

## Eurex Exchange's T7

# Enhanced Trading Interface Manual

Eurex Exchange's T7 Release 3.0

Version V3.1

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| Eurex Exchange's T7 Release 3.0 | Eurex Frankfurt AG |
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|                                 |                    |
| Enhanced Trading Interface      | V3.1               |

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## 1 List of Abbreviations

Please find a list of all the abbreviations used in the document. The first time an abbreviation is introduced in the document it is written in brackets after the phrase.

| Eurex ETI        | Eurex Enhanced Trading Interface  |
|------------------|---|
| Eurex MDI        | Eurex Market Data Interface   |
| Eurex EMDI       | Eurex Enhanced Market Data Interface  |
| Eurex RDI        | Eurex Reference Data Interface  |
| Eurex RDF        | Eurex Reference Data File   |
| Eurex Trader GUI | Graphical User Interface for access to basic trading functions for orders and Eurex Trade Entry service |
| Eurex Admin GUI  | Graphical User Interface for Administration functions, for example, user maintenance                    |
| LF               | Low-frequency session   |
| HF               | High-frequency session  |
| UDF              | User-defined field that is not part of the official FIX Specification                                   |
| IOC              | Immediate or Cancel Order   |
| OCO              | One Cancels the Other Order   |
| BOC              | Book or Cancel Order  |
| CAO              | Closing Auction Only Order  |

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#### 2 Introduction

The Eurex Exchange's T7 is the industry-leading, multi-asset trading platform of the Deutsche Börse Group, its affiliates and partners.

The system has best-in-class performance and is scalable to support markets of any size. It can be customized to support different types of markets.

The Eurex Enhanced Trading Interface (Eurex ETI) is the high performance interface designed for participants who require the highest throughput and the lowest latency for their transactions.

All application messages between the client and the Eurex ETI follow FIX V5.0 SP2 semantics including all officially approved extension packs.

A proprietary session layer and flat binary encoding is used in order to provide the best performance.

The Eurex ETI provides all trading functions of T7:

- Order handling
- Quote handling including quote activation and inactivation
- Execution notifications
- Market maker protection mechanisms
- Creation of a strategy
- Request for quote
- Cross request
- Access to private reference data (e.g., list of own users/sessions, trade enrichment rules)

Additionally the Eurex ETI enables participants to subscribe to private trading data:

- Drop copy for complete order history of all standard orders of a session
- Trade notifications for all sessions of the business unit

The following trading support information may be subscribed by each session:

General messages from Eurex market supervision

Private risk control messages are automatically sent to each session of the corresponding trading and clearing business unit.

The Eurex ETI does not provide any market data, or administrative functions.

## 2.1 Purpose

The purpose of this document is to provide the documentation of the simulation version of the Eurex ETI interface to participants.

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It describes the main concepts of the Eurex ETI as well as all message formats.

In addition to this document a corresponding XML representation and the schema files as well as C-Header files are published.

## 2.2 Readership

The main target group are technical staff within the participant firms. Chapter Message Formats provides the detailed message formats and fields. An introduction to the XML Interface Description and important message flows are provided in the appendix. The chapter 8.4 Uniqueness of Identifiers documents criteria required for uniqueness of Ids.

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## 3 Technical Overview

The Eurex Enhanced Trading Interface (Eurex ETI) is the high performance trading interface designed for participants who require the highest throughput and the lowest latency. This transactional interface is provided in parallel to the Eurex FIX Gateway whose target groups are FIX 4.2 and FIX 4.4 customers.

The Eurex ETI has the following main characteristics:

## 3.1 Message Based

The Eurex ETI is an asynchronous, message-based interface. The connection between the participant and T7 is established via a TCP/IP connection.

## 3.2 Low Footprint

Integration of the Eurex ETI interface into the participant's existing IT infrastructure is simplified due to the following:

- No special hardware is required.
- No exchange software has to be installed.
- Free choice of operating system, programming language and compiler versions.

#### 3.3 Standard

In order to ease the implementation effort for participants, the Eurex ETI uses best practice methods taken from the financial industry, namely the use of the FIX Protocol standard.

#### 3.4 Session Oriented

The Eurex ETI is a session oriented interface.

Participant applications connect to the trading system by Application Gateways that host the client sessions. A session is established by opening a TCP/IP session to the gateway.

The exchange provides a unique session identifier that is used when logging on. A Session ID can only establish one session at any time. Each participant application requires its own session.

Eurex ETI based applications receive information on orders and quotes which were entered in their own session. Several trading groups and traders of the same business unit may share a single session.

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## 3.5 Backward Compatibility

Eurex ETI offers its enhancements with new XML and C-header files for each release. Use of these files can be deferred until the next releases under certain circumstances, because Eurex ETI supports the concept of layout-level backward compatibility. That means, in case of an application that was built for for one of the previous releases, Eurex ETI expects and sends the old layouts. Please refer to chapter 7.4 Overview of Supported Message Types for the details regarding the supported interface versions. New or modified field contents (valid values and/or usage), however, are not suppressed. In certain cases, even layout-level backward compatibility cannot be offered. Enhancements introduced within the new release cannot be used by applications that make use of the backward compatibility facility. Please note that XML and C-header files of the previous releases will not be re-distributed.

Therefore an application using the ETI interface should be able to deal with:

- new valid values as field content.
- usage changes of message fields,
- new message layouts in a broadcast stream.

## 3.6 Subscription Mechanism

The Eurex ETI provides information across sessions via a subscription mechanism. This includes trade notifications at a business unit level, the complete order history of standard orders of another session (listener broadcast), and public news messages.

#### 3.7 Full Control in Case of a Failover

A heartbeat mechanism between the participant's application and T7 supports the detection of malfunctions of the underlying trading session between the participant and the Exchange gateway.

The Eurex ETI does not include any mechanism for automatic failover. Participant applications can implement a failover mechanism of their choice that supports their requirements. Please refer to chapter 5.3 Failover for more information.

#### 3.8 Architecture Throttle

The number of transaction requests transmitted to T7 per pre-defined time interval by each participant session is limited. This is to:

- prevent single participant sessions generating excessively high transaction rates, which might adversely affect the exchange's trading as a whole;
- guarantee fairness between participant sessions.

For more details, please refer to chapter 5.4 Throughput Limits .

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## 3.9 Session Login and User Login Throttle

The number of session and user login requests transmitted to T7 per pre-defined time interval is limited. T7 will check both, the number of logins for a certain session and the number of logins for a certain user (via all sessions belonging to its business unit). For both, T7 will count the number of logins (per time interval). If that counter hits the limit, T7 will reject that login request and all the following ones (for either a certain session - session login, or a certain user - user login) within a "cooling" time interval. Then, T7 will re-set the related counter.

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## 4 Service Description

#### 4.1 FIX Semantics

All application messages between the participant and the Eurex ETI follow FIX V5.0 SP2 semantics including all officially approved extension packs.

Additionally user defined fields (UDF) and messages have been added to cover functional gaps in the FIX standard or to increase performance.

The following changes have been made for performance reasons:

- All rejections and errors on an application and session level are communicated via the FIX standard Reject (3) message.
- All parties are identified by individual UDFs instead of repeating groups.
   UDF tags and names were chosen in a way that supports automated translation to standard FIX repeating groups for parties.

The FIX messages are denoted in the following way:

Message name (Message Type)

The FIX fields are denoted in the following way:

Field name (FIX Tag)

FIX repeating groups and components are denoted in the following way:

<Group name>

## 4.2 Party Identification

The **participant** is an entity accessing T7. The Eurex concept of a member remains in place, and will be represented by a "participant" within the new system. When trades are sent to the clearing system, the participant will be replaced by its corresponding member-ID.

A participant may have several **business units** as independent entities taking part in trading at the exchange. Business units are identified by a business unit ID. A business unit belongs to a participant. The Eurex Enhanced Trading Interface deals only with the concept of a business unit.

A **user** is a person, such as a trader or an exchange market supervisor that interacts with T7. Users are identified by a user ID. A user belongs to one business unit. A user is a trader or administrator that logs on to the system to enter commands on the trading system.

Users can be assigned to a specific **trader group**, along with the *head trader* and *supervisor roles*:

A user with a user level of **head trader** may modify or cancel orders of any
user belonging to the same trader group.

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• A user with a user level of **supervisor** may modify or cancel orders of any user belonging to the same business unit.

All requests that are received by the Eurex Enhanced Trading Interface (Eurex ETI), with the exception of session related requests, must carry the ID of a user that enters the request.

The user of the business unit needs to be provided by the request submitter in the SenderSubID (50) of the request header. All orders and quotes must carry the identification of a physical person that is legally responsible for the order or quote.

The following party roles and attributes are used in Eurex ETI:

| Party                        | Description   | Party Attributes              | Relevant FIX Field   |  |
|------------------------------|---|-------------------------------|--|--|
| Participant                  | The participant is an entity accessing Eurex Exchange's T7.   | Participant Short<br>Name     | RootPartyExecutingFirm(22401)  |  |
| Business<br>Unit             | Indicates the company or a part of a company that is set up as an independent entity taking part in trading at the exchange.      | Business Unit ID              | PartyIDExecutingUnit (20059),<br>RootPartyIDExecutingUnit (20459),<br>PartyDetailIDExecutingUnit (20259)   |  |
| User                         | A business unit can have multiple users. A user can be a trading user and/or an administrator.                                    | User ID                       | Username (553),<br>SenderSubID (50)  |  |
| Owning User                  | User who owns the transaction.  | Owning User ID                | PartyIDExecutingTrader (20012), RootPartyIDExecutingTrader (20412), TargetPartyIDExecutingTrader (20612) RequestingPartyIDExecutingTrader (20812) PartyDetailIDExecutingTrader (20212) |  |
|                              |   | Owning User Short<br>Name     | RootPartyExecutingTrader (22412) PartyDetailExecutingTrader (22212)  |  |
| Entering<br>User             | User who initiates/submits the order/quote transaction; could be the head trader or supervisor or a market supervision user.      | Entering User ID              | PartyIDEnteringTrader (20036)  |  |
| Entering<br>Entity           | Identifies the entity that entered<br>the transaction; might be market<br>supervision, the participant or the<br>clearing member. | Entering Entity ID            | PartyIDEnteringFirm (20007)<br>RequestingPartyIDEnteringFirm (20807)   |  |
|                              |   | Entering Entity<br>Short Name | RequestingPartyEnteringFirm (22807)  |  |
| Trader<br>Group              | Users can be assigned to a specific trader group.   | Trader Group                  | TargetPartyIDDeskID (20676)<br>PartyDetailIDDeskID (22276)   |  |
| Session                      | Identification of the session. A session belongs to a business unit.  | Session ID                    | PartyIDSessionID (20055),<br>TargetPartyIDSessionID (20655),<br>RootPartyIDSessionID (20455)   |  |
| Clearing<br>Member           | Clearing member identification.   | Clearing Member<br>Short Name | RootPartyClearingFirm (22404),<br>RequestingPartyClearingFirm (22804)  |  |
| Clearing<br>Business<br>Unit | Indicates the company or a part of a company that is set up as an independent entity taking part in clearing.                     | Clearing Business<br>Unit ID  | RootPartyIDClearingUnit (25026)  |  |
| Clearing<br>House            | A post trade facility.  | Clearing House<br>Short Name  | RootPartyClearingOrganization (22421)  |  |
| Take-up<br>Member            | Indicates the name of a member institution to which a give-up is designated.  | Take-up Member<br>Short Name  | PartyIDTakeUpTradingFirm (20096)<br>RootPartyIDTakeUpTradingFirm (20496)   |  |
| External<br>Member           | Partner identification at the cooperation exchange (KRX, TAIFEX) is required for orders in the cooperation products.              | External Member ID            | PartyIDOrderOriginationFirm (20013), RootPartyIDOrderOriginationFirm (20413)   |  |

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| Party                   | Description  | Party Attributes             | Relevant FIX Field  |
|-------------------------|--|------------------------------|---|
| External<br>Beneficiary | Mandatory final beneficiary account at the cooperation exchange (KRX, TAIFEX)required for orders in in the cooperation products. | Final Benificiary<br>Account | PartyIDBeneficiary (20032),<br>RootPartyIDBeneficiary (20432) |
| System                  | Executing system.  | System ID                    | RequestingPartyIDExecutingSystem (20816)                      |

UDF tags for Eurex ETI parties consist of an offset and the standard "enum" value of *PartyRole (452):* 

- PartyID (448) has an offset of 20000
- RootPartyID (1117) has an offset of 20400
- TargetPartyID (1462) has an offset of 20600

UDF names for Eurex ETI parties consist of the standard FIX field name (*PartyID* (448), *RootPartyID* (1117), *TargetPartyID* (1462)) concatenated with the symbolic name of the standard "enum" value of *PartyRole* (452) as defined in the FIX Repository.

For example the Eurex ETI tag and field name for the user is PartyIDExecutingTrader (20036).

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## 4.3 Security Identification

Each Eurex product is processed on exactly one partition; a partition is a grouping of products. To optimize the routing to the corresponding partition, the product identifier needs to be provided in each order and quote transaction by the participant. The exceptions to this rule are Short Order Message Layouts, see chapter 4.6.8 Short Order Message Layouts.

Both single and multi leg instruments are uniquely identified by the unique instrument identifier.

Additionally for multi leg instruments it is mandatory to specify the instrument type in all order requests.

| Identifier            | Description   | Relevant FIX Tags   |
|-----------------------|---|---|
| Product Identifier    | The product identifier uniquely identifies a Eurex product.   | MarketSegmentID (1300)                                    |
| Instrument Identifier | The instrument identifier uniquely identifies an instrument in the core system.   | SecurityID (48),<br>SimpleSecurityID (30048) <sup>1</sup> |
| Instrument Type       | Required for complex instruments, valid values are: $1 = \text{Simple Instrument } 2 = \text{Standard}$ Option Strategy $3 = \text{Non-Standard Option}$ Strategy $4 = \text{Options Volatility Strategy } 5 = \text{Futures Spread } 6 = \text{Inter Product Spread } 7 = \text{Standard Future Strategy } 8 = \text{Pack and Bundle } 9 = \text{Strip}$ | ProductComplex (1227)                                     |

## 4.4 Creation of a Strategy

The Create Strategy message can be used to create a specified complex instrument on Eurex.

The Eurex product identifier (MarketSegmentID (1300)), instrument type (ProductComplex (1227)) and the signature < InstrumtLegGrp> (description of the legs, their ratios and side) are mandatory attributes of the request.

Standard Options Strategies, Options Volatility Strategies, Standard Future Strategies, Pack and Bundle and Inter Product Spread require the entry of the strategy type (SecuritySubtype (762)). Please refer to functional product and instrument files on the Eurex website: www.eurexchange.com > Technology > Eurex Exchange's T7 > Documents.

If the complex instrument already exists or is created successfully, the Create Strategy Response message returns the complex instrument identifier (SecurityID (48)) and the signature of the complex instrument.

Note: The signature which is returned by the T7 architecture may differ from the signature which was sent in the Create Strategy message, e.g. in order to match a pre-defined strategy template. The same is true for instrument type (*ProductComplex (1227)*) and strategy type (*SecuritySubType (762)*).

<sup>&</sup>lt;sup>1</sup> SimpleSecurityID (30048): Instrument identifier for simple instruments. Should be filled with the 4 least significant bytes of SecurityID (48) provided in Reference Data of **Eurex RDI** and **Eurex RDF**.

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Only after a specific complex instrument has been requested and created, is it possible to enter orders or quotes for this instrument.

Strategies which are created by users are always temporary and are cancelled during end of day processing if their order book is empty.

#### 4.5 Order Identifiers

Market Participants may choose one of the following options for order identification:

- Use a constant client order ID over the complete lifetime of an order, like it is currently supported in the Eurex Enhanced Transaction Solution interface.
- Standard FIX policy of client order ID chaining: client order ID must change on every modification and cancellation request.
- Use the exchange order ID.

Market participants may use the client order ID for order and order related message identification. Modification and cancellation of an order is supported both via the client order ID and the exchange order ID.

Once an order has a client order ID, it must have a client order ID for the rest of its life cycle. Respectively an order without a client order ID cannot be modified to have a client order ID later on in its life cycle.

#### 4.5.1 Client Order ID

The FIX standard field *ClOrdID* (11) is used for the client order ID.

Note: T7 will not enforce market participants to use a new ClOrdlD (11) for application messages related to a resting order; i.e. the ClOrdlD (11) may stay the same during the life cycle of an order.

The standard FIX policy regarding usage of client order IDs is additionally supported by Eurex ETI:

- When modifying or cancelling an order, a new ClOrdID (11) must be provided.
- The order to be modified or cancelled is identified with the *OrigClOrdID* (41). In this way the customer is able to find and track individual requests by their client order ID.

If a market participant changes the client order ID, the uniqueness of ClOrdID (11) is checked at entry time among currently live orders for the same instrument and session. Duplicate ClOrdID (11) values for the same session and instrument will be rejected with the exception of Immediate or Cancel (IOC) Orders.

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#### 4.5.2 Exchange Order ID

The exchange order ID is assigned by the matching engine on order entry and remains unchanged for the entire life time of the order, for example, an order modify does not result in a change of the exchange order ID.

An exchange order ID is guaranteed to be unique among all orders of the same product.

The FIX standard field OrderID (37) is used for exchange order ID.

## 4.6 Order Handling

## 4.6.1 Order Types

The following Eurex order types are supported via the Eurex ETI interface:

| Order Type                | Description   | Relevant FIX Tags   |
|---------------------------|---|---|
| Market                    | Market orders are not visible in the order book for any market participant and have no specific price limit, but are matched to the best available contra-side bid or offer.                                      | OrdType (40) = 1  |
| Limit                     | Limit orders include a specified price limit, and may not be executed at a price worse than that limit.   | OrdType (40) = 2<br>Price (44)                                  |
| Stop (Market)             | Stop market orders create market orders when the specified trigger price is reached. Similar to market orders, stop orders are not visible in the order book for any market participant.                          | OrdType (40) = 3<br>StopPx (99)                                 |
| Stop (Limit)              | Stop limit orders create limit orders when the specified trigger price is reached. Similar to market orders, stop orders are not visible in the order book for any market participant.                            | OrdType (40) = 4<br>Price (44)<br>StopPx (99)                   |
| One-cancels-the-<br>other | An order that combines the functionality of a limit order and a stop (market) order, expressed as a single order. Traders will specify a limit price and a trigger price as part of one order.                    | OrdType (40) = 2<br>Price (44)<br>StopPx (99)                   |
| Closing auction only      | Closing auction only orders may be entered during the entire trading day, but are only active during the closing auction phase.   | $\begin{array}{l} TradingSessionSubID \\ (625) = 4 \end{array}$ |
| Good-for-day (Day)        | Day orders are deleted automatically in the next end-of-day processing.   | TimeInForce $(59) = 0$  |
| Good-till-date<br>(GTD)   | Order carries a specified date on which the order is automatically cancelled.   | TimeInForce $(59) = 6$<br>ExpireDate $(432)$                    |
| Good-till-cancelled (GTC) | Order remains valid until it is executed, cancelled, or if the contract expires.  | TimeInForce $(59) = 1$  |
| Immediate or Cancel (IOC) | An IOC order is to be filled immediately, either completely or to the extent possible; the portion that cannot be filled immediately is cancelled.  | TimeInForce (59) = 3  |
| Book or Cancel            | An order, which is placed as resting liquidity in the order book to ensure passive execution. If immediate (and hence aggressive) execution is possible, the order is rejected without entry into the order book. | Execlnst (18) = 6 (encoded as bit map with third bit being set) |

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| Order Type     | Description   | Relevant FIX Tags  |
|----------------|---|--|
| Persistent     | A persistent order is an order that is reinstated at the beginning of the Business Day (if valid for that Business Day) or after a Market Reset.  | ExecInst (18) = H (encoded as bit map with first bit being set)                        |
| Non-persistent | Non-persistent orders are automatically cancelled at the end of the Business Day or after a Market reset. They are also cancelled in case of some system events (see Mass Cancellation Notification) and session connection problems.             | Execlnst $(18) = Q$ (encoded as bit map with second bit being set)                     |
| Standard       | The complete order history can be recovered via retransmission requests. The order data is visible to all low-frequency sessions belonging to the same business unit. Standard orders can be persistent or non-persistent                         | $\begin{array}{l} ApplSeqIndicator \\ (28703) = 1 \\ (Recovery\_Required) \end{array}$ |
| Lean           | For lean orders, the execution notifications can be recovered (via retransmission requests on the session data channel). All data on lean orders are visible only to the session that submitted the order. Lean orders are always non-persistent. | ApplSeqIndicator $(28703) = 0$ $(No_Recovery_Required)$                                |

#### 4.6.2 Cancellation

The owner of an order is the entering business unit, session and user. On behalf cancellation via a different session of the same business unit is supported. Head traders of the same trader group and the supervisor of the business unit may cancel on behalf of the owning user.

Cancelling an order will remove the remainder of a live order from the T7 architecture's order book.

The participant may either use the *OrigClOrdID* (41, unique per instrument) and the *TargetPartyIDSessionID*(20655) or the *OrderID* (37;unique per product) to identify the corresponding order to cancel. The Eurex ETI interface will respond with an *Execution Report* (8) or *Reject* (3) message for confirmation or rejection respectively.

#### 4.6.3 Modification

An order may only be modified if the request comes from the same user, or a supervisor, or a head trader from the same trader group. Modification by another session of the same business unit is only supported for standard orders.

The participant may either use the OrigCIOrdID (41) or the OrderID (37) to identify the corresponding order to modify. The Eurex ETI interface will respond with an Execution Report (8) or Reject (3) message for confirmation or rejection respectively.

The ownership of the modified order can be modified by the *OwnershipIndicator* (28743). The Short Order Message Layout does not support the change ownership functionality.

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| Ownership<br>Indicator (28743)       | Description   | Relevant FIX Tags                |
|--------------------------------------|---|----------------------------------|
| No change of ownership               | No change of the order's ownership. The executing user is not changed               | OwnershipIndicator $(28743) = 0$ |
| Change ownership to execution trader | The entering trader becomes the owner of the order, i.e is now the executing trader | OwnershipIndicator $(28743) = 1$ |

Orders that have been completely filled cannot be modified.

The following order attributes cannot be modified:

- Security identification: MarketSegmentID (1300), SimpleSecurityID (30048), SecurityID (48), ProductComplex (1227)
- Side (54)
- TradingSessionSubID (625)
- ExecInst (18)
- ApplSeqIndicator (28703)

The following restrictions apply to the modification of the field *OrdType* (40):

- A Market Order (OrdType(40) = 1) may only be modified to a Limit Order (OrdType(40) = 2).
- A Limit Order (OrdType (40) = 2) may only be modified to a Market Order (OrdType (40) = 1).
- A Stop (Market) Order (OrdType (40) = 3) may only be modified to a Stop (Limit) Order (OrdType (40) = 4).
- A Stop (Limit) Order (OrdType(40) = 4) may only be modified to a Stop (Market) Order (OrdType(40) = 3).
- A One-cancels-the-other Order cannot be modified to a Market, Limit or Stop Order.

An order that is modified will lose its time priority, i.e. it will get a new priority timestamp, if

- Price (44) is modified in any way, or
- OrderQty (38) is increased, or
- OrdType (40) is changed, or
- ExecType (150) is "L = Triggered by system".

#### 4.6.4 Total Order Quantity Modification

Participants need to specify the new total order quantity when modifying the field *OrderQty* (38). This approach leads, from a participant's point of view, to a clear and deterministic behaviour by specifying a total execution limit. The previously executed quantity of an order is

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maintained and is used to calculate the new open quantity. If this is zero or less then the order will be cancelled.

<u>During the lifetime of an order</u>, the total quantity of the order is always equal to the sum of the open order quantity and the accumulated traded quantity:

$$OrderQty$$
 (38) =  $CumQty$  (14) +  $LeavesQty$  (151)

After an order has been cancelled (OrdStatus (39) is "4 = Cancelled"), the total quantity of the order is equal to the sum of the cancelled order quantity and the accumulated traded quantity, while the open order quantity is zero.

$$OrderQty(38) = CumQty(14) + CxlQty(84)$$

#### 4.6.5 Self-Match-Prevention (prevention of cross matches)

The T7 system offers a Self-Match-Prevention mechanism to avoid matching (crossing) of orders and/or quotes of one business unit having the same value in the field *MatchInstCrossID* (28744).

For orders, any Self-Match-Prevention event involved in a transaction is reported in the order response and/or notification by the field Crossed (28745) set to "1 = Cross rejected". In the case the order has not been deleted completely (OrderStatus (39) is not "4 = Cancelled"), the total order quantity of the order is reduced by the system and must be recalculated by the formulas given in chapter before.

For quotes, a Self-Match-Prevention event is reported in the Quote Execution Notification (10407) by the QuoteEventReason (28733) field set to "16 = Cross rejected". If the Self-Match-Prevention event leads to a partial deletion of the quote (QuoteEventType (28539) set to "2 = Modified quote side") the deleted quote quantity is given in QuoteEvenetQty (28542).

#### 4.6.6 Order Mass Cancellation

Using the Order Mass Cancellation Request, a user can cancel all orders within a specified instrument, user or session scope. The instrument scope can be extended to an entire product. The session scope can be extended to all sessions of the submitting user or may reference a single but different session.

If the Order Mass Cancellation Request is rejected by the trading system, no orders have been deleted.

The following filter criteria can be specified:

| Filter Criteria:<br>Target Parties   | Description                           |
|--------------------------------------|---------------------------------------|
| TargetPartyIDExecutingTrader (20612) | Cancel all orders owned by a user ID. |

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| Filter Criteria:<br>Target Parties | Description   |
|------------------------------------|---|
| TargetPartyIDSessionID (20655)     | Cancel all orders of a session depending on the authorization of the user role. |

The user may filter on a specific owning session or the session scope can be extended to all sessions of the business unit.

A **head trader** may cancel all orders of any user belonging to the same trader group or for the complete trader group. Additionally the session may be used as filter criteria.

A **supervisor** may opt for the cancellation of all orders of any user, any trader group and any session of the business unit.

The omission of the filter criteria results in a mass cancellation request for all orders of the business unit in a product or instrument respectively.

Note: Mass cancellation confirmation is not provided on a single order or quote level. The owning session will be informed about the scope of the cancellation by a summary record with an exception list. Please find more information regarding unsolicited mass order cancellation in chapter 4.16 Mass Cancellation Notification and Mass Cancellation Events.

#### 4.6.7 Account Structure

The field *TradingCapacity* (1815) must be provided for orders. It designates if the trader is acting in the capacity of Agent, trading for its own account or acting as a market maker.

For quotes, the trader is implicitly always acting as a market maker.

| <b>Business Type</b> | Description   | Relevant FIX Tags                   |
|----------------------|---|-------------------------------------|
| Agency               | Market Participant is trading on behalf of clients. | ${\sf TradingCapacity}\ (1815) = 1$ |
| Proprietary          | Market Participant is trading for its own account.  | ${\sf TradingCapacity}\ (1815) = 5$ |
| Market Making        | Market Participant is acting as a Market Maker.     | TradingCapacity $(1815) = 6$        |

The entry of a Eurex account type and number is supported via the *Account* (1) field. It designates the account type and number to be used for the order when submitted to clearing.

The field *Account* (1) needs to be provided only for orders.

Note: T7 will not evaluate the consistency between TradingCapacity (1815) and Account (1) for an order.

If the Clearing Account is missing or invalid, then it will be set by the clearing system according to the rules described in the Eurex document "Functional and Interface Overview", chapter "Clearing Account Rules"

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#### 4.6.8 Short Order Message Layouts

The Eurex ETI supports order message layouts with reduced message content for simple instruments: New Order Single (Short Layout) and Replace Order Single (short layout).

The reduced payload of these messages, which is similar to quote messages, provides improved latency.

For short order message layouts the following order attributes are implicitly set:

- Lean
- Limit order
- Product Identifier

The usage of *TimeInForce* (59) in short order message layouts is limited to the following options:

- · Good for Day
- Immediate or Cancel (IOC)

Note: Orders entered via New Order Single (Short Layout) may only be modified via Replace Order Single (Short Layout). The combined usage of short and "normal" order message layouts for the same order is not supported.

#### 4.6.9 Order Status and Execution Reports

The Execution Report (8) message is used to communicate many different events. The type of event is specified in the ExecType (150) field and the OrdStatus (39) field is used to convey the current status of an order.

The Eurex ETI will always send only one response message per request. Unsolicited events are communicated via notifications.

The following table shows different order scenarios and their usage of *OrdStatus* (39), *ExecType* (150) and *ExecRestatementReason* (378) in the *Execution Report* (8) sent by the Eurex ETI Interface:

| Scenario   | OrdStatus(39)      | <b>ExecType</b> (150) | ExecRestatementReason (378) |
|--|--------------------|-----------------------|-----------------------------|
| NEW ORDER  |                    |                       |                             |
| Non-IOC order added without execution            | 0=New              | 0=New                 | 101=Order added             |
| Non-IOC order added with partial execution       | 1=Partially filled | F=Trade               | 101=Order added             |
| Order (IOC or non-IOC) added with full execution | 2=Filled           | F=Trade               | 101=Order added             |
| IOC order added without execution                | 4=Cancelled        | 4=Cancelled           | 105=IOC order cancelled     |

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| Scenario  | OrdStatus(39)      | ЕхесТуре (150) | ExecRestatementReason (378)                                |
|---|--------------------|----------------|--|
| IOC order added with partial execution  | 4=Cancelled        | F=Trade        | 105=IOC order cancelled                                    |
| Attempt to add executable BOC order   | 4=Cancelled        | 4=Cancelled    | 212=BOC order cancelled                                    |
| Stop order added and triggered without execution  | 0=New              | L=Triggered    | 101=Order added  |
| Stop order added and triggered with partial execution   | 1=Partially filled | F=Trade        | 101=Order added  |
| Stop order added and triggered with full execution  | 2=Filled           | F=Trade        | 101=Order added  |
| Closing auction only order added outside of closing auction   | 9=Suspended        | 0=New          | 101=Order added  |
| Attempt to add (and trigger) executable (stop) order but deleted due to SMP                             | 4=Cancelled        | 4=Cancelled    | 101=Order added  |
| (Stop) order added (and<br>triggered) with partial<br>execution and deletion of<br>remainder due to SMP | 4=Cancelled        | F=Trade        | 101=Order added  |
| REPLACE ORDER   |                    |                |  |
| Unfilled order replaced (remaining non-IOC) without execution   | 0=New              | 5=Replaced     | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Unfilled order replaced (remaining non-IOC) with partial execution                                      | 1=Partially filled | F=Trade        | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Partially filled order replaced without execution   | 1=Partially filled | 5=Replaced     | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Order quantity replaced at or below executed quantity   | 2=Filled           | 5=Replaced     | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Order replaced (remaining non-IOC) with partial execution   | 1=Partially filled | F=Trade        | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Order replaced (to IOC or non-IOC) with full execution  | 2=Filled           | F=Trade        | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Order replaced to IOC without execution   | 4=Cancelled        | 4=Cancelled    | 105=IOC order cancelled 181=Ownership Changed <sup>2</sup> |
| Order replaced to IOC with partial execution  | 4=Cancelled        | F=Trade        | 105=IOC order cancelled 181=Ownership Changed <sup>2</sup> |
| Stop order replaced and triggered without execution   | 0=New              | L=Triggered    | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Stop order replaced and triggered with partial execution  | 1=Partially filled | F=Trade        | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |
| Stop order replaced and triggered with full execution   | 2=Filled           | F=Trade        | 102=Order replaced<br>181=Ownership Changed <sup>2</sup>   |

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| Scenario   | OrdStatus(39)       | ExecType (150)      | ExecRestatementReason (378)                              |
|--|---------------------|---------------------|--|
| Closing auction only order replaced outside of closing auction   | 9=Suspended         | 5=Replaced          | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| Attempt to modify (and trigger stop) order becoming executable and deleted due to SMP                      | 4=Cancelled         | 4=Cancelled         | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| (Stop) order modified (and<br>triggered) with partial<br>execution and deletion of<br>remainder due to SMP | 4=Cancelled         | F=Trade             | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| CANCEL ORDER   |                     |                     |  |
| Order cancelled  | 4=Cancelled         | 4=Cancelled         | 103=Order cancelled                                      |
| Order cancellation deferred due to instrument freeze   | 6=Pending<br>Cancel | 6=Pending<br>Cancel | 197=Order cancellation pending                           |
| Actual order cancellation after being initially deferred   | 4=Cancelled         | 4=Cancelled         | 199=Pending cancellation executed                        |
| Closing auction only order deleted outside of closing auction  | 9=Suspend           | 4=Cancelled         | 103=Order cancelled                                      |
| Actual order deletion with partial execution after being initially deferred                                | 4=Cancelled         | F=Trade             | 199=Pending cancellation executed                        |
| UNSOLICITED EVENT  |                     |                     |  |
| Other user: Unfilled order replaced (remaining non-IOC) without execution                                  | 0=New               | D=Restated          | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| Other user: Partially filled order replaced without execution  | 1=Partially filled  | D=Restated          | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| Other user: Order quantity replaced at or below executed quantity  | 2=Filled            | D=Restated          | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| Other user: Closing auction only order replaced outside of closing auction                                 | 9=Suspended         | D=Restated          | 102=Order replaced<br>181=Ownership Changed <sup>2</sup> |
| Partial execution of order resting on book   | 1=Partially filled  | F=Trade             | 108=Book order executed                                  |
| Full execution of order resting on book  | 2=Filled            | F=Trade             | 108=Book order executed                                  |
| Market order triggered and partially executed  | 1=Partially filled  | F=Trade             | 135=Market order triggered                               |
| Market order triggered and fully executed  | 2=Filled            | F=Trade             | 135=Market order triggered                               |
| Resting stop order triggered with partial execution  | 1=Partially filled  | F=Trade             | 172=Stop order triggered                                 |
| Resting stop order triggered with full execution   | 2=Filled            | F=Trade             | 172=Stop order triggered                                 |

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| Scenario  | OrdStatus(39)      | ExecType (150) | ExecRestatementReason (378) |
|---|--------------------|----------------|-----------------------------|
| Resting OCO order triggered with partial execution  | 1=Partially filled | F=Trade        | 164=OCO order triggered     |
| Resting OCO order triggered with full execution   | 2=Filled           | F=Trade        | 164=OCO order triggered     |
| Closing auction only order executed with partial execution  | 9=Suspended        | F=Trade        | 150=CAO order inactivated   |
| Market order triggered with partial execution and complete deletion of remainder due to SMP       | 4=Cancelled        | F=Trade        | 135=Market order triggered  |
| Resting stop order triggered with partial execution and complete deletion of remainder due to SMP | 4=Cancelled        | F=Trade        | 172=Stop order triggered    |
| Resting OCO order triggered with partial execution and complete deletion of remainder due to SMP  | 4=Cancelled        | F=Trade        | 164=OCO order triggered     |
| Unfilled closing auction only order moved into closing auction                                    | 0=New              | D=Restated     | 149=CAO order activated     |
| Partially filled closing auction only order moved into closing auction                            | 1=Partially filled | D=Restated     | 149=CAO order activated     |
| Closing auction only order (unfilled or partially filled) moved out of closing auction            | 9=Suspended        | 9=Suspended    | 150=CAO order inactivated   |
| Restatement of unfilled order   | 0=New              | D=Restated     | 1=Order book restatement    |
| Restatement of partially filled order   | 1=Partially filled | D=Restated     | 1=Order book restatement    |
| Restatement of closing auction only order (unfilled or partially filled)                          | 9=Suspended        | D=Restated     | 1=Order book restatement    |
| Complete deletion of order due to SMP without execution   | 4=Cancelled        | 4=Cancelled    | 103=Order cancelled         |
| Restatement: Partial deletion of unfilled order due to SMP without execution                      | 0=New              | D=Restated     | 1=Order book restatement    |
| Restatement: Partial deletion of partially  | 1=Partially filled | D=Restated     | 1=Order book restatement    |
| Resting stop order triggered without execution  | 0=New              | L=Triggered    | 172=Stop order triggered    |
| Resting OCO order triggered without execution   | 0=New              | L=Triggered    | 164=OCO order triggered     |
| Resting market order triggered without execution and complete deletion due to SMP                 | 4=Cancelled        | 4=Cancelled    | 135=Market order triggered  |

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| Scenario  | OrdStatus(39) | ExecType (150) | ExecRestatementReason (378) |
|---|---------------|----------------|-----------------------------|
| Resting stop order triggered without execution and complete deletion due to SMP | 4=Cancelled   | 4=Cancelled    | 172=Stop order triggered    |
| Resting OCO order triggered without execution and complete deletion due to SMP  | 4=Cancelled   | 4=Cancelled    | 164=OCO order triggered     |

Note: For performance reasons the Eurex ETI will use the standard FIX *Reject* (3) message for all rejections on application and session level.

#### 4.6.10 Order Book Restatement

Order status inquiries are not supported by the Eurex ETI. Participants must maintain the state of orders based on the *Execution Report* (8) messages.

During the start-of-day phase and after a market reset event, all active orders of a session will be transmitted to the market participant via the respective session.

At first a Trading Session Event message is sent informing the participant about start-of-day or a market reset event per partition respectively, optionally followed by Extended Order Information messages for each restated order of the corresponding session and finally a Trading Session Event message is sent indicating the end of the restatement per product. Extended Order Information messages for restated order and end of the restatement message are only visible to LF sessions.

Note: Order book restatement messages (and the Trading Session Event messages mentioned above) are recoverable. The owning session can request a retransmission in the event it was not logged on at the time. Order book restatement messages (including the Trading Session Event messages mentioned above) are also sent on the listener broadcast. These messages are only visible to LF sessions.

## 4.7 Quote Handling

#### 4.7.1 Quote Characteristics

A (double sided) quote establishes both a limit to buy and to sell within a single transaction. Quantities to buy and to sell are independent of one another. The T7 architecture supports one-sided as well as double-sided quotes.

A quote is owned by the session. A session may have only one quote per instrument. Sessions belonging to the same business unit may have different quotes in the same instrument, but only one quote per session. Quotes of the same business unit might be executed against each other.

A user may overwrite, modify or cancel any quote of another user that is owned by the same session.

One session cannot enter or modify individual quotes of another session.

<sup>&</sup>lt;sup>2</sup>In case of a modify order combined with an order ownership change

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Sessions may cancel all quotes or inactivate and reactivate the quotes of another session belonging to the same business unit.

Quotes are non-persistent; they are automatically cancelled in case of:

- Exchange system failure (i.e. market reset)
- Session logs out
- Session looses the connection to the trading gateway
- Session logs in twice via a different connection
- Mass Cancellation events
- At the end of the business day.

#### 4.7.2 Maintaining Quotes

Quotes are entered using the Mass Quote message. A Mass Quote request may contain several single-sided or double-sided quotes for different instruments of the same product.

There can only be one quote for an instrument in a Mass Quote message. Actions can be different for each side of a single instrument, for example in a double-sided quote; a trader can cancel one side and replace the other side.

The Client Order ID is not supported for quotes; instead the participant defines a mass quote identifier (*QuoteID* (117)) for each Mass Quote message. The mass quote identifier is provided in each Quote Execution Notification (QuoteMsgID (1166)) and Trade Notification (*CIOrdID* (11)).

T7 has two methods for updating quotes:

- Quote Entry
- Quote Modification

Note: Quote Entry and Quote Modification cannot both be used within the same Mass Quote message.

The two types of quoting models are distinguished by the usage of different values in field *QuoteSizeType* (28723):

| Quoting Model             | QuoteSizeType (28723) |
|---------------------------|-----------------------|
| Quote Entry               | 2 = Open Size         |
| <b>Quote Modification</b> | $1 = Total\;Size$     |

Every **quote entry** simply overwrites an existing quote without considering an existing executed quantity. For each quote entry request, the user must specify the new price and the new quantity of the quote side. Under quote entry, there can only be one entry per instrument. If a two sided quote is entered then both sides must be in the same entry.

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Accepted quotes are not confirmed in the Mass Quote Response unless additional information needs to be conveyed back to the submitter. The field *QuoteEntryStatus* (1167) identifies the status of quote entries of a Mass Quote that could not be processed as requested.

If an individual quote side of a double-sided quote in a mass quote request is rejected (for instance after the price reasonability check or the extended price range validation), then both sides of the quote for the instrument are not processed, and both sides of the current quote are cancelled; see Mass Quote Response message.

If however, the entire mass quote request is rejected, then any old quotes of the session remain unaffected; even if there had been new quotes for the corresponding instruments in the rejected mass quote request.

Participants may define via the Eurex Admin GUI trade enrichment rules for text fields or fields required for quoting in partner exchange products applied to trades resulting from quote executions.

**Quote modification** allows a trader to modify quotes with a total execution limit, similar to orders where the quantity specified by the trader is always a total order quantity. The previously executed quantity of a quote side is maintained and is used to calculate the new open quantity. If this is zero or less then the quote side will be cancelled. If the previous quote side is not found, for example as it has traded out, then the modification for that quote side is ignored.

The priority timestamp of a quote stored in the order book is preserved when the price is left unchanged and the open quote quantity is not strictly increased. Like for orders, when price and quantity are not modified, the priority timestamp is also preserved. In all other cases, the priority timestamp is refreshed.

To **cancel** a quote side, the quote quantity must be set to zero and the limit price field must be omitted. Only quotes entered via the same session can be cancelled with the *Mass Quote Request (i)*.

**Quote mass cancellation** functionality is provided via Quote Mass Cancellation Request. With the help of this request it is possible to cancel all own quotes in a product as well as all quotes in a product of another session belonging to the same business unit. Please find more information regarding unsolicited mass cancellation in chapter 4.16 Mass Cancellation Notification and Mass Cancellation Events.

#### 4.7.3 Quote Activation/Inactivation

Quotes of a given session can be activated/inactivated on two different scopes:

- the product scope,
- the product and instrument type scope.

Quotes are inactivated by setting the status "quotes inactive" on the applied scope. In this case the system will hide all inactive quotes from trading. Quote activation is not meant to be used for liquidity taking trading strategies.

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When "quotes inactive" is set for a session on a specific scope, none of the quotes of that session for that scope participate in matching nor are visible in the order book depth. The trader can continue to add, modify, and cancel individual quote sides for this session and scope, while all these quotes neither participate in matching nor are visible to the market.

The participant may set the status "quotes inactive/quotes active" for a session and scope using the Quote Activation Request and specifying MassActionType (1373). Please note that in case the Market Maker Protection mechanism is applied for the session, Quote Activation Requests can only be submitted on the scope of the applied Market Maker Protection parameters.

The status "quotes inactive/quotes active" is persisted for the current business day. After a system failover, all quotes are cancelled, but the latest status (quote active/quotes inactive) of a session and scope will remain in place after the failover. At the start of a new business day the default status for all sessions and scopes is "quotes active".

Note: The processing of the Quote Activation Request (for activation) will be slowed down by the core system. As a consequence, the first-in/first-out principle for a certain instrument of a transaction set including a Quote Activation Request (for activation) is not guaranteed any more.

The processing of the Quote Activation Request (for inactivation) will not be slowed down.

#### 4.7.4 Market Maker Protection

A market maker protection mechanism is provided to prevent too many simultaneous executions on quotes provided by a Market Maker.

Market maker protection parameters can be specified for a session on two different scopes:

- the product scope,
- the product and instrument type scope.

Market maker protection parameters can be specified on either the product scope or the product and instrument type scope. Both scopes can not be used in parallel for one product on one session. Please note that for 'Inter Product Spreads' the Market Maker protection mechanism is not available.

The participant may use the Market Maker Parameter Definition request to define, overwrite or delete market maker protection parameters. To delete market maker protection parameters for a session and scope, all market maker protection parameters must be set to zero. The Inquire Market Maker Parameters can be used to retrieve the recent market maker protection parameter for a session and product on all scopes.

The Market Maker Parameters are:

• ExposureDuration (1629): The time frame where the market maker protection parameters are counted (sliding time window).

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- CumQty (14): Volume counter that counts the total number of traded contracts.
- PctCount (28615): The Percent counter sums up each trade as a percentage of the original volume.
- Delta (7966): The Delta counter holds for futures the difference of bought future contracts and sold future contracts. For options it is the the difference of (long calls + short puts) and (short calls + long puts).
- Vega (7968): The Vega counter (applicable for options only) holds the absolute number of purchased contracts minus sold contracts.
- If a threshold is exceeded then:
- "quotes inactive" is set for the session and scope, i.e. quotes are inactivated on the respective scope,
- the threshold counter will be automatically reset on the respective scope,
- a Quote Activation Notification message (Session Data, retransmittable) for the scope of the threshold counter is sent to the respective session.

## 4.8 Price Validity Checks

There are two different price validations for orders and quotes, both considering the most recent best bid and best ask price.

#### 4.8.1 Price Reasonability Check

When entering or replacing an order or quote, the user may opt for a check ensuring that the entered price does not differ significantly from the market. The field *PriceValidityCheckType* (28710) provides the following options:

- Valid value "0" = None
- Valid value "1" = Optional
- Valid value "2" = Mandatory

The "optional" differs from the "mandatory" Price Reasonability Check in the following way:

If the best bid and best ask prices are not available or if their spread is not reasonable, an additional reference price (the last traded price or the theoretical price) is taken into account. If the additional reference price is also not available, the incoming order or quote is

- accepted without performing a price validation in case the submitting user chooses "optional", or
- rejected in case the submitting user chooses "mandatory".

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#### 4.8.2 Extended Price Range Validation

In case no Price Reasonability Check was performed, the Extended Price Validity Check is applied which ensures that no erroneous price crosses through the market.

For more details please refer to the document "Eurex Exchange's T7 Functional Reference".

#### 4.9 Trade Notifications

#### 4.9.1 Trade Characteristics

If subscribed to the Trade broadcast (see chapter 6.9 Broadcast), a session will receive Trade Notification messages that confirm each trade for the entire business unit.

Notifications about trades are only provided on the T7 architecture via *Trade Capture Report* (AE) messages. Information provided via *Execution Reports* (8, U8) is indicative only and needs to be confirmed via a *Trade Capture Report* (AE). For further details see chapter 6.10.2 Preliminary Execution Report and Legally Binding Trade Notifications

T7 will send out the Trade Notification message for each order and quote execution to the trading and clearing business units involved. The receiving clearing business unit may belong to a different participant.

For trades in complex instruments, the Trade Notification message will be generated for each instrument leg executions.

#### 4.9.2 Trade Report Types

The TradeReportType (856) indicates the type of the trade report type.

| Scenario          | TradeReportType (856)       |
|-------------------|-----------------------------|
| Final Trade       | 0 = Trade                   |
| Preliminary Trade | 1 = Alleged                 |
| Modified Trade    | 5 = No/Was (Replaced)       |
| Trade Reversal    | 7 = (Locked-In) Trade Break |

#### 4.9.3 Trade Reconciliation

There are several identifiers that can be used to associate an *Execution Report* (8) or a *Quote Execution Report* (U8) with *Trade Capture Reports* (AE) and public trades on the market data interface. Please find an example message flow in the appendix, Trade Reconciliation and Identifiers Trade reconciliation and identifiers.

Every **match event** with one or more executions (**match steps**) in a simple or complex instrument results in only one *Execution Report (8) or a Quote Execution Report (U8)* message for each order or quote respectively. A Trade Notification will then be sent to confirm each trade at each price level. For complex instruments, there is a Trade Notification for each leg execution of the instrument.

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Every match step occurring at the exchange has an identifier that is provided in the field FillMatchID (28708) in the Execution Report (8), QuoteEventMatchID (8714) in the Quote Execution Report (U8) and TrdMatchID (880) in the Trade Notification. This identifier allows participants to link trade capture reports and the corresponding execution report. The same identifier is placed into the field MDEntryID (278) of the market data incremental feed in the Eurex Enhanced Market Data Interface (EMDI) so that the trade can also be tracked in the market data feed.

The *TradeID* (1003) field in the Trade Notification in Eurex ETI uniquely identifies all order leg allocations referring to the same matching event, simple instrument and price. The *TradeID* (1003) is equivalent to the trade identifier "TrdMatchID" in Eurex Clearing.

The field *SideTradeID* (1506), which is unique for a product and business day, in the Trade Notification provides the private identifier of an order or quote match step event, which can be reconciled with the corresponding *Execution Report* (8) for orders and *Execution Report* (U8) for quotes the following way:

- For order match events in simple instruments, the *Execution Report (8)* message provides the order execution ID on each price level, *FillExecID (1363)*.
- For order match events in complex instruments the *Execution Report (8)* message provides the order execution ID on each price level and additionally the order leg execution ID, *LegExecID (28725)*.
- For quote match events in simple instruments the Quote Execution Report (U8) message provides the quote side execution ID on each price level, QuoteEventExecID (28711).
- For quote match events in complex instruments the *Quote Execution Report (U8)* message provides the quote side execution ID on each price level and additionally the quote side leg execution ID, *LegExecID (28725)*.

| Match Reporting  | Execution Report (8), (U8)                       | Trade Notification                    |
|--|--|---------------------------------------|
| Trade event on instrument level: public trade volume reporting             | FillMatchID (28708),<br>QuoteEventMatchID (8714) | TrdMatchID (880)                      |
| Identifier for all leg allocations referring to the same simple instrument |  | TradelD (1003),<br>OrigTradelD (1126) |
| Order in simple instrument   | FillExecID (1363)                                | SideTradeID (1506)                    |
| Order in complex instruments   | LegExecID (28725)                                | SideTradeID (1506)                    |
| Quote in simple instrument   | QuoteEventExecID (28711)                         | SideTradeID (1506)                    |
| Quote in complex instrument  | LegExecID (28725)                                | SideTradeID (1506)                    |

Note: For trade cancellations a new *TradeID* (1003) is generated by the T7 architecture; the *SideTradeID* (1506) remains the same and allows the link to the cancelled trade. The original trade identifier is provided in field *OrigTradeID* (1126).

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## 4.10 Cross Request

A cross trade is a trade where a participant trades against an own order in the order book. In a pre-arranged trade, orders from at least two members are executed against each other as previously negotiated. Participants wanting to consciously enter cross and pre-arranged trades into T7, must preceded them with the entry of a cross request.

A trader sends the Cross Request message which is then published via the market data interfaces to all other participants, to alert them of the intention to trade with an own order or to conduct a pre-arranged trade.

The cross request contains the security identification (product and instrument id combination) and the *OrderQty (38)*, which is mandatory for regulatory reasons. The quantity is valid for both sides of the cross request.

## 4.11 Request for Quote

The request for quote functionality is used by a trader to ask market makers to enter a quote in a specified instrument. This functionality is supported in the Eurex ETI by the Quote Request message. All requests for quote are published via the market data interfaces to all other participants.

Every Quote Request message contains the security identification (product and instrument id combination). Side (54) and OrderQty (38) are optional attributes.

A Quote Request message might be rejected with an error message indicating a previous request for quote has been already processed recently.

Note: Each request for quote is validated against the available quantities at the best price and the corresponding bid/ask spread in the market. A *Reject (3)* message might indicate that the bid/ask spread and the quantities in the market are currently sufficient.

#### 4.12 Listener Broadcast

T7 offers 'drop copies' for standard orders (not for lean orders) to sessions within the same business unit. This service is provided on session level; for example each listener session may subscribe to listener broadcast data of one specified session or all sessions of a business unit. The parallel subscription to listener data of more than one session of a business unit is supported.

The listener broadcast provides information of the complete order history of standard orders of a session and can be retransmitted.

Complete order history means here: all changes to an order happening on the current business day.

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#### 4.13 News

The News message provides public information from the Eurex market supervision.

This public stream provides a unique sequence number to support retransmission, i.e. news messages are recoverable. The retransmission protocol includes the access to historical news, i.e. there is no cut at the end of the business day.

#### 4.14 Risk Control

The Eurex ETI supports advanced risk protection services. There are the following message formats:

- When a breach on a certain level of risk limits occurs, the participant will be informed via the Risk Notification message.
- Entitlement updates triggered from the Clearing system affecting the business unit are communicated via the Entitlement Notification message.
- Entitlement updates triggered within the Trading system (GUI) affecting the business unit or the trader are communicated via the PartyActionReport message.
- Legal text messages in case of suspension from trading will be provided via the Legal Notification message.

This private stream is automatically sent to each session of the corresponding business unit and clearing unit, no subscription mechanism is supported.

Each Risk Control broadcast message provides a unique sequence number and can be retransmitted.

Note: The advanced risk protection parameter maintenance remains on the current Eurex platform; hence maintenance of these parameters is not possible via the Eurex ETI, the new Eurex Trader GUI or the Eurex Admin GUI.

## 4.15 Service Availability

The Service Availability message provides information on the availability of all services on different partitions. Retransmission is not supported for this stream, i.e. service availability messages are not recoverable.

Subscription is handled via the Subscribe message. As filter criteria for subscription a single partition or all partitions may be specified. The Subscribe Response message confirms the subscription followed by Service Availability messages providing the current status of all services on all partitions. Any status change of a service would then be communicated via a new Service Availability message.

The following three services reside on a partition:

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- *MatchingEngineStatus* (25005): Order/Quote Management service informs if trading is active for a grouping of Eurex products.
- TradeManagerStatus (25006): Trades service informs about the availability of the retransmission service of trades for a grouping of Eurex products.
- ApplSeqStatus (28732): Retransmission of Order/Quote Events service informs about the availability of the retransmission services for order and
  quote events (session data and listener data) for a grouping of Eurex
  products.

In addition to the (availability) status, the current business day of the related service is provided. The business day defines the visibility scope for retransmission data. Only data related to the current business day can be requested for retransmission.

The Eurex ETI Gateway rejects requests if their target service is not available on the respective on partition. If a request has no target service, the request processing is independent of the published service states.

If a certain service on one or even on all partitions becomes unavailable, the system will

- NOT logout any user
- NOT logout any session
- NOT cancel any subscription
- NOT delete any orders (persistent or non-persistent) or quotes

#### 4.16 Mass Cancellation Notification and Mass Cancellation Events

Mass cancellation notification is not provided on a single order or quote level. The FIX message format *OrderMassActionReport* (*BZ*) message is used for responses and notifications. The owning session will be informed about the scope of the cancellation by a summary record. The summary record will also provide the entering parties involved and the reason for the mass cancellation.

Orders that couldn't be cancelled due to an incompatible instrument state are provided with their client order ID (*NotAff Orig ClOrdID (1372)*) and Exchange Order ID (*NotAffectedOrderID (1371)*) in the <NotAffectedOrdersGrp>.

Instruments where quotes couldn't be cancelled due to an incompatible instrument state are provided with their Instrument ID (NotAffectedSecurityID (28702)) in the <NotAffectedSecuritiesGrp>.

Eurex Exchange's T7 informs additionally about events that implicitly led to the mass cancellation of orders or quotes via the Mass Cancellation Event message:

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| Mass Cancellation Event                  | Persistent<br>Orders | Non-persistent<br>Orders | Quotes           |
|--|----------------------|--------------------------|------------------|
| Product Holiday                          | No                   | No                       | Yes              |
| Product Halt                             | No                   | Yes                      | Yes              |
| Instrument Suspension                    | No                   | No                       | Yes <sup>3</sup> |
| Strategy Cancellation                    | Yes                  | Yes                      | Yes              |
| Volatility Interruption Product level    | No                   | Yes                      | Yes              |
| Volatility Interruption Instrument level | No                   | Yes                      | Yes              |
| Product temporarily not tradeable        | No                   | Yes                      | Yes              |

There is no notification for the cancellation of orders and quotes during the end-of-day processing.

## 4.17 Trading Session Events

Trading session events triggered by the T7 architecture are communicated to **all** trading and listener sessions via the Trading Session Event message. It is part of the session data stream and the listener data stream, regardless if orders or quotes were entered for a product by the session.

Trading session events might imply mass cancellation events, where no explicit mass cancellation notifications are provided; for details see the following table:

| Trading Session Event           | Level     | Persistent<br>Orders | Non-persistent<br>Orders | Quotes |
|---------------------------------|-----------|----------------------|--------------------------|--------|
| Start of Service                | Partition | No                   | Yes                      | Yes    |
| Market Reset                    | Partition | No                   | Yes                      | Yes    |
| End of Restatement <sup>4</sup> | Product   | N/A                  | N/A                      | N/A    |
| End of Service                  | Partition | No                   | Yes                      | Yes    |
| Service Resumed                 | Partition | N/A                  | N/A                      | N/A    |

For all Trading Session Event messages to be sent out on Partition level (see above) the field MarketSegmentId is not set.

# 4.18 Timestamps

All Eurex ETI timestamps will provide date and time, in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).

The Eurex ETI provides the following timestamp information:

<sup>&</sup>lt;sup>3</sup> For Suspended instruments, quotes are cancelled, if the instrument state is "Restricted" or "Closed".

<sup>&</sup>lt;sup>4</sup> Order Book Restatement is only provided for Low Frequency Sessions (LF), see chapter Session Concept.

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| Timestamp               | FIX field  | Description  |
|-------------------------|--|--|
| Transaction timestamp   | ExecID (17),<br>MassActionReportID (1369),<br>QuoteResponseID (693),<br>SecurityResponseID (322),<br>MMParameterReportID (28717) | Taken when a transaction is functionally processed and used as a unique message identifier per product for messages sent by the Eurex ETI. <i>ExecID (17)</i> maps to <i>MDEntryTime (273)</i> in Eurex EMDI for order and quote events. |
| Entry timestamp         | TrdRegTSEntryTime (21009)  | Time of the creation of the order. It will be set when an order is received and processed by the Matching Engine. This timestamp is only provided for Standard Orders.   |
| Priority timestamp      | TrdRegTSTimePriority (21008)   | Is initially set to the entry timestamp and then gets re-stamped when the order looses time priority, see chapter 4.6.3 Modification. This timestamp is only provided for Standard Orders.   |
| Creation timestamp      | LastUpdateTime (779),<br>OrigTime (42)   | Creation Time of a strategy, respectively of market supervision News.  |
| Gateway request in      | RequestTime (5979)   | Provides the time the Eurex application has read an inbound message on a gateway from the TCP socket.  |
| Gateway request out     | RequestOut (7764)  | Provides the time the Eurex application has sent an outbound message from a gateway to the matching engine.  |
| Gateway response in     | ResponseIn(7765)   | Provides the time the Eurex application has received an inbound response message on a gateway from a matching engine.  |
| Gateway response out    | SendingTime (52)   | Provides the time the Eurex application has written an outbound message on a gateway to the TCP socket.  |
| Matching engine in      | TrdRegTSTimeIn (21002)   | Provides the time the Eurex application has received an inbound message on a matching engine.  |
| Matching engine out     | TrdRegTSTimeOut (21003)  | Provides the time the Eurex application has sent an outbound message from a matching engine.   |
| Gateway notification in | NotificationIn(25043)  | Provides the time the Eurex application has received an inbound notification message on a gateway from a matching engine.  |

# 5 Connectivity and Session Parameters

# 5.1 Session Concept

The Eurex ETI interface is a session oriented interface whereby the session is the basic scope of the interaction with the T7 architecture. Several users may share a single session, but every session may only be instantiated once. Each TCP/IP connection may only support one session instance.

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The receiver of the direct response to a request sent to the gateway is always the submitting session. Additionally the session is informed about system events and all unsolicited messages referring to status changes of orders and quotes belonging to that session.

The Eurex ETI interface will supports three session types: low frequency sessions for regular trading, low frequency session for back office, and high frequency session.

The following table provides an overview on the functionality supported by the different session types:

| Functionality   | Low Frequency<br>Session (LF) –<br>Regular Trading | Low Frequency<br>Session (LF) - Back<br>Office | High Frequency<br>Session (HF) |
|---|--|--|--------------------------------|
| Standard Order  | Yes  | No   | No                             |
| Lean Order  | Yes  | No   | Yes                            |
| Persistent Order  | Yes  | No   | No                             |
| Non-persistent Order  | Yes  | No   | Yes                            |
| Order Book<br>Restatement   | Yes  | Yes  | No                             |
| Short Order Message<br>Layouts  | Yes  | No   | Yes                            |
| Quotes  | Yes  | No   | Yes                            |
| Maintaining orders of another session (same business unit)              | Yes  | No   | Yes <sup>1</sup>               |
| Maintaining quotes of another session (same business unit) <sup>2</sup> | Yes  | No   | Yes                            |
| Listener Broadcast  | Yes  | Yes  | No                             |
| Trade Broadcast   | Yes  | Yes  | No                             |
| Trade Reversals   | Yes <sup>3</sup>                                   | Yes  | No                             |
| News Broadcast  | Yes  | Yes  | No                             |
| Risk Control Broadcast  | Yes  | Yes  | Yes                            |
| Market Maker<br>Parameter request for<br>the own session                | Yes  | No   | Yes                            |
| Market Maker<br>Parameter request for<br>another session                | Yes  | No   | No                             |
| Service Availability<br>Broadcast                                       | Yes  | Yes  | Yes                            |
| Session List Inquire  | Yes  | Yes  | No                             |
| User List Inquire   | Yes  | No   | Yes                            |
| Trade Enrichment List   | Yes  | Yes  | Yes                            |

<sup>&</sup>lt;sup>1</sup> Only Order Mass Cancellation and Cancel Order Single is supported via HF sessions.

<sup>&</sup>lt;sup>2</sup> Only QuoteActivation and Quote Mass Cancellation is supported via both, LF and HF session.

<sup>&</sup>lt;sup>3</sup> Trade Reversals are part of the Trade Broadcast.

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### 5.1.1 Low Frequency Session (LF) – Regular Trading

This session type supports the complete Eurex ETI functionality. It is specially aimed at participant applications that rely on the complete order history to be recoverable. Although the submission of for example non-persistent and lean orders or quotes is supported.

Modification for another session of the same business unit is only supported for standard orders.

A LF session may also be used to subscribe broadcast streams, for example: Listener broadcast, trade notifications.

### 5.1.2 Low Frequency Session (LF) – Back Office

This session type supports only a subset of the Regular Trading Low Frequency Sessions. Please refer to the table above for the details.

### 5.1.3 High Frequency Session (HF)

This session type is aimed at high frequency trading; only executions of orders and quotes and foreign events may be recovered.

The submission of standard and orders is not supported by this session type.

The HF session type does not support the subscription of the broadcasts listener, trades, and news.

Mass cancellation and quote activation/inactivation for another session is supported.

#### 5.2 Identification and Authentication

The Eurex ETI has a three-step logon procedure, with a Connection Gateway Request message to retrieve the assigned application gateway from the connection gateway, followed by a Session Logon at the assigned gateway and followed by one or multiple User Logon messages.

#### 5.2.1 IP Addresses and Ports

At first the participant must establish a TCP/IP session to the Connection Gateway — the IP/port numbers are provided by the exchange. Participants will be provided with a "Primary" and "Secondary" Connection Gateway address via the member portal. If the connection to the primary Connection Gateway fails, participants should connect to the secondary Connection Gateway.

Once that connection is established, the participant sends a Connection Gateway Request message. The Connection Gateway will validate *PartyIDSessionID* (20055) and *Password* (554), which are parameters provided by the exchange. The Connection Gateway cannot be used for any other purpose.

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The Connection Gateway Response contains the IP/ports of the primary and secondary application gateway where the member application can establish an active Eurex ETI session. Once the Connection Gateway Response message is received, the Connection Gateway connection is closed.

The participant must now try to connect to one of the provided application gateways within 120 seconds. If the connection is not made within this time, the slots are released and the participant must start again from scratch.

For more details regarding network topology and how to deal with the Connection Gateways please refer to the document "Eurex Exchange's T7 - Network Access to Exchange Applications".

#### 5.2.2 Session Authentication

After requesting the Application Gateway addresses and ports the participant must open a TCP/IP connection to the specified gateway. The Session Logon message must be the first message sent by the participant authenticating the Eurex ETI session.

The gateway will validate *PartyIDSessionID* (20055) and *Password* (554), which are parameters provided by the exchange. A successful logon will initiate a Eurex ETI session.

Note: The Session Logon message is not used to log on and authenticate a user on T7.

The following messages may be sent on a session without any authenticated trader:

- Session logon/logout
- Heartbeat messages
- Subscription and un-subscription of broadcasts
- · Retransmission of recoverable data
- Trader authentication
- Session List inquire
- User List Inquire
- Trade Enrichment List Inquire

All other requests must be submitted with an authenticated trader name in the *SenderSubID* (50) of the message header.

#### **5.2.3** User Authentication

The User Logon message identifies and authenticates a qualified user establishing access to the T7 architecture. A Eurex ETI session may be shared by several users belonging to the same business unit.

The participant must provide the binary **User ID** in the *Username (553)* field, and the corresponding password in the *Password (554)* field.

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A successful user logon will grant the user access to the trading system. All further transactions that require a user scope from the session are validated in the gateway against an authenticated User ID, i.e. *SenderSubID* (50) in the message header.

Users may logon to the T7 architecture via all sessions of their business unit.

Multiple User Logon messages for a user via the same session are rejected.

Note: Eurex ETI uses binary identifiers for users (User ID) and business units (Business Unit ID). A mapping to the current Member (Business Unit Short Name) and Trader ID (User Login Name) is available in the Eurex Admin GUI.

#### 5.3 Failover

In the event of a network connection failure, active Eurex ETI sessions will be disconnected from the gateway. There will be no automatic session failover if a connection to the gateway is lost.

In the event of a Eurex ETI gateway failure, active sessions will be disconnected.

If the active Eurex ETI session is ever disconnected, for any reason, the participant application must reconnect to the Connection Gateway by resending the Gateway Request message, and then receives a new gateway assignment.

Please note, that quotes and non-persistent orders (both, lean ans standard ones) are automatically deleted in such cases.

# 5.4 Throughput Limits

HF and LF sessions can differ in the number of requests per time interval allowed. Please refer to the document "Functional and Interface Overview", chapter "The Eurex Enhanced Trading Interface" available in the member section on the Eurex website for more information on the session types (and their throughput limits) which are available.

A participant application may send multiple messages without waiting for a response. However, the number of messages allowed within a given timeframe is limited by the use of throttles.

The limits are configured by the T7 architecture for each session type, and are provided to the participant application in the Session Logon Response message.

The limit parameters are upper limits and do not guarantee throughput rates. As loads fluctuate in the exchange system, actual throughput rates can vary.

The mechanism uses three components:

- Transaction limit
- Reject/disconnect limit
- Time interval

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#### 5.4.1 Transaction Limit

The transaction limit is the maximum number of messages that a participant application may send within a configured time interval without getting rejected (sliding window approach).

If a participant application exceeds the threshold "number of transactions per time interval", the exceeding request will be rejected and not queued. The unit of the time interval is milliseconds.

Required heartbeats do not count against the transaction limit.

For example, a transaction limit of 200 messages per second could be represented in the Logon (A) response message as:

ThrottleNoMsgs (1613) = 200

ThrottleTimeInterval (1614) = 1000

### 5.4.2 Reject/Disconnect Limit

The purpose of the Reject/Disconnect Limit is to protect the gateway from large amounts of invalid data. It defines the maximum number of sequential message rejects due to the violation of the transaction limit allowed by the Eurex ETI.

Once an acknowledgement has been sent, the reject/disconnect limit counter is reset to zero.

If the participant application continues to send messages which are rejected for exceeding the transaction limit and the reject/disconnect limit is exceeded, the Eurex ETI will disconnect the session.

For example, a disconnect limit of 500 rejects is represented in the Logon (A) response message as:

ThrottleRejectNoMsg (25002) = 500

#### 5.5 Mass Cancellation on Disconnect

Quotes and non-persistent orders are automatically cancelled on session disconnect.

In case of a session loss or a session logout the following messages will be generated for all products where the Matching Engine cancelled non-persistent orders (either lean or standard orders) and/or quotes of the lost session:

Order Mass Cancellation Notification (retransmittable, via listener broadcast and session data) for cancelled non-persistent orders (MassActionReason (28721): 6 = "Session Loss"). Potentially followed-up by Cancel Order Notification messages for each order of <NotAffectedOrdersGrp> that could not be cancelled due to an incompatible instrument state.

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Quote Mass Cancellation Notification (non-retransmittable, via session data) for cancelled quotes (MassActionReason (28721): 6 = "Session Loss"). Potentially followed-up by Quote Execution Notification (retransmittable, via session data) messages for each quote on an instrument in <NotAffectedSecuritiesGrp> that could not be cancelled due to an incompatible instrument state.

## 5.6 Mass Cancellation on Duplicate Session Login

Quotes and non-persistent orders of a session are automatically cancelled if the session tries to login again via a new connection to a gateway.

In such a scenario, the already logged in session stays logged in while the second session login (via a different connection) is rejected. The following messages will be generated for all products where the Matching Engine cancelled non-persistent orders (either lean or standard orders) and/or quotes of the session:

- Order Mass Cancellation Notification (retransmittable, via listener broadcast and session data) for cancelled non-persistent orders (MassActionReason (28721): 7="Duplicate Session Login"). Potentially followed-up by Cancel Order Notification messages for each order of <NotAffectedOrdersGrp> that could not be cancelled due to an incompatible instrument state.
- Quote Mass Cancellation Notification (non-retransmittable, via listener broadcast) for cancelled quotes (MassActionReason (28721): 7="Duplicate Session Login"). Potentially followed-up by Quote Execution Notification (retransmittable, via session data) messages for each quote on an instrument in <NotAffectedSecuritiesGrp> that could not be cancelled due to an incompatible instrument state.

# 6 Session Layer

The Eurex ETI interface uses a proprietary session layer. The Eurex ETI follows FIX 5.0 semantics; however the message headers and trailers have been modified to improve efficiency.

Each message in the Eurex ETI has a unique numeric *TemplateID* (28500) assigned to it in addition to the standard FIX *MsgType* (35) information provided in the header.

The Eurex ETI will echo the participant's *MsgSeqNum* (34) of the request header in the corresponding response header.

# 6.1 Flat Binary Encoding

ETI messages have a defined order of fixed-length fields and arrays of fixed-length elements. Eurex ETI avoids string fields wherever possible.

The arrays (repeating groups) consist of a counter (FIX NoXXX fields, indicating the number of array elements) and their fixed-length elements. In general, repeating groups are at the end of the ETI messages(see chapter 8.3 Variable Arrays),

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Binary values are presented in little endian byte order.

The length of ETI messages (BodyLen (9)) sent by the ETI gateway is always set to a multiple of 8. If there is a variable size string at the end of a message, it is "filled up" with binary zeroes.

Padding bytes required for proper alignment do not need to be initialized.

### 6.2 Logon

The participant application needs to open a TCP/IP connection to T7 during start-up.

The first message to be sent on the connection must be the Session Logon message.

If the Session Logon message is not sent within a certain time interval, the connection will be closed by the T7 architecture.

If the session logon fails, no further logon attempts will be accepted on that TCP connection. The application must drop the TCP session and restart the logon to the Connection Gateway.

### 6.3 Logout

The participant may log out the session using the Session Logout message.

The Eurex ETI will automatically drop a session if:

- The TCP/IP session is disconnected.
- If three consecutive heartbeats are missed or on receipt of too many Heartbeats
- If throttle reject/disconnect limit is exceeded.
- In case of severe protocol errors.

After a successful session logout, the participant should shut down the connection and close the socket.

The system will perform a forced logout overnight after which time the participant may log back in.

#### 6.4 Heartbeat

The *HeartBtInt* (108) must be specified by the participant in the Session Logon message. This parameter specifies the period in which the Eurex ETI sends heartbeats to the participant and the interval the Eurex ETI checks for request messages from the application.

The Heartbeat message should be sent by the participant if no other message has been processed during the defined *HeartBtInt* (108) interval. It is used by the Eurex ETI gateway to monitor the status of the communication link to the ETI client during periods of inactivity.

A heartbeat interval of zero indicates that Eurex ETI will not take any action for missed heartbeats. This setting can only be used on test systems.

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The minimum value is 100 milliseconds in the production system. The upper limit is 60 seconds.

If the field is not supplied, then the Eurex ETI will use a default value. The applied heartbeat interval is provided in the Session Logon Response.

Note: Heartbeats do not count against any of the throttle counters. Anyhow, a session sending too many heartbeats is disconnected by the system.

The Heartbeat Notification is sent by Eurex ETI based on the heartbeat interval, regardless if the participant application sends Heartbeat messages or not. It may be used by the ETI client to monitor the status of the communication link to the Eurex ETI gateway during periods of inactivity.

### 6.5 Reject

All rejections and errors on the application and session level are communicated via the FIX standard Reject (3) message; i.e. none of the fields in the request message other than *MsgSeqNum* (34) will be echoed.

## 6.6 Message Sequence Number

The *MsgSeqNum* (34) in the request header must increment with each message sent by the participant to the gateway, starting with the Session Logon message as sequence number 1.

The Eurex ETI will echo the participant's *MsgSeqNum* (34) of the request header in the corresponding response header.

In case of any unexpected sequence numbers, sequence number gaps, or duplicate sequence numbers, the request message will be rejected with a sequence number error, and the session will be disconnected.

Note: There is no recovery mechanism for message sequence numbers in the Eurex ETI. All participant connections (including a reconnection after a disconnection) are considered "new," and all Session Logon requests are expected to contain the message sequence number 1.

# 6.7 Application Message Sequencing

### 6.7.1 Application Message Identifier

All recoverable session and listener data sent by Eurex ETI will provide an application message identifier, *ApplMsgID* (28704), to uniquely identify order and quote related data sent by the gateway.

With the help of the application message identifier, the participant is able to ask for a retransmission of recoverable order/quote data.

The same application message identifier is also provided in the Listener Broadcast (standard order drop copy).

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The ApplMsgID (28704) has the following characteristics:

- It is unique per partition and business day.
- It is ascending during a business day until end-of-stream.
- Gap detection is not possible.
- It does not start at any particular number.
- Consists of 16 bytes, ordered with the highest significant byte first (as in big endian).

Memory comparison functions such as **memcmp()** can be used to compare two Application Message Identifiers:

- Two Application Message Identifiers ApplMsgID1 and ApplMsgID2 are equal, if the character array of size 16 of ApplMsgID1 and ApplMsgID2 are equal at all positions.
- The ApplMsgID1 is greater than ApplMsgID2, if at the first differing position i, the corresponding character ApplMsgID1[i] is greater than ApplMsgID2[i].
- The ApplMsgID1 is less than ApplMsgID2, if at the first differing position i, the corresponding character ApplMsgID1[i] is less than ApplMsgID2[i].

#### 6.7.2 Application Message Sequence Number

Eurex ETI will assign an application message sequence number, the *ApplSeqNum* (1181), to messages related to Trade Notification, News and Risk Control (Risk Notification and Entitlement Notification).

The ApplSeqNum (1181) has the following characteristics:

- The first message will be the message sequence number 1.
- It is ascending during a business day until end-of-stream (Trade Notification).
- The message sequence will be gapless and allows gap detection.
- Trade notification: unique per business day, partition and business unit.
- News: unique per market.
- Risk Control: unique per business unit.

#### 6.8 Session Data

Each session receives information on orders and quotes which were entered in their own session automatically without any subscription. The Session Data include Trading Session Event messages: start of service, market reset, end of restatement (for LF sessions only), and end of service.

For standard orders the complete order history may be recovered.

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For lean orders and quotes only match events in the session scope may be recovered.

Session Data are recoverable, if and only if they have an ApplMsgld (28704).

The complete history for standard orders is distributed via the listener broadcast, too. In these cases, both messages for (session and listener data) will have the same *ApplMsgId* (28704).

Note: The retransmission message template used for order and quote events may differ from the session data response template. For more details, please refer to chapter 7.5.22 Retransmit Response (Order/Quote Event).

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### 6.9 Broadcast

A broadcast is an application message that is available to multiple sessions, such as Trades or News messages.

Sessions may receive the following broadcast types:

| Broadcast  | FIX Message Type   | Application<br>Identifier<br>(1355) | Broadcast<br>Message<br>Identifier |
|--|--|-------------------------------------|------------------------------------|
| <b>Listener</b> : complete order history of standard orders of a session                         | Execution Report (8), Trading Session Status (h), Order Mass Action Report (BZ)      |                                     | ApplMsgID<br>(28704)               |
| <b>Trades</b> : Trade data on business unit level  | Trade Capture Report (AE)  | 1                                   | ApplSeqNum<br>(1181)               |
| <b>News</b> : Public general messages from Eurex market supervision                              | News (B)   | 2                                   | ApplSeqNum<br>(1181)               |
| Risk Control: Private risk control messages  | Party Risk Limits Update<br>Report (CR), Party<br>Entitlements Update Report<br>(CZ) | 6                                   | ApplSeqNum<br>(1181)               |
| <b>Service Availability</b> : Provides information on the availability of service on a partition | User Notification (CB)   | 3                                   | N/A                                |

After a session is established, it is not subscribed to any broadcast, but the risk control broadcast; nevertheless unsolicited session data is received.

For broadcast subscription, the Subscribe message is used. Per request only one broadcast type, via *RefApplID* (1355), may be subscribed. The response provides a unique subscription identifier in *ApplSubID* (28727).

For broadcast un-subscription, the Unsubscribe message is used. Per request only one subscription, via *RefApplSubID* (28728), may be un-subscribed.

The following tables shows the results of different subscriptions:

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| RefApplID (1355)         | SubscriptionScope (25001)  | Result   |
|--------------------------|----------------------------|--|
| Trade (1)                | 0xFFFFFFF (no value)       | All trade data of the own business unit.   |
| News (2)                 | Market ID (1=XEUR, 2=XEEE) | All public general messages from the market supervision of the specified market.                       |
| Service Availability (3) | Partition ID               | Availability of the services provided by the specified partition.                                      |
| Service Availability (3) | 0xFFFFFFFF (no value)      | Availability of the services provided by all known partitions.   |
| Listener Data (5)        | Session ID                 | Complete history of standard orders (of the current business day) submitted via the specified session. |
| Listener Data (5)        | 0xFFFFFFFF (no value)      | Complete history of standard orders (of the current business day) of the own business unit.            |

Note: Broadcasts may only be subscribed by LF sessions with the exception of service availability, which are available on HF and LF sessions. The receipt of the risk control broadcast is required by the regulator for all sessions; therefore no subscription is needed.

The FIX Application Sequencing concept<sup>1</sup> is used for broadcasts on Eurex ETI:

- Each broadcast type is assigned a unique ApplID (1180).
- Application-level messages are uniquely identified using a combination of ApplID (1180) and ApplSeqNum (1181) or ApplID (1180) and ApplMsgID (28704) respectively.

## 6.10 Recovery

#### 6.10.1 Retransmission

Re-transmission is supported for recoverable session data and the broadcast types listener, trades, news, and risk control.

Since application message identifiers and sequence numbers are unique per partition, the *PartitionID* (5948) is a mandatory parameter for all retransmission requests.

For retransmission, the Retransmit and Retransmit (Order/Quote Event) message respectively is used.

With a re-transmission request, only data in the scope of one broadcast type and partition can be requested via RefAppIID (1355) and PartitionID (5948).

The FIX application level recovery concept can be used by the participant for selective recovery and late start restatements:

<sup>&</sup>lt;sup>1</sup> See FIX 5.0 SP2 Specification, Vol.1

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| Recoverable<br>Data                                    | Scope         | Application<br>Message<br>Sequencing | Application<br>Identifier<br>RefAppIID (1355) | Retransmission<br>Sequencing                  |
|--|---------------|--------------------------------------|---|---|
| Recoverable session data                               | session       | ApplMsgID<br>(28704)                 | 4   | ApplBegMsgID (28718),<br>ApplEndMsgID (28719) |
| Listener<br>broadcast<br>(standard order<br>drop copy) | $session^2$   | ApplMsgID<br>(28704)                 | 5   | ApplBegMsgID (28718),<br>ApplEndMsgID (28719) |
| Trades   | business unit | ApplSeqNum<br>(1181)                 | 1   | ApplBegSeqNum (1182),<br>ApplEndSeqNum (1183) |
| News   | market        | ApplSeqNum<br>(1181)                 | 2   | ApplBegSeqNum (1182),<br>ApplEndSeqNum (1183) |
| Risk Control   | business unit | ApplSeqNum<br>(1181)                 | 6   | ApplBegSeqNum (1182),<br>ApplEndSeqNum (1183) |

Optionally, the application message identifiers and respectively the application message sequence numbers provide the retransmission sequencing range. If no start value is specified, it is assumed to be "1". If ending range is absent, it is assumed to be infinity ("all available messages").

The re-transmission response, Retransmit Response and Retransmit Response (Order/Quote Event) message respectively, will provide the range of recovered order and quote data in the fields *ApplBegMsgID* (28718) and *ApplEndMsgID* (28719) and for all other broadcasts respectively in the fields *ApplBegSeqNum* (1182) and *ApplEndSeqNum* (1183).

This range may differ from the requested range, i.e. further retransmission requests may need to be submitted.

Please note, Risk Control and News messages are not deleted at the end of the trading day.

If you specify *ApplBegSeqNum* (1182) with no value in your retransmit request, you may receive old Risk Control/News messages in your retransmit response, where the data relates to a trading day from the past.

Please check the value of the field

- OrigTime (42) in case of News (TemplateID 10031),
- TradeDate (75) in case of Entitlement Notification (10034), Risk Notification (10033) and Party Action Report (10042).

This value indicates the date when either the respective risk data event has occurred or the respective news has been created and can therefore be used as a filter.

### 6.10.2 Preliminary Execution Report and Legally Binding Trade Notifications

All order and quote response information in the Eurex ETI is sent out immediately after the order and quote has been processed by the core matching process.

 $<sup>^2</sup>$  Retransmission of listener broadcast data must be requested for each session separately. No session wildcard processing is supported for retransmission.

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All order and quote response information in the Eurex ETI is preliminary; this includes *Execution Reports* (8) sent out for persistent and non-persistent orders as well as Quote *Execution Reports* (U8) sent out for quotes. This is also true for the standard order drop copy information published via the Listener broadcast.

Note: Market data on T7 is based on order and quote execution information. The Eurex MDI and Eurex EMDI interfaces provide trade price messages on the basis of this preliminary information.

For these reasons, a participant application always needs to confirm the preliminary execution information with the corresponding legally binding Trade Notification message (*Trade Capture Report (AE)*).

In case of an exchange system failure, the participant is informed of a market reset event via the Trading Session Event message including the last persisted application message identifier. This message is followed by an order book restatement of all active orders.

In this event it is highly recommended to reconcile all *Execution Reports* (8, U8) with higher application message identifiers with the corresponding *Trade Capture Reports* (AE). If there is no *Trade Capture Report* (AE) for a given *Execution Report* (8) or a Quote *Execution Report* (U8) then this *Execution Report* (8) or a Quote *Execution Report* (U8) has to be considered invalid and should be discarded. Please find detailed information regarding trade reconciliation in chapter 4.9.3 Trade reconcilation.

# 7 Message Formats

This chapter provides details on the administrative and application messages used by the Eurex ETI. Information on data types and the most important error codes are provided. Messages sent by participants not listed in this section are rejected by the server via a Reject (3) message.

Each ETI message format has a unique binary message type identifier (*TemplateID* (28500)) and is based on a standard FIX message.

The Interface version used by the participant needs to be provided during Session Logon in *DefaultCstmApplVerID* (1408); the Session Logon Response will return the Interface Version, which the Eurex ETI Gateway currently uses, in the same field.

In production, the Interface Version will allow the participant to recognize that the Eurex ETI has changed.

The Build Number shows to which ETI XML file, ETI XSD file, canned data, exchange software the ETI Manual belongs to.

# 7.1 Message Fragmentation

In case the complete data of a transaction does not fit into a single message, Eurex ETI automatically sends a sequence of messages to the participant.

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The field *LastFragment (893)* in the corresponding header structure indicates whether the current message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction or if the application should wait for further messages in order to retrieve the full data set.

Another mechanism for message fragmentation that is used for inquiring reference data (session, user, enrichment rules) bases on the LastEntityProcess (25035) field that is part of the requests and the responses.

In the first inquiry (request) LastEntityProcess (25035) must not be set. The application should continue sending the inquiries using the LastEntityProcess (25035) from the recent response. A response with LastEntityProcess (25035) not set indicates that no more data is available.

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# 7.2 Data Types

Eurex ETI supports the following data types:

| ETI Data Type                | Description   | No Value   |
|------------------------------|---|--|
| signed int                   | <ul> <li>little endian byte order</li> <li>supported are 1, 2, 4 and</li> <li>byte, signed integers</li> <li>two¹s complement</li> <li>representation</li> </ul>  | 1 byte signed int: 0x80<br>2 byte signed int: 0x8000<br>4 byte signed int: 0x80000000<br>8 byte signed int:<br>0x80000000000000000             |
| unsigned int                 | - little endian byte order<br>- supported are 1, 2, 4 and<br>8-byte, unsigned integers  | 1 byte unsigned int: 0xFF<br>2 byte unsigned int: 0xFFFF<br>4 byte unsigned int:<br>0xFFFFFFFF<br>8 byte unsigned int:<br>0xFFFFFFFFFFFFFFFFFF |
| Float                        | <ul><li>encoded as 8-byte signed integer</li><li>8 implicit decimals</li></ul>  | 0×800000000000000  |
| Fixed String                 | <ul> <li>length information specifies the fixed size</li> <li>encoded as character array</li> <li>completely filled with valid characters (space padding if required)</li> </ul>  | 0x00 at the first position   |
| Fixed String (0- terminable) | <ul> <li>length information specifies the fixed size</li> <li>encoded as character array optionally 0-terminable</li> <li>(minimum string size of 1)</li> <li>XML file: attribute</li> <li>"isTerminable" is set to true</li> <li>padding after 0-terminator required up to fixed size</li> </ul> | 0x00 at the first position   |
| Variable String              | <ul> <li>length information specifies the maximum possible size</li> <li>separate counter field specifies the transmitted string size</li> <li>XML file: attribute</li> <li>"variableSize" set to true</li> <li>the message is filled up to a multiple of 8 bytes and truncated</li> </ul>        | 0x00 at the first position (if the field is not the last one of a certain message)   |
| Counter                      | This data type represents an unsigned integer as a counter for arrays of variable size.   | see 1 byte unsigned int and 2 byte unsigned int respectively   |
| LocalMktDate                 | Date of Local Market (as opposed to UTC) in YYYYMMDD 4 byte unsigned binary format. Example: date 10.09.2014 is represented by a 4 byte unsigned integer number 20140910.   | see 4 byte unsigned int  |

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| ETI Data Type | Description  | No Value                    |
|---------------|--|-----------------------------|
| PriceType     | Price in integer format including 8 decimals. For certain asset classes, prices may have negative values.  | see 8 byte signed int       |
| Qty           | Quantity in signed 4 byte integer format.  | see 4 byte signed int       |
| SeqNum        | Message sequence number in 8 byte unsigned binary format.  | see 8 byte unsigned int     |
| UTCTimestamp  | Date and time, in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).  | see 8 byte unsigned int     |
| char          | String of length 1.  | 0×00                        |
| Data          | Byte array where each byte has a value from 0 to 255: - the length information specifies the fixed size - encoded as byte array - byte array is always filled completely | Each byte filled with 0x00. |

### 7.3 Error Codes

All rejections and errors on an application and session level are communicated via the FIX standard *Reject (3)* message; except for Mass Quote Response.

The error code will be provided in field SessionRejectReason (373), the error text in field VarText (30355).

Eurex ETI offers detailed error description in the error text, only for selected errors unique error codes are available.

The Eurex ETI will provide the following dedicated error codes, which the participant application may interpret for automated processing:

| SessionRejectReason (373) | Description   |
|---------------------------|---|
| 100                       | Reject due to exceeded throttle limit.                                |
| 101                       | Exposure limit exceeded.  |
| 102                       | Service temporarily not available.                                    |
| 103                       | Service not available.  |
| 104                       | Result of transaction unknown.  |
| 211                       | User already logged in.   |
| 10000                     | Order not found.  |
| 10001                     | Price reasonability check failed.                                     |
| 10002                     | Client order ID not unique.   |
| 10003                     | Quote activation in progress.   |
| 10004                     | Pre-trade risk limit for open orders on Business Unit level exceeded. |

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| SessionRejectReason (373) | Description   |
|---------------------------|---|
| 10005                     | Pre-trade risk limit for open orders on session level exceeded. |
| 10010                     | Throttle limit for creation of complex instrument exceeded.     |

# 7.4 Overview of Supported Message Types

The following message formats are based on:

• Interface Version: 3.0

■ Build Number: 3.0.113.ga-3000112-7

Additionally, ETI clients implementing interface version '2.5' will be supported. Please refer to chapter Change Log for details regarding interface changes between the ETI version '2.5' and '3.0'.

## 7.4.1 Session Layer

| ETI Message                    | TemplateID<br>(28500) | Sender      | FIX Message                  | MsgType<br>(35) |
|--------------------------------|-----------------------|-------------|------------------------------|-----------------|
| Connection Gateway Request     | 10020                 | Participant | ApplicationMessageRequest    | BW              |
| Connection Gateway Response    | 10021                 | ETI Gateway | ApplicationMessageRequestAck | BX              |
| Session Logon                  | 10000                 | Participant | Logon                        | А               |
| Session Logon Response         | 10001                 | ETI Gateway | Logon                        | А               |
| Session Logout                 | 10002                 | Participant | Logout                       | 5               |
| Session Logout Response        | 10003                 | ETI Gateway | Logout                       | 5               |
| Session Logout Notification    | 10012                 | ETI Gateway | Logout                       | 5               |
| Heartbeat                      | 10011                 | Participant | Heartbeat                    | 0               |
| Heartbeat Notification         | 10023                 | ETI Gateway | Heartbeat                    | 0               |
| Legal Notification             | 10037                 | ETI Gateway | UserNotification             | СВ              |
| User Logon                     | 10018                 | Participant | UserRequest                  | BE              |
| User Logon Response            | 10019                 | ETI Gateway | UserResponse                 | BF              |
| User Logout                    | 10029                 | Participant | UserRequest                  | BE              |
| User Logout Response           | 10024                 | ETI Gateway | UserResponse                 | BF              |
| Throttle Update Notification   | 10028                 | ETI Gateway | UserNotification             | СВ              |
| Subscribe                      | 10025                 | Participant | ApplicationMessageRequest    | BW              |
| Subscribe Response             | 10005                 | ETI Gateway | ApplicationMessageRequestAck | BX              |
| Unsubscribe                    | 10006                 | Participant | ApplicationMessageRequest    | BW              |
| Unsubscribe Response           | 10007                 | ETI Gateway | ApplicationMessageRequestAck | BX              |
| Retransmit                     | 10008                 | Participant | ApplicationMessageRequest    | BW              |
| Retransmit Response            | 10009                 | ETI Gateway | ApplicationMessageRequestAck | BX              |
| Retransmit (Order/Quote Event) | 10026                 | Participant | ApplicationMessageRequest    | BW              |

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| ETI Message                                | TemplateID<br>(28500) | Sender      | FIX Message                  | MsgType<br>(35) |
|--|-----------------------|-------------|------------------------------|-----------------|
| Retransmit Response<br>(Order/Quote Event) | 10027                 | ETI Gateway | ApplicationMessageRequestAck | ВХ              |
| Reject                                     | 10010                 | ETI Gateway | Reject                       | 3               |
| Session List Inquire                       | 10035                 | Participant | SessionDetailsListRequest    | U5              |
| Session List Inquire Response              | 10036                 | ETI Gateway | SessionDetailsListResponse   | U6              |
| Trade Enrichment List Inquire              | 10040                 | Participant | TradeEnrichmentListRequest   | U7              |
| Trade Enrichment List Inquire Response     | 10041                 | ETI Gateway | TradeEnrichmentListReport    | U9              |
| User List Inquire                          | 10038                 | Participant | PartyDetailListRequest       | CF              |
| User List Inquire Response                 | 10039                 | ETI Gateway | PartyDetailListReport        | CG              |

# 7.4.2 Strategy Creation

| ETI Message              | TemplateID<br>(28500) | Sender      | FIX Message               | MsgType<br>(35) |
|--------------------------|-----------------------|-------------|---------------------------|-----------------|
| Create Strategy          | 10301                 | Participant | SecurityDefinitionRequest | С               |
| Create Strategy Response | 10302                 | ETI Gateway | SecurityDefinition        | d               |

# 7.4.3 Order Handling

| ETI Message                                | TemplateID<br>(28500) | Sender      | FIX Message                | MsgType<br>(35) |
|--|-----------------------|-------------|----------------------------|-----------------|
| New Order Single                           | 10100                 | Participant | NewOrderSingle             | D               |
| New Order Single (short layout)            | 10125                 | Participant | NewOrderSingle             | D               |
| New Order Multi Leg                        | 10113                 | Participant | NewOrderMultileg           | AB              |
| New Order Response (Standard Order)        | 10101                 | ETI Gateway | ExecutionReport            | 8               |
| New Order Response (Lean<br>Order)         | 10102                 | ETI Gateway | ExecutionReport            | 8               |
| Immediate Execution Response               | 10103                 | ETI Gateway | ExecutionReport            | 8               |
| Book Order Execution                       | 10104                 | ETI Gateway | ExecutionReport            | 8               |
| Replace Order Single                       | 10106                 | Participant | OrderCancelReplaceRequest  | G               |
| Replace Order Single (short layout)        | 10126                 | Participant | OrderCancelReplaceRequest  | G               |
| Replace Order Multi Leg                    | 10114                 | Participant | MultilegOrderCancelReplace | AC              |
| Replace Order Response<br>(Standard Order) | 10107                 | ETI Gateway | ExecutionReport            | 8               |
| Replace Order Response (Lean Order)        | 10108                 | ETI Gateway | ExecutionReport            | 8               |
| Cancel Order Single                        | 10109                 | Participant | OrderCancelRequest         | F               |
| Cancel Order Multi Leg                     | 10123                 | Participant | OrderCancelRequest         | F               |

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| ETI Message                 | TemplateID<br>(28500) | Sender       | FIX Message             | MsgType<br>(35) |  |
|-----------------------------|-----------------------|--------------|-------------------------|-----------------|--|
| Cancel Order Response       | 10110                 | ETI Gateway  | ExecutionReport         | 8               |  |
| (Standard Order)            | 10110                 |              | Execution report        |                 |  |
| Cancel Order Response (Lean | 10111                 | ETI Gateway  | ExecutionReport         | 8               |  |
| Order)                      | 10111                 | Lii dateway  | ExecutionReport         | ŏ               |  |
| Cancel Order Notification   | 10112                 | ETI Gateway  | ExecutionReport         | 8               |  |
| Order Mass Cancellation     | 10120                 | Participant  | OrderMassActionPoquest  | CA              |  |
| Request                     | 10120                 | i articipant | OrderMassActionRequest  |                 |  |
| Order Mass Cancellation     | 10121                 | ETI Gateway  | OrderMassActionReport   | BZ              |  |
| Response                    | 10121                 | Lii Gateway  | OrderiviassActionReport | DΔ              |  |
| Order Mass Cancellation     | 10124                 | ETI Gateway  | OrderMassActionReport   | BZ              |  |
| Response No Hits            | 10124                 | Lii Gateway  | OrderiviassActionReport | DL              |  |
| Order Mass Cancellation     | 10122                 | ETI Gateway  | OrderMassActionPonert   | BZ              |  |
| Notification                | 10122                 | LII Gateway  | OrderMassActionReport   | ΒZ              |  |
| Extended Order Information  | 10117                 | ETI Gateway  | ExecutionReport         | 8               |  |

# 7.4.4 Quote and Cross Request

| ETI Message            | TemplateID<br>(28500) | Sender      | FIX Message        | MsgType (35) |
|------------------------|-----------------------|-------------|--------------------|--------------|
| Quote Request          | 10401                 | Participant | QuoteRequest       | R            |
| Quote Request Response | 10402                 | ETI Gateway | RequestAcknowledge | U1           |
| Cross Request          | 10118                 | Participant | CrossRequest       | U16          |
| Cross Request Response | 10119                 | ETI Gateway | RequestAcknowledge | U1           |

# 7.4.5 Quote Handling

| ETI Message                   | TemplateID | Sender       | FIX Message              | MsgType |  |
|-------------------------------|------------|--------------|--------------------------|---------|--|
|                               | (28500)    |              |                          | (35)    |  |
| Mass Quote                    | 10405      | Participant  | MassQuote                | i       |  |
| Mass Quote Response           | 10406      | ETI Gateway  | MassQuoteAcknowledgement | Ь       |  |
| Quote Execution Notification  | 10407      | ETI Gateway  | QuoteExecutionReport     | U8      |  |
| Quote Mass Cancellation       | 10408      | Participant  | OrderMassActionRequest   | CA      |  |
| Request                       | 10400      | 1 articipant | OrdenviassActionNequest  |         |  |
| Quote Mass Cancellation       | 10409      | ETI Gateway  | OrderMassActionReport    | BZ      |  |
| Response                      | 10409      | LTT Gateway  | OrdenviassActionNeport   |         |  |
| Quote Mass Cancellation       | 10410      | ETI Gateway  | OrderMassActionReport    | BZ      |  |
| Notification                  | 10410      | LTT Gateway  | OrdenviassActionNeport   |         |  |
| Quote Activation Request      | 10403      | Participant  | OrderMassActionRequest   | CA      |  |
| Quote Activation Response     | 10404      | ETI Gateway  | OrderMassActionReport    | BZ      |  |
| Quote Activation Notification | 10411      | ETI Gateway  | OrderMassActionReport    | BZ      |  |

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| ETI Message            | TemplateID<br>(28500) | Sender                  | FIX Message              | MsgType<br>(35) |  |
|------------------------|-----------------------|-------------------------|--------------------------|-----------------|--|
| Inquire Market Maker   | 10305                 | Participant Participant | <br>  MMParameterRequest | U17             |  |
| Parameters             | 10303                 | 1 articipant            | wiwii arameterixequest   | 011             |  |
| Inquire Market Maker   | 10306                 | ETI Gateway             | MMParameterResponse      | U18             |  |
| Parameters Response    | 10300                 | Lii dateway             | www.arameterKesponse     | 010             |  |
| Market Maker Parameter | 10303                 | Participant             | MMParameterDefinition-   | U14             |  |
| Definition             | 10303                 | Farticipalit            | Request                  | 014             |  |
| Market Maker Parameter | 10304                 | ETI Gateway             | Paguast Asknowledge      | 111             |  |
| Definition Response    | 10304                 | Lii Gateway             | RequestAcknowledge       | U1              |  |

# 7.4.6 Other

| ETI Message               | TemplateID | Sender      | FIX Message                   | MsgType |
|---------------------------|------------|-------------|-------------------------------|---------|
|                           | (28500)    |             |                               | (35)    |
| Party Action Report       | 10042      | ETI Gateway | PartyActionReport             | DI      |
| Trade Notification        | 10500      | ETI Gateway | TradeCaptureReport            | AE      |
| Trade Notification Status | 10501      | ETI Gateway | TradingSessionStatus          | h       |
| Service Availability      | 10030      | ETI Gateway | UserNotification              | СВ      |
| News                      | 10031      | ETI Gateway | News                          | В       |
| Entitlement Notification  | 10034      | ETI Gateway | PartyEntitlementsUpdateReport | CZ      |
| Risk Notification         | 10033      | ETI Gateway | PartyRiskLimitsUpdateReport   | CR      |
| Trading Session Event     | 10307      | ETI Gateway | TradingSessionStatus          | h       |
| Mass Cancellation Event   | 10308      | ETI Gateway | OrderMassActionReport         | BZ      |
| Gap Fill                  | 10032      | ETI Gateway | ApplicationMessageReport      | BY      |

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# 7.5 Session Layer

### 7.5.1 Connection Gateway Request

This message is used to retrieve the assigned gateway from the connection gateway. For more details, please refer to chapter  $5.2.1\ \text{IP}$  Addresses and Ports.

## Connection Gateway Request



## Connection Gateway Response

| Tag   | Field Name                          | Req'd | Len | Ofs | Data Type      | Description                            |  |  |  |
|---|-------------------------------------|-------|-----|-----|----------------|--|--|--|--|
| <messa,< th=""><th colspan="9"><messageheaderin></messageheaderin></th></messa,<>         | <messageheaderin></messageheaderin> |       |     |     |                |  |  |  |  |
| 9   | BodyLen                             | Y     | 4   | 0   | unsigned int   | Number of bytes for the message, in-   |  |  |  |
|   |                                     |       |     |     |                | cluding this field.                    |  |  |  |
| 28500   | TemplateID                          | Y     | 2   | 4   | unsigned int   | Unique identifier for a Eurex ETI      |  |  |  |
|   |                                     |       |     |     |                | message layout. Value: 10020           |  |  |  |
|   |                                     |       |     |     |                | (ApplicationMessageRequest, Msg-       |  |  |  |
|   |                                     |       |     |     |                | Type = BW)                             |  |  |  |
| 25028   | NetworkMsgID                        | U     | 8   | 6   | Fixed String   | not used                               |  |  |  |
| 25017   | Pad2                                | U     | 2   | 14  | Fixed String   | not used                               |  |  |  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>                           |       |     |     |                |  |  |  |  |
| 34  | MsgSeqNum                           | Υ     | 4   | 16  | unsigned int   | Must be set to 1.                      |  |  |  |
| 50  | SenderSubID                         | U     | 4   | 20  | unsigned int   | not used                               |  |  |  |
| < Messa   | ge Body>                            |       |     |     |                |  |  |  |  |
| 20055   | PartyIDSessionID                    | Y     | 4   | 24  | unsigned int   | Session ID.                            |  |  |  |
| 1408  | DefaultCstmApplVerID                | Υ     | 30  | 28  | Fixed String   | Indicates the Eurex ETI interface ver- |  |  |  |
|   |                                     |       |     |     | (0-terminable) | sion the ETI gateway software uses.    |  |  |  |
|   |                                     |       |     |     |                | Valid characters: $\x20,\x22-\x7B,$    |  |  |  |
|   |                                     |       |     |     |                | \x7D,\x7E                              |  |  |  |
| 554   | Password                            | Υ     | 32  | 58  | Fixed String   | Password.                              |  |  |  |
|   |                                     |       |     |     | (0-terminable) | Valid characters: 0-9,A-Z,a-z,\x21,    |  |  |  |
|   |                                     |       |     |     |                | \x23,\x24,\x25,\x26,\x2A,\x2B,         |  |  |  |
|   |                                     |       |     |     |                | \x2D,\x2F,\x3D,\x40,\x5F               |  |  |  |
| 25021   | Pad6                                | U     | 6   | 90  | Fixed String   | not used                               |  |  |  |

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# 7.5.2 Connection Gateway Response

This message confirms the Connection Gateway request. For more details, please refer to chapter  $5.2.1\ \text{IP}$  Addresses and Ports.

| SecondaryGatewaySub-   Part  | Tag  | Field Name         | Req'd | Len | Ofs | Data Type    | Description                              |  |  |
|--|--|--------------------|-------|-----|-----|--------------|--|--|--|
| Cluding this field.   Cluding this field.  | <messageheaderout></messageheaderout>  |                    |       |     |     |              |  |  |  |
| 28500   TemplateID   | 9  | BodyLen            | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |
| message layout. Value: 10021 (ApplicationMessageRequestAck, MsgType = BX)  25017 Pad2  V 2 6 Fixed String not used  **ResponseHeader>  5979 RequestTime Y 8 16 UTCTimestamp Gateway request in timestamp.  34 MsgSeqNum Y 4 24 unsigned int participant for requests sent to the gateway.  25019 Pad4  V 4 28 Fixed String not used  **Message Body>  28644 GatewayID Y 4 32 unsigned int little endian byte order.  28645 GatewaySubID Y 4 36 unsigned int little endian byte order.  28726 SecondaryGatewayID Y 4 40 unsigned int little endian byte order.  28726 SecondaryGatewaySub-ID  SecondaryGatewaySub-ID  SecondaryGatewaySub-ID  SecondaryGatewaySub-ID  Port number to be used for the assigned Secondary Application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  Paddress of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in little endian byte order.  Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in little endian byte order.   |  |                    |       |     |     |              | cluding this field.                      |  |  |
| (ApplicationMessageRequestAck, MsgType = BX)  25017 Pad2   | 28500  | TemplateID         | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |  |  |
| SecondaryGatewaySubline   Secondary Gateway Subline   Secondary Cateway Subline   Se |  |                    |       |     |     |              | message layout. Value: 10021             |  |  |
| 25017   Pad2   |  |                    |       |     |     |              | (ApplicationMessageRequestAck,           |  |  |
| SecondaryGatewaySubl   Part   SecondaryGatewaySubl   Part   Secondary Application Gateway Subl   Part   P |  |                    |       |     |     |              | MsgType = BX)                            |  |  |
| SecondaryGatewaySub-   SecondaryGatewaySub-   ID   | 25017  | Pad2               | U     | 2   | 6   | Fixed String | not used                                 |  |  |
| Seding Time  | <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeader>         |       |     |     |              |  |  |  |
| 34   MsgSeqNum   | 5979   | RequestTime        | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |
| participant for requests sent to the gateway.  25019 Pad4 U 4 28 Fixed String not used  **Message Body>**  28644 GatewayID Y 4 32 unsigned int Gateway where the member application on can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28645 GatewaySubID Y 4 36 unsigned int Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in little endian byte order.   | 52   | SendingTime        | Υ     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |  |  |
| 25019   Pad4   | 34   | MsgSeqNum          | Υ     | 4   | 24  | unsigned int | Message sequence number used by the      |  |  |
| 28044   GatewayID  |  |                    |       |     |     |              | participant for requests sent to the ga- |  |  |
| 28644   GatewayID  |  |                    |       |     |     |              | teway.                                   |  |  |
| 28644 GatewayID Y 4 32 unsigned int IP address of the Primary Application Gateway where the member application can establish an active Eurex ETI session.  Note: Binary values are presented in little endian byte order.  Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub-ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in little endian byte order.  | 25019  | Pad4               | U     | 4   | 28  | Fixed String | not used                                 |  |  |
| Gateway where the member application can establish an active Eurex ETI session.  Note: Binary values are presented in little endian byte order.  28645 GatewaySubID Y 4 36 unsigned int Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in  | < Messa  | ge Body>           |       |     |     |              |  |  |  |
| on can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28645 GatewaySubID Y 4 36 unsigned int Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   | 28644  | GatewayID          | Y     | 4   | 32  | unsigned int | IP address of the Primary Application    |  |  |
| session. Note: Binary values are presented in little endian byte order.  28645 GatewaySubID  Y  4  36 unsigned int Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID  Y  4  40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726  SecondaryGatewaySub- ID  Y  4  44  unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              | Gateway where the member applicati-      |  |  |
| Note: Binary values are presented in little endian byte order.  28645 GatewaySubID Y 4 36 unsigned int Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              | on can establish an active Eurex ETI     |  |  |
| SecondaryGatewaySub- ID   Y   4   44   Unsigned int   Iittle endian byte order.   Iittle endian byte order.   Port number to be used for the assigned Primary Application Gateway.   Note: Binary values are presented in little endian byte order.   IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.   Port number to be used for the assigned Secondary Application Gateway.   Note: Binary values are presented in little endian byte order.   |  |                    |       |     |     |              | session.                                 |  |  |
| 28725 SecondaryGatewayID  Y 4 36 unsigned int Port number to be used for the assigned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID  Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID  Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in  |  |                    |       |     |     |              | Note: Binary values are presented in     |  |  |
| gned Primary Application Gateway. Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              | little endian byte order.                |  |  |
| Note: Binary values are presented in little endian byte order.  28725 SecondaryGatewayID Y 4 40 unsigned int IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   | 28645  | GatewaySubID       | Y     | 4   | 36  | unsigned int | Port number to be used for the assi-     |  |  |
| SecondaryGatewayID   Y   4   40   Unsigned int   IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.    SecondaryGatewaySub- ID   Y   4   44   Unsigned int   Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              |  |  |  |
| 28725 SecondaryGatewayID  Y  4  40  unsigned int  IP address of the Secondary Application Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  28726  SecondaryGatewaySub-ID  Y  4  44  unsigned int  Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              | •  |  |  |
| tion Gateway where the member application can establish an active Eurex ETI session. Note: Binary values are presented in little endian byte order.  SecondaryGatewaySub-ID  Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              |  |  |  |
| SecondaryGatewaySub- ID  | 28725  | SecondaryGatewayID | Y     | 4   | 40  | unsigned int | ,  |  |  |
| ETI session. Note: Binary values are presented in little endian byte order.  SecondaryGatewaySub-ID  Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in   |  |                    |       |     |     |              | ,  |  |  |
| 28726 SecondaryGatewaySub- ID  SecondaryGatewaySub- Y 4 44 unsigned int gned Secondary Application Gateway.  Note: Binary values are presented in  |  |                    |       |     |     |              |  |  |  |
| 28726 SecondaryGatewaySub- ID Y 4 44 unsigned int Port number to be used for the assigned Secondary Application Gateway. Note: Binary values are presented in  |  |                    |       |     |     |              | · ·                                      |  |  |
| ID  Y  4  44  unsigned int  port number to be used for the assigned Secondary Application Gateway.  Note: Binary values are presented in   |  |                    |       |     |     |              | presented in little endian byte order.   |  |  |
| gned Secondary Application Gateway.  Note: Binary values are presented in  | 28726  |                    | Y     | 4   | 44  | unsigned int | Port number to be used for the assi-     |  |  |
| Note: Binary values are presented in   |  | ID                 |       |     |     | Č            |  |  |  |
|  |  |                    |       |     |     |              | ,  |  |  |
| 1  |  |                    |       |     |     |              | little endian byte order.                |  |  |

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| Tag   | Field Name  | Req'd | Len | Ofs | Data Type    | Description           |
|-------|-------------|-------|-----|-----|--------------|-----------------------|
| 28730 | SessionMode | Y     | 1   | 48  | unsigned int | Session type.         |
|       |             |       |     |     |              | Value Description     |
|       |             |       |     |     |              | 1 HF                  |
|       |             |       |     |     |              | 2 LF                  |
| 339   | TradSesMode | Y     | 1   | 49  | unsigned int | Trading session mode. |
|       |             |       |     |     |              | Value Description     |
|       |             |       |     |     |              | 1 Development         |
|       |             |       |     |     |              | 2 Simulation          |
|       |             |       |     |     |              | 3 Production          |
|       |             |       |     |     |              | 4 Acceptance          |
| 25021 | Pad6        | U     | 6   | 50  | Fixed String | not used              |

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## 7.5.3 Session Logon

This message must be the first message sent by the participant to the assigned gateway authenticating the Eurex ETI session. Password change is not supported. For more details, please refer to chapter 5.2.2 Session Authentication and Logon.

Session Logon



## Session Logon Response

| Tag   | Field Name           | Req'd | Len | Ofs | Data Type      | Description                            |
|---|----------------------|-------|-----|-----|----------------|--|
| <messa< td=""><td>geHeaderIn&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderIn>          |       |     |     |                |  |
| 9   | BodyLen              | Y     | 4   | 0   | unsigned int   | Number of bytes for the message, in-   |
|   |                      |       |     |     |                | cluding this field.                    |
| 28500   | TemplateID           | Υ     | 2   | 4   | unsigned int   | Unique identifier for a Eurex ETI mes- |
|   |                      |       |     |     |                | sage layout. Value: 10000 (Logon,      |
|   |                      |       |     |     |                | MsgType = A)                           |
| 25028   | NetworkMsgID         | U     | 8   | 6   | Fixed String   | not used                               |
| 25017   | Pad2                 | U     | 2   | 14  | Fixed String   | not used                               |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>   | stHeader>            |       |     |     |                |  |
| 34  | MsgSeqNum            | Y     | 4   | 16  | unsigned int   | Must be set to 1.                      |
| 50  | SenderSubID          | U     | 4   | 20  | unsigned int   | not used                               |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | ge Body>             |       |     |     |                |  |
| 108   | HeartBtInt           | N     | 4   | 24  | unsigned int   | Heartbeat interval in milliseconds.    |
|   |                      |       |     |     |                | See also Heartbeat                     |
| 20055   | PartyIDSessionID     | Y     | 4   | 28  | unsigned int   | Session ID.                            |
| 1408  | DefaultCstmApplVerID | Y     | 30  | 32  | Fixed String   | Indicates the Eurex ETI interface ver- |
|   |                      |       |     |     | (0-terminable) | sion the participant application uses. |
|   |                      |       |     |     |                | The interface version can be found in  |
|   |                      |       |     |     |                | XML and C-Header files.                |
|   |                      |       |     |     |                | Valid characters: $\x20,\x22-\x7B$ ,   |
|   |                      |       |     |     |                | \x7D,\x7E                              |
| 554   | Password             | Y     | 32  | 62  | Fixed String   | Password.                              |
|   |                      |       |     |     | (0-terminable) | Valid characters: $0-9,A-Z,a-z,\x21,$  |
|   |                      |       |     |     |                | \x23,\x24,\x25,\x26,\x2A,\x2B,         |
|   |                      |       |     |     |                | \x2D,\x2F,\x3D,\x40,\x5F               |

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| Tag   | Field Name            | Req'd | Len | Ofs | Data Type                      | Description   |
|-------|-----------------------|-------|-----|-----|--------------------------------|---|
| 25012 | ApplUsageOrders       | Y     | 1   | 94  | char                           | Participant application: type of order processing.  Value Description  A Automated  M Manual  B Both (Automated and Manual)  N None   |
| 25013 | ApplUsageQuotes       | Y     | 1   | 95  | char                           | Participant application: type of quote processing.  Value Description  A Automated  M Manual  B Both (Automated and Manual)  N None   |
| 25014 | OrderRoutingIndicator | Y     | 1   | 96  | char                           | Indicates if the participant application is an order routing system.  Value Description  Y Yes  N No  |
| 1600  | FIXEngineName         | N     | 30  | 97  | Fixed String<br>(0-terminable) | Provides the name of the infrastructure component being used for session level communication. Normally this would be the FIX Engine or FIX Gateway product name.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |
| 1601  | FIXEngineVersion      | N     | 30  | 127 | Fixed String<br>(0-terminable) | Provides the version of the FIX infrastructure component.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 1602  | FIXEngineVendor       | N     | 30  | 157 | Fixed String<br>(0-terminable) | Provides the name of the vendor providing the FIX infrastructure component.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |

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| Tag   | Field Name                    | Req'd | Len | Ofs | Data Type                      | Description  |
|-------|-------------------------------|-------|-----|-----|--------------------------------|--|
| 1603  | ApplicationSystem-<br>Name    | Y     | 30  | 187 | Fixed String<br>(0-terminable) | Provides the name of the application system being used to generate Eurex ETI application messages. This will normally be a trading system, OMS, or EMS.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |
| 1604  | ApplicationSystem-<br>Version | Y     | 30  | 217 | Fixed String<br>(0-terminable) | Provides the version of the application system being used to initiate Eurex ETI application messages.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 1605  | ApplicationSystem-<br>Vendor  | Y     | 30  | 247 | Fixed String<br>(0-terminable) | Provides the vendor of the application system.   Valid characters: $\xspace \times 20, \xspace \times 7B, \xspace \times 7D, \xspace \times 7B$  |
| 25018 | Pad3                          | U     | 3   | 277 | Fixed String                   | not used   |

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| Enhanced Trading Interface      | V3.1               |

# 7.5.4 Session Logon Response

This message confirms the Session Logon request. For more details, please refer to chapter 5.2.2 Session Authentication and Logon.

| Cluding this field.   Cluding this field.  | Tag  | Field Name              | Req'd | Len | Ofs | Data Type    | Description                            |
|--|--|-------------------------|-------|-----|-----|--------------|--|
| Cluding this field.  | <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderOut>            |       |     |     |              |  |
| 28500   TemplateID   | 9  | BodyLen                 | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-   |
| sage layout. Value: 10001 (Log MsgType = A)  25017 Pad2 U 2 6 Fixed String not used  **ResponseHeader**  5979 RequestTime Y 8 8 UTCTimestamp Gateway request in timestamp.  52 SendingTime Y 8 16 UTCTimestamp Gateway response out timestamp.  34 MsgSeqNum Y 4 24 unsigned int Message sequence number used by participant for requests sent to the teway.  25019 Pad4 U 4 28 Fixed String not used  **Message Body**  1614 ThrottleTimeInterval Y 8 32 signed int Throttle time interval in number milliseconds; applicable for transaction limit.  1613 ThrottleNoMsgs Y 4 40 unsigned int Transaction limit per ThrottleTime terval (1614). If set to 0, throttle will be switched off.  25002 ThrottleDisconnect-Limit Unity Will be switched off.  108 HeartBtInt Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s  |  |                         |       |     |     |              | cluding this field.                    |
| MsgType = A  | 28500  | TemplateID              | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes- |
| 25017 Pad2   |  |                         |       |     |     |              | sage layout. Value: 10001 (Logon,      |
| Serial Part      |  |                         |       |     |     |              | ,                                      |
| September   Sept   |  |                         | U     | 2   | 6   | Fixed String | not used                               |
| 52 SendingTime Y 8 16 UTCTimestamp Gateway response out timestamp.  34 MsgSeqNum Y 4 24 unsigned int Message sequence number used by participant for requests sent to the teway.  25019 Pad4 U 4 28 Fixed String not used  CMessage Body> 1614 ThrottleTimeInterval Y 8 32 signed int milliseconds; applicable for transaction limit.  1613 ThrottleNoMsgs Y 4 40 unsigned int Transaction limit per ThrottleTime terval (1614). If set to 0, throttle will be switched off.  25002 ThrottleDisconnect- Limit Disconnect limit: maximum numl of sequential message rejects due throttle violation allowed by the Example 25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during sequence of the participant of the session instance signed by the Eurex system during sequence number used by the Eurex system durin | •  | I                       |       |     |     |              |  |
| 34   MsgSeqNum   |  |                         |       |     |     | •            |  |
| 25019   Pad4   |  |                         |       |     |     | •            |  |
| 25019   Pad4   | 34   | MsgSeqNum               | Y     | 4   | 24  | unsigned int | Message sequence number used by the    |
| 25019   Pad4   |  |                         |       |     |     |              |  |
| All   ThrottleTimeInterval   Y   8   32   signed int   Throttle time interval in number milliseconds; applicable for transaction limit.  |  |                         |       |     |     |              |  |
| 1614 ThrottleTimeInterval Y 8 32 signed int Throttle time interval in number milliseconds; applicable for transaction limit.  1613 ThrottleNoMsgs Y 4 40 unsigned int Transaction limit per ThrottleTime terval (1614). If set to 0, throttle will be switched off.  25002 ThrottleDisconnect-Limit Y 4 44 unsigned int Disconnect limit: maximum number terval (1614). If set to 0, throttle will be switched off.  108 HeartBtInt Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during seconds.  |  |                         | U     | 4   | 28  | Fixed String | not used                               |
| milliseconds; applicable for transaction limit.  1613 ThrottleNoMsgs Y 4 40 unsigned int Transaction limit per ThrottleTime terval (1614). If set to 0, throttle will be switched off.  25002 ThrottleDisconnect-Limit Y 4 44 unsigned int Disconnect limit: maximum number of sequential message rejects due throttle violation allowed by the Exex ETI.  108 HeartBtInt Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during seconds.  |  | Ī                       |       |     |     |              | l <del>-</del>                         |
| on limit.  ThrottleNoMsgs  Y  4  40  unsigned int  Transaction limit per ThrottleTime terval (1614). If set to 0, throttl will be switched off.  ThrottleDisconnect- Limit  Y  4  44  unsigned int  Disconnect limit: maximum numl of sequential message rejects due throttle violation allowed by the E ex ETI.  108  HeartBtInt  Y  4  48  unsigned int  Heartbeat interval in milliseconds. See also Heartbeat  25004  SessionInstanceID  Y  4  52  unsigned int  Unique ID for the session instance signed by the Eurex system during s  | 1614   | ThrottleTimeInterval    | Y     | 8   | 32  | signed int   |  |
| ThrottleNoMsgs Y 4 40 unsigned int Transaction limit per ThrottleTime terval (1614). If set to 0, throttle will be switched off.  ThrottleDisconnect-Limit Y 4 44 unsigned int Disconnect limit: maximum number of sequential message rejects due throttle violation allowed by the Exex ETI.  108 HeartBtInt Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during seconds.  |  |                         |       |     |     |              |  |
| terval (1614). If set to 0, throttl will be switched off.  25002 ThrottleDisconnect-Limit  Y 4 44 unsigned int  Disconnect limit: maximum number of sequential message rejects due throttle violation allowed by the Exex ETI.  108 HeartBtInt  Y 4 48 unsigned int  Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int  Unique ID for the session instance signed by the Eurex system during seconds.   | 1610   |                         |       |     |     |              |  |
| ThrottleDisconnect- Limit  Y 4 44 unsigned int  Disconnect limit: maximum numl of sequential message rejects due throttle violation allowed by the E ex ETI.  108 HeartBtInt  Y 4 48 unsigned int  Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int  Unique ID for the session instance signed by the Eurex system during seconds.   | 1613   | I hrottleNoMsgs         | Y     | 4   | 40  | unsigned int | -                                      |
| ThrottleDisconnect- Limit  Y 4 44 unsigned int Disconnect limit: maximum number of sequential message rejects due throttle violation allowed by the E ex ETI.  108 HeartBtInt  Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during seconds.  |  |                         |       |     |     |              |  |
| Limit  Y 4 44 unsigned int Disconnect limit: maximum numl of sequential message rejects due throttle violation allowed by the E ex ETI.  108 HeartBtInt  Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s   |  | Thurstale Disease and a |       |     |     |              | Will be switched off.                  |
| of sequential message rejects due throttle violation allowed by the E ex ETI.  108 HeartBtInt  Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s   | 25002  |                         | Y     | 4   | 44  | unsigned int | Disconnect limit: maximum number       |
| ex ETI.  108 HeartBtInt  Y 4 48 unsigned int Heartbeat interval in milliseconds. See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s   |  |                         |       |     |     |              | of sequential message rejects due to   |
| 108 HeartBtInt  Y 4 48 unsigned int Heartbeat interval in milliseconds.  See also Heartbeat  25004 SessionInstanceID  Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s   |  |                         |       |     |     |              | throttle violation allowed by the Eur- |
| See also Heartbeat  25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s   |  |                         |       |     |     |              |  |
| 25004 SessionInstanceID Y 4 52 unsigned int Unique ID for the session instance signed by the Eurex system during s   | 108  | HeartBtInt              | Y     | 4   | 48  | unsigned int | Heartbeat interval in milliseconds.    |
| signed by the Eurex system during s  |  |                         |       |     |     |              |  |
|  | 25004  | SessionInstanceID       | Y     | 4   | 52  | unsigned int | Unique ID for the session instance as- |
| sion logon: to be communicated   |  |                         |       |     |     |              | signed by the Eurex system during ses- |
|  |  |                         |       |     |     |              | sion logon; to be communicated to      |
| helpdesk for troubleshooting.  |  |                         |       |     |     |              |  |
| 339 TradSesMode Y 1 56 unsigned int Trading session mode.  | 339  | TradSesMode             | Y     | 1   | 56  | unsigned int | Irading session mode.                  |
| Value Description  |  |                         |       |     |     |              | Value Description                      |
| 1 Development  |  |                         |       |     |     |              | 1 Development                          |
| 2 Simulation   |  |                         |       |     |     |              | 2 Simulation                           |
| 3 Production   |  |                         |       |     |     |              | 3 Production                           |
| 4 Acceptance   |  |                         |       |     |     |              | 4 Acceptance                           |

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| Tag   | Field Name           | Req'd | Len | Ofs | Data Type      | Description                                |
|-------|----------------------|-------|-----|-----|----------------|--|
| 1408  | DefaultCstmApplVerID | Y     | 30  | 57  | Fixed String   | Indicates the Eurex ETI interface ver-     |
|       |                      |       |     |     | (0-terminable) | sion the ETI gateway software uses.        |
|       |                      |       |     |     |                | Valid characters: $\x 20, \x 22 - \x 7B$ , |
|       |                      |       |     |     |                | \x7D,\x7E                                  |
| 25016 | Pad1                 | U     | 1   | 87  | Fixed String   | not used                                   |

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# 7.5.5 Session Logout

Session Logout request. For more details, please refer to chapter 6.3 Logout.

Session Logout



## Session Logout Response

| Tag   | Field Name                      | Req'd | Len | Ofs | Data Type    | Description                              |  |
|---|---------------------------------|-------|-----|-----|--------------|--|--|
| < Messa   | geHeaderIn>                     |       |     |     |              |  |  |
| 9   | BodyLen                         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |
|   |                                 |       |     |     |              | cluding this field.                      |  |
| 28500   | TemplateID                      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |
|   |                                 |       |     |     |              | sage layout. Value: 10002 (Logout,       |  |
|   |                                 |       |     |     |              | MsgType = 5)                             |  |
| 25028   | NetworkMsgID                    | U     | 8   | 6   | Fixed String | not used                                 |  |
| 25017   | Pad2                            | U     | 2   | 14  | Fixed String | not used                                 |  |
| <reque< td=""><td colspan="7"><requestheader></requestheader></td></reque<> | <requestheader></requestheader> |       |     |     |              |  |  |
| 34  | MsgSeqNum                       | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |  |
|   |                                 |       |     |     |              | participant for requests sent to the ga- |  |
|   |                                 |       |     |     |              | teway.                                   |  |
| 50  | SenderSubID                     | U     | 4   | 20  | unsigned int | not used                                 |  |

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## 7.5.6 Session Logout Response

This message confirms the Session Logout request. For more details, please refer to chapter  $6.3\ \text{Logout}.$ 

| Tag  | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|--|--------------|-------|-----|-----|--------------|--|
| < Messa  | geHeaderOut> |       |     |     |              |  |
| 9  | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|  |              |       |     |     |              | cluding this field.                      |
| 28500  | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|  |              |       |     |     |              | sage layout. Value: 10003 (Logout,       |
|  |              |       |     |     |              | MsgType = 5)                             |
| 25017  | Pad2         | U     | 2   | 6   | Fixed String | not used                                 |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeader>   |       |     |     |              |  |
| 5979   | RequestTime  | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 52   | SendingTime  | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |
| 34   | MsgSeqNum    | Υ     | 4   | 24  | unsigned int | Message sequence number used by the      |
|  |              |       |     |     |              | participant for requests sent to the ga- |
|  |              |       |     |     |              | teway.                                   |
| 25019  | Pad4         | U     | 4   | 28  | Fixed String | not used                                 |

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## 7.5.7 Session Logout Notification

The Session Logout Notification message is used to inform about an unsolicited session logout triggered by the operator of the Eurex system or by the Eurex system itself. For more details, please refer to chapter 6.3 Logout.

| Tag   | Field Name                  | Req'd | Len  | Ofs | Data Type       | Description   |  |
|---|-----------------------------|-------|------|-----|-----------------|---|--|
| < Messa   | geHeaderOut>                |       |      |     |                 |   |  |
| 9   | BodyLen                     | Y     | 4    | 0   | unsigned int    | Number of bytes for the message, in-  |  |
|   |                             |       |      |     |                 | cluding this field.   |  |
| 28500   | TemplateID                  | Υ     | 2    | 4   | unsigned int    | Unique identifier for a Eurex ETI mes-  |  |
|   |                             |       |      |     |                 | sage layout. Value: 10012 (Logout,  |  |
|   |                             |       |      |     |                 | MsgType = 5)  |  |
| 25017   | Pad2                        | U     | 2    | 6   | Fixed String    | not used  |  |
| <notifh< td=""><td colspan="7"><notifheader></notifheader></td></notifh<> | <notifheader></notifheader> |       |      |     |                 |   |  |
| 52  | SendingTime                 | Υ     | 8    | 8   | UTCTimestamp    | Gateway response out timestamp.   |  |
| < Messa   | ge Body>                    |       |      |     |                 |   |  |
| 30354   | VarTextLen                  | Υ     | 2    | 16  | Counter         | Number of used bytes for field VarText  |  |
|   |                             |       |      |     |                 | (30355).  |  |
| 25021   | Pad6                        | U     | 6    | 18  | Fixed String    | not used  |  |
| 30355   | VarText                     | Υ     | 2000 | 24  | Variable String | Error text.   |  |
|   |                             |       |      |     |                 | Valid characters: $\xspace \times 09, \xspace \times 000, \x$ |  |
|   |                             |       |      |     |                 | \x20-\x7B,\x7D,\x7E   |  |

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### 7.5.8 Heartbeat

The Heartbeat message is used by the Eurex ETI gateway to monitor the status of the communication link to the ETI client during periods of inactivity. For more details, please refer to chapter 6.4 Heartbeat.

| Tag     | Field Name   | Req'd | Len | Ofs | Data Type    | Description                            |
|---------|--------------|-------|-----|-----|--------------|--|
| < Messa | geHeaderIn>  |       |     |     |              |  |
| 9       | BodyLen      | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-   |
|         |              |       |     |     |              | cluding this field.                    |
| 28500   | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes- |
|         |              |       |     |     |              | sage layout. Value: 10011 (Heartbeat,  |
|         |              |       |     |     |              | MsgType = 0)                           |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                               |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                               |

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#### 7.5.9 Heartbeat Notification

The Heartbeat notification may be used by the ETI client to monitor the status of the communication link to the Eurex ETI gateway during periods of inactivity. For more details please refer to chapter 6.4 Heartbeat.

| Tag  | Field Name   | Req'd | Len | Ofs | Data Type    | Description                            |
|--|--------------|-------|-----|-----|--------------|--|
| <messa< th=""><th>geHeaderOut&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderOut> |       |     |     |              |  |
| 9  | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-   |
|  |              |       |     |     |              | cluding this field.                    |
| 28500  | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes- |
|  |              |       |     |     |              | sage layout. Value: 10023 (Heartbeat,  |
|  |              |       |     |     |              | MsgType = 0)                           |
| 25017  | Pad2         | U     | 2   | 6   | Fixed String | not used                               |
| <notifh< td=""><td>Header&gt;</td><td></td><td></td><td></td><td></td><td></td></notifh<>    | Header>      |       |     |     |              |  |
| 52   | SendingTime  | Y     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.        |

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## 7.5.10 Legal Notification

This message informs about the suspension from trading. For more details, please refer to chapter 4.14 Risk Control.

| Tag  | Field Name                            | Req'd | Len | Ofs      | Data Type    | Description                            |  |  |  |
|--|---------------------------------------|-------|-----|----------|--------------|--|--|--|--|
| <messa< td=""><td colspan="9"><messageheaderout></messageheaderout></td></messa<>    | <messageheaderout></messageheaderout> |       |     |          |              |  |  |  |  |
| 9  | BodyLen                               | Y     | 4   | 0        | unsigned int | Number of bytes for the message, in-   |  |  |  |
|  |                                       |       |     |          |              | cluding this field.                    |  |  |  |
| 28500  | TemplateID                            | Y     | 2   | 4        | unsigned int | Unique identifier for a Eurex ETI      |  |  |  |
|  |                                       |       |     |          |              | message layout. Value: 10037 (User-    |  |  |  |
|  |                                       |       |     |          |              | Notification, $MsgType = CB$ )         |  |  |  |
| 25017  |                                       | U     | 2   | 6        | Fixed String | not used                               |  |  |  |
| <rbch< td=""><td>T</td><td></td><td></td><td><u> </u></td><td></td><td></td></rbch<> | T                                     |       |     | <u> </u> |              |  |  |  |  |
| 52   | SendingTime                           | Y     | 8   | 8        | UTCTimestamp | Gateway response out timestamp.        |  |  |  |
| 1181   | ApplSeqNum                            | Y     | 8   | 16       | unsigned int | Application sequence number assi-      |  |  |  |
|  |                                       |       |     |          |              | gned to a non-order related Eurex ETI  |  |  |  |
|  |                                       |       |     |          |              | data stream.                           |  |  |  |
| 28727  | ApplSubID                             | U     | 4   | 24       | unsigned int | not used                               |  |  |  |
| 5948   | PartitionID                           | Y     | 2   | 28       | unsigned int | Grouping of Eurex products.            |  |  |  |
|  |                                       |       |     |          |              | Belongs to the scope of Service        |  |  |  |
|  |                                       |       |     |          |              | Availability and Retransmit requests.  |  |  |  |
| 1352   | ApplResendFlag                        | Y     | 1   | 30       | unsigned int | Indicates a retransmission message.    |  |  |  |
|  |                                       |       |     |          |              | Value Description                      |  |  |  |
|  |                                       |       |     |          |              | 0 False                                |  |  |  |
|  |                                       |       |     |          |              | 1 True                                 |  |  |  |
| 1180   | ApplID                                | Y     | 1   | 31       | unsigned int | Identifier for an ETI data stream.     |  |  |  |
|  |                                       |       |     |          |              | Value Description                      |  |  |  |
|  |                                       |       |     |          |              | 6 Risk Control                         |  |  |  |
| 893  | LastFragment                          | Y     | 1   | 32       | unsigned int | Indicates whether this message is the  |  |  |  |
| 030  | Lustrugment                           | •     | -   | 02       | unsigned int | last fragment (part) of a sequence of  |  |  |  |
|  |                                       |       |     |          |              | messages belonging to one dedicated    |  |  |  |
|  |                                       |       |     |          |              | transaction.                           |  |  |  |
|  |                                       |       |     |          |              | Value Description                      |  |  |  |
|  |                                       |       |     |          |              | 1 Last Message                         |  |  |  |
|  |                                       |       |     |          |              |  |  |  |  |
| 25022  |                                       | U     | 7   | 33       | Fixed String | not used                               |  |  |  |
|  | ge Body>                              |       |     |          |              | 1-                                     |  |  |  |
| 60   | TransactTime                          | Y     | 8   | 40       | UTCTimestamp | Transaction timestamp.                 |  |  |  |
| 30354  | VarTextLen                            | Y     | 2   | 48       | Counter      | Number of used bytes for field VarText |  |  |  |
|  |                                       |       |     |          |              | (30355).                               |  |  |  |

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| Tag   | Field Name | Req'd | Len  | Ofs | Data Type       | Description   |
|-------|------------|-------|------|-----|-----------------|---|
| 926   | UserStatus | Y     | 1    | 50  | unsigned int    | The status of the User  |
|       |            |       |      |     |                 | Value Description   |
|       |            |       |      |     |                 | 10 Admission to trading sus-  |
|       |            |       |      |     |                 | pended  |
|       |            |       |      |     |                 | 11 Suspension revoked   |
| 25020 | Pad5       | U     | 5    | 51  | Fixed String    | not used  |
| 30355 | VarText    | Υ     | 2000 | 56  | Variable String | Error text.   |
|       |            |       |      |     |                 | Valid characters: $\xspace \times 09, \xspace \times 000, \x$ |
|       |            |       |      |     |                 | \x20-\x7B,\x7D,\x7E   |

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# 7.5.11 User Logon

Each user needs to logon to Eurex via the User Logon message. For more details, please refer to chapter 5.2.3 User Authentication.

User Logon



## User Logon Response

| Tag   | Field Name   | Req'd | Len | Ofs | Data Type      | Description                              |
|---|--------------|-------|-----|-----|----------------|--|
| < Messa   | geHeaderIn>  |       |     |     |                |  |
| 9   | BodyLen      | Υ     | 4   | 0   | unsigned int   | Number of bytes for the message, in-     |
|   |              |       |     |     |                | cluding this field.                      |
| 28500   | TemplateID   | Y     | 2   | 4   | unsigned int   | Unique identifier for a Eurex ETI        |
|   |              |       |     |     |                | message layout. Value: 10018 (User-      |
|   |              |       |     |     |                | Request, $MsgType = BE$ )                |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String   | not used                                 |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String   | not used                                 |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>    |       |     |     |                |  |
| 34  | MsgSeqNum    | Υ     | 4   | 16  | unsigned int   | Message sequence number used by the      |
|   |              |       |     |     |                | participant for requests sent to the ga- |
|   |              |       |     |     |                | teway.                                   |
| 50  | SenderSubID  | U     | 4   | 20  | unsigned int   | not used                                 |
| < Messa   | ge Body>     |       |     |     |                |  |
| 553   | Username     | Y     | 4   | 24  | unsigned int   | User ID.                                 |
| 554   | Password     | Υ     | 32  | 28  | Fixed String   | Password.                                |
|   |              |       |     |     | (0-terminable) | Valid characters: 0-9,A-Z,a-z,\x21,      |
|   |              |       |     |     |                | \x23,\x24,\x25,\x26,\x2A,\x2B,           |
|   |              |       |     |     |                | \x2D,\x2F,\x3D,\x40,\x5F                 |
| 25019   | Pad4         | U     | 4   | 60  | Fixed String   | not used                                 |

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## 7.5.12 User Logon Response

The User Logon Response message is used to confirm a user logon. For more details, please refer to chapter 5.2.3 User Authentication.

| Tag  | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|--|--------------|-------|-----|-----|--------------|--|
| < Messa  | geHeaderOut> |       |     |     |              |  |
| 9  | BodyLen      | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|  |              |       |     |     |              | cluding this field.                      |
| 28500  | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|  |              |       |     |     |              | message layout. Value: 10019 (User-      |
|  |              |       |     |     |              | ${\sf Response,\ MsgType} = {\sf BF)}$   |
| 25017  | Pad2         | U     | 2   | 6   | Fixed String | not used                                 |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeader>   |       |     |     |              |  |
| 5979   | RequestTime  | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 52   | SendingTime  | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |
| 34   | MsgSeqNum    | Υ     | 4   | 24  | unsigned int | Message sequence number used by the      |
|  |              |       |     |     |              | participant for requests sent to the ga- |
|  |              |       |     |     |              | teway.                                   |
| 25019  | Pad4         | U     | 4   | 28  | Fixed String | not used                                 |

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## 7.5.13 User Logout

Each user may logout from Eurex via the User Logout message.

User Logout



User Logout Response

| Tag     | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|---------|--------------|-------|-----|-----|--------------|--|
| < Messa | geHeaderIn>  |       |     |     |              |  |
| 9       | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|         |              |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID   | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|         |              |       |     |     |              | message layout. Value: 10029 (User-      |
|         |              |       |     |     |              | Request, $MsgType = BE$ )                |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                                 |
| < Reque | stHeader>    |       |     |     |              |  |
| 34      | MsgSeqNum    | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|         |              |       |     |     |              | participant for requests sent to the ga- |
|         |              |       |     |     |              | teway.                                   |
| 50      | SenderSubID  | U     | 4   | 20  | unsigned int | not used                                 |
| < Messa | ge Body>     |       |     |     |              |  |
| 553     | Username     | Y     | 4   | 24  | unsigned int | User ID.                                 |
| 25019   | Pad4         | U     | 4   | 28  | Fixed String | not used                                 |

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## 7.5.14 User Logout Response

The User Logout Response message is used to confirm a user logout.

| Tag  | Field Name                            | Req'd | Len | Ofs | Data Type    | Description                              |  |  |  |  |
|--|---------------------------------------|-------|-----|-----|--------------|--|--|--|--|--|
| < Messa  | <messageheaderout></messageheaderout> |       |     |     |              |  |  |  |  |  |
| 9  | BodyLen                               | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |  |  |
|  |                                       |       |     |     |              | cluding this field.                      |  |  |  |  |
| 28500  | TemplateID                            | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |  |  |  |  |
|  |                                       |       |     |     |              | message layout. Value: 10024 (User-      |  |  |  |  |
|  |                                       |       |     |     |              | ${\sf Response,\ MsgType} = {\sf BF)}$   |  |  |  |  |
| 25017  | Pad2                                  | U     | 2   | 6   | Fixed String | not used                                 |  |  |  |  |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeader>                            |       |     |     |              |  |  |  |  |  |
| 5979   | RequestTime                           | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |  |  |
| 52   | SendingTime                           | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |  |  |  |  |
| 34   | MsgSeqNum                             | Υ     | 4   | 24  | unsigned int | Message sequence number used by the      |  |  |  |  |
|  |                                       |       |     |     |              | participant for requests sent to the ga- |  |  |  |  |
|  |                                       |       |     |     |              | teway.                                   |  |  |  |  |
| 25019  | Pad4                                  | U     | 4   | 28  | Fixed String | not used                                 |  |  |  |  |

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| 6                               |                    |  |  |
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## 7.5.15 Throttle Update Notification

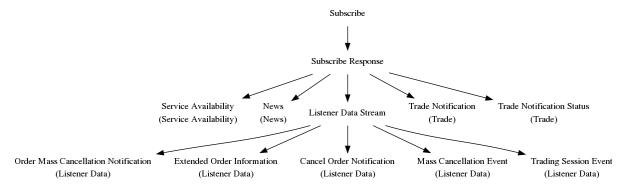
This message informs about throttle parameters that have been updated intraday.

| Tag   | Field Name           | Req'd | Len | Ofs | Data Type    | Description                             |
|---|----------------------|-------|-----|-----|--------------|---|
| < Messa   | geHeaderOut>         |       |     |     |              |   |
| 9   | BodyLen              | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-    |
|   |                      |       |     |     |              | cluding this field.                     |
| 28500   | TemplateID           | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI       |
|   |                      |       |     |     |              | message layout. Value: 10028 (User-     |
|   |                      |       |     |     |              | Notification, $MsgType = CB$ )          |
| 25017   | Pad2                 | U     | 2   | 6   | Fixed String | not used                                |
| <notifh< td=""><td>Header&gt;</td><td></td><td></td><td></td><td></td><td></td></notifh<> | Header>              |       |     |     |              |   |
| 52  | SendingTime          | Y     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.         |
| < Messa   | ge Body>             |       |     |     |              |   |
| 1614  | ThrottleTimeInterval | Y     | 8   | 16  | signed int   | Throttle time interval in number of     |
|   |                      |       |     |     |              | milliseconds; applicable for transacti- |
|   |                      |       |     |     |              | on limit.                               |
| 1613  | ThrottleNoMsgs       | Y     | 4   | 24  | unsigned int | Transaction limit per ThrottleTimeIn-   |
|   |                      |       |     |     |              | terval (1614). If set to 0, throttling  |
|   |                      |       |     |     |              | will be switched off.                   |
| 25002   | ThrottleDisconnect-  | Υ     | 4   | 28  | unsigned int | Disconnect limit: maximum number        |
| 25002   | Limit                | '     | '   | 20  | unsigned int | of sequential message rejects due to    |
|   |                      |       |     |     |              | throttle violation allowed by the Eur-  |
|   |                      |       |     |     |              | ex ETI.                                 |
|   |                      |       |     |     |              | CA LII.                                 |

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#### 7.5.16 Subscribe

This message is used to subscribe to a Eurex ETI broadcast. Multiple subscriptions to the same pair of RefApplId (1355) and SubscriptionScope (25001) are not allowed. For more details, please refer to chapter 6.9 Broadcast.



| Tag  | Field Name        | Req'd | Len | Ofs | Data Type    | Description                              |
|--|-------------------|-------|-----|-----|--------------|--|
| < Messa  | geHeaderIn>       |       |     |     |              |  |
| 9  | BodyLen           | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|  |                   |       |     |     |              | cluding this field.                      |
| 28500  | TemplateID        | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|  |                   |       |     |     |              | message layout. Value: 10025             |
|  |                   |       |     |     |              | (ApplicationMessageRequest, Msg-         |
|  |                   |       |     |     |              | Type = BW)                               |
| 25028  | NetworkMsgID      | U     | 8   | 6   | Fixed String | not used                                 |
| 25017  | Pad2              | U     | 2   | 14  | Fixed String | not used                                 |
| <reque< td=""><td>estHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | estHeader>        |       |     |     |              |  |
| 34   | MsgSeqNum         | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|  |                   |       |     |     |              | participant for requests sent to the ga- |
|  |                   |       |     |     |              | teway.                                   |
| 50   | SenderSubID       | U     | 4   | 20  | unsigned int | not used                                 |
| < Messa  | ge Body>          | ,     |     |     |              |  |
| 25001  | SubscriptionScope | N     | 4   | 24  | unsigned int | For filter criteria for broadcast subs-  |
|  |                   |       |     |     |              | cription see Broadcast                   |
| 1355   | RefAppIID         | Y     | 1   | 28  | unsigned int | Application identifier of a Eurex ETI    |
|  |                   |       |     |     |              | data stream.                             |
|  |                   |       |     |     |              | Value Description                        |
|  |                   |       |     |     |              | 1 Trade                                  |
|  |                   |       |     |     |              | 2 News                                   |
|  |                   |       |     |     |              | 3 Service Availability                   |
|  |                   |       |     |     |              | 5 Listener Data                          |
| 25018  | Pad3              | U     | 3   | 29  | Fixed String | not used                                 |

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## 7.5.17 Subscribe Response

The Subscribe Broadcast Response message is used to confirm the broadcast subscription. For more details, please refer to chapter 6.9 Broadcast.

| Tag  | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|--|--------------|-------|-----|-----|--------------|--|
| < Messa  | geHeaderOut> |       |     |     |              |  |
| 9  | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|  |              |       |     |     |              | cluding this field.                      |
| 28500  | TemplateID   | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|  |              |       |     |     |              | message layout. Value: 10005             |
|  |              |       |     |     |              | (ApplicationMessageRequestAck,           |
|  |              |       |     |     |              | MsgType = BX)                            |
| 25017  | Pad2         | U     | 2   | 6   | Fixed String | not used                                 |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeader>   |       |     |     |              |  |
| 5979   | RequestTime  | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 52   | SendingTime  | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |
| 34   | MsgSeqNum    | Y     | 4   | 24  | unsigned int | Message sequence number used by the      |
|  |              |       |     |     |              | participant for requests sent to the ga- |
|  |              |       |     |     |              | teway.                                   |
| 25019  | Pad4         | U     | 4   | 28  | Fixed String | not used                                 |
| < Messa  | ge Body>     |       |     |     |              |  |
| 28727  | ApplSubID    | Y     | 4   | 32  | unsigned int | Unique ID assigned by the Eurex sys-     |
|  |              |       |     |     |              | tem during broadcast subscription in     |
|  |              |       |     |     |              | order to link broadcasts to the related  |
|  |              |       |     |     |              | subscription.                            |
| 25019  | Pad4         | U     | 4   | 36  | Fixed String | not used                                 |

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#### 7.5.18 Unsubscribe

This message is used to revoke a broadcast subscription.

## Unsubscribe



# Unsubscribe Response

| Tag   | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|---|--------------|-------|-----|-----|--------------|--|
| <messa< th=""><th>geHeaderIn&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderIn>  |       |     |     |              |  |
| 9   | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |              |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID   | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|   |              |       |     |     |              | message layout. Value: 10006             |
|   |              |       |     |     |              | (ApplicationMessageRequest, Msg-         |
|   |              |       |     |     |              | Type = BW)                               |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                                 |
| < Reque   | stHeader>    |       |     |     |              |  |
| 34  | MsgSeqNum    | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |              |       |     |     |              | participant for requests sent to the ga- |
|   |              |       |     |     |              | teway.                                   |
| 50  | SenderSubID  | U     | 4   | 20  | unsigned int | not used                                 |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | ge Body>     |       |     |     |              |  |
| 28728   | RefApplSubID | Y     | 4   | 24  | unsigned int | Unique ID for the subscription instan-   |
|   |              |       |     |     |              | ce assigned by the Eurex system du-      |
|   |              |       |     |     |              | ring broadcast subscription.             |
| 25019   | Pad4         | U     | 4   | 28  | Fixed String | not used                                 |

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## 7.5.19 Unsubscribe Response

The Unsubscribe Broadcast Response message is used to confirm the revocation of a broadcast subscription.

| Tag  | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|--|--------------|-------|-----|-----|--------------|--|
| <messa,< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<> | geHeaderOut> |       |     |     |              |  |
| 9  | BodyLen      | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|  |              |       |     |     |              | cluding this field.                      |
| 28500  | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|  |              |       |     |     |              | message layout. Value: 10007             |
|  |              |       |     |     |              | (ApplicationMessageRequestAck,           |
|  |              |       |     |     |              | MsgType = BX)                            |
| 25017  | Pad2         | U     | 2   | 6   | Fixed String | not used                                 |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<>     | nseHeader>   |       |     |     |              |  |
| 5979   | RequestTime  | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 52   | SendingTime  | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |
| 34   | MsgSeqNum    | Υ     | 4   | 24  | unsigned int | Message sequence number used by the      |
|  |              |       |     |     |              | participant for requests sent to the ga- |
|  |              |       |     |     |              | teway.                                   |
| 25019  | Pad4         | U     | 4   | 28  | Fixed String | not used                                 |

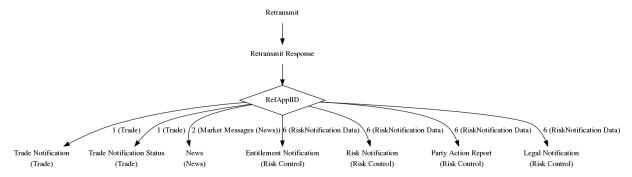
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#### 7.5.20 Retransmit

This message is used for re-transmission of trade, risk control and news data for recovery purposes. The specified application sequence number range will lead to the retransmission of data whose application sequence number is >= ApplBegSeqNum (1182) and <= ApplEndSeqNum (1183). Depending on RefApplID (1355), the request is sent to the respective service:

- RefAppIID = 1 (Trade) => request is sent to the Trades service
- RefAppIID = 2 (News) => request sent to the News service
- RefAppIID = 6 (Risk Control) => request sent to the Risk Control service

For more details, please refer to chapter 6.10.1 Retransmission.



| Tag   | Field Name    | Req'd | Len | Ofs | Data Type    | Description                              |
|---|---------------|-------|-----|-----|--------------|--|
| <messa< th=""><th>geHeaderIn&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderIn>   |       |     |     |              |  |
| 9   | BodyLen       | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |               |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID    | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|   |               |       |     |     |              | message layout. Value: 10008             |
|   |               |       |     |     |              | (ApplicationMessageRequest, Msg-         |
|   |               |       |     |     |              | Type = BW)                               |
| 25028   | NetworkMsgID  | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2          | U     | 2   | 14  | Fixed String | not used                                 |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>   | stHeader>     |       |     |     |              |  |
| 34  | MsgSeqNum     | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |               |       |     |     |              | participant for requests sent to the ga- |
|   |               |       |     |     |              | teway.                                   |
| 50  | SenderSubID   | U     | 4   | 20  | unsigned int | not used                                 |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | ge Body>      |       |     |     |              |  |
| 1182  | ApplBegSeqNum | N     | 8   | 24  | SeqNum       | "no value"means first known sequence     |
|   |               |       |     |     |              | number: 1                                |
| 1183  | ApplEndSeqNum | N     | 8   | 32  | SeqNum       | Ending range of application sequence     |
|   |               |       |     |     |              | numbers.                                 |

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| Tag   | Field Name        | Req'd | Len | Ofs | Data Type    | Description  |
|-------|-------------------|-------|-----|-----|--------------|--|
| 25001 | SubscriptionScope | N     | 4   | 40  | unsigned int | Retransmission scope (for the supported RefApplIDs): - Trade broadcast: "no value"   |
|       |                   |       |     |     |              | <ul> <li>News broadcast: Market ID (1 = XEUR, 2 = XEEE)</li> <li>Risk Control broadcast: "no value"</li> </ul>   |
| 5948  | PartitionID       | Y     | 2   | 44  | unsigned int | The application sequence numbers are only unique per RefApplID, SubcriptionScope and PartionID. Therefore, the PartitionID is required to define the scope of a Retransmission Request.  For News and Risk Control broadcast to be set to 0. |
| 1355  | RefAppIID         | Y     | 1   | 46  | unsigned int | Application identifier of a Eurex ETI data stream.  Value Description  1 Trade  2 News  6 Risk Control   |
| 25016 | Pad1              | U     | 1   | 47  | Fixed String | not used   |

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#### 7.5.21 Retransmit Response

The Retransmission Response message confirms the Retransmit request and delivers only a fixed number of the requested data packages. So the requesting client would have to send a new retransmission request (with updated sequence numbers) if the captured response does not contain all requested data. (See below: ApplEndSeqNum (1183)).

The field ApplTotalMessageCount (1349) indicates how many retransmitted broadcast messages will follow. For fragmented messages, each fragment counts as one message. They will not be interrupted by other messages.

All these messages will consist of:

- <MessageHeaderOut>.
- < RBCHeader>, where ApplSubID (28727) is always set to 'no value' and ApplResendFlag (1352) is always set to True (indicating a retransmission message).
- <MessageBody>, which is specific for the TemplateID (28500) in <MessageHeaderOut>.

For more details, please refer to chapter 6.10.1 Retransmission.

| Tag  | Field Name    | Req'd | Len | Ofs | Data Type    | Description                              |
|--|---------------|-------|-----|-----|--------------|--|
| < Messa  | geHeaderOut>  |       |     |     |              |  |
| 9  | BodyLen       | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|  |               |       |     |     |              | cluding this field.                      |
| 28500  | TemplateID    | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|  |               |       |     |     |              | message layout. Value: 10009             |
|  |               |       |     |     |              | (ApplicationMessageRequestAck,           |
|  |               |       |     |     |              | MsgType = BX                             |
| 25017  | Pad2          | U     | 2   | 6   | Fixed String | not used                                 |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeader>    |       |     |     |              |  |
| 5979   | RequestTime   | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 52   | SendingTime   | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.          |
| 34   | MsgSeqNum     | Y     | 4   | 24  | unsigned int | Message sequence number used by the      |
|  |               |       |     |     |              | participant for requests sent to the ga- |
|  |               |       |     |     |              | teway.                                   |
| 25019  | Pad4          | U     | 4   | 28  | Fixed String | not used                                 |
| < Messa  | ge Body>      |       |     |     |              |  |
| 1183   | ApplEndSeqNum | N     | 8   | 32  | SeqNum       | Ending range of application sequence     |
|  |               |       |     |     |              | numbers. If it is not set to the related |
|  |               |       |     |     |              | request's ApplEndSeqNum, the client      |
|  |               |       |     |     |              | will have to send another retransmis-    |
|  |               |       |     |     |              | sion request (with an updated Ap-        |
|  |               |       |     |     |              | plBegSeqNum). "no value"means the        |
|  |               |       |     |     |              | requested data is not available.         |

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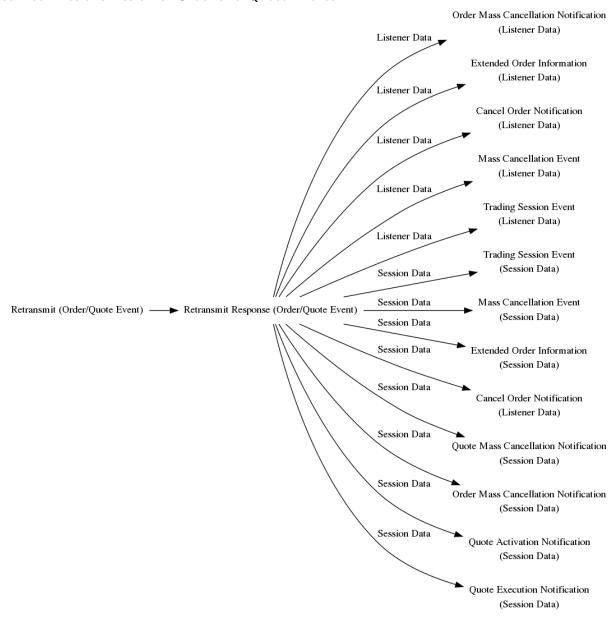
| Tag   | Field Name        | Req'd | Len | Ofs | Data Type    | Description                        |
|-------|-------------------|-------|-----|-----|--------------|------------------------------------|
| 1357  | RefApplLastSeqNum | N     | 8   | 40  | SeqNum       | Last application sequence number   |
|       |                   |       |     |     |              | known by the Eurex system for a    |
|       |                   |       |     |     |              | certain scope of RefAppIID, Subs-  |
|       |                   |       |     |     |              | criptionScope and PartitionID. "no |
|       |                   |       |     |     |              | value"means that there is no da-   |
|       |                   |       |     |     |              | ta persisted yet for the requested |
|       |                   |       |     |     |              | stream/subscription scope.         |
| 1349  | ApplTotalMessage- | Υ     | 2   | 48  | unsigned int | Total number of messages (frag-    |
| 1549  | Count             | '     |     | 10  | unsigned int | ments) included in transmission.   |
|       |                   |       |     |     |              | mentaj mended in transmission.     |
| 25021 | Pad6              | U     | 6   | 50  | Fixed String | not used                           |

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#### 7.5.22 Retransmit (Order/Quote Event)

This message is used for re-transmission of recoverable order/quote event data for recovery purposes. The specified application message identifier range will lead to the retransmission of data whose application message identifier is > ApplBegMsgID (28718) and <= ApplEndMsgID (28719).

For more details, please refer to chapter 6.10.1 Retransmission. This message is sent to the service "Retransmission of Order and Quote Events".



| Tag     | Field Name  | Req'd | Len | Ofs | Data Type    | Description                          |
|---------|-------------|-------|-----|-----|--------------|--------------------------------------|
| < Messa | geHeaderIn> |       |     |     |              |                                      |
| 9       | BodyLen     | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in- |
|         |             |       |     |     |              | cluding this field.                  |

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| Tag   | Field Name        | Req'd | Len | Ofs | Data Type    | Description                                |
|---|-------------------|-------|-----|-----|--------------|--|
| 28500   | TemplateID        | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI          |
|   |                   |       |     |     |              | message layout. Value: 10026               |
|   |                   |       |     |     |              | (ApplicationMessageRequest, Msg-           |
|   |                   |       |     |     |              | Type = BW)                                 |
| 25028   | NetworkMsgID      | U     | 8   | 6   | Fixed String | not used                                   |
| 25017   | Pad2              | U     | 2   | 14  | Fixed String | not used                                   |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>         |       |     |     |              |  |
| 34  | MsgSeqNum         | Y     | 4   | 16  | unsigned int | Message sequence number used by the        |
|   |                   |       |     |     |              | participant for requests sent to the ga-   |
|   |                   |       |     |     |              | teway.                                     |
| 50  | SenderSubID       | U     | 4   | 20  | unsigned int | not used                                   |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>  | ge Body>          |       |     |     |              |  |
| 25001   | SubscriptionScope | N     | 4   | 24  | unsigned int | Retransmission scope (for the suppor-      |
|   |                   |       |     |     |              | ted RefAppIIDs):                           |
|   |                   |       |     |     |              | - Session Data: "no value"                 |
|   |                   |       |     |     |              | - Listener Data: session ID                |
| 5948  | PartitionID       | Υ     | 2   | 28  | unsigned int | Application message identifiers are        |
|   |                   |       |     |     |              | only unique per RefApplID, Subcrip-        |
|   |                   |       |     |     |              | tionScope and PartitionID. Therefore,      |
|   |                   |       |     |     |              | the PartitionID is required to define      |
|   |                   |       |     |     |              | the scope of a Retransmit request.         |
| 1355  | RefAppIID         | Υ     | 1   | 30  | unsigned int | Application identifier of a Eurex ETI      |
|   |                   |       |     |     |              | data stream.                               |
|   |                   |       |     |     |              | Value Description                          |
|   |                   |       |     |     |              | 4 Session Data                             |
|   |                   |       |     |     |              | 5 Listener Data                            |
| 20710   |                   |       | 1.0 | 0.1 |              |  |
| 28718   | ApplBegMsgID      | N     | 16  | 31  | data         | Beginning range of application messa-      |
|   |                   |       |     |     |              | ge identifiers; 'no value' indicates first |
| 25-:  |                   |       | -   |     |              | known application message identifier.      |
| 28719   | ApplEndMsgID      | N     | 16  | 47  | data         | Ending range of application messa-         |
|   |                   |       |     |     |              | ge identifiers; "no value"means last       |
|   |                   |       |     |     |              | known application message identifier.      |
| 25016   | Pad1              | U     | 1   | 63  | Fixed String | not used                                   |

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#### 7.5.23 Retransmit Response (Order/Quote Event)

This message confirms the Retransmit (Order/Quote Event) request and delivers only a fixed number of the requested data packages. So the requesting client would have to send a new Retransmit (Order/Quote Event) request (with updated application message identifiers), if the captured response does not contain all requested data. (See below: ApplEndMsgID (28719)). The field ApplTotalMessageCount (1349) indicates how many retransmitted broadcast messages will follow. For fragmented messages, each fragment counts as one message. They will not be interrupted by other messages. All these messages will consist of:

- ullet < MessageHeaderOut > .
- < RBCHeaderME>, where ApplSubID (28727) is always set to "no value", TrdRegTSTimeOut (21003) is always set to "no value", and ApplResendFlag (1352) is always set to True (indicating a retransmission message).
- <MessageBody>, which is specific for the TemplateID (28500) in <MessageHeaderOut>.

The retransmission message template used for order and quote events differs from the session data response template in the following cases:

| Tag  | Field Name        | Req'd | Len | Ofs | Data Type    | Description                                  |
|--|-------------------|-------|-----|-----|--------------|--|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderOut>      |       |     |     |              |  |
| 9  | BodyLen           | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-         |
|  |                   |       |     |     |              | cluding this field.                          |
| 28500  | TemplateID        | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI            |
|  |                   |       |     |     |              | message layout. Value: 10027                 |
|  |                   |       |     |     |              | (ApplicationMessageRequestAck,               |
|  |                   |       |     |     |              | MsgType = BX)                                |
| 25017  | Pad2              | U     | 2   | 6   | Fixed String | not used                                     |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<>   | nseHeader>        |       |     |     |              |  |
| 5979   | RequestTime       | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.                |
| 52   | SendingTime       | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.              |
| 34   | MsgSeqNum         | Y     | 4   | 24  | unsigned int | Message sequence number used by the          |
|  |                   |       |     |     |              | participant for requests sent to the ga-     |
|  |                   |       |     |     |              | teway.                                       |
| 25019  | Pad4              | U     | 4   | 28  | Fixed String | not used                                     |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>     | ge Body>          |       |     |     |              |  |
| 1349   | ApplTotalMessage- | Y     | 2   | 32  | unsigned int | Total number of messages (frag-              |
| 10.5   | Count             |       | _   | 02  | ansigned int | ments) included in transmission.             |
| 28719  | ApplEndMsgID      | N     | 16  | 34  | data         | Ending range of application message          |
| 20113  | / Apple Halvisgib | '`    | 10  |     | data         | identifiers. If it is not set to the related |
|  |                   |       |     |     |              | request's ApplEndMsgID, the client           |
|  |                   |       |     |     |              | will have to send another Retransmit         |
|  |                   |       |     |     |              | request (with an updated ApplBegMs-          |
|  |                   |       |     |     |              | gID).  |
|  |                   |       |     |     |              | 81D).  |

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| Tag   | Field Name       | Req'd | Len | Ofs | Data Type    | Description                          |  |
|-------|------------------|-------|-----|-----|--------------|--------------------------------------|--|
| 28722 | RefApplLastMsgID | N     | 16  | 50  | data         | Last application message identifier  |  |
|       |                  |       |     |     |              | known by the Eurex system for a cer- |  |
|       |                  |       |     |     |              | tain scope of RefAppIID, Subscripti- |  |
|       |                  |       |     |     |              | onScope and PartitionID.             |  |
| 25021 | Pad6             | U     | 6   | 66  | Fixed String | not used                             |  |

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| <u> </u>           |  |  |  |
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|                    |  |  |  |

## 7.5.24 Reject

All rejections and errors on an application and session level are communicated via the FIX standard Reject (3) message; except for Mass Quote Response.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-----------------|-------|-----|-----|--------------|--|
| <messa<sub>c</messa<sub>  | geHeaderOut>    |       |     |     |              |  |
| 9   | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |                 |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |                 |       |     |     |              | sage layout. Value: 10010 (Reject,       |
|   |                 |       |     |     |              | MsgType = 3)                             |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                 |
| <nrres< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrres<> | sponseHeaderME> |       |     |     |              |  |
| 5979  | RequestTime     | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 7764  | RequestOut      | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |
|   |                 |       |     |     |              | sage to the Matching Engine              |
| 21002   | TrdRegTSTimeIn  | N     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |
| 21003   | TrdRegTSTimeOut | N     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |
| 7765  | ResponseIn      | N     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |
|   |                 |       |     |     |              | message from the Matching Engine         |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |
| 34  | MsgSeqNum       | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |
|   |                 |       |     |     |              | participant for requests sent to the ga- |
|   |                 |       |     |     |              | teway.                                   |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the    |
|   |                 |       |     |     |              | last fragment (part) of a sequence of    |
|   |                 |       |     |     |              | messages belonging to one dedicated      |
|   |                 |       |     |     |              | transaction.                             |
|   |                 |       |     |     |              | Value Description                        |
|   |                 |       |     |     |              | 1 Last Message                           |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used                                 |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>      | ge Body>        |       |     |     |              |  |

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| Tag   | Field Name          | Req'd | Len | Ofs | Data Type    | Descri   | otion                             |
|-------|---------------------|-------|-----|-----|--------------|----------|-----------------------------------|
| 373   | SessionRejectReason | Y     | 4   | 64  | unsigned int | Error co | ode.                              |
|       |                     |       |     |     |              | Value    | Description                       |
|       |                     |       |     |     |              | 1        | Required Tag Missing              |
|       |                     |       |     |     |              | 5        | Value is incorrect (out of        |
|       |                     |       |     |     |              |          | range) for this tag               |
|       |                     |       |     |     |              | 7        | Decryption problem                |
|       |                     |       |     |     |              | 11       | Invalid TemplateID                |
|       |                     |       |     |     |              | 16       | Incorrect NumInGroup              |
|       |                     |       |     |     |              |          | count for repeating group         |
|       |                     |       |     |     |              | 99       | Other                             |
|       |                     |       |     |     |              | 100      | Throttle limit exceeded           |
|       |                     |       |     |     |              | 101      | Exposure limit exceeded           |
|       |                     |       |     |     |              | 102      | Service temporarily not available |
|       |                     |       |     |     |              | 103      | Service not available             |
|       |                     |       |     |     |              | 104      | Result of transaction un-         |
|       |                     |       |     |     |              |          | known                             |
|       |                     |       |     |     |              | 105      | Error converting response         |
|       |                     |       |     |     |              |          | or broadcast                      |
|       |                     |       |     |     |              | 152      | Heartbeat violation error         |
|       |                     |       |     |     |              | 200      | Internal technical error          |
|       |                     |       |     |     |              | 210      | Validation Error                  |
|       |                     |       |     |     |              | 211      | User already logged in            |
|       |                     |       |     |     |              | 10000    | Order not found                   |
|       |                     |       |     |     |              | 10001    | Price not reasonable              |
|       |                     |       |     |     |              | 10002    | Duplicate Order (ClOrdID)         |
|       |                     |       |     |     |              | 10003    | another quote activation re-      |
|       |                     |       |     |     |              |          | quest is pending for the sa-      |
|       |                     |       |     |     |              |          | me Product / Instrument           |
|       |                     |       |     |     |              |          | Type / SessionID                  |
|       |                     |       |     |     |              | 10004    | Book Order limit exceeded         |
|       |                     |       |     |     |              |          | on BU level                       |
|       |                     |       |     |     |              | 10005    | Book Order limit exceeded         |
|       |                     |       |     |     |              |          | on Session level                  |
|       |                     |       |     |     |              | 10010    | Throttle limit for creation       |
|       |                     |       |     |     |              |          | of complex instrument ex-         |
|       |                     |       |     |     |              |          | ceeded                            |
| 30354 | VarTextLen          | Υ     | 2   | 68  | Counter      | Numbe    | r of used bytes for field VarText |
|       |                     |       |     |     |              | (30355)  | ).                                |

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| Tag   | Field Name    | Req'd | Len  | Ofs | Data Type       | Description   |  |
|-------|---------------|-------|------|-----|-----------------|---|--|
| 1409  | SessionStatus | Υ     | 1    | 70  | unsigned int    | Session status.                                       |  |
|       |               |       |      |     |                 | Value Description                                     |  |
|       |               |       |      |     |                 | 0 Session active                                      |  |
|       |               |       |      |     |                 | 4 Session logout complete                             |  |
| 25016 | Pad1          | U     | 1    | 71  | Fixed String    | not used  |  |
| 30355 | VarText       | Y     | 2000 | 72  | Variable String | Error text.   |  |
|       |               |       |      |     |                 | Valid characters: $\times 09, \times 0A, \times 0D$ , |  |
|       |               |       |      |     |                 | \x20-\x7B,\x7D,\x7E                                   |  |

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#### 7.5.25 Session List Inquire

This message is used to get the list of sessions for the own business unit. These returned sessions (PartyIDSessionID (20055)) can be used as SubscriptionScope (25001) for retransmission and subscriptions requests to Listener Data (RefAppIID (1355) = 4).

For more details, please refer to chapter 6.10.1 Retransmission

Session List Inquire



## Session List Inquire Response

| Tag   | Field Name   | Req'd | Len | Ofs | Data Type    | Description                                      |  |  |  |
|---|--------------|-------|-----|-----|--------------|--|--|--|--|
| <messageheaderin></messageheaderin>   |              |       |     |     |              |  |  |  |  |
| 9   | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-             |  |  |  |
|   |              |       |     |     |              | cluding this field.                              |  |  |  |
| 28500   | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-           |  |  |  |
|   |              |       |     |     |              | sage layout. Value: 10035 (Session-              |  |  |  |
|   |              |       |     |     |              | ${\sf DetailsListRequest,\ MsgType} = {\sf U5)}$ |  |  |  |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used   |  |  |  |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used   |  |  |  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>    |       |     |     |              |  |  |  |  |
| 34  | MsgSeqNum    | Υ     | 4   | 16  | unsigned int | Message sequence number used by the              |  |  |  |
|   |              |       |     |     |              | participant for requests sent to the ga-         |  |  |  |
|   |              |       |     |     |              | teway.   |  |  |  |
| 50  | SenderSubID  | U     | 4   | 20  | unsigned int | not used   |  |  |  |

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## 7.5.26 Session List Inquire Response

This message confirms the Session List Inquire request and provides information about sessions of the own business unit. The SessionSubMode (28730) is only set for LF sessions.

| Tag  | Field Name          | Req'd | Len | Ofs | Data Type    | Description   |
|--|---------------------|-------|-----|-----|--------------|---|
| < Messa  | geHeaderOut>        |       |     |     |              |   |
| 9  | BodyLen             | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-                    |
|  |                     |       |     |     |              | cluding this field.                                     |
| 28500  | TemplateID          | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-                  |
|  |                     |       |     |     |              | sage layout. Value: 10036 (Session-                     |
|  |                     |       |     |     |              | ${\sf DetailsListResponse},\ {\sf MsgType} = {\sf U6})$ |
| 25017  | Pad2                | U     | 2   | 6   | Fixed String | not used  |
| < Respo  | nseHeader>          |       |     |     |              |   |
| 5979   | RequestTime         | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.                           |
| 52   | SendingTime         | Y     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.                         |
| 34   | MsgSeqNum           | Y     | 4   | 24  | unsigned int | Message sequence number used by the                     |
|  |                     |       |     |     |              | participant for requests sent to the ga-                |
|  |                     |       |     |     |              | teway.  |
| 25019  | Pad4                | U     | 4   | 28  | Fixed String | not used  |
|  | ge Body>            |       |     |     |              |   |
| 28734  |                     | Y     | 2   | 32  | Counter      | Number of sessions in a response                        |
| 25021  | Pad6                | U     | 6   | 34  | Fixed String | not used  |
| <session< td=""><td>nsGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 1-1000, Record counter:</td></session<> | nsGrp>              |       |     |     |              | Cardinality: 1-1000, Record counter:                    |
|  |                     |       |     |     |              | NoSessions  |
| 20055  | >PartyIDSessionID   | Y     | 4   | 40  | unsigned int | Session ID.   |
| 28730  | >SessionMode        | Y     | 1   | 44  | unsigned int | Session type.   |
|  |                     |       |     |     |              | Value Description                                       |
|  |                     |       |     |     |              | 1 HF  |
|  |                     |       |     |     |              | 2 LF  |
|  |                     |       |     |     |              | 3 GUI   |
| 28735  | >SessionSubMode     | N     | 1   | 45  | unsigned int | Set if SessionMode(28730) = 2(LF)                       |
| 20133  | / Jession Jubiviode | '`    | •   | 15  | unsigned int |   |
|  |                     |       |     |     |              | Value Description                                       |
|  |                     |       |     |     |              | 0 Regular Trading Session                               |
|  |                     |       |     |     |              | 1 FIX Trading Session                                   |
|  |                     |       |     |     |              | 2 Regular Back Office Session                           |
| 25017  | >Pad2               | U     | 2   | 46  | Fixed String | not used  |

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#### 7.5.27 Trade Enrichment List Inquire

This message is used to get the list of enrichment rules and enrichment rule IDs for the own business unit. To retrieve all enrichment rule data, in the first request LastEntityProcessed (25035) must be set to 'no value'. While the LastEntityProcessed (25035) received in the response is not 'no value', continue sending requests using the LastEntityProcessed (25035) obtained from the response.

Trade Enrichment List Inquire



## Trade Enrichment List Inquire Response

| Tag   | Field Name          | Req'd | Len | Ofs | Data Type    | Description                                |
|---|---------------------|-------|-----|-----|--------------|--|
| < Messa   | geHeaderIn>         |       |     |     |              |  |
| 9   | BodyLen             | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-       |
|   |                     |       |     |     |              | cluding this field.                        |
| 28500   | TemplateID          | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-     |
|   |                     |       |     |     |              | sage layout. Value: 10040 (Trade-          |
|   |                     |       |     |     |              | ${\sf EnrichmentListRequest,\ MsgType}\ =$ |
|   |                     |       |     |     |              | U7)  |
| 25028   | NetworkMsgID        | U     | 8   | 6   | Fixed String | not used                                   |
| 25017   | Pad2                | U     | 2   | 14  | Fixed String | not used                                   |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>           |       |     |     |              |  |
| 34  | MsgSeqNum           | Υ     | 4   | 16  | unsigned int | Message sequence number used by the        |
|   |                     |       |     |     |              | participant for requests sent to the ga-   |
|   |                     |       |     |     |              | teway.                                     |
| 50  | SenderSubID         | U     | 4   | 20  | unsigned int | not used                                   |
| < Messa   | ge Body>            | ,     |     |     |              |  |
| 25035   | LastEntityProcessed | N     | 16  | 24  | data         | Paging key for reference data request      |

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## 7.5.28 Trade Enrichment List Inquire Response

This message confirms the Enrichment List Inquire request and provides information about enrichment rules of the own business unit.

| Tag  | Field Name                            | Req'd | Len | Ofs | Data Type    | Description  |  |  |  |
|--|---------------------------------------|-------|-----|-----|--------------|--|--|--|--|
| <messa< td=""><td colspan="9"><messageheaderout></messageheaderout></td></messa<>  | <messageheaderout></messageheaderout> |       |     |     |              |  |  |  |  |
| 9  | BodyLen                               | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.   |  |  |  |
| 28500  | TemplateID                            | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI message layout. Value: 10041 (Trade-EnrichmentListReport, MsgType = U9)                |  |  |  |
| 25017  | Pad2                                  | U     | 2   | 6   | Fixed String | not used   |  |  |  |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<>   | nseHeader>                            |       |     |     |              |  |  |  |  |
| 5979   | RequestTime                           | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.  |  |  |  |
| 52   | SendingTime                           | Υ     | 8   | 16  | UTCTimestamp | Gateway response out timestamp.  |  |  |  |
| 34   | MsgSeqNum                             | Y     | 4   | 24  | unsigned int | Message sequence number used by the participant for requests sent to the gateway.  |  |  |  |
| 25019  | Pad4                                  | U     | 4   | 28  | Fixed String | not used   |  |  |  |
| < Messa  | ge Body>                              |       |     |     |              |  |  |  |  |
| 25035  | LastEntityProcessed                   | N     | 16  | 32  | data         | Paging key for reference data request  |  |  |  |
| 28738  | NoEnrichmentRules                     | Y     | 2   | 48  | Counter      | Number of enrichment rules in a response   |  |  |  |
| 25021  | Pad6                                  | U     | 6   | 50  | Fixed String | not used   |  |  |  |
| <enrich< td=""><td>mentRulesGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-400, Record counter: NoEnrichmentRules</td></enrich<> | mentRulesGrp>                         |       |     |     |              | Cardinality: 0-400, Record counter: NoEnrichmentRules  |  |  |  |
| 25033  | >EnrichmentRuleID                     | Y     | 2   | 56  | unsigned int | Identifies an enrichment rule  |  |  |  |
| 20099  | >PartyIDOrigination-<br>Market        | N     | 1   | 58  | unsigned int | Value Description  1 Korea Exchange  2 Taiwan Futures Exchange   |  |  |  |
| 1  | >Account                              | N     | 2   | 59  | Fixed String | Accounts to book trades and keep positions on. Valid characters: 1-9, $\times$ 41, $\times$ 47, $\times$ 4D, $\times$ 50 |  |  |  |

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| Tag   | Field Name                        | Req'd | Len | Ofs | Data Type    | Description   |
|-------|-----------------------------------|-------|-----|-----|--------------|---|
| 77    | >PositionEffect                   | N     | 1   | 61  | char         | Field is used for Eurex position management purposes and indicates whether the order is submitted to open or close a position.  Value Description  C Close O Open   |
| 20096 | >PartyIDTakeUp-<br>TradingFirm    | N     | 5   | 62  | Fixed String | Take-up Member Short Name.  Valid characters: A-Z,0-9,\x20  |
| 20013 | >PartyIDOrder-<br>OriginationFirm | N     | 7   | 67  | Fixed String | External Member ID.  Valid characters: A-Z,0-9,\x20   |
| 20032 | >PartyIDBeneficiary               | N     | 9   | 74  | Fixed String | Final Beneficiary Valid characters: A-Z,0-9,\x20  |
| 25007 | >FreeText1                        | N     | 12  | 83  | Fixed String | First free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading KRX or TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |
| 25008 | >FreeText2                        | N     | 12  | 95  | Fixed String | Second free-format text field for trader-specific or customer-related comments.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
|       | >FreeText3                        | N     | 12  | 107 | Fixed String | Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E        |
| 25016 | >Pad1                             | U     | 1   | 119 | Fixed String | not used  |

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#### 7.5.29 User List Inquire

This message is used to get the list of traders of the own business unit. To retrieve all user data, in the first request LastEntityProcessed (25035) must be set to 'no value'. While the LastEntityProcessed (25035) received in the response is not 'no value', continue sending requests using the LastEntityProcessed (25035) obtained from the response.

User List Inquire



User List Inquire Response

| Tag   | Field Name          | Req'd | Len | Ofs | Data Type    | Description                                     |
|---|---------------------|-------|-----|-----|--------------|---|
| < Messa   | geHeaderIn>         |       |     |     |              |   |
| 9   | BodyLen             | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-            |
|   |                     |       |     |     |              | cluding this field.                             |
| 28500   | TemplateID          | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI               |
|   |                     |       |     |     |              | message layout. Value: 10038 (Party-            |
|   |                     |       |     |     |              | ${\sf DetailListRequest,\ MsgType} = {\sf CF)}$ |
| 25028   | NetworkMsgID        | U     | 8   | 6   | Fixed String | not used  |
| 25017   | Pad2                | U     | 2   | 14  | Fixed String | not used  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>           |       |     |     |              |   |
| 34  | MsgSeqNum           | Y     | 4   | 16  | unsigned int | Message sequence number used by the             |
|   |                     |       |     |     |              | participant for requests sent to the ga-        |
|   |                     |       |     |     |              | teway.  |
| 50  | SenderSubID         | U     | 4   | 20  | unsigned int | not used  |
| < Messa   | ge Body>            |       |     |     |              |   |
| 25035   | LastEntityProcessed | N     | 16  | 24  | data         | Paging key for reference data request           |

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## 7.5.30 User List Inquire Response

This message confirms the User List Inquire request and provides information about the traders of the own business unit.

| Tag   | Field Name                      | Req'd | Len | Ofs | Data Type     | Description                                    |
|---|---------------------------------|-------|-----|-----|---------------|--|
| < Messa   | geHeaderOut>                    |       |     |     |               |  |
| 9   | BodyLen                         | Υ     | 4   | 0   | unsigned int  | Number of bytes for the message, in-           |
|   |                                 |       |     |     |               | cluding this field.                            |
| 28500   | TemplateID                      | Υ     | 2   | 4   | unsigned int  | Unique identifier for a Eurex ETI              |
|   |                                 |       |     |     |               | message layout. Value: 10039 (Party-           |
|   |                                 |       |     |     |               | ${\sf DetailListReport,\ MsgType} = {\sf CG)}$ |
| 25017   | Pad2                            | U     | 2   | 6   | Fixed String  | not used                                       |
| <respo< td=""><td>nseHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<>  | nseHeader>                      |       |     |     |               |  |
| 5979  | RequestTime                     | Υ     | 8   | 8   | UTCTimestamp  | Gateway request in timestamp.                  |
| 52  | SendingTime                     | Υ     | 8   | 16  | UTCTimestamp  | Gateway response out timestamp.                |
| 34  | MsgSeqNum                       | Υ     | 4   | 24  | unsigned int  | Message sequence number used by the            |
|   |                                 |       |     |     |               | participant for requests sent to the ga-       |
|   |                                 |       |     |     |               | teway.   |
| 25019   | Pad4                            | U     | 4   | 28  | Fixed String  | not used                                       |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>  | ge Body>                        |       |     |     |               |  |
| 25035   | LastEntityProcessed             | N     | 16  | 32  | data          | Paging key for reference data request          |
| 1671  | NoPartyDetails                  | Y     | 2   | 48  | Counter       | Number of PartyDetailsGrp repeating            |
|   |                                 |       |     |     |               | group  |
| 25021   | Pad6                            | U     | 6   | 50  | Fixed String  | not used                                       |
| <partyl< td=""><td>DetailsGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-1000, Record counter:</td></partyl<> | DetailsGrp>                     |       |     |     |               | Cardinality: 0-1000, Record counter:           |
|   |                                 |       |     |     |               | NoPartyDetails                                 |
| 20212   | >PartyDetail-                   | Υ     | 4   | 56  | unsigned int  | Trader ID                                      |
| 20212   | ${\sf IDE}{\sf xecutingTrader}$ | ı     | 4   | 30  | unsigned int  | Trader 1D                                      |
| 22212   | >PartyDetailExecuting-          | Υ     | 6   | 60  | Fixed String  | Trader Name                                    |
| 22212   | Trader                          | ı     | U   | 00  | Tixed String  | Valid characters: \x20,\x22-\x7B,              |
|   |                                 |       |     |     |               | \x7D,\x7E                                      |
|   | >PartyDetailRole-               |       |     |     |               | (XID, (XIL                                     |
| 1674  | Qualifier                       | Y     | 1   | 66  | unsigned int  |  |
|   | Quanner                         |       |     |     |               | Value Description                              |
|   |                                 |       |     |     |               | 10 Trader                                      |
|   |                                 |       |     |     |               | 11 Head Trader                                 |
|   |                                 |       |     |     |               | 12 Supervisor                                  |
| 1672  | > Darty Datail Status           | Y     | 1   | 67  | unsigned int  | Member status.                                 |
| 1072  | >PartyDetailStatus              | '     | 1   | 01  | unsigned iiit |  |
|   |                                 |       |     |     |               | Value Description                              |
|   |                                 |       |     |     |               | 0 Active                                       |
|   |                                 |       |     |     |               | 1 Suspend                                      |
| 22276   | >PartyDetailDeskID              | N     | 3   | 68  | Fixed String  | Trader Group.                                  |
|   |                                 |       |     |     |               | Valid characters: A-Z,0-9,\x20                 |

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| Tag   | Field Name | Req'd | Len | Ofs | Data Type    | Description |
|-------|------------|-------|-----|-----|--------------|-------------|
| 25016 | >Pad1      | U     | 1   | 71  | Fixed String | not used    |

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## 7.6 Strategy Creation

#### 7.6.1 Create Strategy

The Security Definition Request message is used to create a strategy on Eurex. For more details, please refer to chapter 4.4 Creation of a Strategy. This message is sent to the service "Order and Quote Management".

Create Strategy



| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-----------------|-------|-----|-----|--------------|--|
| < Messa   | geHeaderIn>     |       |     |     |              |  |
| 9   | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |                 |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |                 |       |     |     |              | sage layout. Value: 10301 (Security-     |
|   |                 |       |     |     |              | ${\sf DefinitionRequest,\ MsgType} = c)$ |
| 25028   | NetworkMsgID    | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2            | U     | 2   | 14  | Fixed String | not used                                 |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>       |       |     |     |              |  |
| 34  | MsgSeqNum       | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |                 |       |     |     |              | participant for requests sent to the ga- |
|   |                 |       |     |     |              | teway.                                   |
| 50  | SenderSubID     | Y     | 4   | 20  | unsigned int | User ID.                                 |
| < Messa   | ge Body>        |       |     |     |              |  |
| 376   | ComplianceID    | N     | 8   | 24  | unsigned int | For participants to uniquely identify    |
|   |                 |       |     |     |              | trading strategies                       |
| 1300  | MarketSegmentID | Y     | 4   | 32  | signed int   | Product identifier.                      |
| 762   | SecuritySubType | N     | 4   | 36  | signed int   | Strategy Type. Required for Pro-         |
|   |                 |       |     |     |              | ductComplex (1227) = 2=Standard          |
|   |                 |       |     |     |              | Option Strategy, 4=Option Volatili-      |
|   |                 |       |     |     |              | ty Strategy, 6=Inter Product Spread,     |
|   |                 |       |     |     |              | 7=Standard Future Strategy, 8=Pack       |
|   |                 |       |     |     |              | and Bundle                               |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                                    |
|---|----------------|-------|-----|-----|--------------|--|
| 1227  | ProductComplex | Y     | 1   | 40  | unsigned int | This field qualifies an instrument type        |
|   |                |       |     |     |              | on Eurex.                                      |
|   |                |       |     |     |              | Value Description                              |
|   |                |       |     |     |              | 2 Standard Option Strategy                     |
|   |                |       |     |     |              | 3 Non-Standard Option Stra-                    |
|   |                |       |     |     |              | tegy   |
|   |                |       |     |     |              | 4 Volatility Strategy                          |
|   |                |       |     |     |              | 5 Futures Spread                               |
|   |                |       |     |     |              | 6 Inter-Product Spread                         |
|   |                |       |     |     |              | 7 Standard Future Strategy                     |
|   |                |       |     |     |              | 8 Pack and Bundle                              |
|   |                |       |     |     |              | 9 Strip  |
| 555   | NoLegs         | Y     | 1   | 41  | Counter      | Number of InstrmtLegGrp repeating              |
|   |                |       |     |     |              | group instances.                               |
| 2404  | ComplianceText | N     | 20  | 42  | Fixed String | This field is used to provide additio-         |
|   |                |       |     |     |              | nal regulatory information (according          |
|   |                |       |     |     |              | to respective rules & regs, circulars          |
|   |                |       |     |     |              | and/or bilateral coordination between          |
|   |                |       |     |     |              | participant and Trading Surveillance           |
|   |                |       |     |     |              | Office).                                       |
|   |                |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,           |
|   |                |       |     |     |              | \x7D,\x7E                                      |
| 25017   |                | U     | 2   | 62  | Fixed String | not used                                       |
| <instrm< td=""><td>tLegGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-20, Record counter: No-<br/>Legs</td></instrm<> | tLegGrp>       |       |     |     |              | Cardinality: 0-20, Record counter: No-<br>Legs |
| 602   | >LegSecurityID | Y     | 8   | 64  | signed int   | Instrument identifier of the leg securi-       |
|   |                |       |     |     |              | ty.  |
| 566   | >LegPrice      | N     | 8   | 72  | PriceType    | Strategy leg underlying price (only ap-        |
|   |                |       |     |     |              | plicable for underlying leg).                  |
| 600   | >LegSymbol     | N     | 4   | 80  | signed int   | Product identifier of the leg security         |
|   |                |       |     |     |              | (only applicable for underlying leg).          |
| 623   | >LegRatioQty   | Y     | 4   | 84  | Qty          | The ratio of quantity for this indivi-         |
|   |                |       |     |     |              | dual leg relative to the entire multileg       |
|   |                |       |     |     |              | security.                                      |
| 624   | >LegSide       | Y     | 1   | 88  | unsigned int | The side of the individual leg of a stra-      |
|   |                |       |     |     |              | tegy as defined in its signature.              |
|   |                |       |     |     |              | Value Description                              |
|   |                |       |     |     |              | 1 Buy  |
|   |                |       |     |     |              | 2 Sell   |
|   | I              |       |     |     |              |  |

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| Tag   | Field Name       | Req'd | Len | Ofs | Data Type    | Description            |
|-------|------------------|-------|-----|-----|--------------|------------------------|
| 609   | >LegSecurityType | Y     | 1   | 89  | unsigned int | Indicates type of leg. |
|       |                  |       |     |     |              | Value Description      |
|       |                  |       |     |     |              | 1 Multileg Instrument  |
|       |                  |       |     |     |              | 2 Underlying Leg       |
| 25021 | >Pad6            | U     | 6   | 90  | Fixed String | not used               |

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## 7.6.2 Create Strategy Response

This message confirms the creation of a strategy or returns the parameters of a existing strategy. For more details, please refer to chapter 4.4 Creation of a Strategy.

| Tag  | Field Name                            | Req'd | Len | Ofs | Data Type    | Description                              |  |  |  |  |
|--|---------------------------------------|-------|-----|-----|--------------|--|--|--|--|--|
| <messa< td=""><td colspan="10"><messageheaderout></messageheaderout></td></messa<>       | <messageheaderout></messageheaderout> |       |     |     |              |  |  |  |  |  |
| 9  | BodyLen                               | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |  |  |
|  |                                       |       |     |     |              | cluding this field.                      |  |  |  |  |
| 28500  | TemplateID                            | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |  |  |
|  |                                       |       |     |     |              | sage layout. Value: 10302 (Security-     |  |  |  |  |
|  |                                       |       |     |     |              | Definition, $MsgType = d$ )              |  |  |  |  |
| 25017  | Pad2                                  | U     | 2   | 6   | Fixed String | not used                                 |  |  |  |  |
|  | sponseHeaderME>                       |       |     |     |              |  |  |  |  |  |
| 5979   | RequestTime                           | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |  |  |
| 7764   | RequestOut                            | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |  |  |  |  |
|  |                                       |       |     |     |              | sage to the Matching Engine              |  |  |  |  |
|  | TrdRegTSTimeIn                        | Υ     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |  |  |  |  |
| 21003  | TrdRegTSTimeOut                       | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |  |  |  |  |
| 7765   | ResponseIn                            | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |  |  |  |  |
|  |                                       |       |     |     |              | message from the Matching Engine         |  |  |  |  |
| 52   | SendingTime                           | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |  |  |  |  |
| 34   | MsgSeqNum                             | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |  |  |  |  |
|  |                                       |       |     |     |              | participant for requests sent to the ga- |  |  |  |  |
|  |                                       |       |     |     |              | teway.                                   |  |  |  |  |
| 893  | LastFragment                          | Y     | 1   | 60  | unsigned int | Indicates whether this message is the    |  |  |  |  |
|  |                                       |       |     |     |              | last fragment (part) of a sequence of    |  |  |  |  |
|  |                                       |       |     |     |              | messages belonging to one dedicated      |  |  |  |  |
|  |                                       |       |     |     |              | transaction.                             |  |  |  |  |
|  |                                       |       |     |     |              | Value Description                        |  |  |  |  |
|  |                                       |       |     |     |              | 1 Last Message                           |  |  |  |  |
| 25018  | Pad3                                  | U     | 3   | 61  | Fixed String | not used                                 |  |  |  |  |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | ge Body>                              |       |     |     |              |  |  |  |  |  |
| 1148   | LowLimitPrice                         | N     | 8   | 64  | PriceType    | Allowable low limit price for the tra-   |  |  |  |  |
|  |                                       |       |     |     |              | ding day. A key parameter in valida-     |  |  |  |  |
|  |                                       |       |     |     |              | ting order price. Used as the lower      |  |  |  |  |
|  |                                       |       |     |     |              | band for validating order prices. Or-    |  |  |  |  |
|  |                                       |       |     |     |              | ders submitted with prices below the     |  |  |  |  |
|  |                                       |       |     |     |              | lower limit will be rejected             |  |  |  |  |
| 1149   | HighLimitPrice                        | N     | 8   | 72  | PriceType    | Allowable high limit price for the tra-  |  |  |  |  |
|  |                                       |       |     |     |              | ding day. A key parameter in valida-     |  |  |  |  |
|  |                                       |       |     |     |              | ting order price. Used as the upper      |  |  |  |  |
|  |                                       |       |     |     |              | band for validating order prices. Or-    |  |  |  |  |
|  |                                       |       |     |     |              | ders submitted with prices above the     |  |  |  |  |
|  |                                       |       |     |     |              | upper limit will be rejected             |  |  |  |  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------|-------|-----|-----|--------------|--|
| 48    | SecurityID             | Y     | 8   | 80  | signed int   | Instrument identifier.   |
| 779   | LastUpdateTime         | Y     | 8   | 88  | UTCTimestamp | Creation timestamp of the strategy.  |
| 322   | SecurityResponseID     | Υ     | 8   | 96  | UTCTimestamp | Identifier for the Security Definition                                       |
|       |                        |       |     |     |              | message.   |
| 1300  | MarketSegmentID        | Y     | 4   | 104 | signed int   | Product identifier.  |
| 28614 | NumberOfSecurities     | Y     | 4   | 108 | signed int   | Number of strategies that have been  |
|       |                        |       |     |     |              | created per session, product, instru-  |
|       |                        |       |     |     |              | ment type and business day.  |
| 762   | SecuritySubType        | N     | 4   | 112 | signed int   | Strategy Type. Required for Pro-   |
|       |                        |       |     |     |              | ductComplex (1227) = 2=Standard  |
|       |                        |       |     |     |              | Option Strategy, 4=Option Volatili-  |
|       |                        |       |     |     |              | ty Strategy, 6=Inter Product Spread,   |
|       |                        |       |     |     |              | 7=Standard Future Strategy, 8=Pack   |
| 1277  | NA Introduction        | Y     | 1   | 116 |              | and Bundle   |
| 1377  | MultilegModel          | r     | 1   | 116 | unsigned int | Specifies if a strategy is temporarily (user-defined) or permanently (prede- |
|       |                        |       |     |     |              | fined) available.  |
|       |                        |       |     |     |              | ,  |
|       |                        |       |     |     |              | Value Description  |
|       |                        |       |     |     |              | 0 Predefined Multileg Securi-  |
|       |                        |       |     |     |              | ty   |
|       |                        |       |     |     |              | 1 User-defined Multleg Secu-   |
|       |                        |       |     |     |              | rity   |
| 1144  | ImpliedMarketIndicator | Y     | 1   | 117 | unsigned int | Indicates that an implied market to  |
|       |                        |       |     |     |              | be created for either the legs of a  |
|       |                        |       |     |     |              | multi-leg instrument (Implied-in) or   |
|       |                        |       |     |     |              | for the multi-leg instrument based on  |
|       |                        |       |     |     |              | the existence of the legs (Implied-  |
|       |                        |       |     |     |              | out). Determination as to whether im-  |
|       |                        |       |     |     |              | plied markets should be created is ge-                                       |
|       |                        |       |     |     |              | nerally done at the level of the multi-                                      |
|       |                        |       |     |     |              | leg instrument. Commonly used in listed derivatives.                         |
|       |                        |       |     |     |              | Value Description  |
|       |                        |       |     |     |              | 0 Not implied  |
|       |                        |       |     |     |              | 3 Both Implied-in and  |
|       |                        |       |     |     |              | Implied-out  |
|       |                        |       |     |     |              |  |

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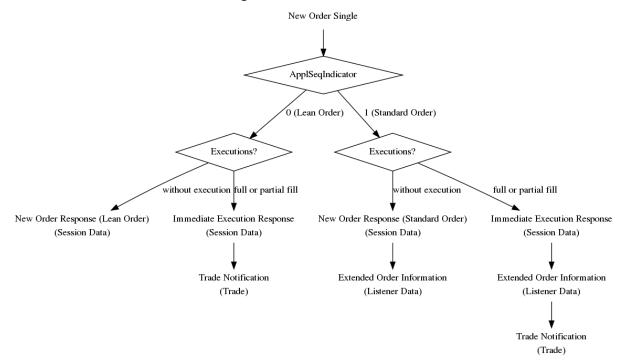
| or  | his field qualifies an instrument type<br>n Eurex. |
|---|--|
|   | 1 Eurex.   |
|   |  |
|   | /alue Description                                  |
|   | 2 Standard Option Strategy                         |
|   | 3 Non-Standard Option Stra-                        |
|   | tegy   |
|   | 4 Volatility Strategy                              |
|   | 5 Futures Spread                                   |
|   | 6 Inter-Product Spread                             |
|   | 7 Standard Future Strategy                         |
|   | 8 Pack and Bundle                                  |
|   | 9 Strip  |
| 555 NoLegs Y 1 119 Counter No                         | umber of InstrmtLegGrp repeating                   |
| gr  | roup instances.                                    |
| <instrmtleggrp></instrmtleggrp>                       | ardinality: 0-20, Record counter: No-              |
|   | egs  |
| 602   >LegSecurityID   Y   8   120   signed int   In- | strument identifier of the leg securi-             |
| ty.   |  |
|   | trategy leg underlying price (only ap-             |
|   | icable for underlying leg).                        |
|   | roduct identifier of the leg security              |
|   | only applicable for underlying leg).               |
|   | he ratio of quantity for this indivi-              |
|   | ual leg relative to the entire multileg ecurity.   |
|   | he side of the individual leg of a stra-           |
|   | gy as defined in its signature.                    |
|   |  |
|   | /alue Description                                  |
|   | 1 Buy  |
|   | 2 Sell   |
| 609 >LegSecurityType Y 1 145 unsigned int In          | dicates type of leg.                               |
|   | /alue Description                                  |
|   | 1 Multileg Instrument                              |
|   | 2 Underlying Leg                                   |
| 25021 >Pad6 U 6 146 Fixed String no                   | ot used  |

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# 7.7 Order Handling

### 7.7.1 New Order Single

The New Order Single message is used by the participant to submit an order for single leg securities. For more details, please refer to chapter 4.6.1 Order Types. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|---|--------------|-------|-----|-----|--------------|--|
| < Messa   | geHeaderIn>  |       |     |     |              |  |
| 9   | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |              |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID   | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |              |       |     |     |              | sage layout. Value: 10100 (NewOrder-     |
|   |              |       |     |     |              | $Single,\ MsgType = D)$                  |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                                 |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>    |       |     |     |              |  |
| 34  | MsgSeqNum    | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |              |       |     |     |              | participant for requests sent to the ga- |
|   |              |       |     |     |              | teway.                                   |
| 50  | SenderSubID  | Y     | 4   | 20  | unsigned int | User ID.                                 |
| < Messa   | ge Body>     |       |     |     |              |  |
| 44  | Price        | N     | 8   | 24  | PriceType    | Limit price. Required if OrdType (40)    |
|   |              |       |     |     |              | is Limit (2) or Stop Limit (4).          |
| 99  | StopPx       | N     | 8   | 32  | PriceType    | Stop price. Required if OrdType (40)     |
|   |              |       |     |     |              | is Stop (3) or used as the trigger price |
|   |              |       |     |     |              | for an One-cancels-the-other order.      |

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| Tag   | Field Name                       | Req'd | Len | Ofs | Data Type    | Description  |
|-------|----------------------------------|-------|-----|-----|--------------|--|
| 11    | ClOrdID                          | N     | 8   | 40  | unsigned int | Client Order ID: Unique participant defined order request identifier; used for client order id chaining.   |
| 376   | ComplianceID                     | N     | 8   | 48  | unsigned int | For participants to uniquely identify trading strategies   |
| 38    | OrderQty                         | Y     | 4   | 56  | Qty          | Total Order Quantity.  |
| 432   | ExpireDate                       | N     | 4   | 60  | LocalMktDate | Date of order expiry. Required if TimeInForce $(59) = 6$ .   |
| 1300  | MarketSegmentID                  | Y     | 4   | 64  | signed int   | Product identifier.  |
| 30048 | SimpleSecurityID                 | Y     | 4   | 68  | unsigned int | Instrument identifier for simple instruments. Should be filled with the 4 least significant bytes of SecurityID (48) provided in Eurex RDI and Eurex RDF reference data.       |
| 28744 | MatchInstCrossID                 | N     | 4   | 72  | unsigned int | Self Match Prevention ID.  |
| 20096 | PartyIDTakeUpTrading-<br>Firm    | N     | 5   | 76  | Fixed String | Take-up Member Short Name.<br>Valid characters: A-Z,0-9,\x20   |
| 20013 | PartyIDOrder-<br>OriginationFirm | N     | 7   | 81  | Fixed String | External Member ID.  Valid characters: A-Z,0-9,\x20  |
| 20032 | PartyIDBeneficiary               | N     | 9   | 88  | Fixed String | Final Beneficiary Valid characters: A-Z,0-9,\x20   |
| 28703 | ApplSeqIndicator                 | Y     | 1   | 97  | unsigned int | Indicates if the order is a Lean Order or a Standard Order. Application sequencing is limited for Lean Orders.  Value Description  0 No Recovery Required  1 Recovery Required |
| 54    | Side                             | Y     | 1   | 98  | unsigned int | Side of the order.  Value Description  1 Buy  2 Sell   |
| 40    | OrdType                          | Y     | 1   | 99  | unsigned int | Order type.  Value Description  1 Market  2 Limit  3 Stop  4 Stop Limit  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description   |
|-------|------------------------|-------|-----|-----|--------------|---|
| 28710 | PriceValidityCheckType | Y     | 1   | 100 | unsigned int | Indicator how price validity check should be performed by the exchange (see Price Reasonability Check).  Value Description  0 None  1 Optional  2 Mandatory   |
| 59    | TimeInForce            | Y     | 1   | 101 | unsigned int | Execution and trading restriction parameters supported by Eurex.  Value Description  0 Day (GFD)  1 Good Till Cancelled (GTC)  - Standard Orders only  3 Immediate or Cancel (IOC)  6 Good Till Date (GTD) -  Standard Orders only                    |
| 18    | ExecInst               | Y     | 1   | 102 | unsigned int | Instructions for order handling.  Value Description  1 Persistent Order (FIX value 'H')  2 Non-persistent Order (FIX value 'Q')  5 Persistent and Book or Cancel order (FIX value 'H 6')  6 Non-persistent and Book or Cancel order (FIX value 'Q 6') |
| 625   | TradingSessionSubID    | N     | 1   | 103 | unsigned int | Marks a certain order as a closing auction one.  Value Description  4 Closing or closing auction  |

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| Tag   | Field Name                  | Req'd | Len | Ofs | Data Type    | Description   |
|-------|-----------------------------|-------|-----|-----|--------------|---|
| 1815  | TradingCapacity             | Y     | 1   | 104 | unsigned int | This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.    Value   Description   1   Customer (Agency)   5   Principal (Proprietary)   6   MarketMaker                   |
| 1     | Account                     | N     | 2   | 105 | Fixed String | Accounts to book trades and keep positions on.  Valid characters: 1-9,\x41,\x47,\x4D, \x50  |
| 20038 | PartyIDPosition-<br>Account | N     | 20  | 107 | Fixed String | 'Flexible Account' information. Valid characters: $\x20,\x30-\x39,\x41-\x5A$  |
| 77    | PositionEffect              | Y     | 1   | 127 | char         | Field is used for Eurex position management purposes and indicates whether the order is submitted to open or close a position.  Value Description  C Close  O Open  |
| 20075 | PartyIDLocationID           | N     | 2   | 128 | Fixed String | Country code.  Valid characters: \x01-\x7E  |
| 1031  | CustOrderHandlingInst       | N     | 1   | 130 | Fixed String | Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier. The field is for participant use only.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 2404  | ComplianceText              | N     | 20  | 131 | Fixed String | This field is used to provide additional regulatory information (according to respective rules & regs, circulars and/or bilateral coordination between participant and Trading Surveillance Office).  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |

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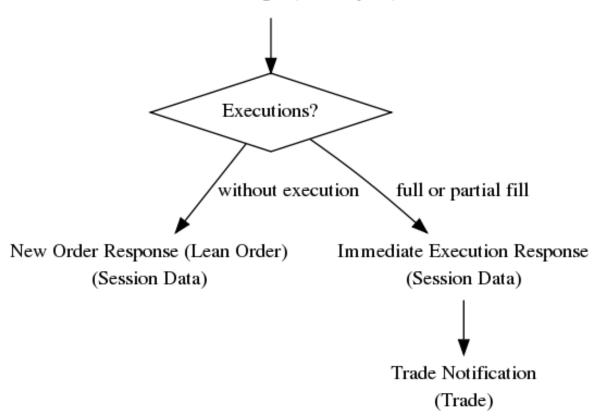
| Tag   | Field Name | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|------------|-------|-----|-----|--------------|--|
| 25007 | FreeText1  | N     | 12  | 151 | Fixed String | First free-format text field for trader- |
|       |            |       |     |     |              | specific or customer-related com-        |
|       |            |       |     |     |              | ments. Should not be used in conjunc-    |
|       |            |       |     |     |              | tion with External Member and Final      |
|       |            |       |     |     |              | Beneficiary used for trading KRX or      |
|       |            |       |     |     |              | TAIFEX products.                         |
|       |            |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |            |       |     |     |              | \x7D,\x7E                                |
| 25008 | FreeText2  | N     | 12  | 163 | Fixed String | Second free-format text field for        |
|       |            |       |     |     |              | trader-specific or customer-related      |
|       |            |       |     |     |              | comments.                                |
|       |            |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |            |       |     |     |              | \x7D,\x7E                                |
| 25009 | FreeText3  | N     | 12  | 175 | Fixed String | Third free-format text field for trader- |
|       |            |       |     |     |              | specific or customer-related com-        |
|       |            |       |     |     |              | ments. Should not be used in conjunc-    |
|       |            |       |     |     |              | tion with External Member and Final      |
|       |            |       |     |     |              | Beneficiary used for trading TAIFEX      |
|       |            |       |     |     |              | products.                                |
|       |            |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |            |       |     |     |              | \x7D,\x7E                                |
| 25020 | Pad5       | U     | 5   | 187 | Fixed String | not used                                 |

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### 7.7.2 New Order Single (short layout)

This short order message layout is used by the participant to submit an order in a simple instrument. Selected order attributes are implicitly set. For more details, please refer to chapter 4.6.8 Short Order Message Layouts. This message is sent to the service "Order and Quote Management".

# New Order Single (short layout)



| Tag  | Field Name                          | Req'd | Len | Ofs | Data Type    | Description                              |  |  |  |  |  |
|--|-------------------------------------|-------|-----|-----|--------------|--|--|--|--|--|--|
| <messa,< td=""><td colspan="11"><messageheaderin></messageheaderin></td></messa,<>         | <messageheaderin></messageheaderin> |       |     |     |              |  |  |  |  |  |  |
| 9  | BodyLen                             | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |  |  |  |
|  |                                     |       |     |     |              | cluding this field.                      |  |  |  |  |  |
| 28500  | TemplateID                          | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |  |  |  |
|  |                                     |       |     |     |              | sage layout. Value: 10125 (NewOrder-     |  |  |  |  |  |
|  |                                     |       |     |     |              | Single, $MsgType = D$ )                  |  |  |  |  |  |
| 25028  | NetworkMsgID                        | U     | 8   | 6   | Fixed String | not used                                 |  |  |  |  |  |
| 25017  | Pad2                                | U     | 2   | 14  | Fixed String | not used                                 |  |  |  |  |  |
| < Reque  | stHeader>                           |       |     |     |              |  |  |  |  |  |  |
| 34   | MsgSeqNum                           | Υ     | 4   | 16  | unsigned int | Message sequence number used by the      |  |  |  |  |  |
|  |                                     |       |     |     |              | participant for requests sent to the ga- |  |  |  |  |  |
|  |                                     |       |     |     |              | teway.                                   |  |  |  |  |  |
| 50   | SenderSubID                         | Y     | 4   | 20  | unsigned int | User ID.                                 |  |  |  |  |  |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<> | ge Body>                            |       |     |     |              |  |  |  |  |  |  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------|-------|-----|-----|--------------|--|
| 44    | Price                  | Υ     | 8   | 24  | PriceType    | Limit price.   |
| 11    | CIOrdID                | Y     | 8   | 32  | unsigned int | Client Order ID: Unique participant defined order request identifier; used for client order id chaining.   |
| 376   | ComplianceID           | N     | 8   | 40  | unsigned int | For participants to uniquely identify trading strategies   |
| 38    | OrderQty               | Y     | 4   | 48  | Qty          | Total Order Quantity.  |
| 30048 | SimpleSecurityID       | Y     | 4   | 52  | unsigned int | Instrument identifier for simple instruments. Should be filled with the 4 least significant bytes of SecurityID (48) provided in Eurex RDI and Eurex RDF reference data. |
| 28744 | MatchInstCrossID       | N     | 4   | 56  | unsigned int | Self Match Prevention ID.  |
| 25033 | EnrichmentRuleID       | N     | 2   | 60  | unsigned int | Identifies an enrichment rule  |
| 54    | Side                   | Y     | 1   | 62  | unsigned int | Side of the order.  Value Description  1 Buy   |
| 28710 | PriceValidityCheckType | Y     | 1   | 63  | unsigned int | 2 Sell  Indicator how price validity check   |
|       |                        |       |     |     |              | should be performed by the exchange (see Price Reasonability Check).  Value Description  0 None  |
|       |                        |       |     |     |              | 1 Optional 2 Mandatory   |
| 59    | TimeInForce            | Y     | 1   | 64  | unsigned int | Execution and trading restriction parameters supported by Eurex.  Value Description  0 Day (GFD)  3 Immediate or Cancel (IOC)  |
| 18    | ExecInst               | Y     | 1   | 65  | unsigned int | Instructions for order handling.  Value Description  |
|       |                        |       |     |     |              | 2 Non-persistent Order (FIX value 'Q')   |
|       |                        |       |     |     |              | 6 Non-persistent and Book or Cancel order (FIX value 'Q 6')  |

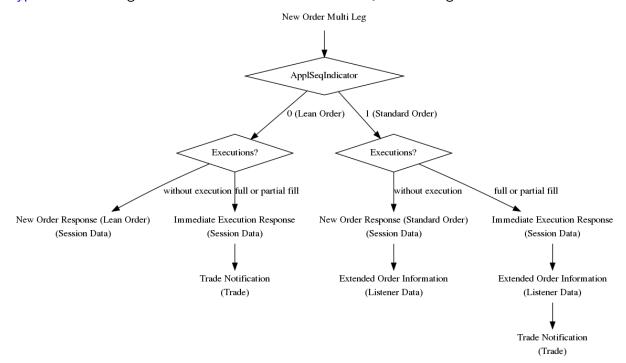
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| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                            |
|-------|-----------------|-------|-----|-----|--------------|--|
| 1815  | TradingCapacity | Y     | 1   | 66  | unsigned int | This field designates if the trader is |
|       |                 |       |     |     |              | acting in the capacity of agent, tra-  |
|       |                 |       |     |     |              | ding for its own account or acting as  |
|       |                 |       |     |     |              | a market maker.                        |
|       |                 |       |     |     |              | Value Description                      |
|       |                 |       |     |     |              | 1 Customer (Agency)                    |
|       |                 |       |     |     |              | 5 Principal (Proprietary)              |
|       |                 |       |     |     |              | 6 MarketMaker                          |
|       |                 |       |     |     |              |  |
| 25020 | Pad5            | U     | 5   | 67  | Fixed String | not used                               |

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### 7.7.3 New Order Multi Leg

The New Order Multi Leg message is provided to submit orders for securities that are made up of multiple securities, known as "legs". For more details, please refer to chapter 4.6.1 Order Types. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name   | Req'd | Len | Ofs | Data Type    | Description                              |
|---|--------------|-------|-----|-----|--------------|--|
| <messa< th=""><th>geHeaderIn&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderIn>  |       |     |     |              |  |
| 9   | BodyLen      | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |              |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |              |       |     |     |              | sage layout. Value: 10113 (NewOrder-     |
|   |              |       |     |     |              | Multileg,MsgType=AB)                     |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                                 |
| < Reque   | stHeader>    |       |     |     |              |  |
| 34  | MsgSeqNum    | Υ     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |              |       |     |     |              | participant for requests sent to the ga- |
|   |              |       |     |     |              | teway.                                   |
| 50  | SenderSubID  | Υ     | 4   | 20  | unsigned int | User ID.                                 |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | ge Body>     |       |     |     |              |  |
| 11  | ClOrdID      | N     | 8   | 24  | unsigned int | Client Order ID: Unique participant      |
|   |              |       |     |     |              | defined order request identifier; used   |
|   |              |       |     |     |              | for client order id chaining.            |
| 48  | SecurityID   | Υ     | 8   | 32  | signed int   | Instrument identifier.                   |
| 44  | Price        | Υ     | 8   | 40  | PriceType    | Limit price. Required if OrdType (40)    |
|   |              |       |     |     |              | is Limit (2) or Stop Limit (4).          |

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| Tag   | Field Name            | Req'd | Len | Ofs | Data Type          | Description                             |
|-------|-----------------------|-------|-----|-----|--------------------|---|
| 376   | ComplianceID          | N     | 8   | 48  | unsigned int       | For participants to uniquely identify   |
|       |                       |       |     |     |                    | trading strategies                      |
| 1300  | MarketSegmentID       | Υ     | 4   | 56  | signed int         | Product identifier.                     |
| 38    | OrderQty              | Υ     | 4   | 60  | Qty                | Total Order Quantity.                   |
| 432   | ExpireDate            | N     | 4   | 64  | LocalMktDate       | Date of order expiry. Required if Ti-   |
|       |                       |       |     |     |                    | meInForce $(59) = 6$ .                  |
| 28744 | MatchInstCrossID      | N     | 4   | 68  | unsigned int       | Self Match Prevention ID.               |
| 20096 | PartyIDTakeUpTrading- | N     | 5   | 72  | Fixed String       | Take-up Member Short Name.              |
|       | Firm                  |       |     |     | 1 11100 0 0 111119 | Valid characters: A-Z,0-9,\x20          |
|       | PartyIDOrder-         |       |     |     |                    | ·                                       |
| 20013 | OriginationFirm       | N     | 7   | 77  | Fixed String       | External Member ID.                     |
| 22222 |                       |       |     |     |                    | Valid characters: A-Z,0-9,\x20          |
| 20032 | PartyIDBeneficiary    | N     | 9   | 84  | Fixed String       | Final Beneficiary                       |
| 20702 | A 1C 1 1' .           | V     | 1   | 02  |                    | Valid characters: A-Z,0-9,\x20          |
| 28703 | ApplSeqIndicator      | Y     | 1   | 93  | unsigned int       | Indicates if the order is a Lean Order  |
|       |                       |       |     |     |                    | or a Standard Order. Application se-    |
|       |                       |       |     |     |                    | quencing is limited for Lean Orders.    |
|       |                       |       |     |     |                    | Value Description                       |
|       |                       |       |     |     |                    | 0 No Recovery Required                  |
|       |                       |       |     |     |                    | 1 Recovery Required                     |
| 1227  | ProductComplex        | Υ     | 1   | 94  | unsigned int       | This field qualifies an instrument type |
|       |                       |       |     |     |                    | on Eurex.                               |
|       |                       |       |     |     |                    | Value Description                       |
|       |                       |       |     |     |                    | 2 Standard Option Strategy              |
|       |                       |       |     |     |                    | 3 Non-Standard Option Stra-             |
|       |                       |       |     |     |                    | tegy                                    |
|       |                       |       |     |     |                    | 4 Volatility Strategy                   |
|       |                       |       |     |     |                    | 5 Futures Spread                        |
|       |                       |       |     |     |                    | 6 Inter-Product Spread                  |
|       |                       |       |     |     |                    | 7 Standard Future Strategy              |
|       |                       |       |     |     |                    | 8 Pack and Bundle                       |
|       |                       |       |     |     |                    | 9 Strip                                 |
| 54    | Side                  | Υ     | 1   | 95  | unsigned int       | Side of the order.                      |
|       |                       |       |     |     |                    | Value Description                       |
|       |                       |       |     |     |                    | 1 Buy                                   |
|       |                       |       |     |     |                    | 2 Sell                                  |
|       | 0.1=                  |       |     |     |                    |   |
| 40    | OrdType               | Y     | 1   | 96  | unsigned int       | Order type.                             |
|       |                       |       |     |     |                    | Value Description                       |
|       |                       |       |     |     |                    | 2 Limit                                 |
|       | <u> </u>              |       |     |     |                    |   |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description   |
|-------|------------------------|-------|-----|-----|--------------|---|
| 28710 | PriceValidityCheckType | Y     | 1   | 97  | unsigned int | Indicator how price validity check should be performed by the exchange (see Price Reasonability Check).  Value Description  0 None  1 Optional  2 Mandatory   |
| 18    | ExecInst               | Y     | 1   | 98  | unsigned int | Instructions for order handling.  Value Description  1 Persistent Order (FIX value 'H')  2 Non-persistent Order (FIX value 'Q')   |
| 59    | TimeInForce            | Y     | 1   | 99  | unsigned int | Execution and trading restriction parameters supported by Eurex.  Value Description  0 Day (GFD)  1 Good Till Cancelled (GTC)  - Standard Orders only  3 Immediate or Cancel (IOC)  6 Good Till Date (GTD) -  Standard Orders only                |
| 1815  | TradingCapacity        | Y     | 1   | 100 | unsigned int | This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.  Value Description  1 Customer (Agency)  5 Principal (Proprietary)  6 MarketMaker                                |
| 20075 | PartyIDLocationID      | N     | 2   | 101 | Fixed String | Country code.  Valid characters: \x01-\x7E  |
| 2404  | ComplianceText         | N     | 20  | 103 | Fixed String | This field is used to provide additional regulatory information (according to respective rules & regs, circulars and/or bilateral coordination between participant and Trading Surveillance Office).  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |

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| Tag  | Field Name                  | Req'd | Len | Ofs | Data Type    | Description   |
|--|-----------------------------|-------|-----|-----|--------------|---|
| 1031   | Ü                           | N     | 1   | 123 | Fixed String | Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier. The field is for participant use only.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 20038  | PartyIDPosition-<br>Account | N     | 20  | 124 | Fixed String | 'Flexible Account' information. Valid characters: $\x 20, \x 30-\x 39, \x 41-\x 5A$   |
| 25007  | FreeText1                   | N     | 12  | 144 | Fixed String | First free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading KRX or TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |
| 25008  | FreeText2                   | N     | 12  | 156 | Fixed String | Second free-format text field for trader-specific or customer-related comments.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 25009  | FreeText3                   | N     | 12  | 168 | Fixed String | Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E        |
| 555  | NoLegs                      | Y     | 1   | 180 | Counter      | Number of LegOrd repeating group instances.   |
| 25018  | Pad3                        | U     | 3   | 181 | Fixed String | not used  |
| <legor< td=""><td>dGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-20, Record counter: No-<br/>Legs</td></legor<> | dGrp>                       |       |     |     |              | Cardinality: 0-20, Record counter: No-<br>Legs  |
| 28715  | >LegAccount                 | N     | 2   | 184 | Fixed String | Leg-specific account to book trades and keep positions on.  Valid characters: 1-9,\x41,\x47,\x4D, \x50  |

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| Tag   | Field Name         | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|--------------------|-------|-----|-----|--------------|---|
| 564   | >LegPositionEffect | Y     | 1   | 186 | char         | Leg-specific field used for Eurex posi- |
|       |                    |       |     |     |              | tion management purposes and indi-      |
|       |                    |       |     |     |              | cates whether the leg is submitted to   |
|       |                    |       |     |     |              | open or close a position.               |
|       |                    |       |     |     |              | Value Description                       |
|       |                    |       |     |     |              | C Close                                 |
|       |                    |       |     |     |              | O Open                                  |
| 25020 | >Pad5              | U     | 5   | 187 | Fixed String | not used                                |

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# 7.7.4 New Order Response (Standard Order)

This message confirms a New Order request for a Standard Order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag  | Field Name                            | Req'd | Len | Ofs | Data Type    | Description                              |  |  |  |
|--|---------------------------------------|-------|-----|-----|--------------|--|--|--|--|
| <messa< th=""><th colspan="9"><messageheaderout></messageheaderout></th></messa<>            | <messageheaderout></messageheaderout> |       |     |     |              |  |  |  |  |
| 9  | BodyLen                               | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |  |
|  |                                       |       |     |     |              | cluding this field.                      |  |  |  |
| 28500  | TemplateID                            | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |  |
|  |                                       |       |     |     |              | sage layout. Value: 10101 (Execution-    |  |  |  |
|  |                                       |       |     |     |              | Report, MsgType = 8)                     |  |  |  |
| 25017  | Pad2                                  | U     | 2   | 6   | Fixed String | not used                                 |  |  |  |
| <respo< td=""><td>nseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeaderME>                          |       |     |     |              |  |  |  |  |
| 5979   | RequestTime                           | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |  |
| 7764   | RequestOut                            | Υ     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |  |  |  |
|  |                                       |       |     |     |              | sage to the Matching Engine              |  |  |  |
| 21002  | TrdRegTSTimeIn                        | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |  |  |  |
| 21003  | TrdRegTSTimeOut                       | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |  |  |  |
| 7765   | ResponseIn                            | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |  |  |  |
|  |                                       |       |     |     |              | message from the Matching Engine         |  |  |  |
| 52   | SendingTime                           | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |  |  |  |
| 34   | MsgSeqNum                             | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |  |  |  |
|  |                                       |       |     |     |              | participant for requests sent to the ga- |  |  |  |
|  |                                       |       |     |     |              | teway.                                   |  |  |  |
| 5948   | PartitionID                           | Y     | 2   | 60  | unsigned int | Grouping of Eurex products.              |  |  |  |
|  |                                       |       |     |     |              | Belongs to the scope of Service          |  |  |  |
|  |                                       |       |     |     |              | Availability and Retransmit requests.    |  |  |  |
| 1180   | ApplID                                | Y     | 1   | 62  | unsigned int | Identifier for an ETI data stream.       |  |  |  |
|  |                                       |       |     |     |              | Value Description                        |  |  |  |
|  |                                       |       |     |     |              | 4 Session Data                           |  |  |  |
| 28704  | ApplMsgID                             | Υ     | 16  | 63  | data         | Application message identifier assi-     |  |  |  |
|  |                                       |       |     |     |              | gned to an order or quote event.         |  |  |  |
| 893  | LastFragment                          | Υ     | 1   | 79  | unsigned int | Indicates whether this message is the    |  |  |  |
|  |                                       |       |     |     |              | last fragment (part) of a sequence of    |  |  |  |
|  |                                       |       |     |     |              | messages belonging to one dedicated      |  |  |  |
|  |                                       |       |     |     |              | transaction.                             |  |  |  |
|  |                                       |       |     |     |              | Value Description                        |  |  |  |
|  |                                       |       |     |     |              | 1 Last Message                           |  |  |  |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>     | ge Body>                              |       |     |     |              |  |  |  |  |
| 37   |                                       | Υ     | 8   | 80  | unsigned int | Exchange Order ID generated by Eur-      |  |  |  |
|  |                                       |       |     |     | <u> </u>     | ex System; it remains constant over      |  |  |  |
|  |                                       |       |     |     |              | the lifetime of an order.                |  |  |  |

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| ClordID  | Tag   | Field Name           | Req'd | Len | Ofs | Data Type    | Description                             |
|--|-------|----------------------|-------|-----|-----|--------------|---|
| SecurityID   | 11    | ClOrdID              | N     | 8   | 88  | unsigned int | Client Order ID: Unique participant     |
| SecurityID   |       |                      |       |     |     |              | defined order request identifier; used  |
| Transaction timestamp.   Transaction timestamp.  |       |                      |       |     |     |              | for client order id chaining.           |
| 21009 TrdRegTSEntryTime  | 48    | SecurityID           | Υ     | 8   | 96  | signed int   | Instrument identifier.                  |
| the creation of the order.    21008 TrdRegTSTimePriority   Y   8   120   UTCTimestamp   Priority timestamp.  | 17    | ExecID               | Υ     | 8   | 104 | UTCTimestamp | Transaction timestamp.                  |
| Triggered   Priority timestamp.   Priority timestamp.   Priority timestamp.  | 21009 | TrdRegTSEntryTime    | Υ     | 8   | 112 | UTCTimestamp | The entry timestamp is the time of      |
| 39 OrdStatus  Y 1 128 Char  Conveys the current status of an order.  Value Description 0 New 4 Cancelled 9 Suspended  The reason why this message was generated.  Value Description 0 New 4 Cancelled 1 Triggered  378 ExecRestatement- Reason  Y 2 130 unsigned int Code to further qualify the field Exec- Type (150) of the Execution Report (8) message.  Value Description 101 Order add accepted 105 IOC Order accepted 212 Book or Cancel Order accepted 212 Book or Cancel Order accepted 105 IOC Order accepted 106 IOC order accepted 107 IOC order accepted 108 IDC order accepted 109 IDC order accepted  |       |                      |       |     |     |              | the creation of the order.              |
| Second    | 21008 | TrdRegTSTimePriority | Y     | 8   | 120 | UTCTimestamp | Priority timestamp.                     |
| Value   Description  | 39    | OrdStatus            | Y     | 1   | 128 | char         |   |
| The reason why this message was generated.   Value   Description   Des   |       |                      |       |     |     |              |   |
| A   Cancelled   9   Suspended  |       |                      |       |     |     |              |   |
| Suspended   Susp   |       |                      |       |     |     |              |   |
| Second Programme   |       |                      |       |     |     |              |   |
| A  | 150   |                      |       |     | 100 |              |   |
| Value   Description   O   New   4   Cancelled   L   Triggered  | 150   | Exec Type            | Y     | 1   | 129 | char         |   |
| Code to further qualify the field Exection Report (8) message.   Value   Description   |       |                      |       |     |     |              |   |
| A   Cancelled   L   Triggered  |       |                      |       |     |     |              |   |
| ExecRestatement-Reason  Y 2 130 unsigned int Value Description 101 Order add accepted 105 IOC Order accepted 212 Book or Cancel Order accepted 212 Book or Cancel Order accepted 212 Book or Cancel Order accepted 105 IOC Order accepted 212 Book or Cancel Order accepted 212 Book or Cancel Order accepted 212 Identicates SMP involvement.  Value Description 0 No crossing (Order not subject to crossing) 1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              |   |
| ExecRestatement- Reason  Y 2 130 unsigned int Code to further qualify the field Exec- Type (150) of the Execution Report (8) message.  Value Description 101 Order add accepted 105 IOC Order accepted 212 Book or Cancel Order accepted 212 Book or Cancel Order accepted 105 IOC Order accepted 106 IOC Order accepted 107 IOC Order accepted 108 Identicates SMP involvement.  Value Description 0 No crossing (Order not subject to crossing) 1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              |   |
| Reason  Reason  Y  2 130  Unsigned int  Code to further qualify the field Exec- Type (150) of the Execution Report (8) message.  Value Description 101 Order add accepted 105 IOC Order accepted 212 Book or Cancel Order accepted 212 Book or Cancel Order accepted  Value Description 0 No crossing (Order not subject to crossing) 1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              | L Iriggered                             |
| Reason  Type (150) of the Execution Report (8) message.  Value Description  101 Order add accepted  105 IOC Order accepted  212 Book or Cancel Order accepted  212 Book or Cancel Order accepted  Value Description  O No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match  | 378   | ExecRestatement-     | V     | 2   | 130 | unsigned int | Code to further qualify the field Exec- |
| 28745 Crossed  Y 1 132 unsigned int    Walue   Description   101   Order add accepted   105   IOC Order accepted   212   Book or Cancel Order accepted   212   Book or Cancel Order accepted   105   IOC Order acc | 370   | Reason               | '     | _   | 150 | unsigned int |   |
| Value Description  101 Order add accepted  105 IOC Order accepted  212 Book or Cancel Order accepted  214 Crossed  Y  1  1  1  1  1  1  1  1  1  1  1  1   |       |                      |       |     |     |              |   |
| 28745 Crossed Y 1 132 unsigned int Identicates SMP involvement.  Value Description  No crossing (Order not subject to crossing)  101 Order add accepted  105 IOC Order accepted  212 Book or Cancel Order accepted  Value Description  0 No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              |   |
| 28745 Crossed  Y  1 132 unsigned int Value Description  O No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match   |       |                      |       |     |     |              |   |
| 28745 Crossed  Y  1 132 unsigned int  Value Description  O No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              |   |
| 28745 Crossed  Y 1 132 unsigned int Value Description  O No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              | · ·                                     |
| 28745 Crossed  Y  1 132 unsigned int Value Description  O No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match   |       |                      |       |     |     |              |   |
| Value Description  0 No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              |   |
| 0 No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match   | 28745 | Crossed              | Y     | 1   | 132 | unsigned int | Identicates SMP involvement.            |
| ject to crossing)  1 Cross rejected (Order subject to crossing and match   |       |                      |       |     |     |              | Value Description                       |
| 1 Cross rejected (Order subject to crossing and match  |       |                      |       |     |     |              | 0 No crossing (Order not sub-           |
| ject to crossing and match   |       |                      |       |     |     |              | ject to crossing)                       |
|  |       |                      |       |     |     |              |   |
| prevented)   |       |                      |       |     |     |              |   |
|  |       |                      |       |     |     |              | prevented)                              |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|----------------|-------|-----|-----|--------------|---|
| 1227  | ProductComplex | Y     | 1   | 133 | unsigned int | This field qualifies an instrument type |
|       |                |       |     |     |              | on Eurex.                               |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 1 Simple instrument                     |
|       |                |       |     |     |              | 2 Standard Option Strategy              |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-             |
|       |                |       |     |     |              | tegy                                    |
|       |                |       |     |     |              | 4 Volatility Strategy                   |
|       |                |       |     |     |              | 5 Futures Spread                        |
|       |                |       |     |     |              | 6 Inter-Product Spread                  |
|       |                |       |     |     |              | 7 Standard Future Strategy              |
|       |                |       |     |     |              | 8 Pack and Bundle                       |
|       |                |       |     |     |              | 9 Strip                                 |
| 1823  | Triggered      | Y     | 1   | 134 | unsigned int | Indicates if an order has been pre-     |
|       |                |       |     |     |              | viously triggered.                      |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 0 Not Triggered                         |
|       |                |       |     |     |              | 1 Triggered Stop                        |
|       |                |       |     |     |              | 2 Triggered OCO                         |
| 25016 | Pad1           | U     | 1   | 135 | Fixed String | not used                                |

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# 7.7.5 New Order Response (Lean Order)

This message confirms a New Order request for a Lean Order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |  |  |
|---|-----------------|-------|-----|-----|--------------|--|--|--|
| <messageheaderout></messageheaderout>   |                 |       |     |     |              |  |  |  |
| 9   | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |
|   |                 |       |     |     |              | cluding this field.                      |  |  |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |
|   |                 |       |     |     |              | sage layout. Value: 10102 (Execution-    |  |  |
|   |                 |       |     |     |              | Report, MsgType = 8)                     |  |  |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                 |  |  |
| <nrres< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrres<> | sponseHeaderME> |       |     |     |              |  |  |  |
| 5979  | RequestTime     | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |
| 7764  | RequestOut      | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |  |  |
|   |                 |       |     |     |              | sage to the Matching Engine              |  |  |
| 21002   | TrdRegTSTimeIn  | Υ     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |  |  |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |  |  |
| 7765  | Responseln      | Υ     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |  |  |
|   |                 |       |     |     |              | message from the Matching Engine         |  |  |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |  |  |
| 34  | MsgSeqNum       | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |  |  |
|   |                 |       |     |     |              | participant for requests sent to the ga- |  |  |
|   |                 |       |     |     |              | teway.                                   |  |  |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the    |  |  |
|   |                 |       |     |     |              | last fragment (part) of a sequence of    |  |  |
|   |                 |       |     |     |              | messages belonging to one dedicated      |  |  |
|   |                 |       |     |     |              | transaction.                             |  |  |
|   |                 |       |     |     |              | Value Description                        |  |  |
|   |                 |       |     |     |              | 1 Last Message                           |  |  |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used                                 |  |  |
|   | ge Body>        |       |     |     |              |  |  |  |
|   | OrderID         | Υ     | 8   | 64  | unsigned int | Exchange Order ID generated by Eur-      |  |  |
|   |                 |       |     |     | -            | ex System; it remains constant over      |  |  |
|   |                 |       |     |     |              | the lifetime of an order.                |  |  |
| 11  | ClOrdID         | N     | 8   | 72  | unsigned int | Client Order ID: Unique participant      |  |  |
|   |                 |       |     |     |              | defined order request identifier; used   |  |  |
|   |                 |       |     |     |              | for client order id chaining.            |  |  |
| 48  | SecurityID      | Υ     | 8   | 80  | signed int   | Instrument identifier.                   |  |  |
| 17  | ExecID          | Υ     | 8   | 88  | UTCTimestamp | Transaction timestamp.                   |  |  |

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| Tag   | Field Name       | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|------------------|-------|-----|-----|--------------|---|
| 39    | OrdStatus        | Y     | 1   | 96  | char         | Conveys the current status of an or-    |
|       |                  |       |     |     |              | der.                                    |
|       |                  |       |     |     |              | Value Description                       |
|       |                  |       |     |     |              | 0 New                                   |
|       |                  |       |     |     |              | 4 Cancelled                             |
|       |                  |       |     |     |              | 9 Suspended                             |
| 150   | ЕхесТуре         | Υ     | 1   | 97  | char         | The reason why this message was ge-     |
|       |                  |       |     |     |              | nerated.                                |
|       |                  |       |     |     |              | Value Description                       |
|       |                  |       |     |     |              | 0 New                                   |
|       |                  |       |     |     |              | 4 Cancelled                             |
|       |                  |       |     |     |              | L Triggered                             |
| 378   | ExecRestatement- | Y     | 2   | 98  | unsigned int | Code to further qualify the field Exec- |
| 0.0   | Reason           | •     | _   |     | ansigned int | Type (150) of the Execution Report      |
|       |                  |       |     |     |              | (8) message.                            |
|       |                  |       |     |     |              | Value Description                       |
|       |                  |       |     |     |              | 101 Order add accepted                  |
|       |                  |       |     |     |              | 105 IOC Order accepted                  |
|       |                  |       |     |     |              | 212 Book or Cancel Order ac-            |
|       |                  |       |     |     |              | cepted                                  |
| 28745 | Crossed          | Υ     | 1   | 100 | unsigned int | Identicates SMP involvement.            |
|       |                  |       |     |     |              | Value Description                       |
|       |                  |       |     |     |              | 0 No crossing (Order not sub-           |
|       |                  |       |     |     |              | ject to crossing)                       |
|       |                  |       |     |     |              | 1 Cross rejected (Order sub-            |
|       |                  |       |     |     |              | ject to crossing and match              |
|       |                  |       |     |     |              | prevented)                              |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|----------------|-------|-----|-----|--------------|---|
| 1227  | ProductComplex | Y     | 1   | 101 | unsigned int | This field qualifies an instrument type |
|       |                |       |     |     |              | on Eurex.                               |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 1 Simple instrument                     |
|       |                |       |     |     |              | 2 Standard Option Strategy              |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-             |
|       |                |       |     |     |              | tegy                                    |
|       |                |       |     |     |              | 4 Volatility Strategy                   |
|       |                |       |     |     |              | 5 Futures Spread                        |
|       |                |       |     |     |              | 6 Inter-Product Spread                  |
|       |                |       |     |     |              | 7 Standard Future Strategy              |
|       |                |       |     |     |              | 8 Pack and Bundle                       |
|       |                |       |     |     |              | 9 Strip                                 |
| 1823  | Triggered      | Υ     | 1   | 102 | unsigned int | Indicates if an order has been pre-     |
|       |                |       |     |     |              | viously triggered.                      |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 0 Not Triggered                         |
|       |                |       |     |     |              | 1 Triggered Stop                        |
|       |                |       |     |     |              | 2 Triggered OCO                         |
| 25016 | Pad1           | U     | 1   | 103 | Fixed String | not used                                |

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## 7.7.6 Immediate Execution Response

This message informs about the immediate execution of an incoming order or the execution of a book order due to a replace request. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag  | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |  |  |
|--|-----------------|-------|-----|-----|--------------|--|--|--|
| <messageheaderout></messageheaderout>  |                 |       |     |     |              |  |  |  |
| 9  | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |
|  |                 |       |     |     |              | cluding this field.                      |  |  |
| 28500  | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |
|  |                 |       |     |     |              | sage layout. Value: 10103 (Execution-    |  |  |
|  |                 |       |     |     |              | Report, $MsgType = 8$ )                  |  |  |
| 25017  |                 | U     | 2   | 6   | Fixed String | not used                                 |  |  |
| <respo< td=""><td>nseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<> | nseHeaderME>    |       |     |     |              |  |  |  |
| 5979   | RequestTime     | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |
| 7764   | RequestOut      | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |  |  |
|  |                 |       |     |     |              | sage to the Matching Engine              |  |  |
| 21002  | TrdRegTSTimeIn  | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |  |  |
| 21003  | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |  |  |
| 7765   | ResponseIn      | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |  |  |
|  |                 |       |     |     |              | message from the Matching Engine         |  |  |
| 52   | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |  |  |
| 34   | MsgSeqNum       | Υ     | 4   | 56  | unsigned int | Message sequence number used by the      |  |  |
|  |                 |       |     |     |              | participant for requests sent to the ga- |  |  |
|  |                 |       |     |     |              | teway.                                   |  |  |
| 5948   | PartitionID     | Y     | 2   | 60  | unsigned int | Grouping of Eurex products.              |  |  |
|  |                 |       |     |     |              | Belongs to the scope of Service          |  |  |
|  |                 |       |     |     |              | Availability and Retransmit requests.    |  |  |
| 1180   | ApplID          | Y     | 1   | 62  | unsigned int | Identifier for an ETI data stream.       |  |  |
|  |                 |       |     |     |              | Value Description                        |  |  |
|  |                 |       |     |     |              | 4 Session Data                           |  |  |
| 28704  | ApplMsgID       | N     | 16  | 63  | data         | Not set if the submitting session is not |  |  |
| 20101  | , the manager   | ''    | 10  |     | data         | the owner of the executed order.         |  |  |
| 893  | LastFragment    | Y     | 1   | 79  | unsigned int | Indicates whether this message is the    |  |  |
|  | Lustriugilient  |       | -   |     | unsigned int | last fragment (part) of a sequence of    |  |  |
|  |                 |       |     |     |              | messages belonging to one dedicated      |  |  |
|  |                 |       |     |     |              | transaction.                             |  |  |
|  |                 |       |     |     |              | Value Description                        |  |  |
|  |                 |       |     |     |              | 0 Not Last Message                       |  |  |
|  |                 |       |     |     |              | 1 Last Message                           |  |  |
|  |                 |       |     |     |              | 1 Last iviessage                         |  |  |
| < Messa  | ge Body>        |       |     |     |              |  |  |  |

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| Tag   | Field Name           | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|----------------------|-------|-----|-----|--------------|--|
| 37    | OrderID              | Υ     | 8   | 80  | unsigned int | Exchange Order ID generated by Eur-      |
|       |                      |       |     |     |              | ex System; it remains constant over      |
|       |                      |       |     |     |              | the lifetime of an order.                |
| 11    | ClOrdID              | N     | 8   | 88  | unsigned int | Client Order ID: Unique participant      |
|       |                      |       |     |     |              | defined order request identifier; used   |
|       |                      |       |     |     |              | for client order id chaining.            |
| 41    | OrigClOrdID          | N     | 8   | 96  | unsigned int | ClOrdID (11) of the last successfully    |
|       |                      |       |     |     |              | processed task (request) referring to    |
|       |                      |       |     |     |              | the specific order.                      |
| 48    | SecurityID           | Υ     | 8   | 104 | signed int   | Instrument identifier.                   |
| 17    | ExecID               | Y     | 8   | 112 | UTCTimestamp | Transaction timestamp.                   |
| 21009 | TrdRegTSEntryTime    | N     | 8   | 120 | UTCTimestamp | The entry timestamp is the time of       |
|       |                      |       |     |     |              | the creation of the order.               |
| 21008 | TrdRegTSTimePriority | N     | 8   | 128 | UTCTimestamp | Priority timestamp.                      |
| 1300  | MarketSegmentID      | Υ     | 4   | 136 | signed int   | Product identifier.                      |
| 151   | LeavesQty            | Y     | 4   | 140 | Qty          | Remaining quantity of an order. If the   |
|       |                      |       |     |     |              | order has been executed partially this   |
|       |                      |       |     |     |              | field contains the non-executed quan-    |
|       |                      |       |     |     |              | tity. A remaining size of 0 indicates    |
|       |                      |       |     |     |              | that the order is fully matched or no    |
|       |                      |       |     |     |              | longer active.                           |
| 14    | CumQty               | Y     | 4   | 144 | Qty          | Cumulated executed quantity of an or-    |
|       |                      |       |     |     |              | der.                                     |
| 84    | CxIQty               | Y     | 4   | 148 | Qty          | Total quantity cancelled for this order. |
| 30555 | NoLegExecs           | Y     | 2   | 152 | Counter      | Number of InstrmntLegExec repea-         |
|       |                      |       |     |     |              | ting group instances.                    |
| 378   | ExecRestatement-     | Y     | 2   | 154 | unsigned int | Code to further qualify the field Exec-  |
| 0.0   | Reason               |       | _   | 10. | unsigned int | Type (150) of the Execution Report       |
|       |                      |       |     |     |              | (8) message.                             |
|       |                      |       |     |     |              | ( )                                      |
|       |                      |       |     |     |              | Value Description                        |
|       |                      |       |     |     |              | 101 Order add accepted                   |
|       |                      |       |     |     |              | 102 Order modify accepted                |
|       |                      |       |     |     |              | 105 IOC Order accepted                   |
|       |                      |       |     |     |              | 181 Ownership Changed                    |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description  |
|-------|----------------|-------|-----|-----|--------------|--|
| 1227  | ProductComplex | Υ     | 1   | 156 | unsigned int | This field qualifies an instrument type              |
|       |                |       |     |     |              | on Eurex.  |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | 1 Simple instrument                                  |
|       |                |       |     |     |              | 2 Standard Option Strategy                           |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-                          |
|       |                |       |     |     |              | tegy   |
|       |                |       |     |     |              | 4 Volatility Strategy                                |
|       |                |       |     |     |              | 5 Futures Spread                                     |
|       |                |       |     |     |              | 6 Inter-Product Spread                               |
|       |                |       |     |     |              | 7 Standard Future Strategy                           |
|       |                |       |     |     |              | 8 Pack and Bundle                                    |
|       |                |       |     |     |              | 9 Strip  |
| 39    | OrdStatus      | Y     | 1   | 157 | char         | Conveys the current status of an order.              |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | 1 Partially filled                                   |
|       |                |       |     |     |              | 2 Filled   |
|       |                |       |     |     |              | 4 Cancelled  |
| 150   | ЕхесТуре       | Y     | 1   | 158 | char         | The reason why this message was generated.           |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | F Trade  |
| 1823  | Triggered      | Y     | 1   | 159 | unsigned int | Indicates if an order has been previously triggered. |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | 0 Not Triggered                                      |
|       |                |       |     |     |              | 1 Triggered Stop                                     |
|       |                |       |     |     |              | 2 Triggered OCO                                      |
| 28745 | Crossed        | Y     | 1   | 160 | unsigned int | Identicates SMP involvement.                         |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | 0 No crossing (Order not sub-                        |
|       |                |       |     |     |              | ject to crossing)                                    |
|       |                |       |     |     |              | 1 Cross rejected (Order sub-                         |
|       |                |       |     |     |              | ject to crossing and match                           |
|       |                |       |     |     |              | prevented)   |
| 1362  | NoFills        | Υ     | 1   | 161 | Counter      | Specifies the number of partial fills in-            |
|       |                |       |     |     |              | cluded in this Execution Report.                     |
| 25021 | Pad6           | U     | 6   | 162 | Fixed String | not used   |

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| Tag  | Field Name        | Req'd | Len | Ofs | Data Type    | Description                               |
|--|-------------------|-------|-----|-----|--------------|---|
| <fillsgr< td=""><td>rp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-100, Record counter:</td></fillsgr<>         | rp>               |       |     |     |              | Cardinality: 0-100, Record counter:       |
|  |                   |       |     |     |              | NoFills                                   |
| 1364   | >FillPx           | Y     | 8   | 168 | PriceType    | Price of Fill.                            |
| 1365   | >FillQty          | Y     | 4   | 176 | Qty          | Quantity of Fill.                         |
| 28708  | >FillMatchID      | Y     | 4   | 180 | unsigned int | Unique identifier for each price level    |
|  |                   |       |     |     |              | (match step) of a match event; it is      |
|  |                   |       |     |     |              | used for public trade reporting.          |
| 1363   | >FillExecID       | Y     | 4   | 184 | signed int   | Private identifier of an order match      |
|  |                   |       |     |     |              | step event, which can be reconciled       |
|  |                   |       |     |     |              | with the field SideTradeID (1506) in      |
|  |                   |       |     |     |              | the Trade Notification.                   |
| 1443   | >FillLiquidityInd | N     | 1   | 188 | unsigned int | Indicates whether the order added or      |
|  |                   |       |     |     |              | removed liquidity. Required only for      |
|  |                   |       |     |     |              | execution reports generated for fills.    |
|  |                   |       |     |     |              | Value Description                         |
|  |                   |       |     |     |              | 2 Removed Liquidity                       |
|  |                   |       |     |     |              | 5 Triggered Stop Order                    |
| 25018  | >Pad3             | U     | 3   | 189 | Fixed String | not used                                  |
| <instrm< td=""><td>ntLegExecGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-600, Record counter:</td></instrm<> | ntLegExecGrp>     |       |     |     |              | Cardinality: 0-600, Record counter:       |
|  |                   |       |     |     |              | NoLegExecs                                |
| 602  | >LegSecurityID    | Y     | 8   | 0   | signed int   | Instrument identifier of the leg securi-  |
|  |                   |       |     |     |              | ty.                                       |
| 637  | >LegLastPx        | Y     | 8   | 8   | PriceType    | Price of this leg fill.                   |
| 1418   | >LegLastQty       | Y     | 4   | 16  | Qty          | Quantity executed in this leg fill.       |
| 1893   | >LegExecID        | Y     | 4   | 20  | signed int   | Private identifier of a leg match step,   |
|  |                   |       |     |     |              | which can be reconciled with the field    |
|  |                   |       |     |     |              | SideTradeID (1506) in the Trade No-       |
|  |                   |       |     |     |              | tification.                               |
| 624  | >LegSide          | Y     | 1   | 24  | unsigned int | The side of the individual leg of a stra- |
|  |                   |       |     |     |              | tegy as defined in its signature.         |
|  |                   |       |     |     |              | Value Description                         |
|  |                   |       |     |     |              | 1 Buy                                     |
|  |                   |       |     |     |              | 2 Sell                                    |
| 25010  | >NoFillsIndex     | Y     | 1   | 25  | unsigned int | Reference to the corresponding Fills-     |
|  |                   |       |     |     |              | Grp repeating group instance.             |
| 25021  | >Pad6             | U     | 6   | 26  | Fixed String | not used                                  |

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### 7.7.7 Book Order Execution

This message informs about the execution of a resting book order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag  | Field Name              | Req'd | Len | Ofs | Data Type    | Description                            |  |  |
|--|-------------------------|-------|-----|-----|--------------|--|--|--|
| <messageheaderout></messageheaderout>  |                         |       |     |     |              |  |  |  |
| 9  | BodyLen                 | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-   |  |  |
|  |                         |       |     |     |              | cluding this field.                    |  |  |
| 28500  | TemplateID              | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes- |  |  |
|  |                         |       |     |     |              | sage layout. Value: 10104 (Execution-  |  |  |
|  |                         |       |     |     |              | Report, MsgType = 8)                   |  |  |
| 25017  | Pad2                    | U     | 2   | 6   | Fixed String | not used                               |  |  |
| <rbch< td=""><td>eaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<> | eaderME>                |       |     |     |              |  |  |  |
| 21003  | ${\sf TrdRegTSTimeOut}$ | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.         |  |  |
| 25043  | NotificationIn          | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a no-   |  |  |
|  |                         |       |     |     |              | tification message from the Matching   |  |  |
|  |                         |       |     |     |              | Engine                                 |  |  |
| 52   | SendingTime             | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.        |  |  |
| 28727  | ApplSubID               | U     | 4   | 32  | unsigned int | not used                               |  |  |
| 5948   | PartitionID             | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.            |  |  |
|  |                         |       |     |     |              | Belongs to the scope of Service        |  |  |
|  |                         |       |     |     |              | Availability and Retransmit requests.  |  |  |
| 28704  | ApplMsgID               | Y     | 16  | 38  | data         | Application message identifier assi-   |  |  |
|  |                         |       |     |     |              | gned to an order or quote event.       |  |  |
| 1180   | ApplID                  | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.     |  |  |
|  |                         |       |     |     |              | Value Description                      |  |  |
|  |                         |       |     |     |              | 4 Session Data                         |  |  |
| 1352   | ApplResendFlag          | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.    |  |  |
|  |                         |       |     |     |              |  |  |  |
|  |                         |       |     |     |              | Value Description  0 False             |  |  |
|  |                         |       |     |     |              |  |  |  |
|  |                         |       |     |     |              | 1 True                                 |  |  |
| 893  | LastFragment            | Y     | 1   | 56  | unsigned int | Indicates whether this message is the  |  |  |
|  |                         |       |     |     |              | last fragment (part) of a sequence of  |  |  |
|  |                         |       |     |     |              | messages belonging to one dedicated    |  |  |
|  |                         |       |     |     |              | transaction.                           |  |  |
|  |                         |       |     |     |              | Value Description                      |  |  |
|  |                         |       |     |     |              | 0 Not Last Message                     |  |  |
|  |                         |       |     |     |              | 1 Last Message                         |  |  |
| 25022  | Pad7                    | U     | 7   | 57  | Fixed String | not used                               |  |  |
| 20022  | I au i                  |       |     |     |              |  |  |  |

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| Tag   | Field Name       | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|------------------|-------|-----|-----|--------------|--|
| 37    | OrderID          | Υ     | 8   | 64  | unsigned int | Exchange Order ID generated by Eur-      |
|       |                  |       |     |     |              | ex System; it remains constant over      |
|       |                  |       |     |     |              | the lifetime of an order.                |
| 11    | ClOrdID          | N     | 8   | 72  | unsigned int | Client Order ID: Unique participant      |
|       |                  |       |     |     |              | defined order request identifier; used   |
|       |                  |       |     |     |              | for client order id chaining.            |
| 41    | OrigClOrdID      | N     | 8   | 80  | unsigned int | ClOrdID (11) of the last successfully    |
|       |                  |       |     |     |              | processed task (request) referring to    |
|       |                  |       |     |     |              | the specific order.                      |
| 48    | SecurityID       | Υ     | 8   | 88  | signed int   | Instrument identifier.                   |
| 17    | ExecID           | Υ     | 8   | 96  | UTCTimestamp | Transaction timestamp.                   |
| 1300  | MarketSegmentID  | Υ     | 4   | 104 | signed int   | Product identifier.                      |
| 151   | LeavesQty        | Υ     | 4   | 108 | Qty          | Remaining quantity of an order. If the   |
|       |                  |       |     |     |              | order has been executed partially this   |
|       |                  |       |     |     |              | field contains the non-executed quan-    |
|       |                  |       |     |     |              | tity. A remaining size of 0 indicates    |
|       |                  |       |     |     |              | that the order is fully matched or no    |
|       |                  |       |     |     |              | longer active.                           |
| 14    | CumQty           | Y     | 4   | 112 | Qty          | Cumulated executed quantity of an or-    |
|       |                  |       |     |     |              | der.                                     |
| 84    | CxlQty           | Y     | 4   | 116 | Qty          | Total quantity cancelled for this order. |
| 30555 | NoLegExecs       | Y     | 2   | 120 | Counter      | Number of InstrmntLegExec repea-         |
|       |                  |       |     |     |              | ting group instances.                    |
| 378   | ExecRestatement- | Y     | 2   | 122 | unsigned int | Code to further qualify the field Exec-  |
|       | Reason           |       |     |     |              | Type (150) of the Execution Report       |
|       |                  |       |     |     |              | (8) message.                             |
|       |                  |       |     |     |              |  |
|       |                  |       |     |     |              | Value Description                        |
|       |                  |       |     |     |              | 108 Book Order executed                  |
|       |                  |       |     |     |              | 135 Market Order triggered and executed  |
|       |                  |       |     |     |              | 164 One-cancels-the-other Or-            |
|       |                  |       |     |     |              | der has been triggered                   |
|       |                  |       |     |     |              | 172 Stop Order has been trigge-          |
|       |                  |       |     |     |              | red                                      |
|       |                  |       |     |     |              | 150 Closing Auction Order has            |
|       |                  |       |     |     |              | been inactivated                         |
|       |                  |       |     |     |              | 199 Pending order cancellation           |
|       |                  |       |     |     |              | executed (end of FREEZE                  |
|       |                  |       |     |     |              | state)                                   |
|       |                  |       |     |     |              | 181 Ownership Changed                    |
|       |                  |       |     |     |              | 101 Ownership Changed                    |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                               |
|-------|----------------|-------|-----|-----|--------------|---|
| 1227  | ProductComplex | Υ     | 1   | 124 | unsigned int | This field qualifies an instrument type   |
|       |                |       |     |     |              | on Eurex.                                 |
|       |                |       |     |     |              | Value Description                         |
|       |                |       |     |     |              | 1 Simple instrument                       |
|       |                |       |     |     |              | 2 Standard Option Strategy                |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-               |
|       |                |       |     |     |              | tegy                                      |
|       |                |       |     |     |              | 4 Volatility Strategy                     |
|       |                |       |     |     |              | 5 Futures Spread                          |
|       |                |       |     |     |              | 6 Inter-Product Spread                    |
|       |                |       |     |     |              | 7 Standard Future Strategy                |
|       |                |       |     |     |              | 8 Pack and Bundle                         |
|       |                |       |     |     |              | 9 Strip                                   |
| 39    | OrdStatus      | Υ     | 1   | 125 | char         | Conveys the current status of an or-      |
|       |                |       |     |     |              | der.                                      |
|       |                |       |     |     |              | Value Description                         |
|       |                |       |     |     |              | 1 Partially filled                        |
|       |                |       |     |     |              | 2 Filled                                  |
|       |                |       |     |     |              | 9 Suspended                               |
|       |                |       |     |     |              | 4 Cancelled                               |
| 150   | ExecType       | Y     | 1   | 126 | <br>char     | The reason why this message was ge-       |
| 100   | Lxcc Type      |       | -   |     | cital        | nerated.                                  |
|       |                |       |     |     |              | Value Description                         |
|       |                |       |     |     |              | F Trade                                   |
|       |                |       |     |     |              | 9 Suspended                               |
| 1000  |                |       |     | 107 |              |   |
| 1823  | Triggered      | Y     | 1   | 127 | unsigned int | Indicates if an order has been pre-       |
|       |                |       |     |     |              | viously triggered.                        |
|       |                |       |     |     |              | Value Description                         |
|       |                |       |     |     |              | 0 Not Triggered                           |
|       |                |       |     |     |              | 1 Triggered Stop                          |
|       |                |       |     |     |              | 2 Triggered OCO                           |
| 28745 | Crossed        | Y     | 1   | 128 | unsigned int | Identicates SMP involvement.              |
|       |                |       |     |     |              | Value Description                         |
|       |                |       |     |     |              | 0 No crossing (Order not sub-             |
|       |                |       |     |     |              | ject to crossing)                         |
|       |                |       |     |     |              | 1 Cross rejected (Order sub-              |
|       |                |       |     |     |              | ject to crossing and match                |
|       |                |       |     |     |              | prevented)                                |
| 1362  | NoFills        | Y     | 1   | 129 | Counter      | Specifies the number of partial fills in- |
|       |                |       | _   | -   | 322          | cluded in this Execution Report.          |
|       |                |       |     |     |              |   |

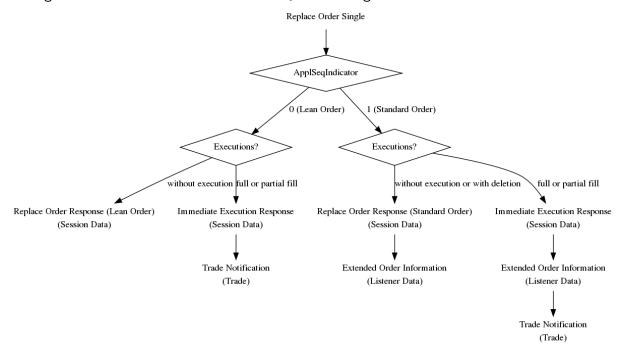
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| Tag   | Field Name        | Req'd | Len | Ofs | Data Type    | Description   |
|---|-------------------|-------|-----|-----|--------------|---|
| 25021   | Pad6              | U     | 6   | 130 | Fixed String | not used  |
| <fillsgi< td=""><td>/p&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-100, Record counter: NoFills</td></fillsgi<>            | /p>               |       |     |     |              | Cardinality: 0-100, Record counter: NoFills   |
| 1364  | >FillPx           | Y     | 8   | 136 | PriceType    | Price of Fill.  |
| 1365  | >FillQty          | Υ     | 4   | 144 | Qty          | Quantity of Fill.   |
| 28708   | >FillMatchID      | Y     | 4   | 148 | unsigned int | Unique identifier for each price level (match step) of a match event; it is used for public trade reporting.  |
| 1363  | >FillExecID       | Y     | 4   | 152 | signed int   | Private identifier of an order match step event, which can be reconciled with the field SideTradeID (1506) in the Trade Notification.   |
| 1443  | >FillLiquidityInd | N     | 1   | 156 | unsigned int | Indicates whether the order added or removed liquidity. Required only for execution reports generated for fills.  Value Description  1 Added Liquidity  5 Triggered Stop Order  6 Triggered OCO Order  7 Triggered Market Order |
| 25018   | >Pad3             | U     | 3   | 157 | Fixed String | not used  |
| <instrm< td=""><td>ntLegExecGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-600, Record counter: NoLegExecs</td></instrm<> | ntLegExecGrp>     |       |     |     |              | Cardinality: 0-600, Record counter: NoLegExecs  |
| 602   | >LegSecurityID    | Y     | 8   | 0   | signed int   | Instrument identifier of the leg security.  |
| 637   | >LegLastPx        | Υ     | 8   | 8   | PriceType    | Price of this leg fill.   |
| 1418  | >LegLastQty       | Υ     | 4   | 16  | Qty          | Quantity executed in this leg fill.   |
| 1893  | J T               | Y     | 4   | 20  | signed int   | Private identifier of a leg match step, which can be reconciled with the field SideTradeID (1506) in the Trade Notification.  |
| 624   | >LegSide          | Y     | 1   | 24  | unsigned int | The side of the individual leg of a strategy as defined in its signature.  Value Description  1 Buy 2 Sell  |
| 25010   | >NoFillsIndex     | Y     | 1   | 25  | unsigned int | Reference to the corresponding Fills-Grp repeating group instance.  |
|   |                   |       |     |     |              |   |

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### 7.7.8 Replace Order Single

This message is used to replace an existing order in a simple instrument. For more details, please refer to chapter 4.6.3 Modification and Total Order Quantity Modification. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name                          | Req'd | Len | Ofs | Data Type    | Description                               |  |  |  |  |
|---|-------------------------------------|-------|-----|-----|--------------|---|--|--|--|--|
| < Messa   | <messageheaderin></messageheaderin> |       |     |     |              |   |  |  |  |  |
| 9   | BodyLen                             | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-      |  |  |  |  |
|   |                                     |       |     |     |              | cluding this field.                       |  |  |  |  |
| 28500   | TemplateID                          | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-    |  |  |  |  |
|   |                                     |       |     |     |              | sage layout. Value: 10106 (Order-         |  |  |  |  |
|   |                                     |       |     |     |              | ${\sf CancelReplaceRequest,\ MsgType}\ =$ |  |  |  |  |
|   |                                     |       |     |     |              | G)  |  |  |  |  |
| 25028   | NetworkMsgID                        | U     | 8   | 6   | Fixed String | not used                                  |  |  |  |  |
| 25017   | Pad2                                | U     | 2   | 14  | Fixed String | not used                                  |  |  |  |  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>                           |       |     |     |              |   |  |  |  |  |
| 34  | MsgSeqNum                           | Υ     | 4   | 16  | unsigned int | Message sequence number used by the       |  |  |  |  |
|   |                                     |       |     |     |              | participant for requests sent to the ga-  |  |  |  |  |
|   |                                     |       |     |     |              | teway.                                    |  |  |  |  |
| 50  | SenderSubID                         | Υ     | 4   | 20  | unsigned int | User ID.                                  |  |  |  |  |
| < Messa   | ge Body>                            |       |     |     |              |   |  |  |  |  |
| 37  | OrderID                             | N     | 8   | 24  | unsigned int | Exchange Order ID generated by Eur-       |  |  |  |  |
|   |                                     |       |     |     |              | ex System; it remains constant over       |  |  |  |  |
|   |                                     |       |     |     |              | the lifetime of an order.                 |  |  |  |  |
| 11  | ClOrdID                             | N     | 8   | 32  | unsigned int | Client Order ID: Unique participant       |  |  |  |  |
|   |                                     |       |     |     |              | defined order request identifier; used    |  |  |  |  |
|   |                                     |       |     |     |              | for client order id chaining.             |  |  |  |  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|------------------------|-------|-----|-----|--------------|--|
| 41    | OrigClOrdID            | N     | 8   | 40  | unsigned int | ClOrdID (11) of the last successfully    |
|       |                        |       |     |     |              | processed task (request) referring to    |
|       |                        |       |     |     |              | the specific order.                      |
| 44    | Price                  | N     | 8   | 48  | PriceType    | Limit price. Required if OrdType (40)    |
|       |                        |       |     |     |              | is Limit (2) or Stop Limit (4).          |
| 99    | StopPx                 | N     | 8   | 56  | PriceType    | Stop price. Required if OrdType (40)     |
|       |                        |       |     |     |              | is Stop (3) or used as the trigger price |
|       |                        |       |     |     |              | for an One-cancels-the-other order.      |
| 376   | ComplianceID           | N     | 8   | 64  | unsigned int | For participants to uniquely identify    |
|       |                        |       |     |     |              | trading strategies                       |
| 38    | OrderQty               | Y     | 4   | 72  | Qty          | Total Order Quantity.                    |
| 432   | ExpireDate             | N     | 4   | 76  | LocalMktDate | Date of order expiry. Required if Ti-    |
|       |                        |       |     |     |              | meInForce $(59) = 6$ .                   |
| 1300  | MarketSegmentID        | Y     | 4   | 80  | signed int   | Product identifier.                      |
| 30048 | SimpleSecurityID       | Y     | 4   | 84  | unsigned int | Instrument identifier for simple instru- |
|       |                        |       |     |     |              | ments. Should be filled with the 4       |
|       |                        |       |     |     |              | least significant bytes of SecurityID    |
|       |                        |       |     |     |              | (48) provided in Eurex RDI and Eurex     |
|       |                        |       |     |     |              | RDF reference data.                      |
| 28744 | MatchInstCrossID       | N     | 4   | 88  | unsigned int | Self Match Prevention ID.                |
| 20655 | TargetPartyIDSessionID | N     | 4   | 92  | unsigned int | Session ID.                              |
| 20096 | PartyIDTakeUpTrading-  | N     | 5   | 96  | Fixed String | Take-up Member Short Name.               |
| 20090 | Firm                   | IN    | 5   | 90  | Tixed String | Valid characters: A-Z,0-9,\x20           |
|       | PartyIDOrder-          |       |     |     |              | Valid Characters. A-2,0-9, \x20          |
| 20013 | OriginationFirm        | N     | 7   | 101 | Fixed String | External Member ID.                      |
|       | Origination inii       |       |     |     |              | Valid characters: A-Z,0-9,\x20           |
| 20032 | PartyIDBeneficiary     | N     | 9   | 108 | Fixed String | Final Beneficiary                        |
|       |                        |       |     |     |              | Valid characters: A-Z,0-9,\x20           |
| 28703 | ApplSeqIndicator       | Y     | 1   | 117 | unsigned int | Indicates if the order is a Lean Order   |
|       |                        |       |     |     |              | or a Standard Order. Application se-     |
|       |                        |       |     |     |              | quencing is limited for Lean Orders.     |
|       |                        |       |     |     |              | Value Description                        |
|       |                        |       |     |     |              | 0 No Recovery Required                   |
|       |                        |       |     |     |              | 1 Recovery Required                      |
| 54    | Side                   | Y     | 1   | 118 | unsigned int | Side of the order.                       |
|       |                        |       |     |     |              | Value Description                        |
|       |                        |       |     |     |              | 1 Buy                                    |
|       |                        |       |     |     |              | 2 Sell                                   |
|       |                        |       |     |     |              |  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|------------------------|-------|-----|-----|--------------|---|
| 40    | OrdType                | Y     | 1   | 119 | unsigned int | Order type.                             |
|       |                        |       |     |     |              | Value Description                       |
|       |                        |       |     |     |              | 1 Market                                |
|       |                        |       |     |     |              | 2 Limit                                 |
|       |                        |       |     |     |              | 3 Stop                                  |
|       |                        |       |     |     |              | 4 Stop Limit                            |
| 28710 | PriceValidityCheckType | Y     | 1   | 120 | unsigned int | Indicator how price validity check      |
|       |                        |       |     |     |              | should be performed by the exchange     |
|       |                        |       |     |     |              | (see Price Reasonability Check).        |
|       |                        |       |     |     |              | Value Description                       |
|       |                        |       |     |     |              | 0 None                                  |
|       |                        |       |     |     |              | 1 Optional                              |
|       |                        |       |     |     |              | 2 Mandatory                             |
| 59    | TimeInForce            | Y     | 1   | 121 | unsigned int | Execution and trading restriction pa-   |
|       |                        |       |     |     | J            | rameters supported by Eurex.            |
|       |                        |       |     |     |              | Value Description                       |
|       |                        |       |     |     |              | 0 Day (GFD)                             |
|       |                        |       |     |     |              | 1 Good Till Cancelled (GTC)             |
|       |                        |       |     |     |              | - Standard Orders only                  |
|       |                        |       |     |     |              | 3 Immediate or Cancel (IOC)             |
|       |                        |       |     |     |              | 6 Good Till Date (GTD) -                |
|       |                        |       |     |     |              | Standard Orders only                    |
| 18    | ExecInst               | Y     | 1   | 122 | unsigned int | Instructions for order handling.        |
|       |                        |       |     |     |              | Value Description                       |
|       |                        |       |     |     |              | 1 Persistent Order (FIX value           |
|       |                        |       |     |     |              | 'H')                                    |
|       |                        |       |     |     |              | 2 Non-persistent Order (FIX             |
|       |                        |       |     |     |              | value 'Q')                              |
|       |                        |       |     |     |              | 5 Persistent and Book or                |
|       |                        |       |     |     |              | Cancel order (FIX value 'H              |
|       |                        |       |     |     |              | 6')                                     |
|       |                        |       |     |     |              | 6 Non-persistent and Book or            |
|       |                        |       |     |     |              | Cancel order (FIX value 'Q 6')          |
|       |                        |       |     |     |              |   |
| 625   | TradingSessionSubID    | N     | 1   | 123 | unsigned int | Marks a certain order as a closing auc- |
|       |                        |       |     |     |              | tion one.                               |
|       |                        |       |     |     |              | Value Description                       |
|       |                        |       |     |     |              | 4 Closing or closing auction            |

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| Tag   | Field Name                  | Req'd | Len | Ofs | Data Type    | Description   |
|-------|-----------------------------|-------|-----|-----|--------------|---|
| 1815  | TradingCapacity             | Y     | 1   | 124 | unsigned int | This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.    Value   Description                             |
| 1     | Account                     | N     | 2   | 125 | Fixed String | Accounts to book trades and keep positions on. Valid characters: 1-9,\x41,\x47,\x4D, \x50   |
| 20038 | PartyIDPosition-<br>Account | N     | 20  | 127 | Fixed String | 'Flexible Account' information. Valid characters: $\x20,\x30-\x39,\x41-\x5A$  |
| 77    | PositionEffect              | Y     | 1   | 147 | char         | Field is used for Eurex position management purposes and indicates whether the order is submitted to open or close a position.  Value Description  C Close O Open                   |
| 28743 | OwnershipIndicator          | Y     | 1   | 148 | unsigned int | Value Description  0 Do not change ownership  1 Change ownership to executing party (User ID)   |
| 20075 | PartyIDLocationID           | N     | 2   | 149 | Fixed String | Country code.  Valid characters: \x01-\x7E  |
| 1031  | CustOrderHandlingInst       | N     | 1   | 151 | Fixed String | Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier. The field is for participant use only.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |

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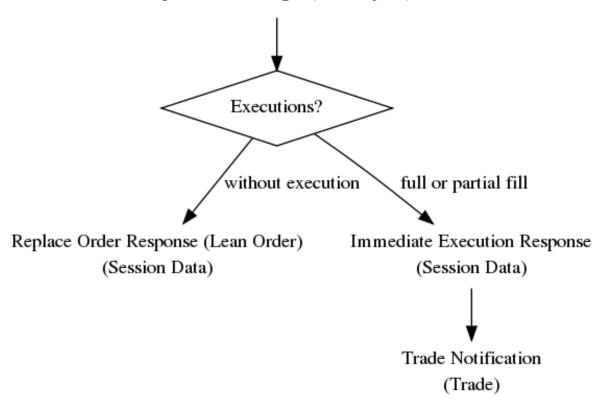
| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|----------------|-------|-----|-----|--------------|--|
| 2404  | ComplianceText | N     | 20  | 152 | Fixed String | This field is used to provide additio-   |
|       |                |       |     |     |              | nal regulatory information (according    |
|       |                |       |     |     |              | to respective rules & regs, circulars    |
|       |                |       |     |     |              | and/or bilateral coordination between    |
|       |                |       |     |     |              | participant and Trading Surveillance     |
|       |                |       |     |     |              | Office).                                 |
|       |                |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |                |       |     |     |              | \x7D,\x7E                                |
| 25007 | FreeText1      | N     | 12  | 172 | Fixed String | First free-format text field for trader- |
|       |                |       |     |     |              | specific or customer-related com-        |
|       |                |       |     |     |              | ments.Should not be used in conjunc-     |
|       |                |       |     |     |              | tion with External Member and Final      |
|       |                |       |     |     |              | Beneficiary used for trading KRX or      |
|       |                |       |     |     |              | TAIFEX products.                         |
|       |                |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |                |       |     |     |              | \x7D,\x7E                                |
| 25008 | FreeText2      | N     | 12  | 184 | Fixed String | Second free-format text field for        |
|       |                |       |     |     |              | trader-specific or customer-related      |
|       |                |       |     |     |              | comments.                                |
|       |                |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |                |       |     |     |              | \x7D,\x7E                                |
| 25009 | FreeText3      | N     | 12  | 196 | Fixed String | Third free-format text field for trader- |
|       |                |       |     |     |              | specific or customer-related com-        |
|       |                |       |     |     |              | ments. Should not be used in conjunc-    |
|       |                |       |     |     |              | tion with External Member and Final      |
|       |                |       |     |     |              | Beneficiary used for trading TAIFEX      |
|       |                |       |     |     |              | products.                                |
|       |                |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|       |                |       |     |     |              | \x7D,\x7E                                |

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### 7.7.9 Replace Order Single (short layout)

This short order message layout is used by the participant to replace an order in a simple instrument. Selected order attributes are implicitly set. For more details, please refer to chapter 4.6.8 Short Order Message Layouts. This message is sent to the service "Order and Quote Management".

## Replace Order Single (short layout)



| Tag  | Field Name                          | Req'd | Len | Ofs | Data Type    | Description                               |  |  |  |
|--|-------------------------------------|-------|-----|-----|--------------|---|--|--|--|
| <messa,< td=""><td colspan="9"><messageheaderin></messageheaderin></td></messa,<>          | <messageheaderin></messageheaderin> |       |     |     |              |   |  |  |  |
| 9  | BodyLen                             | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-      |  |  |  |
|  |                                     |       |     |     |              | cluding this field.                       |  |  |  |
| 28500  | TemplateID                          | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-    |  |  |  |
|  |                                     |       |     |     |              | sage layout. Value: 10126 (Order-         |  |  |  |
|  |                                     |       |     |     |              | ${\sf CancelReplaceRequest,\ MsgType}\ =$ |  |  |  |
|  |                                     |       |     |     |              | G)  |  |  |  |
| 25028  | NetworkMsgID                        | U     | 8   | 6   | Fixed String | not used                                  |  |  |  |
| 25017  | Pad2                                | U     | 2   | 14  | Fixed String | not used                                  |  |  |  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>  | stHeader>                           |       |     |     |              |   |  |  |  |
| 34   | MsgSeqNum                           | Y     | 4   | 16  | unsigned int | Message sequence number used by the       |  |  |  |
|  |                                     |       |     |     |              | participant for requests sent to the ga-  |  |  |  |
|  |                                     |       |     |     |              | teway.                                    |  |  |  |
| 50   | SenderSubID                         | Y     | 4   | 20  | unsigned int | User ID.                                  |  |  |  |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<> | ge Body>                            |       |     |     |              |   |  |  |  |

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| Tag   | Field Name                  | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|-----------------------------|-------|-----|-----|--------------|--|
| 11    | ClOrdID                     | N     | 8   | 24  | unsigned int | Client Order ID: Unique participant      |
|       |                             |       |     |     |              | defined order request identifier; used   |
|       |                             |       |     |     |              | for client order id chaining.            |
| 41    | OrigClOrdID                 | Y     | 8   | 32  | unsigned int | CIOrdID (11) of the last successfully    |
|       |                             |       |     |     |              | processed task (request) referring to    |
|       |                             |       |     |     |              | the specific order.                      |
| 44    | Price                       | Y     | 8   | 40  | PriceType    | Limit price. Required if OrdType (40)    |
|       |                             |       |     |     |              | is Limit (2) or Stop Limit (4).          |
| 376   | ComplianceID                | N     | 8   | 48  | unsigned int | For participants to uniquely identify    |
|       |                             |       |     |     |              | trading strategies                       |
| 38    | OrderQty                    | Y     | 4   | 56  | Qty          | Total Order Quantity.                    |
| 30048 | SimpleSecurityID            | Y     | 4   | 60  | unsigned int | Instrument identifier for simple instru- |
|       |                             |       |     |     |              | ments. Should be filled with the 4       |
|       |                             |       |     |     |              | least significant bytes of SecurityID    |
|       |                             |       |     |     |              | (48) provided in Eurex RDI and Eurex     |
|       |                             |       |     |     |              | RDF reference data.                      |
|       |                             |       |     |     |              |  |
| 28744 | MatchInstCrossID            | N     | 4   | 64  | unsigned int | Self Match Prevention ID.                |
| 25033 | EnrichmentRuleID            | N     | 2   | 68  | unsigned int | Identifies an enrichment rule            |
| 54    | Side                        | Y     | 1   | 70  | unsigned int | Side of the order.                       |
|       |                             |       |     |     |              | Value Description                        |
|       |                             |       |     |     |              | 1 Buy                                    |
|       |                             |       |     |     |              | 2 Sell                                   |
| 28710 | PriceValidityCheckType      | Y     | 1   | 71  | unsigned int | Indicator how price validity check       |
| 20110 | Trice variancy encercity pe | •     | -   |     | ansigned int | should be performed by the exchange      |
|       |                             |       |     |     |              | (see Price Reasonability Check).         |
|       |                             |       |     |     |              |  |
|       |                             |       |     |     |              | Value Description                        |
|       |                             |       |     |     |              | 0 None                                   |
|       |                             |       |     |     |              | 1 Optional                               |
|       |                             |       |     |     |              | 2 Mandatory                              |
| 59    | TimeInForce                 | Υ     | 1   | 72  | unsigned int | Execution and trading restriction pa-    |
|       |                             |       |     |     |              | rameters supported by Eurex.             |
|       |                             |       |     |     |              | Value Description                        |
|       |                             |       |     |     |              | 0 Day (GFD)                              |
|       |                             |       |     |     |              | 3 Immediate or Cancel (IOC)              |
|       |                             |       |     |     |              | [  |

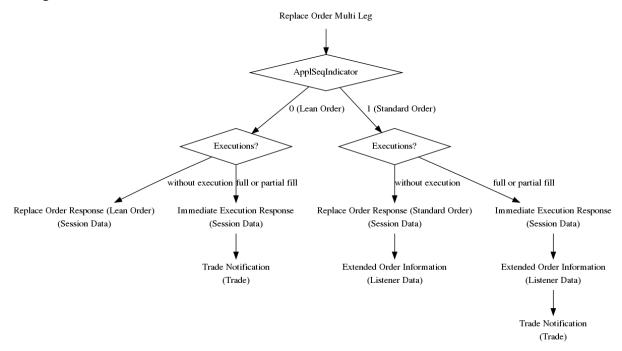
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|                                 |                    |
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| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                            |
|-------|-----------------|-------|-----|-----|--------------|--|
| 18    | ExecInst        | Y     | 1   | 73  | unsigned int | Instructions for order handling.       |
|       |                 |       |     |     |              | Value Description                      |
|       |                 |       |     |     |              | 2 Non-persistent Order (FIX            |
|       |                 |       |     |     |              | value 'Q')                             |
|       |                 |       |     |     |              | 6 Non-persistent and Book or           |
|       |                 |       |     |     |              | Cancel order (FIX value 'Q             |
|       |                 |       |     |     |              | 6')                                    |
| 1815  | TradingCapacity | Y     | 1   | 74  | unsigned int | This field designates if the trader is |
|       |                 |       |     |     |              | acting in the capacity of agent, tra-  |
|       |                 |       |     |     |              | ding for its own account or acting as  |
|       |                 |       |     |     |              | a market maker.                        |
|       |                 |       |     |     |              | Value Description                      |
|       |                 |       |     |     |              | 1 Customer (Agency)                    |
|       |                 |       |     |     |              | 5 Principal (Proprietary)              |
|       |                 |       |     |     |              | 6 MarketMaker                          |
| 25020 | Pad5            | U     | 5   | 75  | Fixed String | not used                               |

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#### 7.7.10 Replace Order Multi Leg

This message is used to replace a multi leg order (previously submitted using the New Order Multi Leg message). For more details, please refer to chapter 4.6.3 Modification and Total Order Quantity Modification. This message is sent to the service "Order and Quote Management".



| Tag     | Field Name   | Req'd | Len | Ofs | Data Type    | Description                                    |
|---------|--------------|-------|-----|-----|--------------|--|
| < Messa | geHeaderIn>  |       |     |     |              |  |
| 9       | BodyLen      | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-           |
|         |              |       |     |     |              | cluding this field.                            |
| 28500   | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-         |
|         |              |       |     |     |              | sage layout. Value: 10114 (Multileg-           |
|         |              |       |     |     |              | ${\sf OrderCancelReplace,MsgType} = {\sf AC)}$ |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                                       |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                                       |
| < Reque | stHeader>    |       |     |     |              |  |
| 34      | MsgSeqNum    | Υ     | 4   | 16  | unsigned int | Message sequence number used by the            |
|         |              |       |     |     |              | participant for requests sent to the ga-       |
|         |              |       |     |     |              | teway.   |
| 50      | SenderSubID  | Υ     | 4   | 20  | unsigned int | User ID.                                       |
| < Messa | ge Body>     |       |     |     |              |  |
| 37      | OrderID      | N     | 8   | 24  | unsigned int | Exchange Order ID generated by Eur-            |
|         |              |       |     |     |              | ex System; it remains constant over            |
|         |              |       |     |     |              | the lifetime of an order.                      |
| 11      | ClOrdID      | N     | 8   | 32  | unsigned int | Client Order ID: Unique participant            |
|         |              |       |     |     |              | defined order request identifier; used         |
|         |              |       |     |     |              | for client order id chaining.                  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type     | Description                             |
|-------|------------------------|-------|-----|-----|---------------|---|
| 41    | OrigClOrdID            | N     | 8   | 40  | unsigned int  | ClOrdID (11) of the last successfully   |
|       |                        |       |     |     |               | processed task (request) referring to   |
|       |                        |       |     |     |               | the specific order.                     |
| 48    | SecurityID             | Υ     | 8   | 48  | signed int    | Instrument identifier.                  |
| 44    | Price                  | Υ     | 8   | 56  | PriceType     | Limit price. Required if OrdType (40)   |
|       |                        |       |     |     |               | is Limit (2) or Stop Limit (4).         |
| 376   | ComplianceID           | N     | 8   | 64  | unsigned int  | For participants to uniquely identify   |
|       |                        |       |     |     |               | trading strategies                      |
| 1300  | MarketSegmentID        | Υ     | 4   | 72  | signed int    | Product identifier.                     |
| 38    | OrderQty               | Y     | 4   | 76  | Qty           | Total Order Quantity.                   |
| 432   | ExpireDate             | N     | 4   | 80  | LocalMktDate  | Date of order expiry. Required if Ti-   |
|       |                        |       |     |     |               | meInForce $(59) = 6$ .                  |
| 28744 | MatchInstCrossID       | N     | 4   | 84  | unsigned int  | Self Match Prevention ID.               |
| 20655 | TargetPartyIDSessionID | N     | 4   | 88  | unsigned int  | Session ID.                             |
| 20096 | PartyIDTakeUpTrading-  | N     | 5   | 92  | Fixed String  | Take-up Member Short Name.              |
| 20090 | Firm                   | IN    | 5   | 92  | r ixed String | Valid characters: A-Z,0-9,\x20          |
|       | PartyIDOrder-          |       |     |     |               | Valid Characters. A-2,0-9, \A20         |
| 20013 | OriginationFirm        | N     | 7   | 97  | Fixed String  | External Member ID.                     |
|       | Origination inii       |       |     |     |               | Valid characters: A-Z,0-9,\x20          |
| 20032 | PartyIDBeneficiary     | N     | 9   | 104 | Fixed String  | Final Beneficiary                       |
|       |                        |       |     |     |               | Valid characters: A-Z,0-9,\x20          |
| 28703 | ApplSeqIndicator       | Y     | 1   | 113 | unsigned int  | Indicates if the order is a Lean Order  |
|       |                        |       |     |     |               | or a Standard Order. Application se-    |
|       |                        |       |     |     |               | quencing is limited for Lean Orders.    |
|       |                        |       |     |     |               | Value Description                       |
|       |                        |       |     |     |               | 0 No Recovery Required                  |
|       |                        |       |     |     |               | 1 Recovery Required                     |
| 1227  | ProductComplex         | Y     | 1   | 114 | unsigned int  | This field qualifies an instrument type |
| 1221  | 1 Toddet Complex       | '     | _   | 117 | unsigned int  | on Eurex.                               |
|       |                        |       |     |     |               | Value Description                       |
|       |                        |       |     |     |               | 2 Standard Option Strategy              |
|       |                        |       |     |     |               | 3 Non-Standard Option Stra-             |
|       |                        |       |     |     |               | tegy                                    |
|       |                        |       |     |     |               | 4 Volatility Strategy                   |
|       |                        |       |     |     |               | 5 Futures Spread                        |
|       |                        |       |     |     |               | 6 Inter-Product Spread                  |
|       |                        |       |     |     |               | 7 Standard Future Strategy              |
|       |                        |       |     |     |               | 8 Pack and Bundle                       |
|       |                        |       |     |     |               | 9 Strip                                 |
|       |                        |       |     |     |               | 9 Зитр                                  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------|-------|-----|-----|--------------|--|
| 54    | Side                   | Y     | 1   | 115 | unsigned int | Side of the order.  Value Description  1 Buy  2 Sell   |
| 40    | OrdType                | Y     | 1   | 116 | unsigned int | Order type.  Value Description  2 Limit  |
| 28710 | PriceValidityCheckType | Y     | 1   | 117 | unsigned int | Indicator how price validity check should be performed by the exchange (see Price Reasonability Check).  Value Description  0 None  1 Optional  2 Mandatory  |
| 18    | ExecInst               | Y     | 1   | 118 | unsigned int | Instructions for order handling.  Value Description  1 Persistent Order (FIX value 'H')  2 Non-persistent Order (FIX value 'Q')  |
| 59    | TimeInForce            | Y     | 1   | 119 | unsigned int | Execution and trading restriction parameters supported by Eurex.  Value Description  0 Day (GFD)  1 Good Till Cancelled (GTC) - Standard Orders only  3 Immediate or Cancel (IOC)  6 Good Till Date (GTD) - Standard Orders only |
| 1815  | TradingCapacity        | Y     | 1   | 120 | unsigned int | This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.  Value Description  1 Customer (Agency)  5 Principal (Proprietary)  6 MarketMaker               |

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| Tag   | Field Name                  | Req'd | Len | Ofs | Data Type    | Description  |
|-------|-----------------------------|-------|-----|-----|--------------|--|
| 28743 | OwnershipIndicator          | Y     | 1   | 121 | unsigned int | Value Description  |
|       |                             |       |     |     |              | 0 Do not change ownership  |
|       |                             |       |     |     |              | 1 Change ownership to exe-   |
|       |                             |       |     |     |              | cuting party (User ID)   |
| 20075 | PartyIDLocationID           | N     | 2   | 122 | Fixed String | Country code.  |
|       |                             |       |     |     |              | Valid characters: \x01-\x7E  |
| 1031  | CustOrderHandlingInst       | N     | 1   | 124 | Fixed String | Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier. The field is for participant use only. $ \begin{tabular}{ll} Valid & characters: $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$$   |
| 2404  | ComplianceText              | N     | 20  | 125 | Fixed String | This field is used to provide additional regulatory information (according to respective rules & regs, circulars and/or bilateral coordination between participant and Trading Surveillance Office).  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 20038 | PartyIDPosition-<br>Account | N     | 20  | 145 | Fixed String | 'Flexible Account' information. Valid characters: $\x20,\x30-\x39,\x41-\x5A$   |
| 25007 | FreeText1                   | N     | 12  | 165 | Fixed String | First free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading KRX or TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 25008 | FreeText2                   | N     | 12  | 177 | Fixed String | Second free-format text field for trader-specific or customer-related comments.   Valid characters: $\xspace \xspace $ |

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| Tag  | Field Name         | Req'd | Len | Ofs | Data Type    | Description  |
|--|--------------------|-------|-----|-----|--------------|--|
| 25009  | FreeText3          | N     | 12  | 189 | Fixed String | Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |
| 555  | NoLegs             | Y     | 1   | 201 | Counter      | Number of LegOrd repeating group instances.Must be greater than 1.   |
| 25021  | Pad6               | U     | 6   | 202 | Fixed String | not used   |
| <legor< td=""><td>dGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-20, Record counter: No-<br/>Legs</td></legor<> | dGrp>              |       |     |     |              | Cardinality: 0-20, Record counter: No-<br>Legs   |
| 28715  | >LegAccount        | N     | 2   | 208 | Fixed String | Leg-specific account to book trades and keep positions on.  Valid characters: 1-9,\x41,\x47,\x4D,\x50  |
| 564  | >LegPositionEffect | Y     | 1   | 210 | char         | Leg-specific field used for Eurex position management purposes and indicates whether the leg is submitted to open or close a position.  Value Description  C Close O Open  |
| 25020  | >Pad5              | U     | 5   | 211 | Fixed String | not used   |

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## 7.7.11 Replace Order Response (Standard Order)

This message confirms a Replace Order request for a Standard Order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |  |  |
|---|-----------------|-------|-----|-----|--------------|--|--|--|
| <messageheaderout></messageheaderout>   |                 |       |     |     |              |  |  |  |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |
|   |                 |       |     |     |              | cluding this field.                      |  |  |
| 28500   | TemplateID      | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |
|   |                 |       |     |     |              | sage layout. Value: 10107 (Execution-    |  |  |
|   |                 |       |     |     |              | Report, MsgType = 8)                     |  |  |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                 |  |  |
| <respo< td=""><td>nseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<>    | nseHeaderME>    |       |     |     |              |  |  |  |
| 5979  | RequestTime     | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |
| 7764  | RequestOut      | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |  |  |
|   |                 |       |     |     |              | sage to the Matching Engine              |  |  |
| 21002   | TrdRegTSTimeIn  | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |  |  |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |  |  |
| 7765  | ResponseIn      | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |  |  |
|   |                 |       |     |     |              | message from the Matching Engine         |  |  |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |  |  |
| 34  | MsgSeqNum       | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |  |  |
|   |                 |       |     |     |              | participant for requests sent to the ga- |  |  |
|   |                 |       |     |     |              | teway.                                   |  |  |
| 5948  | PartitionID     | Y     | 2   | 60  | unsigned int | Grouping of Eurex products.              |  |  |
|   |                 |       |     |     |              | Belongs to the scope of Service          |  |  |
|   |                 |       |     |     |              | Availability and Retransmit requests.    |  |  |
| 1180  | ApplID          | Y     | 1   | 62  | unsigned int | Identifier for an ETI data stream.       |  |  |
|   |                 |       |     |     |              | Value Description                        |  |  |
|   |                 |       |     |     |              | 4 Session Data                           |  |  |
| 28704   | ApplMsgID       | N     | 16  | 63  | data         | Not set if the submitting session is not |  |  |
|   |                 |       |     |     |              | the owner of the replaced order.         |  |  |
| 893   | LastFragment    | Υ     | 1   | 79  | unsigned int | Indicates whether this message is the    |  |  |
|   |                 |       |     |     |              | last fragment (part) of a sequence of    |  |  |
|   |                 |       |     |     |              | messages belonging to one dedicated      |  |  |
|   |                 |       |     |     |              | transaction.                             |  |  |
|   |                 |       |     |     |              | Value Description                        |  |  |
|   |                 |       |     |     |              | 1 Last Message                           |  |  |
| <messa< td=""><td> <br/>ge Body&gt;</td><td></td><td>_</td><td></td><td></td><td></td></messa<> | <br>ge Body>    |       | _   |     |              |  |  |  |
| 37  |                 | Υ     | 8   | 80  | unsigned int | Exchange Order ID generated by Eur-      |  |  |
|   |                 |       |     |     |              | ex System; it remains constant over      |  |  |
|   |                 |       |     |     |              | the lifetime of an order.                |  |  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------|-------|-----|-----|--------------|--|
| 11    | ClOrdID                | N     | 8   | 88  | unsigned int | Client Order ID: Unique participant defined order request identifier; used for client order id chaining.   |
| 41    | OrigClOrdID            | N     | 8   | 96  | unsigned int | ClOrdID (11) of the last successfully processed task (request) referring to the specific order.  |
| 48    | SecurityID             | Y     | 8   | 104 | signed int   | Instrument identifier.   |
| 17    | ExecID                 | Y     | 8   | 112 | UTCTimestamp | Transaction timestamp.   |
| 21008 | TrdRegTSTimePriority   | Y     | 8   | 120 | UTCTimestamp | Priority timestamp.  |
| 151   | LeavesQty              | Y     | 4   | 128 | Qty          | Remaining quantity of an order. If the order has been executed partially this field contains the non-executed quantity. A remaining size of 0 indicates that the order is fully matched or no longer active. |
| 14    | CumQty                 | Y     | 4   | 132 | Qty          | Cumulated executed quantity of an order.   |
| 84    | CxIQty                 | Υ     | 4   | 136 | Qty          | Total quantity cancelled for this order.   |
| 39    | OrdStatus              | Y     | 1   | 140 | char         | Conveys the current status of an order.  Value Description  0 New  1 Partially filled  2 Filled  4 Cancelled  9 Suspended  |
| 150   | ExecType               | Y     | 1   | 141 | char         | The reason why this message was generated.  Value Description  4 Cancelled  5 Replaced  L Triggered  |
| 378   | ExecRestatement-Reason | Y     | 2   | 142 | unsigned int | Code to further qualify the field Exec- Type (150) of the Execution Report (8) message.  Value Description  102 Order modify accepted  105 IOC Order accepted  181 Ownership Changed                         |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|----------------|-------|-----|-----|--------------|---|
| 28745 | Crossed        | Y     | 1   | 144 | unsigned int | Identicates SMP involvement.            |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 0 No crossing (Order not sub-           |
|       |                |       |     |     |              | ject to crossing)                       |
|       |                |       |     |     |              | 1 Cross rejected (Order sub-            |
|       |                |       |     |     |              | ject to crossing and match              |
|       |                |       |     |     |              | prevented)                              |
| 1227  | ProductComplex | Υ     | 1   | 145 | unsigned int | This field qualifies an instrument type |
|       |                |       |     |     |              | on Eurex.                               |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 1 Simple instrument                     |
|       |                |       |     |     |              | 2 Standard Option Strategy              |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-             |
|       |                |       |     |     |              | tegy                                    |
|       |                |       |     |     |              | 4 Volatility Strategy                   |
|       |                |       |     |     |              | 5 Futures Spread                        |
|       |                |       |     |     |              | 6 Inter-Product Spread                  |
|       |                |       |     |     |              | 7 Standard Future Strategy              |
|       |                |       |     |     |              | 8 Pack and Bundle                       |
|       |                |       |     |     |              | 9 Strip                                 |
| 1823  | Triggered      | Y     | 1   | 146 | unsigned int | Indicates if an order has been pre-     |
|       |                |       |     |     |              | viously triggered.                      |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 0 Not Triggered                         |
|       |                |       |     |     |              | 1 Triggered Stop                        |
|       |                |       |     |     |              | 2 Triggered OCO                         |
| 25020 | Pad5           | U     | 5   | 147 | Fixed String | not used                                |

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# 7.7.12 Replace Order Response (Lean Order)

This message confirms a Replace Order request for a Lean Order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type     | Description  |
|---|-----------------|-------|-----|-----|---------------|--|
| <messa,< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>  | geHeaderOut>    |       |     |     |               |  |
| 9   | BodyLen         | Y     | 4   | 0   | unsigned int  | Number of bytes for the message, in-   |
|   |                 |       |     |     |               | cluding this field.  |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int  | Unique identifier for a Eurex ETI mes-   |
|   |                 |       |     |     |               | sage layout. Value: 10108 (Execution-  |
|   |                 |       |     |     |               | Report, MsgType = 8)   |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String  | not used   |
| <nrres< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrres<> | sponseHeaderME> |       |     |     |               |  |
| 5979  | RequestTime     | Y     | 8   | 8   | UTCTimestamp  | Gateway request in timestamp.  |
| 7764  | RequestOut      | Y     | 8   | 16  | UTCTimestamp  | Timestamp the gateway sends a mes-   |
|   |                 |       |     |     |               | sage to the Matching Engine  |
| 21002   | TrdRegTSTimeIn  | Y     | 8   | 24  | UTCTimestamp  | Matching engine in timestamp.  |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp  | Matching engine out timestamp.   |
| 7765  | ResponseIn      | Y     | 8   | 40  | UTCTimestamp  | Timestamp the gateway receives a   |
|   |                 |       |     |     |               | message from the Matching Engine   |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp  | Gateway response out timestamp.  |
| 34  | MsgSeqNum       | Υ     | 4   | 56  | unsigned int  | Message sequence number used by the  |
|   |                 |       |     |     |               | participant for requests sent to the ga-   |
|   |                 |       |     |     |               | teway.   |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int  | Indicates whether this message is the  |
|   |                 |       |     |     |               | last fragment (part) of a sequence of  |
|   |                 |       |     |     |               | messages belonging to one dedicated  |
|   |                 |       |     |     |               | transaction.   |
|   |                 |       |     |     |               | Value Description  |
|   |                 |       |     |     |               | 1 Last Message   |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String  | not used   |
|   | ge Body>        |       |     | 01  | T IXCU String | not asea   |
|   | OrderID         | Υ     | 8   | 64  | unsigned int  | Exchange Order ID generated by Eur-  |
|   | Orderib         |       |     |     | a             | ex System; it remains constant over  |
|   |                 |       |     |     |               | the lifetime of an order.  |
| 11  | ClOrdID         | N     | 8   | 72  | unsigned int  | Client Order ID: Unique participant  |
|   | CIOTUID         |       |     |     | a             | defined order request identifier; used   |
|   |                 |       |     |     |               | for client order id chaining.  |
| 41  | OrigClOrdID     | N     | 8   | 80  | unsigned int  | ClOrdID (11) of the last successfully  |
|   |                 |       |     |     | 2 2 6 122     | processed task (request) referring to  |
|   |                 |       |     |     |               | the specific order.  |
| 48  | SecurityID      | Υ     | 8   | 88  | signed int    | Instrument identifier.   |
| 17  | ExecID          | Y     | 8   | 96  | UTCTimestamp  | Transaction timestamp.   |
|   |                 |       |     |     |               | The state of the s |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------|-------|-----|-----|--------------|--|
| 151   | LeavesQty              | Y     | 4   | 104 | Qty          | Remaining quantity of an order. If the order has been executed partially this field contains the non-executed quantity. A remaining size of 0 indicates that the order is fully matched or no longer active. |
| 14    | CumQty                 | Y     | 4   | 108 | Qty          | Cumulated executed quantity of an order.   |
| 84    | CxlQty                 | Y     | 4   | 112 | Qty          | Total quantity cancelled for this order.   |
| 39    | OrdStatus              | Y     | 1   | 116 | char         | Conveys the current status of an order.  Value Description  0 New  1 Partially filled  2 Filled  4 Cancelled  9 Suspended  |
| 150   | ExecType               | Y     | 1   | 117 | char         | The reason why this message was generated.  Value Description  4 Cancelled  5 Replaced  L Triggered  |
| 378   | ExecRestatement-Reason | Y     | 2   | 118 | unsigned int | Code to further qualify the field Exec- Type (150) of the Execution Report (8) message.  Value Description  102 Order modify accepted  105 IOC Order accepted  181 Ownership Changed                         |
| 28745 | Crossed                | Y     | 1   | 120 | unsigned int | Identicates SMP involvement.  Value Description  0 No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match prevented)   |

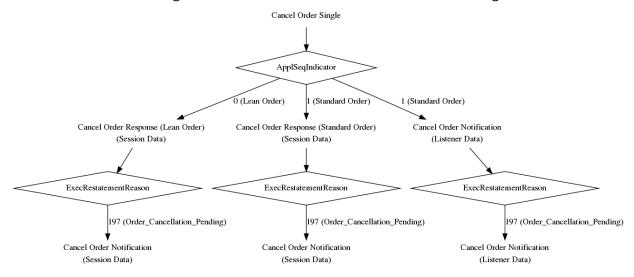
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|                                 |                    |
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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description  |
|-------|----------------|-------|-----|-----|--------------|--|
| 1227  | ProductComplex | Y     | 1   | 121 | unsigned int | This field qualifies an instrument type on Eurex.    |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | 1 Simple instrument                                  |
|       |                |       |     |     |              | 2 Standard Option Strategy                           |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-                          |
|       |                |       |     |     |              | tegy   |
|       |                |       |     |     |              | 4 Volatility Strategy                                |
|       |                |       |     |     |              | 5 Futures Spread                                     |
|       |                |       |     |     |              | 6 Inter-Product Spread                               |
|       |                |       |     |     |              | 7 Standard Future Strategy                           |
|       |                |       |     |     |              | 8 Pack and Bundle                                    |
|       |                |       |     |     |              | 9 Strip  |
| 1823  | Triggered      | Y     | 1   | 122 | unsigned int | Indicates if an order has been previously triggered. |
|       |                |       |     |     |              | Value Description                                    |
|       |                |       |     |     |              | 0 Not Triggered                                      |
|       |                |       |     |     |              | 1 Triggered Stop                                     |
|       |                |       |     |     |              | 2 Triggered OCO                                      |
| 25020 | Pad5           | U     | 5   | 123 | Fixed String | not used   |

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### 7.7.13 Cancel Order Single

This message is used to cancel a single order. For more details, please refer to chapter 4.6.2 Cancellation. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                                |
|---|-----------------|-------|-----|-----|--------------|--|
| <messa< th=""><th>geHeaderIn&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderIn>     |       |     |     |              |  |
| 9   | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-       |
|   |                 |       |     |     |              | cluding this field.                        |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI          |
|   |                 |       |     |     |              | message layout. Value: 10109 (Order-       |
|   |                 |       |     |     |              | ${\sf CancelRequest,\ MsgType} = {\sf F)}$ |
| 25028   | NetworkMsgID    | U     | 8   | 6   | Fixed String | not used                                   |
| 25017   | Pad2            | U     | 2   | 14  | Fixed String | not used                                   |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>   | stHeader>       |       |     |     |              |  |
| 34  | MsgSeqNum       | Y     | 4   | 16  | unsigned int | Message sequence number used by the        |
|   |                 |       |     |     |              | participant for requests sent to the ga-   |
|   |                 |       |     |     |              | teway.                                     |
| 50  | SenderSubID     | Y     | 4   | 20  | unsigned int | User ID.                                   |
| < Messa   | ge Body>        |       |     |     |              |  |
| 37  | OrderID         | N     | 8   | 24  | unsigned int | Exchange Order ID generated by Eur-        |
|   |                 |       |     |     |              | ex System; it remains constant over        |
|   |                 |       |     |     |              | the lifetime of an order.                  |
| 11  | ClOrdID         | N     | 8   | 32  | unsigned int | Client Order ID: Unique participant        |
|   |                 |       |     |     |              | defined order request identifier; used     |
|   |                 |       |     |     |              | for client order id chaining.              |
| 41  | OrigClOrdID     | N     | 8   | 40  | unsigned int | ClOrdID (11) of the last successfully      |
|   |                 |       |     |     |              | processed task (request) referring to      |
|   |                 |       |     |     |              | the specific order.                        |
| 376   | ComplianceID    | N     | 8   | 48  | unsigned int | For participants to uniquely identify      |
|   |                 |       |     |     |              | trading strategies                         |
| 1300  | MarketSegmentID | Y     | 4   | 56  | signed int   | Product identifier.                        |

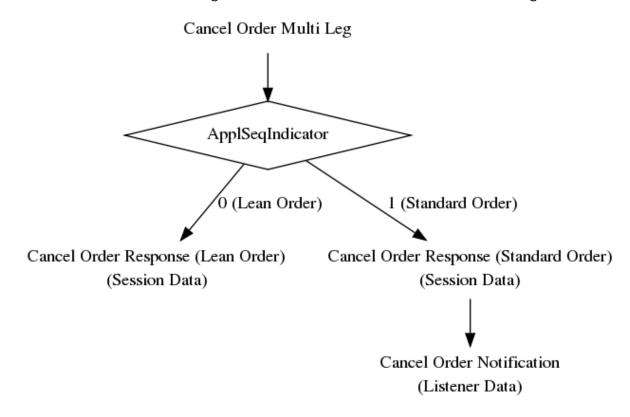
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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------|-------|-----|-----|--------------|--|
| 30048 | SimpleSecurityID       | Y     | 4   | 60  | unsigned int | Instrument identifier for simple instruments. Should be filled with the 4 least significant bytes of SecurityID (48) provided in Eurex RDI and Eurex RDF reference data. |
| 20655 | TargetPartyIDSessionID | N     | 4   | 64  | unsigned int | Session ID that entered the order.   |
| 25019 |                        | U     | 4   | 68  | Fixed String | not used   |

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### 7.7.14 Cancel Order Multi Leg

This message is used to cancel a multi leg order. For more details, please refer to chapter 4.6.2 Cancellation. This message is sent to the service "Order and Quote Management".



| Tag  | Field Name   | Req'd | Len | Ofs | Data Type    | Description                                |
|--|--------------|-------|-----|-----|--------------|--|
| < Messa  | geHeaderIn>  |       |     |     |              |  |
| 9  | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-       |
|  |              |       |     |     |              | cluding this field.                        |
| 28500  | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI          |
|  |              |       |     |     |              | message layout. Value: 10123 (Order-       |
|  |              |       |     |     |              | ${\sf CancelRequest,\ MsgType} = {\sf F)}$ |
| 25028  | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                                   |
| 25017  | Pad2         | U     | 2   | 14  | Fixed String | not used                                   |
| < Reque  | stHeader>    |       |     |     |              |  |
| 34   | MsgSeqNum    | Y     | 4   | 16  | unsigned int | Message sequence number used by the        |
|  |              |       |     |     |              | participant for requests sent to the ga-   |
|  |              |       |     |     |              | teway.                                     |
| 50   | SenderSubID  | Y     | 4   | 20  | unsigned int | User ID.                                   |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | ge Body>     |       |     |     |              |  |
| 37   | OrderID      | N     | 8   | 24  | unsigned int | Exchange Order ID generated by Eur-        |
|  |              |       |     |     |              | ex System; it remains constant over        |
|  |              |       |     |     |              | the lifetime of an order.                  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description                            |
|-------|------------------------|-------|-----|-----|--------------|--|
| 11    | ClOrdID                | N     | 8   | 32  | unsigned int | Client Order ID: Unique participant    |
|       |                        |       |     |     |              | defined order request identifier; used |
|       |                        |       |     |     |              | for client order id chaining.          |
| 41    | OrigClOrdID            | N     | 8   | 40  | unsigned int | ClOrdID (11) of the last successfully  |
|       |                        |       |     |     |              | processed task (request) referring to  |
|       |                        |       |     |     |              | the specific order.                    |
| 48    | SecurityID             | Υ     | 8   | 48  | signed int   | Instrument identifier.                 |
| 376   | ComplianceID           | N     | 8   | 56  | unsigned int | For participants to uniquely identify  |
|       |                        |       |     |     |              | trading strategies                     |
| 1300  | MarketSegmentID        | Υ     | 4   | 64  | signed int   | Product identifier.                    |
| 20655 | TargetPartyIDSessionID | N     | 4   | 68  | unsigned int | Session ID.                            |

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## 7.7.15 Cancel Order Response (Standard Order)

This message confirms the cancellation of a Standard Order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag  | Field Name                            | Req'd | Len | Ofs | Data Type    | Description                              |  |  |  |
|--|---------------------------------------|-------|-----|-----|--------------|--|--|--|--|
| <messa< th=""><th colspan="9"><messageheaderout></messageheaderout></th></messa<>              | <messageheaderout></messageheaderout> |       |     |     |              |  |  |  |  |
| 9  | BodyLen                               | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |  |
|  |                                       |       |     |     |              | cluding this field.                      |  |  |  |
| 28500  | TemplateID                            | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |  |  |  |
|  |                                       |       |     |     |              | sage layout. Value: 10110 (Execution-    |  |  |  |
|  |                                       |       |     |     |              | Report, MsgType = 8)                     |  |  |  |
| 25017  | Pad2                                  | U     | 2   | 6   | Fixed String | not used                                 |  |  |  |
| <respo< td=""><td>nseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></respo<>   | nseHeaderME>                          |       |     |     |              |  |  |  |  |
| 5979   | RequestTime                           | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |  |  |  |
| 7764   | RequestOut                            | Υ     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |  |  |  |
|  |                                       |       |     |     |              | sage to the Matching Engine              |  |  |  |
| 21002  | TrdRegTSTimeIn                        | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |  |  |  |
| 21003  | TrdRegTSTimeOut                       | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |  |  |  |
| 7765   | ResponseIn                            | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |  |  |  |
|  |                                       |       |     |     |              | message from the Matching Engine         |  |  |  |
| 52   | SendingTime                           | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |  |  |  |
| 34   | MsgSeqNum                             | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |  |  |  |
|  |                                       |       |     |     |              | participant for requests sent to the ga- |  |  |  |
|  |                                       |       |     |     |              | teway.                                   |  |  |  |
| 5948   | PartitionID                           | Y     | 2   | 60  | unsigned int | Grouping of Eurex products.              |  |  |  |
|  |                                       |       |     |     |              | Belongs to the scope of Service          |  |  |  |
|  |                                       |       |     |     |              | Availability and Retransmit requests.    |  |  |  |
| 1180   | ApplID                                | Y     | 1   | 62  | unsigned int | Identifier for an ETI data stream.       |  |  |  |
|  |                                       |       |     |     |              | Value Description                        |  |  |  |
|  |                                       |       |     |     |              | 4 Session Data                           |  |  |  |
| 28704  | ApplMsgID                             | N     | 16  | 63  | data         | Not set if the submitting session is not |  |  |  |
|  |                                       |       |     |     |              | the owner of the cancelled order.        |  |  |  |
| 893  | LastFragment                          | Υ     | 1   | 79  | unsigned int | Indicates whether this message is the    |  |  |  |
|  |                                       |       |     |     |              | last fragment (part) of a sequence of    |  |  |  |
|  |                                       |       |     |     |              | messages belonging to one dedicated      |  |  |  |
|  |                                       |       |     |     |              | transaction.                             |  |  |  |
|  |                                       |       |     |     |              | Value Description                        |  |  |  |
|  |                                       |       |     |     |              | 1 Last Message                           |  |  |  |
| <messa< td=""><td> <br/>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | <br>ge Body>                          |       |     |     |              |  |  |  |  |
| 37   |                                       | Υ     | 8   | 80  | unsigned int | Exchange Order ID generated by Eur-      |  |  |  |
|  |                                       |       |     |     | <u> </u>     | ex System; it remains constant over      |  |  |  |
|  |                                       |       |     |     |              | the lifetime of an order.                |  |  |  |

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| Tag | Field Name       | Req'd | Len | Ofs | Data Type    | Description                              |
|-----|------------------|-------|-----|-----|--------------|--|
| 11  | ClOrdID          | N     | 8   | 88  | unsigned int | Client Order ID: Unique participant      |
|     |                  |       |     |     |              | defined order request identifier; used   |
|     |                  |       |     |     |              | for client order id chaining.            |
| 41  | OrigClOrdID      | N     | 8   | 96  | unsigned int | ClOrdID (11) of the last successfully    |
|     |                  |       |     |     |              | processed task (request) referring to    |
|     |                  |       |     |     |              | the specific order.                      |
| 48  | SecurityID       | Y     | 8   | 104 | signed int   | Instrument identifier.                   |
| 17  | ExecID           | Y     | 8   | 112 | UTCTimestamp | Transaction timestamp.                   |
| 14  | CumQty           | Y     | 4   | 120 | Qty          | Cumulated executed quantity of an or-    |
|     |                  |       |     |     |              | der.                                     |
| 84  | CxIQty           | Y     | 4   | 124 | Qty          | Total quantity cancelled for this order. |
| 39  | OrdStatus        | Y     | 1   | 128 | char         | Conveys the current status of an or-     |
|     |                  |       |     |     |              | der.                                     |
|     |                  |       |     |     |              | Value Description                        |
|     |                  |       |     |     |              | 4 Cancelled                              |
|     |                  |       |     |     |              | 6 Pending Cancel (i.e. result            |
|     |                  |       |     |     |              | of Order Cancel Request)                 |
|     |                  |       |     |     |              | 9 Suspended                              |
| 150 | ЕхесТуре         | Y     | 1   | 129 | char         | The reason why this message was ge-      |
|     |                  |       |     |     |              | nerated.                                 |
|     |                  |       |     |     |              | Value Description                        |
|     |                  |       |     |     |              | 4 Cancelled                              |
|     |                  |       |     |     |              | 6 Pending Cancel (e.g. result            |
|     |                  |       |     |     |              | of Order Cancel Request)                 |
|     | <b>.</b>         |       |     |     |              |  |
| 378 | ExecRestatement- | Υ     | 2   | 130 | unsigned int | Code to further qualify the field Exec-  |
|     | Reason           |       |     |     |              | Type (150) of the Execution Report       |
|     |                  |       |     |     |              | (8) message.                             |
|     |                  |       |     |     |              | Value Description                        |
|     |                  |       |     |     |              | 103 Order delete accepted                |
|     |                  |       |     |     |              | 197 Pending order deletion fi-           |
|     |                  |       |     |     |              | nally completed (end of                  |
|     |                  |       |     |     |              | FREEZE state)                            |
|     |                  |       |     |     |              | 111222 33415)                            |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|----------------|-------|-----|-----|--------------|---|
| 1227  | ProductComplex | Y     | 1   | 132 | unsigned int | This field qualifies an instrument type |
|       |                |       |     |     |              | on Eurex.                               |
|       |                |       |     |     |              | Value Description                       |
|       |                |       |     |     |              | 1 Simple instrument                     |
|       |                |       |     |     |              | 2 Standard Option Strategy              |
|       |                |       |     |     |              | 3 Non-Standard Option Stra-             |
|       |                |       |     |     |              | tegy                                    |
|       |                |       |     |     |              | 4 Volatility Strategy                   |
|       |                |       |     |     |              | 5 Futures Spread                        |
|       |                |       |     |     |              | 6 Inter-Product Spread                  |
|       |                |       |     |     |              | 7 Standard Future Strategy              |
|       |                |       |     |     |              | 8 Pack and Bundle                       |
|       |                |       |     |     |              | 9 Strip                                 |
| 25018 | Pad3           | U     | 3   | 133 | Fixed String | not used                                |

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# 7.7.16 Cancel Order Response (Lean Order)

This message confirms the cancellation of a Lean Order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-----------------|-------|-----|-----|--------------|--|
| <messa,< th=""><th>geHeaderOut&gt;</th><th></th><th></th><th></th><th></th><th></th></messa,<>  | geHeaderOut>    |       |     |     |              |  |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |                 |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID      | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |                 |       |     |     |              | sage layout. Value: 10111 (Execution-    |
|   |                 |       |     |     |              | Report, MsgType = 8)                     |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                 |
| <nrres< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrres<> | sponseHeaderME> |       |     |     |              |  |
| 5979  | RequestTime     | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 7764  | RequestOut      | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |
|   |                 |       |     |     |              | sage to the Matching Engine              |
| 21002   | TrdRegTSTimeIn  | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |
| 7765  | ResponseIn      | Υ     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |
|   |                 |       |     |     |              | message from the Matching Engine         |
| 52  | SendingTime     | Υ     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |
| 34  | MsgSeqNum       | Υ     | 4   | 56  | unsigned int | Message sequence number used by the      |
|   |                 |       |     |     |              | participant for requests sent to the ga- |
|   |                 |       |     |     |              | teway.                                   |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the    |
|   |                 |       |     |     |              | last fragment (part) of a sequence of    |
|   |                 |       |     |     |              | messages belonging to one dedicated      |
|   |                 |       |     |     |              | transaction.                             |
|   |                 |       |     |     |              | Value Description                        |
|   |                 |       |     |     |              | 1 Last Message                           |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used                                 |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>        | ge Body>        |       |     |     |              |  |
|   | OrderID         | Υ     | 8   | 64  | unsigned int | Exchange Order ID generated by Eur-      |
|   |                 |       |     |     | _            | ex System; it remains constant over      |
|   |                 |       |     |     |              | the lifetime of an order.                |
| 11  | ClOrdID         | N     | 8   | 72  | unsigned int | Client Order ID: Unique participant      |
|   |                 |       |     |     |              | defined order request identifier; used   |
|   |                 |       |     |     |              | for client order id chaining.            |
| 41  | OrigClOrdID     | N     | 8   | 80  | unsigned int | ClOrdID (11) of the last successfully    |
|   |                 |       |     |     |              | processed task (request) referring to    |
|   |                 |       |     |     |              | the specific order.                      |
| 48  | SecurityID      | Υ     | 8   | 88  | signed int   | Instrument identifier.                   |
| 17  | ExecID          | Υ     | 8   | 96  | UTCTimestamp | Transaction timestamp.                   |

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| Tag   | Field Name       | Req'd | Len | Ofs | Data Type    | Description   |
|-------|------------------|-------|-----|-----|--------------|---|
| 14    | CumQty           | Y     | 4   | 104 | Qty          | Cumulated executed quantity of an or-   |
|       |                  |       |     |     |              | der.  |
| 84    | CxIQty           | Y     | 4   | 108 | Qty          | Total quantity cancelled for this order.                                      |
| 39    | OrdStatus        | Y     | 1   | 112 | char         | Conveys the current status of an or-  |
|       |                  |       |     |     |              | der.  |
|       |                  |       |     |     |              | Value Description   |
|       |                  |       |     |     |              | 4 Cancelled   |
|       |                  |       |     |     |              | 6 Pending Cancel (i.e. result   |
|       |                  |       |     |     |              | of Order Cancel Request)  |
|       |                  |       |     |     |              | 9 Suspended   |
| 150   | ExecType         | Y     | 1   | 113 | char         | The reason why this message was ge-   |
|       |                  |       |     |     |              | nerated.  |
|       |                  |       |     |     |              | Value Description   |
|       |                  |       |     |     |              | 4 Cancelled   |
|       |                  |       |     |     |              | 6 Pending Cancel (e.g. result   |
|       |                  |       |     |     |              | of Order Cancel Request)  |
| 270   | ExecRestatement- | V     |     | 114 |              |   |
| 378   | Reason           | Y     | 2   | 114 | unsigned int | Code to further qualify the field Exec-<br>Type (150) of the Execution Report |
|       |                  |       |     |     |              | (8) message.  |
|       |                  |       |     |     |              |   |
|       |                  |       |     |     |              | Value Description   |
|       |                  |       |     |     |              | 103 Order delete accepted   |
|       |                  |       |     |     |              | 197 Pending order deletion fi-<br>nally completed (end of                     |
|       |                  |       |     |     |              | FREEZE state)   |
|       |                  |       |     |     |              | ,   |
| 1227  | ProductComplex   | Y     | 1   | 116 | unsigned int | This field qualifies an instrument type                                       |
|       |                  |       |     |     |              | on Eurex.   |
|       |                  |       |     |     |              | Value Description   |
|       |                  |       |     |     |              | 1 Simple instrument   |
|       |                  |       |     |     |              | 2 Standard Option Strategy  |
|       |                  |       |     |     |              | 3 Non-Standard Option Stra-   |
|       |                  |       |     |     |              | tegy  4 Volatility Stratomy   |
|       |                  |       |     |     |              | 4 Volatility Strategy 5 Futures Spread  |
|       |                  |       |     |     |              | 6 Inter-Product Spread  |
|       |                  |       |     |     |              | 7 Standard Future Strategy  |
|       |                  |       |     |     |              | 8 Pack and Bundle   |
|       |                  |       |     |     |              | 9 Strip   |
|       |                  |       |     |     |              |   |
| 25018 | Pad3             | U     | 3   | 117 | Fixed String | not used  |

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#### 7.7.17 Cancel Order Notification

This message informs about an unsolicited cancellation of a single order. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag  | Field Name              | Req'd | Len | Ofs | Data Type    | Description  |
|--|-------------------------|-------|-----|-----|--------------|--|
| <messa,< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<> | geHeaderOut>            |       |     |     |              |  |
| 9  | BodyLen                 | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field. |
| 28500  | TemplateID              | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-                 |
|  |                         |       |     |     |              | sage layout. Value: 10112 (Execution-                  |
|  |                         |       |     |     |              | Report, $MsgType = 8$ )                                |
| 25017  | Pad2                    | U     | 2   | 6   | Fixed String | not used   |
| <rbch< td=""><td>eaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>         | eaderME>                |       |     |     |              |  |
| 21003  | ${\sf TrdRegTSTimeOut}$ | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.                         |
| 25043  | NotificationIn          | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a no-                   |
|  |                         |       |     |     |              | tification message from the Matching                   |
|  |                         |       |     |     |              | Engine   |
| 52   | SendingTime             | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.                        |
| 28727  | ApplSubID               | N     | 4   | 32  | unsigned int | Unique ID assigned by the Eurex sys-                   |
|  |                         |       |     |     |              | tem during broadcast subscription in                   |
|  |                         |       |     |     |              | order to link broadcasts to the related                |
|  |                         |       |     |     |              | subscription.  |
| 5948   | PartitionID             | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.                            |
|  |                         |       |     |     |              | Belongs to the scope of Service                        |
|  |                         |       |     |     |              | Availability and Retransmit requests.                  |
| 28704  | ApplMsgID               | N     | 16  | 38  | data         | Application message identifier assi-                   |
|  |                         |       |     |     |              | gned to an order or quote event.                       |
| 1180   | ApplID                  | N     | 1   | 54  | unsigned int | Identifier for an ETI data stream.                     |
|  |                         |       |     |     |              | Value Description                                      |
|  |                         |       |     |     |              | 4 Session Data   |
|  |                         |       |     |     |              | 5 Listener Data  |
| 1352   | ApplResendFlag          | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.                    |
|  |                         |       |     |     |              | Value Description                                      |
|  |                         |       |     |     |              | 0 False  |
|  |                         |       |     |     |              | 1 True   |
| 893  | LastFragment            | Y     | 1   | 56  | unsigned int | Indicates whether this message is the                  |
|  |                         |       |     |     |              | last fragment (part) of a sequence of                  |
|  |                         |       |     |     |              | messages belonging to one dedicated                    |
|  |                         |       |     |     |              | transaction.   |
|  |                         |       |     |     |              | Value Description                                      |
|  |                         |       |     |     |              | 1 Last Message   |
| 25022  | Pad7                    | U     | 7   | 57  | Fixed String | not used   |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>     | ge Body>                |       |     |     |              |  |

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| 37   OrderID  | Tag   | Field Name            | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-------|-----------------------|-------|-----|-----|--------------|--|
| the lifetime of an order.    11 ClOrdID   | 37    | OrderID               | Y     | 8   | 64  | unsigned int | Exchange Order ID generated by Eur-      |
| ClordID   |       |                       |       |     |     |              | ex System; it remains constant over      |
| defined order request identifier; used for client order id chaining.  41 OrigClOrdID  N  8  80 unsigned int ClOrdID (11) of the last successfully processed task (request) referring to the specific order.  48 SecurityID  Y  8  88 signed int Instrument identifier.  17 ExccID  Y  4 104 Qty Cumulated executed quantity of an order.  84 CxIQty  Y  4 108 Qty Total quantity cancelled for this order.  1300 MarketSegmentID  Y  4 112 signed int Product identifier.  20036 PartyIDEnteringTrader  N  4 116 unsigned int Entering User ID.  ExecRestatement-Reason  Y  2 120 unsigned int Code to further qualify the field ExecType (150) of the Execution Report (8) message.  Value Description  103 Order delete accepted  197 Pending order deletion finally completed (end of FREEZE state)  199 Pending order cancellation executed (end of FREEZE state)  199 Pending order cancellation executed (end of FREEZE state)  20007 PartyIDEnteringFirm  N  1 122 unsigned int  Entering Entity ID.  Value Description  1 Participant  2 Market Supervision  39 OrdStatus  Y  1 123 Char  Conveys the current status of an order.  Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)   |       |                       |       |     |     |              | the lifetime of an order.                |
| All OrigClOrdID   | 11    | ClOrdID               | N     | 8   | 72  | unsigned int | Client Order ID: Unique participant      |
| 48 SecurityID  Y  8 88 signed int Instrument identifier.  17 ExecID  Y  8 96 UTCTimestamp  Transaction timestamp.  14 CumQty  Y  4 104 Qty  Cumulated executed quantity of an order.  84 CxlQty  Y  4 108 Qty  Total quantity cancelled for this order.  1300 MarketSegmentID  Y  4 112 signed int  Product identifier.  20036 PartyIDEnteringTrader  Y  2 120 unsigned int  SeeseRestatement- Reason  Y  2 120 unsigned int  Unsigned int  Unsigned int  Entering User ID.  Code to further qualify the field Exectype (150) of the Execution Report (8) message.  Value Description  103 Order delete accepted  197 Pending order cancellation executed (end of FREEZE state)  199 Pending order cancellation executed (end of FREEZE state)  20007 PartyIDEnteringFirm  N  1 122 unsigned int  Entering Entity ID.  Value Description  1 Participant  2 Market Supervision  39 OrdStatus  Y  1 123 char  Conveys the current status of an order.  Value Description  1 Participant  2 Market Supervision  6 Pending Cancel (i.e. result of Order Cancel Request)   |       |                       |       |     |     |              | defined order request identifier; used   |
| Processed task (request) referring to the specific order.  48   SecurityID   Y   8   88   signed int   Instrument identifier.  17   ExecID   Y   8   96   UTCTimestamp   Transaction timestamp.  18   CumQty   Y   4   104   Qty   Cumulated executed quantity of an order.  180   MarketSegmentID   Y   4   112   signed int   Product identifier.  20036   PartyIDEnteringTrader   N   4   116   unsigned int   Entering User ID.  20037   ExecRestatement-Reason   Y   2   120   unsigned int   Unsigned int   Product identifier.  20040   PartyIDEnteringFirm   N   1   122   unsigned int   Product identifier.  2007   PartyIDEnteringFirm   N   1   122   unsigned int   Product identifier.  20080   Value   Description   Insulation   Description   Insulation   Product identifier.  20090   PartyIDEnteringFirm   N   1   122   unsigned int   Entering User ID.  20090   PartyIDEnteringFirm   N   1   122   unsigned int   Entering Entity ID.  20090   PartyIDEnteringFirm   N   1   123   Char   Conveys the current status of an order.  20090   Value   Description   Value  |       |                       |       |     |     |              | for client order id chaining.            |
| the specific order.  48 SecurityID Y 8 8 88 signed int Instrument identifier.  17 ExecID Y 8 96 UTCTimestamp Transaction timestamp.  14 CumQty Y 4 104 Qty Cumulated executed quantity of an order.  84 Cx Qty Y 4 108 Qty Total quantity cancelled for this order.  1300 MarketSegmentID Y 4 112 signed int Product identifier.  20036 PartyIDEnteringTrader N 4 116 unsigned int Entering User ID.  ExecRestatement-Reason Y 2 120 unsigned int Walue Description  103 Order delete accepted  197 Pending order deletion finally completed (end of FREEZE state)  199 Pending order cancellation executed (end of FREEZE state)  20007 PartyIDEnteringFirm N 1 122 unsigned int Entering Entering User ID.  20008 PartyIDEnteringFirm N 1 122 unsigned int Entering User ID.  20009 PartyIDEnteringFirm N 1 122 unsigned int Entering Entity ID.  Value Description  103 Order delete accepted  197 Pending order cancellation executed (end of FREEZE state)  199 Pending order cancellation executed (end of FREEZE state)  20007 PartyIDEnteringFirm N 1 122 unsigned int Entering Entity ID.  Value Description  1 Participant  2 Market Supervision  39 OrdStatus Y 1 123 char Conveys the current status of an order.  Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)   | 41    | OrigClOrdID           | N     | 8   | 80  | unsigned int | ClOrdID (11) of the last successfully    |
| 48   SecurityID   Y   8   88   Signed int   Instrument identifier.  |       |                       |       |     |     |              | processed task (request) referring to    |
| Transaction timestamp.   Transaction timestamp.   |       |                       |       |     |     |              | the specific order.                      |
| 14 CumQty Y 4 104 Qty Cumulated executed quantity of an order.  84 CxlQty Y 4 108 Qty Total quantity cancelled for this order.  1300 MarketSegmentID Y 4 112 signed int Product identifier.  20036 PartylDEnteringTrader N 4 116 unsigned int Entering User ID.  378 ExecRestatement-Reason Y 2 120 unsigned int Reason   | 48    | SecurityID            | Y     | 8   | 88  | signed int   | Instrument identifier.                   |
| B4   Cx Qty   Y   4   108   Qty   Total quantity cancelled for this order.  | 17    | ExecID                | Υ     | 8   | 96  | UTCTimestamp | Transaction timestamp.                   |
| 84 Cx Qty   | 14    | CumQty                | Υ     | 4   | 104 | Qty          | Cumulated executed quantity of an or-    |
| 1300   MarketSegmentID   Y   4   112   signed int   Product identifier.   |       |                       |       |     |     |              | der.                                     |
| 20036   PartyIDEnteringTrader   N   4   116   unsigned int   Entering User ID.  | 84    | CxIQty                | Υ     | 4   | 108 | Qty          | Total quantity cancelled for this order. |
| SexecRestatement-Reason   Y   2   120   Unsigned int   Code to further qualify the field ExecType (150) of the Execution Report (8) message.   Value   Description   103   Order delete accepted   197   Pending order deletion finally completed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state  | 1300  | MarketSegmentID       | Υ     | 4   | 112 | signed int   | Product identifier.                      |
| Reason  Reason  Y  2 120  unsigned int  Code to further qualify the field Exec- Type (150) of the Execution Report (8) message.  Value  Description  103  Order delete accepted  197  Pending order deletion finally completed (end of FREEZE state)  199  Pending order cancellation executed (end of FREEZE state)  199  Pending order cancellation executed (end of FREEZE state)  199  Pending order cancellation executed (end of FREEZE state)  199  PartylDEnteringFirm  N  1 122  unsigned int  Entering Entity ID.  Value  Description  1 Participant  2 Market Supervision  39  OrdStatus  Y  1 123  char  Conveys the current status of an order.  Value  Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)   | 20036 | PartyIDEnteringTrader | N     | 4   | 116 | unsigned int | Entering User ID.                        |
| Reason  Type (150) of the Execution Report (8) message.  Value Description 103 Order delete accepted 197 Pending order deletion finally completed (end of FREEZE state) 199 Pending order cancellation executed (end of FREEZE state) 199 Pending order cancellation executed (end of FREEZE state)  Value Description 1 Participant 2 Market Supervision  39 OrdStatus  Y 1 123 Char Conveys the current status of an order.  Value Description 4 Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)   | 270   | ExecRestatement-      | V     | 2   | 120 | immed int    | Code to further qualify the field Even   |
| (8) message.    Value   Description   103   Order delete accepted   197   Pending order deletion finally completed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending Entity ID.   199 | 310   | Reason                | Ť     |     | 120 | unsigned int |  |
| Value   Description   103   Order delete accepted   197   Pending order deletion finally completed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending Entity ID.   Value   Description   1   Participant   2   Market Supervision   2   Market Supervision   2   Market Supervision   4   Cancelled   6   Pending Cancel (i.e. result of Order Cancel Request)   199   Pending Cancel (i.e. result of Order Cancel Request)   199   Pending order deletion finally completed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREE  |       |                       |       |     |     |              |  |
| 103 Order delete accepted   197 Pending order deletion finally completed (end of FREEZE state)   199 Pending order cancellation executed (end of FREEZE state)   199 Pending order cancellat  |       |                       |       |     |     |              |  |
| 197   Pending order deletion finally completed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending Entity ID.   |       |                       |       |     |     |              | ·  |
| PartyIDEnteringFirm   |       |                       |       |     |     |              | · ·                                      |
| FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending order cancellation executed (end of FREEZE state)   199   Pending entity ID.     Value   Description  |       |                       |       |     |     |              |  |
| 20007 PartyIDEnteringFirm N 1 122 unsigned int Entering Entity ID.  Value Description 1 Participant 2 Market Supervision  OrdStatus Y 1 123 char Conveys the current status of an order.  Value Description 1 Participant 2 Market Supervision  A Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              |  |
| 20007 PartyIDEnteringFirm  N  1 122 unsigned int  Entering Entity ID.  Value Description  1 Participant  2 Market Supervision  39 OrdStatus  Y  1 123 char  Conveys the current status of an order.  Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)   |       |                       |       |     |     |              | FREEZE state)                            |
| 20007 PartyIDEnteringFirm  N  1  122 unsigned int  Entering Entity ID.  Value Description  1 Participant  2 Market Supervision  39 OrdStatus  Y  1  123 char  Conveys the current status of an order.  Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)   |       |                       |       |     |     |              | 199 Pending order cancellation           |
| 20007 PartyIDEnteringFirm N 1 122 unsigned int Entering Entity ID.  Value Description 1 Participant 2 Market Supervision  Y 1 123 char Conveys the current status of an order.  Value Description 4 Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              | executed (end of FREEZE                  |
| Value Description  1 Participant 2 Market Supervision  39 OrdStatus  Y 1 123 Char Conveys the current status of an order.  Value Description  4 Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              | state)                                   |
| 39 OrdStatus  Y 1 123 Char Conveys the current status of an order.  Value Description 4 Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)  | 20007 | PartyIDEnteringFirm   | N     | 1   | 122 | unsigned int | Entering Entity ID.                      |
| 1 Participant 2 Market Supervision  39 OrdStatus  Y 1 123 Char  Conveys the current status of an order.  Value Description 4 Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)   |       |                       |       |     |     |              | Value Description                        |
| 39 OrdStatus  Y 1 123 Char Conveys the current status of an order.  Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              | ·  |
| 39 OrdStatus  Y 1 123 Char Conveys the current status of an order.  Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              |  |
| der.    Value   Description   4   Cancelled   6   Pending Cancel (i.e. result of Order Cancel Request)  |       |                       | .,    |     |     |              | ·  |
| Value Description  4 Cancelled  6 Pending Cancel (i.e. result of Order Cancel Request)  | 39    | OrdStatus             | Y     | 1   | 123 | char         |  |
| 4 Cancelled 6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              |  |
| 6 Pending Cancel (i.e. result of Order Cancel Request)  |       |                       |       |     |     |              | · ·                                      |
| of Order Cancel Request)  |       |                       |       |     |     |              |  |
|   |       |                       |       |     |     |              |  |
| 9 Suspended   |       |                       |       |     |     |              | . ,                                      |
|   |       |                       |       |     |     |              | 9 Suspended                              |

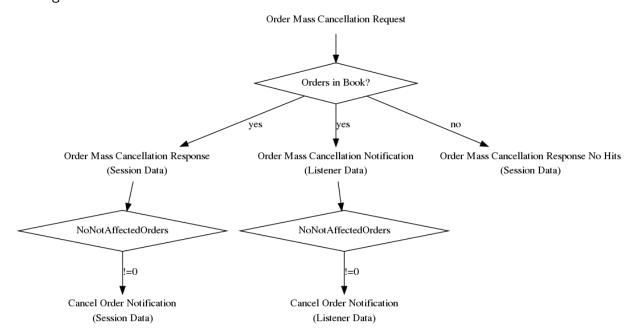
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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description  |
|-------|----------------|-------|-----|-----|--------------|--|
| 150   | ExecType       | Y     | 1   | 124 | char         | Indicates if a request has been entered by the participant or by market supervision.  Value Description  4 Cancelled   |
|       |                |       |     |     |              | 6 Pending Cancel (e.g. result of Order Cancel Request)   |
| 1227  | ProductComplex | Y     | 1   | 125 | unsigned int | This field qualifies an instrument type on Eurex.  Value Description  1 Simple instrument  2 Standard Option Strategy  3 Non-Standard Option Strategy  4 Volatility Strategy  5 Futures Spread  6 Inter-Product Spread  7 Standard Future Strategy  8 Pack and Bundle  9 Strip |
| 54    | Side           | Y     | 1   | 126 | unsigned int | Side of the order.  Value Description  1 Buy  2 Sell   |
| 25016 | Pad1           | U     | 1   | 127 | Fixed String | not used   |

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#### 7.7.18 Order Mass Cancellation Request

This message is used for mass cancellation of orders. For more details, please refer to chapter 4.6.6 Order Mass Cancellation. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description                                     |
|---|------------------------|-------|-----|-----|--------------|---|
| < Messa   | geHeaderIn>            |       |     |     |              |   |
| 9   | BodyLen                | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-            |
|   |                        |       |     |     |              | cluding this field.                             |
| 28500   | TemplateID             | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI               |
|   |                        |       |     |     |              | message layout. Value: 10120 (Order-            |
|   |                        |       |     |     |              | ${\sf MassActionRequest,\ MsgType} = {\sf CA)}$ |
| 25028   | NetworkMsgID           | U     | 8   | 6   | Fixed String | not used  |
| 25017   | Pad2                   | U     | 2   | 14  | Fixed String | not used  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>              |       |     |     |              |   |
| 34  | MsgSeqNum              | Υ     | 4   | 16  | unsigned int | Message sequence number used by the             |
|   |                        |       |     |     |              | participant for requests sent to the ga-        |
|   |                        |       |     |     |              | teway.  |
| 50  | SenderSubID            | Y     | 4   | 20  | unsigned int | User ID.  |
| < Messa   | ge Body>               |       |     |     |              |   |
| 48  | SecurityID             | N     | 8   | 24  | signed int   | Instrument identifier.                          |
| 376   | ComplianceID           | N     | 8   | 32  | unsigned int | For participants to uniquely identify           |
|   |                        |       |     |     |              | trading strategies                              |
| 1300  | MarketSegmentID        | Υ     | 4   | 40  | signed int   | Product identifier.                             |
| 20655   | TargetPartyIDSessionID | N     | 4   | 44  | unsigned int | Session ID.                                     |
| 20612   | TargetParty-           | N     | 4   | 48  | unsigned ist | Owning User ID                                  |
| 20012   | IDExecutingTrader      | IN    | 4   | 40  | unsigned int | Owning User ID.                                 |
| 25019   | Pad4                   | U     | 4   | 52  | Fixed String | not used  |

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### 7.7.19 Order Mass Cancellation Response

This message confirms the Mass Cancellation request for orders. For more details, please refer to chapter 4.16 Mass Cancellation Notification and Mass Cancellation Events.

| Cluding this field.  | Tag   | Field Name          | Req'd                                 | Len | Ofs | Data Type    | Description                                    |
|--|---|---------------------|---------------------------------------|-----|-----|--------------|--|
| Cluding this field.   Cluding this field.  | <messa<sub>ξ</messa<sub>  | geHeaderOut>        |                                       |     |     |              |  |
| TemplateID   | 9   | BodyLen             | Υ                                     | 4   | 0   | unsigned int | Number of bytes for the message, in-           |
| message layout. Value: 10121 (Orn MassActionReport, MsgType = B 25017 Pad2   |   |                     |                                       |     |     |              | cluding this field.                            |
| MassActionReport, MsgType = B  | 28500   | TemplateID          | Υ                                     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI              |
| 25017   Pad2   |   |                     |                                       |     |     |              | message layout. Value: 10121 (Order-           |
| Separation   Sep   |   |                     |                                       |     |     |              | ${\sf MassActionReport,\ MsgType} = {\sf BZ)}$ |
| 5979       RequestTime       Y       8       8       UTCTimestamp       Gateway request in timestamp.         7764       RequestOut       Y       8       16       UTCTimestamp       Timestamp the gateway sends an sage to the Matching Engine         21002       TrdRegTSTimeIn       Y       8       24       UTCTimestamp       Matching engine in timestamp.         21003       TrdRegTSTimeOut       Y       8       32       UTCTimestamp       Matching engine out timestamp.         7765       ResponseIn       Y       8       40       UTCTimestamp       Timestamp the gateway receive message from the Matching Engine         52       SendingTime       Y       8       48       UTCTimestamp       Gateway response out timestamp.         34       MsgSeqNum       Y       4       56       unsigned int       Message sequence number used by participant for requests sent to the teway.         5948       PartitionID       Y       2       60       unsigned int       Grouping of Eurex products.         Belongs to the scope of Ser Availability and Retransmit request       Availability and Retransmit request         1180       AppIID       Y       1       62       unsigned int       Identifier for an ETI data stream.  | 25017   | Pad2                | U                                     | 2   | 6   | Fixed String | not used                                       |
| 7764 RequestOut  Y  8  16  UTCTimestamp  Timestamp the gateway sends a nage to the Matching Engine  21002 TrdRegTSTimeIn  Y  8  24  UTCTimestamp  Matching engine in timestamp.  7765 ResponseIn  Y  8  40  UTCTimestamp  Timestamp the gateway receive message from the Matching Engine  52 SendingTime  Y  8  48  UTCTimestamp  Gateway response out timestamp.  34 MsgSeqNum  Y  4  56  Unsigned int  Message sequence number used by participant for requests sent to the teway.  5948 PartitionID  Y  2  60  Unsigned int  Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit request  1180 AppIID  Y  1  62  Unsigned int  Identifier for an ETI data stream.  | < Respoi  | nseHeaderME>        |                                       |     |     |              |  |
| sage to the Matching Engine  21002 TrdRegTSTimeIn Y 8 24 UTCTimestamp Matching engine in timestamp.  21003 TrdRegTSTimeOut Y 8 32 UTCTimestamp Matching engine out timestamp.  7765 ResponseIn Y 8 40 UTCTimestamp Timestamp the gateway receive message from the Matching Engine  52 SendingTime Y 8 48 UTCTimestamp Gateway response out timestamp.  34 MsgSeqNum Y 4 56 unsigned int Message sequence number used by participant for requests sent to the teway.  5948 PartitionID Y 2 60 unsigned int Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit requests sent.  1180 AppIID Y 1 62 unsigned int Identifier for an ETI data stream.  | 5979  | RequestTime         | Υ                                     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.                  |
| 21002TrdRegTSTimeInY824UTCTimestampMatching engine in timestamp.21003TrdRegTSTimeOutY832UTCTimestampMatching engine out timestamp.7765ResponseInY840UTCTimestampTimestamp the gateway receive message from the Matching Enging.52SendingTimeY848UTCTimestampGateway response out timestamp.34MsgSeqNumY456unsigned intMessage sequence number used by participant for requests sent to the teway.5948PartitionIDY260unsigned intGrouping of Eurex products. Belongs to the scope of Ser Availability and Retransmit requests.1180AppIIDY162unsigned intIdentifier for an ETI data stream.  | 7764  | RequestOut          | Υ                                     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-             |
| 21003 TrdRegTSTimeOut  Y 8 32 UTCTimestamp Matching engine out timestamp.  Timestamp the gateway receive message from the Matching Engine of the Matching Engine |   |                     |                                       |     |     |              | sage to the Matching Engine                    |
| 7765 Responseln  Y  8  40  UTCTimestamp  Timestamp the gateway receive message from the Matching Engire message from the Matching Engire  52 SendingTime  Y  8  48  UTCTimestamp  Gateway response out timestamp.  Message sequence number used by participant for requests sent to the teway.  5948 PartitionID  Y  2  60  Unsigned int  Grouping of Eurex products.  Belongs to the scope of Servavilability and Retransmit requests sent Identifier for an ETI data stream.   | 21002   | TrdRegTSTimeIn      | Υ                                     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.                  |
| message from the Matching Engir  52 SendingTime  Y 8 48 UTCTimestamp Gateway response out timestamp.  34 MsgSeqNum  Y 4 56 unsigned int Message sequence number used by participant for requests sent to the teway.  5948 PartitionID  Y 2 60 unsigned int Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit requests.  1180 ApplID  Y 1 62 unsigned int Identifier for an ETI data stream.   | 21003   | TrdRegTSTimeOut     | Υ                                     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.                 |
| 52 SendingTime  Y 8 48 UTCTimestamp Gateway response out timestamp.  34 MsgSeqNum  Y 4 56 unsigned int Message sequence number used by participant for requests sent to the teway.  5948 PartitionID  Y 2 60 unsigned int Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit requests.  1180 AppIID  Y 1 62 unsigned int Identifier for an ETI data stream.  | 7765  | ResponseIn          | Υ                                     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a               |
| 34 MsgSeqNum  Y  4 56 unsigned int  Message sequence number used by participant for requests sent to the teway.  5948 PartitionID  Y  2 60 unsigned int  Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit requests.  1180 ApplID  Y  1 62 unsigned int  Identifier for an ETI data stream.   |   |                     |                                       |     |     |              | message from the Matching Engine               |
| participant for requests sent to the teway.  5948 PartitionID  Y  2  60  unsigned int  Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit requests  1180 AppIID  Y  1 62  unsigned int  Identifier for an ETI data stream.   | 52  | SendingTime         | Υ                                     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.                |
| teway.  5948 PartitionID  Y 2 60 unsigned int Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit reques  1180 ApplID  Y 1 62 unsigned int Identifier for an ETI data stream.   | 34  | MsgSeqNum           | Υ                                     | 4   | 56  | unsigned int | Message sequence number used by the            |
| 5948 PartitionID  Y 2 60 unsigned int Grouping of Eurex products.  Belongs to the scope of Ser Availability and Retransmit requesements.  1180 ApplID  Y 1 62 unsigned int Identifier for an ETI data stream.  |   |                     |                                       |     |     |              | participant for requests sent to the ga-       |
| Belongs to the scope of Ser Availability and Retransmit reques  1180 ApplID Y 1 62 unsigned int Identifier for an ETI data stream.   |   |                     |                                       |     |     |              | teway.   |
| Availability and Retransmit reques  1180 ApplID Y 1 62 unsigned int Identifier for an ETI data stream.   | 5948  | PartitionID         | Υ                                     | 2   | 60  | unsigned int | Grouping of Eurex products.                    |
| 1180 ApplID Y 1 62 unsigned int Identifier for an ETI data stream.   |   |                     |                                       |     |     |              | Belongs to the scope of Service                |
|  |   |                     |                                       |     |     |              | Availability and Retransmit requests.          |
| W.L. Burrer  | 1180  | ApplID              | Υ                                     | 1   | 62  | unsigned int | Identifier for an ETI data stream.             |
|  |   |                     |                                       |     |     |              | Value Description                              |
| 4 Session Data   |   |                     |                                       |     |     |              | 4 Session Data                                 |
| 28704 ApplMsgID Y 16 63 data Application message identifier a  | 20704   | A IM ID             | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 1.6 | 62  | Lete         | A 1:1:   |
|  | 28704   | ApplivisgID         | Y                                     | 10  | 03  | data         | Application message identifier assi-           |
| gned to an order or quote event.   | 002   | l .e .              | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 1   | 70  |              |  |
|  | 893   | LastFragment        | Y                                     | 1   | /9  | unsigned int | Indicates whether this message is the          |
|  |   |                     |                                       |     |     |              | last fragment (part) of a sequence of          |
|  |   |                     |                                       |     |     |              | messages belonging to one dedicated            |
| transaction.   |   |                     |                                       |     |     |              |  |
| Value Description  |   |                     |                                       |     |     |              |  |
| 0 Not Last Message   |   |                     |                                       |     |     |              |  |
| 1 Last Message   |   |                     |                                       |     |     |              | 1 Last Message                                 |
| <message body=""></message>  | <messag< td=""><td>ge Body&gt;</td><td></td><td></td><td>1</td><td></td><td></td></messag<> | ge Body>            |                                       |     | 1   |              |  |
| 1369 MassActionReportID Y 8 80 UTCTimestamp Transaction timestamp.   | 1369  | MassActionReportID  | Υ                                     | 8   | 80  | UTCTimestamp | Transaction timestamp.                         |
| 1370 NoNotAffectedOrders Y 2 88 Counter Number of NotAffectedOrders rep  | 1370  | NoNotAffectedOrders | Υ                                     | 2   | 88  | Counter      | Number of NotAffectedOrders repea-             |
| ting group instances.  |   |                     |                                       |     |     |              | ting group instances.                          |

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| Tag   | Field Name          | Req'd                               | Len | Ofs | Data Type    | Description                          |
|---|---------------------|-------------------------------------|-----|-----|--------------|--------------------------------------|
| 25021   | Pad6                | U                                   | 6   | 90  | Fixed String | not used                             |
| <notaf< td=""><td>fectedOrdersGrp&gt;</td><td>Cardinality: 0-500, Record counter:</td></notaf<> | fectedOrdersGrp>    | Cardinality: 0-500, Record counter: |     |     |              |                                      |
|   |                     |                                     |     |     |              | NoNotAffectedOrders                  |
| 1371  | >NotAffectedOrderID | Y                                   | 8   | 96  | unsigned int | Exchange Order ID of an order whose  |
|   |                     |                                     |     |     |              | cancellation is pending.             |
| 1372  | >NotAffOrigClOrdID  | N                                   | 8   | 104 | unsigned int | Original Client Order ID of an order |
|   |                     |                                     |     |     |              | whose cancellation is pending.       |

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## 7.7.20 Order Mass Cancellation Response No Hits

This message confirms the Mass Cancellation request for orders if the order book of the session was not affected.

| Tag   | Field Name         | Req'd | Len | Ofs | Data Type    | Description                                    |
|---|--------------------|-------|-----|-----|--------------|--|
| <messa< th=""><th>geHeaderOut&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<>    | geHeaderOut>       |       |     |     |              |  |
| 9   | BodyLen            | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-           |
|   |                    |       |     |     |              | cluding this field.                            |
| 28500   | TemplateID         | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI              |
|   |                    |       |     |     |              | message layout. Value: 10124 (Order-           |
|   |                    |       |     |     |              | ${\sf MassActionReport,\ MsgType} = {\sf BZ)}$ |
| 25017   | Pad2               | U     | 2   | 6   | Fixed String | not used                                       |
| <nrre.< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrre.<> | sponseHeaderME>    |       |     |     |              |  |
| 5979  | RequestTime        | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.                  |
| 7764  | RequestOut         | Υ     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-             |
|   |                    |       |     |     |              | sage to the Matching Engine                    |
| 21002   | TrdRegTSTimeIn     | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.                  |
| 21003   | TrdRegTSTimeOut    | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.                 |
| 7765  | ResponseIn         | Υ     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a               |
|   |                    |       |     |     |              | message from the Matching Engine               |
| 52  | SendingTime        | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.                |
| 34  | MsgSeqNum          | Υ     | 4   | 56  | unsigned int | Message sequence number used by the            |
|   |                    |       |     |     |              | participant for requests sent to the ga-       |
|   |                    |       |     |     |              | teway.   |
| 893   | LastFragment       | Y     | 1   | 60  | unsigned int | Indicates whether this message is the          |
|   |                    |       |     |     |              | last fragment (part) of a sequence of          |
|   |                    |       |     |     |              | messages belonging to one dedicated            |
|   |                    |       |     |     |              | transaction.                                   |
|   |                    |       |     |     |              | Value Description                              |
|   |                    |       |     |     |              | 1 Last Message                                 |
| 25018   | Pad3               | U     | 3   | 61  | Fixed String | not used                                       |
| < Messa   | ge Body>           |       |     |     | _            |  |
| 1369  | MassActionReportID | Υ     | 8   | 64  | UTCTimestamp | Transaction timestamp.                         |

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#### 7.7.21 Order Mass Cancellation Notification

This message informs about an unsolicited mass cancellation event of orders. For more details, please refer to chapter 4.16 Mass Cancellation Notification and Mass Cancellation Events.

| Tag  | Field Name         | Req'd | Len | Ofs | Data Type    | Description   |
|--|--------------------|-------|-----|-----|--------------|---|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderOut>       |       |     |     |              |   |
| 9  | BodyLen            | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.  |
| 28500  | TemplateID         | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI message layout. Value: 10122 (Order-MassActionReport, MsgType = BZ)   |
| 25017  | Pad2               | U     | 2   | 6   | Fixed String | not used  |
| <rbch< td=""><td>leaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>      | leaderME>          |       |     |     |              |   |
| 21003  | TrdRegTSTimeOut    | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.  |
| 25043  | NotificationIn     | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a notification message from the Matching Engine  |
| 52   | SendingTime        | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.   |
| 28727  | ApplSubID          | N     | 4   | 32  | unsigned int | Only set for Listener Data.   |
| 5948   | PartitionID        | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.  Belongs to the scope of Service  Availability and Retransmit requests.   |
| 28704  | ApplMsgID          | Y     | 16  | 38  | data         | Application message identifier assigned to an order or quote event.   |
| 1180   | ApplID             | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.  Value Description  4 Session Data  5 Listener Data  |
| 1352   | ApplResendFlag     | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.  Value Description  0 False  1 True   |
| 893  | LastFragment       | Y     | 1   | 56  | unsigned int | Indicates whether this message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction.  Value Description  0 Not Last Message  1 Last Message |
| 25022  | Pad7               | U     | 7   | 57  | Fixed String | not used  |
| < Messa  | ge Body>           |       |     |     |              |   |
| 1369   | MassActionReportID | Y     | 8   | 64  | UTCTimestamp | Transaction timestamp.  |

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| Tag   | Field Name                    | Req'd | Len | Ofs | Data Type    | Description  |
|---|-------------------------------|-------|-----|-----|--------------|--|
| 48  | SecurityID                    | N     | 8   | 72  | signed int   | Only set for mass cancellations on in-                 |
|   |                               |       |     |     |              | strument (SecurityID) level.                           |
| 1300  | MarketSegmentID               | Υ     | 4   | 80  | signed int   | Product identifier.                                    |
| 20655   | TargetPartyIDSessionID        | Υ     | 4   | 84  | unsigned int | Session ID.  |
| 20612   | TargetParty-IDExecutingTrader | N     | 4   | 88  | unsigned int | Owning User ID.  |
| 20036   | PartyIDEnteringTrader         | N     | 4   | 92  | unsigned int | Entering User ID.                                      |
| 1370  | NoNotAffectedOrders           | Y     | 2   | 96  | Counter      | Number of NotAffectedOrders repeating group instances. |
| 20007   | PartyIDEnteringFirm           | N     | 1   | 98  | unsigned int | Entering Entity ID.                                    |
|   | , ,                           |       |     |     | -            | Value Description                                      |
|   |                               |       |     |     |              | 1 Participant  |
|   |                               |       |     |     |              | 2 Market Supervision                                   |
| 28721   | MassActionReason              | Y     | 1   | 99  | unsigned int | Reason for mass cancellation.                          |
|   |                               |       |     |     |              | Value Description                                      |
|   |                               |       |     |     |              | 0 No special reason                                    |
|   |                               |       |     |     |              | 1 Trading was stopped                                  |
|   |                               |       |     |     |              | 2 Emergency  |
|   |                               |       |     |     |              | 3 Market Maker Protection                              |
|   |                               |       |     |     |              | 6 Session loss or logout                               |
|   |                               |       |     |     |              | 7 Duplicate Session Login                              |
|   |                               |       |     |     |              | 8 Clearing Risk Control                                |
| 18  | ExecInst                      | Y     | 1   | 100 | unsigned int | Instructions for order handling.                       |
|   |                               |       |     |     |              | Value Description                                      |
|   |                               |       |     |     |              | 3 Persistent and non-                                  |
|   |                               |       |     |     |              | persistent orders affected                             |
|   |                               |       |     |     |              | (FIX value 'H Q')                                      |
|   |                               |       |     |     |              | 2 Non-persistent Order (FIX                            |
|   |                               |       |     |     |              | value 'Q')   |
| 25018   | Pad3                          | U     | 3   | 101 | Fixed String | not used   |
| <notaf< td=""><td>fectedOrdersGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-500, Record counter:</td></notaf<> | fectedOrdersGrp>              |       |     |     |              | Cardinality: 0-500, Record counter:                    |
|   |                               |       |     |     |              | NoNotAffectedOrders                                    |
| 1371  | >NotAffectedOrderID           | Y     | 8   | 104 | unsigned int | Exchange Order ID of an order whose                    |
|   |                               |       |     |     |              | cancellation is pending.                               |
| 1372  | >NotAffOrigClOrdID            | N     | 8   | 112 | unsigned int | Original Client Order ID of an order                   |
|   |                               |       |     |     |              | whose cancellation is pending.                         |

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#### 7.7.22 Extended Order Information

This message format is used for order book restatement, retransmission of order events, the Listener Broadcast and for unsolicited order events within the session data. For more details, please refer to chapter 4.6.9 Order Status and Execution Reports.

| Tag  | Field Name      | Req'd | Len | Ofs | Data Type    | Description   |
|--|-----------------|-------|-----|-----|--------------|---|
| <messa<sub>c</messa<sub>   | geHeaderOut>    |       |     |     |              |   |
| 9  | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.  |
| 28500  | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI message layout. Value: $10117$ (Execution-Report, MsgType = 8)  |
| 25017  | Pad2            | U     | 2   | 6   | Fixed String | not used  |
| <rbch< td=""><td>eaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<> | eaderME>        |       |     |     |              |   |
| 21003  | TrdRegTSTimeOut | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.  |
| 25043  | NotificationIn  | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a notification message from the Matching Engine  |
| 52   | SendingTime     | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.   |
| 28727  | ApplSubID       | N     | 4   | 32  | unsigned int | Only set for Listener Data.   |
| 5948   | PartitionID     | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.  Belongs to the scope of Service  Availability and Retransmit requests.   |
| 28704  | ApplMsgID       | N     | 16  | 38  | data         | Application message identifier assigned to an order or quote event.   |
| 1180   | ApplID          | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.  |
| 1352   | ApplResendFlag  | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.  Value Description  0 False  1 True   |
| 893  | LastFragment    | Y     | 1   | 56  | unsigned int | Indicates whether this message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction.  Value Description  0 Not Last Message  1 Last Message |
| 25022  | Pad7            | U     | 7   | 57  | Fixed String | not used  |
| < Messa  | ge Body>        |       |     |     |              | 1   |

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| Tag   | Field Name            | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|-----------------------|-------|-----|-----|--------------|--|
| 37    | OrderID               | Υ     | 8   | 64  | unsigned int | Exchange Order ID generated by Eur-      |
|       |                       |       |     |     |              | ex System; it remains constant over      |
|       |                       |       |     |     |              | the lifetime of an order.                |
| 11    | ClOrdID               | N     | 8   | 72  | unsigned int | Client Order ID: Unique participant      |
|       |                       |       |     |     |              | defined order request identifier; used   |
|       |                       |       |     |     |              | for client order id chaining.            |
| 41    | OrigClOrdID           | N     | 8   | 80  | unsigned int | ClOrdID (11) of the last successfully    |
|       |                       |       |     |     |              | processed task (request) referring to    |
|       |                       |       |     |     |              | the specific order.                      |
| 48    | SecurityID            | Y     | 8   | 88  | signed int   | Instrument identifier.                   |
| 17    | ExecID                | Υ     | 8   | 96  | UTCTimestamp | Transaction timestamp.                   |
| 21009 | TrdRegTSEntryTime     | Υ     | 8   | 104 | UTCTimestamp | The entry timestamp is the time of       |
|       |                       |       |     |     |              | the creation of the order.               |
| 21008 | TrdRegTSTimePriority  | Υ     | 8   | 112 | UTCTimestamp | Priority timestamp.                      |
| 44    | Price                 | N     | 8   | 120 | PriceType    | Limit price. Required if OrdType (40)    |
|       |                       |       |     |     |              | is Limit (2) or Stop Limit (4).          |
| 99    | StopPx                | N     | 8   | 128 | PriceType    | Stop price. Required if OrdType (40)     |
|       |                       |       |     |     |              | is Stop (3) or used as the trigger price |
|       |                       |       |     |     |              | for an One-cancels-the-other order.      |
| 1300  | MarketSegmentID       | Y     | 4   | 136 | signed int   | Product identifier.                      |
| 151   | LeavesQty             | Υ     | 4   | 140 | Qty          | Remaining quantity of an order. If the   |
|       |                       |       |     |     |              | order has been executed partially this   |
|       |                       |       |     |     |              | field contains the non-executed quan-    |
|       |                       |       |     |     |              | tity. A remaining size of 0 indicates    |
|       |                       |       |     |     |              | that the order is fully matched or no    |
|       |                       |       |     |     |              | longer active.                           |
| 14    | CumQty                | Υ     | 4   | 144 | Qty          | Cumulated executed quantity of an or-    |
|       |                       |       |     |     |              | der.                                     |
| 84    | CxIQty                | Υ     | 4   | 148 | Qty          | Total quantity cancelled for this order. |
| 38    | OrderQty              | Υ     | 4   | 152 | Qty          | Total Order Quantity.                    |
| 432   | ExpireDate            | N     | 4   | 156 | LocalMktDate | Date of order expiry. Required if Ti-    |
|       |                       |       |     |     |              | meInForce (59) = 6.                      |
| 28744 | MatchInstCrossID      | N     | 4   | 160 | unsigned int | Self Match Prevention ID.                |
| 20059 | PartyIDExecutingUnit  | Y     | 4   | 164 | unsigned int | Business Unit ID.                        |
| 20055 | PartyIDSessionID      | Υ     | 4   | 168 | unsigned int | Session ID.                              |
| 20012 | PartyIDExecuting-     | Υ     | 4   | 172 | unsigned int | Owning User ID.                          |
| 20012 | Trader                |       | 7   | -12 | unsigned int | Chining Oder ID.                         |
| 20036 | PartyIDEnteringTrader | N     | 4   | 176 | unsigned int | Entering User ID.                        |
| 30555 | NoLegExecs            | Y     | 2   | 180 | Counter      | Number of InstrmntLegExec repea-         |
|       |                       |       |     |     |              | ting group instances.                    |

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| Tag   | Field Name          | Req'd | Len | Ofs | Data Type    | Description                             |
|-------|---------------------|-------|-----|-----|--------------|---|
| 378   | ExecRestatement-    | Υ     | 2   | 182 | unsigned int | Code to further qualify the field Exec- |
| 370   | Reason              | '     | _   | 102 | unsigned int | Type (150) of the Execution Report      |
|       |                     |       |     |     |              | (8) message.                            |
|       |                     |       |     |     |              | Value Description                       |
|       |                     |       |     |     |              | 001 Order book restatement              |
|       |                     |       |     |     |              | 101 Order add accepted                  |
|       |                     |       |     |     |              | 102 Order modify accepted               |
|       |                     |       |     |     |              | 103 Order delete accepted               |
|       |                     |       |     |     |              | 105 IOC Order accepted                  |
|       |                     |       |     |     |              | 108 Book Order executed                 |
|       |                     |       |     |     |              | 135 Market Order triggered and          |
|       |                     |       |     |     |              | executed                                |
|       |                     |       |     |     |              | 149 Closing Auction Order has           |
|       |                     |       |     |     |              | been activated                          |
|       |                     |       |     |     |              | 150 Closing Auction Order has           |
|       |                     |       |     |     |              | been inactivated                        |
|       |                     |       |     |     |              | 164 One-cancels-the-other Or-           |
|       |                     |       |     |     |              | der has been triggered                  |
|       |                     |       |     |     |              | 172 Stop Order has been trigge-         |
|       |                     |       |     |     |              | red                                     |
|       |                     |       |     |     |              | 212 Book or Cancel Order ac-            |
|       |                     |       |     |     |              | cepted                                  |
|       |                     |       |     |     |              | 199 Pending order cancellation          |
|       |                     |       |     |     |              | executed (end of FREEZE                 |
|       |                     |       |     |     |              | state)                                  |
|       |                     |       |     |     |              | 181 Ownership Changed                   |
| 20007 | PartyIDEnteringFirm | N     | 1   | 184 | unsigned int | Entering Entity ID.                     |
|       |                     |       |     |     |              | Value Description                       |
|       |                     |       |     |     |              | 1 Participant                           |
|       |                     |       |     |     |              | 2 Market Supervision                    |

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| Tag  | Field Name     | Req'd | Len | Ofs | Data Type    | Description                             |
|------|----------------|-------|-----|-----|--------------|---|
| 1227 | ProductComplex | Υ     | 1   | 185 | unsigned int | This field qualifies an instrument type |
|      |                |       |     |     |              | on Eurex.                               |
|      |                |       |     |     |              | Value Description                       |
|      |                |       |     |     |              | 1 Simple instrument                     |
|      |                |       |     |     |              | 2 Standard Option Strategy              |
|      |                |       |     |     |              | 3 Non-Standard Option Stra-             |
|      |                |       |     |     |              | tegy                                    |
|      |                |       |     |     |              | 4 Volatility Strategy                   |
|      |                |       |     |     |              | 5 Futures Spread                        |
|      |                |       |     |     |              | 6 Inter-Product Spread                  |
|      |                |       |     |     |              | 7 Standard Future Strategy              |
|      |                |       |     |     |              | 8 Pack and Bundle                       |
|      |                |       |     |     |              | 9 Strip                                 |
| 39   | OrdStatus      | Y     | 1   | 186 | char         | Conveys the current status of an or-    |
|      |                |       |     |     |              | der.                                    |
|      |                |       |     |     |              | Value Description                       |
|      |                |       |     |     |              | 0 New                                   |
|      |                |       |     |     |              | 1 Partially filled                      |
|      |                |       |     |     |              | 2 Filled                                |
|      |                |       |     |     |              | 4 Cancelled                             |
|      |                |       |     |     |              | 9 Suspended                             |
| 150  | ЕхесТуре       | Υ     | 1   | 187 | char         | The reason why this message was ge-     |
|      |                |       |     |     |              | nerated.                                |
|      |                |       |     |     |              | Value Description                       |
|      |                |       |     |     |              | 0 New                                   |
|      |                |       |     |     |              | 4 Cancelled                             |
|      |                |       |     |     |              | 5 Replaced                              |
|      |                |       |     |     |              | 9 Suspended                             |
|      |                |       |     |     |              | D Restated                              |
|      |                |       |     |     |              | L Triggered                             |
|      |                |       |     |     |              | F Trade                                 |
| 54   | Side           | Y     | 1   | 188 | unsigned int | Side of the order.                      |
|      |                |       |     |     |              | Value Description                       |
|      |                |       |     |     |              | 1 Buy                                   |
|      |                |       |     |     |              | 2 Sell                                  |
|      |                |       |     |     |              |   |

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| Tag  | Field Name           | Req'd | Len | Ofs | Data Type    | Description                             |
|------|----------------------|-------|-----|-----|--------------|---|
| 40   | OrdType              | Υ     | 1   | 189 | unsigned int | Order type.                             |
|      |                      |       |     |     |              | Value Description                       |
|      |                      |       |     |     |              | 1 Market                                |
|      |                      |       |     |     |              | 2 Limit                                 |
|      |                      |       |     |     |              | 3 Stop                                  |
|      |                      |       |     |     |              | 4 Stop Limit                            |
| 1815 | TradingCapacity      | Υ     | 1   | 190 | unsigned int | This field designates if the trader is  |
|      |                      |       |     |     |              | acting in the capacity of agent, tra-   |
|      |                      |       |     |     |              | ding for its own account or acting as   |
|      |                      |       |     |     |              | a market maker.                         |
|      |                      |       |     |     |              | Value Description                       |
|      |                      |       |     |     |              | 1 Customer (Agency)                     |
|      |                      |       |     |     |              | 5 Principal (Proprietary)               |
|      |                      |       |     |     |              | 6 MarketMaker                           |
| 59   | TimeInForce          | N     | 1   | 191 | unsigned int | Execution and trading restriction pa-   |
|      |                      |       |     |     |              | rameters supported by Eurex.            |
|      |                      |       |     |     |              | Value Description                       |
|      |                      |       |     |     |              | 0 Day (GFD)                             |
|      |                      |       |     |     |              | 1 Good Till Cancelled (GTC)             |
|      |                      |       |     |     |              | - Standard Orders only                  |
|      |                      |       |     |     |              | 3 Immediate or Cancel (IOC)             |
|      |                      |       |     |     |              | 6 Good Till Date (GTD) -                |
|      |                      |       |     |     |              | Standard Orders only                    |
| 18   | ExecInst             | N     | 1   | 192 | unsigned int | Instructions for order handling.        |
|      |                      |       |     |     |              | Value Description                       |
|      |                      |       |     |     |              | 1 Persistent Order (FIX value           |
|      |                      |       |     |     |              | 'H')                                    |
|      |                      |       |     |     |              | 2 Non-persistent Order (FIX             |
|      |                      |       |     |     |              | value 'Q')                              |
|      |                      |       |     |     |              | 5 Persistent and Book or                |
|      |                      |       |     |     |              | Cancel order (FIX value 'H              |
|      |                      |       |     |     |              | 6 Non-persistent and Book or            |
|      |                      |       |     |     |              | Cancel order (FIX value 'Q              |
|      |                      |       |     |     |              | 6')                                     |
| 625  | TradingSessionSubID  | N     | 1   | 193 | unsigned int | Marks a certain order as a closing auc- |
| 023  | Traumg Dession Dubit | IN    | 1   | 193 | ansigned int | tion one.                               |
|      |                      |       |     |     |              | Value Description                       |
|      |                      |       |     |     |              | 4 Closing or closing auction            |
|      |                      |       |     |     |              | 4 Closing of closing auction            |

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| Tag   | Field Name                       | Req'd | Len | Ofs | Data Type    | Description  |
|-------|----------------------------------|-------|-----|-----|--------------|--|
| 28703 | ApplSeqIndicator                 | N     | 1   | 194 | unsigned int | Indicates if the order is a Lean Order or a Standard Order. Application sequencing is limited for Lean Orders.  Value Description  0 No Recovery Required  1 Recovery Required   |
| 1     | Account                          | N     | 2   | 195 | Fixed String | Accounts to book trades and keep positions on. Valid characters: 1-9,\x41,\x47,\x4D, \x50  |
| 20038 | PartyIDPosition-<br>Account      | N     | 20  | 197 | Fixed String | 'Flexible Account' information. Valid characters: $\x20,\x30-\x39,\x41-\x5A$   |
| 77    | PositionEffect                   | N     | 1   | 217 | char         | Field is used for Eurex position management purposes and indicates whether the order is submitted to open or close a position.  Value Description  C Close  O Open   |
| 20096 | PartyIDTakeUpTrading-<br>Firm    | N     | 5   | 218 | Fixed String | Take-up Member Short Name.  Valid characters: A-Z,0-9,\x20   |
| 20013 | PartyIDOrder-<br>OriginationFirm | N     | 7   | 223 | Fixed String | External Member ID.  Valid characters: A-Z,0-9,\x20  |
| 20032 | PartyIDBeneficiary               | N     | 9   | 230 | Fixed String | Final Beneficiary Valid characters: A-Z,0-9,\x20   |
| 20075 | PartyIDLocationID                | N     | 2   | 239 | Fixed String | Country code. Valid characters: \x01-\x7E  |
| 1031  | CustOrderHandlingInst            | N     | 1   | 241 | Fixed String | Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier. The field is for participant use only.   Valid characters: $\xspace \xspace \$ |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description  |
|-------|----------------|-------|-----|-----|--------------|--|
| 2404  | ComplianceText | N     | 20  | 242 | Fixed String | This field is used to provide additional regulatory information (according to respective rules & regs, circulars and/or bilateral coordination between participant and Trading Surveillance Office).  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 25007 | FreeText1      | N     | 12  | 262 | Fixed String | First free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading KRX or TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 25008 | FreeText2      | N     | 12  | 274 | Fixed String | Second free-format text field for trader-specific or customer-related comments. Valid characters: $\xspace \xspace \x$ |
| 25009 | FreeText3      | N     | 12  | 286 | Fixed String | Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 1362  | NoFills        | Y     | 1   | 298 | Counter      | Specifies the number of partial fills included in this Execution Report.   |
| 555   | NoLegs         | Y     | 1   | 299 | Counter      | Number of LegOrd repeating group instances.  |
| 1823  | Triggered      | Y     | 1   | 300 | unsigned int | Indicates if an order has been previously triggered.  Value Description  0 Not Triggered  1 Triggered Stop  2 Triggered OCO  |

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| Tag  | Field Name         | Req'd | Len | Ofs | Data Type    | Description  |
|--|--------------------|-------|-----|-----|--------------|--|
| 28745  | Crossed            | Y     | 1   | 301 | unsigned int | Identicates SMP involvement.   |
|  |                    |       |     |     |              | Value Description  0 No crossing (Order not subject to crossing)  1 Cross rejected (Order subject to crossing and match prevented)   |
| 25017  | Pad2               | U     | 2   | 302 | Fixed String | not used   |
| <legor< td=""><td>dGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-20, Record counter: No-<br/>Legs</td></legor<> | dGrp>              |       |     |     |              | Cardinality: 0-20, Record counter: No-<br>Legs   |
| 28715  | >LegAccount        | N     | 2   | 304 | Fixed String | Leg-specific account to book trades and keep positions on.  Valid characters: 1-9,\x41,\x47,\x4D,\x50  |
| 564  | >LegPositionEffect | Y     | 1   | 306 | char         | Leg-specific field used for Eurex position management purposes and indicates whether the leg is submitted to open or close a position.  Value Description  C Close  O Open |
| 25020  | >Pad5              | U     | 5   | 307 | Fixed String | not used   |
| <fillsgr< td=""><td>·p&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-100, Record counter: NoFills</td></fillsgr<>   | ·p>                |       |     |     |              | Cardinality: 0-100, Record counter: NoFills  |
| 1364   | >FillPx            | Y     | 8   | 0   | PriceType    | Price of Fill.   |
| 1365   | >FillQty           | Y     | 4   | 8   | Qty          | Quantity of Fill.  |
| 28708  |                    | Y     | 4   | 12  | unsigned int | Unique identifier for each price level (match step) of a match event; it is used for public trade reporting.   |
| 1363   | >FillExecID        | Y     | 4   | 16  | signed int   | Private identifier of an order match step event, which can be reconciled with the field SideTradeID (1506) in the Trade Notification.                                      |

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| Tag   | Field Name        | Req'd | Len | Ofs | Data Type    | Description  |
|---|-------------------|-------|-----|-----|--------------|--|
| 1443  | >FillLiquidityInd | N     | 1   | 20  | unsigned int | Indicates whether the order added or removed liquidity. Required only for execution reports generated for fills.  Value Description  1 Added Liquidity  2 Removed Liquidity  5 Triggered Stop Order  6 Triggered OCO Order  7 Triggered Market Order |
| 25018   | >Pad3             | U     | 3   | 21  | Fixed String | not used   |
| <instrm< td=""><td>entLegExecGrp&gt;</td><td></td><td></td><td></td><td>J</td><td>Cardinality: 0-600, Record counter: NoLegExecs</td></instrm<> | entLegExecGrp>    |       |     |     | J            | Cardinality: 0-600, Record counter: NoLegExecs   |
| 602   | >LegSecurityID    | Y     | 8   | 0   | signed int   | Instrument identifier of the leg security.   |
| 637   | >LegLastPx        | Y     | 8   | 8   | PriceType    | Price of this leg fill.  |
| 1418  | >LegLastQty       | Υ     | 4   | 16  | Qty          | Quantity executed in this leg fill.  |
| 1893  | >LegExecID        | Y     | 4   | 20  | signed int   | Private identifier of a leg match step, which can be reconciled with the field SideTradeID (1506) in the Trade Notification.   |
| 624   | >LegSide          | Y     | 1   | 24  | unsigned int | The side of the individual leg of a strategy as defined in its signature.  Value Description  1 Buy 2 Sell   |
| 25010   | >NoFillsIndex     | Y     | 1   | 25  | unsigned int | Reference to the corresponding Fills-Grp repeating group instance.   |
| 25021   | >Pad6             | U     | 6   | 26  | Fixed String | not used   |

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# 7.8 Quote and Cross Request

#### 7.8.1 Quote Request

This message is used to send a Quote Request. For more details, please refer to chapter 4.11 Request for Quote. This message is sent to the service "Order and Quote Management".

Quote Request

V
Quote Request Response
(Session Data)

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-----------------|-------|-----|-----|--------------|--|
| < Messa   | geHeaderIn>     |       |     |     |              |  |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |                 |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |                 |       |     |     |              | sage layout. Value: 10401 (Quote-        |
|   |                 |       |     |     |              | Request, $MsgType = R$ )                 |
| 25028   | NetworkMsgID    | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2            | U     | 2   | 14  | Fixed String | not used                                 |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>       |       |     |     |              |  |
| 34  | MsgSeqNum       | Υ     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |                 |       |     |     |              | participant for requests sent to the ga- |
|   |                 |       |     |     |              | teway.                                   |
| 50  | SenderSubID     | Y     | 4   | 20  | unsigned int | User ID.                                 |
| < Messa   | ge Body>        |       |     |     |              |  |
| 48  | SecurityID      | Y     | 8   | 24  | signed int   | Instrument identifier.                   |
| 376   | ComplianceID    | N     | 8   | 32  | unsigned int | For participants to uniquely identify    |
|   |                 |       |     |     |              | trading strategies                       |
| 1300  | MarketSegmentID | Υ     | 4   | 40  | signed int   | Product identifier.                      |
| 38  | OrderQty        | N     | 4   | 44  | Qty          | Total Order Quantity.                    |
| 54  | Side            | N     | 1   | 48  | unsigned int | Side of the order.                       |
|   |                 |       |     |     |              | Value Description                        |
|   |                 |       |     |     |              | 1 Buy                                    |
|   |                 |       |     |     |              | 2 Sell                                   |
|   |                 |       |     |     |              |  |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                            |
|-------|----------------|-------|-----|-----|--------------|--|
| 2404  | ComplianceText | N     | 20  | 49  | Fixed String | This field is used to provide additio- |
|       |                |       |     |     |              | nal regulatory information (according  |
|       |                |       |     |     |              | to respective rules & regs, circulars  |
|       |                |       |     |     |              | and/or bilateral coordination between  |
|       |                |       |     |     |              | participant and Trading Surveillance   |
|       |                |       |     |     |              | Office).                               |
|       |                |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,   |
|       |                |       |     |     |              | \x7D,\x7E                              |
| 25018 | Pad3           | U     | 3   | 69  | Fixed String | not used                               |

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# 7.8.2 Quote Request Response

This message confirms a Quote Request.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                               |
|---|-----------------|-------|-----|-----|--------------|---|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | geHeaderOut>    |       |     |     |              |   |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-      |
|   |                 |       |     |     |              | cluding this field.                       |
| 28500   | TemplateID      | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-    |
|   |                 |       |     |     |              | sage layout. Value: 10402 (Request-       |
|   |                 |       |     |     |              | ${\sf Acknowledge,\ MsgType} = {\sf U1)}$ |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                  |
| <nrres< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrres<> | sponseHeaderME> |       |     |     |              |   |
| 5979  | RequestTime     | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.             |
| 7764  | RequestOut      | Υ     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-        |
|   |                 |       |     |     |              | sage to the Matching Engine               |
| 21002   | TrdRegTSTimeIn  | Υ     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.             |
| 21003   | TrdRegTSTimeOut | Υ     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.            |
| 7765  | Responseln      | Υ     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a          |
|   |                 |       |     |     |              | message from the Matching Engine          |
| 52  | SendingTime     | Υ     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.           |
| 34  | MsgSeqNum       | Y     | 4   | 56  | unsigned int | Message sequence number used by the       |
|   |                 |       |     |     |              | participant for requests sent to the ga-  |
|   |                 |       |     |     |              | teway.                                    |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the     |
|   |                 |       |     |     |              | last fragment (part) of a sequence of     |
|   |                 |       |     |     |              | messages belonging to one dedicated       |
|   |                 |       |     |     |              | transaction.                              |
|   |                 |       |     |     |              | Value Description                         |
|   |                 |       |     |     |              | 1 Last Message                            |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used                                  |
| < Messa   | ge Body>        |       |     |     |              |   |
| 17  | ExecID          | Y     | 8   | 64  | UTCTimestamp | Transaction timestamp.                    |

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# 7.8.3 Cross Request

This message is used to create a Cross Request. For more details, please refer to chapter 4.10 Cross Request. This message is sent to the service "Order and Quote Management".

# Cross Request



# Cross Request Response

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-----------------|-------|-----|-----|--------------|--|
| <messa< td=""><td>geHeaderIn&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderIn>     |       |     |     |              |  |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |                 |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID      | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |
|   |                 |       |     |     |              | message layout. Value: 10118 (Cross-     |
|   |                 |       |     |     |              | Request, MsgType = U16)                  |
|   | NetworkMsgID    | U     | 8   | 6   | Fixed String | not used                                 |
| 25017   | Pad2            | U     | 2   | 14  | Fixed String | not used                                 |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>   | stHeader>       |       |     |     |              |  |
| 34  | MsgSeqNum       | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |
|   |                 |       |     |     |              | participant for requests sent to the ga- |
|   |                 |       |     |     |              | teway.                                   |
|   | SenderSubID     | Υ     | 4   | 20  | unsigned int | User ID.                                 |
|   | ge Body>        |       |     |     |              | _  |
| 48  | SecurityID      | Y     | 8   | 24  | signed int   | Instrument identifier.                   |
| 376   | ComplianceID    | N     | 8   | 32  | unsigned int | For participants to uniquely identify    |
|   |                 |       |     |     |              | trading strategies                       |
| 1300  | MarketSegmentID | Υ     | 4   | 40  | signed int   | Product identifier.                      |
| 38  | OrderQty        | Υ     | 4   | 44  | Qty          | Total Order Quantity.                    |
| 2404  | ComplianceText  | N     | 20  | 48  | Fixed String | This field is used to provide additio-   |
|   |                 |       |     |     |              | nal regulatory information (according    |
|   |                 |       |     |     |              | to respective rules & regs, circulars    |
|   |                 |       |     |     |              | and/or bilateral coordination between    |
|   |                 |       |     |     |              | participant and Trading Surveillance     |
|   |                 |       |     |     |              | Office).                                 |
|   |                 |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,     |
|   |                 |       |     |     |              | \x7D,\x7E                                |
| 25019   | Pad4            | U     | 4   | 68  | Fixed String | not used                                 |

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# 7.8.4 Cross Request Response

This message confirms a Cross Request.

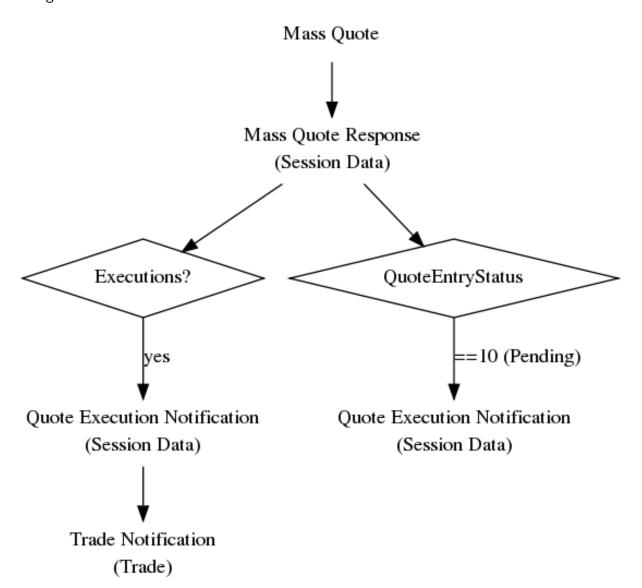
| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                               |
|---|-----------------|-------|-----|-----|--------------|---|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | geHeaderOut>    |       |     |     |              |   |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-      |
|   |                 |       |     |     |              | cluding this field.                       |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-    |
|   |                 |       |     |     |              | sage layout. Value: 10119 (Request-       |
|   |                 |       |     |     |              | ${\sf Acknowledge,\ MsgType} = {\sf U1)}$ |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                  |
| <nrre.< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrre.<> | sponseHeaderME> |       |     |     |              |   |
| 5979  | RequestTime     | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.             |
| 7764  | RequestOut      | Υ     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-        |
|   |                 |       |     |     |              | sage to the Matching Engine               |
| 21002   | TrdRegTSTimeIn  | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.             |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.            |
| 7765  | Responseln      | Υ     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a          |
|   |                 |       |     |     |              | message from the Matching Engine          |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.           |
| 34  | MsgSeqNum       | Υ     | 4   | 56  | unsigned int | Message sequence number used by the       |
|   |                 |       |     |     |              | participant for requests sent to the ga-  |
|   |                 |       |     |     |              | teway.                                    |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the     |
|   |                 |       |     |     |              | last fragment (part) of a sequence of     |
|   |                 |       |     |     |              | messages belonging to one dedicated       |
|   |                 |       |     |     |              | transaction.                              |
|   |                 |       |     |     |              | Value Description                         |
|   |                 |       |     |     |              | 1 Last Message                            |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used                                  |
| < Messa   | ge Body>        |       |     |     |              |   |
| 17  | ExecID          | Υ     | 8   | 64  | UTCTimestamp | Transaction timestamp.                    |

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# 7.9 Quote Handling

#### 7.9.1 Mass Quote

Quotes are entered using the Mass Quote message. For more details, please refer to chapter 4.7.2 Maintaining Quotes. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name   | Req'd | Len | Ofs | Data Type    | Description                          |
|---|--------------|-------|-----|-----|--------------|--------------------------------------|
| <messa< td=""><td>geHeaderIn&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderIn>  |       |     |     |              |                                      |
| 9   | BodyLen      | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in- |
|   |              |       |     |     |              | cluding this field.                  |
| 28500   | TemplateID   | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI    |
|   |              |       |     |     |              | message layout. Value: 10405 (Mass-  |
|   |              |       |     |     |              | Quote, $MsgType = i$ )               |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used                             |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used                             |

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| Tag   | Field Name                            | Req'd | Len | Ofs | Data Type    | Description   |
|---|---------------------------------------|-------|-----|-----|--------------|---|
| < Reque   | stHeader>                             |       |     |     |              |   |
| 34  | MsgSeqNum                             | Y     | 4   | 16  | unsigned int | Message sequence number used by the participant for requests sent to the gateway.   |
| 50  | SenderSubID                           | Υ     | 4   | 20  | unsigned int | User ID.  |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>  | ge Body>                              |       |     |     |              |   |
| 117   | QuoteID                               | Y     | 8   | 24  | unsigned int | Customer defined mass quote identifier.   |
| 376   | ComplianceID                          | N     | 8   | 32  | unsigned int | For participants to uniquely identify trading strategies  |
| 1300  | MarketSegmentID                       | Y     | 4   | 40  | signed int   | Product identifier.   |
| 28744   | MatchInstCrossID                      | N     | 4   | 44  | unsigned int | Self Match Prevention ID.   |
| 25033   | EnrichmentRuleID                      | N     | 2   | 48  | unsigned int | Identifies an enrichment rule   |
| 28710   | PriceValidityCheckType  QuoteSizeType | Y     | 1   | 50  | unsigned int | Indicator how price validity check should be performed by the exchange (see Price Reasonability Check).  Value Description  0 None  1 Optional 2 Mandatory  Identifies the quoting model. |
| 295   | NoQuoteEntries                        | Y     | 1   | 52  | Counter      | Value Description  1 Total Size (Quote Modification)  2 Open Size(Quote Entry)  The number of quote entries for a   |
|   |                                       |       |     |     |              | Mass Quote.   |
| 25018   | Pad3                                  | U     | 3   | 53  | Fixed String | not used  |
| <quote< td=""><td>EntryGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-100, Record counter: NoQuoteEntries</td></quote<> | EntryGrp>                             |       |     |     |              | Cardinality: 0-100, Record counter: NoQuoteEntries  |
| 48  | >SecurityID                           | Y     | 8   | 56  | signed int   | Instrument identifier.  |
| 132   | >BidPx                                | N     | 8   | 64  | PriceType    | Bid price/rate.   |
| 133   | >OfferPx                              | N     | 8   | 72  | PriceType    | Offer price/rate.   |
| 134   | >BidSize                              | N     | 4   | 80  | Qty          | Quantity of bid.  |
| 135   | >OfferSize                            | N     | 4   | 84  | Qty          | Quantity of offer.  |

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#### 7.9.2 Mass Quote Response

This message is the acknowledgement for a Mass Quote request. For more details, please refer to chapter 4.7.2 Maintaining Quotes. For a list of scenarios for the valid values of QuoteEntryStatus, please refer to chapter 8.6 Quote Entry Status

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description   |  |  |
|---|-----------------|-------|-----|-----|--------------|---|--|--|
| <pre></pre> |                 |       |     |     |              |   |  |  |
| 9   | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.  |  |  |
| 28500   | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI message layout. Value: 10406 (Mass-QuoteAcknowledgement, MsgType = b)   |  |  |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used  |  |  |
| <nrres< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrres<>   | sponseHeaderME> |       |     |     |              |   |  |  |
| 5979  | RequestTime     | Y     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.   |  |  |
| 7764  | RequestOut      | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a message to the Matching Engine  |  |  |
| 21002   | TrdRegTSTimeIn  | Y     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.   |  |  |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.  |  |  |
| 7765  | ResponseIn      | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a message from the Matching Engine   |  |  |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.   |  |  |
| 34  | MsgSeqNum       | Y     | 4   | 56  | unsigned int | Message sequence number used by the participant for requests sent to the gateway.   |  |  |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction.  Value Description  1 Last Message |  |  |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used  |  |  |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>  | ge Body>        |       |     |     |              |   |  |  |
| 117   | QuotelD         | Y     | 8   | 64  | unsigned int | Customer defined mass quote identifier.   |  |  |
| 693   | QuoteResponseID | Y     | 8   | 72  | UTCTimestamp | Mass quote response identifier generated by the exchange.   |  |  |
| 1300  | MarketSegmentID | Y     | 4   | 80  | signed int   | Product identifier.   |  |  |
| 295   |                 | Y     | 1   | 84  | Counter      | The number of quote entries of a Mass Quote that could not be processed as requested.   |  |  |
| 25018   | Pad3            | U     | 3   | 85  | Fixed String | not used  |  |  |

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| Tag   | Field Name         | Req'd | Len | Ofs | Data Type    | Description   |
|---|--------------------|-------|-----|-----|--------------|---|
| <quote< td=""><td>EntryAckGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-100, Record counter:</td></quote<> | EntryAckGrp>       |       |     |     |              | Cardinality: 0-100, Record counter:                           |
|   |                    |       |     |     |              | NoQuoteEntries  |
| 48  | >SecurityID        | Υ     | 8   | 88  | signed int   | Instrument identifier.  |
| 28547   | >BidCxlSize        | N     | 4   | 96  | Qty          | Quote quantity that has been cancel-                          |
|   |                    |       |     |     |              | led on the buy side.  |
| 28548   | >OfferCxlSize      | N     | 4   | 100 | Qty          | Quote quantity that has been cancel-                          |
|   |                    |       |     |     |              | led on the sell side.   |
| 368   | >QuoteEntryReject- | N     | 4   | 104 | unsigned int | Reason code indicating why the quote                          |
| 300   | Reason             | 14    | 7   | 104 | unsigned int | entry has been rejected.                                      |
|   |                    |       |     |     |              |   |
|   |                    |       |     |     |              | Value Description   |
|   |                    |       |     |     |              | 1 Unknown security  |
|   |                    |       |     |     |              | 6 Duplicate quote   |
|   |                    |       |     |     |              | 8 Invalid price   |
|   |                    |       |     |     |              | 16 Reference price not availa-                                |
|   |                    |       |     |     |              | ble   |
|   |                    |       |     |     |              | 100 Single sided quotes not al-                               |
|   |                    |       |     |     |              | lowed   |
|   |                    |       |     |     |              | 103 Invalid usage of quoting                                  |
|   |                    |       |     |     |              | model 106 Invalid size  |
|   |                    |       |     |     |              |   |
|   |                    |       |     |     |              | 107 Invalid underlying leg price 108 Bid price not reasonable |
|   |                    |       |     |     |              | 109 Ask price not reasonable                                  |
|   |                    |       |     |     |              | 110 Bid price exceeds extended                                |
|   |                    |       |     |     |              | price range   |
|   |                    |       |     |     |              | 111 Ask price exceeds extended                                |
|   |                    |       |     |     |              | price range   |
|   |                    |       |     |     |              | 115 Instrument state freeze                                   |
|   |                    |       |     |     |              | 116 Deletion already pending                                  |
|   |                    |       |     |     |              | 117 Fuse Box violation on sessi-                              |
|   |                    |       |     |     |              | on level  |
|   |                    |       |     |     |              | 118 Fuse Box violation on BU                                  |
|   |                    |       |     |     |              | level   |
|   |                    |       |     |     |              | 119 Entitlement not assigned                                  |
|   |                    |       |     |     |              | for underlying  |
|   |                    |       |     |     |              | 131 Instrument state does not                                 |
|   |                    |       |     |     |              | allow processing  |
|   |                    |       |     |     |              | * More values   |
|   |                    |       |     |     |              |   |

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| Tag   | Field Name        | Req'd | Len | Ofs | Data Type    | Description                           |
|-------|-------------------|-------|-----|-----|--------------|---------------------------------------|
| 1167  | >QuoteEntryStatus | Y     | 1   | 108 | unsigned int | Identifies the status of an individua |
|       |                   |       |     |     |              | quote.                                |
|       |                   |       |     |     |              | Value Description                     |
|       |                   |       |     |     |              | 0 Accepted with warning               |
|       |                   |       |     |     |              | 5 Rejected                            |
|       |                   |       |     |     |              | 6 Removed from Market                 |
|       |                   |       |     |     |              | 10 Pending                            |
| 25010 | s D. 12           | 1.1   | 2   | 100 | Fired Chains |                                       |
| 25018 | >Pad3             | U     | 3   | 109 | Fixed String | not used                              |

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#### 7.9.3 Quote Execution Notification

This message informs about quote match events. For more details, please refer to chapter 4.7.2 Maintaining Quotes.

| Tag  | Field Name      | Req'd | Len | Ofs | Data Type    | Description   |
|--|-----------------|-------|-----|-----|--------------|---|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderOut>    |       |     |     |              |   |
| 9  | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.  |
| 28500  | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI message layout. Value: 10407 (Quote-ExecutionReport, MsgType = U8)  |
| 25017  | Pad2            | U     | 2   | 6   | Fixed String | not used  |
| <rbch< td=""><td>leaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>      | leaderME>       |       |     |     |              |   |
| 21003  | TrdRegTSTimeOut | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.  |
| 25043  | NotificationIn  | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a notification message from the Matching Engine  |
| 52   | SendingTime     | Υ     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.   |
| 28727  | ApplSubID       | U     | 4   | 32  | unsigned int | not used  |
| 5948   | PartitionID     | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.  Belongs to the scope of Service  Availability and Retransmit requests.   |
| 28704  | ApplMsgID       | N     | 16  | 38  | data         | Application message identifier assigned to an order or quote event.   |
| 1180   | AppIID          | Y     | 1   | 54  | unsigned int | Value   Description   4   Session Data  |
| 1352   | ApplResendFlag  | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.  Value Description  0 False  1 True   |
| 893  | LastFragment    | Y     | 1   | 56  | unsigned int | Indicates whether this message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction.  Value Description  0 Not Last Message  1 Last Message |
| 25022  | Pad7            | U     | 7   | 57  | Fixed String | not used  |
| < Messa  | ge Body>        |       |     |     |              |   |
| 17   | ExecID          | Y     | 8   | 64  | UTCTimestamp | Transaction timestamp.  |
| 1300   | MarketSegmentID | Y     | 4   | 72  | signed int   | Product identifier.   |

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| Tag  | Field Name            | Req'd | Len | Ofs | Data Type    | Description                            |
|--|-----------------------|-------|-----|-----|--------------|--|
| 30555  | NoLegExecs            | Y     | 2   | 76  | Counter      | Number of InstrmntLegExec repea-       |
|  |                       |       |     |     |              | ting group instances.                  |
| 28706  | NoQuoteEvents         | Y     | 1   | 78  | Counter      | Number of QuoteEvent repeating         |
|  |                       |       |     |     |              | group instances.                       |
| 25016  | Pad1                  | U     | 1   | 79  | Fixed String | not used                               |
| <quote< td=""><td>EventGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 1-100, Record counter:</td></quote<> | EventGrp>             |       |     |     |              | Cardinality: 1-100, Record counter:    |
|  |                       |       |     |     |              | NoQuoteEvents                          |
| 48   | >SecurityID           | Y     | 8   | 80  | signed int   | Instrument identifier.                 |
| 28553  | >QuoteEventPx         | N     | 8   | 88  | PriceType    | Price of this fill.                    |
| 1166   | >QuoteMsgID           | Y     | 8   | 96  | unsigned int | Customer defined mass quote identi-    |
|  |                       |       |     |     |              | fier.                                  |
| 28714  | >QuoteEventMatchID    | N     | 4   | 104 | unsigned int | Unique identifier for each price level |
|  |                       |       |     |     |              | (match step) of a match event; it is   |
|  |                       |       |     |     |              | used for public trade reporting.       |
| 28711  | >QuoteEventExecID     | N     | 4   | 108 | signed int   | Private identifier of a quote match    |
|  |                       |       |     |     |              | step, which can be reconciled with the |
|  |                       |       |     |     |              | field SideTradeID (1506) in the Trade  |
|  |                       |       |     |     |              | Notification.                          |
| 28542  | >QuoteEventQty        | N     | 4   | 112 | Qty          | Quantity executed in this fill.        |
| 28539  | >QuoteEventType       | Y     | 1   | 116 | unsigned int | Conveys the quote event type.          |
|  |                       |       |     |     |              | Value Description                      |
|  |                       |       |     |     |              | 2 Modified side                        |
|  |                       |       |     |     |              | 3 Removed Quote Side                   |
|  |                       |       |     |     |              | 4 Partially Filled                     |
|  |                       |       |     |     |              | 5 Filled                               |
| 28581  | >QuoteEventSide       | Y     | 1   | 117 | unsigned int | Side of the quote.                     |
|  | , quesezrente.ue      |       |     |     |              | Value Description                      |
|  |                       |       |     |     |              |  |
|  |                       |       |     |     |              | 1 Buy<br>2 Sell                        |
|  |                       |       |     |     |              | 2   3611                               |
| 28641  | >QuoteEventLiquidity- | N     | 1   | 118 | unsigned int | Indicates whether the quote added or   |
|  | Ind                   |       | -   |     |              | removed liquidity.                     |
|  |                       |       |     |     |              |  |
|  |                       |       |     |     |              | Value Description                      |
|  |                       |       |     |     |              | 1 Added Liquidity                      |
|  |                       |       |     |     |              | 2 Removed Liquidity                    |

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| Tag  | Field Name          | Req'd | Len | Ofs | Data Type    | Description                               |
|--|---------------------|-------|-----|-----|--------------|---|
| 28733  | >QuoteEventReason   | N     | 1   | 119 | unsigned int | Additional information why quote side     |
|  |                     |       |     |     |              | was removed.                              |
|  |                     |       |     |     |              | Value Description                         |
|  |                     |       |     |     |              | 14 Pending Cancellation Executed          |
|  |                     |       |     |     |              | 15 Invalid Price                          |
|  |                     |       |     |     |              | 16 Quote subject to crossing              |
|  |                     |       |     |     |              | and match prevented                       |
| <quote< td=""><td>LegExecGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-600, Record counter:</td></quote<> | LegExecGrp>         |       |     |     |              | Cardinality: 0-600, Record counter:       |
|  |                     |       |     |     |              | NoLegExecs                                |
| 602  | >LegSecurityID      | Υ     | 8   | 0   | signed int   | Instrument identifier of the leg securi-  |
|  |                     |       |     |     |              | ty.                                       |
| 637  | >LegLastPx          | Υ     | 8   | 8   | PriceType    | Price of this leg fill.                   |
| 1418   | >LegLastQty         | Υ     | 4   | 16  | Qty          | Quantity executed in this leg fill.       |
| 1893   | >LegExecID          | Υ     | 4   | 20  | signed int   | Private identifier of a leg match step,   |
|  |                     |       |     |     |              | which can be reconciled with the field    |
|  |                     |       |     |     |              | SideTradeID (1506) in the Trade No-       |
|  |                     |       |     |     |              | tification.                               |
| 624  | >LegSide            | Υ     | 1   | 24  | unsigned int | The side of the individual leg of a stra- |
|  |                     |       |     |     |              | tegy as defined in its signature.         |
|  |                     |       |     |     |              | Value Description                         |
|  |                     |       |     |     |              | 1 Buy                                     |
|  |                     |       |     |     |              | 2 Sell                                    |
|  |                     | _     |     |     |              |   |
| 25011  | >NoQuoteEventsIndex | Y     | 1   | 25  | unsigned int | Reference to the corresponding Quo-       |
|  |                     |       |     |     |              | teEvent repeating group instance.         |
| 25021  | >Pad6               | U     | 6   | 26  | Fixed String | not used                                  |

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#### 7.9.4 Quote Mass Cancellation Request

This message is used for the mass cancellation of quotes. For more details, please refer to chapter 4.7.2 Maintaining Quotes. This message is sent to the service "Order and Quote Management".

# Quote Mass Cancellation Request Quote Mass Cancellation Response (Session Data) NoNotAffectedSecurities !=0 (Pending Deletion)

Quote Execution Notification (Session Data)

| Tag   | Field Name                  | Req'd | Len | Ofs | Data Type    | Description                                     |  |  |
|---|-----------------------------|-------|-----|-----|--------------|---|--|--|
| <messa< td=""><td>geHeaderIn&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderIn>                 |       |     |     |              |   |  |  |
| 9   | BodyLen                     | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-            |  |  |
|   |                             |       |     |     |              | cluding this field.                             |  |  |
| 28500   | TemplateID                  | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI               |  |  |
|   |                             |       |     |     |              | message layout. Value: 10408 (Order-            |  |  |
|   |                             |       |     |     |              | ${\sf MassActionRequest,\ MsgType} = {\sf CA)}$ |  |  |
| 25028   | NetworkMsgID                | U     | 8   | 6   | Fixed String | not used  |  |  |
| 25017   | Pad2                        | U     | 2   | 14  | Fixed String | not used  |  |  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>   | stHeader>                   |       |     |     |              |   |  |  |
| 34  | MsgSeqNum                   | Y     | 4   | 16  | unsigned int | Message sequence number used by the             |  |  |
|   |                             |       |     |     |              | participant for requests sent to the ga-        |  |  |
|   |                             |       |     |     |              | teway.  |  |  |
| 50  | SenderSubID                 | Y     | 4   | 20  | unsigned int | User ID.  |  |  |
| <messa< td=""><td colspan="8"><message body=""></message></td></messa<>                     | <message body=""></message> |       |     |     |              |   |  |  |
| 376   | ComplianceID                | N     | 8   | 24  | unsigned int | For participants to uniquely identify           |  |  |
|   |                             |       |     |     |              | trading strategies                              |  |  |
| 1300  | MarketSegmentID             | Y     | 4   | 32  | signed int   | Product identifier.                             |  |  |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description |
|-------|------------------------|-------|-----|-----|--------------|-------------|
| 20655 | TargetPartyIDSessionID | Y     | 4   | 36  | unsigned int | Session ID. |

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# 7.9.5 Quote Mass Cancellation Response

This message confirms a Quote Mass Cancellation request.

| Tag  | Field Name                    | Req'd | Len | Ofs | Data Type     | Description                              |
|--|-------------------------------|-------|-----|-----|---------------|--|
| <messa,< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<> | geHeaderOut>                  |       |     |     |               |  |
| 9  | BodyLen                       | Y     | 4   | 0   | unsigned int  | Number of bytes for the message, in-     |
|  |                               |       |     |     |               | cluding this field.                      |
| 28500  | TemplateID                    | Y     | 2   | 4   | unsigned int  | Unique identifier for a Eurex ETI        |
|  |                               |       |     |     |               | message layout. Value: 10409 (Order-     |
|  |                               |       |     |     |               | ${\sf MassActionReport,\ MsgType=BZ)}$   |
| 25017  | Pad2                          | U     | 2   | 6   | Fixed String  | not used                                 |
|  | sponseHeaderME>               | T     |     |     |               |  |
| 5979   | RequestTime                   | Y     | 8   | 8   | UTCTimestamp  | Gateway request in timestamp.            |
| 7764   | RequestOut                    | Y     | 8   | 16  | UTCTimestamp  | Timestamp the gateway sends a mes-       |
|  |                               |       |     |     |               | sage to the Matching Engine              |
|  | TrdRegTSTimeIn                | N     | 8   | 24  | UTCTimestamp  | Matching engine in timestamp.            |
| 21003  | TrdRegTSTimeOut               | N     | 8   | 32  | UTCTimestamp  | Matching engine out timestamp.           |
| 7765   | ResponseIn                    | Y     | 8   | 40  | UTCTimestamp  | Timestamp the gateway receives a         |
|  |                               |       |     |     |               | message from the Matching Engine         |
| 52   | SendingTime                   | Υ     | 8   | 48  | UTCTimestamp  | Gateway response out timestamp.          |
| 34   | MsgSeqNum                     | Y     | 4   | 56  | unsigned int  | Message sequence number used by the      |
|  |                               |       |     |     |               | participant for requests sent to the ga- |
|  |                               |       |     |     |               | teway.                                   |
| 893  | LastFragment                  | Y     | 1   | 60  | unsigned int  | Indicates whether this message is the    |
|  |                               |       |     |     |               | last fragment (part) of a sequence of    |
|  |                               |       |     |     |               | messages belonging to one dedicated      |
|  |                               |       |     |     |               | transaction.                             |
|  |                               |       |     |     |               | Value Description                        |
|  |                               |       |     |     |               | 0 Not Last Message                       |
|  |                               |       |     |     |               | 1 Last Message                           |
| 25018  | Pad3                          | U     | 3   | 61  | Fixed String  | not used                                 |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>     | ge Body>                      |       |     |     |               |  |
| 1369   | MassActionReportID            | Y     | 8   | 64  | UTCTimestamp  | Transaction timestamp.                   |
| 28707  | NoNotAffected-                | Υ     | 2   | 72  | Counter       | Number of NotAffectedSecurities re-      |
| 20101  | Securities                    | ı     | 2   | 12  | Counter       |  |
| 25021  | Pad6                          | U     | 6   | 74  | Fixed String  | peating group instances.  not used       |
|  | Fado<br> fectedSecuritiesGrp> |       | U   | 14  | Tived Stillig | Cardinality: 0-500, Record counter:      |
| NOLAI  | rected Securities Grp>        |       |     |     |               | NoNotAffectedSecurities                  |
|  | >NotAffectedSecurity-         |       |     |     |               |  |
| 28702  | ID                            | Y     | 8   | 80  | unsigned int  | Instrument ID whose quote mass can-      |
|  |                               |       |     |     |               | cellation is pending.                    |

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#### 7.9.6 Quote Mass Cancellation Notification

This message informs about an unsolicited Quote Mass Cancellation event. For more details, please refer to chapter 4.16 Mass Cancellation Notification and Mass Cancellation Events.

| Tag   | Field Name                            | Req'd | Len | Ofs | Data Type    | Description  |  |  |  |
|---|---------------------------------------|-------|-----|-----|--------------|--|--|--|--|
| <messa< td=""><td colspan="9"><messageheaderout></messageheaderout></td></messa<> | <messageheaderout></messageheaderout> |       |     |     |              |  |  |  |  |
| 9   | BodyLen                               | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-                         |  |  |  |
| 20500   | 5                                     |       |     |     |              | cluding this field.  |  |  |  |
| 28500   | TemplateID                            | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI                            |  |  |  |
|   |                                       |       |     |     |              | message layout. Value: 10410 (Order-                         |  |  |  |
| 25017   | D. 10                                 | 11    | 2   | 6   | Fired Chains | MassActionReport, MsgType = BZ)                              |  |  |  |
| 25017   | Pad2                                  | U     | 2   | 6   | Fixed String | not used   |  |  |  |
|   | TadPosTSTimeOut                       | NI    | 0   | 0   | UTCTimestamn | Matching engine out timestamp                                |  |  |  |
| 21003   |                                       | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.                               |  |  |  |
| 25043   | NotificationIn                        | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a no-                         |  |  |  |
|   |                                       |       |     |     |              | tification message from the Matching Engine                  |  |  |  |
| 52  | SendingTime                           | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.                              |  |  |  |
| 28727   | -                                     | U     | 4   | 32  | unsigned int | not used   |  |  |  |
|   | ApplSubID                             | Y     | 2   | 36  |              |  |  |  |  |
| 5948  | PartitionID                           | Y     | 2   | 30  | unsigned int | Grouping of Eurex products.  Belongs to the scope of Service |  |  |  |
|   |                                       |       |     |     |              | Availability and Retransmit requests.                        |  |  |  |
| 28704   | ApplMsgID                             | N     | 16  | 38  | data         | Application message identifier assi-                         |  |  |  |
| 20704   | ApplivisgiD                           | IN    | 10  | 30  | uata         | gned to an order or quote event.                             |  |  |  |
| 1180  | ApplID                                | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.                           |  |  |  |
| 1100  | Дриго                                 | '     | _   | 34  | unsigned int |  |  |  |  |
|   |                                       |       |     |     |              | Value Description 4 Session Data                             |  |  |  |
|   |                                       |       |     |     |              | 4 Session Data   |  |  |  |
| 1352  | ApplResendFlag                        | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.                          |  |  |  |
|   |                                       |       |     |     |              | Value Description  |  |  |  |
|   |                                       |       |     |     |              | 0 False  |  |  |  |
|   |                                       |       |     |     |              | 1 True   |  |  |  |
| 803   | LastFragment                          | Y     | 1   | 56  | unsigned int | Indicates whether this message is the                        |  |  |  |
| 093   | Lasti ragillelli                      | Į.    | 1   | 30  | unsigned int | last fragment (part) of a sequence of                        |  |  |  |
|   |                                       |       |     |     |              | messages belonging to one dedicated                          |  |  |  |
|   |                                       |       |     |     |              | transaction.   |  |  |  |
|   |                                       |       |     |     |              | Value Description  |  |  |  |
|   |                                       |       |     |     |              | 0 Not Last Message   |  |  |  |
|   |                                       |       |     |     |              | 1 Last Message   |  |  |  |
|   |                                       |       |     |     |              | 1 Last Wessage   |  |  |  |
| 25022   |                                       | U     | 7   | 57  | Fixed String | not used   |  |  |  |
|   | ge Body>                              |       |     |     |              |  |  |  |  |
|   | MassActionReportID                    | Υ     | 8   | 64  | UTCTimestamp | Transaction timestamp.                                       |  |  |  |
| 48  | SecurityID                            | U     | 8   | 72  | signed int   | not used   |  |  |  |

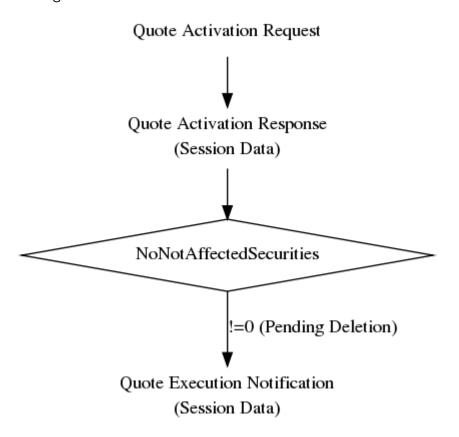
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| Tag   | Field Name                    | Req'd | Len | Ofs | Data Type    | Description   |
|---|-------------------------------|-------|-----|-----|--------------|---|
| 1300  | MarketSegmentID               | Υ     | 4   | 80  | signed int   | Product identifier.   |
| 20655   | TargetPartyIDSessionID        | Υ     | 4   | 84  | unsigned int | Session ID.   |
| 20036   | PartyIDEnteringTrader         | N     | 4   | 88  | unsigned int | Entering User ID.   |
| 20612   | TargetParty-IDExecutingTrader | N     | 4   | 92  | unsigned int | Owning User ID.   |
| 28707   | NoNotAffected-<br>Securities  | Y     | 2   | 96  | Counter      | Number of NotAffectedSecurities repeating group instances.            |
| 28721   | MassActionReason              | Υ     | 1   | 98  | unsigned int | Reason for mass cancellation.   |
|   |                               |       |     |     |              | Value Description   |
|   |                               |       |     |     |              | 0 No special reason   |
|   |                               |       |     |     |              | 1 Trading was stopped   |
|   |                               |       |     |     |              | 2 Emergency   |
|   |                               |       |     |     |              | 3 Market Maker Protection   |
|   |                               |       |     |     |              | 6 Session loss or logout  |
|   |                               |       |     |     |              | 7 Duplicate Session Login   |
|   |                               |       |     |     |              | 8 Clearing Risk Control   |
| 20007   | PartyIDEnteringFirm           | N     | 1   | 99  | unsigned int | Entering Entity ID.   |
|   |                               |       |     |     |              | Value Description   |
|   |                               |       |     |     |              | 1 Participant   |
|   |                               |       |     |     |              | 2 Market Supervision  |
| 20676   | TargetPartyIDDeskID           | N     | 3   | 100 | Fixed String | Trader Group.   |
|   |                               |       |     |     |              | Valid characters: A-Z,0-9,\x20  |
| 25016   | Pad1                          | U     | 1   | 103 | Fixed String | not used  |
| <notaf< td=""><td>fectedSecuritiesGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-500, Record counter:</td></notaf<> | fectedSecuritiesGrp>          |       |     |     |              | Cardinality: 0-500, Record counter:                                   |
|   |                               |       |     |     |              | NoNotAffectedSecurities   |
| 28702   | >NotAffectedSecurity-         | Y     | 8   | 104 | unsigned int | Instrument ID whose quote mass cancellation or activation is pending. |

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#### 7.9.7 Quote Activation Request

This message is used for inactivation and activation of quotes of a session within the product scope or the product and instrument type scope. For more details, please refer to chapter 4.7.3 Quote Activation/Inactivation. This message is sent to the service "Order and Quote Management".



| Tag   | Field Name   | Req'd | Len | Ofs | Data Type    | Description                                     |
|---|--------------|-------|-----|-----|--------------|---|
| < Messa   | geHeaderIn>  |       |     |     |              |   |
| 9   | BodyLen      | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-            |
|   |              |       |     |     |              | cluding this field.                             |
| 28500   | TemplateID   | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI               |
|   |              |       |     |     |              | message layout. Value: 10403 (Order-            |
|   |              |       |     |     |              | ${\sf MassActionRequest,\ MsgType} = {\sf CA)}$ |
| 25028   | NetworkMsgID | U     | 8   | 6   | Fixed String | not used  |
| 25017   | Pad2         | U     | 2   | 14  | Fixed String | not used  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<> | stHeader>    |       |     |     |              |   |
| 34  | MsgSeqNum    | Y     | 4   | 16  | unsigned int | Message sequence number used by the             |
|   |              |       |     |     |              | participant for requests sent to the ga-        |
|   |              |       |     |     |              | teway.  |
| 50  | SenderSubID  | Y     | 4   | 20  | unsigned int | User ID.  |
| < Messa   | ge Body>     |       |     |     |              |   |
| 376   | ComplianceID | N     | 8   | 24  | unsigned int | For participants to uniquely identify           |
|   |              |       |     |     |              | trading strategies                              |

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| Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description                                       |
|-------|------------------------|-------|-----|-----|--------------|---|
| 1300  | MarketSegmentID        | Y     | 4   | 32  | signed int   | Product identifier.                               |
| 20655 | TargetPartyIDSessionID | Y     | 4   | 36  | unsigned int | Session ID.                                       |
| 1373  | MassActionType         | Y     | 1   | 40  | unsigned int | Specifies the type of action requested.           |
|       |                        |       |     |     |              | Value Description                                 |
|       |                        |       |     |     |              | 1 Suspend quotes                                  |
|       |                        |       |     |     |              | 2 Release quotes from suspension                  |
| 1227  | ProductComplex         | N     | 1   | 41  | unsigned int | This field qualifies an instrument type on Eurex. |
|       |                        |       |     |     |              | Value Description                                 |
|       |                        |       |     |     |              | 1 Simple instrument                               |
|       |                        |       |     |     |              | 2 Standard Option Strategy                        |
|       |                        |       |     |     |              | 3 Non-Standard Option Stra-                       |
|       |                        |       |     |     |              | tegy  |
|       |                        |       |     |     |              | 4 Volatility Strategy                             |
|       |                        |       |     |     |              | 5 Futures Spread                                  |
|       |                        |       |     |     |              | 6 Inter-Product Spread                            |
|       |                        |       |     |     |              | 7 Standard Future Strategy                        |
|       |                        |       |     |     |              | 8 Pack and Bundle                                 |
|       |                        |       |     |     |              | 9 Strip   |
| 25021 | Pad6                   | U     | 6   | 42  | Fixed String | not used  |

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# 7.9.8 Quote Activation Response

The Quote Activation Response message confirms a Quote Activation Request.

| Tag   | Field Name                            | Req'd                   | Len | Ofs | Data Type     | Description                                    |  |  |  |
|---|---------------------------------------|-------------------------|-----|-----|---------------|--|--|--|--|
| <messa< td=""><td colspan="9"><messageheaderout></messageheaderout></td></messa<>               | <messageheaderout></messageheaderout> |                         |     |     |               |  |  |  |  |
| 9   | BodyLen                               | Υ                       | 4   | 0   | unsigned int  | Number of bytes for the message, in-           |  |  |  |
|   |                                       |                         |     |     |               | cluding this field.                            |  |  |  |
| 28500   | TemplateID                            | Y                       | 2   | 4   | unsigned int  | Unique identifier for a Eurex ETI              |  |  |  |
|   |                                       |                         |     |     |               | message layout. Value: 10404 (Order-           |  |  |  |
|   |                                       |                         |     |     |               | ${\sf MassActionReport,\ MsgType} = {\sf BZ)}$ |  |  |  |
| 25017   | Pad2                                  | U                       | 2   | 6   | Fixed String  | not used                                       |  |  |  |
| <nrre.< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrre.<> | sponseHeaderME>                       |                         |     |     |               |  |  |  |  |
| 5979  | RequestTime                           | Y                       | 8   | 8   | UTCTimestamp  | Gateway request in timestamp.                  |  |  |  |
| 7764  | RequestOut                            | Y                       | 8   | 16  | UTCTimestamp  | Timestamp the gateway sends a mes-             |  |  |  |
|   |                                       |                         |     |     |               | sage to the Matching Engine                    |  |  |  |
| 21002   | TrdRegTSTimeIn                        | N                       | 8   | 24  | UTCTimestamp  | Matching engine in timestamp.                  |  |  |  |
| 21003   | TrdRegTSTimeOut                       | N                       | 8   | 32  | UTCTimestamp  | Matching engine out timestamp.                 |  |  |  |
| 7765  | ResponseIn                            | Y                       | 8   | 40  | UTCTimestamp  | Timestamp the gateway receives a               |  |  |  |
|   |                                       |                         |     |     |               | message from the Matching Engine               |  |  |  |
| 52  | SendingTime                           | Y                       | 8   | 48  | UTCTimestamp  | Gateway response out timestamp.                |  |  |  |
| 34  | MsgSeqNum                             | Y                       | 4   | 56  | unsigned int  | Message sequence number used by the            |  |  |  |
|   |                                       |                         |     |     |               | participant for requests sent to the ga-       |  |  |  |
|   |                                       |                         |     |     |               | teway.   |  |  |  |
| 893   | LastFragment                          | Y                       | 1   | 60  | unsigned int  | Indicates whether this message is the          |  |  |  |
|   |                                       |                         |     |     |               | last fragment (part) of a sequence of          |  |  |  |
|   |                                       |                         |     |     |               | messages belonging to one dedicated            |  |  |  |
|   |                                       |                         |     |     |               | transaction.                                   |  |  |  |
|   |                                       |                         |     |     |               | Value Description                              |  |  |  |
|   |                                       |                         |     |     |               | 0 Not Last Message                             |  |  |  |
|   |                                       |                         |     |     |               | 1 Last Message                                 |  |  |  |
| 25018   | Pad3                                  | U                       | 3   | 61  | Fixed String  | not used                                       |  |  |  |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>        | ge Body>                              |                         |     |     |               |  |  |  |  |
| 1369  | MassActionReportID                    | Y                       | 8   | 64  | UTCTimestamp  | Transaction timestamp.                         |  |  |  |
| 28707   | NoNotAffected-                        | Y                       | 2   | 72  | Counter       | Number of NotAffectedSecurities re-            |  |  |  |
| 20101   | Securities                            | ī                       |     | 12  | Counter       | peating group instances.                       |  |  |  |
| 25021   | Pad6                                  | U                       | 6   | 74  | Fixed String  | not used                                       |  |  |  |
|   | fectedSecuritiesGrp>                  |                         | J   | 17  | Tived Stillig | Cardinality: 0-500, Record counter:            |  |  |  |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  | rected Securities of p                | NoNotAffectedSecurities |     |     |               |  |  |  |  |
|   | >NotAffectedSecurity-                 |                         |     |     |               |  |  |  |  |
| 28702   | ID                                    | Y                       | 8   | 80  | unsigned int  | Instrument ID whose quote mass can-            |  |  |  |
|   |                                       |                         |     |     |               | cellation or activation is pending.            |  |  |  |

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#### 7.9.9 Quote Activation Notification

This message informs about an unsolicited inactivation and activation of quotes.

| Tag   | Field Name                            | Req'd | Len | Ofs | Data Type    | Description   |  |  |  |
|---|---------------------------------------|-------|-----|-----|--------------|---|--|--|--|
| <messa< th=""><th colspan="9"><messageheaderout></messageheaderout></th></messa<> | <messageheaderout></messageheaderout> |       |     |     |              |   |  |  |  |
| 9   | BodyLen                               | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.              |  |  |  |
| 28500   | TemplateID                            | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI                                   |  |  |  |
|   |                                       |       |     |     |              | message layout. Value: 10411 (Order-MassActionReport, MsgType = BZ) |  |  |  |
| 25017   | Pad2                                  | U     | 2   | 6   | Fixed String | not used  |  |  |  |
|   | leaderME>                             |       |     |     |              |   |  |  |  |
| 21003   | TrdRegTSTimeOut                       | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.                                      |  |  |  |
| 25043   | NotificationIn                        | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a no-                                |  |  |  |
|   |                                       |       |     |     | ·            | tification message from the Matching                                |  |  |  |
|   |                                       |       |     |     |              | Engine  |  |  |  |
| 52  | SendingTime                           | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.                                     |  |  |  |
| 28727   | ApplSubID                             | U     | 4   | 32  | unsigned int | not used  |  |  |  |
| 5948  | PartitionID                           | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.   |  |  |  |
|   |                                       |       |     |     |              | Belongs to the scope of Service                                     |  |  |  |
|   |                                       |       |     |     |              | Availability and Retransmit requests.                               |  |  |  |
| 28704   | ApplMsgID                             | Y     | 16  | 38  | data         | Application message identifier assi-                                |  |  |  |
|   |                                       |       |     |     |              | gned to an order or quote event.                                    |  |  |  |
| 1180  | ApplID                                | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.                                  |  |  |  |
|   |                                       |       |     |     |              | Value Description   |  |  |  |
|   |                                       |       |     |     |              | 4 Session Data  |  |  |  |
| 1352  | ApplResendFlag                        | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.                                 |  |  |  |
|   |                                       |       |     |     |              | Value Description   |  |  |  |
|   |                                       |       |     |     |              | 0 False   |  |  |  |
|   |                                       |       |     |     |              | 1 True  |  |  |  |
| 893   | LastFragment                          | Υ     | 1   | 56  | unsigned int | Indicates whether this message is the                               |  |  |  |
|   |                                       |       |     |     |              | last fragment (part) of a sequence of                               |  |  |  |
|   |                                       |       |     |     |              | messages belonging to one dedicated                                 |  |  |  |
|   |                                       |       |     |     |              | transaction.  |  |  |  |
|   |                                       |       |     |     |              | Value Description   |  |  |  |
|   |                                       |       |     |     |              | 0 Not Last Message  |  |  |  |
|   |                                       |       |     |     |              | 1 Last Message  |  |  |  |
| 25022   | Pad7                                  | U     | 7   | 57  | Fixed String | not used  |  |  |  |
| < Messa   | ge Body>                              |       |     |     |              |   |  |  |  |
| 1369  | MassActionReportID                    | Y     | 8   | 64  | UTCTimestamp | Transaction timestamp.  |  |  |  |
| 1300  | MarketSegmentID                       | Y     | 4   | 72  | signed int   | Product identifier.   |  |  |  |
| 20036   | PartyIDEnteringTrader                 | N     | 4   | 76  | unsigned int | Entering User ID.   |  |  |  |

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| Tag   | Field Name                   | Req'd | Len | Ofs | Data Type    | Description   |
|---|------------------------------|-------|-----|-----|--------------|---|
| 28707   | NoNotAffected-<br>Securities | Y     | 2   | 80  | Counter      | Number of NotAffectedSecurities re-                                   |
| 20007   | PartyIDEnteringFirm          | N     | 1   | 82  | unsigned int | peating group instances.  Entering Entity ID.                         |
| 20001   | T drey Dentering inin        |       | -   | 02  | unsigned int | Value Description   |
|   |                              |       |     |     |              | 1 Participant   |
|   |                              |       |     |     |              | 2 Market Supervision  |
| 1227  | ProductComplex               | N     | 1   | 83  | unsigned int | This field qualifies an instrument type                               |
|   |                              |       |     |     |              | on Eurex.   |
|   |                              |       |     |     |              | Value Description   |
|   |                              |       |     |     |              | 1 Simple instrument   |
|   |                              |       |     |     |              | 2 Standard Option Strategy  |
|   |                              |       |     |     |              | 3 Non-Standard Option Stra-   |
|   |                              |       |     |     |              | tegy 4 Volatility Strategy  |
|   |                              |       |     |     |              | 5 Futures Spread  |
|   |                              |       |     |     |              | 6 Inter-Product Spread  |
|   |                              |       |     |     |              | 7 Standard Future Strategy  |
|   |                              |       |     |     |              | 8 Pack and Bundle   |
|   |                              |       |     |     |              | 9 Strip   |
| 1373  | MassActionType               | Y     | 1   | 84  | unsigned int | Specifies the type of action requested.                               |
|   |                              |       |     |     |              | Value Description   |
|   |                              |       |     |     |              | 1 Suspend quotes  |
|   |                              |       |     |     |              | 2 Release quotes from sus-  |
|   |                              |       |     |     |              | pension   |
| 28721   | MassActionReason             | Υ     | 1   | 85  | unsigned int | Reason for mass cancellation.   |
|   |                              |       |     |     |              | Value Description   |
|   |                              |       |     |     |              | 0 No special reason   |
|   |                              |       |     |     |              | 3 Market Maker Protection   |
| 25017   | Pad2                         | U     | 2   | 86  | Fixed String | not used  |
| <notaf< td=""><td>fectedSecuritiesGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-500, Record counter: NoNotAffectedSecurities</td></notaf<> | fectedSecuritiesGrp>         |       |     |     |              | Cardinality: 0-500, Record counter: NoNotAffectedSecurities           |
| 28702   | >NotAffectedSecurity-<br>ID  | Y     | 8   | 88  | unsigned int | Instrument ID whose quote mass cancellation or activation is pending. |

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#### 7.9.10 Inquire Market Maker Parameters

This message is used to inquire for the Market Maker Parameters currently active for a session. For more details, please refer to chapter 4.7.4 Market Maker Protection. This message is sent to the service "Order and Quote Management".

# Inquire Market Maker Parameters



# Inquire Market Maker Parameters Response (Session Data)

| Tag   | Field Name                 | Req'd | Len | Ofs | Data Type    | Description   |
|---|----------------------------|-------|-----|-----|--------------|---|
| <messa,< th=""><th>geHeaderIn&gt;</th><th></th><th></th><th></th><th></th><th></th></messa,<> | geHeaderIn>                |       |     |     |              |   |
| 9   | BodyLen                    | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-                                |
|   |                            |       |     |     |              | cluding this field.   |
| 28500   | TemplateID                 | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI                                   |
|   |                            |       |     |     |              | message layout. Value: 10305  |
|   |                            |       |     |     |              | $\begin{tabular}{ll} $(MMParameterRequest, MsgType = \end{tabular}$ |
|   |                            |       |     |     |              | U17)  |
| 25028   | NetworkMsgID               | U     | 8   | 6   | Fixed String | not used  |
| 25017   | Pad2                       | U     | 2   | 14  | Fixed String | not used  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>     | stHeader>                  |       |     |     |              |   |
| 34  | MsgSeqNum                  | Υ     | 4   | 16  | unsigned int | Message sequence number used by the                                 |
|   |                            |       |     |     |              | participant for requests sent to the ga-                            |
|   |                            |       |     |     |              | teway.  |
| 50  | SenderSubID                | Y     | 4   | 20  | unsigned int | User ID.  |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<>    | ge Body>                   |       |     |     |              |   |
| 1300  | MarketSegmentID            | Y     | 4   | 24  | signed int   | Product identifier.   |
| 20655   | Target Party ID Session ID | Y     | 4   | 28  | unsigned int | Session ID.   |

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# 7.9.11 Inquire Market Maker Parameters Response

This message is the positive response to the Inquire Market Maker Parameters request.

| Tag   | Field Name          | Req'd | Len | Ofs | Data Type          | Description                              |  |  |
|---|---------------------|-------|-----|-----|--------------------|--|--|--|
| <messageheaderout></messageheaderout>   |                     |       |     |     |                    |  |  |  |
| 9   | BodyLen             | Υ     | 4   | 0   | unsigned int       | Number of bytes for the message, in-     |  |  |
|   |                     |       |     |     |                    | cluding this field.                      |  |  |
| 28500   | TemplateID          | Y     | 2   | 4   | unsigned int       | Unique identifier for a Eurex ETI        |  |  |
|   |                     |       |     |     |                    | message layout. Value: 10306             |  |  |
|   |                     |       |     |     |                    | (MMParameterResponse, MsgType            |  |  |
| 25017   | Pad2                | U     | 2   | 6   | Fixed String       | = U18)                                   |  |  |
|   | sponseHeaderME>     |       |     | 0   | 1 ixed String      | not used                                 |  |  |
|   | RequestTime         | Υ     | 8   | 8   | UTCTimestamp       | Gateway request in timestamp.            |  |  |
| 7764  | ·                   | Y     | 8   | 16  | UTCTimestamp       | Timestamp the gateway sends a mes-       |  |  |
| 1704  | Nequestout          | '     | Ü   | 10  | O i C i illicatamp | sage to the Matching Engine              |  |  |
| 21002   | TrdRegTSTimeIn      | Y     | 8   | 24  | UTCTimestamp       | Matching engine in timestamp.            |  |  |
| 21003   | TrdRegTSTimeOut     | Y     | 8   | 32  | UTCTimestamp       | Matching engine out timestamp.           |  |  |
| 7765  |                     | Y     | 8   | 40  | UTCTimestamp       | Timestamp the gateway receives a         |  |  |
|   |                     |       |     |     |                    | message from the Matching Engine         |  |  |
| 52  | SendingTime         | Υ     | 8   | 48  | UTCTimestamp       | Gateway response out timestamp.          |  |  |
| 34  | _                   | Υ     | 4   | 56  | unsigned int       | Message sequence number used by the      |  |  |
|   |                     |       |     |     | _                  | participant for requests sent to the ga- |  |  |
|   |                     |       |     |     |                    | teway.                                   |  |  |
| 893   | LastFragment        | Y     | 1   | 60  | unsigned int       | Indicates whether this message is the    |  |  |
|   |                     |       |     |     |                    | last fragment (part) of a sequence of    |  |  |
|   |                     |       |     |     |                    | messages belonging to one dedicated      |  |  |
|   |                     |       |     |     |                    | transaction.                             |  |  |
|   |                     |       |     |     |                    | Value Description                        |  |  |
|   |                     |       |     |     |                    | 1 Last Message                           |  |  |
| 25018   | Pad3                | U     | 3   | 61  | Fixed String       | not used                                 |  |  |
| < Messa   | ge Body>            |       |     |     |                    |  |  |  |
| 28717   | MMParameterReportID | Y     | 8   | 64  | UTCTimestamp       | Transaction timestamp.                   |  |  |
| 1300  | MarketSegmentID     | Υ     | 4   | 72  | signed int         | Product identifier.                      |  |  |
| 28705   | NoMMParameters      | Υ     | 1   | 76  | Counter            | Number of MMParameters repeating         |  |  |
|   |                     |       |     |     |                    | group instances.                         |  |  |
| 25018   | Pad3                | U     | 3   | 77  | Fixed String       | not used                                 |  |  |
| <mmpa< td=""><td>arameterGrp&gt;</td><td></td><td></td><td></td><td></td><td>Cardinality: 0-9, Record counter:</td></mmpa<> | arameterGrp>        |       |     |     |                    | Cardinality: 0-9, Record counter:        |  |  |
|   |                     |       |     |     |                    | NoMMParameters                           |  |  |
| 1629  | >ExposureDuration   | Y     | 8   | 80  | signed int         | Participant defined time frame (in mil-  |  |  |
|   |                     |       |     |     |                    | liseconds) the risk protection parame-   |  |  |
|   |                     |       |     |     |                    | ters should be counted.                  |  |  |

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| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                               |
|-------|-----------------|-------|-----|-----|--------------|---|
| 14    | >CumQty         | Υ     | 4   | 88  | Qty          | Volume threshold: total number of         |
|       |                 |       |     |     |              | traded contracts.                         |
| 28615 | >PctCount       | Y     | 4   | 92  | signed int   | The Percent counter sums up each          |
|       |                 |       |     |     |              | trade as a percentage of the original     |
|       |                 |       |     |     |              | volume.                                   |
| 7966  | >Delta          | Y     | 4   | 96  | signed int   | The Delta counter holds for futures       |
|       |                 |       |     |     |              | the difference of bought future con-      |
|       |                 |       |     |     |              | tracts and sold future contracts. For     |
|       |                 |       |     |     |              | options it is the the difference of (long |
|       |                 |       |     |     |              | calls + short puts) and (short calls +    |
|       |                 |       |     |     | -            | long puts).                               |
| 7968  | >Vega           | Y     | 4   | 100 | signed int   | Absolute number of contracts purcha-      |
|       |                 |       |     |     |              | sed reduced by the number of con-         |
|       |                 |       |     |     |              | tracts sold (for options only)            |
| 1227  | >ProductComplex | N     | 1   | 104 | unsigned int | This field qualifies an instrument type   |
|       |                 |       |     |     |              | on Eurex.                                 |
|       |                 |       |     |     |              | Value Description                         |
|       |                 |       |     |     |              | 1 Simple instrument                       |
|       |                 |       |     |     |              | 2 Standard Option Strategy                |
|       |                 |       |     |     |              | 3 Non-Standard Option Stra-               |
|       |                 |       |     |     |              | tegy                                      |
|       |                 |       |     |     |              | 4 Volatility Strategy                     |
|       |                 |       |     |     |              | 5 Futures Spread                          |
|       |                 |       |     |     |              | 6 Inter-Product Spread                    |
|       |                 |       |     |     |              | 7 Standard Future Strategy                |
|       |                 |       |     |     |              | 8 Pack and Bundle                         |
|       |                 |       |     |     |              | 9 Strip                                   |
| 25022 | >Pad7           | U     | 7   | 105 | Fixed String | not used                                  |

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#### 7.9.12 Market Maker Parameter Definition

This message is used for definition of market maker protection parameters for a session. For more details, please refer to chapter 4.7.4 Market Maker Protection. This message is sent to the service "Order and Quote Management".

#### Market Maker Parameter Definition



# Market Maker Parameter Definition Response (Session Data)

| Tag  | Field Name                          | Req'd | Len | Ofs | Data Type    | Description                              |  |  |  |
|--|-------------------------------------|-------|-----|-----|--------------|--|--|--|--|
| <messa,< th=""><th colspan="9"><messageheaderin></messageheaderin></th></messa,<>          | <messageheaderin></messageheaderin> |       |     |     |              |  |  |  |  |
| 9  | BodyLen                             | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |  |  |  |
|  |                                     |       |     |     |              | cluding this field.                      |  |  |  |
| 28500  | TemplateID                          | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI        |  |  |  |
|  |                                     |       |     |     |              | message layout. Value: 10303             |  |  |  |
|  |                                     |       |     |     |              | $({\sf MMParameterDefinitionRequest},$   |  |  |  |
|  |                                     |       |     |     |              | MsgType = U14)                           |  |  |  |
| 25028  | NetworkMsgID                        | U     | 8   | 6   | Fixed String | not used                                 |  |  |  |
| 25017  | Pad2                                | U     | 2   | 14  | Fixed String | not used                                 |  |  |  |
| <reque< td=""><td>stHeader&gt;</td><td></td><td></td><td></td><td></td><td></td></reque<>  | stHeader>                           |       |     |     |              |  |  |  |  |
| 34   | MsgSeqNum                           | Y     | 4   | 16  | unsigned int | Message sequence number used by the      |  |  |  |
|  |                                     |       |     |     |              | participant for requests sent to the ga- |  |  |  |
|  |                                     |       |     |     |              | teway.                                   |  |  |  |
| 50   | SenderSubID                         | Y     | 4   | 20  | unsigned int | User ID.                                 |  |  |  |
| <messa,< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa,<> | ge Body>                            |       |     |     |              |  |  |  |  |
| 1629   | ExposureDuration                    | Y     | 8   | 24  | signed int   | Participant defined time frame (in mil-  |  |  |  |
|  |                                     |       |     |     |              | liseconds) the risk protection parame-   |  |  |  |
|  |                                     |       |     |     |              | ters should be counted.                  |  |  |  |
| 1300   | MarketSegmentID                     | Y     | 4   | 32  | signed int   | Product identifier.                      |  |  |  |
| 20655  | TargetPartyIDSessionID              | Y     | 4   | 36  | unsigned int | Session ID.                              |  |  |  |
| 14   | CumQty                              | Υ     | 4   | 40  | Qty          | Volume threshold: total number of        |  |  |  |
|  |                                     |       |     |     |              | traded contracts.                        |  |  |  |
| 28615  | PctCount                            | Y     | 4   | 44  | signed int   | The Percent counter sums up each         |  |  |  |
|  |                                     |       |     |     |              | trade as a percentage of the original    |  |  |  |
|  |                                     |       |     |     |              | volume.                                  |  |  |  |

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| Tag   | Field Name     | Req'd | Len | Ofs | Data Type    | Description                                |
|-------|----------------|-------|-----|-----|--------------|--|
| 7966  | Delta          | Υ     | 4   | 48  | signed int   | The Delta counter holds for futures        |
|       |                |       |     |     |              | the difference of bought future con-       |
|       |                |       |     |     |              | tracts and sold future contracts. For      |
|       |                |       |     |     |              | options it is the the difference of (long  |
|       |                |       |     |     |              | calls $+$ short puts) and (short calls $+$ |
|       |                |       |     |     |              | long puts).                                |
| 7968  | Vega           | Y     | 4   | 52  | signed int   | Absolute number of contracts purcha-       |
|       |                |       |     |     |              | sed reduced by the number of con-          |
|       |                |       |     |     |              | tracts sold (for options only)             |
| 1227  | ProductComplex | N     | 1   | 56  | unsigned int | This field qualifies an instrument type    |
|       |                |       |     |     |              | on Eurex.                                  |
|       |                |       |     |     |              | Value Description                          |
|       |                |       |     |     |              | 1 Simple instrument                        |
|       |                |       |     |     |              | 2 Standard Option Strategy                 |
|       |                |       |     |     |              | 3 Non-Standard Option Strategy             |
|       |                |       |     |     |              | 4 Volatility Strategy                      |
|       |                |       |     |     |              | 5 Futures Spread                           |
|       |                |       |     |     |              | 7 Standard Future Strategy                 |
|       |                |       |     |     |              | 8 Pack and Bundle                          |
|       |                |       |     |     |              | 9 Strip                                    |
| 25022 | Pad7           | U     | 7   | 57  | Fixed String | not used                                   |

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# 7.9.13 Market Maker Parameter Definition Response

This message confirms a Market Maker Parameter Definition request.

| Tag   | Field Name      | Req'd | Len | Ofs | Data Type    | Description                              |
|---|-----------------|-------|-----|-----|--------------|--|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>    | geHeaderOut>    |       |     |     |              |  |
| 9   | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-     |
|   |                 |       |     |     |              | cluding this field.                      |
| 28500   | TemplateID      | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-   |
|   |                 |       |     |     |              | sage layout. Value: 10304 (Request-      |
|   |                 |       |     |     |              | Acknowledge, $MsgType = U1$ )            |
| 25017   | Pad2            | U     | 2   | 6   | Fixed String | not used                                 |
| <nrre.< td=""><td>sponseHeaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></nrre.<> | sponseHeaderME> |       |     |     |              |  |
| 5979  | RequestTime     | Υ     | 8   | 8   | UTCTimestamp | Gateway request in timestamp.            |
| 7764  | RequestOut      | Y     | 8   | 16  | UTCTimestamp | Timestamp the gateway sends a mes-       |
|   |                 |       |     |     |              | sage to the Matching Engine              |
| 21002   | TrdRegTSTimeIn  | Υ     | 8   | 24  | UTCTimestamp | Matching engine in timestamp.            |
| 21003   | TrdRegTSTimeOut | Y     | 8   | 32  | UTCTimestamp | Matching engine out timestamp.           |
| 7765  | ResponseIn      | Y     | 8   | 40  | UTCTimestamp | Timestamp the gateway receives a         |
|   |                 |       |     |     |              | message from the Matching Engine         |
| 52  | SendingTime     | Y     | 8   | 48  | UTCTimestamp | Gateway response out timestamp.          |
| 34  | MsgSeqNum       | Y     | 4   | 56  | unsigned int | Message sequence number used by the      |
|   |                 |       |     |     |              | participant for requests sent to the ga- |
|   |                 |       |     |     |              | teway.                                   |
| 893   | LastFragment    | Y     | 1   | 60  | unsigned int | Indicates whether this message is the    |
|   |                 |       |     |     |              | last fragment (part) of a sequence of    |
|   |                 |       |     |     |              | messages belonging to one dedicated      |
|   |                 |       |     |     |              | transaction.                             |
|   |                 |       |     |     |              | Value Description                        |
|   |                 |       |     |     |              | 1 Last Message                           |
| 25018   | Pad3            | U     | 3   | 61  | Fixed String | not used                                 |
| < Messa   | ge Body>        |       |     |     |              |  |
| 17  | ExecID          | N     | 8   | 64  | UTCTimestamp | Transaction timestamp.                   |

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# 7.10 Other

# 7.10.1 Party Action Report

A Member supervisor or EUREX market supervision has stopped or released a trader or a business unit for one or all markets.

| Tag  | Field Name                        | Req'd | Len | Ofs | Data Type    | Description                                |
|--|-----------------------------------|-------|-----|-----|--------------|--|
| < Messag   | geHeaderOut>                      |       |     |     |              |  |
| 9  | BodyLen                           | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-       |
|  |                                   |       |     |     |              | cluding this field.                        |
| 28500  | TemplateID                        | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI          |
|  |                                   |       |     |     |              | message layout. Value: 10042 (Party-       |
|  |                                   |       |     |     |              | ${\sf ActionReport,\ MsgType} = {\sf DI})$ |
| 25017  | Pad2                              | U     | 2   | 6   | Fixed String | not used                                   |
| <rbche< td=""><td>eader&gt;</td><td></td><td></td><td></td><td></td><td></td></rbche<> | eader>                            |       |     |     |              |  |
| 52   | ${\sf SendingTime}$               | Υ     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.            |
| 1181   | ApplSeqNum                        | Υ     | 8   | 16  | unsigned int | Application sequence number assi-          |
|  |                                   |       |     |     |              | gned to a non-order related Eurex ETI      |
|  |                                   |       |     |     |              | data stream.                               |
| 28727  | ApplSubID                         | U     | 4   | 24  | unsigned int | not used                                   |
| 5948   | PartitionID                       | Y     | 2   | 28  | unsigned int | Grouping of Eurex products.                |
|  |                                   |       |     |     |              | Belongs to the scope of Service            |
|  |                                   |       |     |     |              | Availability and Retransmit requests.      |
| 1352   | ApplResendFlag                    | Y     | 1   | 30  | unsigned int | Indicates a retransmission message.        |
|  |                                   |       |     |     |              | Value Description                          |
|  |                                   |       |     |     |              | 0 False                                    |
|  |                                   |       |     |     |              | 1 True                                     |
| 1180   | ApplID                            | Y     | 1   | 31  | unsigned int | Identifier for an ETI data stream.         |
|  |                                   |       |     |     |              | Value Description                          |
|  |                                   |       |     |     |              | 6 Risk Control                             |
| 893  | LastFragment                      | Y     | 1   | 32  | unsigned int | Indicates whether this message is the      |
| 093  | Lastragment                       | '     | 1   | 32  | unsigned int | last fragment (part) of a sequence of      |
|  |                                   |       |     |     |              | messages belonging to one dedicated        |
|  |                                   |       |     |     |              | transaction.                               |
|  |                                   |       |     |     |              | Value Description                          |
|  |                                   |       |     |     |              | 1 Last Message                             |
|  |                                   |       |     |     |              | 1 Last Wessage                             |
|  | Pad7                              | U     | 7   | 33  | Fixed String | not used                                   |
|  | ge Body>                          |       |     |     |              |  |
| 60   | TransactTime                      | Y     | 8   | 40  | UTCTimestamp | Transaction timestamp.                     |
| 75   | TradeDate                         | N     | 4   | 48  | LocalMktDate | Business date.                             |
| 20812  | RequestingParty-IDExecutingTrader | N     | 4   | 52  | unsigned int | Owning User ID                             |
| 20059  | PartyIDExecutingUnit              | Y     | 4   | 56  | unsigned int | Business Unit ID.                          |

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| Tag   | Field Name                         | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------------------|-------|-----|-----|--------------|--|
| 20012 | PartyIDExecuting-<br>Trader        | N     | 4   | 60  | unsigned int | Owning User ID.  |
| 20816 | RequestingParty-IDExecutingSystem  | Y     | 4   | 64  | unsigned int | System ID.  Value Description  2 Eurex Trading               |
| 1301  | MarketID                           | N     | 2   | 68  | unsigned int | Market ID.  Value Description  1 XEUR  2 XEEE  * More values |
| 2329  | PartyActionType                    | Y     | 1   | 70  | unsigned int | Value Description  1 Halt trading  2 Reinstate               |
| 20807 | RequestingParty-<br>IDEnteringFirm | Y     | 1   | 71  | unsigned int | Value Description  1 Participant  2 Market Supervision       |

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#### 7.10.2 Trade Notification

The Trade Notification message is the legally binding confirmation for a trade. For more details, please refer to chapter 4.9 Trade Notifications.

| Tag  | Field Name        | Req'd | Len | Ofs | Data Type    | Description                                 |
|--|-------------------|-------|-----|-----|--------------|---|
| <messa< th=""><th>geHeaderOut&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderOut>      |       |     |     |              |   |
| 9  | BodyLen           | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-        |
|  |                   |       |     |     |              | cluding this field.                         |
| 28500  | TemplateID        | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI           |
|  |                   |       |     |     |              | message layout. Value: 10500 (Trade-        |
|  |                   |       |     |     |              | ${\sf CaptureReport,\ MsgType} = {\sf AE})$ |
| 25017  | Pad2              | U     | 2   | 6   | Fixed String | not used                                    |
| <rbch< td=""><td>leader&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>        | leader>           |       |     |     |              |   |
| 52   | SendingTime       | Υ     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.             |
| 1181   | ApplSeqNum        | Y     | 8   | 16  | unsigned int | Application sequence number assi-           |
|  |                   |       |     |     |              | gned to a non-order related Eurex ETI       |
|  |                   |       |     |     |              | data stream.                                |
| 28727  | ApplSubID         | N     | 4   | 24  | unsigned int | Unique ID assigned by the Eurex sys-        |
|  |                   |       |     |     |              | tem during broadcast subscription in        |
|  |                   |       |     |     |              | order to link broadcasts to the related     |
|  |                   |       |     |     |              | subscription.                               |
| 5948   | PartitionID       | Y     | 2   | 28  | unsigned int | Grouping of Eurex products.                 |
|  |                   |       |     |     |              | Belongs to the scope of Service             |
|  |                   |       |     |     |              | Availability and Retransmit requests.       |
| 1352   | ApplResendFlag    | Y     | 1   | 30  | unsigned int | Indicates a retransmission message.         |
|  |                   |       |     |     |              | Value Description                           |
|  |                   |       |     |     |              | 0 False                                     |
|  |                   |       |     |     |              | 1 True                                      |
| 1100   |                   |       |     | 0.1 |              |   |
| 1180   | ApplID            | Y     | 1   | 31  | unsigned int | Identifier for an ETI data stream.          |
|  |                   |       |     |     |              | Value Description                           |
|  |                   |       |     |     |              | 1 Trade                                     |
| 893  | LastFragment      | Υ     | 1   | 32  | unsigned int | Indicates whether this message is the       |
|  |                   |       |     |     | -            | last fragment (part) of a sequence of       |
|  |                   |       |     |     |              | messages belonging to one dedicated         |
|  |                   |       |     |     |              | transaction.                                |
|  |                   |       |     |     |              | Value Description                           |
|  |                   |       |     |     |              | 1 Last Message                              |
| 25.5   |                   |       |     |     | <b>— –</b> : |   |
| 25022  |                   | U     | 7   | 33  | Fixed String | not used                                    |
|  | ge Body>          |       |     |     |              |   |
|  | SecurityID        | Y     | 8   | 40  | signed int   | Instrument identifier.                      |
| 1650   | RelatedSecurityID | N     | 8   | 48  | signed int   | Instrument identifier of the original       |
|  |                   |       |     |     |              | Eurex strategy.                             |

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| Tag   | Field Name                | Req'd | Len | Ofs | Data Type    | Description                              |
|-------|---------------------------|-------|-----|-----|--------------|--|
| 44    | Price                     | N     | 8   | 56  | PriceType    | Limit price. Required if OrdType (40)    |
|       |                           |       |     |     |              | is Limit (2) or Stop Limit (4).          |
| 31    | LastPx                    | Υ     | 8   | 64  | PriceType    | Price of this fill.                      |
| 28585 | SideLastPx                | N     | 8   | 72  | PriceType    | Fill price for the original Eurex strat- |
|       |                           |       |     |     |              | egy.                                     |
| 1596  | ClearingTradePrice        | N     | 8   | 80  | PriceType    | Final trade price                        |
| 60    | TransactTime              | Υ     | 8   | 88  | UTCTimestamp | Transaction timestamp.                   |
| 37    | OrderID                   | N     | 8   | 96  | unsigned int | Exchange Order ID generated by Eur-      |
|       |                           |       |     |     |              | ex System; it remains constant over      |
|       |                           |       |     |     |              | the lifetime of an order.                |
| 11    | ClOrdID                   | N     | 8   | 104 | unsigned int | Client Order ID: Unique participant      |
|       |                           |       |     |     |              | defined order request identifier. For    |
|       |                           |       |     |     |              | quotes the QuoteMsgID (1166) is pro-     |
|       |                           |       |     |     |              | vided in the trade notification.         |
| 1003  | TradeID                   | Y     | 4   | 112 | unsigned int | Uniquely identifies all order leg allo-  |
|       |                           |       |     |     |              | cations referring to the same match      |
| 1100  |                           |       |     |     |              | event, simple instrument and price.      |
| 1126  | OrigTradeID               | N     | 4   | 116 | unsigned int | This field provides the original trade   |
|       | D .D . IDE .:             |       |     |     |              | identifier.                              |
| 20459 | RootPartyIDExecuting-     | Y     | 4   | 120 | unsigned int | Business Unit ID.                        |
| 20455 | Unit RootPartyIDSessionID | N     | 4   | 124 | unsigned int | Session ID.                              |
|       | RootPartyIDExecuting-     |       |     |     | unsigned int |  |
| 20412 | Trader                    | Y     | 4   | 128 | unsigned int | Owning User ID.                          |
|       | RootPartyIDClearing-      |       |     |     |              |  |
| 25026 | Unit                      | Y     | 4   | 132 | unsigned int | Clearing Business Unit ID.               |
| 14    | CumQty                    | N     | 4   | 136 | Qty          | Cumulated executed quantity of an or-    |
|       |                           |       |     |     |              | der.                                     |
| 151   | LeavesQty                 | N     | 4   | 140 | Qty          | Remaining quantity of the order at the   |
|       |                           |       |     |     |              | time of the execution. If the order has  |
|       |                           |       |     |     |              | been executed partially this field con-  |
|       |                           |       |     |     |              | tains the non-executed quantity. A re-   |
|       |                           |       |     |     |              | maining size of 0 indicates that the     |
|       |                           |       |     |     |              | order is fully matched or no longer ac-  |
|       |                           |       |     |     |              | tive.                                    |
| 1300  | MarketSegmentID           | Y     | 4   | 144 | signed int   | Product identifier.                      |
| 1649  | RelatedSymbol             | N     | 4   | 148 | signed int   | Product identifier of the original Eurex |
|       |                           |       |     |     |              | strategy.                                |
| 32    | LastQty                   | Y     | 4   | 152 | Qty          | Quantity executed in this fill.          |
| 1009  | SideLastQty               | N     | 4   | 156 | signed int   | Fill quantity for the original Eurex     |
|       |                           |       |     |     |              | strategy.                                |
| 28736 | ClearingTradeQty          | N     | 4   | 160 | Qty          | Final traded quantity                    |

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| 1506 SideTradeID Y 4 164 unsigned int Private trade identifier of an order or quote match step.  28582 MatchDate Y 4 168 LocalMktDate Business day of the match event.  880 TrdMatchID Y 4 172 unsigned int Unique identifier for each price level (match step) of a match event; it is used for public trade reporting.  1851 StrategyLinkID N 4 176 unsigned int Identifier that links all trades resulting from a match step of a strategy order.   | Tag   | Field Name             | Req'd | Len | Ofs | Data Type    | Description                                |
|--|-------|------------------------|-------|-----|-----|--------------|--|
| MatchDate  |       |                        | Υ     | 4   | 164 | unsigned int | Private trade identifier of an order or    |
| 880 TrdMatchID Y 4 172 unsigned int Unique identifier for each price level (match step) of a match event; it is used for public trade reporting.  1851 StrategyLinkID N 4 176 unsigned int Identifier that links all trades resulting from a match step of a strategy order.  748 TotNumTradeReports N 4 180 signed int Number of leg executions of the original strategy order.  442 MultiLegReportingType N 1 184 unsigned int Indicates if the trade resulted from a single order or a multi leg order.  Value Description  1 Single instrument  2 Complex instrument  1 Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description  0 Trade 1 Alleged 5 No/Was (Replaced) 7 (Locked-In) Trade Break  830 TransferReason Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  1 Identifies the role for which the trade notification is received.   |       |                        |       |     |     |              | quote match step.                          |
| (match step) of a match event; it is used for public trade reporting.    1851   StrategyLinkID   | 28582 | MatchDate              | Υ     | 4   | 168 | LocalMktDate | Business day of the match event.           |
| StrategyLinkID   | 880   | TrdMatchID             | Υ     | 4   | 172 | unsigned int | Unique identifier for each price level     |
| StrategyLinkID   |       |                        |       |     |     |              | (match step) of a match event; it is       |
| from a match step of a strategy order.  748 TotNumTradeReports N 4 180 signed int Number of leg executions of the original strategy order.  442 MultiLegReportingType N 1 184 unsigned int Indicates if the trade resulted from a single order or a multi leg order.  Value Description  1 Single instrument  2 Complex instrument  0: Final Trade  1: Preliminary Trade  5: Modified Trade  7: Trade Reversal  Value Description  0 Trade  1 Alleged  5 No/Was (Replaced)  7 (Locked-In) Trade Break  830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description   |       |                        |       |     |     |              | used for public trade reporting.           |
| TotNumTradeReports   | 1851  | StrategyLinkID         | N     | 4   | 176 | unsigned int | Identifier that links all trades resulting |
| NultiLegReportingType   N   1   184   unsigned int   Indicates if the trade resulted from a single order or a multi leg order.   Value   Description   1   Single instrument   2   Complex instrum   |       |                        |       |     |     |              | from a match step of a strategy order.     |
| MultiLegReportingType   N   1   184   unsigned int   Indicates if the trade resulted from a single order or a multi leg order.   Value   Description   1   Single instrument   2   Complex instrument   2   Complex instrument   2   Complex instrument   356   TradeReportType   Y   1   185   unsigned int   Identifies the type of trade notification: 0: Final Trade   1: Preliminary Trade   5: Modified Trade   7: Trade Reversal   Value   Description   0   Trade   1   Alleged   5   No/Was (Replaced)   7   (Locked-In) Trade Break   830   TransferReason   Y   1   186   unsigned int   Identifies the role for which the trade notification is received.   Value   Description   Value   Value   Value   Value   Value   Value   Value   Value   Value   Valu   | 748   | TotNumTradeReports     | N     | 4   | 180 | signed int   | Number of leg executions of the origi-     |
| single order or a multi leg order.    Value   Description   1   Single instrument   2   Complex instrument   2   Complex instrument   3   3   3   3   3   3   3   3   3  |       |                        |       |     |     |              | **   |
| Value   Description   1   Single instrument   2   Complex instrument    | 442   | MultiLegReportingType  | N     | 1   | 184 | unsigned int |  |
| 1   Single instrument   2   Complex instrume   |       |                        |       |     |     |              | single order or a multi leg order.         |
| 2   Complex instrument   2   Complex instrum   |       |                        |       |     |     |              | Value Description                          |
| 856 TradeReportType  Y  1  185 unsigned int  Identifies the type of trade notification: 0: Final Trade 1: Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description 0 Trade 1 Alleged 5 No/Was (Replaced) 7 (Locked-In) Trade Break  830 TransferReason  Y  1  186 unsigned int Identifies the type of trade notification: 0: Final Trade 1: Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description  Unsigned int Identifies the type of trade notification: 0: Final Trade 1: Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description   |       |                        |       |     |     |              | 1 Single instrument                        |
| on: 0: Final Trade 1: Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description 0 Trade 1 Alleged 5 No/Was (Replaced) 7 (Locked-In) Trade Break  830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  |       |                        |       |     |     |              | 2 Complex instrument                       |
| on: 0: Final Trade 1: Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description 0 Trade 1 Alleged 5 No/Was (Replaced) 7 (Locked-In) Trade Break  830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  | 856   | TradeReportType        | Υ     | 1   | 185 | unsigned int | Identifies the type of trade notificati-   |
| 1: Preliminary Trade 5: Modified Trade 7: Trade Reversal  Value Description 0 Trade 1 Alleged 5 No/Was (Replaced) 7 (Locked-In) Trade Break  830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description   |       | , ,,                   |       |     |     | · ·          |  |
| 5: Modified Trade 7: Trade Reversal  Value Description 0 Trade 1 Alleged 5 No/Was (Replaced) 7 (Locked-In) Trade Break  830 TransferReason Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description   |       |                        |       |     |     |              | 0: Final Trade                             |
| 7: Trade Reversal  Value Description  0 Trade  1 Alleged  5 No/Was (Replaced)  7 (Locked-In) Trade Break  830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  |       |                        |       |     |     |              | 1: Preliminary Trade                       |
| Value   Description   0   Trade   1   Alleged   5   No/Was (Replaced)   7   (Locked-In) Trade Break   S30   TransferReason   Y   1   186   Unsigned int   Identifies the role for which the trade notification is received.   Value   Description  |       |                        |       |     |     |              | 5: Modified Trade                          |
| 830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  |       |                        |       |     |     |              | 7: Trade Reversal                          |
| 830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  |       |                        |       |     |     |              | Value Description                          |
| 830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  |       |                        |       |     |     |              | 0 Trade                                    |
| 830 TransferReason  Y 1 186 unsigned int Identifies the role for which the trade notification is received.  Value Description  |       |                        |       |     |     |              | 1 Alleged                                  |
| 830 TransferReason Y 1 186 unsigned int Identifies the role for which the trade notification is received.    Value   Description   Value   Value |       |                        |       |     |     |              | 5 No/Was (Replaced)                        |
| notification is received.  Value Description   |       |                        |       |     |     |              | 7 (Locked-In) Trade Break                  |
| notification is received.  Value Description   | 830   | TransferReason         | Y     | 1   | 186 | unsigned int | Identifies the role for which the trade    |
| Value Description  |       |                        |       |     |     |              |  |
|  |       |                        |       |     |     |              |  |
|  |       |                        |       |     |     |              |  |
| 2 Clearer  |       |                        |       |     |     |              |  |
|  | 00400 | D . D . IDD            | N.    |     | 107 | F: 10::      |  |
| 20432 RootPartyIDBeneficiary N 9 187 Fixed String Final Beneficiary.   | 20432 | RootPartyIDBeneficiary | N N   | 9   | 187 | Fixed String | _  |
| Valid characters: \x20,\x22-\x7B,  |       |                        |       |     |     |              |  |
| \x7D,\x7E  |       | Root Party/ID Takal In |       |     |     |              | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\    |
| 20496 ROOLFartyID TakeOp- N 5 196 Fixed String Take-up Member Short Name.  | 20496 |                        | N     | 5   | 196 | Fixed String | Take-up Member Short Name.                 |
| Valid characters: \x20,\x22-\x7B,  |       | Traumgriffi            |       |     |     |              | Valid characters: $\x20,\x22-\x7B$ ,       |
| \x7D,\x7E  |       |                        |       |     |     |              | \x7D,\x7E                                  |
|  | 20413 | RootPartyIDOrder-      | N     | 7   | 201 | Fixed String | External Member ID.                        |
| 20413  |       | OriginationFirm        |       |     |     | 3            | Valid characters: A-Z,0-9,\x20             |

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| Tag   | Field Name         | Req'd | Len | Ofs | Data Type    | Description  |
|-------|--------------------|-------|-----|-----|--------------|--|
|       | MatchType          | N     | 1   | 208 | unsigned int | The point in the matching process at which this trade was matched.  Value Description  3 Confirmed Trade Report (reporting from recognized markets)  4 Auto-match incoming order  5 Cross Auction  7 Call Auction  |
| 28610 | MatchSubType       | N     | 1   | 209 | unsigned int | Indicates the auction type the trade originates from. Not filled for uncrossing, i.e. when a complex instrument switches to the instrument state "Continuous".    Value   Description   1   Opening auction   2   Closing auction   3   Intraday auction   4   Circuit Breaker auction |
| 54    | Side               | Y     | 1   | 210 | unsigned int | Side of the trade. Leg executions of sell orders for complex instruments will have an inverted value compared to the signature.  Value Description  1 Buy 2 Sell   |
| 1057  | AggressorIndicator | N     | 1   | 211 | unsigned int | Indicates whether the order added or removed liquidity.  Value Description  0 Passive  1 Aggressive  |
| 1815  | TradingCapacity    | Y     | 1   | 212 | unsigned int | This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.  Value Description  1 Customer (Agency)  5 Principal (Proprietary)  6 MarketMaker   |

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| Tag   | Field Name                      | Req'd | Len | Ofs | Data Type    | Description   |
|-------|---------------------------------|-------|-----|-----|--------------|---|
| 1     | Account                         | N     | 2   | 213 | Fixed String | Accounts to book trades and keep positions on. Valid characters: $1-9$ , $\times 41$ , $\times 47$ , $\times 50$  |
| 20438 | RootPartyIDPosition-<br>Account | N     | 20  | 215 | Fixed String | 'Flexible Account' information. Valid characters: $\x20,\x30-\x39,\x41-\x5A$  |
| 77    | PositionEffect                  | N     | 1   | 235 | char         | Field is used for Eurex position management purposes and indicates whether the order is submitted to open or close a position.  Value Description  C Close O Open   |
| 1031  | CustOrderHandlingInst           | N     | 1   | 236 | Fixed String | Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier. The field is for participant use only.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 25007 | FreeText1                       | N     | 12  | 237 | Fixed String | First free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading KRX or TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E |
| 25008 | FreeText2                       | N     | 12  | 249 | Fixed String | Second free-format text field for trader-specific or customer-related comments.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 25009 | FreeText3                       | N     | 12  | 261 | Fixed String | Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with External Member and Final Beneficiary used for trading TAIFEX products.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E        |

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| Tag   | Field Name                         | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------------------------|-------|-----|-----|--------------|--|
| 1115  | OrderCategory                      | N     | 1   | 273 | char         | Indicates if the trade notification results from an order or quote.  Value Description  1 Order  2 Quote   |
| 40    | OrdType                            | N     | 1   | 274 | unsigned int | Order type.  Value Description  1 Market  2 Limit  |
| 28587 | RelatedProduct-<br>Complex         | N     | 1   | 275 | unsigned int | Instrument type of the orginal Eurex strategy.  Value Description 2 Standard Option Strategy 3 Non-Standard Option Strategy 4 Volatility Strategy 5 Futures Spread 6 Inter-Product Spread 7 Standard Future Strategy 8 Pack and Bundle 9 Strip |
| 28586 | OrderSide                          | N     | 1   | 276 | unsigned int | Side of the order in the original Eurex strategy.  Value Description  1 Buy 2 Sell   |
| 22421 | RootPartyClearing-<br>Organization | Y     | 4   | 277 | Fixed String | Clearing House Short Name.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E  |
| 22401 | RootPartyExecuting-<br>Firm        | Y     | 5   | 281 | Fixed String | Participant Short Name.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 22412 | RootPartyExecuting-<br>Trader      | Y     | 6   | 286 | Fixed String | Owning User Short Name.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |
| 22404 | RootPartyClearingFirm              | Y     | 5   | 292 | Fixed String | Clearing Member Short Name.  Valid characters: \x20,\x22-\x7B, \x7D,\x7E   |

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| Tag   | Field Name | Req'd | Len | Ofs | Data Type    | Description |
|-------|------------|-------|-----|-----|--------------|-------------|
| 25022 | Pad7       | U     | 7   | 297 | Fixed String | not used    |

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### 7.10.3 Trade Notification Status

| Tag  | Field Name     | Req'd | Len | Ofs | Data Type    | Description  |
|--|----------------|-------|-----|-----|--------------|--|
| <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderOut>   |       |     |     |              |  |
| 9  | BodyLen        | Y     | 4   | 0   | unsigned int | Number of bytes for the message, in-                             |
| 28500  | TamarlataID    | Y     | 2   | 4   | unsigned int | cluding this field.  Unique identifier for a Eurex ETI mes-      |
| 20000  | TemplateID     | Ť     | 2   | 4   | unsigned int | ,  |
|  |                |       |     |     |              | sage layout. Value: $10501$ (Trading-SessionStatus, MsgType = h) |
| 25017  | Pad2           | U     | 2   | 6   | Fixed String | not used   |
| <rbch< td=""><td>leader&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>        | leader>        |       |     |     |              |  |
| 52   | SendingTime    | Υ     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.                                  |
| 1181   | ApplSeqNum     | Υ     | 8   | 16  | unsigned int | Application sequence number assi-                                |
|  |                |       |     |     |              | gned to a non-order related Eurex ETI                            |
|  |                |       |     |     |              | data stream.   |
| 28727  | ApplSubID      | N     | 4   | 24  | unsigned int | Unique ID assigned by the Eurex sys-                             |
|  |                |       |     |     |              | tem during broadcast subscription in                             |
|  |                |       |     |     |              | order to link broadcasts to the related                          |
|  |                |       |     |     |              | subscription.  |
| 5948   | PartitionID    | Y     | 2   | 28  | unsigned int | Grouping of Eurex products.                                      |
|  |                |       |     |     |              | Belongs to the scope of Service                                  |
|  |                |       |     |     |              | Availability and Retransmit requests.                            |
| 1352   | ApplResendFlag | Y     | 1   | 30  | unsigned int | Indicates a retransmission message.                              |
|  |                |       |     |     |              | Value Description  |
|  |                |       |     |     |              | 0 False  |
|  |                |       |     |     |              | 1 True   |
| 1180   | ApplID         | Y     | 1   | 31  | unsigned int | Identifier for an ETI data stream.                               |
|  |                |       |     |     |              | Value Description  |
|  |                |       |     |     |              | 1 Trade  |
| 893  | LastFragment   | Υ     | 1   | 32  | unsigned int | Indicates whether this message is the                            |
|  | _              |       |     |     |              | last fragment (part) of a sequence of                            |
|  |                |       |     |     |              | messages belonging to one dedicated                              |
|  |                |       |     |     |              | transaction.   |
|  |                |       |     |     |              | Value Description  |
|  |                |       |     |     |              | 1 Last Message   |
| 25022  | Pad7           | U     | 7   | 33  | Fixed String | not used   |
| < Messa  | ge Body>       |       |     |     |              |  |
| 1368   | TradSesEvent   | Y     | 1   | 40  | unsigned int | Trading session event type.                                      |
|  |                |       |     |     |              | Value Description  |
|  |                |       |     |     |              | 104 End of Service   |
|  |                |       |     |     |              |  |

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| Tag   | Field Name | Req'd | Len | Ofs | Data Type    | Description |
|-------|------------|-------|-----|-----|--------------|-------------|
| 25022 | Pad7       | U     | 7   | 41  | Fixed String | not used    |

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# 7.10.4 Service Availability

The Service Availability message provides information on the availability of a partition. For more details, please refer to chapter 4.15 Service Availability.

| September   Sept | Tag  | Field Name                               | Req'd        | Len | Ofs | Data Type     | Description                           |
|--|--|--|--------------|-----|-----|---------------|---------------------------------------|
| Cluding this field.   Cluding this field.  | <messa< td=""><td>geHeaderOut&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | geHeaderOut>                             |              |     |     |               |                                       |
| 28500   TemplateID   | 9  | BodyLen                                  | Y            | 4   | 0   | unsigned int  | Number of bytes for the message, in-  |
| message layout. Value: 10030 (User-Notification, MsgType = CB)  25017 Pad2   |  |  |              |     |     |               | cluding this field.                   |
| Notification, MsgType = CB   | 28500  | TemplateID                               | Y            | 2   | 4   | unsigned int  | Unique identifier for a Eurex ETI     |
| 25017   Pad2   |  |  |              |     |     |               | •                                     |
| SendingTime  |  |  |              |     |     |               | Notification, $MsgType = CB$ )        |
| S2   SendingTime   |  |  | U            | 2   | 6   | Fixed String  | not used                              |
| 28727   ApplSubID  | <nrbc< td=""><td>Header&gt;</td><td></td><td></td><td></td><td></td><td></td></nrbc<>        | Header>                                  |              |     |     |               |                                       |
| tem during broadcast subscription in order to link broadcasts to the related subscription.  1180 ApplID Y 1 20 unsigned int Identifier for an ETI data stream.    Value   Description   3   Service Availability   | 52   | SendingTime                              |              | 8   | 8   | UTCTimestamp  | Gateway response out timestamp.       |
| order to link broadcasts to the related subscription.  1180 ApplID Y 1 20 unsigned int Identifier for an ETI data stream.  Value Description 3 Service Availability  893 LastFragment Y 1 21 unsigned int Indicates whether this message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction.  Value Description 0 Not Last Message 1 Last Message 1 Last Message 25017 Pad2 U 2 22 Fixed String not used  **Message Body>**  MatchingEngineTrade-Date Date  N 4 24 LocalMktDate Current business day for Order/Quote Management service.  25031 TradeManagerTrade-Date N 4 28 LocalMktDate Current business day of Trades service.  25032 ApplSeqTradeDate N 4 32 LocalMktDate Current business day of Retransmission of Order/Quote Events service.  5948 PartitionID Y 2 36 unsigned int Grouping of Eurex products. Belongs to the scope of Service   | 28727  | ApplSubID                                | Y            | 4   | 16  | unsigned int  |                                       |
| Subscription   Subs |  |  |              |     |     |               | ·                                     |
| 1180 ApplID  |  |  |              |     |     |               |                                       |
| Value   Description   3   Service Availability   |  |  |              |     |     |               | ·                                     |
| Service Availability   3   Service Availability   Service Availabi | 1180   | ApplID                                   | Y            | 1   | 20  | unsigned int  | Identifier for an ETI data stream.    |
| 893 LastFragment Y 1 21 unsigned int Indicates whether this message is the last fragment (part) of a sequence of messages belonging to one dedicated transaction.    Value   Description   0   Not Last Message   1   Last Message   1   Last Message   1   Last Message   25017   Pad2  |  |  |              |     |     |               | Value Description                     |
| last fragment (part) of a sequence of messages belonging to one dedicated transaction.    Value   Description   0   Not Last Message   1   Last Message   1   Last Message   1   Last Message   1   Last Message   25017   Pad2   U 2 22   Fixed String   not used   |  |  |              |     |     |               | 3 Service Availability                |
| messages belonging to one dedicated transaction.   Value   Description   0   Not Last Message   1   Last Message   Last Message   1   Last Message   Last Message  | 893  | LastFragment                             | Υ            | 1   | 21  | unsigned int  | Indicates whether this message is the |
| transaction.    Value   Description  |  |  |              |     |     |               | last fragment (part) of a sequence of |
| Value   Description     0   Not Last Message   1   Last Message   Last Messa |  |  |              |     |     |               | messages belonging to one dedicated   |
| 25017 Pad2 U 2 22 Fixed String not used  **Message Body>**  25030 MatchingEngineTrade-Date N 4 24 LocalMktDate Current business day for Order/Quote Management service.  25031 TradeManagerTrade-Date N 4 28 LocalMktDate Current business day of Trades service.  25032 ApplSeqTradeDate N 4 32 LocalMktDate Current business day of Retransmission of Order/Quote Events service.  5948 PartitionID Y 2 36 unsigned int Grouping of Eurex products.  Belongs to the scope of Service   |  |  |              |     |     |               | transaction.                          |
| 25017 Pad2 U 2 22 Fixed String not used  **Message Body**  25030 MatchingEngineTrade-Date  N 4 24 LocalMktDate  Current business day for Order/Quote Management service.  25031 TradeManagerTrade-Date  N 4 28 LocalMktDate  Current business day of Trades service.  Current business day of Retransmission of Order/Quote Events service.  Selongs to the scope of Service  |  |  |              |     |     |               | Value Description                     |
| 25017 Pad2 U 2 22 Fixed String not used <a href="#"></a>   |  |  |              |     |     |               | 0 Not Last Message                    |
| CMessage Body>         25030       MatchingEngineTrade-Date       N       4       24       LocalMktDate       Current business day for Order/Quote Management service.         25031       TradeManagerTrade-Date       N       4       28       LocalMktDate       Current business day of Trades service.         25032       ApplSeqTradeDate       N       4       32       LocalMktDate       Current business day of Retransmission on of Order/Quote Events service.         5948       PartitionID       Y       2       36       unsigned int       Grouping of Eurex products. Belongs to the scope of Service   |  |  |              |     |     |               | 1 Last Message                        |
| CMessage Body>         25030       MatchingEngineTrade-Date       N       4       24       LocalMktDate       Current business day for Order/Quote Management service.         25031       TradeManagerTrade-Date       N       4       28       LocalMktDate       Current business day of Trades service.         25032       ApplSeqTradeDate       N       4       32       LocalMktDate       Current business day of Retransmission on of Order/Quote Events service.         5948       PartitionID       Y       2       36       unsigned int       Grouping of Eurex products. Belongs to the scope of Service   | 25017  | Pad2                                     | 11           | 2   | 22  | Fixed String  | not used                              |
| 25030   MatchingEngineTrade-Date   N   4   24   LocalMktDate   Current business day for Order/Quote   Management service.     25031   TradeManagerTrade-Date   N   4   28   LocalMktDate   Current business day of Trades service.     25032   ApplSeqTradeDate   N   4   32   LocalMktDate   Current business day of Retransmission of Order/Quote Events service.     5948   PartitionID   Y   2   36   unsigned int   Grouping of Eurex products.     Belongs to the scope of Service   |  |  | U            |     |     | Tixed String  | not used                              |
| Date    Date   N   4   24   LocalMktDate   Current business day for Order/Quote   Management service.  | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\   | ĺ  |              |     |     |               |                                       |
| Management service.     Management service.  | 25030  |  | N            | 4   | 24  | LocalMktDate  | Current business day for Order/Quote  |
| Date  N 4 28 LocalMktDate Current business day of Trades service.  25032 ApplSeqTradeDate N 4 32 LocalMktDate Current business day of Retransmission of Order/Quote Events service.  5948 PartitionID Y 2 36 unsigned int Grouping of Eurex products.  Belongs to the scope of Service   |  | Date                                     |              |     |     |               | Management service.                   |
| Date    25032   ApplSeqTradeDate   N   4   32   LocalMktDate   Current business day of Retransmission of Order/Quote Events service.    5948   PartitionID   Y   2   36   unsigned int   Grouping of Eurex products.   Belongs to the scope of Service   | 25031  | TradeManagerTrade-                       | <sub>N</sub> | 4   | 28  | LocalMktDate  | Current business day of Trades ser-   |
| 25032 ApplSeqTradeDate N 4 32 LocalMktDate Current business day of Retransmission of Order/Quote Events service.  5948 PartitionID Y 2 36 unsigned int Grouping of Eurex products. Belongs to the scope of Service   |  | Date                                     |              | •   |     |               | · ·                                   |
| on of Order/Quote Events service.  5948 PartitionID Y 2 36 unsigned int Grouping of Eurex products.  Belongs to the scope of Service   | 25032  | ApplSegTradeDate                         | N            | 4   | 32  | LocalMktDate  |                                       |
| 5948 PartitionID Y 2 36 unsigned int Grouping of Eurex products.  Belongs to the scope of Service  |  | 1,1,2,4,1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2, |              |     |     | <del>-</del>  | j                                     |
| Belongs to the scope of Service  | 5948   | PartitionID                              | Y            | 2   | 36  | unsigned int  |                                       |
|  |  |  |              |     |     | <b>3</b> ** * | · · ·                                 |
| i i i i i i i i i i i i i i i i i i i  |  |  |              |     |     |               | Availability and Retransmit requests. |

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| Tag   | Field Name           | Req'd | Len | Ofs | Data Type    | Description   |
|-------|----------------------|-------|-----|-----|--------------|---|
| 25005 | MatchingEngineStatus | Y     | 1   | 38  | unsigned int | Order/Quote Management service:<br>Informs if trading is active for grou- |
|       |                      |       |     |     |              | ping of Eurex products.   |
|       |                      |       |     |     |              | Value Description   |
|       |                      |       |     |     |              | 0 Unavailable 1 Available   |
|       |                      |       |     |     |              | 1 Available   |
| 25006 | TradeManagerStatus   | Υ     | 1   | 39  | unsigned int | Trades service: Informs about the   |
|       |                      |       |     |     |              | availability of the retransmission ser-                                   |
|       |                      |       |     |     |              | vice of trades for a grouping of Eurex                                    |
|       |                      |       |     |     |              | products.   |
|       |                      |       |     |     |              | Value Description   |
|       |                      |       |     |     |              | 0 Unavailable   |
|       |                      |       |     |     |              | 1 Available   |
| 28732 | ApplSeqStatus        | Υ     | 1   | 40  | unsigned int | Retransmission of Order/Quote   |
|       |                      |       |     |     |              | Events service: Informs about the   |
|       |                      |       |     |     |              | availability of the retransmission  |
|       |                      |       |     |     |              | services for order and quote events                                       |
|       |                      |       |     |     |              | (session data and listener data) for a                                    |
|       |                      |       |     |     |              | grouping of Eurex products.   |
|       |                      |       |     |     |              | Value Description   |
|       |                      |       |     |     |              | 0 Unavailable   |
|       |                      |       |     |     |              | 1 Available   |
| 25022 | Pad7                 | U     | 7   | 41  | Fixed String | not used  |

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### 7.10.5 News

The News message provides public information from the Eurex market supervision. News messages distributed without an ApplSeqNum are not part of the retransmission responses. For more details, please refer to chapter  $4.13~{\rm News}$ .

| Tag  | Field Name        | Req'd | Len | Ofs | Data Type    | Description  |  |  |  |
|--|-------------------|-------|-----|-----|--------------|--|--|--|--|
| <messageheaderout></messageheaderout>  |                   |       |     |     |              |  |  |  |  |
| 9  | BodyLen           | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-                         |  |  |  |
|  |                   |       |     |     |              | cluding this field.  |  |  |  |
| 28500  | TemplateID        | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI                            |  |  |  |
|  |                   |       |     |     |              | message layout. Value: 10031 (News,                          |  |  |  |
|  |                   |       |     |     |              | MsgType = B)   |  |  |  |
| 25017  | Pad2              | U     | 2   | 6   | Fixed String | not used   |  |  |  |
| <rbch< td=""><td>leader&gt;</td><td></td><td></td><td>1</td><td></td><td></td></rbch<> | leader>           |       |     | 1   |              |  |  |  |  |
| 52   | SendingTime       | Υ     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.                              |  |  |  |
| 1181   | ApplSeqNum        | N     | 8   | 16  | unsigned int | Application sequence number assi-                            |  |  |  |
|  |                   |       |     |     |              | gned to a non-order related Eurex ETI                        |  |  |  |
|  |                   |       |     |     |              | data stream.   |  |  |  |
| 28727  | ApplSubID         | N     | 4   | 24  | unsigned int | Unique ID assigned by the Eurex sys-                         |  |  |  |
|  |                   |       |     |     |              | tem during broadcast subscription in                         |  |  |  |
|  |                   |       |     |     |              | order to link broadcasts to the related                      |  |  |  |
| F040   | D ID              | Y     | 2   | 20  |              | subscription.  |  |  |  |
| 5948   | PartitionID       | Y     | 2   | 28  | unsigned int | Grouping of Eurex products.  Belongs to the scope of Service |  |  |  |
|  |                   |       |     |     |              | Availability and Retransmit requests.                        |  |  |  |
| 1352   | ApplResendFlag    | Y     | 1   | 30  | unsigned int | Indicates a retransmission message.                          |  |  |  |
| 1552   | Applitesellul lag | '     | 1   | 30  | unsigned int |  |  |  |  |
|  |                   |       |     |     |              | Value Description  |  |  |  |
|  |                   |       |     |     |              | 0 False  |  |  |  |
|  |                   |       |     |     |              | 1 True   |  |  |  |
| 1180   | ApplID            | Υ     | 1   | 31  | unsigned int | Identifier for an ETI data stream.                           |  |  |  |
|  |                   |       |     |     |              | Value Description  |  |  |  |
|  |                   |       |     |     |              | 2 News   |  |  |  |
| 893  | LastFragment      | Y     | 1   | 32  | unsigned int | Indicates whether this message is the                        |  |  |  |
| 033  | Lasti ragilient   |       | -   | 32  | unsigned int | last fragment (part) of a sequence of                        |  |  |  |
|  |                   |       |     |     |              | messages belonging to one dedicated                          |  |  |  |
|  |                   |       |     |     |              | transaction.   |  |  |  |
|  |                   |       |     |     |              | Value Description  |  |  |  |
|  |                   |       |     |     |              | 1 Last Message   |  |  |  |
| 05000  | D 17              | 11    | 7   | 22  | Final Cuito  |  |  |  |  |
| 25022  |                   | U     | 7   | 33  | Fixed String | not used   |  |  |  |
|  | ge Body> OrigTime | Υ     | 8   | 40  | UTCTimestamp | Creation timestamp of the News mes-                          |  |  |  |
| 42   | Orig i ime        | r     | 0   | 40  | OTCTIMESTAMP | ·  |  |  |  |
|  |                   |       |     |     |              | sage.  |  |  |  |

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| Tag   | Field Name | Req'd | Len  | Ofs | Data Type       | Description   |
|-------|------------|-------|------|-----|-----------------|---|
| 30354 | VarTextLen | Υ     | 2    | 48  | Counter         | Number of used bytes for field VarText  |
|       |            |       |      |     |                 | (30355).  |
| 148   | Headline   | Y     | 256  | 50  | Fixed String    | The headline of a News message.   |
|       |            |       |      |     |                 | Valid characters: $\x 20, \x 22 - \x 7B$ ,  |
|       |            |       |      |     |                 | \x7D,\x7E   |
| 25021 | Pad6       | U     | 6    | 306 | Fixed String    | not used  |
| 30355 | VarText    | N     | 2000 | 312 | Variable String | News text.  |
|       |            |       |      |     |                 | Valid characters: $\xspace \times 09, \xspace \times 00, \xspace \times $ |
|       |            |       |      |     |                 | \x20-\x7B,\x7D,\x7E   |

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### 7.10.6 Entitlement Notification

This message informs about entitlement updates of the business unit. For more details, please refer to chapter  $4.14~{\rm Risk}~{\rm Control}.$ 

| Tag   | Field Name                            | Req'd                                 | Len | Ofs | Data Type    | Description   |  |  |  |
|---|---------------------------------------|---------------------------------------|-----|-----|--------------|---|--|--|--|
| <messa< td=""><td colspan="9"><messageheaderout></messageheaderout></td></messa<>       | <messageheaderout></messageheaderout> |                                       |     |     |              |   |  |  |  |
| 9   | BodyLen                               | Υ                                     | 4   | 0   | unsigned int | Number of bytes for the message, in-                                      |  |  |  |
|   |                                       |                                       |     |     |              | cluding this field.   |  |  |  |
| 28500   | TemplateID                            | Y                                     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI   |  |  |  |
|   |                                       |                                       |     |     |              | message layout. Value: 10034 (Party-                                      |  |  |  |
|   |                                       |                                       |     |     |              | EntitlementsUpdateReport, MsgType   |  |  |  |
|   |                                       |                                       |     |     |              | = CZ)   |  |  |  |
| 25017   | Pad2                                  | U                                     | 2   | 6   | Fixed String | not used  |  |  |  |
| <rbch< td=""><td>leader&gt;</td><td>ı</td><td></td><td>1</td><td></td><td></td></rbch<> | leader>                               | ı                                     |     | 1   |              |   |  |  |  |
| 52  | SendingTime                           | Y                                     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.   |  |  |  |
| 1181  | ApplSeqNum                            | Y                                     | 8   | 16  | unsigned int | Application sequence number assi-   |  |  |  |
|   |                                       |                                       |     |     |              | gned to a non-order related Eurex ETI                                     |  |  |  |
|   |                                       |                                       |     |     |              | data stream.  |  |  |  |
| 28727   | ApplSubID                             | U                                     | 4   | 24  | unsigned int | not used  |  |  |  |
| 5948  | PartitionID                           | Y                                     | 2   | 28  | unsigned int | Grouping of Eurex products.   |  |  |  |
|   |                                       |                                       |     |     |              | Belongs to the scope of Service   |  |  |  |
|   |                                       |                                       |     |     |              | Availability and Retransmit requests.                                     |  |  |  |
| 1352  | ApplResendFlag                        | Y                                     | 1   | 30  | unsigned int | Indicates a retransmission message.                                       |  |  |  |
|   |                                       |                                       |     |     |              | Value Description   |  |  |  |
|   |                                       |                                       |     |     |              | 0 False   |  |  |  |
|   |                                       |                                       |     |     |              | 1 True  |  |  |  |
| 1180  | ApplID                                | Y                                     | 1   | 31  | unsigned int | Identifier for an ETI data stream.  |  |  |  |
|   |                                       |                                       |     |     |              | Value Description   |  |  |  |
|   |                                       |                                       |     |     |              | 6 Risk Control  |  |  |  |
| 000   |                                       | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 1   | 20  |              |   |  |  |  |
| 893   | LastFragment                          | Y                                     | 1   | 32  | unsigned int | Indicates whether this message is the                                     |  |  |  |
|   |                                       |                                       |     |     |              | last fragment (part) of a sequence of messages belonging to one dedicated |  |  |  |
|   |                                       |                                       |     |     |              | transaction.  |  |  |  |
|   |                                       |                                       |     |     |              |   |  |  |  |
|   |                                       |                                       |     |     |              | Value Description   |  |  |  |
|   |                                       |                                       |     |     |              | 1 Last Message  |  |  |  |
| 25022   | Pad7                                  | U                                     | 7   | 33  | Fixed String | not used  |  |  |  |
| < Messa   | ge Body>                              |                                       |     |     |              |   |  |  |  |
| 60  | TransactTime                          | Y                                     | 8   | 40  | UTCTimestamp | Transaction timestamp.  |  |  |  |
| 75  | TradeDate                             | Y                                     | 4   | 48  | LocalMktDate | Business date.  |  |  |  |
| 20259   | PartyDetail-                          | Y                                     | 4   | 52  | unsigned int | Business Unit ID.   |  |  |  |
|   | IDExecutingUnit                       |                                       | •   |     | 25.6         |   |  |  |  |

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| Tag   | Field Name                            | Req'd | Len | Ofs | Data Type    | Description  |
|-------|---------------------------------------|-------|-----|-----|--------------|--|
| 20816 | RequestingParty-<br>IDExecutingSystem | Y     | 4   | 56  | unsigned int | System ID.  Value Description  1 Eurex Clearing  |
| 1301  | MarketID                              | N     | 2   | 60  | unsigned int | 2 Eurex Trading  Market ID.  |
|       |                                       |       |     |     |              | Value Description  1 XEUR  2 XEEE  * More values   |
| 1324  | ListUpdateAction                      | Y     | 1   | 62  | char         | Invocation (D = Delete) or release (A = Add) of a trading limitation.  Value Description A Add (Invocation) D Delete (Release) |
| 22807 | RequestingParty-<br>EnteringFirm      | Y     | 9   | 63  | Fixed String | Entering Entity Short Name.  Valid characters: A-Z,0-9,\x20  |
| 22804 | RequestingParty-<br>ClearingFirm      | N     | 9   | 72  | Fixed String | Clearing Member Short Name. Valid characters: A-Z,0-9,\x20   |
| 1672  | PartyDetailStatus                     | Y     | 1   | 81  | unsigned int | Member status.  Value Description  0 Active  1 Suspend   |
| 25021 | Pad6                                  | U     | 6   | 82  | Fixed String | not used   |

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### 7.10.7 Risk Notification

This message informs about risk events for the business unit. For more details, please refer to chapter  $4.14~{\rm Risk}~{\rm Control}.$ 

| Tag  | Field Name      | Req'd | Len | Ofs | Data Type    | Description                                    |  |  |
|--|-----------------|-------|-----|-----|--------------|--|--|--|
| <messageheaderout></messageheaderout>  |                 |       |     |     |              |  |  |  |
| 9  | BodyLen         | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-           |  |  |
|  |                 |       |     |     |              | cluding this field.                            |  |  |
| 28500  | TemplateID      | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-         |  |  |
|  |                 |       |     |     |              | sage layout. Value: 10033 (PartyRisk-          |  |  |
|  |                 |       |     |     |              | ${\sf LimitsUpdateReport,MsgType} = {\sf CR)}$ |  |  |
| 25017  | Pad2            | U     | 2   | 6   | Fixed String | not used                                       |  |  |
| <rbch< td=""><td>leader&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>    | leader>         |       |     |     |              |  |  |  |
| 52   | SendingTime     | Y     | 8   | 8   | UTCTimestamp | Gateway response out timestamp.                |  |  |
| 1181   | ApplSeqNum      | Y     | 8   | 16  | unsigned int | Application sequence number assi-              |  |  |
|  |                 |       |     |     |              | gned to a non-order related Eurex ETI          |  |  |
|  |                 |       |     |     |              | data stream.                                   |  |  |
| 28727  | ApplSubID       | U     | 4   | 24  | unsigned int | not used                                       |  |  |
| 5948   | PartitionID     | Y     | 2   | 28  | unsigned int | Grouping of Eurex products.                    |  |  |
|  |                 |       |     |     |              | Belongs to the scope of Service                |  |  |
|  |                 |       |     |     |              | Availability and Retransmit requests.          |  |  |
| 1352   | ApplResendFlag  | Y     | 1   | 30  | unsigned int | Indicates a retransmission message.            |  |  |
|  |                 |       |     |     |              | Value Description                              |  |  |
|  |                 |       |     |     |              | 0 False  |  |  |
|  |                 |       |     |     |              | 1 True   |  |  |
| 1180   | ApplID          | Y     | 1   | 31  | unsigned int | Identifier for an ETI data stream.             |  |  |
| 1100   | / тррпъ         | •     | _   |     | unsigned int | Value Description                              |  |  |
|  |                 |       |     |     |              | 6 Risk Control                                 |  |  |
|  |                 |       |     |     |              | 0 Nisk Collition                               |  |  |
| 893  | LastFragment    | Y     | 1   | 32  | unsigned int | Indicates whether this message is the          |  |  |
|  |                 |       |     |     |              | last fragment (part) of a sequence of          |  |  |
|  |                 |       |     |     |              | messages belonging to one dedicated            |  |  |
|  |                 |       |     |     |              | transaction.                                   |  |  |
|  |                 |       |     |     |              | Value Description                              |  |  |
|  |                 |       |     |     |              | 1 Last Message                                 |  |  |
| 25022  | Pad7            | U     | 7   | 33  | Fixed String | not used                                       |  |  |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<> | ge Body>        |       |     |     |              |  |  |  |
| 60   | TransactTime    | Y     | 8   | 40  | UTCTimestamp | Transaction timestamp.                         |  |  |
| 75   | TradeDate       | Y     | 4   | 48  | LocalMktDate | Business date.                                 |  |  |
| 20259  | PartyDetail-    | Y     | 4   | 52  | unsigned int | Business Unit ID.                              |  |  |
| 20239  | IDExecutingUnit | '     | •   | J2  | unsigned int | Dusiness Offic ID.                             |  |  |

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| Tag   | Field Name                        | Req'd | Len | Ofs | Data Type    | Description   |
|-------|-----------------------------------|-------|-----|-----|--------------|---|
| 20816 | RequestingParty-IDExecutingSystem | Y     | 4   | 56  | unsigned int | System ID.  Value Description  1 Eurex Clearing  2 Eurex Trading  |
| 1301  | MarketID                          | N     | 2   | 60  | unsigned int | Market ID.  Value Description  1 XEUR  2 XEEE  * More values  |
| 1324  | ListUpdateAction                  | Y     | 1   | 62  | char         | Invocation (A = Add) or release (D = Delete) of a risk limitation.  Value Description A Add (Invocation) D Delete (Release) |
| 1767  | RiskLimitAction                   | N     | 1   | 63  | unsigned int | Risk protection action.  Value Description  4 Warning  0 Queue Inbound  2 Reject  |
| 22807 | RequestingParty-<br>EnteringFirm  | Y     | 9   | 64  | Fixed String | Entering Entity Short Name.  Valid characters: A-Z,0-9,\x20   |
| 22804 | RequestingParty-<br>ClearingFirm  | N     | 9   | 73  | Fixed String | Clearing Member Short Name.<br>Valid characters: A-Z,0-9,\x20   |
| 25021 | Pad6                              | U     | 6   | 82  | Fixed String | not used  |

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# 7.10.8 Trading Session Event

For more details, please refer to chapter 4.17 Trading Session Events.

| Tag  | Field Name              | Req'd | Len | Ofs | Data Type    | Description                                       |  |  |
|--|-------------------------|-------|-----|-----|--------------|---|--|--|
| <messageheaderout></messageheaderout>  |                         |       |     |     |              |   |  |  |
| 9  | BodyLen                 | Υ     | 4   | 0   | unsigned int | Number of bytes for the message, in-              |  |  |
|  |                         |       |     |     |              | cluding this field.                               |  |  |
| 28500  | TemplateID              | Υ     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI mes-            |  |  |
|  |                         |       |     |     |              | sage layout. Value: 10307 (Trading-               |  |  |
|  |                         |       |     |     |              | ${\sf SessionStatus}, \ {\sf MsgType} = {\sf h})$ |  |  |
| 25017  | Pad2                    | U     | 2   | 6   | Fixed String | not used  |  |  |
| <rbch< td=""><td>eaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<> | eaderME>                |       |     |     |              |   |  |  |
| 21003  | ${\sf TrdRegTSTimeOut}$ | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.                    |  |  |
| 25043  | NotificationIn          | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a no-              |  |  |
|  |                         |       |     |     |              | tification message from the Matching              |  |  |
|  |                         |       |     |     |              | Engine  |  |  |
| 52   | SendingTime             | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.                   |  |  |
| 28727  | ApplSubID               | N     | 4   | 32  | unsigned int | Only set for Listener Data.                       |  |  |
| 5948   | PartitionID             | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.                       |  |  |
|  |                         |       |     |     |              | Belongs to the scope of Service                   |  |  |
|  |                         |       |     |     |              | Availability and Retransmit requests.             |  |  |
| 28704  | ApplMsgID               | Y     | 16  | 38  | data         | Application message identifier assi-              |  |  |
|  |                         |       |     |     |              | gned to an order or quote event.                  |  |  |
| 1180   | ApplID                  | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.                |  |  |
|  |                         |       |     |     |              | Value Description                                 |  |  |
|  |                         |       |     |     |              | 4 Session Data                                    |  |  |
|  |                         |       |     |     |              | 5 Listener Data                                   |  |  |
| 1352   | ApplResendFlag          | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.               |  |  |
|  |                         |       |     |     |              | Value Description                                 |  |  |
|  |                         |       |     |     |              | 0 False   |  |  |
|  |                         |       |     |     |              | 1 True  |  |  |
|  |                         |       |     |     |              | 1 Hue   |  |  |
| 893  | LastFragment            | Y     | 1   | 56  | unsigned int | Indicates whether this message is the             |  |  |
|  |                         |       |     |     |              | last fragment (part) of a sequence of             |  |  |
|  |                         |       |     |     |              | messages belonging to one dedicated               |  |  |
|  |                         |       |     |     |              | transaction.                                      |  |  |
|  |                         |       |     |     |              | Value Description                                 |  |  |
|  |                         |       |     |     |              | 1 Last Message                                    |  |  |
| 25022  | Pad7                    | U     | 7   | 57  | Fixed String | not used  |  |  |
| < Messag   | ge Body>                |       |     |     |              |   |  |  |
| 1300   | MarketSegmentID         | N     | 4   | 64  | signed int   | Product identifier.                               |  |  |
| 75   | TradeDate               | N     | 4   | 68  | LocalMktDate | Business date.                                    |  |  |

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| Tag   | Field Name       | Req'd | Len | Ofs | Data Type    | Description  |
|-------|------------------|-------|-----|-----|--------------|--|
| 1368  | TradSesEvent     | Y     | 1   | 72  | unsigned int | Trading session event type.  |
|       |                  |       |     |     |              | Value Description  |
|       |                  |       |     |     |              | 101 Start of Service   |
|       |                  |       |     |     |              | 102 Market Reset   |
|       |                  |       |     |     |              | 103 End of Restatement   |
|       |                  |       |     |     |              | 104 End of Service   |
|       |                  |       |     |     |              | 105 Service Resumed  |
| 28722 | RefApplLastMsgID | N     | 16  | 73  | data         | Last persisted application message identifier in case of a Market Reset event. |
| 25022 | Pad7             | U     | 7   | 89  | Fixed String | not used   |

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### 7.10.9 Mass Cancellation Event

This message informs about the cancellation of orders and/or quotes because of a system event. While Quotes are always deleted, the deletion of orders (Standard/Lean) is indicated by the ExecInst (18) field.

For more details see chapter 4.16 Mass Cancellation Notification and Mass Cancellation Events.

| Tag  | Field Name      | Req'd | Len | Ofs | Data Type    | Description   |
|--|-----------------|-------|-----|-----|--------------|---|
| <messa< th=""><th>geHeaderOut&gt;</th><th></th><th></th><th></th><th></th><th></th></messa<> | geHeaderOut>    |       |     |     |              |   |
| 9  | BodyLen         | Y     | 4   | 0   | unsigned int | Number of bytes for the message, including this field.  |
| 28500  | TemplateID      | Y     | 2   | 4   | unsigned int | Unique identifier for a Eurex ETI message layout. Value: 10308 (Order-MassActionReport, MsgType = BZ)                         |
| 25017  | Pad2            | U     | 2   | 6   | Fixed String | not used  |
| <rbch< td=""><td>leaderME&gt;</td><td></td><td></td><td></td><td></td><td></td></rbch<>      | leaderME>       |       |     |     |              |   |
| 21003  | TrdRegTSTimeOut | N     | 8   | 8   | UTCTimestamp | Matching engine out timestamp.  |
| 25043  | NotificationIn  | N     | 8   | 16  | UTCTimestamp | Timestamp the gateway receives a notification message from the Matching Engine  |
| 52   | SendingTime     | Y     | 8   | 24  | UTCTimestamp | Gateway response out timestamp.   |
| 28727  | ApplSubID       | N     | 4   | 32  | unsigned int | Unique ID assigned by the Eurex system during broadcast subscription in order to link broadcasts to the related subscription. |
| 5948   | PartitionID     | Y     | 2   | 36  | unsigned int | Grouping of Eurex products.  Belongs to the scope of Service Availability and Retransmit requests.                            |
| 28704  | ApplMsgID       | N     | 16  | 38  | data         | Application message identifier assigned to an order or quote event.   |
| 1180   | ApplID          | Y     | 1   | 54  | unsigned int | Identifier for an ETI data stream.  Value Description  4 Session Data  5 Listener Data  |
| 1352   | ApplResendFlag  | Y     | 1   | 55  | unsigned int | Indicates a retransmission message.  Value Description  0 False  1 True   |

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| Tag     | Field Name         | Req'd | Len | Ofs | Data Type    | Description  |
|---------|--------------------|-------|-----|-----|--------------|--|
| 893     | LastFragment       | Υ     | 1   | 56  | unsigned int | Indicates whether this message is the  |
|         |                    |       |     |     |              | last fragment (part) of a sequence of  |
|         |                    |       |     |     |              | messages belonging to one dedicated  |
|         |                    |       |     |     |              | transaction.   |
|         |                    |       |     |     |              | Value Description  |
|         |                    |       |     |     |              | 1 Last Message   |
| 25022   | Pad7               | U     | 7   | 57  | Fixed String | not used   |
| < Messa | ge Body>           |       |     |     |              |  |
| 1369    | MassActionReportID | Y     | 8   | 64  | UTCTimestamp | Transaction timestamp.   |
| 48      | SecurityID         | N     | 8   | 72  | signed int   | Instrument identifier.   |
| 1300    | MarketSegmentID    | Y     | 4   | 80  | signed int   | Product identifier.  |
| 28721   | MassActionReason   | Y     | 1   | 84  | unsigned int | Reason for mass cancellation.  |
|         |                    |       |     |     |              | Value Description  |
|         |                    |       |     |     |              | 105 Product State Halt   |
|         |                    |       |     |     |              | 106 Product State Holiday  |
|         |                    |       |     |     |              | 107 Instrument Suspended   |
|         |                    |       |     |     |              | 109 Complex Instrument Deletion  |
|         |                    |       |     |     |              | 110 Volatility Interruption  |
|         |                    |       |     |     |              | 111 Product temporarily not  |
|         |                    |       |     |     |              | tradeable  |
| 18      | ExecInst           | N     | 1   | 85  | unsigned int | Cancellation scope for orders. Quotes are always cancelled by Mass Cancellation Events.'No value' indicates no order cancellation. |
|         |                    |       |     |     |              | Value Description  |
|         |                    |       |     |     |              | 1 Persistent Order (FIX value  |
|         |                    |       |     |     |              | 'H')   |
|         |                    |       |     |     |              | 2 Non-persistent Order (FIX  |
|         |                    |       |     |     |              | value 'Q')   |
|         |                    |       |     |     |              | 3 Persistent and non-  |
|         |                    |       |     |     |              | persistent orders affected   |
|         |                    |       |     |     |              | (FIX value 'H Q')  |
| 25017   | Pad2               | U     | 2   | 86  | Fixed String | not used   |

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### 7.10.10 Gap Fill

This message informs that the provided message must be skipped over, due to the fact that the Eurex system is not able to provide the functional data to the participant. The exchange may be contacted for further error analysis.

| Tag   | Field Name                            | Req'd | Len | Ofs | Data Type                 | Description   |  |
|---|---------------------------------------|-------|-----|-----|---------------------------|---|--|
|   | <messageheaderout></messageheaderout> |       |     |     |                           |   |  |
| 9   | BodyLen                               | Y     | 4   | 0   | unsigned int              | Number of bytes for the message, including this field.  |  |
| 28500   | TemplateID                            | Y     | 2   | 4   | unsigned int              | Unique identifier for a Eurex ETI message layout. Value: $10032$ (ApplicationMessageReport, Msg-Type = BY)  |  |
| 25017   | Pad2                                  | U     | 2   | 6   | Fixed String              | not used  |  |
| <notifh< td=""><td>leader&gt;</td><td></td><td></td><td></td><td></td><td></td></notifh<> | leader>                               |       |     |     |                           |   |  |
| 52  | SendingTime                           | Y     | 8   | 8   | UTCTimestamp              | Gateway response out timestamp.   |  |
| <messa< td=""><td>ge Body&gt;</td><td></td><td></td><td></td><td></td><td></td></messa<>  | ge Body>                              |       |     |     |                           |   |  |
| 28724   | ApplIDStatus                          | Y     | 4   | 16  | unsigned int              | Application sequencing related error code.  Value Description  105 Error converting response or broadcast   |  |
| 28728   | RefApplSubID                          | N     | 4   | 20  | unsigned int              | * More values  Unique ID for the subscription instance assigned by the Eurex system du-   |  |
| 30354   | VarTextLen                            | Y     | 2   | 24  | Counter                   | ring broadcast subscription.  Number of used bytes for field VarText (30355).   |  |
| 1355  | RefAppIID                             | Y     | 1   | 26  | unsigned int              | Application identifier of a Eurex ETI data stream.  Value Description  1 Trade  2 News  3 Service Availability  4 Session Data  5 Listener Data  6 Risk Control |  |
| 1409<br>25019   | SessionStatus Pad4                    | Y     | 1   | 27  | unsigned int Fixed String | Session status.  Value Description  0 Session active  4 Session logout complete  not used   |  |
|   |                                       |       |     |     | 5 56                      |   |  |

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| Tag   | Field Name | Req'd | Len  | Ofs | Data Type       | Description  |
|-------|------------|-------|------|-----|-----------------|--|
| 30355 | VarText    | Υ     | 2000 | 32  | Variable String | Error text.  |
|       |            |       |      |     |                 | Valid characters: $\xspace \xspace \x$ |
|       |            |       |      |     |                 | \x20-\x7B,\x7D,\x7E  |

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|                                 |                    |
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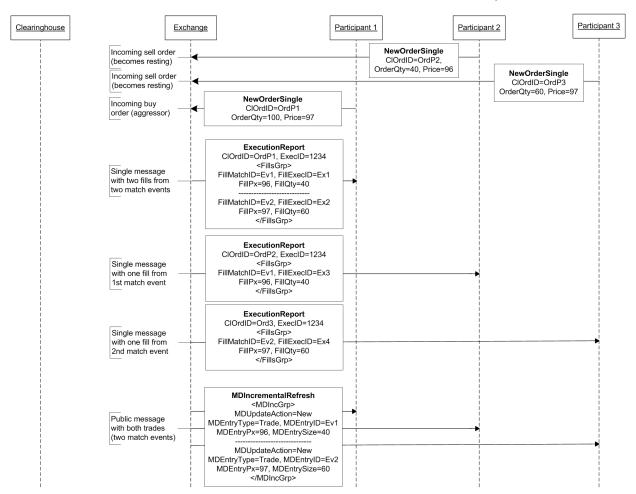
# 8 Appendix

#### 8.1 Trade Reconciliation and Identifiers

The following message flow shows a match event of an incoming aggressively matching order against two resting orders in the book at two different price levels.

The focus of this message flow is to show, how trade reconciliation is based on the different execution and trade identifiers.

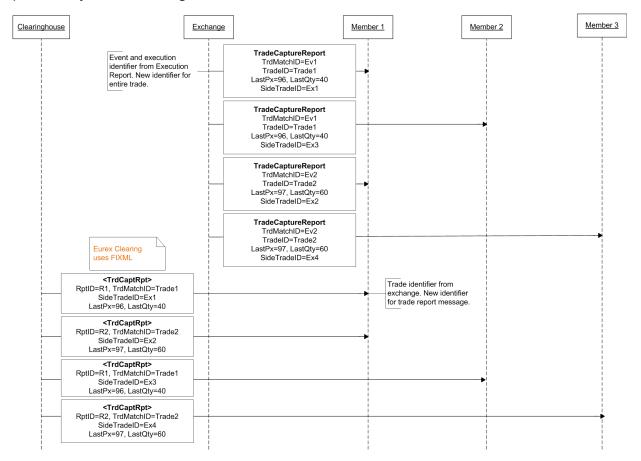
The first figure shows the relevant private execution identifiers and the identifier of the match event in the *Execution Report* (8) message as well as in the public trade information (message MDIncrementalRefresh refers to the Eurex EMDI and Eurex MDI interface).



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The second figure shows how the private execution identifiers and the identifier of the match event can also be found in the *Trade Capture Report (AE)*.

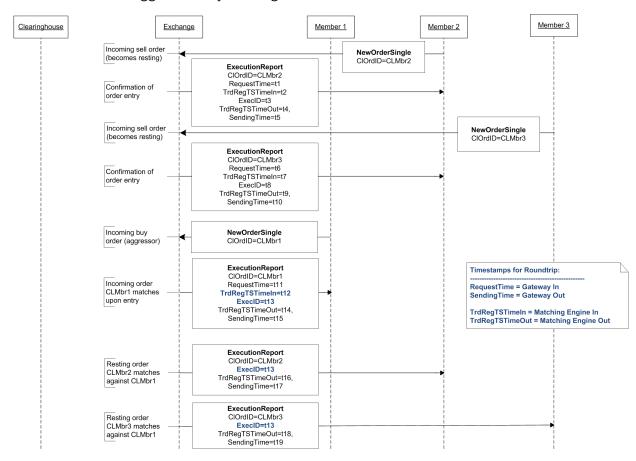
Additionally it is illustrated, how trades within T7 can be mapped to the trade information provided by Eurex Clearing.



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### 8.2 Reconciliation of Timestamps in Eurex ETI and Eurex EMDI

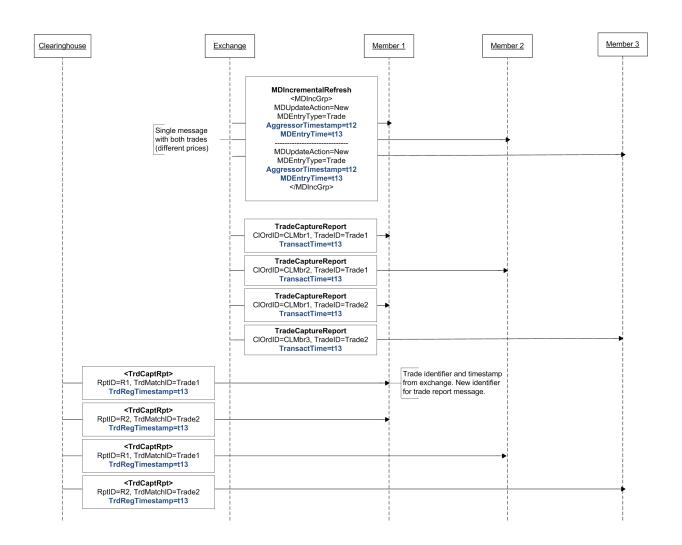
Transaction and matching engine in timestamps can be mapped in Eurex ETI and Eurex EMDI in order to identify own transactions that led to a public market data update as well as trades. A not 'successful' aggressor may investigate how much he was too late.



**T13**: *MDEntryTime* (273) in Eurex EMDI maps to ExecID (17) in Eurex ETI order / quote responses and notifications as well as to *TransactTime* (60) in the Eurex ETI Trade Notification.

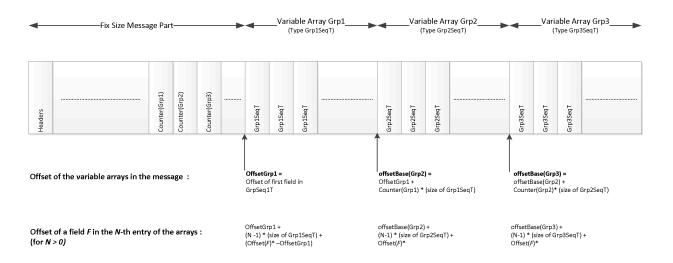
**T12**: AggressorTimeStamp (8820) in Eurex EMDI maps to TrdRegTSTimeIn (21002) in Eurex ETI. It comprises the matching engine in time of the order that triggered the trade.

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# 8.3 Variable Arrays

#### How to Access Variable Arrays and Fields within Variable Arrays



<sup>\*</sup> Offset  $\Rightarrow$  taken from XML-file: value of the offset attribute of a field 'F' in a message

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# 8.4 Uniqueness of Identifiers

The following table documents the criteria required for uniqueness of IDs.

| Tag                   | Field Name   | Description  | Source | Rule  | Uniqueness                       |
|-----------------------|--|--|--------|---|----------------------------------|
| 11                    | ClOrdID  | Client Order ID: Unique participant defined order request identifier.  | $P^1$  | The uniqueness of ClOrdID (11) is checked at entry time among currently live orders for the same instrument and session. Duplicate ClOrdID (11) values for the same session and instrument will be rejected with the exception of Immediate or Cancel (IOC) Orders. | Session<br>Instrument            |
| 37                    | OrderID  | Exchange Order ID generated by Eurex System; it remains constant over the lifetime of an order.  | E      | An exchange order ID is guaranteed to be unique among all orders of the same product that have an open quantity.  | Product                          |
| 117                   | QuoteID  | Participant defined mass quote identifier.   | Р      | The uniqueness of the mass quote identifier is not checked by Eurex.  |                                  |
| 693                   | Quote-<br>ResponseID                               | Mass quote response identifier generated by the exchange.  | E      | Is unique per product.  | Product                          |
| 17                    | ExecID   | Transaction timestamp.   | Е      | Is unique per product.  | Product                          |
| 34                    | MsgSeqNum  | Message sequence number used by the participant for requests sent to the gateway.  | Р      | The MsgSeqNum (34) in the request header must increment with each message sent by the participant to the gateway, starting with the Session Logon message as sequence number 1.   | Session                          |
| 28704                 | ApplMsgID  | Application Message Identifier.  | E      | Is unique per software release and partition. Any kind of "reset" will be announced via the related release notes.  | Software<br>Release<br>Partition |
| 1181                  | ApplSeqNum   | Application Message<br>Sequence Number.  | E      | Trade notification: unique per business day, partition and business unit. Starts every business day with 1. Please note: in rare cases sequence numbers might be sent twice.  | Partition<br>Business Unit       |
|                       |  |  |        | News: unique per market.  | Market                           |
|                       |  |  |        | Risk Control: unique per business unit.   | Business Unit                    |
| 880<br>28708<br>8714  | TrdMatchID<br>FillMatchID<br>QuoteEven<br>tMatchID | Unique identifier for each price level (match step) of a match event; it is used for public trade reporting.   | E      | Is unique for the product of the order and business day.  | Business Day<br>Product          |
| 1363<br>28725<br>1506 | FillExecID<br>LegExecID<br>SideTradeID             | Private identifier of an order match step event, which can be reconciled with the field SideTradeID (1506) in the Trade Notification.  | E      | Is unique for the product of the order and business day.  | BusinessDay<br>Product           |
| 1003<br>1126          | TradelD<br>OrigTradelD                             | The TradelD (1003) field in the Trade Notification in Eurex ETI uniquely identifies all order leg allocations referring to the same matching event, simple instrument and price. The TradelD (1003) is equivalent to the trade identifier in Eurex Clearing. | E      | Is unique per product and business day.   | BusinessDay<br>Product           |

# 8.5 XML Interface Description

The Eurex ETI interface description is also available as a machine readable XML file. The structure of the XML is described by an XML schema file.

The XML file consists of the following parts and definitions:

 $<sup>^{1}</sup>$  P = Participant, E = Eurex

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| Definitions        | Description   |
|--------------------|---|
| MessageFlow        | A "MessageFlow" is a flow diagram describing the system behavior from the user's point of view. The MessageFlow is represented as a tree of nodes.  |
| ApplicationMessage | An "ApplicationMessage" represents a top-level structure which describes a message transmitted between the participant and user and the exchange. In contrast to the "Structure" definition, all components and repeating groups are uncollapsed. Valid values and description of fields are provided in the application scope. |
| Structure          | A "Structure" is either the definition of a top-level-structure ("Message") or of a (repeated) sub-structure. Components and repeating groups are provided in a collapsed representation. All fields show the complete list of valid values.  |
| DataType           | A "DataType" is the technical and functional description of a data field. Each "DataType" is part of a (multi-level) inheritance tree based on the following "rootTypes": <b>String</b> , <b>float</b> , <b>int</b> , and <b>data</b> .   |

For a detailed description of all available XML elements and attributes please refer to the XML schema file.

### 8.6 Quote Entry Status

The following table list the scenarios for the valid values of QuoteEntryStatus (1167):

| Scenario                                       | Quote<br>in Book | QuoteEntryStatus<br>(1167)             | BidCxlSize and/or<br>SellCxlSize provided |
|--|------------------|--|---|
| Incoming Quote with error                      | no               | 5 = Rejected                           | no  |
| Incoming Quote with error                      | yes              | 6 = Removed quote in book and Rejected | yes                                       |
| Incoming Quote during Freeze                   |                  | 10 = Pending                           | no  |
| Incoming Quote during Freeze (already pending) |                  | 5 = Rejected                           | no  |
| Modify/Delete Quote                            | no               | 0 = Accepted with warning              | 0   |
| Modify Quote (Qty $<=$ executed Qty)           | yes              | 0 = Accepted with warning              | yes (remaining Qty)                       |
| Incoming Quote side would lead to Crossing     | yes              | 0 = Accepted with warning              | yes (quote side in book cancelled)        |

# 9 Change Log

# 9.1 T7 Release 3.0 – Update

The valid value 103='Order delete accepted' has been added to field *ExecRestatementReason* (378) in message 'Extended Order Information' (10117).

#### 9.2 T7 Release 3.0:

There is a new ETI interface version, '3.0' (as part of Eurex Exchange's T7 release 3.0) implementing the following enhancements:

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- DefaultCstmApplVerID (1408) accepts '3.0' and '2.5' (backward compatibility layer) as valid values.
- Add field MatchInstCrossID (28744) to the messages: 'Mass Quote' (10405), 'Replace Order Multi Leg' (10114), 'Replace Order Single' (10106), 'Replace Order Single (short layout)' (10126), 'New Order Multi Leg' (10113), 'New Order Single' (10100), 'New Order Single (short layout)' (10125), 'Extended Order Information' (10117).
- Add field Crossed (28745) to the messages: 'Replace Order Response (Lean Order)' (10108), 'Replace Order Response (Standard Order)' (10107), 'New Order Response (Lean Order)' (10102), 'New Order Response (Standard Order)' (10101), 'Book Order Execution' (10104), 'Extended Order Information' (10117), 'Immediate Execution Response' (10103).
- Add field *Triggered* (1823) to the messages: 'New Order Response (Standard Order)' (10101), 'New Order Response (Lean Order)' (10102), 'Replace Order Response (Standard Order)' (10107), 'Replace Order Response (Lean Order)' (10108).
- Add valid value to QuoteEventType (28539): 2='Modified side'.
- Add valid value to QuoteEventReason (28733): 16='Quote subject to crossing and match prevented'.
- Add SMP (Self-Match-Prevention) use cases to chapter '4.6.9. Order Status and Execution Reports'.
- Add chapter '4.6.5 Self-Match-Prevention'.

Please note that changing the size of an ETI field might change the order of the fields in the ETI message and the size of the 'padding-byte' fields.