



## Trade Feed Specification

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System response times may vary for a number of reasons including market conditions, trading volumes and system performance.

## VERSION HISTORY

VERSION	DESCRIPTION	DATE
1.0	First Release	13-04-2010
1.1	Added tag 6807 TransactID Added tag 9982 TradeLiquidityIndicator Added FIX Field Definitions in Appendix C	09-08-2010
1.2	Updated description of tag 11, 37, and 6807 Added tag 439 and 440 Updated FIX Field Validation Specification	22-11-2010
2.0	<ul style="list-style-type: none"> <li>Corrected TradeLiquidityIndicator tag typo in Section 5.4</li> <li>Updated description of tag &lt;54&gt;. Added tags &lt;6803, 6804 and 6805&gt;</li> <li>Added new section to describe Trade Reporting interface specification</li> </ul>	30-06-2011
2.1	Key changes in respect of Trade Reporting (Section 5.5): <ul style="list-style-type: none"> <li>Added new tags &lt;29&gt;LastCapacity, &lt;109&gt;ClientID, &lt;820&gt;TradeLinkID, &lt;6802&gt;ClientCrossRef, &lt;6803&gt;ShortSellNakedQty, &lt;6804&gt;ShortSellLongQty, and &lt;6805&gt;ShortSellCoveredQty.</li> <li>Changed tag &lt;54&gt;Side to support 5 (Sell short).</li> <li>Changed tag &lt;8181&gt;OffExchTradeReportType to support Type "X" (Booking Purposes Trade).</li> </ul>	27-02-2012
2.2	Key changes: <ul style="list-style-type: none"> <li>Added new tag &lt;41&gt;OrigClOrdID and modify description of tag &lt;11&gt;ClOrdID in Trade Report acknowledgement for the trade report cancellation.</li> </ul>	20-07-2012
2.3	Key changes: <ul style="list-style-type: none"> <li>Added new tag &lt;639&gt; PriceImprovement and tag &lt;6833&gt; MidPointExec in Execution Reports from the order book.</li> </ul>	30-10-2012
2.4	Key changes: <ul style="list-style-type: none"> <li>Modify the description of tag &lt;1&gt; and tag &lt;6802&gt; in Trade Execution Report Acknowledgement for on-market trades.</li> <li>Added M=Mixed as a valid value for Order Capacity and LastCapacity</li> <li>Added &lt;4805&gt; ExecVenue to Trade Reports</li> <li>Added &lt;8138&gt; OriginOfTrans to Order Book Trades and Trade Reports</li> <li>Added &lt;8139&gt; IntermediaryID to Order Book Trades and Trade Reports</li> <li>Added &lt;8140&gt; DirectedWholesaleIndic to Order Book Trades and Trade Reports</li> </ul>	16-08-2013
2.5	Key changes <ul style="list-style-type: none"> <li>Added new ExecTransType &lt;20&gt; value = 2 to designate final price on Market on close order</li> <li>Enabled &lt;6833&gt; MidPointExec to be returned on both sides of a trade</li> <li>Added CrossType &lt;8183&gt; for on market trade execution reports to enable identification of Broker Preferred trade</li> <li>Broker Preferencing can be enabled at FIX gateway. Added TradeReportType &lt;8184&gt; for on market trade execution reports to enable identification of Booking Purpose Trade resulting from on market cross utilising new no self-trade feature</li> </ul>	4-10-2013
2.6	<ul style="list-style-type: none"> <li>OrdType &lt;40&gt; will be sent when an Execution results from</li> </ul>	25-10-2013

	Market on Close (MOC) Orders. <40> will <b>not</b> be sent when an Execution results from a Limit or a Pegged Order.	
	<ul style="list-style-type: none"> <li>Added Undisclosed &lt;6801&gt; for on market trade execution reports</li> </ul>	12-03-2014
4.0	<ul style="list-style-type: none"> <li>Added ContraTradePA &lt;9862&gt; for on market trade execution reports to support attributed market</li> </ul>	01-07-2015
5.0	<ul style="list-style-type: none"> <li>Further information on valid scenarios for the use of ContraTradePA &lt;9862&gt; for attributed markets</li> <li>Naming clarification of trade report code F</li> </ul>	21-06-2016
5.2p4	<ul style="list-style-type: none"> <li>Add LastMkt &lt;30&gt; for trade execution reports</li> </ul>	08-06-2017
5.5	<ul style="list-style-type: none"> <li>Add SettlmntTyp&lt;63&gt; and FutSettDate &lt;64&gt; for trade execution reports</li> </ul>	30-01-2018
5.6	<ul style="list-style-type: none"> <li>Align MinQty&lt;110&gt; behaviour across all FIX and Drop Copy Interfaces</li> </ul>	19-Jun-2018

## 1 Introduction

This specification describes the Cboe Trade Feed for trading participants and their clearing participants (collectively “**Participants**”). The protocol of this interface is the FIX protocol.

This document serves as a supplement to the FIX Protocol Specification (please visit [www.fixprotocol.org](http://www.fixprotocol.org) for detail). This document describes what functionality is available on the Trade Feed and how we use the FIX protocol to achieve this functionality.

Cboe supports trade reporting done in accordance with the *Market Integrity Rules (Competition in Exchange Markets)* (“**Trade Reporting**”). Trades reported to Cboe will appear in the Trade Feed as set out in section 5.5 of this specification.

### 1.1 Related documents

TITLE
FIX 4.2 Trading Interface Specification

**Table 1: Related Documentation**

## 2 FIX Protocol

FIX Protocol (Financial Information eXchange Protocol), which is owned and maintained by FIX Protocol Ltd., is a series of standardized messaging specifications for the electronic communication of trade-related messages. It is a globally used collective language developed by bankers, exchanges, and institutional clients and brokers. By providing this interface in FIX Protocol, the participants can connect to this interface with minimal development overhead.

A list of all FIX field data types and formats used by Cboe is shown in Appendix C.

## 3 Trade Feed Service

Cboe's Trade Feed service is provided to Participants as a consolidated view of all trades executed by a trading participant on Cboe in any given trading day.

The service provides:

- a trade execution message when on-market orders are executed; and
- a trade execution message when a Trade Report Request message is accepted by Cboe.

The Trade Feed Service increases the transparency of executions and improves the overall efficiency of participants' operations by eliminating the need for manual data entry, which reduces the risk of error.

## 4 Session Recovery

### 4.1 Disconnection

#### 4.1.1 Same Trading Day Message Recovery

When a participant's session is disconnected and connection is subsequently re-established within the same trading day, all trade execution report messages sent by Cboe but not received by the participant will be detected by tracking the incoming sequence numbers. The messages are then recovered by the FIX message recovery process and re-sent to the participant. On getting a Resend Request from a participant, all trade execution report messages will be transmitted to the participant again with each message containing a *PossDupFlag* field, indicating it is a resent message.

#### 4.1.2 No Recovery on Previous Trading Day Message

If a participant's session is disconnected and connection is subsequently re-established on the next trading day, all missed trade execution report messages on the previous trading day will not be re-sent to the participant.

## 5 Messages

### 5.1 No Order Messages

A Trade Feed session does not accept order messages from a trading participant. Unsolicited trade execution report messages do not contain details of the original order.

### 5.2 Additional Security Identifier

The Cboe symbol is always placed in the *Symbol* (55) field for Trade Feed sessions. Apart from the symbol in the *Symbol* (55) field, the participants may request the following additional security identifier be included in trade execution report messages:

Security Identifier	IDSource (22)	SecurityID (48)	SecurityExchange (207)
ISIN	4	ISIN value	For identifying the market where the ISIN trades.

**Table 2: Additional Security Identifier**

### 5.3 Trade Feed Session versus Trading Session

Client's that have a Trade Feed session will receive different values in the following **Execution Report** fields from those in the trade report messages provided by Cboe through an order entry session:

- *OrderID* is unique;
- *OrdStatus* is always "Filled" (except for cancelled trades);
- *CumQty* is the same as *LastShares* (the size of the trade);
- *AvgPx* is the same as *LastPrice* (the price of the trade); and
- *OrdType* is omitted except for MOC Trades

**Note:** Cboe supports Trade Reporting. The FIX messages used for Trade Reporting through the FIX trading interface are based on the messages used for entering orders. When submitting a Trade Report Request, clients use field *OffExchangeTrade* <6808> in the message to identify it as a trade report. For further details on sending Trade Report Requests, refer to the *FIX 4.2 Trading Interface Specification*. For details concerning Trade Reporting on the Trade Feed, please refer to section 5.5 of this document, *Unsolicited Execution Report: Trade Reporting*.

### 5.4 Unsolicited Execution Report: Order Book Trades

Details of each trade from the order book will be sent via unsolicited **Execution Report** messages, which provide participants with information including shares traded, transaction time, trade dates, etc. The messages do not contain settlement information however it does include a transaction identifier, *TransactID*, that is unique to each trade. The *TransactID* can be cross referenced against CHES messaging for post trade processing.

*ExecID* is the unique identifier of each execution message. Participants are advised to detect possible duplicated *ExecID*'s and *TransactID*'s, regardless of whether the *PossResend* flag has been set on the message, and take appropriate action to deal with the duplication. Please refer to FIX protocol on handling of possible resend messages.

Apart from the standard header, trailer, and the symbol definition fields which are accepted by Cboe (as defined in the *FIX 4.2 Trading Interface Specification*), the fields specified in Table 3 are sent by the Trade Feed service:



Tag	Field Name	Req'd	Comments
1	<i>Account</i>	N	Cboe will populate this field with the latest value, if any, specified on the order.
6	<i>AvgPx</i>	Y	This field always equals <i>LastPx</i> .
11	<i>ClOrdId</i>	Y	Cboe will populate this field with the original value provided by the participant in the New Order Single message through the trading interface.
14	<i>CumQty</i>	Y	This field always equals <i>LastShares</i> .
17	<i>ExecID</i>	Y	Unique identifier of execution message assigned by the trading system. The two execution messages involved in a trade are assigned with different ExecID.
19	<i>ExecRefID</i>	N	This field is used in a trade cancel message (i.e. <i>ExecTransType</i> = 1) to refer to the previous <b>Execution Report</b> .
20	<i>ExecTransType</i>	Y	This field holds the transaction type: 0 = New indicates a trade report. 1 = Cancel indicates a cancelled trade. 2 = Correction. Used to provide confirmed closing price for MOC trades
29	<i>LastCapacity</i>	N	Supported values are 1 = Agent 2 = Cross as agent 3 = Cross as principal 4 = Principal 5 = Mixed 6 = Cross as Mixed  Values of 2, 3 or 6 essentially indicate that the client has executed against themselves. Crossing is determined by reference to first 3 digits of trading PID
30	<i>LastMkt</i>	N	Supported MIC code values are "CXAC" = (Limit) "CXAP" = (Mid-Point) "CXAN" = (Near Point) "CXAF" = (Far Point) "CXAM" = (MOC) <b>Note:</b> This value is determined by the venue of the resting or 'Maker' order in a trade pair. <u>Both sides</u> of the trade contain the same value
31	<i>LastPx</i>	Y	Price of shares bought or sold on this fill or 0 when 20=1 for conformance to FIX specification.
32	<i>LastShares</i>	Y	Price of shares bought or sold on this fill or 0 when 20=1 for conformance to FIX specification.
37	<i>OrderID</i>	Y	Cboe order reference number.
38	<i>OrderQty</i>	Y	This field always equals <i>LastShares</i> .
39	<i>OrdStatus</i>	Y	This field is always sets to 2 (Filled).
40	<i>OrdType</i>	N	If an execution occurs due to the matching of MOC orders, the following value will be returned.  5= MOC  <40> will <b>not</b> be sent for Limit or Pegged Order Executions.
54	<i>Side</i>	Y	This field indicates the side of an order: 1 = Buy 2 = Sell 5 = Sell short
55	<i>Symbol</i>	Y	This field holds the Cboe symbol, which refers to the security traded.

Tag	Field Name	Req'd	Comments
60	<i>TransactTime</i>	Y	This field holds the time and date of execution in UTC.
63	<i>SettlmntTyp</i>	N	<p>Current supported values: 2 = next day settlement</p> <p>Indicates a shortened settlement period. When this tag is populated then tag <i>FutSettDate</i>&lt;64&gt; is also provided.</p> <p><b>ONLY provided where a shortened settlement date (from T+2 to T+1) has been requested by both buyer and seller.</b> Please refer to tag 8080.</p> <p>Please refer to the <b>Order Type Overview</b> document for details on the Warrant Trade Report Facility.</p>
64	<i>FutSettDate</i>	N	<p>Settlement date (with format YYYYMMDD) will be returned <b>only</b> if the trade is reported for T+1 Settlement, in conjunction with tag 63 <i>SettlmntTyp</i></p> <p><b>ONLY provided where a shortened settlement date (from T+2 to T+1) has been requested by both buyer and seller.</b> Please refer to tag 8080.</p> <p>Please refer to the <b>Order Type Overview</b> document for details on the Warrant Trade Report Facility.</p>
76	<i>ExecBroker</i>	Y	This field identifies the Cboe trading participant responsible for the trade. For an order routed through a broker service provider (BSP) connection, the <i>ExecBroker</i> identifies the trading participant who is responsible for the order.
109	<i>ClientID</i>	Y	Internal connection ID assigned by Cboe.
110	<i>MinQty</i>	N	Will be returned if supplied in the original New Order Single message.
150	<i>ExecType</i>	Y	This field holds the value of 2 (Fill).
151	<i>LeavesQty</i>	Y	This field holds the value of 0.
439	<i>ClearingFirm</i>	Y	CHESS Clearing Participant ID supplied in New Order Single message.
440	<i>ClearingAccount</i>	N	Supplemental account information supplied in New Order Single message.
639	<i>PriceImprovement</i>	N	<p>Amount of price improvement in basis points. It is calculated against the primary best bid/offer at the time of execution. It is not specified if the price improvement results in a negative value or there is no primary best bid/offer at the time of execution.</p> <p>This tag is omitted if <i>ExecTransType</i>&lt;20&gt; = 1 or 2</p>
6801	<i>Undisclosed</i>	N	Cboe will populate this field with the latest value, if any, specified on the order.
6802	<i>ClientCrossRef</i>	N	Cboe will populate this field with the latest value, if any, specified on the order.
6803	<i>ShortSellNakedQty</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the NewOrderSingle message.
6804	<i>ShortSellCoveredQty</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the NewOrderSingle message.
6805	<i>ShortSellLongQty</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the NewOrderSingle message.
6807	<i>TransactID</i>	Y	A unique identifier assigned by Cboe for each trade that can be cross referenced against CHESS messaging for post trade processing. It contains 10

Tag	Field Name	Req'd	Comments
			characters in the format XXXYYYYYY where X = the Serial Trade Qualifier and Y = the Trade Serial Number. The first character of the Serial Trade Qualifier identifies the trading venue. CHES has allocated "C" to identify Cboe trades.
6833	<i>MidPointExec</i>	N	Boolean field indicates whether the trade occurred as a result of a Mid-Point order.  Y = True. The trade involved a Mid-Point order. N = False. The trade did not involve a Mid-Point order. This is the default value if this tag is not specified.  This tag is omitted if ExecTransType <20> = 1 or 2
9882	<i>TradeLiquidityIndicator</i>	N	"A" – Order added liquidity "R" – Order removed liquidity
8138	OriginOfTrans	N	Market Integrity Rule defined field for <i>Origin of Order</i> e.g. ACN, ABN, CHES HIN, or other internal client identifier.
8139	IntermediaryID	N	Market Integrity Rule defined field for <i>Intermediary Identifier</i> – may be populated with AFS licence number
8140	DirectedWholesaleIndic	N	Market Integrity Rule defined field to identify wholesale client Y/N value. Default = N
8177	<i>RemoveCrossingFromClearing</i>	N	Cboe will populate this field with the original value, if any, assigned by the original NewOrderSingle message. Boolean field that instructs Cboe not to send a crossing to the clearing house. Possible values: "Y" or "N" and default is "N".
8183	CrossType	N	Defines the matching logic applied for this trade if it was an on-market crossing Valid values are: 101 = trade was the result of a broker preferred crossing 102 = other
8184	TradeReportType	N	Tag to indicate if Execution Report is a Booking Purpose Trade crossing. X = Booking Purpose Trade (due to self-trade prevention where the <i>NoTradeFeat</i> <7713> = X)
9862	ContraTradePA	N	Participant ID of contra side. Required for *attribution instrument. Valid scenarios are: Report a new trade (ExecTransType=0) Report a MOC trade correction (ExecTransType=2)  * By default all CXA quoted & ASX's ETF instruments are attributed.

**Table 3: Unsolicited Execution Report: Order Book Trades**

## 5.5 Unsolicited Execution Report: Trade Reporting

Details of each Trade Report will be sent via unsolicited **Execution Report** messages which provide participants with information including shares traded, transaction time, trade dates, etc.

The messages do not contain settlement information however it does include a transaction identifier, *TransactID*, that is unique to each trade. The *TransactID* can be cross referenced against CHES messaging for post trade processing.

*ExecID* is the unique identifier of each execution message. Participants are advised to detect possible duplicated *ExecID's* and *TransactID's*, regardless of whether the *PossResend* flag has been set on the message, and take appropriate action to deal with the duplication. Please refer to FIX protocol on handling of possible resend messages.

Apart from the standard header, trailer, and the symbol definition fields which are accepted by Cboe (as defined in the FIX 4.2 Trading Interface Specification), the fields specified in Table 4 are sent by the Trade Feed service:

Tag	Field Name	Req'd	Comments
1	<i>Account</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request through the FIX trading interface.
6	<i>AvgPx</i>	Y	This field always equals <i>LastPx</i> .
11	<i>ClOrdId</i>	Y	Cboe populates this field with the value assigned by client in the corresponding Trade Report Cancel Request message. If it is an unsolicited trade report cancel acknowledgement, the ClOrdID will be the original value provided by the participant in the Trade Report Request through the trading interface.
14	<i>CumQty</i>	Y	This field always equals <i>LastShares</i> .
17	<i>ExecID</i>	Y	Unique identifier of execution message assigned by the trading system. The two execution messages involved in a trade are assigned with different ExecID.
19	<i>ExecRefID</i>	N	This field is used in a trade cancel message (i.e. <i>ExecTransType</i> = 1) to refer to the previous <b>Execution Report</b> .
20	<i>ExecTransType</i>	Y	This field holds the transaction type: 0 = New indicates a trade report. 1 = Cancel indicates a cancelled trade.
29	<i>LastCapacity</i>	N	Supported values are 1 = Agent 2 = Cross as agent 3 = Cross as principal 4 = Principal 5 = Mixed 6 = Cross as Mixed  Values of 2, 3 or 6 essentially indicate that the client has executed against themselves.
31	<i>LastPx</i>	Y	Traded price.
32	<i>LastShares</i>	Y	Traded quantity.
37	<i>OrderID</i>	Y	Cboe order reference number.
38	<i>OrderQty</i>	Y	This field always equals <i>LastShares</i> .
39	<i>OrdStatus</i>	Y	This field is always sets to 2 (Filled).
41	<i>OrigClOrdID</i>	N	ClOrdID value of the original trade report assigned in the Trade Report Request through the trading interface.
54	<i>Side</i>	Y	This field indicates the side of an order: 1 = Buy 2 = Sell 5 = Sell short
55	<i>Symbol</i>	Y	This field holds the Cboe symbol, which refers to the security traded.
60	<i>TransactTime</i>	Y	This field holds the time and date of execution in UTC.
75	<i>TradeDate</i>	N	<i>AsAtDate</i> : Date of the trade (expressed in local time at place of trade) if specified in the Trade Report Request through the FIX trading interface.
76	<i>ExecBroker</i>	Y	This field identifies the Cboe trading participant responsible for the trade.
109	<i>ClientID</i>	N	Internal connection ID assigned by Cboe.
150	<i>ExecType</i>	Y	This field holds the value of 2 (Fill).
151	<i>LeavesQty</i>	Y	This field holds the value of 0.
439	<i>ClearingFirm</i>	Y	Cboe will populate this field with the original

			value, if any, assigned by the trading participant in the Trade Report Request through the FIX trading interface.
440	<i>ClearingAccount</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request through the FIX trading interface.
820	<i>TradeLinkID</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request through the FIX trading interface.
4805	<i>ExecVenue</i>	N	Market Integrity Rule defined field for <i>Execution Venue</i> to identify participant crossing system or dark pool – may be populated with MIC or ASIC allocated code
6802	<i>ClientCrossRef</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request.
6803	<i>ShortSellNakedQty</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request.
6804	<i>ShortSellCoveredQty</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request.
6805	<i>ShortSellLongQty</i>	N	Cboe will populate this field with the original value, if any, assigned by the trading participant in the Trade Report Request.
6808	<i>OffExchangeTrade</i>	Y	This field holds the value of “Y”.
8181	<i>OffExchTradeReportType</i>	Y	This field holds the type of trade report.  Values supported by Cboe: B = Block Trade P,p = Large Portfolio Trades T,t = Large Principal Transaction S = Trades at or within the spread L = Permitted Trade during Post Trading Hours Period M = Permitted Trade during Pre Trading Hours Period E = Out of hours trade X = Booking Purposes Trade F = ETF Trade Report – Unit Creation or Redemption
6807	<i>TransactID</i>	Y	A unique identifier assigned by Cboe for each trade that can be cross referenced against CHES messaging for post trade processing. It contains 10 characters in the format XXXYYYYYYY where X = the Serial Trade Qualifier and Y = the Trade Serial Number. The first character of the Serial Trade Qualifier identifies the trading venue. CHES has allocated “C” to identify Cboe trades.
8138	<i>OriginOfTrans</i>	N	Market Integrity Rule defined field for <i>Origin of Order</i> e.g. ACN, ABN, CHES HIN, or other internal client identifier.
8139	<i>IntermediaryID</i>	N	Market Integrity Rule defined field for <i>Intermediary Identifier</i> – may be populated with AFS licence number
8140	<i>DirectedWholesaleIndic</i>	N	Market Integrity Rule defined field to identify wholesale client Y/N value. Default = N
8141	<i>ContraOriginofTrans</i>	N	Market Integrity Rule defined field for <i>Origin of Order</i> e.g. ACN, ABN, CHES HIN, or other

			internal client identifier.
8142	ContraIntermediaryID	N	Market Integrity Rule defined field for IntermediaryIdentifier – may be populated with AFS licence number
8143	ContraDirectedWholesale	N	Market Integrity Rule defined field to identify wholesale client Y/N value. Default = N
8177	<i>RemoveCrossingFromClearing</i>	N	Cboe will populate this field with the original value, if any, assigned by the original Trade Report Request. Boolean field that instructs Cboe not to send a crossing to the clearing house. Possible values: “Y” or “N” and default is “N”.

**Table 4: Unsolicited Execution Report: Trade Reporting**

## 6 Appendix – FIX Field Specification

The below table specifies the data type and format for the FIX fields used by Cboe:

TAG	FIELD NAME	DATA TYPE	FORMAT
1	Account	String	Max. 10 characters
6	AvgPx	Price	Max. 12 digits for integral part Max. 7 digits for decimal part (up to 100,000,000,000.0000000)
11	CIOrdID	String	Max. 32 characters
14	CumQty	Qty	Max. 10 digits (up to 2,147,483,647)
17	ExecID	String	Max. 20 characters
18	ExecInst	String	Max. 1 character
19	ExecRefID	String	Max. 20 characters
20	ExecTransType	char	Max. 1 character
21	HandlInst	char	Max. 1 character
22	IDSource	String	Max. 20 characters
29	LastCapacity	char	Max. 1 character
30	LastMkt	String	Max. 4 characters
31	LastPx	Price	Max. 12 digits for integral part Max. 7 digits for decimal part (up to 100,000,000,000.0000000)
32	LastShares	Qty	Max. 10 digits (up to 2,147,483,647)
37	OrderID	String	Max. 10 characters
38	OrderQty	Qty	Max. 10 digits (up to 2,147,483,647)
39	OrdStatus	char	Max. 1 character
40	OrdType	char	Max. 1 character
41	OrigCIOrdID	String	Max. 32 characters
44	Price	Price	Max. 12 digits for integral part Max. 7 digits for decimal part (up to 100,000,000,000.0000000)
48	SecurityID	String	Max. 20 characters
54	Side	char	Max. 1 character
55	Symbol	String	Max. 20 characters
58	Text	String	Max. 255 characters
59	TimInForce	char	Max. 1 character
60	TransactTime	UTCTimestamp	Valid formats: YYYYMMDD-HH:MM:SS YYYYMMDD-HH:MM:SS.sss
63	SettlmntTyp	char	Max. 1 character
64	FutSettDate	LocalMktDate	Valid formats: YYYYMMDD
75	TradeDate	LocalMktDate	Valid formats: YYYYMMDD
76	ExecBroker	String	Max. 15 characters
109	ClientID	String	Max. 20 characters
110	MinQty	Qty	Max. 10 digits (up to 2,147,483,647)



111	MaxFloor	Qty	Max. 10 digits (up to 2,147,483,647)
126	ExpireTime	UTCTimeStamp	Valid formats: YYYYMMDD-HH:MM:SS YYYYMMDD-HH:MM:SS.sss Must be today and greater than current GMT time
150	ExecType	char	Max. 1 character
151	LeavesQty	Qty	Max. 10 digits (up to 2,147,483,647)
207	SecurityExchange	Exchange	Max. 20 characters
211	PegDifference	PriceOffset	Max. 12 digits for integral part Max. 7 digits for decimal part (up to 100,000,000,000.0000000)
378	ExecRestatementReason	int	
434	CxlRejResponseTo	char	Max. 1 character
439	ClearingFirm	String	Must be 5-digit string
440	ClearingAccount	String	Max. 255 characters
639	PricImprovement	Price offset in basis point	Max. 12 digits for integral part Max. 7 digits for decimal part (up to 100,000,000,000.0000000)
820	TradeLinkID	String	Max. 10 characters
8181	OffExchTradeReportType	Boolean	Max. 1 character
4805	ExecVenue	String	Max. 5 characters
6801	Undisclosed	Boolean	Max. 1 character
6802	ClientCrossRef	String	Max. 15 characters
6803	ShortSellNakedQty	Qty	Max. 10 digits (up to 2,147,483,647)
6804	ShortSellCoveredQty	Qty	Max. 10 digits (up to 2,147,483,647)
6805	ShortSellLongQty	Qty	Max. 10 digits (up to 2,147,483,647)
6807	TransactID	String	Max. 10 characters
6808	OffExchangeTrade	Boolean	Max. 1 character
6833	MidPointExec	Boolean	Max. 1 character
8138	OriginOfTrans	String	Max 20 characters
8139	IntermediaryID	String	Max 10 characters
8140	DirectedWholesaleIndic	Boolean	Max 1 character
8141	ContraOriginofTrans	String	Max. 20 characters
8142	ContraIntermediaryID	String	Max. 10 characters
8143	ContraDirectedWholesale	Boolean	Max 1 character (Y/N with default N)
8177	RemoveCrossingFromClearing	Boolean	Max. 1 character
9862	ContraTradePA	String	Max. 15 characters
9882	TradeLiquidityIndicator	char	Max. 1 character

Table 5: FIX Field Specification