DEUTSCHE BÖRSE GROUP

Deutsche Börse Group's T7

FIX LF Interface

Derivatives Message Reference

Release 9.0

FIX LF Version	9.0
FIX LF Subversion	D0001
Build Version	90.565.4.ga-90005065-64
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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
TES	T7 Entry Service
GUI	Graphical User Interface

2 Introduction

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

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

The T7 FIX LF interface is intended for participants that require a standard FIX connection to the exchange and supports all T7 market types.

The document "T7 FIX Gateway FIX 4.2 and 4.4 Manual" provides the description of the main concepts for all supported market types (cash and derivatives).

The purpose of this document is to provide all message formats for the derivatives market part of the FIX LF interface.

In addition to this document two corresponding XML files, the QuickFix Engine dictionary and a message reference file including message and field descriptions are published.

The FIX LF interface will make use of the FIX 4.4 version only.

3 Change Log

3.1 T7 Release 9.0 – FIX LF 9.0-D0001

Changes to the T7 Release 9.0 – FIX Gateway Production Version:

- One TCP port for all FIX LF sessions.
- FIX 4.4 only - no FIX 4.2 support.
- No support of cross-market sessions.
- In all FIX LF requests the field *TargetCompID(56)* must be set to the XMIC code (e.g. XEUR) the related FIX LF session belongs to.
- In all FIX LF notifications/responses the field *SenderCompID(49)* is set to the related T7 XMIC code (e.g. XEUR).
- Logon Request (msgType="A"): added field *DefaultCstmApplVerID(1408)*; removed field *TestMessageIndicator(464)*.
- Logon Response ("A"): added fields *TradeSesMode(339)*, and *DefaultCstmApplVerSubID(28763)*
- Removed field *LastMsgSeqNumProcessed(369)* from the Header.
- Field *ExecID(17)* has another format/content.

- All text fields are sent without filling blanks.
- All Quantity, Price, Rate and Amount fields are formatted as decimals.
- No fragmentation needed: removed field *ULastFragment(30893)* from message User Order Mass Action Report ("UBZ").
- Removed field *SecondarySessionID (28767)* from message Session Details List ("U6").
- Order Drop Copy will also provide orders of the ETI HF sessions belonging to the business unit of the related FIX LF session.
- Removed valid values *Market Reset (102)*, *Service resumed (105)*, *No more messages for this trading venue (200)*, *Message processing suspended (202)*, *Message processing resumed (203)* from field *TradSesEvent* in message Trading Session Status ("h").
- No Password change possible via Logon ("A"). Please use the SAP portal for maintaining the session password.
- Removed field *AvgPx(6)* from message Execution Report ("8").
- Changed data type of field *MatchType(574)* from String to Int.
- No need for an XMIC field in outgoing FIX messages since this information is already in the *SenderCompID(49)*.
- Removed field *MarketID(1301)* from messages Session Details List ("U6"), User Order Mass Action Report ("UBZ"), Trading Session Status ("h").
- Removed field *LastMkt(30)* from message Trade Capture Report ("AE").
- Removed field *ExDestination(100)* from Execution Report ("8").
- FIX LF Gateway access details (address and port) are provided via Network Access Guide - documentation only.
- Changed behaviour for Execution Report ("8") with *OrdStatus (39)* set to *4 (Canceled)*:
    - FIX LF provides Entering and Executing Trader/Firm and some more order information than FIX Gateway.
- Short names are set for Trader and Business Unit in message Execution Report ("8").

- Entering trader is not set for message Execution Report ("8") with *ExecType (150)* set to *L (Triggered by system)*.

- Removed fields *TriggerType(1100)* and *TriggerPrice(1102)* from message Execution Report ("8"). The stop price of OCO orders is provided in field *StopPx (99)*

- Removed field *SecondaryOrderID(198)* from messages Execution Report ("8"), and Trade Capture Report ("AE").

- Information about executing session (occurence: session ID) not always set in message User Order Mass Action Report ("UBZ"). Then, the message informs all session of the related business unit about the scope of the cancellation.

- The *field HeartBtInt (108)* in the Session Logon request message ("A") must be greater than or equal to 30.

- The Session Logon request message ("A") must be sent within 25 seconds after the TCP connection has been established.

- The message Session Details List ("U6") will provide details for all trading sessions of the own business unit.

- Removed field *SecondarySessionID (28767)* from message Session Details List ("U6").

- Removed valid value *2 (Regular Back Office Session)* from field *SessionSubMode (28735)* in message Session Details List ("U6").

- Removed field *ReturnCodeSource (25024)* from messages Reject ("3"), Execution Report ("8").

- Removed field N*otAffOrigClOrdID (1372)* from message User Order Mass Action Report ("UBZ").

4 Message Formats

The following chapters provide details on the administrative and application messages used by FIX LF. Additionally, information on data types is provided.

The interface version used by the participant needs to be provided during Logon in *DefaultCstmApplVerID (1408)*; the corresponding response message will return the interface version, which the FIX LF Gateway currently uses, in the same field.

The interface version will allow the participant to recognize that FIX LF has changed. The build number shows to which FIX LF XML file, and the FIX LF message reference belongs to.

4.1 Data Types

FIX LF supports the following data types:

Data Type	Description
STRING	Alphanumeric free format strings containing characters from the following set: \x20,\x23-\x25, \x28-\x2A, \x2C-\x3B, \x3F, \x41-\x5F, \x61-\x7B, \x7D,\x7E.
INT (based on STRING)	Sequence of digits without commas or decimals and optional leading sign character.
FLOAT (based on STRING)	Sequence of digits with optional decimal point and leading sign character.
CHAR (based on STRING)	Single character value, can include any alphanumeric character.
BOOLEAN (based on CHAR)	Char field containing either 'Y' or 'N'.
MULTIPLEVALUESSTRING (based on STRING)	String containing one or more space delimited char fields.
LOCALMKTDATE (based on STRING)	Date of Local Market in YYYYMMDD format.
CURRENCY (based on STRING)	ISO currency code (3 characters).
LENGTH (based on INT)	Length of the FIX LF message in bytes. Value must be positive.
SEQNUM (based on INT)	Message sequence number. Value must be positive.
NUMINGROUP (based on INT)	Number of entries in a repeating group. Value must be positive.
QTY (based on FLOAT)	FLOAT (15.4) field with 15 digits before decimal point and at most 4 significant decimal places.
PRICE (based on FLOAT)	FLOAT (11.8) field representing a price with 11 digits before decimal point and at most 8 significant decimal places.
AMT (based on FLOAT)	FLOAT (11.8) field representing a prices times a quantity with 11 digits before decimal point and at most 8 significant decimal places.

Data Type	Description
UTCTIMESTAMP (based on STRING)	Time/date combination in YYYYMMDD-HH:MM:SS[.sssssssss] format. The milli/micro/nanosecond part is optional. The FIX LF gateway provides timestamps in seconds only.
PERCENTAGE (based on FLOAT)	FLOAT (3.7) field representing a percentage with 3 digits before decimal point and at most 7 significant decimal places.

5 Overview of Supported Message Types

The following message formats are based on:

- Interface Version: 9.0
- Build Number: 90.565.4.ga-90005065-64

6 Message Header and Trailer

6.1 Header

Tag	Field Name	Req'd	Data Type	Description
8	BeginString	Y	STRING	Identifies beginning of new message and protocol version. Value: FIX.4.4 — Description: VERSION 44
9	BodyLength	Y	LENGTH	Message length, in bytes, forward to the CheckSum field.
35	MsgType	Y	STRING(3)	Defines the message type. 0 Heartbeat 1 Test Request 2 Resend Request 3 Reject 4 Sequence Reset 5 Logout 8 Execution Report A Logon j Business Message Reject AE Trade Capture Report h Trading Session Status UBZ User order mass action report U6 Session Details List
34	MsgSeqNum	Y	SEQNUM	Message sequence number
43	PossDupFlag	N	BOOLEAN	Indicates possible retransmission of message with this sequence number. N Original transmission Y Possible duplicate
49	SenderCompID	Y	STRING	Assigned identifier of the party sending the message.
52	SendingTime	Y	UTCTIMESTAMP	Time of message transmission.
56	TargetCompID	Y	STRING	Assigned identifier of the party receiving the message.

Tag	Field Name	Req'd	Data Type	Description
97	PossResend	N	BOOLEAN	Indicates that message may contain information that has been sent under another sequence number. Value: N = Original transmission; Y = Possible Resend
122	OrigSendingTime	N	UTCTIME-STAMP	Required if PossDupFlag (43) = "Y".

6.2 Trailer

Tag	Field Name	Req'd	Data Type	Description
10	CheckSum	Y	INT	Three byte, simple checksum.

7 Administrative Messages

Overview of messages contained in this section:

FIX Message	MsgType
Logon	A
Logout	5
Heartbeat	0
Test Request	1
Resend Request	2
Reject	3
Sequence Reset	4

7.1 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.

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='A' />				
98	EncryptMethod	Y	INT	Method of encryption. Value: 0 — None/other
108	HeartBtInt	Y	INT	Heartbeat interval (seconds). The value must be greater than or equal to 30.
554	Password	N	STRING(32)	Password.
141	ResetSeqNumFlag	N	BOOLEAN	Logon requests with ResetSeqNumFlag (141) set to Y will trigger a reset of Sequence numbers at the participant side only. The Sequence numbering for the messages generated from FIX Gateway will remain unchanged. Value: N — No; Y — Yes, reset Sequence numbers
1600	FIXEngineName	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	STRING(30)	Provides the version of the infrastructure component. This field is required in the messages sent to the FIX Gateway.
1602	FIXEngineVendor	N	STRING(30)	Provides the name of the vendor providing the infrastructure component. This field is required in the messages sent to the FIX Gateway.
1603	ApplicationSystem-Name	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. This field is required in the messages sent to the FIX Gateway.
1604	ApplicationSystem-Version	N	STRING(30)	Provides the version of the application system being used to initiate FIX application messages. This field is required in the messages sent to the FIX Gateway.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>1605</td><td>ApplicationSystem-Vendor</td><td>N</td><td>STRING(30)</td><td>Provides the vendor of the application system. This field is required in the messages sent to the FIX Gateway.</td></tr>
<tr><td>1408</td><td>DefaultCstmApplVer-ID</td><td>Y</td><td>STRING</td><td>The default custom application version ID that is the default for a session.</td></tr>
<tr><td>28763</td><td>DefaultCstmApplVer-SubID</td><td>N</td><td>STRING(5)</td><td>Interface subversion. Identifies interface changes within one T7 release. Response only.
<table><tr><td>Value</td><td>Description</td></tr><tr><td>D0001</td><td>Derivatives subversion</td></tr></table></td></tr>
<tr><td>339</td><td>TradSesMode</td><td>N</td><td>INT</td><td>Trading Session Mode. Response only.
<table><tr><td>Value</td><td>Description</td></tr><tr><td>1</td><td>Development</td></tr><tr><td>2</td><td>Simulation</td></tr><tr><td>3</td><td>Production</td></tr><tr><td>4</td><td>Acceptance</td></tr><tr><td>5</td><td>Disaster Recovery</td></tr></table></td></tr>
<tr><td colspan="5"><Trailer /></td></tr>
</table>

7.2 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.

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='5' />				
58	Text	N	STRING(128)	Free format text string.
1409	SessionStatus	N	INT	Session status. Value: 4 – Session logout complete Value: 5 – Invalid user name or password
<Trailer />				

7.3 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.

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='0' />				
112	TestReqID	N	STRING	Identifier included in Test Request message to be returned in resulting Heartbeat.
<Trailer />				

7.4 Test Request

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

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='1' />				
112	TestReqID	Y	STRING	Identifier included in Test Request message to be returned in resulting Heartbeat.
<Trailer />				

7.5 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	Req'd	Data Type	Description
<Header with MsgType='2' />				
7	BeginSeqNo	Y	SEQNUM	Message Sequence number of first message in range to be resent.
16	EndSeqNo	Y	SEQNUM	Message Sequemce number of last message in range to be resent.
<Trailer />				

7.6 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	Req'd	Data Type	Description
<Header with MsgType='3' />				
45	RefSeqNum	Y	SEQNUM	Reference message Sequence number.
58	Text	N	STRING(128)	Free format text string.
371	RefTagID	N	INT	The tag number of the FIX field being referenced.
372	RefMsgType	Y	STRING	The MsgType (35) of the FIX message being referenced.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>373</td><td>SessionRejectReason</td><td>N</td><td>INT</td><td>Code to identify reason for a session-level Reject message.
<table>
<tr><th>Value</th><th>Description</th></tr>
<tr><td>0</td><td>Invalid tag number</td></tr>
<tr><td>1</td><td>Required tag missing</td></tr>
<tr><td>2</td><td>Tag not defined for this message type</td></tr>
<tr><td>3</td><td>Undefined tag</td></tr>
<tr><td>4</td><td>Tag specified without value</td></tr>
<tr><td>5</td><td>Value is incorrect for this tag</td></tr>
<tr><td>6</td><td>Incorrect data format for value</td></tr>
<tr><td>7</td><td>Decryption problem</td></tr>
<tr><td>8</td><td>Signature problem</td></tr>
<tr><td>9</td><td>CompID Problem</td></tr>
<tr><td>10</td><td>Sending time accuracy problem</td></tr>
<tr><td>11</td><td>Invalid msgtype</td></tr>
<tr><td>12</td><td>XML Validation Error</td></tr>
<tr><td>13</td><td>Tag appears more than once</td></tr>
<tr><td>14</td><td>Tag specified out of required order</td></tr>
<tr><td>15</td><td>Repeating group fields out of order</td></tr>
<tr><td>16</td><td>Incorrect NumInGroup count for repeating group</td></tr>
<tr><td>17</td><td>Non 'data' value includes field delimiter</td></tr>
<tr><td>18</td><td>Invalid/Unsupported Application Version</td></tr>
<tr><td>99</td><td>Other</td></tr>
</table></td></tr>
<tr><td>25023</td><td>ReturnCode</td><td>N</td><td>INT</td><td>Return code.</td></tr>
<tr><td colspan="5"><Trailer /></td></tr>
</table>

7.7 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>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td colspan="5"><Header with MsgType='4' /></td></tr>
<tr><td>123</td><td>GapFillFlag</td><td>N</td><td>BOOLEAN</td><td>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></tr>
<tr><td>N</td><td>Sequence Reset, Ignore Msg Seq Num</td></tr>
<tr><td>Y</td><td>Gap Fill Message, Msg Seq Num Field Valid</td></tr>
</table></td></tr>
<tr><td>36</td><td>NewSeqNo</td><td>Y</td><td>SEQNUM</td><td>New Sequence number.</td></tr>
<tr><td colspan="5"><Trailer /></td></tr>
</table>

8 Application Messages

Overview of messages contained in this section:

FIX Message	MsgType
Trade Capture Report	AE
Trading Session Status	h
Session Details List	U6
Execution Report	8
User Order Mass Action Report	UBZ
Business Message Reject	j

8.1 Trade Capture Report

The Trade Capture Report message is used to report trades and trade reversals via FIX Back-office sessions.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td colspan="5"><Header with MsgType='AE' /></td></tr>
<tr><td colspan="5"><Instrument></td></tr>
<tr><td>55</td><td>Symbol</td><td>Y</td><td>STRING(10)</td><td>T7 product identifier. If the ISIN is used as instrument identifier in the FIX request (SecurityAltID (455)), 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>Y</td><td>INT</td><td>T7 instrument identifier.</td></tr>
<tr><td>22</td><td>SecurityIDSource</td><td>Y</td><td>STRING(1)</td><td>Source of the securityID<table><tr><th>Value</th><th>Description</th></tr><tr><td>M</td><td>Marketplace-assigned identifier</td></tr></table></td></tr>
<tr><td>1227</td><td>ProductComplex</td><td>N</td><td>INT</td><td>Identifies an entire suite of products for a given market. In Futures this may be 'interest rates', 'agricultural', 'equity indexes', etc.<table><tr><th>Value</th><th>Description</th></tr><tr><td>1</td><td>Simple Instrument</td></tr><tr><td>2</td><td>Standard Option Strategy</td></tr><tr><td>3</td><td>Non-standard Option Strategy</td></tr><tr><td>4</td><td>Volatility Strategy</td></tr><tr><td>5</td><td>Futures Spread</td></tr><tr><td>6</td><td>Inter Product Spread</td></tr><tr><td>7</td><td>Standard Future Strategy</td></tr><tr><td>8</td><td>Pack and Bundle</td></tr><tr><td>9</td><td>Strip</td></tr><tr><td>10</td><td>Flexible Simple Instrument (used only for TES trades)</td></tr></table></td></tr>
<tr><td>167</td><td>SecurityType</td><td>N</td><td>STRING(4)</td><td>Indicates the type of security.<table><tr><th>Value</th><th>Description</th></tr><tr><td>MLEG</td><td>Multileg Instrument</td></tr></table></td></tr>
<tr><td>762</td><td>SecuritySubType</td><td>N</td><td>INT</td><td>Strategy type.</td></tr>
<tr><td colspan="5"></Instrument></td></tr>
<tr><td colspan="5"><RegulatoryTradeIDGrp>, cardinality: 1, record counter: NoRegulatoryTradeIDs</td></tr>
<tr><td>1903</td><td>RegulatoryTradeID</td><td>N</td><td>STRING</td><td>Trading Venue Transaction Identifier (TVTIC).</td></tr>
</table>

Tag	Field Name	Req'd	Data Type	Description
1906	RegulatoryTrade-IDType	N	INT	Specifies the type of trade identifier provided in RegulatoryTradeID (1903). Value: 5 — Trading venue transaction identifier (TVTIC)
</RegulatoryTradeIDGrp>				
<SRQSRelatedTradeIDGrp>, cardinality: unrestricted, record counter: NoSRQSRelatedTradeIDs				
25152	SRQSRelatedTradeID	N	INT	Provides together with the NegotiationID a link to the corresponding Xetra/Eurex Enlight deal.
</SRQSRelatedTradeIDGrp>				
<RootParties>, cardinality: 0-1, record counter: NoRootPartyIDs, containing occurrences: root_execution_venue				
1117	>RootPartyID	Y	STRING(10)	Root party identifier.
1118	>RootPartyIDSource	Y	CHAR	Identifies class or source of the RootPartyID (1117) value. D — Proprietary custom code G — Market identifier code
1119	>RootPartyRole	Y	INT	Identifies the type role of the RootPartyID (1117) specified. 1 — Executing firm 12 — Executing trader 36 — Entering trader 73 — Execution venue
</RootParties>				
<TrdCapRptSideGrp>, cardinality: 1, record counter: NoSides, containing occurrences: Side1				
54	Side	Y	CHAR	Side of trade. 1 — Buy 2 — Sell
1009	SideLastQty	N	QTY	Used to indicate the quantity on one of a multi-sided Trade Capture Report.
1506	SideTradeID	N	INT	Used to represent the trade ID for each side of the trade assigned by an intermediary.
<Parties>, cardinality: 1-23, record counter: NoPartyIDs				
448	>PartyID	Y	STRING(35)	Party identifier/code. Party identifier/code. See PartyIDSource (447) and PartyRole (452).

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>447</td><td>>PartyIDSource</td><td>Y</td><td>CHAR</td><td>Identifies class or source of the PartyID (448) value. Required if PartyID is specified.<table><tr><th>Value</th><th>Description</th></tr><tr><td>D</td><td>Proprietary custom code</td></tr><tr><td>P</td><td>Short code identifier</td></tr></table></td></tr>
<tr><td>452</td><td>>PartyRole</td><td>Y</td><td>INT</td><td>Party Role.<table><tr><th>Value</th><th>Description</th></tr><tr><td>1</td><td>Executing firm</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>4</td><td>Clearing firm</td></tr><tr><td>7</td><td>Entering firm</td></tr><tr><td>12</td><td>Executing trader</td></tr><tr><td>13</td><td>Order origination firm</td></tr><tr><td>16</td><td>Executing system</td></tr><tr><td>17</td><td>Contra firm</td></tr><tr><td>21</td><td>Clearing organization</td></tr><tr><td>32</td><td>Beneficiary</td></tr><tr><td>36</td><td>Entering trader</td></tr><tr><td>37</td><td>Contra trader</td></tr><tr><td>38</td><td>Position account</td></tr><tr><td>55</td><td>Session ID</td></tr><tr><td>59</td><td>Executing unit</td></tr><tr><td>75</td><td>Location ID</td></tr><tr><td>96</td><td>Take-up (trading) firm</td></tr><tr><td>122</td><td>Investment decision maker</td></tr></table></td></tr>
<tr><td>2376</td><td>>PartyRoleQualifier</td><td>N</td><td>INT</td><td>Indicates the nature of value submitted in the field PartyID (448). PartyRoleQualifier (2376) = 21 (Specialist) and 22 (Algorithm) are only possible together with PartyIDSource (447) = 'D'. PartyRoleQualifier (2376) = 24 (Natural person) is only possible together with PartyIDSource (447) = 'P'. PartyRoleQualifier (2376) = 21 (Specialist) is not allowed in request messages.<table><tr><th>Value</th><th>Description</th></tr><tr><td>22</td><td>Algorithm</td></tr><tr><td>24</td><td>Natural person</td></tr></table></td></tr>
</table>

Tag	Field Name	Req'd	Data Type	Description
802	>NoPartySubIDs	N	NUMINGROUP	Number of PartySubIDs. Only one entry. Only in combination with PartyRole (452) = 7 (Entering firm), 12 (Executing trader) and 36 (Entering trader) possible.
523	>PartySubID	N	STRING(6)	Person (Short name).
803	>PartySubIDType	N	INT	Type of PartySubID. Value: 2 — Person
</Parties>				
25027	PartyIDClearingUnit	N	STRING	Party ID Clearing Unit.
1	Account	N	STRING(2)	Account mnemonic as agreed between buy and sell sides.
77	PositionEffect	N	CHAR	Indicates whether the resulting position after a trade should be an opening position or closing position. Value: O — Open; C — Close
58	Text	N	STRING(128)	Free format text string.
1115	OrderCategory	N	CHAR	Defines the type of interest behind a trade (fill or partial fill). Value: 1 — Order; 2 — Quote
1444	SideLiquidityInd	N	INT	Indicates whether the order added or removed liquidity. Field is used only for on-book trades. Value: 1 — Added Liquidity (passive); 2 — Removed Liquidity (aggressive); 4 — Auction (neither passive nor aggressive, includes VDO matching at midpoint)
1851	StrategyLinkID	N	INT	Identifier that links all trades resulting from a match step of a strategy order.
37	OrderID	N	INT	Exchange Order ID generated by the T7 system.

Tag	Field Name	Req'd	Data Type	Description
40	OrdType	N	CHAR	Order type. Value: 1 Market; 2 Limit; 3 Stop; 4 Stop limit
44	Price	N	PRICE	Price per unit of quantity (e.g. per share).
151	LeavesQty	N	QTY	Quantity open for further execution. If the OrdStatus (39) is Canceled, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty (38) - CumQty (14).
14	CumQty	N	QTY	Cumulated executed quantity of an order. Total quantity (e.g. number of shares) filled.
<OrderAttributeGrp>, cardinality: 1-2, record counter: NoOrderAttributes				
2594	>OrderAttributeType	N	INT	Type of order attribute. Value: 2 Liquidity Provision Activity Order; 3 Risk Reduction Order
2595	>OrderAttributeValue	N	STRING	Value associated with the order attribute type specified in OrderAttributeType (2594). Value: Y Attribute is set.
</OrderAttributeGrp>				
1031	CustOrderHandlingInst	N	CHAR	Rate identifier in accordance with the FIA guidelines. Value: W Desk; Y Electronic; C FCM-provided screen; G FCM API or FIX; H Algo Engine; D Default
25008	FreeText2	N	STRING(12)	Assigned by the party which originates the order.
25009	FreeText3	N	STRING(12)	Assigned by the party which originates the order.

Tag	Field Name	Req'd	Data Type	Description
28585	SideLastPx	N	PRICE	Fill price for the original Eurex strategy. Only provided in case of a multileg instrument.
</TrdCapRptSideGrp>				
31	LastPx	Y	PRICE	Price of this (last) fill.
32	LastQty	Y	QTY	Quantity (e.g. shares) bought/sold on this (last) fill.
75	TradeDate	Y	LOCALMKT-DATE	Indicates date of trade referenced in this message in YYYYMMDD format.
442	MultiLegReporting-Type	N	CHAR	This field indicates if the Trade Capture Report results from a single leg or multileg order. Value: 1 = Single leg; 2 = Individual leg of a multileg security
571	TradeReportID	Y	INT	Unique identifier of the Trade Capture Report.
574	MatchType	N	INT	The point in the matching process at which this trade was matched. Value: 3 = Confirmed Trade Report; 4 = Auto Match Incoming; 5 = Cross Auction; 7 = Call Auction; 11 = Auto Match Resting; 13 = Liquidity Improvement Cross
700	ReversalIndicator	N	BOOLEAN	Reversal Indicator. Value: N = No reversal; Y = Reversal
748	TotNumTradeReports	N	INT	Total number of trade reports returned.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>828</td><td>TrdType</td><td>Y</td><td>INT</td><td>Identifier of the trade type.<table><tr><th>Value</th><th>Description</th></tr><tr><td>0</td><td>Regular Trade (on-book)</td></tr><tr><td>1</td><td>Block Trade</td></tr><tr><td>12</td><td>Exchange for Swap (EFS)</td></tr><tr><td>50</td><td>Portfolio Compression Trade</td></tr><tr><td>1000</td><td>Vola Trade</td></tr><tr><td>1001</td><td>Exchange for physical (EFP) Fin trade</td></tr><tr><td>1002</td><td>Exchange for physical (EFP) Index Future trade</td></tr><tr><td>1004</td><td>Trade at market</td></tr><tr><td>1006</td><td>Xetra/Eurex EnLight triggered trade</td></tr><tr><td>1007</td><td>QTPIP Block Trade</td></tr></table></td></tr>
<tr><td>830</td><td>TransferReason</td><td>Y</td><td>STRING</td><td>Reason trade is being transferred<table><tr><th>Value</th><th>Description</th></tr><tr><td>1</td><td>Owner</td></tr><tr><td>2</td><td>Clearer</td></tr></table></td></tr>
<tr><td>856</td><td>TradeReportType</td><td>Y</td><td>INT</td><td>Type of Trade Report.<table><tr><th>Value</th><th>Description</th></tr><tr><td>0</td><td>Submit</td></tr><tr><td>1</td><td>Alleged</td></tr><tr><td>5</td><td>No/Was (Replaced)</td></tr><tr><td>7</td><td>(Locked-In) Trade Break</td></tr></table></td></tr>
<tr><td>880</td><td>TrdMatchID</td><td>N</td><td>INT</td><td>Identifier assigned to a trade by a matching system.</td></tr>
<tr><td>1003</td><td>TradeID</td><td>Y</td><td>INT</td><td>The unique ID assigned to the trade entity once it is received or matched by the exchange or central counterparty.</td></tr>
<tr><td>1011</td><td>MessageEventSource</td><td>Y</td><td>INT</td><td>Receiver of a message.<table><tr><th>Value</th><th>Description</th></tr><tr><td>200</td><td>On-Book Trade Notification</td></tr><tr><td>201</td><td>TES Trade Notification</td></tr></table></td></tr>
<tr><td>1126</td><td>OrigTradeID</td><td>N</td><td>INT</td><td>Used to preserve original trade id when original trade is being referenced in a subsequent trade transaction such as a transfer.</td></tr>
</table>

Tag	Field Name	Req'd	Data Type	Description
1390	TradePublishIndicator	N	INT	Indicates if a trade should be or has been published via a market publication service. Value: 2 – Deferred Publication; 3 – Published
1596	ClearingTradePrice	N	PRICE	Clearing price.
1649	RelatedSymbol	N	INT	Product identifier of the originating Eurex strategy.
1650	RelatedSecurityID	N	INT	Instrument identifier of the original Eurex strategy.
1724	OrderOrigination	N	INT	Direct market access identifier. Value: 5 – Direct market access
1815	TradingCapacity	N	INT	Trading capacity. Value: 1 – Customer (Agency); 5 – Principal (Proprietary); 6 – Market Maker
2489	PackageID	N	INT	Identifier for a TES trade.
25161	BasketTrdMatchID	N	INT	Basket ID assigned by the T7 system. The field will be populated for TES trades that are part of a basket.
25162	BasketSideTradeReportID	N	STRING(20)	Individual Basket ID assigned by the approver of a basket. The field will be set for TES trades that are part of a basket if the field was populated when the basket was approved.
25182	BasketPartyContraFirm	N	STRING(20)	Counterparty information for TES trades that are part of a basket.
25191	CompressionID	N	INT	TES Trade Compression ID.
28586	OrderSide	N	CHAR	Side of the order in the original T7 strategy. Value: 1 – Buy; 2 – Sell

Tag	Field Name	Req'd	Data Type	Description
28587	RelatedProduct-Complex	N	INT	Instrument type in the original Eurex strategy. Value: 2 = Standard Option Strategy; 3 = Non-standard Option Strategy; 4 = Volatility Strategy; 5 = Futures Spread; 6 = Inter Product Spread; 7 = Standard Future Strategy; 8 = Pack and Bundle; 9 = Strip
28610	MatchSubType	N	INT	Indicates the call auction type the trade originates from. Field is used only for on-book trades. Value: 1 = Opening auction; 2 = Closing auction; 3 = Intraday auction; 4 = Circuit breaker auction; 6 = Outside BBO (CLIP matching outside BBO)
28736	ClearingTradeQty	N	QTY	Quantity used for clearing.
28750	MultilegPriceModel	N	INT	Price decomposition method for legs of a complex instrument. Value: 0 = Standard (leg level prices provided by system); 1 = User defined (leg level prices provided by user)
28758	NegotiationID	N	STRING	ID of a Xetra/Eurex EnLight negotiation.
28899	BasketProfileID	N	STRING	Basket Profile ID.
30060	UTransactTime	Y	STRING	Transaction timestamp. Number of nanoseconds since Jan 1, 1970.
<Trailer />				

8.2 Trading Session Status

The Trading Session Status message informs about session related events.

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='h' />				
58	Text	N	STRING(128)	Free format text string.
336	TradingSessionID	Y	INT	Identifier for trading session. Value: 1 — Description: Day
1368	TradSesEvent	Y	INT	Trading session event type. Value: 103 — Description: End of restatement Value: 201 — Description: Message transmission ended
340	TradSesStatus	Y	INT	State of the trading session. Value: 0 — Description: Unknown Value: 2 — Description: Open Value: 3 — Description: Closed
1300	MarketSegmentID	N	INT	Product identifier.
30060	UTransactTime	N	STRING	Transaction timestamp. Number of nanoseconds since Jan 1, 1970.
30075	UTradeDate	N	LOCALMKT-DATE	Date of trading session in YYYYMMDD format.
<Trailer />				

8.3 Session Details List

Session Details List provides a list of all trading sessions of the own business unit.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td colspan="5"><Header with MsgType='U6' /></td></tr>
<tr><td colspan="5"><SessionGrp>, cardinality: unrestricted, record counter: NoSessions</td></tr>
<tr><td>28766</td><td>GatewaySessionID</td><td>Y</td><td>INT</td><td>The gateway session ID.</td></tr>
<tr><td>28730</td><td>SessionMode</td><td>Y</td><td>INT</td><td>The session type.
<table>
<tr><th>Value</th><th>Description</th></tr>
<tr><td>0</td><td>ETI High Frequency session</td></tr>
<tr><td>1</td><td>ETI Low Frequency session</td></tr>
<tr><td>2</td><td>T7 GUI session</td></tr>
<tr><td>3</td><td>FIX LF session</td></tr>
</table></td></tr>
<tr><td>28735</td><td>SessionSubMode</td><td>Y</td><td>INT</td><td>The session subtype.
<table>
<tr><th>Value</th><th>Description</th></tr>
<tr><td>0</td><td>Regular Trading session</td></tr>
<tr><td>1</td><td>FIX Trading session</td></tr>
</table></td></tr>
<tr><td colspan="5"></SessionGrp></td></tr>
<tr><td>30060</td><td>UTransactTime</td><td>Y</td><td>STRING</td><td>Transaction timestamp. Number of nanoseconds since Jan 1, 1970.</td></tr>
<tr><td colspan="5"><Trailer /></td></tr>
</table>

8.4 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.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td colspan="5"><Header with MsgType='8' /></td></tr>
<tr><td colspan="5"><Parties>, cardinality: 0-10, record counter: NoPartyIDs, containing occurrences: beneficiary , entering_firm , entering_trader , executing_trader , executing_unit , location_id , order_origination_firm , position_account , session_ID , takeup_firm</td></tr>
<tr><td>448</td><td>>PartyID</td><td>Y</td><td>STRING(35)</td><td>Party identifier/code. Party identifier/code. See PartyIDSource (447) and PartyRole (452).</td></tr>
<tr><td>447</td><td>>PartyIDSource</td><td>Y</td><td>CHAR</td><td>Identifies class or source of the PartyID (448) value. Required if PartyID is specified.<table><tr><th>Value</th><th>Description</th></tr><tr><td>D</td><td>Proprietary custom code</td></tr><tr><td>P</td><td>Short code identifier</td></tr></table></td></tr>
<tr><td>452</td><td>>PartyRole</td><td>Y</td><td>INT</td><td>Party Role.<table><tr><th>Value</th><th>Description</th></tr><tr><td>1</td><td>Executing firm</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>4</td><td>Clearing firm</td></tr><tr><td>7</td><td>Entering firm</td></tr><tr><td>12</td><td>Executing trader</td></tr><tr><td>13</td><td>Order origination firm</td></tr><tr><td>16</td><td>Executing system</td></tr><tr><td>17</td><td>Contra firm</td></tr><tr><td>21</td><td>Clearing organization</td></tr><tr><td>32</td><td>Beneficiary</td></tr><tr><td>36</td><td>Entering trader</td></tr><tr><td>37</td><td>Contra trader</td></tr><tr><td>38</td><td>Position account</td></tr><tr><td>55</td><td>Session ID</td></tr><tr><td>59</td><td>Executing unit</td></tr><tr><td>75</td><td>Location ID</td></tr><tr><td>96</td><td>Take-up (trading) firm</td></tr><tr><td>122</td><td>Investment decision maker</td></tr></table></td></tr>
</table>

Tag	Field Name	Req'd	Data Type	Description
2376	>PartyRoleQualifier	N	INT	Indicates the nature of value submitted in the field PartyID (448). PartyRoleQualifier (2376) = 21 (Specialist) and 22 (Algorithm) are only possible together with PartyIDSource (447) = 'D'. PartyRoleQualifier (2376) = 24 (Natural person) is only possible together with PartyIDSource (447) = 'P'. PartyRoleQualifier (2376) = 21 (Specialist) is not allowed in request messages. Value: 22 = Algorithm; 24 = Natural person
802	>NoPartySubIDs	N	NUMINGROUP	Number of PartySubIDs. Only one entry. Only in combination with PartyRole (452) = 7 (Entering firm), 12 (Executing trader) and 36 (Entering trader) possible.
523	>PartySubID	N	STRING(6)	Person (Short name).
803	>PartySubIDType	N	INT	Type of PartySubID. Value: 2 = Person
</Parties>				
<InstrmtLegExecGrp>, cardinality: unrestricted, record counter: NoLegs				
600	LegSymbol	N	STRING(10)	Multileg instrument's individual security's Symbol.
602	LegSecurityID	N	INT	Multileg instrument's individual security's SecurityID.
2680	LegAccount	N	STRING	Account mnemonic as agreed between buy and sell sides.
564	LegPositionEffect	N	CHAR	Indicates whether the resulting position after a trade should be an opening position or closing position. Value: O = Open; C = Close
637	LegLastPx	N	PRICE	Execution price assigned to a leg of a multileg instrument.
1418	LegLastQty	N	QTY	Fill quantity for the leg instrument.

Tag	Field Name	Req'd	Data Type	Description
1893	LegExecID	N	INT	Private identifier of a leg match event, which can be reconciled with the field SideTradeID (1506) in the User/TradeCaptureReport (UAE/AE). Private identifier of a leg match event, which can be reconciled with the field SideTradeID (1506) in the UserTradeCaptureReport (UAE). Private identifier of a leg match event, which can be reconciled with the field SideTradeID (1506) in the TradeCaptureReport (AE).
</InstrmtLegExecGrp>				
<Instrument>				
55	Symbol	Y	STRING(10)	T7 product identifier. If the ISIN is used as instrument identifier in the FIX request (SecurityAltID (455)), the product identifier is allowed but not required. If no product identifier is provided Symbol (55) must contain '[N/A]'.
48	SecurityID	Y	INT	T7 instrument identifier.
22	SecurityIDSource	Y	STRING(1)	Source of the securityID Value: M — Description: Marketplace-assigned identifier
1227	ProductComplex	N	INT	Identifies an entire suite of products for a given market. In Futures this may be 'interest rates', 'agricultural', 'equity indexes', etc. 1 — Simple Instrument 2 — Standard Option Strategy 3 — Non-standard Option Strategy 4 — Volatility Strategy 5 — Futures Spread 6 — Inter Product Spread 7 — Standard Future Strategy 8 — Pack and Bundle 9 — Strip 10 — Flexible Simple Instrument (used only for TES trades)

Tag	Field Name	Req'd	Data Type	Description
167	SecurityType	N	STRING(4)	Indicates the type of security. Value: MLEG — Multileg Instrument
762	SecuritySubType	N	INT	Strategy type.
</Instrument>				
<MtchgInst>, cardinality: 1, record counter: NoMatchInst				
1625	MatchInst	N	INT	Matching Instruction for the order. Value: 2 — Do not match
28744	MatchInstCrossID	N	INT	Numeric identifier. Contains the Self Match Prevention ID.
</MtchgInst>				
1	Account	N	STRING(2)	Account mnemonic as agreed between buy and sell sides.
11	ClOrdID	N	STRING(20)	Unique identifier of an order related task (request) as assigned by the buy-side.
14	CumQty	Y	QTY	Cumulated executed quantity of an order. Total quantity (e.g. number of shares) filled.
17	ExecID	Y	INT	The field provides a unique identifier and can be used for the identification of duplicate order messages.
18	ExecInst	N	MULTIPLE-VALUESTRING	Instructions for order handling on exchange trading floor. If more than one instruction is applicable to an order, this field can contain multiple instructions separated by space. Value: H — Reinstate on trading system failure (persistent) Value: Q — Cancel on trading system failure (non-persistent) Value: 6 — Participate don't initiate (Book or cancel)
31	LastPx	N	PRICE	Price of this (last) fill.
32	LastQty	N	QTY	Quantity (e.g. shares) bought/sold on this (last) fill.
37	OrderID	Y	INT	Exchange Order ID generated by the T7 system.
38	OrderQty	Y	QTY	Quantity ordered. This represents the number of shares for equities or par, face or nominal value for FI instruments.

Tag	Field Name	Req'd	Data Type	Description
39	OrdStatus	Y	CHAR	Identifies current status of order. Value: 0 New; 1 Partially filled; 2 Filled; 4 Canceled; 6 Pending cancel; 8 Rejected; 9 Suspended; A Pending new; E Pending replace
40	OrdType	N	CHAR	Order type. Value: 1 Market; 2 Limit; 3 Stop; 4 Stop limit
41	OrigClOrdID	N	STRING(20)	ClOrdID (11) of the last successfully processed task (request) referring to the specific order.
44	Price	N	PRICE	Price per unit of quantity (e.g. per share).
54	Side	Y	CHAR	Side of order. Value: 1 Buy; 2 Sell
58	Text	N	STRING(128)	Free format text string.
59	TimeInForce	N	CHAR	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. Value: 0 Day; 1 Good till Cancel; 3 Immediate or Cancel; 6 Good till Date
77	PositionEffect	N	CHAR	Indicates whether the resulting position after a trade should be an opening position or closing position. Value: O Open; C Close

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>99</td><td>StopPx</td><td>N</td><td>PRICE</td><td>Price per unit of quantity (e.g. per share).</td></tr>
<tr><td>150</td><td>ExecType</td><td>Y</td><td>CHAR</td><td>Describes the specific ExecutionRpt while OrdStatus (39) will always identify the current order status.
<table><tr><th>Value</th><th>Description</th></tr><tr><td>0</td><td>New</td></tr><tr><td>1</td><td>Partial fill</td></tr><tr><td>2</td><td>Fill</td></tr><tr><td>4</td><td>Canceled</td></tr><tr><td>5</td><td>Replace</td></tr><tr><td>6</td><td>Pending cancel</td></tr><tr><td>8</td><td>Rejected</td></tr><tr><td>9</td><td>Suspended</td></tr><tr><td>A</td><td>Pending new</td></tr><tr><td>D</td><td>Restated</td></tr><tr><td>E</td><td>Pending replace</td></tr><tr><td>F</td><td>Trade</td></tr><tr><td>L</td><td>Triggered by system</td></tr></table></td></tr>
<tr><td>151</td><td>LeavesQty</td><td>Y</td><td>QTY</td><td>Quantity open for further execution. If the OrdStatus (39) is Canceled, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty (38) - CumQty (14).</td></tr>
<tr><td>336</td><td>TradingSessionID</td><td>N</td><td>INT</td><td>Identifier for trading session.
<table><tr><th>Value</th><th>Description</th></tr><tr><td>1</td><td>Day</td></tr></table></td></tr>
<tr><td>378</td><td>ExecRestatement-Reason</td><td>N</td><td>INT</td><td>Code to identify reason for an Execution Report message sent with ExecType=Restated or used when communicating an unsolicited cancel.
Valid values are listed after this table.</td></tr>
<tr><td>432</td><td>ExpireDate</td><td>N</td><td>LOCALMKT-DATE</td><td>Date of order expiration (last day the order can trade), always expressed in terms of the local market date. The time at which the order expires is determined by the local market's business practices.</td></tr>
<tr><td>527</td><td>SecondaryExecID</td><td>N</td><td>INT</td><td>Assigned by the party which accepts the order. Can be used to provide the ExecID used by an exchange or executing system.</td></tr>
</table>

Tag	Field Name	Req'd	Data Type	Description
625	TradingSessionSubID	N	INT	Optional market assigned sub identifier for a trading session. Value: 4 — Description: Closing auction
851	LastLiquidityInd	N	INT	Indicator to identify whether this fill was a result of a liquidity provider providing or liquidity taker taking the liquidity. Applicable only for OrdStatus of Partial or Filled. 1 — Add Liquidity 2 — Removed Liquidity 4 — Auction (neither passive nor aggressive, includes VDO matching at midpoint) 5 — Triggered Stop Order 6 — Triggered One-cancels-the-other Order 7 — Triggered Market Order
880	TrdMatchID	N	INT	Identifier assigned to a trade by a matching system.
1815	TradingCapacity	N	INT	Trading capacity. 1 — Customer (Agency) 5 — Principal (Proprietary) 6 — Market Maker
2523	CrossedIndicator	N	INT	Indicator will be delivered in case of deletion or modification due to Self Match Prevention. 1 — Cross rejected
1823	Triggered	N	INT	Indicates if an order has been previously triggered. 0 — Not triggered (Default) 1 — Triggered
2404	ComplianceText	N	STRING(20)	Identification of the actual trader behind a transaction, required by Market Surveillance.
25008	FreeText2	N	STRING(12)	Assigned by the party which originates the order.

Tag	Field Name	Req'd	Data Type	Description
25009	FreeText3	N	STRING(12)	Assigned by the party which originates the order.
25023	ReturnCode	N	INT	Return code.
25025	ReturnCodeText	N	STRING(2000)	Error text.
30060	UTransactTime	N	STRING	Transaction timestamp. Number of nanoseconds since Jan 1, 1970.
1031	CustOrderHandling-Inst	N	CHAR	Rate identifier in accordance with the FIA guidelines.
<Trailer />				

Value	Description
W	Desk
Y	Electronic
C	FCM-provided screen
G	FCM API or FIX
H	Algo Engine
D	Default

Valid Values of ExecRestatementReason (datatype INT)

Valid Value	Description
1	GT renewal / restatement (no corporate action, order book restatement)
100	Unknown Order State
101	Order Added
102	Order Replaced
103	Order Canceled
105	Immediate or Cancel Order Canceled
108	Book Order executed
114	Order has been changed to IOC
122	Instrument State Change
135	Market Order Triggered
149	Closing Auction Only Order Activated
150	Closing Auction Only Order Inactivated
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
261	Panic Cancel
340	CLIP execution after improvement period
343	CLIP request canceled by arrangement time out

344	CLIP cancellation

8.5 User Order Mass Action Report

This message informs about unsolicited mass cancellation events.

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='UBZ' />				
<Instrument>				
55	Symbol	Y	STRING(10)	T7 product identifier. If the ISIN is used as instrument identifier in the FIX request (SecurityAltID (455)), the product identifier is allowed but not required. If no product identifier is provided Symbol (55) must contain '[N/A]'.
48	SecurityID	Y	INT	T7 instrument identifier.
22	SecurityIDSource	Y	STRING(1)	Source of the securityID Value: M – Marketplace-assigned identifier
1227	ProductComplex	N	INT	Identifies an entire suite of products for a given market. In Futures this may be 'interest rates', 'agricultural', 'equity indexes', etc. 1 – Simple Instrument 2 – Standard Option Strategy 3 – Non-standard Option Strategy 4 – Volatility Strategy 5 – Futures Spread 6 – Inter Product Spread 7 – Standard Future Strategy 8 – Pack and Bundle 9 – Strip 10 – Flexible Simple Instrument (used only for TES trades)
167	SecurityType	N	STRING(4)	Indicates the type of security. Value: MLEG – Multileg Instrument
762	SecuritySubType	N	INT	Strategy type.
</Instrument>				
<Parties>, cardinality: 3-4, record counter: NoPartyIDs, containing occurrences: entering_trader , entering_firm , executing_trader , session_ID				
448	>PartyID	Y	STRING(35)	Party identifier/code. Party identifier/code. See PartyIDSource (447) and PartyRole (452).

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>447</td><td>>PartyIDSource</td><td>Y</td><td>CHAR</td><td>Identifies class or source of the PartyID (448) value. Required if PartyID is specified.<table><tr><th>Value</th><th>Description</th></tr><tr><td>D</td><td>Proprietary custom code</td></tr><tr><td>P</td><td>Short code identifier</td></tr></table></td></tr>
<tr><td>452</td><td>>PartyRole</td><td>Y</td><td>INT</td><td>Party Role.<table><tr><th>Value</th><th>Description</th></tr><tr><td>1</td><td>Executing firm</td></tr><tr><td>3</td><td>Client ID</td></tr><tr><td>4</td><td>Clearing firm</td></tr><tr><td>7</td><td>Entering firm</td></tr><tr><td>12</td><td>Executing trader</td></tr><tr><td>13</td><td>Order origination firm</td></tr><tr><td>16</td><td>Executing system</td></tr><tr><td>17</td><td>Contra firm</td></tr><tr><td>21</td><td>Clearing organization</td></tr><tr><td>32</td><td>Beneficiary</td></tr><tr><td>36</td><td>Entering trader</td></tr><tr><td>37</td><td>Contra trader</td></tr><tr><td>38</td><td>Position account</td></tr><tr><td>55</td><td>Session ID</td></tr><tr><td>59</td><td>Executing unit</td></tr><tr><td>75</td><td>Location ID</td></tr><tr><td>96</td><td>Take-up (trading) firm</td></tr><tr><td>122</td><td>Investment decision maker</td></tr></table></td></tr>
<tr><td>2376</td><td>>PartyRoleQualifier</td><td>N</td><td>INT</td><td>Indicates the nature of value submitted in the field PartyID (448). PartyRoleQualifier (2376) = 21 (Specialist) and 22 (Algorithm) are only possible together with PartyIDSource (447) = 'D'. PartyRoleQualifier (2376) = 24 (Natural person) is only possible together with PartyIDSource (447) = 'P'. PartyRoleQualifier (2376) = 21 (Specialist) is not allowed in request messages.<table><tr><th>Value</th><th>Description</th></tr><tr><td>22</td><td>Algorithm</td></tr><tr><td>24</td><td>Natural person</td></tr></table></td></tr>
</table>

Tag	Field Name	Req'd	Data Type	Description
802	>NoPartySubIDs	N	NUMINGROUP	Number of PartySubIDs. Only one entry. Only in combination with PartyRole (452) = 7 (Entering firm), 12 (Executing trader) and 36 (Entering trader) possible.
523	>PartySubID	N	STRING(6)	Person (Short name).
803	>PartySubIDType	N	INT	Type of PartySubID. Value: 2 — Person
</Parties>				
<NotAffectedOrdersGrp>, cardinality: unrestricted, record counter: NoNotAffectedOrders				
1371	NotAffectedOrderID	N	INT	Exchange Order ID of an order whose cancellation is pending.
</NotAffectedOrdersGrp>				
54	Side	N	CHAR	Side Value: 1 — Buy Value: 2 — Sell
44	Price	N	PRICE	Price per unit of quantity (e.g. per share).
30018	UExecInst	N	MULTIPLE-VALUESTRING	Reason for mass cancellation. Value: H — Reinstate on trading system failure (persistent) Value: Q — Cancel on trading system failure (non-persistent)
1369	MassActionReportID	Y	INT	Transaction timestamp.

<table>
<tr><th>Tag</th><th>Field Name</th><th>Req'd</th><th>Data Type</th><th>Description</th></tr>
<tr><td>28721</td><td>MassActionReason</td><td>Y</td><td>INT</td><td>Reason for mass cancellation.
<table>
<tr><th>Value</th><th>Description</th></tr>
<tr><td>0</td><td>No special reason</td></tr>
<tr><td>1</td><td>Trading was stopped</td></tr>
<tr><td>2</td><td>Emergency</td></tr>
<tr><td>3</td><td>Market Maker Protection</td></tr>
<tr><td>6</td><td>Session loss or logout</td></tr>
<tr><td>7</td><td>Duplicate Session Login</td></tr>
<tr><td>8</td><td>Clearing Risk Control</td></tr>
<tr><td>100</td><td>Internal connection loss</td></tr>
<tr><td>105</td><td>Product State Halt</td></tr>
<tr><td>106</td><td>Product State Holiday</td></tr>
<tr><td>107</td><td>Instrument Suspended</td></tr>
<tr><td>109</td><td>Complex Instrument Deletion</td></tr>
<tr><td>110</td><td>Volatility Interruption</td></tr>
<tr><td>111</td><td>Product temporarily not tradeable</td></tr>
<tr><td>117</td><td>Member has been disabled</td></tr>
</table></td></tr>
<tr><td colspan="5"><Trailer /></td></tr>
</table>

8.6 Business Message Reject

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

Tag	Field Name	Req'd	Data Type	Description
<Header with MsgType='j' />				
45	RefSeqNum	Y	SEQNUM	Reference message Sequence number.
58	Text	N	STRING(128)	Free format text string.
372	RefMsgType	Y	STRING	The MsgType (35) of the FIX message being referenced.
380	BusinessRejectReason	Y	INT	Code to identify reason for a Business Message Reject message. Value: Description 0: Other 1: Unknown ID 3: Unsupported message type 4: Application not available 5: Conditionally required field missing 6: Not authorized
379	BusinessRejectRefID	N	STRING	The value of the business-level ID field on the message being referenced.
<Trailer />				

9 Occurrences

9.1 OrderAttributeGrp

This section contains all occurrences of structure "OrderAttributeGrp".

liquidity_provision_activity_order
Liquidity provision activity order.

- OrderAttributeType = LIQUIDITY_PROVISION_ACTIVITY_ORDER (mandatory)
- OrderAttributeValue (mandatory)

risk_reduction_order
Risk reduction order.

- OrderAttributeType = RISK_REDUCTION_ORDER (mandatory)
- OrderAttributeValue (mandatory)

9.2 Parties

This section contains all occurrences of structure "Parties".

beneficiary
Beneficiary Account.

- PartyID (mandatory)
- PartyRole = BENEFICIARY (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

clearing_firm
Clearing firm information.

- PartyID (mandatory)
- PartyRole = CLEARING_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

clearing_organization
Clearing organization information.

- PartyID (mandatory)
- PartyRole = CLEARING_ORGANIZATION (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

clearing_unit
Party ID Clearing Unit.

- PartyID (mandatory)
- PartyRole = CLEARING_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

client_id
Client Identifier (short code).

- PartyID (mandatory)
- PartyRole = CLIENT_ID (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

entering_firm
Entering Entity ID.

- PartyID (mandatory)
- PartyRole = ENTERING_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

entering_trader
Entering User ID.

- PartyID (mandatory)
- PartyRole = ENTERING_TRADER (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

executing_firm
Executing firm information.

- PartyID (mandatory)
- PartyRole = EXECUTING_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

executing_trader
Executing trader information.

- PartyID (mandatory)
- PartyRole = EXECUTING_TRADER (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)
- PartySubIDType = PERSON (mandatory)

executing_unit
Executing unit information.

- PartyID (mandatory)
- PartyRole = EXECUTING_UNIT (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

execution_identifier
Execution identifier.

- PartyID (mandatory)
- PartyRole = EXECUTING_TRADER (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

investment_identifier
Investment identifier.

- PartyID (mandatory)
- PartyRole = INVESTMENT_DECISION_MAKER (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

location_id
Location ID information. Origin country code to identify the region from which the transaction originates.

- PartyID (mandatory)
- PartyRole = LOCATION_ID (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

order_origination_firm
Executing firm information.

- PartyID (mandatory)
- PartyRole = ORDER_ORIGINATION_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

position_account
Flexible account identifier.

- PartyID (mandatory)
- PartyRole = FLEXIBLE_ACCOUNT_IDENTIFIER (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

session_ID
Session ID.

- PartyID (mandatory)
- PartyRole = SESSION_ID (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

settlement_account
Settlement Account.

- PartyID (mandatory)
- PartyRole = SETTLEMENT_ACCOUNT (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

settlement_firm
Settlement Firm.

- PartyID (mandatory)
- PartyRole = SETTLEMENT_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

settlement_location
Settlement location information.

- PartyID (mandatory)
- PartyRole = SETTLEMENT_LOCATION (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

settlement_unit
Party ID Settlement Unit.

- PartyID (mandatory)
- PartyRole = SETTLEMENT_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

takeup_firm
Take-up trading firm information.

- PartyID (mandatory)
- PartyRole = TAKEUP_FIRM (mandatory)
- PartyIDSource = PROPRIETARYCUSTOMCODE (mandatory)

9.3 RootParties

This section contains all occurrences of structure "RootParties".

root_execution_venue
Execution venue (segment MIC).

- RootPartyID (mandatory)
- RootPartyIDSource = Market_identifier_code (mandatory)
- RootPartyRole = Execution_venue (mandatory)

9.4 TrdCapRptSideGrp

This section contains all occurrences of structure "TrdCapRptSideGrp".

Side1
Side 1 information.

- Side (mandatory)
- SideLastQty (mandatory)
- SideTradeID (mandatory)
- Parties
  - clearing_firm
  - clearing_organization
  - executing_trader
  - executing_firm
  - executing_unit
  - session_ID
  - order_origination_firm
  - beneficiary
  - position_account
  - takeup_firm
  - settlement_location
  - settlement_account
  - settlement_firm
  - client_id
  - investment_identifier
  - execution_identifier
  - clearing_firm
  - settlement_firm
- PartyIDClearingUnit (mandatory)
- Account (mandatory)
- PositionEffect (mandatory)
- Text (mandatory)
- OrderCategory (mandatory)
- SideLiquidityInd (mandatory)

- StrategyLinkID (mandatory)
- OrderID (mandatory)
- OrdType (mandatory)
- Price (mandatory)
- LeavesQty (mandatory)
- CumQty (mandatory)
- OrderAttributeGrp
- CustOrderHandlingInst (mandatory)
- FreeText2 (mandatory)
- FreeText3 (mandatory)
- SideLastPx (mandatory)

A Appendix