) Will be set to "[N/A]"  |

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| Tag  | Field Name       | RF | R | XEOMI | Comment  |
|------|------------------|----|---|-------|--|
| 6489 | TriggerIndicator |    | С | 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 |    | С | NNCC- | Char  |
|      |                  |    |   |       | XONTRO and MAX-ONE<br>"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       |    | С | NNCN- | String                                |
|      |                  |    |   |       | Only XONTRO<br>"E" = EG-Order         |
| 6489 | TriggerIndicator |    | С | NNCN- | String                                |
|      |                  |    |   |       | Only XONTRO<br>"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 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 canellations of any orders during "Subscription Order Freeze".

| Tag                                     | Field Name   | RF | R | XEOMI | Comment   |  |  |  |
|---|--|----|---|-------|---|--|--|--|
| <pre><parties< pre=""></parties<></pre> | parties> Component Block (tag 453 will be increased) |    |   |       |   |  |  |  |
| 448                                     | <executing system=""> PartyID</executing>            |    | M |       | String Valid values are XETRA XETRA-2 XONTRO MAX-ONE  |  |  |  |
| 447                                     | PartyIDSource  |    | М |       | Char<br>Will be set to = "D"  |  |  |  |
| 452                                     | PartyRole  |    | М |       | Integer Will be set to 16 = "Executing System"  |  |  |  |
| 802                                     | NoPartySubIDs  |    | М |       | NumInGroup<br>Will be set to "1"  |  |  |  |
| 523                                     | PartySubID   |    | М |       | String Will be set to "[N/A]"   |  |  |  |
| 803                                     | PartySubIDType                                       |    | М |       | Integer<br>Will be set to "3" (by system)   |  |  |  |
| 39                                      | OrdStatus  |    | М |       | 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   |
|------|--------------|----|---|-------|---|
|      |              | KF |   | YEOMI |   |
| 150  | ExecType     |    | M |       | Char Type of record   |
|      |              |    |   |       | Will be set to "C" (expired) in case of cancellation due to   |
|      |              |    |   |       | order validity expiration.  |
| 5862 | UpdateReason |    | 0 | 0000N | String(15)  |
|      |              |    |   |       | Reason of order modification or deletion by the system  |
|      |              |    |   |       | Master data modifications: "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,<br>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<br>without single price fixing                       |
|      |              |    |   |       | "VKKH" = Change from continuous price fixing with   |
|      |              |    |   |       | single price fixing to no trading   |
|      |              |    |   |       | "LHBR" = End of subscription rights trading   |
|      |              |    |   |       | Ancillary rights:   |
|      |              |    |   |       | "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  |
|      |              |    |   |       | Miscellaneous events:   |
|      |              |    |   |       | "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   |
|      |              |    |   |       | The state of the order domino   |

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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           | 0  | М |       | String Will always be ignored |
| 48  | SecurityID       | 0  | М |       | String<br>ISIN                |
| 22  | SecurityIDSource | 0  | М |       | String<br>Must be set to "4"  |

### **Outgoing Messages**

| Tag | Field Name       | RF | R | XEOMI | Comment                              |
|-----|------------------|----|---|-------|--------------------------------------|
| 55  | Symbol           | 0  | М |       | String Will always be set to "[N/A]" |
| 48  | SecurityID       | 0  | М |       | String<br>ISIN                       |
| 22  | SecurityIDSource | 0  | М |       | String<br>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    | 0  | М |       | NumInGroup  Number of parties concerned  Valid values are 1 – 6  The value must correspond to the number of parties (repeating groups) provided.  |
| 448 | PartyID       | 0  | M |       | String PartyRole = 1 (Executing Firm) String(4), KVNr of the owner of the order PartyRole=3 (Client Identification Code) String(20), Shortcode. (ESMA RTS24 Field 3) Special values: 1 = AGGR 2 = PNAL PartyRole = 7 (Entering Firm) String(4), KVNr of party/customer PartyRole=12 (Execution within Firm) String(20), Shortcode or algorithm. (ESMA RTS24 Field 5) Special values: 3 = NORE PartyRole = 29 (Intermediary) String(10) integer, INVESTRO sales institution PartyRole = 63 (Systematic Internaliser) String(5), Xetra Member ID PartyRole = 66 (Market Maker) String(4), KVNr of intermediary PartyRole=122 (Investment Decision Maker) String(20), Shortcode or algorithm. (ESMA RTS24 Field 4) |
| 447 | PartyIDSource | 0  | 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 | ХЕОМІ | Comment  |
|------|--------------------|----|---|-------|--|
| 452  | PartyRole          | 0  | 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 | PartyRoleQualifier | 0  | 0 | NNOON | Integer The indication of this qualifiers is only necessary if "PartyID" represents an algorithm (22) and not a shortcode (default). The differentation 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     | 0  | 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        | 0  | M |       | String PartyRole = 1 (Executing Firm) String(4), KVNr of the owner of the order PartyRole = 7 (Entering Firm) String(4), KVNr of party/customer PartyRole = 16 (Executing System) Valid values: "XETRA" "XETRA-2" "XOTRO" "MAX-ONE" "INVESTRO" PartyRole = 29 (Intermediary) String(10) numerisch, Investro-Sales-Institution PartyRole = 55 (Session ID) String(4), KVNr of originator String(5), Xetra MemberID of the originator PartyRole = 63 (Systematic Internaliser) String(5), Xetra MemberID PartyRole = 66 (Market Maker) String(4), KVNr of the intermediary |
| 447 | PartyIDSource  | 0  | М |       | Char<br>Will always be set to "D"  |
| 452 | PartyRole      | 0  | М |       | 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  | 0  | С |       | NumInGroup Will be set to "1" if PartyRole = "55" or "16 ", or will be missing.  |
| 523 | PartySubID     | 0  | С |       | 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 | 0  | С |       | 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   | 0  | 0 | 00000 | NumInGroup will be ignored Must always be set to "1" If this tag is available, the tags 336 and 625 will follow.   |
| 336 | TradingSessionID    | 0  | 0 | 00000 | String(1) will be ignored Must always be set to "1" mandatory if tag 386 is available mandatory if tag 625 is available  |
| 625 | TradingSessionSubID | 0  | 0 | 00000 | 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   | 0  | 0 | 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  | 0  | 0 | NNOON | Integer Type of attribute.  0 = AGGR (Aggregated Order) The inclusion of this attribute excludes the concurrent inclusion of the party <client code="" identification=""> (ESMA RTS 24 Field 3)  1 = PNAL (Pending Allocation) The inclusion of this attribute excludes the concurrent inclusion of the party <client code="" identification=""> (ESMA RTS 24 Field 3)  2 = Liquidity provision activity order (ESMA RTS 24 Feld 8) Only permitted in NewOrderSingle message.  6 = NORE The inclusion of this attribute excludes the concurrent inclusion of the party <execution firm="" within=""> (ESMA RTS 24 Field 5)</execution></client></client> |
| 2595 | OrderAttributeValue | 0  | 0 | 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    | 0  | 0 | NNOON | NumInGroup Number of ValueCheck entries contained. Only the value "1" is permitted.  |
| 1869 | ValueCheckType   | 0  | 0 | 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 | 0  | 0 | 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>

| Tag  | Field Name            | RF | R | XEOMI | Comments  |
|------|-----------------------|----|---|-------|---|
| 1907 | NoRegulatoryTradeID   | 0  | 0 |       | NumInGroup Only "1" is valid.   |
| 1903 | RegulatoryTradeID     | 0  | 0 |       | 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 | 0  | 0 |       | Integer Type of Regulatory TradeID 5 = TVTIC (Trading venue transaction identification code)  |

### 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) - Specifities

### 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:

| SecondaryClOrdID               | 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   |  |  |
|---|--|----|---|-------|---|--|--|
| <partie< td=""><td colspan="7">cparties&gt; Component Block (tag 453 will be extended)</td></partie<> | cparties> Component Block (tag 453 will be extended) |    |   |       |   |  |  |
| 448   | <executing system=""><br/>PartyID</executing>        |    | М |       | String<br>INVESTRO                                    |  |  |
| 447   | PartyIDSource  |    | М |       | Char<br>Will always be set to "D"                     |  |  |
| 452   | PartyRole  |    | М |       | Integer Will be set to 16 = "Executing System"        |  |  |
| 802   | NoPartySubIDs  |    | М |       | NumInGroup<br>Will be set to "1"                      |  |  |
| 523   | PartySubID   |    | М |       | String Will be set to "[N/A]"                         |  |  |
| 803   | PartySubIDType                                       |    | М |       | Integer Will be set to "3" (system)                   |  |  |
| 150   | ЕхесТуре   |    | М |       | Char Type of Report Will be set to "I" (order status) |  |  |

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#### 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. Instruciton-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

| No. | Event | Message Flow   |                   |                |  |  |
|-----|-------|----------------|-------------------|----------------|--|--|
|     |       | FE<br>Customer | BT FIX<br>Gateway | Trading System |  |  |
|     | Event |                |                   | ←•             |  |  |
| 1   | News  |                | ←•                |                |  |  |

# 7.4.2 Component Blocks

## News Messages

| Tag   | Field Name           | RF | R | XEOMI | Comment   |
|---|----------------------|----|---|-------|---|
| <standard header="" message=""></standard>  |                      | M  | М |       | tag 35 = "B" (MsgType)  |
| <linesoftextgrp></linesoftextgrp>   |                      | 0  | М |       |   |
| <instrmtgrp></instrmtgrp>   |                      | 0  | 0 |       |   |
| 148   | Headline             |    | M |       | String event key - FIXOF  |
| <routin< td=""><td>gGrp&gt;</td><td>0</td><td>М</td><td></td><td></td></routin<>                | gGrp>                | 0  | М |       |   |
| 6255  | EndTime              |    | 0 | 00000 | String<br>end of trading hours (event TREXP)<br>Format "HHMM0000" |
| 6516  | NewsValidUntil       |    | 0 | 00000 | LocalMktDate date until the news is valid                         |
| 6517  | NewsEventDate        |    | 0 | 00000 | LocalMktDate date for resp. date from which the news is valid     |
| <standa< td=""><td>ard message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td></standa<> | ard message trailer> | М  | М |       |   |

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## 7.4.3 NoLinesOfText Repeating Group <LinesOfTextGrp>

| Tag | Field Name  | RF | R | XEOMI | Comment  |
|-----|-------------|----|---|-------|--|
| 33  | LinesOfText |    | М |       | NumInGroup<br>Number of lines<br>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     | 0  | 0 |       | NumInGroup<br>Number of lines<br>filled with "1"<br>If this tag is available, the tags 55, 22 and 48 will follow |
| 55  | Symbol           | 0  | С |       | String<br>available if tag 146 is present<br>Will be set to "[N/A]" by the BT-FIX Gateway                        |
| 22  | SecurityIDSource | 0  | С |       | String must be present if tag 146 contains a value Will be set to "4" by the BT-FIX Gateway                      |
| 48  | SecurityID       | 0  | С |       | 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 | 0  | 0 |       | NumInGroup<br>Valid values are "1", "2" or "3".<br>If this tag is available, then tags 216 and 217 will follow.  |
| 216 | RoutingType  | 0  | С |       | Integer Available if tag 215 is present Will be set to "1" by the BT-FIX Gateway.  |
| 217 | RoutingID    | 0  | С |       | 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<br>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<br>(depending on the<br>connections<br>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  BT FIX Cotower XONTRO |         |    |
|-----|-----------------------------|-------------------------------------|---------|----|
| 1   | Trade Capture Report        | •                                   | Gateway |    |
|     |                             |                                     | •       |    |
|     | Confirmation (always final) |                                     |         | ←• |
| 3   | Trade Capture Report Ack    |                                     | •••     |    |

| Nr. | SNO Realtime                                 |             | Message Flow<br>BT FIX |        |
|-----|--|-------------|------------------------|--------|
|     |  | FE Customer | 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:

|   | 6556 BusinessTransactionType | 487<br>TradeReportTransType      | 856<br>TradeReportType |
|---|------------------------------|----------------------------------|------------------------|
| OTC trade entry<br>(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<br>(EnterMifid)              | 1 (TradeAdvice)              | 0 (new)<br>2 (replace) Amendment | 0 (submit)             |
| MiFID report<br>cancellation<br>(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 <u>Mandatory</u> or <u>Conditionally mandatory</u>. The columns EnterOTC to DeleteMifid contain information about <u>Mandatory</u> <u>Optional</u> <u>Conditional</u> <u>Not allowed</u> <u>Ignored</u>.

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# 7.5.3.2 Request "TradeCaptureReport" – Message Data

| Tag   | Field Name             | RF       | R        |          |           |            |            |            | Comments  |
|---|------------------------|----------|----------|----------|-----------|------------|------------|------------|---|
| Ü   |                        |          |          | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid |   |
| <standa< td=""><td>ard message header&gt;</td><td>М</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td>Tag 35 = "AE" (MsgType)</td></standa<> | ard message header>    | М        | М        |          |           |            |            |            | Tag 35 = "AE" (MsgType)   |
| 30  | LastMkt                | 0        | М        |          |           |            |            |            | Stock Exchange Location<br>MIC Code   |
| 31  | LastPx                 | М        | М        |          |           |            |            |            | Price, Float(10,4)  |
| 32  | LastQty                | М        | М        |          |           |            |            |            | Quantity, Float(13,3)   |
| 60  | TransactTime           | М        | М        |          |           |            |            |            | UTCTimestamp  |
| 64  | SettlDate              | 0        |          | С        | I         | ı          | I          | I          | LocalMktDate Date of fixed value Always used in combination with tag 5053   |
| 75  | TradeDate              | М        | М        |          |           |            |            |            | LocalMktDate Trade date (AS) Date of trade having been transacted   |
| 487   | TradeReportTransType   | 0        | М        |          |           |            |            |            | Integer  0 = new EnterOTC EnterMiFID  1 = cancel DeleteOTC DeleteMiFID  2 = replace EnterMiFID (amendment)  4 = reverse ReverseOTC                  |
| 570   | PreviouslyReported     | M        | M        | С        | С         | С          | С          | С          | Boolean If Tag 487 = new (0), then Tag 570 = N, otherwise = Y  N = EnterOTC EnterMiFID  Y = ReverseOTC EnterMiFID (amendment) DeleteOTC DeleteMiFID |
| 571   | TradeReportID          | М        | М        |          |           |            |            |            | String(16) Unique Identifier of trade, assigned by the FIX Client. Not checked by the BT FIX Gateway  |
| 572   | TradeReportRefID       | 0        | 0        | N        | М         | М          | N          | М          | String(16) Key of a trade related task, assigned by the FIX Client  |
| <u>578</u>  | TradeInputSource       | <u>O</u> | <u>O</u> | <u>O</u> | 1         | 1          | 1          | 1          | String(4) Segment MIC of a "Non XONTRO Exchange Trading Venue" in order for the trade to be flagged according to the CSDR rules and regs.           |
| 818   | SecondaryTradeReportID | 0        | 0        | 0        | I         | I          | 0          | I          | String(13) bank internal OTC number, assigned by the FIX Client. Not checked by the BT FIX Gateway  |
| 880   | TrdMatchID             | 0        | 0        | N        | М         | М          | N          | М          | String(16)<br>Original trade number   |

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

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### 7.5.3.3 Instrument Component Block <instrument>

| Tag | Field Name       | RF | R | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid | Comments   |
|-----|------------------|----|---|----------|-----------|------------|------------|------------|--|
| 55  | Symbol           | 0  | М |          |           |            |            |            | String Ticker symbol This tag will be ignored by the BT FIX Gateway. |
| 48  | SecurityID       | М  | М |          |           |            |            |            | String<br>ISIN   |
| 22  | SecurityIDSource | М  | М |          |           |            |            |            | String<br>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 |          |           |            |            |            | Comments  |
|-----|---------------------|----|---|----------|-----------|------------|------------|------------|---|
|     |                     |    |   | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid |   |
| 768 | NoTrdRegTimestamps  | 0  | 0 | 0        | I         | _          | 0          | I          | NumInGroup<br>Valid value "1"<br>If available then tags 769 and 770 will<br>follow.   |
| 769 | TrdRegTimestamp     | 0  | С | С        | ı         | ı          | С          | ı          | 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 | 0  | С | С        | I         | Ι          | С          | I          | Integer<br>Available if tag 768 is present<br>Valid values<br>1 = "Execution Time"  |

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# 7.5.3.5 NoTransactionCosts Repeating Group <courtage>

| Tag  | Field Name          | RF | R |          |           |            |            |            | Comments   |
|------|---------------------|----|---|----------|-----------|------------|------------|------------|--|
|      |                     |    |   | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid |  |
| 9471 | NoTransactionCosts  | 0  | 0 | 0        | 1         | 1          | ı          | 1          | NumInGroup Valid value = "1" If available, then tag 9473 will follow; possibly tag 9476 will follow.   |
| 9473 | TransactionCostCode | 0  | 0 | С        | ı         | ı          | _          | ı          | 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  | 0  | 0 | С        | I         | I          | I          | I          | Float(9,2)<br>Amount of brokerage fees<br>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 NoPartylDs.

| Tag                | Field Name | RF | R | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid | 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=""></side> |            | М  | М |          |           |            |            |            | <side 1=""> trade details of the originator</side>   |
| <side 2=""></side> |            | 0  | 0 | М        | N         | N          | N          | N          | <side 2=""> trade details of the counterparty</side>   |

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### <Side1>

| Tag  | Field Name            | RF | R |          |           |            |            |            | Comments   |
|--|-----------------------|----|---|----------|-----------|------------|------------|------------|--|
|  |                       |    |   | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid |  |
| 54   | Side                  | M  | М |          |           |            |            |            | Char<br>Side of trade<br>1 = Buy<br>2 = Sell   |
| 37   | OrderID               | М  | М |          |           |            |            |            | String<br>Will be set to "[N/A]"   |
| <parties< td=""><td><b>&gt;</b></td><td>0</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td></td></parties<>                  | <b>&gt;</b>           | 0  | М |          |           |            |            |            |  |
| 453  | NoPartyIDs            | 0  | М |          |           |            |            |            | NumInGroup<br>Valid values are 1 – 4.  |
| <enterin< td=""><td>ng firm&gt;</td><td>0</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td></td></enterin<>                  | ng firm>              | 0  | М |          |           |            |            |            |  |
| <execut< td=""><td>ing firm&gt;</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td></execut<>              | ing firm>             | 0  | 0 | 0        | 0         | 0          | 0          | 0          |  |
| <report< td=""><td>originator&gt;</td><td>0</td><td>0</td><td>N</td><td>Ν</td><td>Ν</td><td>М</td><td>Ν</td><td></td></report<>            | originator>           | 0  | 0 | N        | Ν         | Ν          | М          | Ν          |  |
| <execut< td=""><td>ion venue&gt;</td><td>0</td><td>0</td><td>N</td><td>Ν</td><td>Ν</td><td>М</td><td>Ν</td><td></td></execut<>             | ion venue>            | 0  | 0 | N        | Ν         | Ν          | М          | Ν          |  |
| end <pa< td=""><td>arties&gt;</td><td>0</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td></td></pa<>                         | arties>               | 0  | М |          |           |            |            |            |  |
| 12   | Commission            | 0  | 0 | 0        | I         | I          | I          | Ι          | Float(9,2) Commission Not allowed for short-term financing treasury bonds ("Finanzierungsschaetze").   |
| 15   | Currency              | 0  | 0 | М        | I         | I          | М          | ı          | Currency Currency of price fixing This tag will be ignored for EnterOTC.   |
| 58   | Text                  | 0  | 0 | 0        | I         | I          | I          | I          | String(30)<br>Arbitrary text   |
| 155  | SettlCurrFxRate       | 0  | 0 | С        | I         | I          | I          | ı          | Float(10,5) Currency exchange rate of trade Only valid with tag 156  |
| 156  | SettlCurrFxRateCalc   | 0  | 0 | С        | I         | I          | I          | -          | Char D = divide Only valid with tag 155  |
| 6584   | SpreadPctPremium      | 0  | 0 | 0        | 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            | 0  | 0 | 0        | I         | I          | I          | I          | Float(9,2) Reinvestment discount in percent For investment trust certificates only.  |
| <courtag< td=""><td colspan="2"><courtage></courtage></td><td>0</td><td>0</td><td>I</td><td>I</td><td>I</td><td>ı</td><td></td></courtag<> | <courtage></courtage> |    | 0 | 0        | I         | I          | I          | ı          |  |
| 9596   | ClientFreeField1      | 0  | 0 | С        | 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 | DeletMifid | Comments  |
|------|------------------|----|---|----------|-----------|------------|------------|------------|---|
| 9597 | ClientFreeField2 | 0  | 0 | С        | 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 | DeletMifid | Comments  |
|---|-------------|----|---|----------|-----------|------------|------------|------------|---|
| 54  | Side        | M  | М | М        | N         | N          | N          | N          | Char Side of trade for counterpart 1 = Buy 2 = Sell |
| 37  | OrderID     | М  | М | М        | N         | Ν          | Z          | Ν          | String Will be set to "[N/A]"                       |
| <pre><parties< pre=""></parties<></pre>   | <b>&gt;</b> | 0  | 0 |          |           |            |            |            |   |
| 453   | NoPartyIDs  | 0  | 0 |          |           |            |            |            | NumInGroup<br>Valid value = "1"                     |
| <contra< td=""><td>firm&gt;</td><td>0</td><td>0</td><td>М</td><td>Ν</td><td>Ν</td><td>N</td><td>Ν</td><td></td></contra<> | firm>       | 0  | 0 | М        | Ν         | Ν          | N          | Ν          |   |
| end <pa< td=""><td>arties&gt;</td><td>0</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td></td></pa<>        | arties>     | 0  | М |          |           |            |            |            |   |

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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    | 0  | М | 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       | 0  | M | String PartyRole = 1 (Executing Firm) String(4), KVNr of the owner originator 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: OTC-trade internalised trade or used platform for the trade (if used) character String "OTC" for OTC trades character String "SI" for systematic internaliser  Identification of the trading platform used: 12-digit starting with "B" (ISO 9662): BIC 5 - digit starting with "M" (ISO 10383): MIC 11-digit starting with "I" (ISO 16327): IBEI |
| 447 | PartyIDSource | 0  | М | Char<br>Valid value = "D" only   |
| 452 | PartyRole     | 0  | 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)

|                           | 6556 Business TransactionType | 487<br>TradeReport<br>TransType | 856 TradeReportType   | 150<br>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 |          |           |            |            |            | Comments   |
|--|-------------------------|----|---|----------|-----------|------------|------------|------------|--|
| Tay  | rieid Name              | Kr | K | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid | Comments   |
| <standa< td=""><td>rd message header&gt;</td><td>М</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td>Tag 35 = "AR" (MsgType)</td></standa<> | rd message header>      | М  | М |          |           |            |            |            | Tag 35 = "AR" (MsgType)  |
| <instrum< td=""><td>nent&gt;</td><td>М</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td></td></instrum<>                                   | nent>                   | М  | М |          |           |            |            |            |  |
| 30   | LastMkt                 | 0  | М |          |           |            |            |            | Exchange location MIC Code Used by the FIX Client. Similar to the FIX 5.0 definition of TradeCaptureReportAck.   |
| 58   | Text                    | 0  | С | С        | С         | С          | С          | С          | String Error text of trading system Relates to tags 751, 5555, 9803.   |
| 60   | TransactTime            | М  |   |          |           |            |            |            | UTCTimestamp   |
| 150  | ЕхесТуре                | M  | М |          |           |            |            |            | Char Type of report: 0 = "New", when successful EnterOTC ReverseOTC EnterMiFid, 4 = "Cancelled", when successful DeleteOTC DeleteMiFid 8 = " Rejected", when not successful        |
| 487  | TradeReportTransType    | 0  | 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           | М  | М |          |           |            |            |            | 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        | 0  | 0 | N        | М         | М          | N          | М          | String(16) Unique identifier for trade which is assigned by the FIX client. Not checked by the BT FIX Gateway.   |
| 751  | TradeReportRejectReason | 0  | 0 | 0        | 0         | 0          | 0          | 0          | 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 |          |           |            |            |            | Comments  |
|---|-------------------------|----|---|----------|-----------|------------|------------|------------|---|
|   |                         |    |   | EnterOTC | DeleteOTC | ReverseOTC | EnterMifid | DeletMifid |   |
| 818   | SecondaryTradeReportID  | 0  | 0 | 0        | -         | -          | 0          | -          | String(13) Bank internal OTC number which is assigned by the FIX client. Not checked by the BT FIX Gateway.   |
| 856   | TradeReportType         | 0  | М |          |           |            |            |            | Integer 0 = "submit", in answer to EnterOTC ReverseOTC EnterMiFID 6 = "TradeReportCancel", in answer to DeleteOTC DeleteMiFID                                   |
| 880   | TrdMatchID              | 0  | М |          |           |            |            |            | 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              | 0  | С | С        | С         | С          | С          | С          | Integer<br>Error code (e.g. 3730)<br>Related to tags 58, 751, 9803  |
| 6555  | OrigTrdMatchID          | 0  | 0 | -        | -         | М          | -          | -          | String(16) Old trade number used by the FIX client's request as TrdMatchID.   |
| 6556  | BusinessTransactionType | 0  | 0 | N        | N         | N          | М          | М          | String 1 = TradeAdvice  |
| 9591  | PriceCheckingFlag       | 0  | 0 | -        | -         | -          | 0          | -          | Integer Indicator for price alert. 2 = severe (PriceAlert)  |
| 9803  | TradingSystemID         | 0  | С | С        | С         | С          | С          | С          | Integer Identification of the system which generated the error code. Releates to tags 58, 751, 5555   |
| <standar< td=""><td>d message trailer&gt;</td><td>М</td><td>М</td><td></td><td></td><td></td><td></td><td></td><td></td></standar<> | d message trailer>      | М  | М |          |           |            |            |            |   |

## 7.5.4.3 Instrument Component Block <instrument>

| Tag | Field Name       | RF | R | Comments                             |
|-----|------------------|----|---|--------------------------------------|
| 22  | SecurityIDSource | 0  | М | String Will always be set to "4"     |
| 48  | SecurityID       | 0  | М | String<br>ISIN Format                |
| 55  | Symbol           | 0  | М | String Will always be set to "[N/A]" |

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#### 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 ≥ "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 header="" message=""></standard>                             |                      | М  |   | Tag 35 = "USN" (MsgType)   |
| <instru< td=""><td>ment&gt;</td><td>М</td><td></td><td></td></instru<> | ment>                | М  |   |  |
| 30   | LastMkt              | 0  | М | Exchange location MIC Code   |
| 31   | LastPx               | М  |   | Price, Float(10,4) rate  |
| 32   | LastQty              | M  |   | Quantity, Float(13,3)<br>Nominal value   |
| 75   | TradeDate            | М  |   | LocalMktDate Trade date (possibly deviant trade date)  |
| 60   | TransactTime         | М  |   | UTCTimestamp   |
| 64   | SettlDate            | 0  | С | LocalMktDate Fixed value date Always used in combination with tag 5053.  |
| 283  | LocationID           | 0  | M | String Exchange trading place of registration. Is provided as FIX Data Type Exchange.  XONTRO-Exchange "XBER" = Berlin "XMUN" = Muenchen "XINV" = Investro "XDUS" = Duesseldorf "XFRA" = Frankfurt "XHAM" = Hamburg "XHAN" = Hanover "XETR" = Xetra "XSTU" = Stuttgart  Non-XONTRO-Exchange "BAAD" = Unterschleißheim - Baader Bank "BMTF" = London - Bloomberg Trading Facility "BTFE" = Amsterdam - Bloomberg Trading Facility "CATS" = Stuttgart - cats "EUWA" = 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 "TRQX" = London - Turquoise "TREU" = London - Turquoise "XEQT" = Berlin - Börse Berlin Equiduct Trading "XMUN" = München - Börse München - gettex "XQTX" = Düsseldorf - Börse Düsseldorf - Quotrix "XSTF" = Stuttgart - Baden-Württembergische Wertpapierbörse - Technical Platform 2 "XSTU" = Stuttgart - Baden-Württembergische Wertpapierbörse |
| 487  | TradeReportTransType | 0  | М | Integer 0 = new  |
| 570  | PreviouslyReported   | М  | М | Boolean<br>N = no  |
| 571  | TradeReportID        | М  | М | String(16) Unique identifier, delivered by XONTRO  |

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| Tag  | Field Name       | RF       | R        | Comments  |
|--|------------------|----------|----------|---|
| <u>578</u>   | TradeInputSource | <u>O</u> | <u>O</u> | String(4) Segment MIC of a "Non XONTRO Exchange Trading Venue" in order for the trade to be flagged according to the CSDR rules and regs.   |
| <trdre< td=""><td>gTimestamps&gt;</td><td>0</td><td></td><td>- 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</td></trdre<> | gTimestamps>     | 0        |          | - 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      | 0        | 0        | String(16) "Wegen" trade number   |
| 828  | TrdType          | 0        | 0        | 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       | 0        | М        | Integer record type See chapter 14 Appendix G: Possible Values Tag 829 TrdSubType (Record Type) e.g. 9012 = "Buy – direct trade"  |
| 856  | TradeReportType  | 0        | М        | Integer 0 = submit  |
| 880  | TrdMatchID       | 0        | 0        | String(16)<br>Trade number  |
| 1125   | OrigTradeDate    | 0        | 0        | LocalMktDate Date of the original trade (in case of forwarding/closing Aufgaben, i.e. pending trades)   |
| 1126   | OrigTradeID      | 0        | 0        | String(16) Original trade number (in case of forwarding/closing Aufgaben and reversal)  |
| <regula< td=""><td>atoryTradelDGrp&gt;</td><td>0</td><td>0</td><td>TVTIC (Trading venue transaction identification code)</td></regula<>  | atoryTradelDGrp> | 0        | 0        | TVTIC (Trading venue transaction identification code)   |
| 5053   | TradeType2       | 0        | С        | Integer indicator for fixed value date 1 (DVP) = FZ 7 (When Issued) = FE Always used in combination with tag 64   |
| 5494   | LastTrader       | 0        | 0        | Integer Original intermediary (in case of forwarding/closing Aufgaben)  |
| 5665   | MKTXPriceDiff    | 0        | 0        | Float(15,2) Price difference If negative, then the intermediary transfers the money, otherwise, he/she charges it.  |
| 6034   | ConcessionAmt    | 0        | 0        | Float(9,2) Bonus differential amount If negative, then the intermediary transfers the money, otherwise the intermediary charges the money   |
| 6475   | ClientIndicator  | 0        | 0        | Char<br>Y = "IW-trade"  |

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| Tag  | Field Name           | RF | R | Comments   |
|--|----------------------|----|---|--|
| 6732   | DealerNote           | 0  | 0 | 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 price difference \ Currency code of interest accrued \ Flag brokerage \ Flag fees \ Indicator for reinvestment discount \ Indicator for bonus difference \ Indicator for commission \ Currency code of fees \ Currency code of bonus difference \ Indicator for order reference \ Indicator for bonus difference \ Indicator for order reference \ Indicator for party-ID \ |
| 7017   | VolumeIndicator      | 0  | 0 | Formats and values see Appendix C: User Defined Tags  Integer Unit of security quotation 1 = unit quotation, 2 = percentage quotation, 3 = per thousand  |
| 7680   | OTCInd               | 0  | М | quotation  Integer OTC (Off Exchange) indicator 0 = on-exchange trade 1 = off-exchange trade   |
| 9954   | NextMsgFlag          | 0  | М | Boolean Y = (more) records to follow will be delivered N = no (more) following records   |
| 9807   | RegFeeFlag           | 0  | 0 | 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         | 0  | 0 | Float(9,7) Discount amount (only for short term financing treasury bonds – Finanzierungsschaetze)  |
| <snore< td=""><td>ealtimeSideGrp&gt;</td><td>М</td><td></td><td></td></snore<> | ealtimeSideGrp>      | М  |   |  |
| -ctanda  | ard message trailer> | М  | М |  |

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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                  | 0  | M | String Ticker symbol Will be set to "[N/A]" by the BT-FIX Gateway   |
| 48  | SecurityID              | 0  | М | String<br>ISIN format   |
| 22  | SecurityIDSource        | 0  | М | String Will be set to "4" by the BT-FIX Gateway   |
| 223   | CouponRate              | 0  | 0 | Float(13,9)<br>Interest rate  |
| 228   | Factor                  | 0  | С | Float(10,9) Pool factor/conversion factor Will always be used together with tag 691   |
| 240   | RedemptionDate          | 0  | 0 | LocalMktDate Last redemption date (last maturity)   |
| <secal< td=""><td>tIDGrp&gt;</td><td>0</td><td>0</td><td></td></secal<> | tIDGrp>                 | 0  | 0 |   |
| 691   | Pool                    | 0  | С | String Indicator for tag 228.  1 = PF (pool factor)  2 = FS (Public-Bonds, municipal)  3 = IK (index coefficient)   |
| 6611  | TotalAccruedInterestAmt | 0  | 0 | 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                  | 0  | 0 | 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            | 0  | 0 | 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          | 0  | 0 | NumInGroup Will always be set to "1", "2" or "3". If present, tags 455 and 456 must follow immediately.                                    |
| 455 | SecurityAltID       | 0  | С | String Ticker symbol WKN ISIN Available, if tag 454 is present   |
| 456 | SecurityAltIDSource | 0  | С | 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  | 0  | 0 | NumInGroup Valid values are "1" or "2". If present, tags 769 and 770 must follow immediately.   |
| 769 | TrdRegTimestamp     | 0  | С | UTCTimestamp [microseconds YYYYMMDD-HH:MM:SS.ssssss] Available if tag 768 is present.           |
| 770 | TrdRegTimestampType | 0  | С | 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  | 0  | 0 | NumInGroup<br>Valid value "1"<br>If present, tags 137, 138 and 139 must follow immediately.  |
| 137 | MiscFeeAmt  | 0  | С | 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 | 0  | С | Currency Available, if tag 136 is present Currency code for fees   |
| 139 | MiscFeeType | 0  | С | String "7" = Other   |

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## 7.5.5.6 NoTransactionCosts Repeating Group <courtage>

| Tag  | Field Name          | RF | R | Comments  |
|------|---------------------|----|---|---|
| 9471 | NoTransactionCosts  | 0  | 0 | NumInGroup Valid value = "1" If present, tag 9473 and when indicated 9476 follow immediately.   |
| 9473 | TransactionCostCode | 0  | С | 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  | 0  | С | 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=""></side> |            | М  | М | <side 1=""> trade details of the originator</side>                  |
| <side 2=""></side> |            | 0  | 0 | <side 2=""> trade details of the counterpart</side>                 |
| <side #=""></side> |            | 0  | 0 | <side 3=""> to <side n=""> for order references</side></side>       |

## <Side1>

| Tag   | Field Name          | RF | R | Comments  |
|---|---------------------|----|---|---|
| 54  | Side                | М  | M | Char Side of trade for <entering firm=""> 1 = Buy 2 = Sell</entering>   |
| 37  | OrderID             | М  | М | String Will always be set to "[N/A]"  |
| <partie:< td=""><td>S&gt;</td><td>0</td><td>М</td><td></td></partie:<>  | S>                  | 0  | М |   |
| 453   | NoPartyIDs          | 0  | М | NumInGroup<br>Valid values "1" to "6"   |
| <custor< td=""><td>mer account&gt;</td><td>0</td><td>М</td><td>Data which specify the recipient of the contract notes</td></custor<>  | mer account>        | 0  | М | Data which specify the recipient of the contract notes  |
| <execu< td=""><td>ting firm&gt;</td><td>0</td><td>0</td><td>Data which specify the originator</td></execu<>   | ting firm>          | 0  | 0 | Data which specify the originator   |
| <buyers< td=""><td>seller&gt;</td><td>0</td><td>0</td><td>Data which specify buyer / seller</td></buyers<>  | seller>             | 0  | 0 | Data which specify buyer / seller   |
| <order< td=""><td>origination trader&gt;</td><td>0</td><td>0</td><td>Trader ID</td></order<>  | origination trader> | 0  | 0 | Trader ID   |
| <clearing< td=""><td>ng firm&gt;</td><td>0</td><td>0</td><td>KVNR of clearer</td></clearing<>   | ng firm>            | 0  | 0 | KVNR of clearer   |
| <clearing< td=""><td>ng organization&gt;</td><td>0</td><td>0</td><td>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</td></clearing<> | ng organization>    | 0  | 0 | 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 <p< td=""><td>arties&gt;</td><td>0</td><td>М</td><td></td></p<>   | arties>             | 0  | М |   |
| 1   | Account             | 0  | 0 | 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             | 0  | 0 | Float(9,2) Charges This field contains the description of charges. For  "Finanzierungsschätze", no charges are permitted.   |
| 58   | Text                   | 0  | 0 | 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           | 0  | 0 | Amt, Float(12,2)<br>Actual amount   |
| 120  | SettlCurrency          | 0  | 0 | Currency<br>Currency of actual amount   |
| 155  | SettlCurrFxRate        | 0  | С | Float(10,5) Foreign exchange rate of trade. Always used in combination with tag 156   |
| 156  | SettlCurrFxRateCalc    | 0  | С | Char D = divide Always used in combination with tag 155   |
| 157  | NumDaysIntegererest    | 0  | С | Integer Days of interest, if tag 5427 = I Days of discount, if tag 5427 = D   |
| 159  | AccruedIntegererestAmt | 0  | С | Amt, Float(12,2)<br>Amount of interest, if tag 5427 = I<br>Amount of discount, if Tag 5427 = D  |
| 381  | GrossTradeAmount       | 0  | 0 | Amt, Float(15,2)<br>Market value  |
| 5427 | IntegerrAttribType     | 0  | С | Char Attribute if tag 157 and 159 will be delivered I = Interest D = Discount   |
| 6583 | SpreadPremium          | 0  | 0 | Float(9,2)<br>Bonus amount  |
| 6584 | SpreadPctPremium       | 0  | 0 | Float(5,3) Selling commission Selling commission in percentage values for the calculation of the commission.  |
| 6585 | SpreadPctDiscount      | 0  | 0 | Float(10,7) Reinvestment discount in percentage   |
| 6586 | CashOffset             | 0  | 0 | Float(9,2)<br>Reinvestment discount in percent  |
| 7493 | CustomRate1            | 0  | 0 | Float(4,2) selling markup   |
| 9596 | ClientFreeField1       | 0  | 0 | 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     | 0  | 0 | String(2) Fee code Always used in combination with tag 9596 Valid values: PD = "Amount in Euro" PM = "per mille" PS = "Standard"  |
| 9938  | ClearingHandlingType | 0  | 0 | 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></gebühren>   |                      | 0  | 0 |   |
| <courtag< td=""><td>ge&gt;</td><td>0</td><td>0</td><td></td></courtag<> | ge>                  | 0  | 0 |   |

## <Side2>

| Tag  | Field Name     | RF | R | Comments  |
|--|----------------|----|---|---|
| 54   | Side           | М  | М | Char Side of trade for "contra firm" 1 = Buy 2 = Sell   |
| 37   | OrderID        | М  | М | String Will be set to "[N/A]"   |
| <partie< td=""><td>S&gt;</td><td>0</td><td>М</td><td></td></partie<>   | S>             | 0  | М |   |
| 453 NoPartyIDs   |                | 0  | М | NumInGroup<br>Valid values are "2" "7"  |
| <contra< td=""><td>a firm&gt;</td><td>0</td><td>М</td><td>Data describing the counterparty</td></contra<>  | a firm>        | 0  | М | Data describing the counterparty  |
| <contra< td=""><td>a firm&gt;</td><td>0</td><td>0</td><td>LEI (Legal Entity Identifier) of counterpart.</td></contra<>   | a firm>        | 0  | 0 | LEI (Legal Entity Identifier) of counterpart.   |
| <buyer< td=""><td>seller&gt;</td><td>0</td><td>М</td><td>Data describing the buyer / seller If tag 54 (Side) from <side2> = sell, then seller If tag 54 (Side) from <side2> = buy, then buyer</side2></side2></td></buyer<>                        | seller>        | 0  | М | Data describing the buyer / seller If tag 54 (Side) from <side2> = sell, then seller If tag 54 (Side) from <side2> = buy, then buyer</side2></side2>                        |
| <settle< td=""><td>ment location&gt;</td><td>0</td><td>0</td><td>PSET, Vestima BIC of Place of Settlement.</td></settle<>  | ment location> | 0  | 0 | PSET, Vestima BIC of Place of Settlement.   |
| <agent< td=""><td>&gt;</td><td>0</td><td>0</td><td>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</side2></side2></td></agent<>           | >              | 0  | 0 | 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</side2></side2>     |
| <custoo< td=""><td>dian&gt;</td><td>0</td><td>0</td><td>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</side2></side2></td></custoo<> | dian>          | 0  | 0 | 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</side2></side2> |
| <buyerseller></buyerseller>  |                | 0  | 0 | 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</side2></side2>                     |
| end <p< td=""><td>arties&gt;</td><td>0</td><td>М</td><td></td></p<>  | arties>        | 0  | М |   |

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## <Side 3 through n>

| Tag  | Field Name   | RF | R | Comments   |  |
|------|--------------|----|---|--|--|
| 54   | Side         | М  | М | Char Side of trade for <entering firm=""> 1 = Buy 2 = Sell</entering>  |  |
| 37   | OrderID      | M  | С | String(16) System order number or bank internal order number (SecondaryClOrdID) or bank internal OTC number (SecondaryTradeReportID) or manual trade reference (inictiated with MAN) together with tag 6141. |  |
| 119  | SettlCurrAmt | 0  | С | Float(10,4) proportional settlement amount   |  |
| 6141 | TradeQty     | 0  | С | 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>, <br/>buyer seller>, <custodian>, <agent>, <report originator>, <execution venue>.

### **Outgoing Messages**

| Tag | Field Name | RF | R | XEOMI | Comments   |
|-----|------------|----|---|-------|--|
| 453 | NoPartyIDs | 0  | 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       | 0  | M |       | String PartyRole = 1 (Executing Firm) String(4), KVNr of the originator or owner of the order PartyRole = 4 (Clearing Firm) String(4), KVNr of the clearer PartyRole = 10 (Settlement Location) String(11), Vestima BIC of the counterpart (PSET) PartyRole = 11 (Order Origination Trader) String(6), Trader ID PartyRole = 17 (Contra Firm) String(20), LEI (Legal Entity Identifier) of counterpart, PartyIDSource = N PartyRole = 21 (Clearing Organization) 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 PartyRole = 24 (Customer Account) String(4), KVNr of the contract note- recipient PartyRole = 27 (Buyer Seller) String(4), KVNr of buyer/seller, when PartyIDSource = D String(11), Vestima BIC of counterpart (SELL/BUY), when PartyIDSource = B PartyRole = 28 (Custodian) String(11), Vestima BIC of counterpart (DECU/RECU) PartyRole = 30 (Agent) String(11), Vestima BIC of counterpart (DEAG/REAG) |
| 447    | PartyIDSource | 0  | 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     | 0  | 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"  |
| PtysSu | bGrp          | 0  | С |       | 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 | 0  | С |       | NumInGroup Will be set to "1" or "2" Only valid for PartyRole = 27, 28, or 30                   |
| 523 | PartySubID    | 0  | O |       | 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 | 0  | С |       | 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).</side2></side2></side2></side2> |

## 7.5.5.10 Regulatory TradeID Repeating Group <RegulatoryTradeIDGrp>

| Tag  | Field Name            | RF | R | XEOMI | Comments  |
|------|-----------------------|----|---|-------|---|
| 1907 | NoRegulatoryTradeID   | 0  | 0 |       | NumInGroup Only "1" is valid.   |
| 1903 | RegulatoryTradeID     | 0  | 0 |       | 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 | 0  | 0 |       | 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 CompIDs 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 31st, 2011).

### Successful logon

#### <u>Logon</u>

Logon of the FIX central office 7766.

8=FIX.4.4 <SOH> 9= <SOH> 35=A <SOH> 34=13 <SOH> 49=F\$776619 <SOH> 52=20110831-07:00:00.000 <SOH> 56=F\$RH9917 <SOH> 98=0 <SOH> 108=3600 <SOH> 553=7766 <SOH> 554=111111111 <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= FSRH99I7 <SOH> 52=20110831-07:00:01.000 <SOH> 56= FS7766I7 <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> 10= <SOH> 350H> 350H>

#### **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=XON <SOH> 216=1 <SOH> 217=XOH> 217=X

#### Submission of an OTC-Trade

The central FIX office 7766 enters an OTC-buy-trade with coutnerparty 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> 450=17 <SOH> 37=[N/A] <SOH> 450=17 <S

#### **TradeCaptureReportAck**

8=FIX.4.4 <SOH> **9=** <SOH> 35=AR <SOH> 34=24 <SOH> 49=FSRH99I7 <SOH> 52=20110831-07:00:01.000 <SOH> 56=FS7766I7 <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=FSRH99I9 <SOH> 52=20110831-07:00:01.000 <SOH> 56=FS7766I9 <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> 446=7766 <SOH> 455=22 <SOH> 452=24 <SOH> 448=7766 <SOH> 447=D <SOH> 447=D <SOH> 452=24 <SOH> 448=7766 <SOH> 448=199999 <SOH> 447=D <SOH> 447=D <SOH> 447=D <SOH> 447=D <SOH> 9471=1 <SOH> 9473=0 <SOH> 9476=-100+9473=0 <SOH> 9476=-100+9476=-100+9473=0 <SOH> 9476=-100+9473=0 <SOH> 9476=-100+9473=0 <SOH> 9476=-100+9473=0 <SOH> 9476=-100+9473=0 <SOH> 9476=-100+9473=0

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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>

| ensysteme mbH |                        |
|---------------|------------------------|
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|               |                        |
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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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| ag | Data type/Structure | I/O | Restrictions/Values   | Trading System         |
|----|---------------------|-----|---|------------------------|
|    |                     | 0   | Exception: If PartyRole is set to "session ID", the full structure will be used; in this case, additionally, the following tags will be present:  | uniform across systems |
|    |                     |     | NoPartySubIDs (Tag 802, set to "1" more) PartySubID (Tag 523) (identifier) PartySubIDType (Tag 803, always set to "4040").  |                        |
|    |                     |     | 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".  |                        |
|    |                     |     | 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" PartySubIDType (tag 803) = "4090" is used. |                        |
|    |                     |     | 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.   |                        |
|    |                     |     | For type "Execution within firm" the following qualifier will be used in addition: PartyIDRoleQualifier (Tag 2376) = "22" (algorithm) or "24" (natural person)  |                        |
|    |                     |     | For type "Investment Decision Maker" the following qualifier will be used in addition: PartyRoleQualifier (Tag 2376) = "22" (algorithm) or "24" (natural person)  |                        |
|    |                     |     | For type "Client Identification Code" the following qualifier will be used in addition: PartyRoleQualifier (Tag 2376) = "23" (LEI) or "24" (Nat. Person)  |                        |
|    | Price               |     | 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   | uniform across systems |
|    | Qty                 |     | The FIX Qty data type (15 digits with optional decimal point and sign) is limited. It is always Float (12,3).   | uniform across systems |

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## 10 Appendix C: User Defined Tags

### Legend

Sort sequence: Sorted ascending by tag number

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. 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   | 0   | 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<br>TradeCaptureReport    |
|      |  | 0   | 1 (DVP) = FZ<br>7 (when issued) = FE  | XONTRO, for<br>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<br>"Valid from" date   | XONTRO, MAX-ONE<br>INVESTRO          |
| 5177 | Source   | 0   | <session></session>   | Uniform across systems, 4.2 only     |
| 5179 | TradeTime  | I   | Trade time (hhmmss)   | XONTRO, for<br>TradeCaptureReport    |
| 5253 | 1OrdTypeExt<br>Usage is restricted to Xetra and Xetra<br>Frankfurt 2 Order Cancel requests and<br>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"<br>2 = "Limit"<br>3 = "Stop"<br>4 = "Stop Limit"   | Xetra Frankfurt 2                            |
| 5273 | This field is only used for Order Cancel Requests and EG orders |     | Valid value:<br>E = EG-Order  | XONTRO, MAX-ONE                              |
| 5427 | IntegerrAttribType  | 0   | I = Interest<br>D = Discount  | XONTRO, for<br>TradeCaptureReportSno         |
| 5458 | MDDelayed   | I   | Delay-Indicator   | XONTRO, for<br>TradeCaptureReport            |
| 5476 | PrivateReference  | 0   | String<br>Supplement to OrdSubStatus<br>Text for tag 5048   | INVESTRO/Vestima                             |
| 5494 | LastTrader  | 0   | Format KVNr. Permitted CBF account number (intermediary only) for XONTRO.   | XONTRO, for<br>TradeCaptureReportSno         |
| 5555 | ReturnCode  | 0   | Error code  | Uniform across systems                       |
| 5862 | UpdateReason  | А   | Reason for modification or deletion of an order by system   | XONTRO, MAX-ONE, Xetra,<br>Xetra Frankfurt 2 |
| 5665 | MKTXPriceDiff   | 0   | Price difference  | XONTRO for<br>TradeCaptureReportSno          |
| 5681 | ExchangeTradeType   | I   | Identification issue of securities  | XONTRO for<br>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   | 0   | see Qty   | Xetra  |
| 5946 | PendingReason   | 0   | Valid values: 1 = buffered 2 = locked stock 3 = response delayed (intraday) 4 = order status unknown (end of day)   | Xetra, Xetra Frankfurt 2,<br>MAX-ONE         |
|      |   | 0   | Valid values: 1 = buffered 2 = locked stock 3 = response delayed (intraday) 4 = order status unknown (end of day) 5 = verification pending  | XONTRO                                       |
|      |   | 0   | 4 = "order status unknown (end of day)" 5 = "verification pending" Vestima only   | INVESTRO                                     |
| 6031 | EnteringFirm  |     | <entering firm=""></entering>   | Uniform across systems, version 4.2 only     |
| 6034 | ConcessionAmt   | 0   | bonus differential amount   | XONTRO for<br>TradeCaptureReportSno          |
| 6042 | CxlReason   | I   | 1 = Cancel by kill function   | XONTRO, MAX-ONE                              |
| 6126 | OrigLeavesQty   | 1   | see Qty   | XONTRO                                       |

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

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| Tag  | Field Name                   | I/O | Restrictions/Values   | Trading System  |
|------|------------------------------|-----|---|---|
| 7931 | VenueID                      |     | <executing system=""></executing>   | uniform across systems, version 4.2 only                      |
| 9318 | MktMkerID                    |     | <systematic internalizer=""> <market maker=""></market></systematic>  | uniform across systems, version 4.2 only                      |
| 9320 | OrderRejectReasonTxt         | 0   | Error text  | uniform across systems  |
| 9471 | NoTransactionCosts           |     | <courtage></courtage>   | XONTRO for<br>TradeCaptureReport and<br>TradeCaptureReportSno |
| 9473 | TransactionCostCode          |     | <courtage></courtage>   | XONTRO for<br>TradeCaptureReport and<br>TradeCaptureReportSno |
| 9476 | TransactionCostAmt           |     | <courtage></courtage>   | XONTRO for<br>TradeCaptureReport and<br>TradeCaptureReportSno |
| 9583 | MIFIDInteralizationIndicator |     | Valid values:<br>1 = Facilitation<br>4 = No   | Xetra   |
| 9591 | PriceCheckingFlag            | 0   | 2 = Severe (PriceAlert)   | XONTRO for<br>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              | 0   | 0 = Gateway<br>4 = Xetra<br>5 = Xetra Ffm-2<br>111 = Connector<br>112 = Connector<br>120 = XEO MAX-ONE<br>121 = XEO Xetra<br>122 = XEO Xetra Ffm-2<br>212 = XONTRO<br>312 = MAX-ONE<br>313 = MAX-ONE                          | uniform across systems  |
| 9807 | RegFeeFlag                   | 0   | Key for brokerage fees  | XONTRO for<br>TradeCaptureReportSno                           |
| 9893 | DiscountRate                 | 0   | Discount amount   | XONTRO for<br>TradeCaptureReportSno                           |
| 9933 | CombinedOrderType            | 0   | "Z" = submission of a subscription<br>order<br>"H" = Funds segment "Hanover"<br>If the tag is sent, then the expire date  | XONTRO  |
|      |                              |     | will filled by the trading system. Field ExpireDate (Tag 432) is used.  |   |

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| Tag   | Field Name                              | I/O | Restrictions/Values  | Trading System                      |
|-------|---|-----|--|-------------------------------------|
| 9938  | ClearingHandlingType                    | 0   | 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                             | 0   | Y = (more) records to follow will be delivered N = no (more) following records   | XONTRO for<br>TradeCaptureReportSno |
| 20003 | O3 PartyIDClientID                      |     | <cli>dentification code&gt;</cli>  | XONTRO, MAX-ONE                     |
| 21103 | PartyIDClientIDQualifier                | Е   | <cli>dentification code&gt;</cli>  | XONTRO, MAX-ONE                     |
| 21303 | PartyIDClientIDSource                   | Е   | <cli>dentification code&gt;</cli>  | XONTRO, MAX-ONE                     |
| 20122 | PartyIDInvestmentDecisionMaker          | Е   | <investment decision="" maker=""></investment>   | XONTRO, MAX-ONE                     |
| 21222 | PartyIDInvestmentDecisionMakerQualifier | Е   | <investment decision="" maker=""></investment>   | XONTRO, MAX-ONE                     |
| 21422 | PartyIDInvestmentDecisionMakerSource    | Е   | <investment decision="" maker=""></investment>   | XONTRO, MAX-ONE                     |
| 20012 | PartyIDExecutingTrader                  | Е   | <execution firm="" within=""></execution>  | XONTRO, MAX-ONE                     |
| 21112 | PartyIDExecutingTraderQualifier         | E   | <execution firm="" within=""></execution>  | XONTRO, MAX-ONE                     |
| 21312 | PartyIDExecutingTraderSource            | E   | <execution firm="" within=""></execution>  | XONTRO, MAX-ONE                     |

# Description of tag 6732 DealerNote

Tag 6732 contains different sub-fields which are seperated 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<br>Separator           | Char<br>Char      | "J", "N"  |
|      |            | Different counterparty price                  | String(11)        | 6 places before the decimal point, 4 decimal places   |
|      |            | Separator                                     | Char              | /   |
|      |            | Indicator for deviant trade date<br>Separator | String(2)<br>Char | constant "AS"   |
|      |            | Type of security  Separator                   | 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                                     | Chai              | \   |
|      |            | Type of custody<br>Separator                  | String(3)<br>Char | \   |

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| Tag | Fieldname | Sub-Fieldname                                    | Format             | Restriction/Value                            |
|-----|-----------|--|--------------------|--|
|     |           | Coupon date<br>Separator                         | String(8)<br>Char  | e.g. "21.07.G"<br>\                          |
|     |           | Constant 'APMT'<br>Separator                     | String(4)<br>Char  | "APMT" = against payment                     |
|     |           | Currency code of contract price<br>Separator     | String(3)<br>Char  | \  |
|     |           | Currency code of market value<br>Separator       | String(3)<br>Char  | \  |
|     |           | Currency code of price difference<br>Separator   | String(3),<br>Char | \  |
|     |           | Currency code of interest accrued Separator      | String(3),<br>Char | \  |
|     |           | Flag brokerage<br>Separator                      | String(6),<br>Char | constant /BROK/                              |
|     |           | Flag fees<br>Separator                           | String(6)<br>Char  | constant /FEES/                              |
|     |           | Indicator for reinvestment discount Separator    | String(6)<br>Char  | constant /MISC/                              |
|     |           | Indicator for bonus<br>Separator                 | String(6)<br>Char  | constant /MISC/                              |
|     |           | Indicator for bonus difference<br>Separator      | String(6)<br>Char  | constant /MISC/                              |
|     |           | Indicator for commission<br>Separator            | String(6)<br>Char  | constant /COMM/                              |
|     |           | Currency code of brokerage<br>Separator          | String(3)<br>Char  | = settlement currency                        |
|     |           | Currency code of fees<br>Separator               | String(3)<br>Char  | = settlement currency                        |
|     |           | Currency code of reinvestment discount Separator | String(3)<br>Char  | = settlement currency                        |
|     |           | Currency code of bonus<br>Separator              | String(3)<br>Char  | = settlement currency                        |
|     |           | Currency code of bonus differential Separator    | String(3)<br>Char  | = settlement currency                        |
|     |           | Currency code of commission<br>Separator         | String(3)<br>Char  | = settlement currency                        |
|     |           | Indicator for reinvestment discount Separator    | String(2)<br>Char  | constant "WA"                                |
|     |           | Indicator for bonus<br>Separator                 | String(2)<br>Char  | constant "BO"                                |
|     |           | Bonus key  | String(2)          | 01 = % on market value,<br>02 = EO per unit, |
|     |           | Separator  | Char               | 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"<br>(indicator from MT512 that a MT599<br>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     |
| <u>578</u> | <u>TradeInputSource</u> |
| 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            |

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| Tag   | Field Name                              |
|-------|---|
| 1125  | OrigTradeDate                           |
| 1126  | OrigTradeID                             |
| 1138  | DisplayQty                              |
| 1409  | SessionStatus                           |
| 20003 | PartyIDClientID                         |
| 21103 | PartyIDClientIDQualifier                |
| 21303 | PartyIDClientIDSource                   |
| 20122 | PartylDInvestmentDecisionMaker          |
| 21222 | PartylDInvestmentDecisionMakerQualifier |
| 21422 | PartylDInvestmentDecisionMakerSource    |
| 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 number

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 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 AcctTypCod and AcctTypNo  |                                    |
|     | AcctTypCod  |     | Valid values: A = Agent E = BEST Executor I = Issuer (Quote Provider) L = Liquidity Provider M = Sponsor P = Proprietary Q = Liquidity Manager mandatory  | Xetra, Xetra Frankfurt 2           |
|     |             |     | Valid values: A = Agent P = Proprietary optional  | XONTRO (order routing),<br>MAX-ONE |
|     |             |     | optional ignored  | INVESTRO/Vestima                   |
|     |             |     | "A" = Agent (Client) "P" = Proprietary (bank's own-account trading) "E" = Proprietary (intermediary's own-account trading) optional   | XONTRO for contract notes          |
|     | AcctTypNo   |     | mandatory   | Xetra, Xetra Frankfurt 2           |
|     |             |     | Valid value: Only "1" will be accepted optional   | XONTRO Order,<br>MAX-ONE           |
|     |             |     | "A" = intermediary's own-account trading in case of Aufgaben 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"  optional | XONTRO for contract notes          |
|     |             |     | optional ignored  | INVESTRO/Vestima                   |
| 8   | BeginString |     | Valid values:<br>FIX.4.2<br>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  | Handlinst        | I   | Char "FIX.4.2" mandatory "FIX.4.4" optional ignored   | uniform across systems                       |
| 22  | SecurityIDSource |     | Valid value:<br>4 = ISIN number   | uniform across systems                       |
| 33  | LinesOfText      | 0   | 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                       |
|     |                  | 0   | 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 Qty   | uniform across systems                       |
| 39  | OrdStatus        | 0   | 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<br>Frankfurt 2, MAX-ONE |
|     |                  | 0   | 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"<br>2 = "Limit"<br>3 = "Stop"<br>4 = "Stop Limit"   | Xetra Frankfurt 2,<br>MAX-ONE                |

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| Tag | Field Name                  | I/O | Restrictions/Values   | Trading System                               |
|-----|-----------------------------|-----|---|--|
|     |                             |     | 1 = "Market"<br>2 = "Limit"<br>3 = "Stop"   | XONTRO                                       |
|     |                             |     | 1 = Market  | INVESTRO/Vestima                             |
| 44  | Price                       |     | see Price   | uniform across systems                       |
| 55  | Symbol                      | I   | ignored   | uniform across systems                       |
|     |                             | 0   | 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"<br>6 = "Good till Date"   | Xetra Frankfurt 2,<br>MAX-ONE, XONTRO        |
|     |                             |     | ignored   | INVESTRO                                     |
| 60  | TransactTime                | I   | ignored   | uniform across systems                       |
| 98  | EncryptMethod               |     | Valid value:<br>Only "0" will be accepted   | uniform across systems                       |
| 99  | StopPx                      |     | see Price   | uniform across systems                       |
| 100 | ExDestination               |     | MIC Code<br>XBER, XDUS, XETR, XHAN, XHAM, XMUN,<br>XSTU, XFRA<br>XINV will address INVESTRO/Vestima   | uniform across systems                       |
| 110 | MinQty                      |     | See Qty For midpoint orders only  | Xetra  |
| 150 | ЕхесТуре                    | 0   | 0 = "New" 4 = "Cancelled" 5 = "Replace" 6 = "Pending Cancel" 8 = "Rejected" A = "Pending New" C = "Expired" E = "Pending Replace" F = "Trade" | XONTRO, Xetra, Xetra<br>Frankfurt 2, MAX-ONE |
|     |                             | 0   | 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:<br>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><br/>PartyID</agent> |     | 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</buyer>                 |     | In combination with PartyIDSource = D KVNr base data type is necessary KVNr (Buyer/Seller) must be permitted by XONTRO   | uniform across systems                                    |
|     |   |     | In combination with PartyIDSource = B String(11) Vestima BIC of counterpart (SELL/BUY)   | INVESTRO/Vestima  |
| 448 | <cli>client&gt;<br/>PartyID</cli>                 |     | 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=""><br/>PartyID</clearing>         |     | KVNr base data type is necessary. KVNr (clearer) must be permitted by XONTRO.  | uniform across systems                                    |
| 448 | <clearing organization=""><br/>PartyID</clearing> |     | KVNr base data type is necessary.<br>KVNr must be permitted by XONTRO  | uniform across systems                                    |
| 448 | <contra firm=""><br/>PartyID</contra>             |     | KVNr base data type is necessary. KVNr (counterpart) must be permitted by XONTRO. Exception: in TradeCaptureReportSno the <contra firm=""> will be sent as KVNr and as LEI.</contra>           | uniform across systems                                    |
| 448 | <custodian><br/>PartyID</custodian>               |     | String(11), Vestima BIC of counterpart (DECU/RECU)   | INVESTRO/Vestima  |
| 448 | <customer account=""><br/>PartyID</customer>      |     | KVNr base data type is necessary. KVNr (recipient of contract notes) must be permitted by XONTRO.  | uniform across systems                                    |
| 448 | <entering firm=""><br/>PartyID</entering>         |     | In opposition to the FIX standard, this field is mandatory.  | uniform across systems                                    |
|     |   |     | 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. |   |
| 448 | <executing firm=""><br/>PartyID</executing>       |     | 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</executing>         | 0   | String Possible values: "XETRA" "XETRA-2" "XONTRO" "MAX-ONE" "INVESTRO"  | Xetra, Xetra Frankfurt 2,<br>XONTRO, MAX-ONE,<br>INVESTRO |
| 448 | <execution venue=""> PartyID</execution>          |     | String(12), Code for identification of a reported trade.  Possible values:  Character String "OTC" for OTC trades  Character String "SI" for systematic internaliser                           | INVESTRO/Vestima  |
|     |   |     | Identification for the platform used:  12-digit starting with "B" (ISO 9662): BIC  5-digit starting with "M" (ISO 10383): MIC  11-digit starting with "I" (ISO 16327): IBEI                    |   |

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| Tag | Field Name   | 1/0 | Restrictions/Values  | Trading System                                |
|-----|--|-----|--|---|
| 448 | [Intermediary]<br>PartyID                              |     | String(10), INVESTRO intermediary  | INVESTRO                                      |
| 448 | [MarketMaker]<br>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,<br>Xetra, Xetra Frankfurt 2 |
| 448 | <order origination="" trader=""> PartyID</order>       |     | String(6), trader ID   | XONTRO, MAX-ONE                               |
| 448 | <report originator=""> PartyID</report>                |     | String(11), Code of identification of reporting institute  | INVESTRO/Vestima                              |
| 448 | <session><br/>PartyID</session>                        | 0   | String(5), Xetra MemberID  | Xetra, Xetra Frankfurt 2                      |
|     |  |     | String(4), KVNr of originator  | XONTRO, MAX-ONE,<br>INVESTRO/Vestima          |
| 448 | <settlement location=""> PartyID</settlement>          |     | String(11), Vestima BIC of counterpart (PSET)  | INVESTRO/Vestima                              |
| 448 | <systematic internaliser=""> PartyID</systematic>      |     | String(5), Xetra MemberID  | Xetra   |
| 448 | <cli>client identification code&gt; PartyID</cli>      |     | String(20), client identification code   | XONTRO, MAX-ONE                               |
| 448 | <execution firm="" within=""> PartyID</execution>      |     | String(20), Execution within firm  | XONTRO, MAX-ONE                               |
| 448 | <investment decision="" maker=""> PartyID</investment> |     | 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 Interaliser" 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              | l/O | Pactrictions Nature  | Trading System               |
|-----|-------------------------|-----|--|------------------------------|
| 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              | 0   | String(6) Last 6 digits of the XONTRO UserID for <session></session>   | XONTRO, MAX-ONE,<br>INVESTRO |
|     |                         |     | String(35)<br>Vestima Safe Account   | INVESTRO/Vestima             |
|     |                         |     | Subgroup + TraderID for <session></session>  | Xetra, Xetra Frankfurt 2     |
|     |                         |     | [N/A] for <executing system=""></executing>  | uniform across systems       |
| 526 | SecondaryClOrdID        |     | String(16)   | uniform across systems       |
| 553 | Username                |     | see EnteringFirm (Tag 448)   | uniform across systems       |
| 554 | Password                |     | String(8) Value must contain at least one number and one letter. No distinction between upper and lower case letters. Special characters are not allowed.  | 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:<br>2 = "Opening auction only" (EK - EK-Order)<br>6 = "Main auction" (KS - Kassa-Order)   | XONTRO                       |
|     |                         |     | Valid values:<br>6 = "Main auction" (KS - Kassa-Order)   | MAX-ONE                      |
|     |                         |     | ignored  | 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           | 0   | Missing or set to "1" (PartyRole 55)   | uniform across systems       |
| 803 | PartySubIDType          | 0   | Will be set to "4040" (User Identifier) for PartyRole = 55 Will be set to "3" (System) for PartyRole = 16  | uniform across systems       |
|     |                         | 0   | 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      | 1/0 | Restrictions/Values   | Trading System         |
|-----|-----------------|-----|---|------------------------|
| 828 | TrdType         | 0   | 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<br>829 TrdSubType (Record Type)  | XONTRO                 |
| 923 | UserRequestID   |     | String(16)  | uniform across systems |
| 924 | UserRequestType |     | Valid value:<br>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)

| TrdSubType | Description                                 |
|------------|---|
| 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 – Aufgabe closing                      |
| 9025       | Sell – Aufgabe forwarding                   |
| 9026       | Sell – reversal                             |
| 9027       | Sell – INVESTRO                             |
| 9029       | Sell – EUFO                                 |
| 9511       | Cancellation/Buy – contract note            |
| 9512       | Cancellation/Buy – direct trade             |
| 9513       | Cancellation/Buy - Aufgabe                  |
| 9514       | Cancellation/Buy - Aufgabe closing          |
| 9515       | Cancellation/Buy – Aufgabe forwarding       |
| 9517       | Cancellation/Buy – INVESTRO                 |
| 9519       | Cancellation/Buy – EUFO                     |
| 9521       | Cancellation/Sell – contract note           |
| 9522       | Cancellation/Sell – direct trade            |
| 9523       | Cancellation/Sell – Aufgabe                 |
| 9524       | Cancellation/Sell – Aufgabe closing         |
| 9525       | Cancellation/Sell – Aufgabe 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 – Aufgabe         |
| 9614       | Same-day cancellation/Buy – Aufgabe 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 – Aufgabe        |

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