T7 FIX Gateway

T7 FIX Gateway Manual (FIX 4.2 and FIX 4.4)

Version	V3.0
Interface Version	T7-8.0-1
Back End Version	T7 5.0
Date	27 February 2017

Contents

1 List of abbreviations

Please find a list of all the abbreviations used in the document.

FIX	Financial Information eXchange
TCP/IP	Transmission Control Protocol / Internet Protocol
FPL	FIX Protocol Limited
ETI	Enhanced Trading Interface
RDI	Reference Data Interface
MIC	Market Identifier Code
MDI	Market Data Interface
EMDI	Enhanced Market Data Interface
KRX	Korea Exchange
TAIFEX	Taiwan Future Exchange
GUI	Graphical User Interface

2 Introduction

T7 FIX Gateway is intended for participants that require a standard FIX connection to the exchange and supports all T7 market types (Derivatives and Cash).

The target of this document is to provide a way to access the T7 trading system via an interface using the FIX protocol. The interface includes basic trading functionality for T7 Derivatives and T7 Cash market in a consolidated manner.

The T7 FIX Gateway provides the following trading functions:

- Order management
- Execution notifications
- Risk control event notifications
- Request for quote
- Cross request
- Creation of a strategy (only for T7 Derivatives)

Additionally the T7 FIX Gateway enables participants to subscribe to private trading data for each market type in broadcast form:

- Trade notifications at a business unit level
- Drop Copy for standard (not lean) orders at business unit level

The T7 trading system supports the access via FIX Gateway for both market types, T7 Derivatives and T7 Cash.

It is possible to use one FIX session for the access to several exchanges within a market type (Derivatives and Cash), but the possibility of the access to both market types via a unique FIX session will not be offered. Participants are requested to order separate FIX sessions for Derivatives and Cash for its business units. This can be done via Eurex Member Section (Derivatives) and Xetra Member Section (Cash) respectively.

Note: The T7 FIX Gateway does not provide any reference data. Participants are asked to retrieve reference data via the RDI (Reference Data Interface), via file provided on the Common Report Engine or from the web page of the respective market (T7 Derivatives, T7 Cash).

2.1 Purpose

The purpose of this document is to provide an overview of the T7 FIX Gateway for the T7 trading system.

The focus of the description is to capture T7 specific behaviour, highlight where it deviates from the recommended FIX Protocol standard and keep the amount of the FIX specification which needs to be included in this document to a minimum.

This document contains the description for both supported FIX versions, FIX 4.2 and FIX 4.4 and for all supported market types (Derivatives and Cash). Differences between the two FIX versions and between the different market types are documented at the relevant places within this document.

2.2 Supported FIX Versions

Only FIX protocol versions 4.2 and 4.4 are supported.

The interface is a point-to-point service based on the technology and industry standards TCP/IP, FIX and FIX Session Protocol. The session and application event models and messages are based on the definitions of the FIX protocol for the supported versions.

Following a FIX Protocol Limited (FPL) recommendation to use standard fields from higher versions as the primary solution before using user-defined fields, Deutsche Börse applies the following design rules for support of functionality currently not provided in the corresponding FIX version:

- Fields reserved for internal use (Tag numbers 10000 - 19999) are not used.
- Standard fields of the supported FIX versions that only became part of the standard message in a higher version are used.
- FIX fields of higher versions are only added to standard messages, if no standard field for the required functionality is available in the supported FIX versions.

Characters in ASCII range 32-126 are allowed.

2.3 Intended Readership

The main target group is technical staff within the T7 trading system participants. Throughout this document the term “participant” stands for a T7 participant (see **chapter 3.2 Party Identification** for details).

2.4 Change Log

Date	Version	Description
27.02.2017	3.0	Version for T7 5.0

3 Service Description

3.1 FIX Session Concept

As per the FIX Protocol standard, a FIX session is defined as a bi-directional stream of ordered messages between two parties within a contiguous sequence number.

A participant may have multiple FIX sessions. A FIX session will be initiated by the participant, and maintained between the participant and the T7 FIX Gateway over the course of a trading day.

To access one of the market types, T7 Derivatives and T7 Cash, via the T7 FIX Gateway FIX sessions need to be ordered separately for each market type.

The T7 FIX Gateway supports two types of sessions:

Trading session: supports order management, request for quote, cross request, risk control events and strategy creation (Derivatives only). Each session will receive information for all of its own orders. Several traders may share a single session, but every session can only be instantiated once.

Back-office session: used for receipt of trade confirmations at a business unit level. Clearing business units receive trade confirmations from their trading business units and from their Non-Clearing Members. Back-office sessions can be configured to receive additionally drop copy information for standard (not lean) orders as well as risk control events at the business unit level. The clearing members don't receive drop copy order information from their non-clearing members.

3.2 Party Identification

The **participant** is an entity accessing the T7 Trading System.

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.

A **user** is a person, such as a trader or an exchange market supervisor that interacts with the T7 Trading System. 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.
- A user with a user level of **supervisor** may modify or cancel orders of any user belonging to the same business unit.

For the version FIX 4.4 the <Parties> component block will be used to identify the parties in the FIX messages. For each party a separate occurrence of the repeating group will be set up. For FIX 4.2 a separate field will be defined for each party. For more information see **chapter 6.10.6 <Parties>**.

3.3 Market Identifier Codes

The FIX Gateway is designed to support markets on T7 (Derivatives and Cash). The supported markets are identified by unique Market Identifier Codes (MIC):

Market Identification (MIC)	Deriv-atives	Cash	Description
XEUR	✓		Eurex Deutschland
XEEE	✓		European Energy Exchange
XDUB		✓	Irish Stock Exchange
XETR		✓	Xetra Frankfurt
XVIE		✓	Vienna Stock Exchange

3.4 Security Identification

Instruments traded on T7 will be identified by the product identifier (*Symbol (55)*) and the instrument identifier (*SecurityID (48)*). Both fields must be provided on the FIX requests operating on instrument level. For messages operating on product level e.g. *User Order Mass Action Request (UCA)* only *Symbol (55)* will be provided.

For the identification of an instrument traded on **T7 Derivatives** only the marketplace-assigned identifier with *SecurityIDSource (22) = "M" (Marketplace-assigned identifier)* will be supported and must be provided in the FIX request. Both single and multileg instruments are uniquely identified by the corresponding instrument ID. T7 Derivatives messages sent to the customers will also contain the marketplace-assigned identifier in the component <Instrument>.

For the identification of an instrument traded on **T7 Cash** the ISIN with *SecurityIDSource (22) = "4" (ISIN)* and the marketplace-assigned identifier with *SecurityIDSource (22) = "M" (Marketplace-assigned identifier)* will be supported. One of both identifiers must be provided in the FIX requests. If *SecurityIDSource (22)* is set to *"4" (ISIN)*, *Symbol (55)* can contain *"[N/A]"* instead of the product identifier.

If an ISIN traded in more than one currency is used as instrument identifier the FIX request must contain additionally the currency (*Currency (15)* / *UCurrency (30015)*) to identify the instrument uniquely.

T7 Cash messages sent to the customers will contain both instrument identifiers in the component <Instrument>:

- **ISIN**: *SecurityID (48)* with *SecurityIDSource (22) = "4" (ISIN)*
- **Instrument ID assigned by the trading system**: *SecurityAltID (455)* with *SecurityAltIDSource (456) = "M" (Marketplace-assigned identifier)*

<Instrument>	Description in Derivatives - all Messages	Description in Cash - Messages from Client	Description in Cash - Messages to Client
Symbol (55)	Product identifier	"[N/A]" (if ISIN is used) or Product identifier	Product identifier
SecurityID (48)	Instrument identifier (marketplace-assigned identifier)	Instrument identifier (ISIN or marketplace-assigned identifier)	Instrument identifier (ISIN)
SecurityIDSource (22)	"M" (Marketplace-assigned identifier)	"4" (ISIN) "M" (Marketplace-assigned identifier)	"4" (ISIN)
ProductComplex (1227)	Instrument type	-	-
SecuritySubType (762)	Strategy type	-	-
NoSecurityAltID (454)	-	-	"1"
SecurityAltID (455)	-	-	Instrument identifier assigned by the trading system
SecurityAltID-Source (456)	-	-	"M" (Marketplace-assigned identifier)

3.5 Order ID Policy

The standard FIX policy regarding usage of Client Order IDs is supported by the T7 FIX Gateway.

Order related messages must include a unique customer defined identifier, the Client Order ID, in the *ClOrdID (11)* field.

ClOrdIDs with 20 characters or less are accepted. Characters in ASCII range 32-126 are allowed.

A *ClOrdID (11)* may only be used once per business day and trading session. Additionally the T7 FIX Gateway enforces the uniqueness of *ClOrdID (11)* values among currently live orders.

The Client Order ID needs to change on every modification and cancellation request; the original scope is specified by the *OrigClOrdID (41)*. In this way the customer is able to find and track individual requests by their Client Order ID. This FIX concept is called message chaining and intended for order handling through a single interface and session.

Orders entered through the FIX Gateway can be modified through sessions of other interfaces, i.e. T7 GUI or Enhanced Trading Interface (ETI). ETI supports message chaining but does not enforce it. It is recommended to avoid using message chaining in both the FIX Gateway and ETI in order to receive order updates conducted through ETI also on the FIX Gateway. This can be done by setting *ClOrdID (11) = OrigClOrdID (41)* in ETI which is not permitted in the FIX Gateway. The T7 GUI does not change the Client Order ID of an order by using the same approach.

Note: The FIX Gateway will ignore trailing spaces in the field ClOrdID when a client order ID is checked for uniqueness among currently live orders. A newly entered *ClOrdID (11)* is considered duplicate by the FIX Gateway, if it only differs in the number of trailing spaces from the *ClOrdID (11)* of a live order. In this case the FIX Gateway will send a *Business Message Reject (j)* message denoted by *BusinessRejectReason (380) = 0 (Other) and Text (58) = "ClOrdID is not unique."*.

Example: If a live order exists with the *ClOrdID (11) = "Test"*, any request with *ClOrdID (11) = "Test "* will be rejected. Note that this has no impact on the *OrigClOrdID (41)*, which still must provide the correct number of trailing spaces to identify the corresponding order.

3.6 Uniqueness of Identifier

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

FIX Field	Description	Rule	Uniqueness
ClOrdID (11)	Unique customer defined order request identifier.	The uniqueness of ClOrdID (11) is checked at entry time among currently live orders for the same session. Duplicate ClOrdID (11) values for the same session will be rejected.	- Session
ExecID (17)	The field ExecID (17) in the Execution Report provides a unique identifier and can be used for the identification of duplicate order messages.	Is unique per session.	- Session
OrderID (37)	Exchange Order ID generated by the T7 System; it remains constant over the lifetime of an order.	An exchange order ID is guaranteed to be unique among all orders of the same product.	- Product
TrdMatchID (880)	Unique identifier for each price level (match step) of a match event; it is used for public trade reporting.	Is unique per product and business day.	- Business Day - Product
SecondaryExecID (527) LegExecID (1893) SideTradeID (1506)	Private identifier of an order match step event, which can be reconciled with the field SideTradeID (1506) in the Trade Notification.	Is unique per product and business day.	- Business Day - Product
TradeReportID (571)	The field TradeReportID (571) in the Trade Capture Report provides a unique trade identifier and can be used for the identification of duplicate trade confirmation messages.	Is unique per business day and business unit.	- Business Day - Business Unit
TradeID (1003) OrigTradeID (1126)	The TradeID (1003) field in the Trade Notification uniquely identifies all allocations referring to the same matching event, instrument and price.	Is unique per product and business day.	- Business Day - Product
UTransactTime (30060)	Transaction timestamp. Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).	Is unique per product.	- Product

3.7 Order Management

A FIX session can only modify or cancel own orders (i.e. orders previously submitted successfully on the same FIX session).

3.7.1 Order Types / Trading, Execution and Validity Restrictions

The following order types are supported via the T7 FIX interface:

Order Type	Derivatives	Cash	Description	Relevant FIX Tags
Market (M)	✓	✓	Market orders have no specific price limit. They will be matched to the best price available.	- OrdType (40) = '1'
Limit (L)	✓	✓	Limit orders include a specified price limit and may not be executed at a price worse than that limit.	- OrdType (40) = '2' - Price (44)
Stop Market (S)	✓	✓	Stop orders are orders that create market orders when the specified trigger price is reached. Stop orders are not visible in the order book for any market participant.	- OrdType (40) = '3' - StopPx (99)
Stop Limit (SL)	✓	✓	Stop limit orders create limit orders when the specified trigger price is reached. Stop limit orders are not visible in the order book for any market participant.	- OrdType (40) = '4' - Price (44) - StopPx (99)
Iceberg (Ice)		✓	Limit Order that contains a peak quantity and an overall quantity. The peak quantity can be determined absolutely or randomly. Once the displayed quantity has been completely executed, a new peak is entered into the book. In auction trading, iceberg orders contribute with their overall volume.	<DisplayInstruction> - OrdType (40) = '2' - Price (44)
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 canceled. The execution restriction IOC is allowed for Market and Limit orders.	- TimeInForce (59) = '3'
Fill or Kill (FOK)		✓	A Market or Limit order, which is executed immediately and fully or not at all. If immediate and full execution is not possible, the order is canceled without entry in the order book.	- TimeInForce (59) = '4'
Book or Cancel (BOC)	✓	✓	A Limit 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.	- ExecInst (18) contains '6'

... continued ...

Order Type	Deriv-atives	Cash	Description	Relevant FIX Tags
Trailing Stop (TSO)		✓	A Trailing Stop order is a Stop order whose stop limit is adjusted in accordance with the development of the reference price. Because of the dynamic adjustment of the stop limit the investor does not need to permanently watch the market in order to optimize his stop limit.	- ExecInst (18) contains 'a' - OrdType (40) = 'P' - StopPx (99) - PegOffsetValue (211) - PegOffsetType (836)
One-cancels-the-other (OCO)	✓	✓	A combination 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' - Price (44) - TriggerType (1100) = '4' - TriggerPrice (1102)
Opening auction only		✓	Order only valid in opening auctions.	- TradingSessionSubID (625) = '2'
Closing auction only	✓	✓	Closing auction only orders may be entered during the entire trading day, but are only active during the closing auction phase.	- TradingSessionSubID (625) = '4'
Auction only		✓	Order only valid in auctions.	- TradingSessionSubID (625) = '8'
Good-for-day (Day)	✓	✓	All orders are assumed to be day orders unless otherwise specified. The validity of a day order ends at the close of that day's trading period.	- TimeInForce (59) = '0'
Good-till-date (GTD)	✓	✓	Order carries a specified date up to one year from entry on which the order is automatically canceled.	- TimeInForce (59) = '6' - ExpireDate (432)
Good-till-canceled (GTC)	✓	✓	Order remains valid until it is executed, canceled, or if the contract expires.	- TimeInForce (59) = '1'
Persistent	✓	✓	A Persistent order is an order that survives a trading interruption or system failure. Persistent orders are always written to disk to prevent them from being lost during an emergency and remain in the book until their validity expires.	- absence of ExecInst (18) or - ExecInst (18) contains 'H'
Non-persistent	✓	✓	Non-persistent orders are automatically canceled in case of a trading interruption or exchange system failure and are only valid good-for-day.	- ExecInst (18) contains 'Q'

3.7.1.1 Relevant FIX Fields for identifying Order Types

The following table shows the relevant FIX fields for identifying an order type, the usage of the relevant tags and components and the assignments of the tag values depending on the order type attribute.

Following information has to be considered:

- "Y" or "N" will indicate if tags and components are mandatory or optional for the type of order specified.
- Other values will describe the tag values allowed/supplied for the type of order specified. Example: =1/=2 means that one of the valid values "1", "2" must be supplied.
- Empty cells will indicate that a tag or component is not allowed for the type of order specified.

Tag	Field Name	M	L	S	SL	Ice	TSO	FOK	BOC	OCO	IOC
	<DisplayInstruction>					Y					
	<PegInstructions>						Y				
18	ExecInst	N	N	N	N	N	contains 'a'	N	contains '6'	N	N
40	OrdType	=1	=2	=3	=4	=2	=P	=1/=2	=2	=2	=1/=2
44	Price		Y		Y	Y		-/Y	Y	Y	-/Y
59	TimeInForce	N	N	N	N	N	N	=4	N	N	=3
99	StopPx			Y	Y		Y/N				
1100	TriggerType									=4	
1102	TriggerPrice									Y	
	Derivatives	✓	✓	✓	✓				✓	✓	✓
	Cash	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

3.7.2 Price Validity Checks

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

3.7.2.1 Price Reasonability Check

When entering or replacing an order, 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 (only T7 Derivatives)
- Valid value “2” = Mandatory

The value “optional” defined only for **T7 Derivatives** differs from the value “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 choose “optional”, or
- rejected in case the submitting user chooses “mandatory”.

3.7.2.2 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.

3.7.3 Cancellation

The FIX session may only cancel orders that have been entered previously via the same session.

Cancelling an order will remove the remainder of a live order from the order book. The participant must use the *OrigClOrdID (41)* to identify the order to cancel. The T7 FIX Gateway will respond with an *ExecutionReport (8)* or *OrderCancelReject (9)* message for confirmation or rejection respectively.

Participants can also submit a *User Order Mass Action Request (UCA)* in order to delete all active orders for the respective session in a given product. The *User Order Mass Action Request (UCA)* can be further restricted to a defined trader and/or a defined instrument. The user may delete only part of their orders for one instrument by entering the additional filter criteria side and price.

3.7.4 Modification

The FIX session may only modify orders that have been entered previously via the same session.

The participant must use the *OrigClOrdID (41)* to identify the order to modify.

The T7 FIX Gateway will respond with an *ExecutionReport (8)* or *OrderCancelReject (9)* message for confirmation or rejection respectively.

The *ExecutionReport (8)* will contain *ExecRestatementReason (378) = 181 (ownerschip changed)* if the order ownership was changed. This will be the case if the submitter (Entering Trader) of the modify request is different from the original owner of the order.

Orders that have been completely filled may not be modified anymore.

Note: Modifications of the total order quantity to a quantity less than or equal to the cumulated executed order quantity will be interpreted as a cancel request.

3.7.5 Self Match Prevention

The Self Match Prevention (SMP) functionality allows participants to prevent an execution of an incoming order against a book order or quote side from the same business unit in the same instrument (crossing).

Participants can specify an individual Self Match Prevention ID in the field *MatchInstCrossID (28744)* which is contained in the component <MtchgInst> (Matching Instructions).

The *ExecutionReport (8)* will contain the field *Crossed (28745)* with the valid value *1 (Cross rejected)* if the order was deleted or modified due to SMP.

3.7.6 Account Structure

The mandatory field *TradingCapacity (1815)* specifies the relationship between the market participant and the order.

Business Type	Description	Relevant FIX Tags
Agency	Market Participant is trading on behalf of its customer.	TradingCapacity (1815) = 1
Proprietary	Market Participant is trading for its own account.	TradingCapacity (1815) = 5
Market Making	Market Participant is acting as a Market Maker.	TradingCapacity (1815) = 6

The usage of the field *Account (1)* will be supported only for **T7 Derivatives**:

The entry of a T7 account type and number is supported via the *Account (1)* field designating the account type to be used for the order when submitted to clearing. There are three types of accounts:

- Agent accounts: "A1", "A2", "A3", "A4", "A5", "A6", "A7", "A8", "A9", "G1" and "G2": The account codes G1 and G2 are actually designations that the trade is going to be sent to another member, usually when a participant uses one member to perform the execution and another to do the clearing.
- Proprietary accounts: "P1" and "P2".
- Market Maker accounts: "M1" and "M2".

Every order entered into the T7 trading system can be associated with one of these account types.

In case that no account information is entered by the market participant the clearing account information will be derived from the field *TradingCapacity (1815)*.

3.7.7 Text Fields

The T7 trading system supports four free-format text fields for trader-specific comments to an order. The mapping of the T7 text fields to the FIX tags is as follows:

Text Field	Derivatives	Cash	Valid Characters (hex)	Relevant FIX Tags
Free Text Field 1	✓	✓	\x20,\x22-\x7B,\x7D,\x7E	Text (58)
Free Text Field 2	✓		\x20,\x22-\x7B,\x7D,\x7E	FreeText2 (25008)
Free Text Field 3	✓		\x20,\x22-\x7B,\x7D,\x7E	FreeText3 (25009)
Free Text Field 4		✓	\x20,\x22-\x7B,\x7D,\x7E	FreeText4 (25107)

3.7.8 Order Status and Execution Report

The *ExecutionReport (8)* message is used to communicate events that affect an order. The field *ExecType (150)* specifies the type of event.

The field *OrdStatus (39)* specifies the new status of the order. The different scenarios and their usage of the *OrdStatus (39)* and *ExecType (150)* are as follows:

Scenario	Derivatives	Cash	OrdStatus (39)	ExecType (150)
Successful submission of an order	✓	✓	0 = New	0 = New
Rejected submission of an order	✓	✓	8 = Rejected	8 = Rejected
Partial fill	✓	✓	1 = Partially filled	1 = Partially filled (in FIX 4.2) F = Trade (in FIX 4.4)
Complete fill	✓	✓	2 = Filled	2 = Filled (in FIX 4.2) F = Trade (in FIX 4.4)
Successful cancellation of an order	✓	✓	4 = Canceled	4 = Canceled
Successful modification of an order	✓	✓	0 = New 1 = Partially filled 2 = Filled	5 = Replaced
Triggered Stop Order	✓	✓	0 = New	L = Triggered by system
Triggered One-cancels-the-other Order	✓	✓	0 = New	L = Triggered by system
Order book replay: Transmission of all active orders	✓	✓	0 = New 1 = Partially filled	D = Restated
Unknown Order State	✓	✓	A = Pending New 6 = Pending Cancel E = Pending Replace	A = Pending New 6 = Pending Cancel E = Pending Replace
Successful submission of a closing auction only order outside the closing auction	✓	✓	9 = Suspended	0 = New
Rejected cancellation of an order	✓	✓	8 = Rejected	n/a
Successful modification of a closing auction only order outside the closing auction	✓	✓	9 = Suspended	5 = Replaced
Rejected modification of an order	✓	✓	8 = Rejected	n/a
Unsolicited modification triggered by third party	✓	✓	0 = New 1 = Partially filled 2 = Filled	5 = Replaced
Trailing stop order update triggered by the trading system		✓	0 = New	5 = Replaced
Unsolicited cancellation triggered by third party	✓	✓	4 = Canceled	4 = Canceled
Unsolicited cancellation triggered by the trading system		✓	4 = Canceled	4 = Canceled

. . . continued . . .

Scenario	Derivatives	Cash	OrdStatus (39)	ExecType (150)
Activated closing auction only order	✓	✓	0 = New 1 = Partially filled	D = Restated
Inactivated closing auction only order	✓	✓	9 = Suspended	9 = Suspended
Cancellation during instrument freeze state	✓	✓	6 = Pending Cancel	6 = Pending Cancel
Order book replay: Transmission of inactivated closing auction orders	✓	✓	9 = Suspended	D = Restated

3.7.9 ExecutionReport (8) "Unknown Order State"

An *ExecutionReport (8)* with *ExecRestatementReason (378) = 100 (Unknown Order State)* will be generated when the order status in the T7 FIX Gateway is unknown. For example:

- if no response from the back end is received within a certain time (when the back end response is received by the T7 FIX Gateway afterwards an additional *ExecutionReport (8)* will be sent.)
- if a T7 response does not contain a clearly defined order state (e.g. ETI field *SessionRejectReason (373) = "104" (Result of transaction unknown)*). This information will be forwarded in the FIX fields *ReturnCode (25023)* and *ReturnCodeText (25024)*
- in some recovery situations (e.g. several modify requests with *PossDup="Y"* for the same order).

In these cases members are requested to check the order state in an alternative way (e.g. via GUI).

The different scenarios and their usage of the fields *OrdStatus (39)*, *ExecType (150)* and *ExecRestatementReason (378)* in the *ExecutionReport (8)* messages sent by the T7 FIX Gateway are as follows:

Scenario	OrdStatus (39)	ExecType (150)	ExecRestatementReason (378)
Submission of an Order - Order status is unknown	A = Pending New	A = Pending New	100 = Unknown Order State
Cancellation of an Order - Order status is unknown	6 = Pending Cancel	6 = Pending Cancel	100 = Unknown Order State
Modification of an Order - Order status is unknown	E = Pending Replace	E = Pending Replace	100 = Unknown Order State

3.7.10 Order Book Restatement

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

During Order Book Restatement *ExecutionReport (8)* messages for each restated order of the corresponding session are provided and finally a *TradingSessionStatus (h)* message indicates the end of the restatement per product; see **chapter 3.7.14 Trading Session Events**.

The reason for the restatement is communicated in field *ExecRestatementReason (378)* in message *ExecutionReport (8)*.

Each end of restatement message initiates the start of trading for a product.

ExecRestatementReason (378) will have the value *"1 = GT renewal / restatement"*.

Note: In case an ETI session associated to a FIX session is canceled by the member all orders which were entered via this session and are still valid will be deleted without any further notification to the customer. Therefore these orders will not be restated.

3.7.11 Trailing Stop Order Update Notifications (T7 Cash)

Notifications generated by the trading system about the update of the field *StopPx (99)* for trailing stop orders are communicated to the participants via a modify *ExecutionReport (8)*.

The reason for the order update is provided in the field *ExecRestatementReason (378)* of the *ExecutionReport (8)* message:

Scenario	ExecRestatementReason (378)
Trailing Stop Update	213

3.7.12 Unsolicited Order Cancellations generated by the Trading System (T7 Cash)

Notifications about unsolicited order cancellations generated by the trading system are communicated to the participants via a cancel *ExecutionReport (8)*.

The reason for the order cancellation is provided in the field *ExecRestatementReason (378)* of the *ExecutionReport (8)* message:

Scenario	ExecRestatementReason (378)
GT corporate action	0
Exchange Option	8
End of Day Processing	146
Order Expiration	148
Exceeds maximum quantity	237
Invalid Limit Price	238
User does not exist	241
Session does not exist	242
Invalid Stop Price	243
Marked For Deletion	244
Instrument does not exist	245
Business Unit Risk Event	246
Initial Cleanup	257
Dividend Payment	292
Last Trading Day	294
Trading Parameter Change	295
Currency Change	296
Product Assignment Change	297
Reference Price Change	298

3.7.13 Mass Cancellation Notification

Mass cancellation notification is not provided on a single order level. The owning session will be informed about the scope of the cancellation by a summary record. The summary record will also provide the entering party involved and the reason for the mass cancellation.

Unsolicited order mass cancellation is communicated by the T7 FIX Gateway via the *OrderMassActionReport (UBZ)* message.

The reason for the mass cancellation event is communicated in field *MassActionReason (28721)*, the scope of the deleted orders in field *UExecInst (30018)*.

Orders that couldn't be canceled due to an incompatible instrument state are provided with their Exchange Order ID (*NotAffectedOrderID (1371)* and optionally with their *NotAffOrigClOrdID (1372)* in the <NotAffectedOrdersGrp>).

The following unsolicited mass cancellation events may occur:

Mass Cancellation Event	MassActionReason *(28721)*	Derivatives	Cash
Product Holiday	Product State Holiday *(106)*	✓	✓
Product Halt	Product State Halt *(105)*	✓	✓
Instrument Suspension	Instrument Suspension *(107)*	✓	✓
Strategy Cancellation	Strategy Cancellation *(109)*	✓	
Volatility Interruption Product Level	Circuit Breaker (Volatility Interrupt) *(110)*	✓	
Volatility Interruption Instrument Level	Circuit Breaker (Volatility Interrupt) *(110)*	✓	✓
Product temporarily not tradeable	Product temporarily not tradeable *(111)*	✓	✓
Instrument stopped	Instrument Stopped *(113)*		✓

Additional events related to technical reasons are also possible. See complete list of values for the field *MassActionReason (28721)* in the description of message *OrderMassActionReport (UBZ)*.

The information about the scope of the deleted orders as result of the event is delivered in the field *UExecInst (30018)* in message *OrderMassActionReport (UBZ)*:

UExecInst (30018)	Persistent Orders	Non-persistent Orders
not provided	No	No
H	Yes	No
Q	No	Yes
H Q	Yes	Yes

3.7.14 Trading Session Events

The *TradingSessionStatus (h)* message is used by the T7 FIX Gateway for all session related events.

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

Event	TradSesEvent *(1368)*	Persistent Orders	Non-persistent Orders
Market Reset	Market reset *(102)*	No	Yes
End of Restatement	End of restatement *(103)*	No	Yes
Service Resumed	Service resumed *(105)*	No	Yes
End of Service	No more messages *(200)*	No	Yes
Session Disconnect	Message processing suspended *(202)*	No	Yes

- **Market Reset**: informs the participant that the matching engine has been restarted.
- **End of Restatement**: implies that all non-persistent orders of the session in a product have been canceled; in this case no individual cancellation notifications are provided on individual order level.
- **Service Resumed**: informs the participant that the matcher has started accepting transactions after a slow partition event. All non-persistent orders of the session in a product have been canceled.
- **End of Service**: informs the participant about the end of message transmission.
- **Session Disconnect**: informs the participant about the disconnection of the ETI session.

3.8 Trade Notifications

Participants will use drop copy sessions for receipt of trade confirmations for the business unit.

The scope for all *User/Trade Capture Report (UAE/AE)* messages will be the business unit. All trade information the business unit is authorized to see will be provided within one stream. For clearing business units this feature includes the provision of all trade information for all of their non-clearing business units.

After a Back-office FIX session logon, the transmission of already existing trades of the current business day can be requested via *ResendRequest (2)*.

Newly generated trades and trade reversals on the T7 trading system will automatically be transmitted via the Back-office FIX session.

Note: *User/ TradeCaptureReports (UAE/AE)* are only sent for on-exchange trades, not for Trade Entry Service (TES) trades or for any adjustments/reversal done in the clearing system.

3.8.1 Trade Report Types

The field *TradeReportType (856)* indicates the type of the trade report type:

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

3.8.2 Trade Reconciliation

There are several identifiers that can be used to associate an *ExecutionReport (8)* with *User/ TradeCaptureReports (UAE/AE)* and public trades on the market data interface.

Every **match event** with one or more executions (match steps) in a simple or complex instrument results in one *ExecutionReport (8)* message per matching step for each order. A *User/ TradeCaptureReport (UAE/AE)* will then be sent to confirm each trade at each price level.

For complex instruments (only T7 Derivatives), there is a *User/ TradeCaptureReport (UAE/AE)* for each leg execution of the instrument.

Every **match step** occurring in the exchange has an identifier that is provided in the field *TrdMatchID (880)* in the *ExecutionReport (8)* as well as in the *User/ TradeCaptureReport (UAE/AE)*. This identifier allows participants to link trade capture reports and the corresponding execution report.

The *TradeID (1003)* field in the *User/ TradeCaptureReport (UAE/AE)* uniquely identifies all allocations referring to the same matching event, instrument and price.

The field *SideTradeID (1506)*, which is unique for a product and business day, in the *User/ TradeCaptureReport (UAE/AE)* provides the private identifier of an order match event, which can easily be reconciled with the corresponding *ExecutionReport (8)* for orders in the following way:

- for order match events in simple instruments, the *ExecutionReport (8)* message provides the order execution ID on each price level, *ExecID (17)*.
- for order match events in complex instruments (only T7 Derivatives) the *ExecutionReport (8)* message provides the order execution ID on each price level and additionally the order leg execution ID, *LegExecID (1893)*.

Match Reporting	Derivatives	Cash	Execution Report (8)	Trade Capture Report
Trade event on instrument level: public trade volume reporting	✓	✓	TrdMatchID (880)	TrdMatchID (880)
Identifier for all allocations referring to the same instrument	✓	✓		TradeID (1003), OrigTradeID (1126)
Private execution identifier in Order in a simple instrument	✓	✓	SecondaryExecID (527)	SideTradeID (1506)
Private execution identifier for an order in a complex instrument (only T7 Derivatives)	✓		LegExecID (1893)	SideTradeID (1506)
Client Order Identifier	✓	✓	ClOrdID (11)[1]	ClOrdID (11)[2]

Note: For trade cancellations a new *TradeID (1003)* is generated by the T7 trading system; the *OrigTradeID (1126)* provides the link to the canceled trade. The original trade identifier is provided in field *OrigTradeID (1126)*.

[1] The client order id entered by the order submitter is provided. For reconciliation of orders with trades the T7 System Order ID should be used: OrderID (37).

[2] The Client Order ID of the T7 Enhanced Trading Interface (ETI) is provided. For reconciliation of orders with trades the T7 System Order ID should be used instead: OrderID (37).

3.8.3 Best Practices for Order Management

All order response information in the T7 FIX Gateway is sent out immediately after the order has been processed by the core matching process.

All order response information in the T7 FIX Gateway is preliminary; this includes *ExecutionReports (8)* sent out for persistent and non-persistent orders.

For these reasons, a participant application always needs to confirm the preliminary execution information with the corresponding legally binding *User/ TradeCaptureReport (UAE/AE)*.

Please find detailed information regarding trade reconciliation in **chapter 3.8.2 Trade Reconciliation**.

User/ Trade Capture Reports (UAE/AE) are not delivered via Trading FIX sessions. For the reception of the legally binding *User/ TradeCaptureReports (UAE/AE)* a Back-office FIX session is required.

Back-office FIX sessions need to be ordered by the participants for its business units in the Eurex Member Section for Derivative Markets and in the Xetra Member Section for Cash Markets.

3.9 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 participants are executed against each other as previously negotiated. Cross and pre-arranged trades may not knowingly be entered into the T7 trading system by a participant, unless the participant precedes the cross or pre-arranged trade with a cross request.

A trader sends the T7 FIX Gateway message *CrossRequest (U100)* which is published via the T7 Market Data Interface (MDI) to all other participants, to alert them of the intention to trade with an own order or 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. Optionally the *Side (54)* can be specified by the entering user. In case no side is specified, the quantity is valid for both sides by default.

3.10 Request for Quote

The request for quote functionality is used by a trader for asking market makers to enter a quote in a specified instrument. This functionality is supported in the T7 FIX Gateway by the standard FIX message Quote Request (R). All requests for quote are published via the market data interface to all other participants.

Every *Quote Request (R)* message contains the security identification (see details in **chapter 3.4 Security Identification**). *Side (54)* and *OrderQty (38)* are optional attributes.

A *Quote Request (R)* message might be rejected with an error message indicating a previous request for quote has already recently been sent.

Note: A *Quote Request (R)* message is validated against the available quantities at the best price and the corresponding bid/ask spread in the market. A *Mass Quote Acknowledgement (b)* message confirms the quote request or might indicate that the quote has been rejected.

3.11 Risk Control Event Notifications

The FIX Gateway supports the dissemination of Risk control event notifications on both the Trading and Back-office sessions.

The following notifications are available:

Risk Control Event Notification	Derivatives	Cash
Stop Button Event	✓	✓
Limit Breach Event	✓	
Legal Notification	✓	

3.12 Mass Deletion Request

The *User Order Mass Action Request (UCA)* will allow deletion of multiple orders. Orders may be filtered by Product identifier (Symbol) or Product identifier (Symbol) and Security identifier (SecurityID).

Note: The *ProductComplex (1227)* will not be allowed on this request as no filtering by instrument type will be supported. It is not possible - for example - to restrict a mass cancellation operation to “Standard Option Strategies”.

The user may delete orders owned by a different trader. In this case the owning trader of the orders to be deleted must be provided in the party <target executing trader>.

Users may delete only part of their orders for one instrument by entering the additional filter criteria side and price. For the buy side the orders will be deleted starting from the highest price until the price specified in the filter, for the sell side starting from the lowest price.

The request will be answered by a *User Order Mass Action Response (UCAR)* message having *MassActionResponse (1375)* set to *“2” (Completed)*, if successful. The message then has two different layouts depending on whether any orders were affected or not *(“No hits message”)*. A rejected request will be answered by a *User Order Mass Action Response (UCAR)* message having *MassActionResponse (1375)* set to *“0” (Rejected)* and providing an error code/explaining text in *ReturnCode (25023)/ ReturnCodeText (25025)* respectively.

3.13 Drop Copy for Order Information (Business Unit Level)

Drop copy functionality for standard (not lean) orders of a business unit of the current business day is provided as an optional feature of the Back-office FIX session.

When the client chooses the drop copy feature for a Back-office FIX session in the Member Section, the order-information of the current business day for all standard (not lean) orders of the business unit is provided on a stream basis:

- After a Back-office session logon, the transmission of the already existing active standard orders for the current business day can be requested via *ResendRequest (2)*.
- Newly generated messages for standard (not lean) orders on the back end will automatically be transmitted via the Back-office FIX session.
- All drop copy information for standard (not lean) orders will be sent via FIX messages (*ExecutionReport (8), UserOrderMassActionReport (UBZ)*).

Note: Orders entered or modified via the T7 FIX Gateway will provide the *ClOrdID (11)* in the *ExecutionReport (8)* message of the Drop Copy functionality for standard (not lean) orders. *OrigClOrdID (41)* will not be provided.

For orders immediately triggered after being entered or modified the value of the stop price is not available. The *ExecutionReports (8)* with *ExecType (150) = 0 (New)* and *5 (Replaced)* will contain in this case *StopPx (99) = -1*.

3.14 Strategy Creation (T7 Derivatives)

The creation of a strategy will be supported only for T7 Derivatives.

The *Security Definition Request (c)* message can be used to request the creation of a specified complex instrument on Eurex.

The product identifier (*Symbol (55)*), and the signature <InstrmtLegGrp>, which provides the description of the legs, their ratios and side, are mandatory attributes of the request.

The (*SecuritySubType (762)*) tag must be present in case of a futures spread, option combination or strategy definition.

Only after a specific complex instrument has been requested and created, is it possible to enter orders for this instrument. The successful creation of a complex instrument, or the rejection, is confirmed by the *Security Definition (d)* message. When a new strategy is requested, the instrument identifier (*SecurityID (48)*) and the signature of the complex instrument are returned.

Complex instrument definitions created by users are always temporary and are deleted during end of day processing if their order book is empty.

Note: The signature which is returned by the T7 may differ from the signature which was sent in the *Security Definition Request (c)*, e.g. in order to match a pre-defined strategy template.

3.15 Variance Futures (T7 Derivatives)

Participants enter, modify and delete orders in variance futures using the same messages and fields as for other simple instruments in T7 trading system (New Order Single, Order Cancel/Replace Request, Order Cancel Request). The only difference for variance futures is that the entered *Price (44)* is understood as Volatility and the entered quantity (*OrderQty (38)*) is understood as Vega Notional.

An Execution Report is published as usual.

Once traded, T7 provides a preliminary Trade Capture report (*TradeReportType (856) is 1 = Alleged*) that includes also a preliminary calculated clearing price (*ClearingTradePrice (1596)*) and calculated clearing quantity (*ClearingTradeQty(28736)*).

Once the final conversion parameters are approved at the end of the trading day, a final Trade Capture report (*TradeReportType (856) 5 = No/Was (Replaced)*) is published that provides the final calculated clearing price and clearing quantity.

3.16 Total Return Futures (T7 Derivatives)

Participants enter, modify and delete orders in total return futures using the same messages and fields as for other simple instruments in T7 trading system (New Order Single, Order Cancel/Replace Request, Order Cancel Request).

An Execution Report is published as usual.

Once traded, T7 provides a preliminary Trade Capture report (*TradeReportType (856) is 1 = Alleged*) that includes also a preliminary calculated clearing price (*ClearingTradePrice (1596)*) and calculated clearing quantity (*ClearingTradeQty(28736)*).

At the end of the trading day a final Trade Capture report (*TradeReportType (856) 5 = No/Was (Replaced)*) is published that provides the final calculated clearing price and clearing quantity.

4 Connectivity and Session Parameters

4.1 Session Identification and Authentication

4.1.1 Session Identification and Logon Parameters

For each FIX session, a unique identifier, the *SenderCompID (49)* and a *Password (554)* is assigned by T7 on registration. A participant may have multiple FIX sessions (connections to the FIX Gateway). For each business unit and market type (Derivatives and Cash) a separate FIX session is required.

For security reasons a *Password (554)* must be specified on the *Logon (A)* message. The initial password assigned by T7 for each FIX session should be changed during the first logon by specifying *NewPassword (925)* in the *Logon (A)* message.

When changing the password, the following password validation rules have to be applied:

- Minimum password length 8
- Minimum required alphanumeric characters 1
- Minimum required uppercase characters 1
- Minimum required lowercase characters 1
- Miminum required special (not alphanumeric) characters 1

In exceptional circumstances, a password may need to be reset. Participants are able to perform a password reset via the Member Section.

All messages sent to the FIX Gateway should contain the assigned unique identifier of the FIX session in the field *SenderCompID (49)* and market type identification in the *TargetCompID (56)* field:

- FIX Sessions for T7 Derivatives: *TargetCompID (56) = "EUREX"*
- FIX Sessions for T7 Cash: *TargetCompID (56) = "XETRA"*

All messages sent by the FIX Gateway to the client will contain the market type identification ("EUREX"/ "XETRA") in the *SenderCompID (49)* field and the assigned unique identifier of the FIX session in the *TargetCompID (56)* field.

The FIX Gateway has a two-step logon procedure, with a *Logon (A)* message (Session Logon) followed by one or multiple *User Request (UBE/BE)* messages (Trader Logons) at an application level.

4.1.2 Network Authentication

The FIX Gateway will validate the subnet from where the FIX session is initiated during session logon. The FIX session logon (*Logon (A)* message) will be rejected by the FIX Gateway if the subnet cannot be authenticated. Participants are allowed to initiate/resume their FIX sessions from alternate locations, e.g., a backup site or disaster recovery location, T7 permits the setup of up to four IP subnet addresses for FIX session IDs via the Member Section.

4.1.3 Session Logon

The *Logon (A)* message authenticates a FIX session and establishes a connection to the FIX Gateway. This message must be the first one sent by the client. The FIX Gateway will validate the *SenderCompID (49)* and *Password (554)*. A successful logon will initiate a FIX session.

The T7 FIX Gateway does not support encryption. *EncryptMethod (98)* must therefore be set to *"0" (None/other)*.

As an additional safeguard measure, the *TestMessageIndicator (464)* is used to indicate whether a FIX session to be initiated will be used for Simulation or Production purposes. The FIX Gateway will reject a *Logon (A)* message in the event that the *TestMessageIndicator (464)* value does not match the target environment.

In order to enhance operational support and error analysis on both the session and application level, information about the client's FIX engine (*FIXEngineName (1600), FIXEngineVersion (1601), FIXEngineVendor (1602)* as well as the used FIX application (*ApplicationSystemName (1603), ApplicationSystemVersion (1604), ApplicationSystemVendor (1605)*) must be provided by the client in the *Logon (A)* message. For more details, please refer to the detailed description of the *Logon (A)* message in **chapter 6.4.1 Session Logon**.

<u>Note:</u> The *Logon (A)* message is not used to log on and authenticate a trader on the T7 trading system.

4.1.4 Trader Logon

The *User Request (UBE/BE)* message identifies and authenticates a qualified trader establishing access to the T7 trading system. FIX sessions may be shared by several traders, with the exception of Back-office FIX sessions. Back-office FIX sessions do not require a trader logon.

The participant must provide the corresponding T7 User ID of the trader in the *Username (553)* field, and the corresponding password in the *Password (554)* field.

A successful trader logon will grant the trader access to the T7 trading system.

<u>Note:</u> A trader logon requires an active connection to the T7 trading system (indicated by a *TradingSessionStatus (h)* message with Trading *TradSesEvent (1368) = 203 "Message processing resumed"* sent previously by the FIX Gateway). Order related messages will only be accepted by the trading system if a trader is logged on successfully. Otherwise these messages will be rejected (e.g. *"User not logged in"* in the message *UserResponse (UBF/BF)*) and have to be sent again by the customer using a new *MsgSeqNum (34)* and a new *ClOrdID (11)*. It is strongly recommended that order related messages should only be sent if a previous trader logon was positively confirmed.

4.1.5 IP Addresses and Ports

The FIX connection between a member's infrastructure and the T7 FIX Gateway service is established via a TCP/IP connection. The service comprises of primary and secondary gateways, operated in the T7 Simulation and Production environments. The respective gateways will use distinct target IP addresses and port numbers.

For each FIX session, two individual IP addresses and port numbers are assigned and communicated by T7. Primary IP address and port is for default usage. Secondary combination is reserved for emergency cases (e.g. line outage).

The participant is free to define its own source addresses.

4.2 Failover

The T7 FIX Gateway service features a redundant setup of all components to provide a high level of availability and fault tolerance, and to facilitate a client's implementation of failover in network- and application level failure scenarios. Its setup offers connectivity to both FIX Gateways and thus provides a client's application with the possibility to select which FIX Gateway it will connect to.

A FIX session may be initiated via all available connections, but every session may only be instantiated once. Each TCP/IP connection may only support one session instance.

Both participant ports on the primary and on the secondary FIX Gateway are open. Every FIX session may only be logged in once via one of the connections. Per default only the primary FIX Gateway is connected to the market back end. Therefore the first FIX session logon to the secondary FIX Gateway may take some seconds.

In case of a customer failover the T7 ETI session will be disconnected and non-persistent orders will be deleted.

4.2.1 Network Failover

The minimal network configuration that enables a network failover comprises two connections via dedicated leased line and/or via the Internet. Each line is unchangeably assigned to one FIX Gateway, one to the primary, the other to the backup gateway.

After a successful FIX logon to the secondary FIX Gateway, the port of the primary FIX Gateway connection will remain open, but any further logon attempts to the primary FIX Gateway connection will lead to a disconnect of this session.

4.2.2 Application Failover

In the event of a FIX Gateway failure, active FIX sessions connected to this gateway will be disconnected and the corresponding port will be closed. There will be no automatic FIX session failover in case of a FIX Gateway failure.

4.2.3 Best Practice

In all failover scenarios described above, participants may resume a FIX session for the same *SenderCompID (49)* via connection to the secondary FIX Gateway. Participants should therefore implement a failover mechanism in their application, in order to be able to establish a FIX session over the alternative connection.

If a connection or a session logon fails or is not responded to immediately, a second attempt should only be made after a few seconds (30 seconds recommended).

Note: A failover will not cause a reset of sequence numbers on the FIX Gateway side, neither is a reset of sequence numbers required in the participant's application. After re-establishment of the FIX session via the alternative connection, the regular retransmission process of missed messages starts.

4.3 Message Throttling and Queuing

All messages will be processed by the FIX engine on the exchange side. Nevertheless participants should not send more than 50 application messages (production environment) per second, trading market and FIX session in order to prevent the T7 FIX Gateway from queuing. In case of exceeding a rate of 50 messages per second, the FIX Gateway may queue the affected messages internally and forward them subsequently to the back end, maintaining the maximum back end throttle rate.

The general session parameter MaxOrderRequestQueueTimeout allows a client to define the maximum time period in milliseconds a single FIX message should be held in the FIX Gateway's intermediate buffer in case the throttle limit is exceeded, before it is rejected.

Default is a maximum value, which means that all requests will be queued until they can be routed to the trading system.

Session parameters can be maintained within the Member Section.

4.4 Mass Cancellation on Disconnect

The FIX Gateway does not cancel orders in the event of a FIX Session disconnection.

4.5 Backward Compatibility

The implementation of the FIX interface for T7 5.0 includes the enhancements for the support of the access to the T7 Cash markets (Xetra markets migrated to T7). The T7 FIX interface will use common FIX repositories (common FIX fields and messages) for all supported markets (T7 Derivatives and T7 Cash).

The FIX interface for T7 5.0 will not be backward compatible with the FIX interface for Eurex T7 4.0 nor with the existing FIX interface for Xetra 16.

5 Session Layer

The T7 FIX Gateway uses session level messages as specified by the FIX 4.2 and FIX 4.4 Specification with T7 specific extensions as described in this document.

Details regarding the message layout of administrative messages used can be found in **chapter 6 Message Formats**.

The T7 FIX Gateway ignores the *OrigSendingTime (122)* in all message types.

The following message formats are based on the interface version number: T7-8.0-1.

5.1 Logon

The *Logon (A)* message is the first message the participant needs to send after the TCP connection has been established. No encryption is supported by the FIX Gateway.

As the first message for the day the participant should send a *Logon (A)* message with sequence number 1.

A FIX session is identified by the field *SenderCompID (49)* and *TargetCompID (56)* in the message header.

SenderCompID (49), Password (554) and *BeginString (8)* are validated during the session logon. If validation fails, the FIX Gateway will send a *Logout (5)* message specifying the reason for the rejection followed by the termination of the TCP connection.

Note: If validation during session logon has failed, the sequence number will not be reset.

In the event of an intra-day restart the *Logon (A)* response message may provide a sequence number higher than expected by the participant. This would indicate that messages were missed. The participant should send a *Resend Request (2)* message to trigger retransmission of the missed messages (please refer to **chapter 5.5 Resend Request** for more details).

Logon requests with *ResetSeqNumFlag (141)* set to “Y” will trigger a reset of sequence numbers at the participant side only. The FIX Gateway’s sequence numbering will remain unchanged. Thus the customer is able to access all messages disseminated by the FIX Gateway including the transmission of all active orders at start of the business day.

Note: If a FIX session is successfully logged on subsequent *Logon (A)* messages will be discarded.

5.2 Sequence Number

All FIX messages are identified by a unique sequence number. The FIX Gateway will process messages in sequence per tradeable instrument.

Sequence numbers are reset by the FIX Gateway during down time after the end of each trading day. The same behaviour is expected for the FIX engine on the client side.

Sequence numbers sent by the client which are behind sequence expected will trigger a logout and TCP connection drop by the FIX Gateway.

Sequence numbers ahead of sequence will trigger a message recovery by the FIX Gateway via the *Resend Request (2)* message.

5.3 Heartbeat

The *HeartBtInt (108)* has to be specified by the participant during the FIX session logon.

A *Heartbeat (0)* message should be sent by the participant if no other message has been processed during the defined *HeartBtInt (108)* interval.

5.4 Test Request

A *Test Request (1)* message should be sent if no in-sequence message has been received for more than the heartbeat interval. If no in-sequence message is received after that for more than the heartbeat interval, the TCP connection should be dropped.

5.5 Resend Request

A *Resend Request (2)* message initiates the retransmission of missed messages and can be used if a sequence number gap has been detected. A *Resend Request (2)* message needs to be processed even if it is ahead of sequence.

The *PossDupFlag (43)* field set to "Y" in the Message Header of a FIX message indicates that a FIX engine is repeating transmission of already sent content (including *MsgSeqNum (34)*). In this case a new value is set in the field *SendingTime (52)* and the sending time of the original message is delivered in field *OrigSendingTime (122)*.

The T7 FIX Gateway supports open or closed sequence range in a *Resend Request (2)* message (an open range is indicated by sequence number zero as the *EndSeqNo (16)*).

Note: No Gap Fill messages should be sent by the participant during the resend series for application messages. Application messages should always be re-transmitted since the T7 FIX Gateway requires all missed application messages for the purpose of reconciliation with the T7 trading system.

5.6 Reject

Session level rejects are used by the T7 FIX Gateway to indicate violations of the session protocol, missing fields or invalid values.

5.7 Sequence Reset

Two types of *Sequence Reset (4)* messages are supported: Gap Fill mode and Reset mode.

5.7.1 Gap Fill Mode

This type of *Sequence Reset (4)* message is the response to a *Resend Request (2)* message.

Gap Fill mode is indicated by *GapFillFlag (123) field = "Y"*.

All gap fill messages should have *PossDupFlag (43) = "Y"* in the Message Header.

Note: Gap Fill mode should only be used by the participant for administrative messages (see **chapter 5.5 Resend Request**).

5.7.2 Reset Mode

The Reset Mode of the *Sequence Reset (4)* message may be used by the participant in emergency scenarios where all means of automatic recovery are lost (e.g. in case of an unrecoverable application failure).

Reset Mode is indicated if *GapFillFlag (123) = "N"* or if the field is omitted.

After the Reset Mode has been triggered, the *Test Request (1)* message should be used by the participant to verify that the requested reset has been accepted by the FIX Gateway.

5.8 Logout

The *Logout (5)* message is used by the participant to gracefully close the FIX session. Messages need to be processed normally by the participant until the FIX Gateway sends the logout confirmation.

The T7 FIX Gateway will send a *Trading Session Status (h)* message when all messages for a FIX session have been processed. The FIX Gateway will subsequently log out the FIX session.

Note: The FIX Gateway will also send a *Logout (5)* message if validation fails for a FIX session logon. The reason for the rejection is specified in *SessionStatus (1409)*. The *Logout (5)* message is followed by a drop of the TCP connection.

5.9 Possible Resend

5.9.1 Messages from Client

The FIX Gateway has no specific functionality for FIX messages from client with *PossResend (97) = "Y"*.

Order requests with *PossResend (97) = "Y"*:

- Requests will be rejected if the *ClOrdID (11)* contained in the message has been processed before.
- Requests will be processed if the *ClOrdID (11)* in the request message has not been processed before.

Other requests with *PossResend (97) = "Y"*:

- No special processing, FIX requests will be processed as usual, independently of the value of the field *PossResend (97)*.

5.9.2 Messages to Client

The FIX Gateway will set *PossResend (97) = "Y"* to indicate that a message sent to the client may contain information that has been sent under another sequence number.

If the customer receives a message from FIX Gateway containing *PossResend (97) = "Y"*, the customer must check if the information contained in the message has been received in a previous message and has been already processed. If this is the case the customer should discard the message to avoid the processing of duplicate data.

This is especially relevant for messages containing trading information (order and trade messages). For these messages the FIX Gateway will deliver fields that can be used for the identification of duplicate messages without checking the whole content of the FIX messages.

Relevant messages and fields to be used for the identification of duplicate messages:

Message content	FIX Message	FIX field with unique identifier	Derivatives	Cash
Order information	ExecutionReport (8)	ExecID (17)	✓	✓
Trade information	User/ TradeCaptureReport (UAE/AE)	TradeReportID (571)	✓	✓

5.10 Recovery

When a participant reconnects after a FIX session disconnection during the same business day, two different scenarios can be identified as a reason for the outage: namely outage on the client side and outage on T7 FIX Gateway side.

5.10.1 Outage on the Client Side

- After resuming the FIX session, the participant may have missed some messages from the FIX Gateway. In this case, the sequence number of the next message received from the FIX Gateway will be ahead of the last *MsgSeqNum (34)* stored on the participant side.
- The participant should send a *Resend Request (2)* message in order to trigger all missed messages during the outage.
- The FIX Gateway will return all potentially missed messages with *PossDupFlag (43) = "Y"* to indicate that a message may have been previously transmitted with the same *MsgSeqNum (34)*.

Note: Mass cancellation service on disconnect is not supported by the T7 FIX Gateway. All open orders remain in the order book during an outage including non-persistent orders.

5.10.2 Outage on T7 FIX Gateway Side

In the unlikely event that the disconnection was due to an outage on the T7 side, the participant should consider the following recovery mechanisms:

- After reconnection of the FIX session, the FIX Gateway may receive a sequence number higher than the one expected and sends a *Resend Request (2)* message to the participant.
- The participant should resend all potentially missed messages with *PossDupFlag (43) = "Y"*, to indicate that a message may have been previously transmitted with the same *MsgSeqNum (34)*. The FIX Gateway will send responses to already processed messages with *PossResend (97) = "Y"*. After a forced failover pending order messages might be rejected. These messages can be submitted again by the participant using a new *MsgSeqNum (34)* and a new *ClOrdID (11)*.

Note: No Gap Fill messages should be sent by the participant during the resend series for application messages. Application messages should always be re-transmitted since the T7 FIX Gateway requires all missed application messages for the purpose of reconciliation with the T7 trading system.

If a participant sends Gap Fill messages during the resend series for application messages the related orders might not be accessible any more via the FIX Gateway and related order specific information will not be forwarded to the FIX session. This also holds true in case of *Logon (A)* message with *ResetSeqNumFlag (141) = "Y"*.

6 Message Formats

This chapter provides an overview of supported message types and details on the administrative, technical and application messages used by the T7 FIX interface.

The structure of the header and trailer as well as details on the components used in application messages are provided.

6.1 Overview of supported Message Types

6.1.1 Administrative Messages

Message	Type	Derivatives	Cash	Description
Heartbeat	0	✓	✓	The Heartbeat message may be used by the client and the FIX Gateway to monitor the status of the communication link during periods of inactivity.
Test Request	1	✓	✓	The Test Request message is used to trigger a heartbeat message from the opposing application.
Resend Request	2	✓	✓	The Resend Request is used by the client and the FIX Gateway to initiate the retransmission of messages in a recovery scenario.
Reject	3	✓	✓	The Reject message is used by the FIX Gateway when a message is received but cannot be properly processed due to a session-level rule violation.
Sequence Reset	4	✓	✓	The Sequence Reset message has two modes: Gap Fill mode is used in response to a Resend Request when one or more messages must be skipped over. Reset mode specifies an arbitrarily higher new sequence number after an unrecoverable application failure.
Logout	5	✓	✓	The Logout message initiates or confirms the termination of a FIX session. It is also used by the FIX Gateway to reject the FIX session logon.
Logon	A	✓	✓	The Logon message allows the client to connect to the FIX Gateway. It is also used by the FIX Gateway to confirm the logon.
Business Messages Reject	j	✓	✓	The Business Message Reject message indicates that an application message has been rejected.

6.1.2 Application Messages: Order Management

Message	Type	Derivatives	Cash	Description
New Order Single	D	✓	✓	The New Order Single message is used by the client to submit an order for single leg securities.
User New Order Multileg	UAB	✓		The User New Order Multileg message is provided to submit orders for securities that are made up of multiple securities, known as "legs". Only for FIX 4.2.
New Order Multileg	AB	✓		The New Order Multileg message is provided to submit orders for securities that are made up of multiple securities, known as "legs". Only for FIX 4.4.
Order Cancel Request	F	✓	✓	The Order Cancel Request is used to delete an existing order.
Order Cancel Replace Request	G	✓	✓	The Order Cancel/Replace Request is used to modify an existing order.
User Multileg Order Cancel Replace Request	UAC	✓		The User Multileg Order Cancel Replace request is used to modify a multileg order (previously submitted using the User New Order Multileg message). Only for FIX 4.2.
Multileg Order Cancel Replace Request	AC	✓		The Multileg Order Cancel Replace request is used to modify a multileg order (previously submitted using the New Order Multileg message). Only for FIX 4.4.
Execution Report	8	✓	✓	The Execution Report message is used to: – confirm the receipt of an order – confirm changes to an existing order – transmit all active orders – relay fill information – reject orders
Order Cancel Reject	9	✓	✓	The Order Cancel Reject message indicates that an Order Cancel Request, Order Cancel Replace Request or Multileg Order Cancel Replace Request has been rejected.
Ueer Order Mass Action Request	UCA	✓	✓	User Order Mass Action Request is used for deletion of multiple orders.
User Order Mass Action Response	UCAR	✓	✓	User Order Mass Action Response is used as a response to a User Order Mass Action Request (UCA).
User Order Mass Action Report	UBZ	✓	✓	This message informs about unsolicited mass cancellation events.

6.1.3 Application Messages: Strategy Creation

Message	Type	Derivatives	Cash	Description
Security Definition Request	c	✓		The Security Definition Request message is used to create a strategy on Eurex.
Security Definition	d	✓		The Security Definition message is used to accept or reject the security defined in a Security Definition message.

6.1.4 Application Messages: Cross Request and Quote Request

Message	Type	Derivatives	Cash	Description
Quote Request	R	✓	✓	The Quote Request message is used to request quotes from market makers. This message is commonly referred to as an Request For Quote (RFQ).
Mass/Quote Acknowledgement	b	✓	✓	Mass/Quote Acknowledgement is used as the application level response to a Quote Request.
Cross Request	U100	✓	✓	The Cross Request message is used by a trader to announce a Cross Trade to the market. The request is used, if a trader intends to trade with himself via order-book by sending a buy and a sell order for the same instrument. It is also used for prearranged trades between two traders, where the trade should be reproduced via matching the orders in the order-book.
Cross Request Acknowledgement	U101	✓	✓	Cross Request Acknowledgement is used as the application level response to a Cross Request.

6.1.5 Application Messages: Trade Capture

Message	Type	Derivatives	Cash	Description
User Trade Capture Report	UAE	✓	✓	The User Trade Capture Report message is used to report trades and trade reversals. Only for FIX 4.2.
Trade Capture Report	AE	✓	✓	The Trade Capture Report message is used to report trades and trade reversals. Only for FIX 4.4.

6.1.6 Application Messages: Others

Message	Type	Deriv-atives	Cash	Description
User User Request	UBE	✓	✓	Each trader needs to logon/logoff to/from T7 system via the User User Request message. Only for FIX 4.2.
User Request	BE	✓	✓	Each trader needs to logon/logoff to/from T7 system via the User Request message. Only for FIX 4.4.
User User Response	UBF	✓	✓	The User User Response message is used to confirm or reject the trader logon/logoff. Only for FIX 4.2.
User Response	BF	✓	✓	The User Response message is used to confirm or reject the trader logon/logoff. Only for FIX 4.4.
User Notification	UCB	✓	✓	The User Notification message is used to: - send information of an unsolicited trader logoff - send information of legal notifications
Trading Session Status	h	✓	✓	The Trading Session Status message informs about session related events.
User Party Risk Limits Update Report	UCR	✓		User Party Risk Limits Update Report. This message communicates risk control events related to the Advanced Risk Protection functionality of T7 in case of a risk limit breach or release.
User Party Entitlements Update Report	UCZ	✓		User Party Entitlements Update Report. This message communicates risk control events related to the manual stop or release of trading functionality. Events will be generated on the Clearing back end and passed to the user by the T7 back end.
User Party Action Report	UDI	✓	✓	User Party Action Report. This message communicates risk control events of type halt-trading and re-instate. Events will be entered via the T7 Admin GUI.

6.2 Explanation of the Message Formats

The tables in the next chapters describe the formats of the different components and messages used in T7 FIX Gateway.

Column headers:	"**R**": will indicate the generic usage of tags and components with respect to the requirements of the T7 FIX interface. "**D**": is the abbreviation for Derivatives. It will describe the usage of tags and components for Derivatives. "**C**": is the abbreviation for Cash Market. It will describe the usage of tags and components for Cash.
Content:	The content of the columns "**R**", "**D**" and "**C**" will indicate if a tag or component is mandatory ("Y"), optional ("N"), conditionally mandatory ("C") or not used (shadowed cell) within the structure concerned. "R" describes the generic usage in the T7 FIX interface and contains a summary of the content of "D" and "C". Example: "**D**" = "Y" and "**C**" = "N" –>"**R**" = "N". "**Description**" will contain specific description, format, valid values and further explanatory remarks of a FIX field. Valid values are included in a table. This table has the additional columns "**D**" and "**C**". A checkmark (✓) identifies that the valid value is used for the specific system (Derivatives ("**D**") or/and Cash Market ("**C**")).

The following FIX elements are denoted as follows:

- **FIX messages:** message name (Message Type)
- **FIX fields:** field name (FIX tag)
- **FIX components:** <component block name>
- **FIX repeating groups:** <repeating group name>
- **Occurrences in FIX repeating groups:** <repeating group occurrence name>

Field formats are described with the standard FIX notation (e.g. Int, String, Boolean, Price, etc.).

For some fields additional information is added to describe length and format restrictions related to the T7 FIX Gateway and the T7 Backend implementation. Those are not FIX data type definitions but more conventions of writing and valid only for this document.

For example:

- *String (128)* means that the tag's value will be a string with a maximum length of 128.
- *Int (10)* means that the tag's value may have up to 10 significant digits (after leading zeroes have been removed).
- *Price (11.8)* means that tag's value is a price with up to 11 significant digits before the decimal point and at most 8 decimal places.
- *Qty (10.0)* means that tag's value is a quantity with up to 10 significant digits before the decimal point and without significant decimal places.

6.3 Message Header and Trailer

6.3.1 Message Header

Tag	Field Name	R	D	C	Description
8	BeginString	Y	Y	Y	String Identifies beginning of new message and protocol version. **Value** / **Description** / **D** / **C**: FIX.4.4 / Version 4.4 / ✓ / ✓ FIX.4.2 / Version 4.2 / ✓ / ✓
9	BodyLength	Y	Y	Y	Length Message length, in bytes, forward to the CheckSum field.
35	MsgType	Y	Y	Y	String Defines the message type. Always third field in message. Always unencrypted. Note: A 'U' as the first character in the MsgType field (i.e. U, U2, etc) indicates that the message format is privately defined between the sender and receiver. The valid values for the supported message types are defined in **chapter 6.1 Overview of Supported Message Types.**
34	MsgSeqNum	Y	Y	Y	SeqNum Message sequence number.
43	PossDupFlag	N	N	N	Boolean Indicates possible retransmission of message with this sequence number. **Value** / **Description** / **D** / **C**: N / Original transmission / ✓ / ✓ Y / Possible duplicate / ✓ / ✓
49	SenderCompID	Y	Y	Y	String Assigned identifier of the party sending the message. Will be "EUREX" for T7 Derivatives and "XETRA" for T7 Cash in messages sent to the client.
52	SendingTime	Y	Y	Y	UTC Timestamp Time of message transmission. This field will be ignored by the FIX Gateway.
56	TargetCompID	Y	Y	Y	String Assigned identifier of the party receiving the message. Will be "EUREX" for T7 Derivatives and "XETRA" for T7 Cash in messages sent by the client.

... continued ...

Tag	Field Name	R	D	C	Description
97	PossResend	N	N	N	Boolean Indicates that message may contain information that has been sent under another sequence number. <table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>N</td><td>Original transmission</td><td>✓</td><td>✓</td></tr><tr><td>Y</td><td>Possible Resend</td><td>✓</td><td>✓</td></tr></table>
122	OrigSendingTime	N	C	C	UTC timestamp The FIX Gateway ignores the OrigSendingTime (122) in all message types. Required if PossDupFlag (43) = ”Y”.
369	LastMsgSeqNumProcessed	N	N	N	SeqNum The last MsgSeqNum (34) value received by the FIX engine and processed by downstream application, such as trading engine or order routing system. Can be specified on every message sent. Useful for detecting a backlog with a counterparty.

6.3.2 Message Trailer

Tag	Field Name	R	D	C	Description
10	CheckSum	Y	Y	Y	String Three byte, simple checksum.

6.4 Administrative Messages

6.4.1 Session Logon

The Logon message allows the client to connect to the FIX Gateway. It is also used by the FIX Gateway to confirm the logon.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’A’ = Logon</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>98</td><td>EncryptMethod</td><td>Y</td><td>Y</td><td>Y</td><td>Int
Method of encryption.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>0</td><td>None/other</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>108</td><td>HeartBtInt</td><td>Y</td><td>Y</td><td>Y</td><td>Int
Heartbeat interval in seconds. The heartbeat interval must be greater than zero.</td></tr>
<tr><td>141</td><td>ResetSeqNumFlag</td><td>N</td><td>N</td><td>N</td><td>Boolean
Indicates that the both sides of the FIX session should reset sequence numbers.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>N</td><td>No</td><td>✓</td><td>✓</td></tr><tr><td>Y</td><td>Yes, reset sequence numbers</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>383</td><td>MaxMessageSize</td><td>N</td><td>N</td><td>N</td><td>Length
Maximum number of bytes supported for a single message.
This field will be ignored by the FIX Gateway.</td></tr>
<tr><td>464</td><td>TestMessageIndicator</td><td>N</td><td>N</td><td>N</td><td>Boolean
Indicates that this FIX session will be sending and receiving ”test” vs. ”production” messages.
This field is required in the messages sent to the FIX Gateway.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>N</td><td>False (Production)</td><td>✓</td><td>✓</td></tr><tr><td>Y</td><td>True (Simulation)</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>554</td><td>Password</td><td>N</td><td>N</td><td>N</td><td>String
Password.
This field is required in the messages sent to the FIX Gateway.</td></tr>
<tr><td>789</td><td>NextExpectedMsgSeqNum</td><td>N</td><td>N</td><td>N</td><td>SeqNum
Next expected MsgSeqNum value to be received.
This field will be ignored by the FIX Gateway.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
925	NewPassword	N	N	N	String New Password.
1408	DefaultCstmApplVerID	N	N	N	String (30) Most recent version number of the T7 FIX Gateway interface.
1600	FIXEngineName	N	N	N	String (30) 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. This field is required in the messages sent to the FIX Gateway.
1601	FIXEngineVersion	N	N	N	String (30) Provides the version of the infrastructure component. It will not be returned in the logon response. This field is required in the messages sent to the FIX Gateway.
1602	FIXEngineVendor	N	N	N	String (30) Provides the name of the vendor providing the infrastructure component. It will not be returned in the logon response. This field is required in the messages sent to the FIX Gateway.
1603	ApplicationSystemName	N	N	N	String (30) Provides the name of the application system being used to generate FIX application messages. This will normally be a trading system, OMS, or EMS. It will not be returned in the logon response. This field is required in the messages sent to the FIX Gateway.
1604	ApplicationSystemVersion	N	N	N	String (30) Provides the version of the application system being used to initiate FIX application messages. It will not be returned in the logon response. This field is required in the messages sent to the FIX Gateway.
1605	ApplicationSystemVendor	N	N	N	String (30) Provides the vendor of the application system. It will not be returned in the logon response. This field is required in the messages sent to the FIX Gateway.
<Standard Trailer>					

6.4.2 Session Logout

The Logout message initiates or confirms the termination of a FIX session. It is also used by the FIX Gateway to reject the FIX session logon.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'5' = Logout</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (128)
Message text.</td></tr>
<tr><td>1409</td><td>SessionStatus</td><td>N</td><td>N</td><td>N</td><td>Int (1)
Session status.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>4</td><td>Session logout complete</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Invalid user name or password</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.4.3 Heartbeat

The Heartbeat message may be used by the client and the FIX Gateway to monitor the status of the communication link during periods of inactivity.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'0' = Heartbeat</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>112</td><td>TestReqID</td><td>N</td><td>C</td><td>C</td><td>String
Identifier included in Test Request message; required in the Heartbeat message if the heartbeat is a response to a Test Request.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.4.4 Test Request

The Test Request message is used to trigger a heartbeat message from the opposing application.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'1' = Test Request
<**Message Body**>					
112	TestReqID	Y	Y	Y	String Identifier included in Test Request message; required in the Heartbeat message if the heartbeat is a response to a Test Request.
<**Standard Trailer**>					

6.4.5 Resend Request

The Resend Request is used by the client and the FIX Gateway to initiate the retransmission of messages in a recovery scenario.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'2' = Resend Request
<**Message Body**>					
7	BeginSeqNo	Y	Y	Y	SeqNum Message sequence number of first message in range to be resent.
16	EndSeqNo	Y	Y	Y	Seqnum Message sequence number of last message in range to be resent.
<**Standard Trailer**>					

6.4.6 Business Message Reject

The Business Message Reject message indicates that an application message has been rejected.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'j' = Business Message Reject</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>45</td><td>RefSeqNum</td><td>Y</td><td>Y</td><td>Y</td><td>SeqNum
Reference message sequence number.</td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (128)
Error text.</td></tr>
<tr><td>372</td><td>RefMsgType</td><td>Y</td><td>Y</td><td>Y</td><td>String
The MsgType (35) of the FIX message being referenced.</td></tr>
<tr><td>379</td><td>BusinessRejectRefID</td><td>N</td><td>N</td><td>N</td><td>String (20)
Reference to the ClOrdID (11) of the client's request-message that was rejected.
The field will be populated for responses to the order requests.</td></tr>
<tr><td>380</td><td>BusinessRejectReason</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Code to identify reason for a Business Message Reject message.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Other</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Unknown ID</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Unsupported message type</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Application not available</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Conditionally required field missing</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Not authorized</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
Unique error or event identification number.</td></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>N</td><td>N</td><td>N</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>FIX GATEWAY</td><td>Fix Gateway</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.4.7 Reject

The Reject message is used by the FIX Gateway when a message is received but cannot be properly processed due to a session-level rule violation.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'3' = Reject
<**Message Body**>					
45	RefSeqNum	Y	Y	Y	SeqNum Reference message sequence number.
58	Text	N	N	N	String (128) Error text.
371	RefTagID	N	N	N	Int The tag number of the FIX field being referenced.
372	RefMsgType	Y	Y	Y	String The MsgType (35) of the FIX message being referenced.
373	SessionRejectReason	N	N	N	Int (2) Code to identify reason for a session-level Reject message. The valid values are defined in **chapter 6.4.7.1 SessionRejectReason (373): List of Valid Values.**
25023	ReturnCode	N	N	N	Int (10) Unique error or event identification number.
25024	ReturnCodeSource	N	N	N	String (20) Originating system component providing the return code. **Value** / **Description** / **D** / **C**: FIX GATEWAY / Fix Gateway / ✓ / ✓
<**Standard Trailer**>					

6.4.7.1 SessionRejectReason (373): List of Valid Values

Value	Description	Deriv-atives	Cash
0	Invalid tag number	✓	✓
1	Required tag missing	✓	✓
2	Tag not defined for this message type	✓	✓
3	Undefined tag	✓	✓
4	Tag specified without value	✓	✓
5	Value is incorrect for this tag	✓	✓
6	Incorrect data format for value	✓	✓
7	Decryption problem	✓	✓
8	Signature problem	✓	✓
9	CompID Problem	✓	✓
10	Sending time accuracy problem	✓	✓
11	Invalid msgtype	✓	✓
12	XML Validation Error	✓	✓
13	Tag appears more than once	✓	✓
14	Tag specified out of required order	✓	✓
15	Repeating group fields out of order	✓	✓
16	Incorrect NumInGroup count for repeating group	✓	✓
17	Non data value includes field delimiter	✓	✓
18	Invalid/Unsupported Application Version	✓	✓
99	Other	✓	✓

6.4.8 Sequence Reset

The Sequence Reset message has two modes: Gap Fill mode is used in response to a Resend Request when one or more messages must be skipped over. Reset mode specifies an arbitrarily higher new sequence number after an uncoverable application failure.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’4’ = Sequence Reset</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>36</td><td>NewSeqNo</td><td>Y</td><td>Y</td><td>Y</td><td>SeqNum
New sequence number.</td></tr>
<tr><td>123</td><td>GapFillFlag</td><td>N</td><td>N</td><td>N</td><td>Boolean
Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>N</td><td>Sequence Reset, Ignore Msg Seq Num</td><td>✓</td><td>✓</td></tr><tr><td>Y</td><td>Gap Fill Message, Msg Seq Num Field Valid</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5 Application Messages: Order Management

6.5.1 New Order Single

The New Order Single message is used by the client to submit an order for single leg securities.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'D' = New Order Single Request
<**Message Body**>					
<Parties>		Y	Y	Y	Party Information.
453	NoPartyIDs	Y	Y	Y	NumInGroup Number of parties involved. Only in FIX 4.4.
<beneficiary>		N	N		KRX or TAIFEX Beneficiary Account.
<entering trader>		Y	Y	Y	Entering User ID.
<location ID>		N	N		Location ID information. Origin country code to identify the region from which the transaction originates.
<order origination firm>		N	N		KRX or TAIFEX Member ID.
<position account>		N	N		Flexible account identifier.
<takeup firm>		N	N		Take-up trading firm information.
end <Parties>					
<Instrument>		Y	Y	Y	Security identification.
<TrdgSesGrp>		N	N	N	The group of trading session is used to identify a closing auction only order.
<PegInstructions>		N		C	Peg instructions for a trailing stop order.
<MtchgInst>		N	N	N	Matching Instructions for using the Self Match Prevention functionality.
<DisplayInstruction>		N		C	Display instruction is used for Iceberg Order.
1	Account	N	N		String (2) Account.
11	ClOrdID	Y	Y	Y	String (20) Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).
15	Currency	N		N	Currency Currency used for price. The combination of an ISIN with a defined currency will Identify uniquely an instrument. Mandatory if SecurityIDSource (22) = 4 (ISIN) for ISINs traded in more than one currency. Field will be ignored if SecurityIDSource (22) = M (Marketplace assigned identifier).

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>18</td><td>ExecInst</td><td>N</td><td>N</td><td>C</td><td>Multiple Value String
Instructions for order management; all orders need to be defined as either persistent or non-persistent. An order may additionally be defined as a Book or Cancel Order unless it has been defined as Closing Auction Only with TradingSessionSubID (625).
Note: in case of OrdType (40) = ”P” a value of ”a” must be supplied.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>H</td><td>Reinstate on trading system failure (persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>Q</td><td>Cancel on trading system failure (non-persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>a</td><td>Trailing Stop Peg</td><td></td><td>✓</td></tr>
<tr><td>6</td><td>Participate don’t initiate (Book or cancel)</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>21</td><td>HandlInst</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Instructions for order management.
Only in FIX 4.2.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Automated execution order, private, no Broker intervention</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>38</td><td>OrderQty</td><td>Y</td><td>Y</td><td>Y</td><td>Qty (10.0)
Total Order Quantity.</td></tr>
<tr><td>40</td><td>OrdType</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Order type.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Market</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Limit</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Stop</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Stop limit</td><td>✓</td><td>✓</td></tr>
<tr><td>P</td><td>Pegged</td><td></td><td>✓</td></tr>
</table></td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
Limit price.
Required if OrdType (40) is Limit (2) or Stop Limit (4).</td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Side of order.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (12)
First free-format text field for trader-specific or customer-related comments.

<u>For T7 Derivatives:</u>
Should not be used in conjunction with KRX Member, KRX Beneficiary Account, TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>59</td><td>TimeInForce</td><td>N</td><td>N</td><td>N</td><td>Char
Execution and trading restriction parameters. Will be defaulted to ”0” (Day) by the T7 Back End if missing.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>0</td><td>Day</td><td>✓</td><td>✓</td></tr><tr><td>1</td><td>Good till Cancel</td><td>✓</td><td>✓</td></tr><tr><td>3</td><td>Immediate or Cancel</td><td>✓</td><td>✓</td></tr><tr><td>4</td><td>Fill or Kill</td><td></td><td>✓</td></tr><tr><td>6</td><td>Good till Date</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>UTC Timestamp
Transaction time.
This field will be ignored in all messages sent to the FIX Gateway.</td></tr>
<tr><td>77</td><td>PositionEffect</td><td>N</td><td>Y</td><td></td><td>Char
Field is used for Derivatives position management purposes and indicates whether the order is submitted to open or close a position.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>O</td><td>Open</td><td>✓</td><td></td></tr><tr><td>C</td><td>Close</td><td>✓</td><td></td></tr></table></td></tr>
<tr><td>99</td><td>StopPx</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
Stop Price.
Required for Stop Market, Stop Limit and Trailing Stop Orders.</td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
</table>

<table>
<tr><th colspan="6">... continued ...</th></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>376</td><td>ComplianceID</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Numeric identifier for trading algorithms required by the German High-frequency Trading Act.</td></tr>
<tr><td>432</td><td>ExpireDate</td><td>N</td><td>C</td><td>C</td><td>LocalMktDate
Date of order expiry.
Required if TimeInForce (59) = 6 (Good till Date).</td></tr>
<tr><td>1031</td><td>CustOrderHandlingInst</td><td>N</td><td>N</td><td></td><td>Char
Rate identifier in accordance with the FIA guidelines (No validation).</td></tr>
<tr><td>1100</td><td>TriggerType</td><td>N</td><td>C</td><td>C</td><td>Char
Defines when the trigger will hit, i.e. the action specified by the trigger instructions will come into effect.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>4</td><td>Price movement</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1102</td><td>TriggerPrice</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
The price at which the trigger should hit.</td></tr>
<tr><td>1815</td><td>TradingCapacity</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Customer (Agency)</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Principal (Proprietary)</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Market Maker</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>2404</td><td>ComplianceText</td><td>N</td><td>N</td><td></td><td>String (20)
This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).</td></tr>
<tr><td>25008</td><td>FreeText2</td><td>N</td><td>N</td><td></td><td>String (12)
Second free-format text field for trader-specific or customer-related comments.</td></tr>
<tr><td>25009</td><td>FreeText3</td><td>N</td><td>N</td><td></td><td>String (12)
Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>25107</td><td>FreeText4</td><td>N</td><td></td><td>N</td><td>String (16)
Free-format text field for trader-specific or customer related comments.</td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>28710</td><td>PriceValidityCheckType</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Indicator how price validity check should be performed by the exchange.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>None</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Optional</td><td>✓</td><td></td></tr>
<tr><td>2</td><td>Mandatory</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5.2 New Order Multileg

The New Order Multileg message is provided to submit orders for securities that are made up of multiple securities, known as ”legs”.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y		’UAB’ / ’AB’ = User / New Order Multileg
<**Message Body**>					
<Parties>		Y	Y		Party Information.
453	NoPartyIDs	Y	Y		NumInGroup Number of parties involved. Only in FIX 4.4.
<beneficiary>		N	N		KRX or TAIFEX Beneficiary Account.
<entering trader>		Y	Y		Entering User ID.
<location ID>		N	N		Location ID information. Origin country code to identify the region from which the transaction originates.
<order origination firm>		N	N		KRX or TAIFEX Member ID.
<position account>		N	N		Flexible account identifier.
<takeup firm>		N	N		Take-up trading firm information.
end <Parties>					
<Instrument>		Y	Y		Security identification.
<LegOrdGrp>		Y	Y		The group of leg is used to specify clearing attributes for the legs of a Multileg Order.
<MtchgInst>		N	N		Matching Instructions for using the Self Match Prevention functionality.
11	ClOrdID	Y	Y		String (20) Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).
18	ExecInst	N	N		Multiple Value String Instructions for order management; all orders need to be defined as either persistent or non-persistent. An order may additionally be defined as a Book or Cancel Order unless it has been defined as Closing Auction Only with TradingSessionSubID (625). **Value** / **Description** / **D** / **C**: H – Reinstate on trading system failure (persistent) – D: ✓ Q – Cancel on trading system failure (non-persistent) – D: ✓ 6 – Participate don’t initiate (Book or cancel) – D: ✓
38	OrderQty	Y	Y		Qty (10.0) Total Order Quantity.

... continued ...

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>40</td><td>OrdType</td><td>Y</td><td>Y</td><td></td><td>Char
Order type.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>2</td><td>Limit</td><td>✓</td><td></td></tr></table></td></tr>
<tr><td>44</td><td>Price</td><td>Y</td><td>Y</td><td></td><td>Price (11.8)
Limit price.</td></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Y</td><td></td><td>Char
Side of order.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td></td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td></td></tr></table></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td></td><td>String (12)
First free-format text field for trader-specific or customer-related comments.

<u>For T7 Derivatives:</u>
Should not be used in conjunction with KRX Member, KRX Beneficiary Account, TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>59</td><td>TimeInForce</td><td>N</td><td>N</td><td></td><td>Char
Execution and trading restriction parameters.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>0</td><td>Day</td><td>✓</td><td></td></tr><tr><td>1</td><td>Good till Cancel</td><td>✓</td><td></td></tr><tr><td>3</td><td>Immediate or Cancel</td><td>✓</td><td></td></tr><tr><td>6</td><td>Good till Date</td><td>✓</td><td></td></tr></table></td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Y</td><td></td><td>UTC Timestamp
Transaction time.
This field will be ignored in all messages sent to the FIX Gateway.</td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td></td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>376</td><td>ComplianceID</td><td>N</td><td>N</td><td></td><td>Int (20)
Numeric identifier for trading algorithms required by the German High-frequency Trading Act.</td></tr>
<tr><td>432</td><td>ExpireDate</td><td>N</td><td>C</td><td></td><td>LocalMktDate
Date of order expiry.
Required if TimeInForce (59) = 6 (Good till Date).</td></tr>
<tr><td>1031</td><td>CustOrderHandlingInst</td><td>N</td><td>N</td><td></td><td>Char
Rate identifier in accordance with the FIA guidelines (No validation).</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
1815	TradingCapacity	Y	Y		Int (1) 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** | **D** | **C** 1 | Customer (Agency) | ✓ | 5 | Principal (Proprietary) | ✓ | 6 | Market Maker | ✓ |
2404	ComplianceText	N	N		String (20) This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).
25008	FreeText2	N	N		String (12) Second free-format text field for trader-specific or customer-related comments.
25009	FreeText3	N	N		String (12) Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with TAIFEX Member and TAIFEX Beneficiary Account.
28710	PriceValidityCheckType	Y	Y		Int (1) Indicator how price validity check should be performed by the exchange. **Value** | **Description** | **D** | **C** 0 | None | ✓ | 1 | Optional | ✓ | 2 | Mandatory | ✓ |
<**Standard Trailer**>					

6.5.3 Order Cancel Request

The Order Cancel Request is used to delete an existing order.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’F’ = Order Cancel Request</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><Parties></td><td>Y</td><td>Y</td><td>Y</td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><entering trader></td><td>Y</td><td>Y</td><td>Y</td><td>Entering User ID.</td></tr>
<tr><td colspan="6">end <Parties></td></tr>
<tr><td colspan="2"><Instrument></td><td>Y</td><td>Y</td><td>Y</td><td>Security identification.</td></tr>
<tr><td>11</td><td>ClOrdID</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).</td></tr>
<tr><td>37</td><td>OrderID</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Exchange Order ID generated by the T7 System.
Will be ignored by the FIX Gateway.</td></tr>
<tr><td>38</td><td>OrderQty</td><td>Y</td><td>Y</td><td>Y</td><td>Qty (10.0)
Total Order Quantity.
Will be validated and then ignored.</td></tr>
<tr><td>41</td><td>OrigClOrdID</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
ClOrdID (11) of the last successfully processed task (request) referring to the specific order; used for client order ID chaining.</td></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Side of order.
Will be validated and then ignored.
<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>UTC Timestamp
Transaction time.
This field will be ignored in all messages sent to the FIX Gateway.
Will be validated and then ignored.</td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>376</td><td>ComplianceID</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Numeric identifier for trading algorithms required by the German High-frequency Trading Act.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
30015	UCurrency	N		N	Currency Currency used for price. The combination of an ISIN with a defined currency will identify uniquely an instrument. Mandatory if SecurityIDSource (22) = 4 (ISIN) for ISINs traded in more than one currency. Field will be ignored if SecurityIDSource (22) = M (Marketplace assigned identifier).
<**Standard Trailer**>					

6.5.4 Order Cancel/Replace Request

The Order Cancel Replace Request is used to modify an existing order.

Tag	Field Name	R	D	C	Description
<Standard Header>					
35	MsgType	Y	Y	Y	'G' = Order Cancel/Replace Request
<Message Body>					
<Parties>		Y	Y	Y	Party Information.
453	NoPartyIDs	Y	Y	Y	NumInGroup Number of parties involved. Only in FIX 4.4.
<beneficiary>		N	N		KRX or TAIFEX Beneficiary Account.
<entering trader>		Y	Y	Y	Entering User ID.
<location ID>		N	N		Location ID information. Origin country code to identify the region from which the transaction originates.
<order origination firm>		N	N		KRX or TAIFEX Member ID.
<position account>		N	N		Flexible account identifier.
<takeup firm>		N	N		Take-up trading firm information.
end <Parties>					
<Instrument>		Y	Y	Y	Security identification.
<TrdgSesGrp>		N	N	N	The group of trading session is used to identify a closing auction only order.
<PegInstructions>		N		C	Peg instructions for a trailing stop order.
<MtchgInst>		N	N	N	Matching Instructions for using the Self Match Prevention functionality.
<DisplayInstruction>		N		C	Display instruction is used for Iceberg Order.
1	Account	N	N		String (2) Account.
11	ClOrdID	Y	Y	Y	String (20) Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).
15	Currency	N		N	Currency Currency used for price. The combination of an ISIN with a defined currency will Identify uniquely an instrument. Mandatory if SecurityIDSource (22) = 4 (ISIN) for ISINs traded in more than one currency. Field will be ignored if SecurityIDSource (22) = M (Marketplace assigned identifier).

<table>
<tr><td colspan="6">. . . continued . . .</td></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>18</td><td>ExecInst</td><td>N</td><td>N</td><td>C</td><td>Multiple Value String
Instructions for order management; all orders need to be defined as either persistent or non-persistent. An order may additionally be defined as a Book or Cancel Order unless it has been defined as Closing Auction Only with TradingSessionSubID (625).
<u>Note:</u> in case of OrdType (40) = ”P” a value of ”a” must be supplied.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>H</td><td>Reinstate on trading system failure (persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>Q</td><td>Cancel on trading system failure (non-persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>a</td><td>Trailing Stop Peg</td><td></td><td>✓</td></tr>
<tr><td>6</td><td>Participate don’t initiate (Book or cancel)</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>21</td><td>HandlInst</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Instructions for order management.
Only in FIX 4.2.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Automated execution order, private, no Broker intervention</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>38</td><td>OrderQty</td><td>Y</td><td>Y</td><td>Y</td><td>Qty (10.0)
Total Order Quantity.</td></tr>
<tr><td>40</td><td>OrdType</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Order type.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Market</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Limit</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Stop</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Stop limit</td><td>✓</td><td>✓</td></tr>
<tr><td>P</td><td>Pegged</td><td></td><td>✓</td></tr>
</table></td></tr>
<tr><td>41</td><td>OrigClOrdID</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
ClOrdID (11) of the last successfully processed task (request) referring to the specific order; used for client order ID chaining.</td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
Limit price.
Required if OrdType (40) is Limit (2) or Stop Limit (4).</td></tr>
</table>

<table>
<tr><th colspan="6">. . . continued . . .</th></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Side of order.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (12)
First free-format text field for trader-specific or customer-related comments.

<u>For T7 Derivatives:</u>
Should not be used in conjunction with KRX Member, KRX Beneficiary Account, TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>59</td><td>TimeInForce</td><td>N</td><td>N</td><td>N</td><td>Char
Execution and trading restriction parameters.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Day</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Good till Cancel</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Immediate or Cancel</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Fill or Kill</td><td></td><td>✓</td></tr>
<tr><td>6</td><td>Good till Date</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>UTC Timestamp
Transaction time.
This field will be ignored in all messages sent to the FIX Gateway.</td></tr>
<tr><td>77</td><td>PositionEffect</td><td>N</td><td>N</td><td></td><td>Char
Field is used for Derivatives position management purposes and indicates whether the order is submitted to open or close a position.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>O</td><td>Open</td><td>✓</td><td></td></tr>
<tr><td>C</td><td>Close</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>99</td><td>StopPx</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
Stop Price.
Required for Stop Market and Stop Limit Orders.
Optional for Trailing Stop Orders.</td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>376</td><td>ComplianceID</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Numeric identifier for trading algorithms required by the German High-frequency Trading Act.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
432	ExpireDate	N	C	C	LocalMktDate Date of order expiry. Required if TimeInForce (59) = 6 (Good till Date).
1031	CustOrderHandlingInst	N	N		Char Rate identifier in accordance with the FIA guidelines (No validation).
1100	TriggerType	N	C	C	Char Defines when the trigger will hit, i.e. the action specified by the trigger instructions will come into effect. **Value** | **Description** | **D** | **C** 4 | Price movement | ✓ | ✓
1102	TriggerPrice	N	C	C	Price (11.8) The price at which the trigger should hit.
1815	TradingCapacity	Y	Y	Y	Int (1) 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** | **D** | **C** 1 | Customer (Agency) | ✓ | ✓ 5 | Principal (Proprietary) | ✓ | ✓ 6 | Market Maker | ✓ | ✓
2404	ComplianceText	N	N		String (20) This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).
25008	FreeText2	N	N		String (12) Second free-format text field for trader-specific or customer-related comments.
25009	FreeText3	N	N		String (12) Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with TAIFEX Member and TAIFEX Beneficiary Account.
25107	FreeText4	N		N	String (16) Free-format text field for trader-specific or customer related comments.

<table>
<tr><td colspan="6">. . . continued . . .</td></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>28710</td><td>PriceValidityCheckType</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Indicator how price validity check should be performed by the exchange.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>None</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Optional</td><td>✓</td><td></td></tr>
<tr><td>2</td><td>Mandatory</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5.5 Multileg Order Cancel/Replace Request

The Multileg Order Cancel Replace Request is used to modify a multileg order (previously submitted using the New Order Multileg messsage).

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y		'UAC' / 'AC' = User / Multileg Order Cancel Replace
<**Message Body**>					
<Parties>		Y	Y		Party Information.
453	NoPartyIDs	Y	Y		NumInGroup Number of parties involved. Only in FIX 4.4.
<beneficiary>		N	N		KRX or TAIFEX Beneficiary Account.
<entering trader>		Y	Y		Entering User ID.
<location ID>		N	N		Location ID information. Origin country code to identify the region from which the transaction originates.
<order origination firm>		N	N		KRX or TAIFEX Member ID.
<position account>		N	N		Flexible account identifier.
<takeup firm>		N	N		Take-up trading firm information.
end <Parties>					
<Instrument>		Y	Y		Security identification.
<LegOrdGrp>		Y	Y		The group of leg is used to specify clearing attributes for the legs of a Multileg Order.
<MtchgInst>		N	N		Matching Instructions for using the Self Match Prevention functionality.
11	ClOrdID	Y	Y		String (20) Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).
18	ExecInst	N	N		Multiple Value String Instructions for order management; all orders need to be defined as either persistent or non-persistent. An order may additionally be defined as a Book or Cancel Order unless it has been defined as Closing Auction Only with TradingSessionSubID (625). **Value** / **Description** / **D** / **C** H / Reinstate on trading system failure (persistent) / ✓ / Q / Cancel on trading system failure (non-persistent) / ✓ / 6 / Participate don't initiate (Book or cancel) / ✓ /
38	OrderQty	Y	Y		Qty (10.0) Total Order Quantity.

. . . continued . . .

Tag	Field Name	R	D	C	Description
40	OrdType	Y	Y		Char Order type. **Value** / **Description** / **D** / **C** 2 / Limit / ✓ /
41	OrigClOrdID	Y	Y		String (20) ClOrdID (11) of the last successfully processed task (request) referring to the specific order; used for client order ID chaining.
44	Price	Y	Y		Price (11.8) Limit price.
54	Side	Y	Y		Char Side of order. **Value** / **Description** / **D** / **C** 1 / Buy / ✓ / 2 / Sell / ✓ /
58	Text	N	N		String (12) First free-format text field for trader-specific or customer-related comments. For T7 Derivatives: Should not be used in conjunction with KRX Member, KRX Beneficiary Account, TAIFEX Member and TAIFEX Beneficiary Account.
59	TimeInForce	N	N		Char Execution and trading restriction parameters. **Value** / **Description** / **D** / **C** 0 / Day / ✓ / 1 / Good till Cancel / ✓ / 3 / Immediate or Cancel / ✓ / 6 / Good till Date / ✓ /
60	TransactTime	Y	Y		UTC Timestamp Transaction time. This field will be ignored in all messages sent to the FIX Gateway.
100	ExDestination	Y	Y		Exchange Market Identifier Code of the trading market according to ISO 10383.
376	ComplianceID	N	N		Int (20) Numeric identifier for trading algorithms required by the German High-frequency Trading Act.

<table>
<tr><td colspan="6">. . . continued . . .</td></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>432</td><td>ExpireDate</td><td>N</td><td>C</td><td></td><td>LocalMktDate
Date of order expiry.
Required if TimeInForce (59) = 6 (Good till Date).</td></tr>
<tr><td>1031</td><td>CustOrderHandlingInst</td><td>N</td><td>N</td><td></td><td>Char
Rate identifier in accordance with the FIA guidelines (No validation).</td></tr>
<tr><td>1815</td><td>TradingCapacity</td><td>Y</td><td>Y</td><td></td><td>Int (1)
This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Customer (Agency)</td><td>✓</td><td></td></tr>
<tr><td>5</td><td>Principal (Proprietary)</td><td>✓</td><td></td></tr>
<tr><td>6</td><td>Market Maker</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>2404</td><td>ComplianceText</td><td>N</td><td>N</td><td></td><td>String (20)
This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).</td></tr>
<tr><td>25008</td><td>FreeText2</td><td>N</td><td>N</td><td></td><td>String (12)
Second free-format text field for trader-specific or customer-related comments.</td></tr>
<tr><td>25009</td><td>FreeText3</td><td>N</td><td>N</td><td></td><td>String (12)
Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>28710</td><td>PriceValidityCheckType</td><td>Y</td><td>Y</td><td></td><td>Int (1)
Indicator how price validity check should be performed by the exchange.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>None</td><td>✓</td><td></td></tr>
<tr><td>1</td><td>Optional</td><td>✓</td><td></td></tr>
<tr><td>2</td><td>Mandatory</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5.6 Execution Report

The Execution Report message is used to confirm the receipt of an order, confirm changes to an existing order, transmit all active orders, relay fill information, reject orders.

If a field not supported for the market type (Derivatives, Cash) is entered in the FIX Request, the field will be sent back in the reject Execution Report. This means that reject Execution Reports can contain fields documented as not supported for the specific market type.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'8' = Execution Report
<**Message Body**>					
<Parties>		N	N	N	Party Information.
453	NoPartyIDs	N	N	N	NumInGroup Number of parties involved. Only in FIX 4.4.
<beneficiary>		N	N		KRX or TAIFEX Beneficiary Account.
<entering firm>		N	N	N	Entering Entity ID. 1 = (Participant), 2 = (Market Supervision)
<entering trader>		N	N	N	Entering User ID.
<executing trader>		N	N	N	Owning User ID.
<executing unit>		N	N	N	Executing unit information.
<location ID>		N	N		Location ID information. Origin country code to identify the region from which the transaction originates.
<order origination firm>		N	N		KRX or TAIFEX Member ID.
<position account>		N	N		Flexible account identifier.
<session ID>		N	N	N	Executing session; information provided in case of unsolicited events and for the Drop Copy service.
<takeup firm>		N	N		Take-up trading firm information.
end <Parties>					
<Instrument>		Y	Y	Y	Security identification.
<InstrmtLegExecGrp>		N	C		The Executed Order Leg Group contains the fill information for each leg of a Multileg Order.
<DisplayInstruction>		N		C	Display instruction is used for Iceberg Order.
<PegInstructions>		N		C	Peg instructions for a trailing stop order.
<MtchgInst>		N	N	N	Matching Instructions for using the Self Match Prevention functionality.
1	Account	N	N		String (2) Account.
6	AvgPx	Y	Y	Y	Price (11.8) Average Price information is not calculated; value of zero will be returned.

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>11</td><td>ClOrdID</td><td>N</td><td>N</td><td>N</td><td>String (20)
Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).</td></tr>
<tr><td>14</td><td>CumQty</td><td>Y</td><td>Y</td><td>Y</td><td>Qty (10.0)
Cumulated executed quantity of an order.</td></tr>
<tr><td>15</td><td>Currency</td><td>N</td><td></td><td>N</td><td>Currency
Currency used for price.
The combination of an ISIN with a defined currency will Identify uniquely an instrument.

Will be copied from the FIX request or from the instrument data if the FIX request does not contain the currency but the ISIN was used in the FIX request.</td></tr>
<tr><td>17</td><td>ExecID</td><td>Y</td><td>Y</td><td>Y</td><td>String (80)
Unique ID of the execution report message within the context of business day and session.
Will be generated by the FIX Gateway.
The field provides a unique identifier and can be used for the identification of duplicate order messages.</td></tr>
<tr><td>18</td><td>ExecInst</td><td>N</td><td>N</td><td>N</td><td>Multiple Value String
Instructions for order management; all orders need to be defined as either persistent or non-persistent. An order may additionally be defined as a Book or Cancel Order unless it has been defined as Closing Auction Only with TradingSessionSubID (625).
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>H</td><td>Reinstate on trading system failure (persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>Q</td><td>Cancel on trading system failure (non-persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>a</td><td>Trailing Stop Peg</td><td></td><td>✓</td></tr>
<tr><td>6</td><td>Participate don’t initiate (Book or cancel)</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>20</td><td>ExecTransType</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Identifies transaction type.
Only in FIX 4.2.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>New</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>21</td><td>HandlInst</td><td>N</td><td>N</td><td>N</td><td>Char
Instructions for order management.
Only in FIX 4.2.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Automated execution order, private, no Broker intervention</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>31</td><td>LastPx</td><td>N</td><td>N</td><td>N</td><td>Price (11.8)
Price of this fill.</td></tr>
<tr><td>32</td><td>LastQty</td><td>N</td><td>N</td><td>N</td><td>Qty (10.0)
Quantity executed in this fill.</td></tr>
<tr><td>37</td><td>OrderID</td><td>Y</td><td>Y</td><td>Y</td><td>String
Exchange Order ID generated by the T7 System (Int (20)) or "[N/A]".</td></tr>
<tr><td>38</td><td>OrderQty</td><td>Y</td><td>Y</td><td>Y</td><td>Qty (10.0)
Total Order Quantity.</td></tr>
<tr><td>39</td><td>OrdStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Conveys the current status of an order.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>New</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Partially filled</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Filled</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Canceled</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Pending cancel</td><td>✓</td><td>✓</td></tr>
<tr><td>8</td><td>Rejected</td><td>✓</td><td>✓</td></tr>
<tr><td>9</td><td>Suspended</td><td>✓</td><td>✓</td></tr>
<tr><td>A</td><td>Pending new</td><td>✓</td><td>✓</td></tr>
<tr><td>E</td><td>Pending replace</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>40</td><td>OrdType</td><td>N</td><td>N</td><td>N</td><td>Char
Order type.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Market</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Limit</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Stop</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Stop limit</td><td>✓</td><td>✓</td></tr>
<tr><td>P</td><td>Pegged</td><td></td><td>✓</td></tr>
</table></td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>41</td><td>OrigClOrdID</td><td>N</td><td>N</td><td>N</td><td>String (20)
ClOrdID (11) of the last successfully processed task (request) referring to the specific order; used for client order ID chaining. Will not be delivered for drop copy for orders.</td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
Limit price.
Required if OrdType (40) is Limit (2) or Stop Limit (4).</td></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Side of order.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (12)
First free-format text field for trader-specific or customer related comments.</td></tr>
<tr><td>59</td><td>TimeInForce</td><td>N</td><td>N</td><td>N</td><td>Char
Execution and trading restriction parameters.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Day</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Good till Cancel</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Immediate or Cancel</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Fill or Kill</td><td></td><td>✓</td></tr>
<tr><td>6</td><td>Good till Date</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>77</td><td>PositionEffect</td><td>N</td><td>N</td><td></td><td>Char
Field is used for Derivatives position management purposes and indicates whether the order is submitted to open or close a position.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>O</td><td>Open</td><td>✓</td><td></td></tr>
<tr><td>C</td><td>Close</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>99</td><td>StopPx</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
Stop Price.
Required for Stop Market and Stop Limit Orders.
Optional for Trailing Stop Orders.</td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
</table>

... continued ...

Tag	Field Name	R	D	C	Description
150	ExecType	Y	Y	Y	Char The reason why this message was generated. - ExecType (150) = "1" (Partial fill) and "2" (Fill) are defined only in FIX 4.2. - ExecType (150) = "F" (Trade) is defined only in FIX 4.4. **Value** / **Description** / **D** / **C**: 0 / New / ✓ / ✓ 1 / Partial fill / ✓ / ✓ 2 / Fill / ✓ / ✓ 4 / Canceled / ✓ / ✓ 5 / Replace / ✓ / ✓ 6 / Pending cancel / ✓ / ✓ 8 / Rejected / ✓ / ✓ 9 / Suspended / ✓ / ✓ A / Pending new / ✓ / ✓ D / Restated / ✓ / ✓ E / Pending replace / ✓ / ✓ F / Trade / ✓ / ✓ L / Triggered by system / ✓ / ✓
151	LeavesQty	Y	Y	Y	Qty (10.0) 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.
336	TradingSessionID	N	N	N	String (1) Identifier for trading session. **Value** / **Description** / **D** / **C**: 1 / Day / ✓ / ✓
378	ExecRestatementReason	N	N	N	Int (3) Code to further qualify the field ExecType (150) of the ExecutionReport (8) message. The valid values are defined in **chapter 6.5.6.1 ExecRestatementReason (378): List of Valid Values.**
432	ExpireDate	N	C	C	LocalMktDate Date of order expiry. Required if TimeInForce (59) = 6 (Good till Date).

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>527</td><td>SecondaryExecID</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Private identifier of an order match event, which can be reconciled with the field SideTradeID (1506) in the TradeCaptureReport (UAE/AE).</td></tr>
<tr><td>625</td><td>TradingSessionSubID</td><td>N</td><td>C</td><td>C</td><td>String (1)
This field marks orders for a special trading phase.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>2</td><td>Opening or opening auction</td><td></td><td>✓</td></tr>
<tr><td>4</td><td>Closing or closing auction</td><td>✓</td><td>✓</td></tr>
<tr><td>8</td><td>Auction only</td><td></td><td>✓</td></tr>
</table></td></tr>
<tr><td>851</td><td>LastLiquidityInd</td><td>N</td><td>C</td><td>N</td><td>Int (1)
Indicates whether the order added or removed liquidity. Required only for execution reports generated for fills.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Add Liquidity</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Removed Liquidity</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Triggered Stop Order</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Triggered One-cancels-the-other Order</td><td>✓</td><td>✓</td></tr>
<tr><td>7</td><td>Triggered Market Order</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>880</td><td>TrdMatchID</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Unique identifier for each price level (match step) of a match event (used for public trade reporting).</td></tr>
<tr><td>1031</td><td>CustOrderHandlingInst</td><td>N</td><td>N</td><td></td><td>Char
Rate identifier in accordance with the FIA guidelines (No validation).</td></tr>
<tr><td>1100</td><td>TriggerType</td><td>N</td><td>C</td><td>C</td><td>Char
Defines when the trigger will hit, i.e. the action specified by the trigger instructions will come into effect.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>4</td><td>Price movement</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1102</td><td>TriggerPrice</td><td>N</td><td>C</td><td>C</td><td>Price (11.8)
The price at which the trigger should hit.</td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>1815</td><td>TradingCapacity</td><td>N</td><td>N</td><td>N</td><td>Int (1)
This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Customer (Agency)</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Principal (Proprietary)</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Market Maker</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1823</td><td>Triggered</td><td>N</td><td>N</td><td>N</td><td>Int (1)
Indicates if an order has been previously triggered.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Not triggered (Default)</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Triggered</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>2404</td><td>ComplianceText</td><td>N</td><td>N</td><td></td><td>String (20)
This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).</td></tr>
<tr><td>25008</td><td>FreeText2</td><td>N</td><td>N</td><td></td><td>String (12)
Second free-format text field for trader-specific or customer-related comments.</td></tr>
<tr><td>25009</td><td>FreeText3</td><td>N</td><td>N</td><td></td><td>String (12)
Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>25107</td><td>FreeText4</td><td>N</td><td></td><td>N</td><td>String (16)
Free-format text field for trader-specific or customer related comments.</td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Unique error or event identification number.</td></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>N</td><td>N</td><td>N</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>FIX GATE-WAY</td><td>Fix Gateway</td><td>✓</td><td>✓</td></tr>
<tr><td>TRADIN SYS-TEM</td><td>Trading system</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
</table>

<table>
<tr><td colspan="6">... continued ...</td></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>25025</td><td>ReturnCodeText</td><td>N</td><td>N</td><td>N</td><td>String (2000)
Text explaining the return code.</td></tr>
<tr><td>25108</td><td>OrderIDSfx</td><td>N</td><td></td><td>N</td><td>Int (10)
Order identification suffix generated by the T7 system.
An increase of the peak or overall quantity leads to a new timestamp, loosing time priority and the assignment of a new order id suffix, whereas a reduction maintains the original timestamp and order id suffix.</td></tr>
<tr><td>28710</td><td>PriceValidityCheckType</td><td>N</td><td>N</td><td>N</td><td>Int (1)
Indicator how price validity check should be performed by the exchange.
Will be copied from the request.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>None</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Optional</td><td>✓</td><td></td></tr>
<tr><td>2</td><td>Mandatory</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>28745</td><td>Crossed</td><td>N</td><td>N</td><td>N</td><td>Int (1)
Indicator will be delivered in case of deletion or modification due to Self Match Prevention.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Cross rejected</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5.6.1 ExecRestatementReason (378): List of Valid Values

Value	Description	Derivatives	Cash
0	GT corporate action		✓
1	GT renewal / restatement (no corporate action, order book restatement)	✓	✓
8	Exchange Option		✓
100	Unknown Order State	✓	✓
101	Order Added	✓	✓
102	Order Replaced	✓	✓
103	Order Canceled	✓	✓
105	Immediate or Cancel Order Canceled	✓	✓

. . . continued . . .

Value	Description	Derivatives	Cash
107	FOK Order canceled		✓
117	Canceled by Market Supervision		✓
135	Market Order Triggered	✓	✓
146	End of Day Processing		✓
148	Order Expiration		✓
149	Closing Auction Only Order Activated	✓	✓
150	Closing Auction Only Order Inactivated	✓	✓
151	OAO Order activated		✓
152	OAO Order inactivated		✓
153	AAO Order activated		✓
154	AAO Order inactivated		✓
155	Order Refreshed		✓
164	One-cancels-the-other Order Triggered	✓	✓
172	Stop Order Triggered	✓	✓
181	Ownership Changed	✓	✓
197	Order Cancellation Pending	✓	✓
199	Pending Cancellation Executed	✓	✓
212	Book Or Cancel Order Canceled	✓	✓
213	Trailing Stop Update		✓
237	Exceeds maximum quantity		✓
238	Invalid Limit Price		✓
241	User does not exist		✓
242	Session does not exist		✓
243	Invalid Stop Price		✓
244	Marked For Deletion		✓
245	Instrument does not exist		✓
246	Business Unit Risk Event		✓
257	Initial Cleanup		✓
292	Dividend Payment		✓
294	Last Trading Day		✓
295	Trading Parameter Change		✓
296	Currency Change		✓
297	Product Assignment Change		✓

. . . continued . . .

Value	Description	Deriv-atives	Cash
298	Reference Price Change		✓

6.5.7 Order Cancel Reject

The Order Cancel Reject message indicates that an Order Cancel Request, Order Cancel Replace Request or Multileg Order Cancel Replace Request has been rejected.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’9’ = Order Cancel Reject</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>11</td><td>ClOrdID</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
Unique customer defined order request identifier (20 characters or less, ASCII range 32 - 126).</td></tr>
<tr><td>37</td><td>OrderID</td><td>Y</td><td>Y</td><td>Y</td><td>String
Exchange Order ID generated by the T7 System (Int (20)) or OrderID (37) from FIX request.</td></tr>
<tr><td>39</td><td>OrdStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Conveys the current status of an order.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>8</td><td>Rejected</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>41</td><td>OrigClOrdID</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
ClOrdID (11) of the last successfully processed task (request) referring to the specific order; used for client order ID chaining.</td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>102</td><td>CxlRejReason</td><td>Y</td><td>Y</td><td>Y</td><td>Int (2)
Code to identify reason for cancel rejection.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>0</td><td>Too late to cancel</td><td>✓</td><td>✓</td></tr><tr><td>99</td><td>Other</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>434</td><td>CxlRejResponseTo</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Identifies the type of request that a Cancel Reject is in response to.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Order Cancel Request</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Order Cancel/Replace Request</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
Unique error or event identification number.</td></tr>
</table>

<table>
<tr><th colspan="6">. . . continued . . .</th></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>FIX GATEWAY</td><td>Fix Gateway</td><td>✓</td><td>✓</td></tr>
<tr><td>TRADING SYSTEM</td><td>Trading system</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>25025</td><td>ReturnCodeText</td><td>Y</td><td>Y</td><td>Y</td><td>String (2000)
Text explaining the return code.</td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5.8 Order Mass Action Report

This message informs about unsolicited mass cancellation events.
For more details, please refer to **chapter 3.7.13 Mass Cancellation Notification.**

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'UBZ' = User order mass action report</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><Parties></td><td>N</td><td>N</td><td>N</td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><entering firm></td><td>N</td><td>N</td><td>N</td><td>Entering Entity ID.
1 = (Participant), 2 = (Market Supervision)</td></tr>
<tr><td colspan="2"><entering trader></td><td>N</td><td>N</td><td>N</td><td>Entering User ID.</td></tr>
<tr><td colspan="2"><executing trader></td><td>N</td><td>N</td><td>N</td><td>Trader identification.</td></tr>
<tr><td colspan="2"><session ID></td><td>N</td><td>N</td><td>N</td><td>Executing session; information provided in case of unsolicited events and for the Drop Copy service.</td></tr>
<tr><td colspan="6">end <Parties></td></tr>
<tr><td colspan="2"><Instrument></td><td>Y</td><td>Y</td><td>Y</td><td>Security identification.</td></tr>
<tr><td colspan="2"><NotAffectedOrdersGrp></td><td>N</td><td>N</td><td>N</td><td>The group of not affected orders informs where cancellation is pending due to an unsolicited mass cancellation event.</td></tr>
<tr><td>15</td><td>Currency</td><td>N</td><td></td><td>N</td><td>Currency
Currency used for price.
The combination of an ISIN with a defined currency will Identify uniquely an instrument.</td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>N</td><td>N</td><td>Price (11.8)
Limit price.</td></tr>
<tr><td>54</td><td>Side</td><td>N</td><td>N</td><td>N</td><td>Char
Side of order.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>1301</td><td>MarketID</td><td>N</td><td>N</td><td>N</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>1369</td><td>MassActionReportID</td><td>Y</td><td>Y</td><td>Y</td><td>Int (20)
Transaction timestamp.</td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>28721</td><td>MassActionReason</td><td>Y</td><td>Y</td><td>Y</td><td>Int
Reason for mass cancellation.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>No special reason</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Stop Trading</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Emergency</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Market Maker Protection</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Session loss</td><td>✓</td><td>✓</td></tr>
<tr><td>7</td><td>Duplicate Session Login</td><td>✓</td><td>✓</td></tr>
<tr><td>8</td><td>Clearing Risk Control</td><td>✓</td><td>✓</td></tr>
<tr><td>105</td><td>Product State Halt</td><td>✓</td><td>✓</td></tr>
<tr><td>106</td><td>Product State Holiday</td><td>✓</td><td>✓</td></tr>
<tr><td>107</td><td>Instrument Suspension</td><td>✓</td><td>✓</td></tr>
<tr><td>109</td><td>Strategy Cancellation</td><td>✓</td><td></td></tr>
<tr><td>110</td><td>Circuit Breaker (Volatility Interrupt)</td><td>✓</td><td>✓</td></tr>
<tr><td>111</td><td>Product temporarily not tradeable</td><td>✓</td><td>✓</td></tr>
<tr><td>113</td><td>Instrument Stopped</td><td></td><td>✓</td></tr>
</table></td></tr>
<tr><td>30018</td><td>UExecInst</td><td>N</td><td>N</td><td>N</td><td>Multiple Value String
Cancellation scope for orders. Quotes are always canceled by mass cancellation events.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>H</td><td>Reinstate on trading system failure (persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>Q</td><td>Cancel on trading system failure (non-persistent)</td><td>✓</td><td>✓</td></tr>
<tr><td>H Q</td><td>Persistent and non-persistent orders</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.5.9 Order Mass Action Request

The User Order Mass Action Request (UCA) will allow the deletion of multiple orders based on different filter criteria. For more details, please refer to **chapter 3.12 Mass Deletion Request.**

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'UCA' = User order mass action request</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><Parties></td><td>Y</td><td>Y</td><td>Y</td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><entering trader></td><td>Y</td><td>Y</td><td>Y</td><td>Entering User ID.</td></tr>
<tr><td colspan="6">end <Parties></td></tr>
<tr><td colspan="2"><TargetParties></td><td>N</td><td>N</td><td>N</td><td>Target party information.</td></tr>
<tr><td>1461</td><td>NoTargetPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Identifies the number of target parties identified in a mass action. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><target executing trader></td><td>N</td><td>N</td><td>N</td><td>Target executing trader information.</td></tr>
<tr><td colspan="6">end <TargetParties></td></tr>
<tr><td colspan="2"><Instrument></td><td>Y</td><td>Y</td><td>Y</td><td>Security identification.</td></tr>
<tr><td>11</td><td>ClOrdID</td><td>Y</td><td>Y</td><td>Y</td><td>String
ClOrdID handling will be completely within the responsability of the customer. The FGW will simply echo back the content.</td></tr>
<tr><td>15</td><td>Currency</td><td>N</td><td></td><td>N</td><td>Currency
Currency used for price.
The combination of an ISIN with a defined currency will Identify uniquely an instrument.

Mandatory if SecurityIDSource (22) = 4 (ISIN) for ISINs traded in more than one currency.
Field will be ignored if SecurityIDSource (22) = M (Marketplace assigned identifier).</td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>N</td><td>N</td><td>Price (11.8)
Limit price.</td></tr>
<tr><td>54</td><td>Side</td><td>N</td><td>N</td><td>N</td><td>Char
Side of order.
<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>60</td><td>TransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>UTC Timestamp
Transaction time.
This field will be ignored in all messages sent to the FIX Gateway.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
376	ComplianceID	N	N	N	Int (20) Numeric identifier for trading algorithms required by the German High-frequency Trading Act.
1373	MassActionType	Y	Y	Y	Int (1) Specifies the type of action requested. **Value** / **Description** / **D** / **C** 3 / Cancel orders / ✓ / ✓
1374	MassActionScope	Y	Y	Y	Int (1) Specifies scope of Order Mass Action Request. **Value** / **Description** / **D** / **C** 1 / All orders for a security / ✓ / ✓ 9 / All orders for a market segment (or multiple segments) / ✓ / ✓
30100	UExDestination	Y	Y	Y	Exchange Market Identifier code of the trading market according to ISO 10383.
<**Standard Trailer**>					

6.5.10 Order Mass Action Response

Response to a User Order Mass Action Request (UCA).

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’UCAR’ = User order mass action response</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><Parties></td><td>N</td><td>N</td><td>N</td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><entering trader></td><td>N</td><td>N</td><td>N</td><td>Entering User ID.</td></tr>
<tr><td colspan="6">end <Parties></td></tr>
<tr><td colspan="2"><TargetParties></td><td>N</td><td>N</td><td>N</td><td>Target party information.</td></tr>
<tr><td>1461</td><td>NoTargetPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Identifies the number of target parties identified in a mass action. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><target executing trader></td><td>N</td><td>N</td><td>N</td><td>Target executing trader information.</td></tr>
<tr><td colspan="6">end <TargetParties></td></tr>
<tr><td colspan="2"><Instrument></td><td>Y</td><td>Y</td><td>Y</td><td>Security identification.</td></tr>
<tr><td colspan="2"><NotAffectedOrdersGrp></td><td>N</td><td>N</td><td>N</td><td>The group of not affected orders informs where cancellation is pending due to an unsolicited mass cancellation event.</td></tr>
<tr><td>11</td><td>ClOrdID</td><td>N</td><td>N</td><td>N</td><td>String
Unique customer defined order request identifier.</td></tr>
<tr><td>15</td><td>Currency</td><td>N</td><td></td><td>N</td><td>Currency
Currency used for price.
The combination of an ISIN with a defined currency will Identify uniquely an instrument.

Will be copied from the request.</td></tr>
<tr><td>44</td><td>Price</td><td>N</td><td>N</td><td>N</td><td>Price (11.8)
Limit price.</td></tr>
<tr><td>54</td><td>Side</td><td>N</td><td>N</td><td>N</td><td>Char
Side of order.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>1369</td><td>MassActionReportID</td><td>Y</td><td>Y</td><td>Y</td><td>Int (20)
Transaction timestamp.</td></tr>
</table>

<table>
<tr><td colspan="6">. . . continued . . .</td></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>1373</td><td>MassActionType</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Specifies the type of action requested.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>3</td><td>Cancel orders</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1374</td><td>MassActionScope</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Specifies scope of Order Mass Action Request.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>All orders for a security</td><td>✓</td><td>✓</td></tr>
<tr><td>9</td><td>All orders for a market segment (or multiple segments)</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1375</td><td>MassActionResponse</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Specifies the action taken by counterparty order management system as a result of the action type indicated in MassActionType of the Order Mass Action Request.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Rejected</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Accepted</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Completed</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1376</td><td>MassActionRejectReason</td><td>N</td><td>N</td><td>N</td><td>Int (2)
Reason Order Mass Action Request was rejected.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>99</td><td>Other</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Unique error or event identification number.</td></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>N</td><td>N</td><td>N</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>TRADIN SYS-TEM</td><td>Trading system</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>25025</td><td>ReturnCodeText</td><td>N</td><td>N</td><td>N</td><td>String (2000)
Text explaining the return code.</td></tr>
<tr><td>30100</td><td>UExDestination</td><td>N</td><td>N</td><td>N</td><td>Exchange
Market Identifier code of the trading market according to ISO 10383.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.6 Application Messages: Strategy Creation

6.6.1 Security Definition Request

The Security Definition Request message is used to create a strategy on T7.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y		'c' = Security Definition Request
<**Message Body**>					
<Parties>		Y	Y		Party Information.
453	NoPartyIDs	Y	Y		NumInGroup Number of parties involved. Only in FIX 4.4.
<entering trader>		Y	Y		Entering User ID.
end <Parties>					
<Instrument>		Y	Y		Security identification.
<InstrmtLegGrp>		Y	Y		The group of instrument leg is used for the creation of a Eurex strategy.
320	SecurityReqID	Y	Y		String Unique ID of a Security Definition Request.
321	SecurityRequestType	Y	Y		String (1) Type of security definition request. **Value** / **Description** / **D** / **C** 6 / Product / ✓ /
376	ComplianceID	N	N		Int (20) Numeric identifier for trading algorithms required by the German High-frequency Trading Act.
1301	MarketID	Y	Y		Exchange Market Identifier Code of the trading market according to ISO 10383.
2404	ComplianceText	N	N		String (20) This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).
<**Standard Trailer**>					

6.6.2 Security Definition Response

The Security Definition message is used to accept or reject the security defined in a Security Definition message.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y		'd' = Security Definition
<**Message Body**>					
<Parties>		Y	Y		Party Information.
453	NoPartyIDs	Y	Y		NumInGroup Number of parties involved. Only in FIX 4.4.
<entering trader>		Y	Y		Entering User ID.
end <Parties>					
<Instrument>		Y	Y		Security identification.
<InstrmtLegGrp>		Y	Y		The group of instrument leg is used for the creation of a Eurex strategy.
<MarketSegmentGrp>		Y	Y		The group of market segment provides security definition for the market segment that the security participates in.
58	Text	N	N		String (2000) Error text.
320	SecurityReqID	Y	Y		String Unique ID of a Security Definition Request.
322	SecurityResponseID	Y	Y		String (20) Identifier for the security definition message.
323	SecurityResponseType	Y	Y		String (1) Type of security definition message response. **Value** / **Description** / **D** / **C** 2 / Accept security proposal with revisions as indicated in the message / ✓ / 5 / Reject security proposal / ✓ /
1607	SecurityRejectReason	N	N		Int Identifies the reason a security definition request is being rejected.
25024	ReturnCodeSource	N	N		String (20) Originating system component providing the return code. **Value** / **Description** / **D** / **C** TRADING SYSTEM / Trading system / ✓ /

. . . continued . . .

Tag	Field Name	R	D	C	Description
28614	NumberOfSecurities	Y	Y		Int (10) Number of strategies that have been created per session, product and business day.
<**Standard Trailer**>					

6.7 Application Messages: Quote Request and Cross Request

6.7.1 Quote Request

The Quote Request message is used to request quotes from market makers. This message is commonly referred to as an Request For Quote (RFQ).

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'R' = Quote Request
<**Message Body**>					
<QuoteReqGrp>		Y	Y	Y	The group of quote request provides details of the quote request.
131	QuoteReqID	Y	Y	Y	String Unique identifier for quote request. Uniqueness will be completely within the user's responsibility.
376	ComplianceID	N	N	N	Int (20) Numeric identifier for trading algorithms required by the German High-frequency Trading Act.
2404	ComplianceText	N	N		String (20) This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).
30100	UExDestination	Y	Y	Y	Exchange Market Identifier code of the trading market according to ISO 10383.
<**Standard Trailer**>					

6.7.2 Mass Quote Acknowledgement

The Mass Quote Acknowledgement is used as the application level response to a Quote Request.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'b' = Mass Quote Acknowledgement</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (2000)
Error text.</td></tr>
<tr><td>131</td><td>QuoteReqID</td><td>Y</td><td>Y</td><td>Y</td><td>String
Unique identifier for quote request.
Uniqueness will be completely within the user's responsibility.</td></tr>
<tr><td>297</td><td>QuoteStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Identifies the status of the quote acknowledgement.
<u>Note:</u> in FIX 4.2 the name of this field is QuoteAckStatus.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Accepted</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Rejected</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Unique error or event identification number.</td></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>N</td><td>N</td><td>N</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>FIX GATEWAY</td><td>Fix Gateway</td><td>✓</td><td>✓</td></tr>
<tr><td>TRADING SYSTEM</td><td>Trading system</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td>30100</td><td>UExDestination</td><td>N</td><td>N</td><td>N</td><td>Exchange
Market Identifier code of the trading market according to ISO 10383.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.7.3 Cross Request

The Cross Request message is used by a trader to announce a Cross Trade to the market. The request is used, if a trader intends to trade with himself via order-book by sending a buy and a sell order for the same instrument. It is also used for prearranged trades between two traders, where the trade should be reproduced via matching the orders in the order-book.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y	Y	'U100' = Cross Request
<**Message Body**>					
<Parties>		Y	Y	Y	Party Information.
453	NoPartyIDs	Y	Y	Y	NumInGroup Number of parties involved. Only in FIX 4.4.
<entering trader>		Y	Y	Y	Entering User ID.
end <Parties>					
<Instrument>		Y	Y	Y	Security identification.
15	Currency	N		N	Currency Currency used for price. The combination of an ISIN with a defined currency will Identify uniquely an instrument. Mandatory if SecurityIDSource (22) = 4 (ISIN) for ISINs traded in more than one currency. Field will be ignored if SecurityIDSource (22) = M (Marketplace assigned identifier).
38	OrderQty	Y	Y	Y	Qty (10.0) Total Order Quantity.
100	ExDestination	Y	Y	Y	Exchange Market Identifier Code of the trading market according to ISO 10383.
376	ComplianceID	N	N	N	Int (20) Numeric identifier for trading algorithms required by the German High-frequency Trading Act.
2404	ComplianceText	N	N		String (20) This field is used to provide additional compliance information (according to respective rules and regs, circulars and/or bilateral coordination between participant and Trading Surveillance).
25100	CrossReqID	Y	Y	Y	String Unique identifier for cross request. Uniqueness will be completely within the user's responsibility.
<**Standard Trailer**>					

6.7.4 Cross Request Acknowledgement

Cross Request Acknowledgment is used as the application level response to a Cross Request.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'U101' = Cross Request Acknowledge</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (2000)
Error text.</td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Unique error or event identification number.</td></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>N</td><td>N</td><td>N</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>FIX GATEWAY</td><td>Fix Gateway</td><td>✓</td><td>✓</td></tr>
<tr><td>TRADIN SYSTEM</td><td>Trading system</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>25100</td><td>CrossReqID</td><td>Y</td><td>Y</td><td>Y</td><td>String
Unique identifier for cross request.
Uniqueness will be completely within the user's responsibility.
Will be copied from the request.</td></tr>
<tr><td>25101</td><td>CrossReqAckStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Int
Identifies the status of the cross request.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Accepted</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Rejected</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td>30100</td><td>UExDestination</td><td>N</td><td>N</td><td>N</td><td>Exchange
Market Identifier code of the trading market according to ISO 10383.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.8 Application Messages: Trade Capture

In field *ClOrdID (11)* the Client Order ID of the T7 Enhanced Trading Interface (ETI) is provided. For reconciliation of orders with trades the T7 System Order ID should be used instead: *OrderID (37)*.

6.8.1 Trade Capture Report

The Trade Capture Report message is used to report T7 ”on-book” trades and trade reversals.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’UAE’ / ’AE’ = User / Trade Capture Report</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><Instrument></td><td>Y</td><td>Y</td><td>Y</td><td>Security identification.</td></tr>
<tr><td colspan="2"><TrdCapRptSideGrp></td><td>Y</td><td>Y</td><td>Y</td><td>Side-specific information items of a trade capture report message.</td></tr>
<tr><td>552</td><td>NoSides</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of trade sides.</td></tr>
<tr><td colspan="2"><side1></td><td>Y</td><td>Y</td><td>Y</td><td>Side 1 information.</td></tr>
<tr><td>54</td><td>Side</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Side of trade.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>1009</td><td>SideLastQty</td><td>N</td><td>N</td><td></td><td>Qty (10.0)
Fill quantity for the original Eurex strategy.</td></tr>
<tr><td>1506</td><td>SideTradeID</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
Private trade identifier of an order or quote match event.</td></tr>
<tr><td>1005</td><td>SideTradeReportID</td><td>N</td><td></td><td>Y</td><td>Int (10)
Reference to a transaction identifier for billateral trades generated by the T7 system.</td></tr>
<tr><td colspan="2"><Parties></td><td>Y</td><td>Y</td><td>Y</td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties delivered within the party component block. Some of the parties are delivered as separate fields.</td></tr>
<tr><td colspan="2"><tcr beneficiary></td><td>N</td><td>N</td><td></td><td>KRX or TAIFEX Beneficiary Account.</td></tr>
<tr><td colspan="2"><tcr clearing firm></td><td>Y</td><td>Y</td><td>Y</td><td>Clearing member identification.</td></tr>
<tr><td colspan="2"><tcr clearing organization></td><td>N</td><td>Y</td><td></td><td>Clearing House Short Name.</td></tr>
<tr><td colspan="2"><tcr executing firm></td><td>Y</td><td>Y</td><td>Y</td><td>Executing firm information.</td></tr>
<tr><td colspan="2"><tcr executing firm kvno></td><td>N</td><td></td><td>Y</td><td>Executing firm information (Kassenverein number).</td></tr>
<tr><td colspan="2"><tcr executing trader></td><td>Y</td><td>Y</td><td>Y</td><td>Executing trader information.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
<tcr executing unit>		Y	Y	Y	Executing unit information.
<tcr order origination firm>		N	N		KRX or TAIFEX Member ID.
<tcr position account>		N	N		Flexible account identifier.
<tcr session ID>		N	N	N	Session ID.
<tcr takeup firm>		N	N		Take-up trading firm information.
<tcr settlement account>		N		Y	Settlement Account.
<tcr settlement location>		N		Y	Settlement location information. The valid values are defined in **chapter 6.8.1.1 Settlement Location: List of Valid Values.**
<tcr settlement firm>		N		Y	Settlement Firm.
<tcr clearing unit>		Y	Y	Y	Party ID Clearing Unit.
<tcr settlement unit>		N		Y	Party ID Settlement Unit.
end <Parties>					
1	Account	N	N	N	String (2) Account.
119	SettlCurrAmt	N		Y	Amt (11.8) Total amount due expressed in settlement currency.
155	SettlCurrFxRate	N		N	Float (11.8) Foreign exchange rate used to compute SettlCurrAmt (119) from Currency (15) to SettlCurrency (120).
58	Text	N	N	N	String (12) First free-format text field for trader-specific or customer-related comments. For T7 Derivatives: Should not be used in conjunction with KRX Member, KRX Beneficiary Account, TAIFEX Member and TAIFEX Beneficiary Account.
1115	OrderCategory	N	N	N	Char Indicates if the trade notification results from an order or quote. **Value** | **Description** | **D** | **C** 1 | Order | ✓ | ✓ 2 | Quote | ✓ | ✓

... continued ...

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>1444</td><td>SideLiquidityInd</td><td>N</td><td>N</td><td>N</td><td>Int (1)
Indicates whether the order added or removed liquidity.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Added Liquidity (passive)</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Removed Liquidity (aggressive)</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Auction</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1851</td><td>StrategyLinkID</td><td>N</td><td>C</td><td></td><td>Int (10)
Identifier that links all trades resulting from a match event of a strategy order.</td></tr>
<tr><td>37</td><td>OrderID</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Exchange Order ID generated by the T7 System.
Will not be delivered for trade reversals.</td></tr>
<tr><td>11</td><td>ClOrdID</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Unique identifier of the order.
The Client Order ID of the T7 Enhanced Trading Interface (ETI) is provided.</td></tr>
<tr><td>40</td><td>OrdType</td><td>N</td><td>N</td><td>N</td><td>Char
Order type.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Market</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Limit</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1031</td><td>CustOrderHandlingInst</td><td>N</td><td>N</td><td></td><td>Char
Rate identifier in accordance with the FIA guidelines (No validation).</td></tr>
<tr><td>25008</td><td>FreeText2</td><td>N</td><td>N</td><td></td><td>String (12)
Second free-format text field for trader-specific or customer-related comments.</td></tr>
<tr><td>25009</td><td>FreeText3</td><td>N</td><td>N</td><td></td><td>String (12)
Third free-format text field for trader-specific or customer-related comments. Should not be used in conjunction with TAIFEX Member and TAIFEX Beneficiary Account.</td></tr>
<tr><td>25107</td><td>FreeText4</td><td>N</td><td></td><td>N</td><td>String (16)
Free-format text field for trader-specific or customer related comments.</td></tr>
<tr><td>25108</td><td>OrderIDSfx</td><td>N</td><td></td><td>N</td><td>Int (10)
Order identification suffix generated by the T7 system.
An increase of the peak or overall quantity leads to a new timestamp, loosing time priority and the assignment of a new order id suffix, whereas a reduction maintains the original timestamp and order id suffix.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
28585	SideLastPx	N	N		Price (11.8) Fill price for the original Eurex strategy.
30044	UPrice	N	N	N	Price (11.8) Limit price.
30151	ULeavesQty	N	N	N	Qty (10.0) 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.
<side2>		N		Y	Side 2: counterparty information.
54	Side	N		Y	Char Counterparty side.

Value	Description	D	C
1	Buy		✓
2	Sell		✓

Tag	Field Name	R	D	C	Description
<Parties>		N		Y	Party Information.
453	NoPartyIDs	N		Y	NumInGroup Number of parties delivered within the party component block. Some of the parties are delivered as separate fields.
<tcr executing firm>		N		N	Executing firm information.
<tcr executing firm kvno>		N		Y	Executing firm information (Kassenverein number).
<tcr executing unit>		N		N	Executing unit information.
<tcr settlement firm>		N		N	Settlement Firm.
<tcr settlement account>		N		Y	Settlement Account.
<tcr settlement location>		N		Y	Settlement location information. The valid values are defined in **chapter 6.8.1.1 Settlement Location: List of Valid Values.**
<tcr settlement unit>		N		N	Party ID Settlement Unit.
end <Parties>					
end <TrdCapRptSideGrp>					
15	Currency	N		Y	Currency Currency used for price. The combination of an ISIN with a defined currency will Identify uniquely an instrument.
31	LastPx	Y	Y	Y	Price (11.8) Price of this fill.
32	LastQty	Y	Y	Y	Qty (10.0) Quantity executed in this fill.

... continued ...

Tag	Field Name	R	D	C	Description
64	SettlDate	N		Y	LocalMktDate Specific date of trade settlement (SettlementDate) in YYYYMMDD format.
75	TradeDate	Y	Y	Y	LocalMktDate Business date.
77	PositionEffect	N	N		Char Field is used for Derivatives position management purposes and indicates whether the order is submitted to open or close a position. **Value** / **Description** / **D** / **C** O / Open / ✓ / C / Close / ✓ /
120	SettlCurrency	N		Y	Currency Settlement Currency.
442	MultiLegReportingType	N	N		Char This field indicates if the Trade Capture report results from a single leg or multileg order. **Value** / **Description** / **D** / **C** 1 / Single Leg / ✓ / 2 / Individual leg of a multileg security / ✓ /
570	PreviouslyReported	Y	Y	Y	Boolean Indicates if the trade capture report was previously reported to the counterparty. **Value** / **Description** / **D** / **C** N / Not reported to counterparty / ✓ / ✓
571	TradeReportID	Y	Y	Y	String (80) Unique identifier of the trade capture report. The field provides a unique trade identifier and can be used for the identification of duplicate trade confirmation messages.
574	MatchType	N	N	N	String (2) The point in the matching process at which this trade was matched. **Value** / **Description** / **D** / **C** 3 / Confirmed Trade Report / ✓ / ✓ 4 / Auto Match Incoming / ✓ / ✓ 5 / Cross Auction / ✓ / ✓ 7 / Call Auction / ✓ / ✓ 11 / Auto Match Resting / ✓ / ✓

... continued ...

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>748</td><td>TotNumTradeReports</td><td>N</td><td>C</td><td></td><td>Int (10)
Number of leg executions of the original strategy order.</td></tr>
<tr><td>830</td><td>TransferReason</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
This field indicates the result of the price and quantity validation.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Owner</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Clearer</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>856</td><td>TradeReportType</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Identifies the type of trade notification.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Submit</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Alleged</td><td>✓</td><td></td></tr>
<tr><td>5</td><td>No/Was (Replaced)</td><td>✓</td><td></td></tr>
<tr><td>7</td><td>(Locked-In) Trade Break</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>880</td><td>TrdMatchID</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
Unique identifier for each price level (match step) of a match event (used for public trade reporting).</td></tr>
<tr><td>1003</td><td>TradeID</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
Uniquely identifies all order leg allocations referring to the same matching event, simple instrument and price.</td></tr>
<tr><td>1126</td><td>OrigTradeID</td><td>N</td><td>N</td><td>N</td><td>Int (10)
In case of a trade reversal this field provides the original trade identifier.</td></tr>
<tr><td>1301</td><td>MarketID</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>1596</td><td>ClearingTradePrice</td><td>N</td><td>N</td><td></td><td>Price (11.8)
Clearing price.</td></tr>
<tr><td>1649</td><td>RelatedSymbol</td><td>N</td><td>C</td><td></td><td>Int (10)
Product identifier of the original Eurex strategy.</td></tr>
<tr><td>1650</td><td>RelatedSecurityID</td><td>N</td><td>C</td><td></td><td>Int (20)
Instrument identifier of the original Eurex strategy.</td></tr>
</table>

... continued ...

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>1815</td><td>TradingCapacity</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
This field designates if the trader is acting in the capacity of agent, trading for its own account or acting as a market maker.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Customer (Agency)</td><td>✓</td><td>✓</td></tr>
<tr><td>5</td><td>Principal (Proprietary)</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Market Maker</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>2490</td><td>TradeNumber</td><td>N</td><td></td><td>N</td><td>Int (10)
Trade Number.
Number of Trade Capture Reports belonging to the same price level (match step) of a match event.</td></tr>
<tr><td>28586</td><td>OrderSide</td><td>N</td><td>N</td><td></td><td>Char
Side of the order in the original Eurex strategy.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Buy</td><td>✓</td><td></td></tr>
<tr><td>2</td><td>Sell</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>28587</td><td>RelatedProductComplex</td><td>N</td><td>N</td><td></td><td>Int (1)
Instrument type of the orginal Eurex strategy.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>2</td><td>Standard Option Strategy</td><td>✓</td><td></td></tr>
<tr><td>3</td><td>Non-standard Option Strategy</td><td>✓</td><td></td></tr>
<tr><td>4</td><td>Volatility Strategy</td><td>✓</td><td></td></tr>
<tr><td>5</td><td>Futures Spread</td><td>✓</td><td></td></tr>
<tr><td>6</td><td>Inter Product Spread</td><td>✓</td><td></td></tr>
<tr><td>7</td><td>Standard Future Strategy</td><td>✓</td><td></td></tr>
<tr><td>8</td><td>Pack and Bundle</td><td>✓</td><td></td></tr>
<tr><td>9</td><td>Strip</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>28610</td><td>MatchSubType</td><td>N</td><td>N</td><td>N</td><td>Int (1)
Indicates the call auction type the trade originates from.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>2</td><td>Opening or opening auction</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Closing or closing auction</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Intraday auction</td><td>✓</td><td>✓</td></tr>
<tr><td>8</td><td>Circuit breaker auction</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
</table>

... continued ...

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>28736</td><td>ClearingTradeQty</td><td>N</td><td>N</td><td></td><td>Qty (10.0)
Quantity used for clearing.</td></tr>
<tr><td>28890</td><td>DeliveryType</td><td>N</td><td></td><td>Y</td><td>Int (1)
Identifies type of settlement.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Auslandskassenverein</td><td></td><td>✓</td></tr>
<tr><td>2</td><td>Girosammelverwahrung</td><td></td><td>✓</td></tr>
<tr><td>3</td><td>Streifbandverwahrung</td><td></td><td>✓</td></tr>
<tr><td>4</td><td>Wertpapierrechnung</td><td></td><td>✓</td></tr>
</table></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>Y</td><td>Y</td><td>Y</td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.8.1.1 Settlement Location: List of Valid Values

Value	Description	Derivatives	Cash
APK	Euroclear Finland		✓
CBF	Clearstream Banking Frankfurt		✓
CBL	Clearstream Banking Luxembourg		✓
CCO	Euroclear UK and Ireland		✓
CIK	Euroclear Belgium		✓
EOC	Euroclear Bank		✓
HEL	HELEX Greece		✓
IBC	Iberclear Spain		✓
INT	Interbolsa Portugal		✓
KDP	KDPW Poland		✓
MOT	Monte Titoli Italy		✓
NEC	Euroclear Netherlands		✓
OEB	OeKB Austria		✓
SIC	Euroclear France		✓
SIS	Sega Intersettle		✓
VPC	Euroclear Sweden		✓
VPD	VP Denmark		✓

. . . continued . . .

Value	Description	Derivatives	Cash
VPS	VPS Norway		✓

6.9 Application Messages: Other

6.9.1 User Request

Each trader needs to logon/logoff to/from T7 via the User Request message.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'UBE' / 'BE' = User / User Request</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>553</td><td>Username</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
User ID.</td></tr>
<tr><td>554</td><td>Password</td><td>N</td><td>C</td><td>C</td><td>String (32)
Password. This field is required in messages with UserRequestType (924) = 1 (Log on User).</td></tr>
<tr><td>923</td><td>UserRequestID</td><td>Y</td><td>Y</td><td>Y</td><td>String
Unique identifier for a User Request.</td></tr>
<tr><td>924</td><td>UserRequestType</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
Indicates the action required by a User Request Message.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Log on user</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Log off user</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.9.2 User Response

The User Response message is used to confirm or reject the trader logon/logoff.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'UBF' / 'BF' = User / User Response</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>100</td><td>ExDestination</td><td>Y</td><td>Y</td><td>Y</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>553</td><td>Username</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
User ID.</td></tr>
<tr><td>923</td><td>UserRequestID</td><td>Y</td><td>Y</td><td>Y</td><td>String
Unique identifier for a User Request.</td></tr>
<tr><td>926</td><td>UserStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Int (2)
Indicates the status of a user.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Logged in</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Not logged in</td><td>✓</td><td>✓</td></tr><tr><td>6</td><td>Other</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>927</td><td>UserStatusText</td><td>N</td><td>N</td><td>N</td><td>String (2000)
A text description associated with a user status.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.9.3 User Notification

The User Notification message is used to send information of an unsolicited trader logoff or send information of legal notifications.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>'UCB' = User notification</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><UsernameGrp></td><td>N</td><td>N</td><td>N</td><td>List of users to which the notification is directed.</td></tr>
<tr><td>809</td><td>NoUsernames</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGrp
Number of usernames. Exactly one occurrence</td></tr>
<tr><td>553</td><td>Username</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
User ID.</td></tr>
<tr><td colspan="6">end <UsernameGrp></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (2000)
Message text.</td></tr>
<tr><td>926</td><td>UserStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Int (2)
Indicates the status of a user.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>2</td><td>Not logged in</td><td>✓</td><td>✓</td></tr>
<tr><td>6</td><td>Other</td><td>✓</td><td>✓</td></tr>
<tr><td>7</td><td>Forced user logout by exchange</td><td>✓</td><td>✓</td></tr>
<tr><td>8</td><td>Session shutdown warning</td><td>✓</td><td>✓</td></tr>
<tr><td>10</td><td>User stopped</td><td>✓</td><td>✓</td></tr>
<tr><td>11</td><td>User released</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>30100</td><td>UExDestination</td><td>N</td><td>N</td><td>N</td><td>Exchange
Market Identifier code of the trading market according to ISO 10383.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.9.4 Trading Session Status

The Trading Session Status message informs about session related events.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td>Y</td><td>’h’ = Trading session status</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td>58</td><td>Text</td><td>N</td><td>N</td><td>N</td><td>String (128)
Message text.</td></tr>
<tr><td>336</td><td>TradingSessionID</td><td>Y</td><td>Y</td><td>Y</td><td>String (1)
Identifier for trading session.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Day</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>340</td><td>TradSesStatus</td><td>Y</td><td>Y</td><td>Y</td><td>Int (1)
State of the trading session.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>0</td><td>Unknown</td><td>✓</td><td>✓</td></tr>
<tr><td>1</td><td>Halted</td><td>✓</td><td>✓</td></tr>
<tr><td>2</td><td>Open</td><td>✓</td><td>✓</td></tr>
<tr><td>3</td><td>Closed</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1300</td><td>MarketSegmentID</td><td>N</td><td>N</td><td>N</td><td>Int (10)
Product identifier.</td></tr>
<tr><td>1301</td><td>MarketID</td><td>N</td><td>N</td><td>N</td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>1368</td><td>TradSesEvent</td><td>Y</td><td>Y</td><td>Y</td><td>Int (3)
Trading session event type.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>102</td><td>Market reset</td><td>✓</td><td>✓</td></tr>
<tr><td>103</td><td>End of restatement</td><td>✓</td><td>✓</td></tr>
<tr><td>105</td><td>Service resumed</td><td>✓</td><td>✓</td></tr>
<tr><td>200</td><td>No more messages for this trading venue</td><td>✓</td><td>✓</td></tr>
<tr><td>201</td><td>Message transmission ended</td><td>✓</td><td>✓</td></tr>
<tr><td>202</td><td>Message processing suspended</td><td>✓</td><td>✓</td></tr>
<tr><td>203</td><td>Message processing resumed</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
</table>

. . . continued . . .

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>25024</td><td>ReturnCodeSource</td><td>Y</td><td>Y</td><td>Y</td><td>String (20)
Originating system component providing the return code.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>FIX GATEWAY</td><td>Fix Gateway</td><td>✓</td><td>✓</td></tr>
<tr><td>TRADING SYSTEM</td><td>Trading system</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>N</td><td>N</td><td>N</td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td>30075</td><td>UTradeDate</td><td>N</td><td>N</td><td>N</td><td>LocalMktDate
Date of trading session in YYYYMMDD format.</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.9.5 Party Risk Limits Update Report

User Party Risk Limits Update Report. This message communicates risk control events related to the Advanced Risk Protection functionality of T7 in case of a risk limit breach or release.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="6"><Standard Header></td></tr>
<tr><td>35</td><td>MsgType</td><td>Y</td><td>Y</td><td></td><td>'UCR' = User Party Risk Limits Update Report</td></tr>
<tr><td colspan="6"><Message Body></td></tr>
<tr><td colspan="2"><Parties></td><td>Y</td><td>Y</td><td></td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td></td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><clearing firm></td><td>N</td><td>N</td><td></td><td>Clearing member identification.</td></tr>
<tr><td colspan="2"><entering firm></td><td>Y</td><td>Y</td><td></td><td>Entering Entity ID.
1 = (Participant), 2 = (Market Supervision)</td></tr>
<tr><td colspan="2"><executing system></td><td>Y</td><td>Y</td><td></td><td>Executing system information (2 = Eurex Trading).</td></tr>
<tr><td colspan="2"><executing unit></td><td>Y</td><td>Y</td><td></td><td>Executing unit information.</td></tr>
<tr><td colspan="6">end <Parties></td></tr>
<tr><td>75</td><td>TradeDate</td><td>Y</td><td>Y</td><td></td><td>LocalMktDate
Business date.</td></tr>
<tr><td>1301</td><td>MarketID</td><td>N</td><td>N</td><td></td><td>Exchange
Market Identifier Code of the trading market according to ISO 10383.</td></tr>
<tr><td>1324</td><td>ListUpdateAction</td><td>Y</td><td>Y</td><td></td><td>Char
Invocation or release of a control event.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>A</td><td>Add (Invocation)</td><td>✓</td><td></td></tr><tr><td>D</td><td>Delete (Release)</td><td>✓</td><td></td></tr></table></td></tr>
<tr><td>1767</td><td>RiskLimitAction</td><td>N</td><td>N</td><td></td><td>Int (1)
Risk protection action.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>0</td><td>Queue inbound</td><td>✓</td><td></td></tr><tr><td>2</td><td>Reject</td><td>✓</td><td></td></tr><tr><td>4</td><td>Warning</td><td>✓</td><td></td></tr></table></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>Y</td><td>Y</td><td></td><td>Int (20)
Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).</td></tr>
<tr><td colspan="6"><Standard Trailer></td></tr>
</table>

6.9.6 Party Entitlements Update Report

User Party Entitlements Update Report. This message communicates risk control events related to the manual stop or release of trading functionality. Events will be generated on the Clearing back end and passed to the user by the T7 back end.

Tag	Field Name	R	D	C	Description
<**Standard Header**>					
35	MsgType	Y	Y		'UCZ' = User Party Entitlements Update Report
<**Message Body**>					
<Parties>		Y	Y		Party Information.
453	NoPartyIDs	Y	Y		NumInGroup Number of parties involved. Only in FIX 4.4.
<clearing firm>		N	N		Clearing member identification.
<entering firm>		Y	Y		Entering Entity ID. 1 = (Participant), 2 = (Market Supervision)
<executing system>		Y	Y		Executing system information (2 = Eurex Trading).
<executing unit>		Y	Y		Executing unit information.
end <Parties>					
75	TradeDate	Y	Y		LocalMktDate Business date.
1301	MarketID	N	N		Exchange Market Identifier Code of the trading market according to ISO 10383.
1324	ListUpdateAction	Y	Y		Char Invocation or release of a control event. **Value** / **Description** / **D** / **C** A / Add (Release) / ✓ / D / Delete (Invocation) / ✓ /
1672	PartyDetailStatus	Y	Y		Int (1) Member status. **Value** / **Description** / **D** / **C** 0 / Active / ✓ / 1 / Suspended / ✓ /
30060	UTransactTime	Y	Y		Int (20) Transaction timestamp which provides date and time in UTC, represented as nanoseconds past the UNIX epoch (00:00:00 UTC on 1 January 1970).
<**Standard Trailer**>					

6.9.7 Party Action Report

User Party Action Report. This message communicates risk control events of type halt-trading and re-instate. Events will be entered via the T7 Admin GUI.

Tag	Field Name	R	D	C	Description
<Standard Header>					
35	MsgType	Y	Y	Y	'UDI' = User Party Action Report
<Message Body>					
<Parties>		Y	Y	Y	Party Information.
453	NoPartyIDs	Y	Y	Y	NumInGroup Number of parties involved. Only in FIX 4.4.
<executing unit>		Y	Y	Y	Executing unit information.
<executing trader>		N	N	N	Trader identification.
end <Parties>					
<RequestingParties>		Y	Y	Y	Requesting Parties Information.
1657	NoRequestingPartyIDs	Y	Y	Y	NumInGrp Number of requesting party identifiers. Only in FIX 4.4.
<requesting executing trader>		N	N	N	Requesting executing trader information.
<requesting executing system>		N	N	N	Source of request (2 = Eurex Trading / 3 = Xetra Trading)
<requesting entering firm>		Y	Y	Y	Entering Entity ID. 1 = (Participant), 2 = (Market Supervision)
end <RequestingParties>					
60	TransactTime	N	N	N	UTC Timestamp Transaction time.
75	TradeDate	N	N	N	LocalMktDate Business date.
1301	MarketID	N	N	N	Exchange Market Identifier Code of the trading market according to ISO 10383.
2329	PartyActionType	Y	Y	Y	Int (1) Party Action Type. **Value** | **Description** | **D** | **C** 1 | Halt Trading | ✓ | ✓ 2 | Reinstate | ✓ | ✓
2331	PartyActionReportID	Y	Y	Y	String (30) Unique-ID.

. . . continued . . .

Tag	Field Name	R	D	C	Description
2332	PartyActionResponse	Y	Y	Y	Int (1) Constant value 1 (”Completed”). <table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Completed</td><td>✓</td><td>✓</td></tr></table>
<Standard Trailer>					

6.10 Components

6.10.1 <Instrument>

The <Instrument> component block comprises all fields required for security identification. For messages operating on product level - like the Order Mass Action Request - only Symbol(55) will be necessary, whereas messages operating on instrument level will also need SecurityID(48) and SecurityIDSource(22).

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="2"><Instrument></td><td></td><td></td><td></td><td></td></tr>
<tr><td>55</td><td>Symbol</td><td>Y</td><td>Y</td><td>Y</td><td>String (10)
Unique identifier for a T7 product.

<u>T7 Cash:</u> If the ISIN is used as instrument identifier in the FIX request (SecurityIDSource (22) = ”4” (ISIN)), the product identifier is allowed but not required. If no product identifier is provided Symbol (55) must contain ”[N/A]”.</td></tr>
<tr><td>48</td><td>SecurityID</td><td>N</td><td>N</td><td>N</td><td>String (20)
Instrument identifier.
Required for order messages.
Use ”[N/A]” for Security Definition Requests (c).
Field will not be set for messages operating on product level.</td></tr>
<tr><td>22</td><td>SecurityIDSource</td><td>N</td><td>N</td><td>N</td><td>String (1)
Identifies class or source of the SecurityID (48) value.
Required if SecurityID is specified.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>4</td><td>ISIN</td><td></td><td>✓</td></tr>
<tr><td>M</td><td>Marketplace-assigned identifier</td><td>✓</td><td>✓</td></tr>
</table></td></tr>
<tr><td>1227</td><td>ProductComplex</td><td>N</td><td>N</td><td></td><td>Int (1)
This field qualifies an instrument type on T7.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Simple Instrument</td><td>✓</td><td></td></tr>
<tr><td>2</td><td>Standard Option Strategy</td><td>✓</td><td></td></tr>
<tr><td>3</td><td>Non-standard Option Strategy</td><td>✓</td><td></td></tr>
<tr><td>4</td><td>Volatility Strategy</td><td>✓</td><td></td></tr>
<tr><td>5</td><td>Futures Spread</td><td>✓</td><td></td></tr>
<tr><td>6</td><td>Inter Product Spread</td><td>✓</td><td></td></tr>
<tr><td>7</td><td>Standard Future Strategy</td><td>✓</td><td></td></tr>
<tr><td>8</td><td>Pack and Bundle</td><td>✓</td><td></td></tr>
<tr><td>9</td><td>Strip</td><td>✓</td><td></td></tr>
</table></td></tr>
</table>

<table>
<tr><td colspan="6">. . . continued . . .</td></tr>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td>762</td><td>SecuritySubType</td><td>N</td><td>N</td><td></td><td>Int (10)
Strategy type.
Please refer to functional product and instrument files on the Eurex website www.Eurexchange.com</td></tr>
<tr><td>454</td><td>NoSecurityAltID</td><td>N</td><td></td><td>N</td><td>NumInGroup
Number of SecurityAltID (455) entries.</td></tr>
<tr><td>455</td><td>SecurityAltID</td><td>N</td><td></td><td>N</td><td>Int (20)
Alternative instrument identifier (numeric identifier).</td></tr>
<tr><td>456</td><td>SecurityAltIDSource</td><td>N</td><td></td><td>N</td><td>String (1)
Identifies class or source of the SecurityAltID (455) value. Required if SecurityAltID (455) is specified.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>M</td><td>Marketplace-assigned identifier</td><td></td><td>✓</td></tr></table></td></tr>
<tr><td colspan="6">end <Instrument></td></tr>
</table>

6.10.2 <TrdgSesGrp>

The Trading Session Group is used to identify a Closing Auction Only Order.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="2"><TrdgSesGrp></td><td></td><td></td><td></td><td></td></tr>
<tr><td>386</td><td>NoTradingSessions</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of TradingSessionIDs (336) in repeating group.</td></tr>
<tr><td>336</td><td>TradingSessionID</td><td>Y</td><td>Y</td><td>Y</td><td>String (1)
Identifier for trading session.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Day</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>625</td><td>TradingSessionSubID</td><td>Y</td><td>Y</td><td>Y</td><td>String (1)
This field marks orders for a special trading phase.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>2</td><td>Opening or opening auction</td><td></td><td>✓</td></tr><tr><td>4</td><td>Closing or closing auction</td><td>✓</td><td>✓</td></tr><tr><td>8</td><td>Auction only</td><td></td><td>✓</td></tr></table></td></tr>
<tr><td colspan="6">end <TrdgSesGrp></td></tr>
</table>

6.10.3 <MtchgInst>

Matching Instructions for using the Self Match Prevention functionality.

Tag	Field Name	R	D	C	Description
<MtchgInst>					
1624	NoMatchInst	Y	Y	Y	NumInGrp Number of Instructions. Only one occurrence.
1625	MatchInst	Y	Y	Y	Int (1) Matching Instruction for the order. Value: 2 — Description: Do not match — D: ✓ — C: ✓
28744	MatchInstCrossID	Y	Y	Y	Int (10) Numeric identifier. Contains the Self Match Prevention ID.
end <MtchgInst>					

6.10.4 <NotAffectedOrdersGrp>

The Not Affected Orders Group informs of orders where cancellation is pending due to an unsolicited mass cancellation event.

Tag	Field Name	R	D	C	Description
<NotAffectedOrdersGrp>					
1370	NoNotAffectedOrders	Y	Y	Y	NumInGroup Number of not affected orders in the repeating group of order ids.
1371	NotAffectedOrderID	Y	Y	Y	Int (20) Exchange Order ID of an order whose cancellation is pending.
1372	NotAffOrigClOrdID	N	N	N	String (20) FIX Client Order ID of an order whose cancellation is pending.
end <NotAffectedOrdersGrp>					

6.10.5 <QuoteReqGrp>

The Quote Request Group provides details of the quote request.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="2"><QuoteReqGrp></td><td></td><td></td><td></td><td></td></tr>
<tr><td>146</td><td>NoRelatedSym</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Specifies the number of repeating symbols specified.</td></tr>
<tr><td colspan="2"><Instrument></td><td>Y</td><td>Y</td><td>Y</td><td>Security identification.</td></tr>
<tr><td>54</td><td>Side</td><td>N</td><td>N</td><td>N</td><td>Char
Side.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>1</td><td>Buy</td><td>✓</td><td>✓</td></tr><tr><td>2</td><td>Sell</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>38</td><td>OrderQty</td><td>N</td><td>N</td><td>N</td><td>Qty (10.0)
Total Order Quantity.</td></tr>
<tr><td>15</td><td>Currency</td><td>N</td><td></td><td>N</td><td>Currency
Currency used for price.
The combination of an ISIN with a defined currency will Identify uniquely an instrument.

Mandatory if SecurityIDSource (22) = 4 (ISIN) for ISINs traded in more than one currency.
Field will be ignored if SecurityIDSource (22) = M (Marketplace assigned identifier).</td></tr>
<tr><td colspan="2"><Parties></td><td>Y</td><td>Y</td><td>Y</td><td>Party Information.</td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td colspan="2"><entering trader></td><td>Y</td><td>Y</td><td>Y</td><td>Entering User ID.</td></tr>
<tr><td colspan="6">end <Parties></td></tr>
<tr><td colspan="6">end <QuoteReqGrp></td></tr>
</table>

6.10.6 <Parties>

The <Parties> component block comprises all parties participating in a transaction.

Trade messages:
For *User/ Trade Capture Report (UAE/AE)* messages the same structure will be used for both FIX version, FIX 4.2 and FIX 4.4.
Some of the parties will be delivered as occurrences of the parties repeating group, for other parties separate fields will be defined. Details are documented in **chapter 6.10.6.3 Trade Capture Report: Party Information**

Order management and other application messages:
For each party a separate occurrence of the repeating group will be set up for FIX 4.4. For FIX 4.2 a separate field will be defined for each party. Details are documented in **chapter 6.10.6.2 Order Management and Other Messages: Party Information**

6.10.6.1 Party Component Block

The following structure of the party component block is used for FIX 4.2 and 4.4 in the trade capture report. For other messages the structure is used only for FIX 4.4.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="2"><Parties></td><td></td><td></td><td></td><td></td></tr>
<tr><td>453</td><td>NoPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Number of parties involved. Only in FIX 4.4.</td></tr>
<tr><td>448</td><td>PartyID</td><td>Y</td><td>Y</td><td>Y</td><td>String (30)
Party identifier/code. See PartyIDSource (447) and PartyRole (452).</td></tr>
<tr><td>447</td><td>PartyIDSource</td><td>Y</td><td>Y</td><td>Y</td><td>Char
Identifies class or source of the PartyID (448) value.
Required if PartyID is specified.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>D</td><td>Proprietary custom code</td><td>✓</td><td>✓</td></tr>
<tr><td>H</td><td>Kassenverein number</td><td></td><td>✓</td></tr>
</table></td></tr>
<tr><td>452</td><td>PartyRole</td><td>Y</td><td>Y</td><td>Y</td><td>String (2)
Party Role.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>1</td><td>Executing firm</td><td>✓</td><td>✓</td></tr>
<tr><td>4</td><td>Clearing firm</td><td>✓</td><td>✓</td></tr>
<tr><td>7</td><td>Entering firm</td><td>✓</td><td>✓</td></tr>
<tr><td>10</td><td>Settlement location</td><td></td><td>✓</td></tr>
<tr><td>12</td><td>Executing trader</td><td>✓</td><td>✓</td></tr>
<tr><td>13</td><td>Order origination firm</td><td>✓</td><td></td></tr>
<tr><td>16</td><td>Executing system</td><td>✓</td><td>✓</td></tr>
<tr><td>21</td><td>Clearing organization</td><td>✓</td><td></td></tr>
<tr><td>32</td><td>Beneficiary</td><td>✓</td><td></td></tr>
<tr><td>36</td><td>Entering trader</td><td>✓</td><td>✓</td></tr>
<tr><td>38</td><td>Flexible account identifier</td><td>✓</td><td></td></tr>
<tr><td>55</td><td>Session ID</td><td>✓</td><td>✓</td></tr>
<tr><td>59</td><td>Executing unit</td><td>✓</td><td>✓</td></tr>
<tr><td>75</td><td>Location ID</td><td>✓</td><td></td></tr>
<tr><td>90</td><td>Settlement Firm</td><td></td><td>✓</td></tr>
<tr><td>91</td><td>Settlement Account</td><td></td><td>✓</td></tr>
<tr><td>96</td><td>Take-up (trading) firm</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>802</td><td>NoPartySubIDs</td><td>N</td><td>N</td><td>N</td><td>NumInGrp
No of PartySubIDs involved. Only in combination with PartyRole (452) = 12 (Executing trader) possible.</td></tr>
</table>

. . . continued . . .

Tag	Field Name	R	D	C	Description
523	PartySubID	N	C	C	String (6) Owning User Short Name.
803	PartySubIDType	N	C	C	String (1) Type of PartySubID. <table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>2</td><td>Person</td><td>✓</td><td></td></tr></table>
end <Parties>					

6.10.6.2 Order Management and Other Messages: Party Information

For each party a separate occurrence of the repeating group will be set up for FIX 4.4.
For FIX 4.2 a separate field will be defined for each party.
In FIX 4.4 the party identifier is delivered in the field *PartyRole (452)*, the corresponding Party in the field *PartyID (448)*.

Party	Tag and Field for FIX 4.2	PartyRole (452) for FIX 4.4
<clearing firm>	ClearingFirm (439)	4 = Clearing firm
<entering firm>	PartyIDEnteringFirm (20007)	7 = Entering firm
<executing trader>	PartyIDExecutingTrader (20012)	12 = Executing trader
<order origination firm>	PartyIDOrderOriginationFirm (20013)	13 = Order origination firm
<executing system>	PartyIDExecutingSystem (20016)	16 = Executing system
<beneficiary>	PartyIDBeneficiary (20032)	32 = Benficiary
<entering trader>	PartyIDEnteringTrader (20036)	36 = Entering trader
<position account>	PartyIDPositionAccount (20038)	38 = Flexible account identifier
<session ID>	PartyIDSessionID (20055)	55 = Session ID
<executing unit>	PartyIDExecutingUnit (20059)	59 = Executing unit
<location ID>	PartyIDLocationID (20075)	75 = Location ID
<takeup firm>	PartyIDTakeUpTradingFirm (20096)	96 = Take-up (trading) firm

6.10.6.3 Trade Capture Report: Party Information

For *User/ Trade Capture Report (UAE/AE)* messages the same structure will be used for both FIX versions, FIX 4.2 and FIX 4.4.

The entry for the executing trader (*PartyRole (452) = 12 (Executing Trader)*) contains two parties:

- Owning Used ID: field *PartyID (448)*
- Owning User Short Name: field *PartySubID (523)* with *PartySubIDType (803) = 2 (Person)*

Party	Party Field	PartyRole (452)	PartyIDSource (447)
<tcr beneficiary>	PartyID (448)	32 = Beneficiary	D = Proprietary custom code
<tcr clearing firm>	PartyID (448)	4 = Clearing firm	D = Proprietary custom code
<tcr clearing organization>	PartyID (448)	21 = Clearing organization	D = Proprietary custom code
<tcr executing firm>	PartyID (448)	1 = Executing firm	D = Proprietary custom code
<tcr executing firm kvno>	PartyID (448)	1 = Executing firm	H = Kassenverein number
<tcr executing trader>	PartyID (448) Additionally (optional): PartySubID (523) with PartySubIDType (803) = 2 (Person)	12 = Executing trader	D = Proprietary custom code
<tcr executing unit>	PartyID (448)	59 = Executing unit	D = Proprietary custom code
<tcr order origination firm>	PartyID (448)	13 = Order origination firm	D = Proprietary custom code
<tcr position account>	PartyID (448)	38 = Position account	D = Proprietary custom code
<tcr session ID>	PartyID (448)	55 = Session ID	D = Proprietary custom code
<tcr takeup firm>	PartyID (448)	96 = Take-up (trading) firm	D = Proprietary custom code
<tcr settlement account>	PartyID (448)	91 = Settlement account	D = Proprietary custom code
<tcr settlement location>	PartyID (448)	10 = Settlement location	D = Proprietary custom code
<tcr settlement firm>	PartyID (448)	90 = Settlement firm	D = Proprietary custom code
<tcr clearing unit>	PartyIDClearingUnit (25027)	-	-
<tcr settlement unit>	PartyIDSettlementUnit (25120)	-	-

6.10.7 <TargetParties>

The Target Party component block implemented for sessions running version 4.4 cannot be set up for version 4.2 sessions.

6.10.7.1 Target Party Component Block for FIX 4.4

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="2"><TargetParties></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1461</td><td>NoTargetPartyIDs</td><td>Y</td><td>Y</td><td>Y</td><td>NumInGroup
Identifies the number of target parties identified in a mass action. Only in FIX 4.4.</td></tr>
<tr><td>1462</td><td>TargetPartyID</td><td>Y</td><td>Y</td><td>Y</td><td>Int (10)
PartyID value within an target party repeating group.</td></tr>
<tr><td>1463</td><td>TargetPartyIDSource</td><td>Y</td><td>Y</td><td>Y</td><td>Char
PartyIDSource value within an target party repeating group.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>D</td><td>Proprietary custom code</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td>1464</td><td>TargetPartyRole</td><td>Y</td><td>Y</td><td>Y</td><td>Int (2)
PartyRole value within a target party repeating group.<table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>12</td><td>Executing trader</td><td>✓</td><td>✓</td></tr></table></td></tr>
<tr><td colspan="6">end <TargetParties></td></tr>
</table>

6.10.7.2 Target Party Field for FIX 4.2 / Target Party Roles for FIX 4.4

A Target Party component block will not be present in the version 4.2. The party <target executing trader> will be mapped to tag *20612 TargetPartyIDExecutingTrader*

Party	Tag and Field for FIX 4.2	TargetPartyRole (1464) for FIX 4.4
<target executing trader>	TargetPartyIDExecutingTrader (20612)	12 = Executing trader

6.10.8 <RequestingParties>

The Requesting Party component block implemented for sessions running version 4.4 cannot be set up for version 4.2 sessions.

6.10.8.1 Requesting Party Component Block for FIX 4.4

A Requesting Party component block will not be present in the version 4.2. The parties will be mapped to single tags, which will solely carry the RequestingPartyID information

Tag	Field Name	R	D	C	Description
<RequestingParties>					
1657	NoRequestingPartyIDs	Y	Y	Y	NumInGrp Number of requesting party identifiers. Only in FIX 4.4.
1658	RequestingPartyID	Y	Y	Y	Int (10) Party identifier for the requesting party.
1659	RequestingPartyIDSource	Y	Y	Y	Char Identifies the source of the RequestingPartyID (1658) value. **Value** / **Description** / **D** / **C** D / Proprietary custom code / ✓ / ✓
1660	RequestingPartyRole	Y	Y	Y	Int (2) Identifies the type or role of the RequestingPartyID (1658) specified. **Value** / **Description** / **D** / **C** 7 / Entering firm / ✓ / ✓ 12 / Executing trader / ✓ / ✓ 16 / Executing system / ✓ / ✓
end <RequestingParties>					

6.10.8.2 Requesting Party Fields for FIX 4.2 / Requesting Party Roles for FIX 4.4

A Requesting Party component block will not be present in the version 4.2. The parties will be mapped to single tags, which will solely carry the RequestingPartyID information.

Party	Tag and Field for FIX 4.2	RequestingPartyRole (1660) for FIX 4.4
<requesting entering firm>	RequestingPartyIDEnteringFirm (20807)	7 = Entering firm
<requesting executing trader>	RequestingPartyIDExecutingTrader (20812)	12 = Executing trader
<requesting executing system>	RequestingPartyIDExecutingSystem (20816)	16 = Executing system

6.10.9 <InstrmtLegGrp>

The Instrument Leg Group is used for the creation of a Eurex strategy.

Tag	Field Name	R	D	C	Description
<InstrmtLegGrp>					
555	NoLegs	Y	Y		NumInGroup Number of InstrumentLeg repeating group instances.
600	LegSymbol	Y	Y		String (10) Product identifier of the leg security (only applicable for underlying leg). Use "[N/A]" for option legs.
602	LegSecurityID	Y	Y		Int (20) Instrument identifier of the leg security.
609	LegSecurityType	Y	Y		Int (1) Indicates type of leg. **Value** | **Description** | **D** | **C** 1 | Multileg Instrument | ✓ | 2 | Underlying Leg | ✓ |
623	LegRatioQty	Y	Y		Qty (10.0) The ratio of quantity for this individual leg relative to the entire multileg security.
624	LegSide	Y	Y		Char The side of the individual leg of a strategy. **Value** | **Description** | **D** | **C** 1 | Buy | ✓ | 2 | Sell | ✓ |
566	LegPrice	N	N		Price (11.8) Strategy leg underlying price (only applicable for underlying leg).
end <InstrmtLegGrp>					

6.10.10 <InstrmtLegExecGrp>

The Executed Order Leg Group contains the fill information for each leg of Multileg Order.

Tag	Field Name	R	D	C	Description
<InstrmtLegExecGrp>					
555	NoLegs	Y	Y		NumInGroup Number of InstrumentLeg repeating group instances.
600	LegSymbol	Y	Y		String (10) Product identifier of the leg security (only applicable for underlying leg). Use "[N/A]" for option legs.
602	LegSecurityID	N	C		Int (20) Instrument identifier of the leg security.
564	LegPositionEffect	N	C		Char Leg-specific field used for Derivatives position management purposes and indicates whether the leg is submitted to open or close a position.
637	LegLastPx	N	C		Price Price of this leg fill.
1418	LegLastQty	N	C		Qty Quantity executed in this leg fill.
1893	LegExecID	N	C		Int Private identifier of a leg match event, which can be reconciled with the field SideTradeID (1506) in the User/ TradeCaptureReport (UAE/AE).
28715	LegAccount	N	C		String Leg-specific account to book trades and keep positions on: <table><tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr><tr><td>A1 - A9</td><td>Agent account one to nine</td><td>✓</td><td></td></tr><tr><td>G1 and G2</td><td>Give-up account one and two</td><td>✓</td><td></td></tr><tr><td>M1 and M2</td><td>Market Maker account one and two</td><td>✓</td><td></td></tr><tr><td>P1 and P2</td><td>Proprietary account one and two</td><td>✓</td><td></td></tr></table>
end <InstrmtLegExecGrp>					

6.10.11 <LegOrdGrp>

The Order Leg Group is used to specify clearing attributes for the legs of a Multileg Order.

<table>
<tr><th>Tag</th><th>Field Name</th><th>R</th><th>D</th><th>C</th><th>Description</th></tr>
<tr><td colspan="2"><LegOrdGrp></td><td></td><td></td><td></td><td></td></tr>
<tr><td>555</td><td>NoLegs</td><td>Y</td><td>Y</td><td></td><td>NumInGroup
Number of InstrumentLeg repeating group instances.</td></tr>
<tr><td>564</td><td>LegPositionEffect</td><td>Y</td><td>Y</td><td></td><td>Char
Leg-specific field used for Derivatives position management purposes and indicates whether the leg is submitted to open or close a position.
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>O</td><td>Open</td><td>✓</td><td></td></tr>
<tr><td>C</td><td>Close</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td>28715</td><td>LegAccount</td><td>N</td><td>N</td><td></td><td>String
Leg-specific account to book trades and keep positions on:
<table>
<tr><th>Value</th><th>Description</th><th>D</th><th>C</th></tr>
<tr><td>A1 - A9</td><td>Agent account one to nine</td><td>✓</td><td></td></tr>
<tr><td>G1 and G2</td><td>Give-up account one and two</td><td>✓</td><td></td></tr>
<tr><td>M1 and M2</td><td>Market Maker account one and two</td><td>✓</td><td></td></tr>
<tr><td>P1 and P2</td><td>Proprietary account one and two</td><td>✓</td><td></td></tr>
</table></td></tr>
<tr><td colspan="6">end <LegOrdGrp></td></tr>
</table>

6.10.12 <MarketSegmentGrp>

The Market Segment Group provides security definition for the market segment that the security participates in.

Tag	Field Name	R	D	C	Description
<MarketSegmentGrp>					
1310	NoMarketSegments	Y	Y		NumInGroup Number of Market Segments on which a security may trade.
1301	MarketID	Y	Y		Exchange Market Identifier Code of the trading market according to ISO 10383.
1148	LowLimitPrice	Y	Y		Price Allowable low limit price for the trading day. A key parameter in validating order price. Used as the lower band for validating order prices. Orders submitted with prices below the lower limit will be rejected
1149	HighLimitPrice	Y	Y		Price Allowable high limit price for the trading day. A key parameter in validating order price. Used as the upper band for validating order prices. Orders submitted with prices above the upper limit will be rejected
1144	ImpliedMarketIndicator	Y	Y		Int Indicates that an implied market should be created for either the legs of a multileg instrument (Implied-in) or for the multileg instrument based on the existence of the legs (Implied-out). Determination as to whether implied markets should be created is generally done at the level of the multileg instrument. Commonly used in listed derivatives. **Value** / **Description** / **D** / **C**: 0 / Not implied / ✓ / 3 / Both Implied-in and Implied-out / ✓ /
1377	MultilegModel	Y	Y		Int Specifies if a strategy is temporarily (user-defined) or permanently (predefined) available. **Value** / **Description** / **D** / **C**: 0 / Predefined Multileg Security / ✓ / 1 / User-defined Multleg Security / ✓ /
end <MarketSegmentGrp>					

6.10.13 <DisplayInstruction>

Display instruction is used for Iceberg Order.

Tag	Field Name	R	D	C	Description
<DisplayInstruction>					
1138	DisplayQty	N		C	Qty (10.0) This field provides the display quantity. For iceberg order entry or modify it specifies the quantity that should be visible to the market (peak). On execution reports it contains the currently displayed quantity (remaining peak). If the remaining unexecuted quantity is smaller than the display quantity the remaining unexecuted quantity will be displayed. Required if DisplayMethod (1084) = ”1”. Not allowed in FIX requests if DisplayMethod (1084) = ”3”.
1084	DisplayMethod	N		Y	Char Defines if the field DisplayQty (1138) or the fields DisplayLowQty (1085) and DisplayHighQty (1086) will be used. If not specified the default DisplayMethod is ”1”. **Value** / **Description** / **D** / **C**: 1 / Initial / / ✓ 3 / Random / / ✓
1085	DisplayLowQty	N		C	Qty (10.0) Defines the lower quantity limit to a randomized refresh of displayed quantity. DisplayLowQty must be less than or equal to DisplayHighQty (1086). Required if DisplayMethod (1084) = ”3”.
1086	DisplayHighQty	N		C	Qty (10.0) Defines the upper quantity limit to a randomized refresh of displayed quantity. Required if DisplayMethod (1084) = ”3”.
end <DisplayInstruction>					

6.10.14 <PegInstructions>

Peg instructions for a Trailing Stop order.

Tag	Field Name	R	D	C	Description
<PegInstructions>					
211	PegOffsetValue	Y		Y	Price (11.8) Amount (signed) added to the peg for a pegged order in the context of the PegOffsetType.
836	PegOffsetType	Y		Y	Int (1) Type of Peg Offset value. **Value** / **Description** / **D** / **C** 0 / Price / / ✓ 4 / Percentage / / ✓
end <PegInstructions>					