US Options
FIX Specification

Version 2.6.22

July 26, 2019

Contents

1   Introduction

1.1   Overview

Cboe members use a subset of the FIX 4.2 protocol for order entry and drop copies.

It is assumed that the reader is familiar with the FIX 4.2 protocol as described at http://www.fixprotocol.org. This document describes the differences between the Cboe implementation and the FIX 4.2 standard.

Please refer to markets.cboe.com for updates and further information on policies and procedures.

Please refer to the Cboe Options Exchange Integration Website for additional details regarding upcoming changes in support of the migration of Cboe Options Exchange to the Bats technology platform.

1.2   Document Format

Blue highlighted sections highlight key differences between the Cboe US Options Exchanges (BZX Options Exchange "BZX", Cboe Options Exchange "C1", C2 Options Exchange "C2", and EDGX Options Exchange "EDGX").

1.3   Hours of Operation

Refer to the Holidays & Hours website for Cboe trading hours and holidays schedule. All times are listed in the Eastern Time zone (ET).

All orders are live upon acceptance by the Cboe Options Exchanges. Orders are rejected if they are received outside the sessions as defined in the table below.

The Cboe Options Exchanges support a Pre-Market Queuing Session that allows orders to be entered and queued prior to the start of the Global Trading Hours ("GTH") session and the Regular Trading Hours ("RTH") session.

For more information on the Cboe Opening Process, please refer to the Cboe Options Opening Process Specification.

The Cboe Options Exchanges do not support a closing auction, but do support Extended Trading for select ETF and index products. All orders remaining after the Regular Trading Session that are not eligible for Extended Trading will be cancelled automatically. All orders remaining after the Extended session will be cancelled automatically and execution reports will be delivered.

	C1	C2	BZX	EDGX
Order Acceptance	2:00 am - 3:00 am ET (SPX, VIX and FLEX) 7:30 am - 9:30 am ET (All Products)	7:30 am - 9:30 am ET (All Products)	7:30 am - 9:30 am ET (All Products)	7:30 am - 9:30 am ET (All Products)
GTH	3:00 am - 9:15 am ET (SPX, VIX and FLEX)	8:30 am - 9:15 am ET (DJX)	N/A	8:30 am - 9:15 am ET (XSP)
RTH	9:30 am - 4:00 pm ET (All Products) 9:30 am - 4:15 pm ET (Select ETFs/ETNs and Index Products)	9:30 am - 4:00 pm ET (All Products) 9:30 am - 4:15 pm ET (Select ETFs/ETNs and Index Products)	9:30 am - 4:00 pm ET (All Products) 9:30 am - 4:15 pm ET (Select ETFs/ETNs and Index Products)	9:30 am - 4:00 pm ET (All Products) 9:30 am - 4:15 pm ET (Select ETFs/ETNs and Index Products)

1.4 Data Types

1.4.1 Times

All FIX timestamps are listed in Greenwich Mean Time (GMT) per FIX standard. Users are expected to synchronize their clocks with an external time source.

1.4.2 Prices

Users should program their systems to allow execution prices to be returned with up to four decimals.

Example:

1.0010, 1.0001, 12.3456	Accepted – Flex, Sub-Cabinet, Complex with Equity Legs otherwise rejected.
1.0000, 1.00, 12.3400, 12.34, etc.	Accepted – round penny (extra trailing zeroes are fine).

1.5 Protocol Features

1.5.1 Done For Day Restatements

Good 'Til Cancel ("GTC") and Good 'Til Day ("GTD") orders can result in orders persisting between sessions. The Cboe FIX protocol provides a mechanism for clients to request an end-of-day restatement of GTC/GTD orders to be persisted to the next trading session. See 'FIX Port Attributes' for information on available port attributes, including *Done For Day Restatements*.

When enabled, *Done For Day Restatement* messages are sent to connected clients after the trading session ends, at 4:00 ET (4:15 ET for select ETFs) and prior to the trading session disconnecting at 4:45 ET, for each order that will persist to the next trading session. Customers may send *Order Cancel Request* messages for any open GTC and GTD orders any time prior to the 4:45 ET cutoff. All other order message types received after market close at 4:00 ET (4:15 ET for select ETFs) will be rejected.

Execution Report messages representing done for day orders will have *ExecTransType*="3" (status), *ExecType*="3" (DoneForDay), *ExecRestatementReason*="1" (Good 'Til Restatement), and *OrdStatus* = "3" (DoneForDay).

To enable Done For Day Restatements via port attribute setting, customers should contact the Cboe Trade Desk.

1.5.2 Carried Order Restatements

Good 'Til Cancel ("GTC") and Good 'Til Day ("GTD") orders can result in orders persisting between sessions. The Cboe FIX protocol provides a mechanism for clients to request restatement of orders that have been carried forward from the previous business day trading session. See Section 'FIX Port Attributes' for information on available port attributes, including *Carried Order Restatements*.

When enabled, Carried Order Restatements are sent to connected clients for each product on the Options Exchange for which orders have been carried forward from the previous business day trading session. Carried Order Restatements are sent after connection establishment and before regular trading activity messages on a per-symbol basis.

Execution Report messages representing carried orders will have *ExecTransType*="3" (status), *ExecType*="D" (Restated) and *ExecRestatementReason*="1" (Good 'Til Restatement).

To enable Carried Order Restatements via port attribute setting, customers should contact the Cboe Trade Desk.

1.5.3 Display Indicator Features

Display-Price Sliding (BZX Only)

If the original limit price of the unexecuted remainder of a day order does not lock or cross the NBBO, Cboe works the order at the original limit price while displaying it at the nearest permissible quoting increment. If the original limit price does lock or cross the NBBO, Cboe makes available Display-Price Sliding.

Display-Price Sliding adjusts the original limit price on entry to the locking price of the NBBO. It will be ranked and worked at a price locking the NBBO but will temporarily adjust the displayed price to the nearest permissible quoting increment. When the NBBO widens, the display price will be readjusted to the adjusted limit price. The display price may be temporarily less aggressive than the adjusted limit price or working price.

Multiple Display-Price Sliding does not permanently adjust the original limit price on entry, but allows for Display-Price slid orders to continue to have their display **and** working prices adjusted towards their original limit price based on changes to the prevailing NBBO.

Contra-side Post Only orders received when a Display-Price Slid order is working at a locking price with the NBBO will not result in a reject of a contra-side Post Only order but will instead result in the working price of the Display-Price Slid order to be repriced to one penny away from the locking price.

Price Adjust

If the limit price of an order does not lock or cross the NBBO, the order will be ranked and displayed at the nearest permissible quoting increment.

If the limit price of a Price Adjust eligible order locks or crosses the NBBO, the limit price will be adjusted on entry to the locking price of the NBBO, while the displayed price and ranked price will be temporarily adjusted to the nearest permissible quoting increment. Price Adjust orders will never be ranked at the locking price or at a non-displayable price increment. If the NBBO widens, the displayed price and ranked price will be readjusted to the adjusted limit price.

The limit price of a Multiple Price Adjust order will not be permanently adjusted on entry if the limit price crosses the NBBO. The displayed price and ranked price will be the nearest permissible quoting increment and will be adjusted towards the original limit price based on changes in the prevailing NBBO.

NoRescrapeAtLimit (BZX Only)

Applicable only to fully routable IOC orders (9303=R **and** 59=3). After walking the price down to the limit, there will be no final scrape at Cboe, and the cancel code will state "X: Expired" rather than "N: No Liquidity".

1.5.4 Risk Root

This document uses the term "Risk Root" to denote the underlying symbol in the context of Cboe Options Risk Management functionality. This informs what value must be sent in the defined *RiskRoot* fields when performing a mass cancel or resetting a risk trip.

See the Risk Management Specification for more details.

1.5.5 Cabinet and Sub-Cabinet Orders (C1 Only)

Cabinet orders are identified via *PriceType* (423) = "0" and must have a valid *TimeInForce* (59) of "Day", "GTC", "GTD" or "IOC". All non-IOC Cabinet orders are required to set *OpenClose* (77) = "C". Cabinet orders will only trade with other cabinet orders on the floor and therefore **require direct or default floor routing instructions** as described in <u>Section 1.5.7 "Floor Routing"</u>.

1.5.5.1 Valid Pricing

Orders in non-penny classes must have a limit price **less than or equal to** $0.01 and orders in penny classes must have a limit price **less than** $0.01. Limit prices may be up to 4 decimal places.

1.5.5.2 Invalid Pricing

Orders in penny or non-penny classes priced **greater than** $0.01 and orders in penny classes priced **equal to** $0.01 will be rejected.

1.5.5.3 Market Data

Cabinet orders or executions will not be disseminated on OPRA but will be available on Cboe Options Multicast PITCH and Cboe Options Multicast TOP feeds.

1.5.6 Flex Order Entry (C1 Only)

Orders for FLEX options may be entered using the `New Order Single`, `New Order Multileg`, `New Order Cross`, or `New Order Cross Multileg` message types. The OSI symbol specified in *Symbol* (55) will determine the type of FLEX product being traded.

FLEX Option products

Underlying Security	Lead Char	Settlement Type	Exercise Style
Index	1	AM	American
Index	2	AM	European
Index	3	PM	American
Index	4	PM	European
Index	5	Asian	European
Index	6	Cliquet	European
Equity/ETF	1	PM	American
Equity/ETF	2	PM	European

For example, an OSI of "3SPX" would be used to enter a FLEX order or cross for an SPX option that is PM settled and that has an American exercise style.

Asian settlement types further encode in the fifth character an observation day of month for index value observations.

FLEX Asian Settlement OSI Format

Lead Char	Symbol Abbr.	Observation Day of Month
5	SPX = SPX RUT = RUT XSP = XSP DJX = DJX MXA = MXEA MXF = MXEF	1 = 1 2 = 2 … 9 = 9 0 = 10 A = 11 B = 12 … U = 31

For example, OSI "5MXAC" reads as "Asian MXEA option having capped observation day of month 13".

Cliquet settlement types encode the underlying index in the second character, an observation in the third and fourth characters, a cap return percentage in the fifth character, and a creation day of month in the sixth.

FLEX Cliquet Settlement OSI Format

Lead Char	Symbol Abbr.	Cap % (whole)	Cap % (frac)	Obs. Day	Creation Day
6	S = SPX R = RUT X = XSP D = DJX A = MXEA F = MXEF	A = 0 B = 1 … Z = 25	A = 00 B = 05 … T = 95	1 = 1 2 = 2 … 9 = 9 0 = 10 A = 11 B = 12 … U = 31	1 = 1 2 = 2 … 9 = 9 0 = 10 A = 11 B = 12 … U = 31

For example, OSI "6DCH8T" reads as "Cliquet DJX option having capped return percentage of 2.35%, observation day of month 8 and creation day of month of 30".

If tag *Symbol* (55) is as FLEX OSI symbol, then expiration date, strike price, and call/put indicator are also required.

Alternatively, the Cboe Identifier for an existing FLEX symbol can specified in *Symbol* (55).

FLEX can be traded as a percentage of the closing price of the underlying for the day by indicating *PriceType* (423) = 1. *Price* (44) and *LegPrice* (566) must be in percentage terms if and only if the strike price of the FLEX option is also in percentage terms. FIX users may opt-in to receive restatement messages at the end of the day once the percentage price has been converted into dollars.

FLEX orders initiating an auction are required to specify *FLEXAuctionDuration* (21010).

Unless responding to an auction, complex FLEX orders must specify both *LegPrice* (566) per leg and *Price* (44).

1.5.7 Floor Routing (C1 Only)

All orders routed to the floor must include explicit routing instructions that includes two features: 1) floor routing instruction indicating Direct or Default routing behavior and 2) floor destination information. Floor routing behavior is specified in *FloorRoutingInst* (22303). Direct routing sends the order to the indicated PAR workstation, while default routing indicates that electronic execution is preferred, but the order may be routed to the indicated PAR if it cannot be processed electronically.

Examples of conditions which cause default routing to the Floor include:

➢ a complex order having an AON contingency

➢ a complex order with multiple underlying components

➢ any FLEX order not participating in an auction

➢ not held orders

Floor destination instructions are specified in *FloorDestination* (22100), indicating a PAR workstation (ex. W001) to route to on the floor (or "PARO" to rout to the Floor PAR Official of the underlying symbol) if not specified on the inbound message. See Section 'FIX Port Attributes' for information on available port attributes, including *Default FloorRoutingInst* and *Default FloorDestination*.

1.5.8 Market Maker Floor Trade Notifications (C1 Only)

Market Maker Trade Notifications (MMTN) will be sent to Market Makers if they are identified as the contra party on a floor trade. MMTN messages will be sent to the Market Makers as `Execution Reports` with *ExecType* (150) = "T" over a designated FIX Drop port or a FIX or BOE order entry port. See Sections 'FIX Port Attributes' and 'FIX Drop Port Attributes' for information on available port attributes related to the receipt of MMTN messages.

Market Makers that receive a notification of a trade are required to use `Floor Trade Confirmation` messages or `Add Floor Trade` messages to respond to MMTN messages if they agree with the terms of the trade in the `Execution Report`.

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Order Tags/Port Settings				Handling of the Order	
Order Floor Destination	**Order FloorRoutingInst**	**Port Default Floor Destination**	**Port Default FloorRoutingInst**	**Orders Only Executed on Floor (i.e. complex AON)**	**All Other Order Types**
			E (default)	Reject: ineligible for electronic book	Process electronically
			D	Reject: requires a floor destination	Reject: requires a floor destination
			X	Reject: requires a floor destination	Reject: requires a floor destination
		W001	E (default)	Reject: ineligible for electronic book	Process electronically
		W001	D	Route to floor: W001	Route to floor: W001
		W001	X	Route to floor: W001	Process electronically
W009			E (default)	Reject: ineligible for electronic book	Process electronically
W009		W001	D	Route to floor: W009	Route to floor: W009
W009			X	Route to floor: W009	Process electronically
W009	E			Reject: ineligible for electronic book	Process electronically
W009	D			Route to floor: W009	Route to floor: W009
W009	X			Route to floor: W009	Process electronically
	E			Reject: ineligible for electronic book	Process electronically
	D			Reject: requires a floor destination	Reject: requires a floor destination
	X			Reject: requires a floor destination	Process electronically

E = Electronic only   **D** = Direct   **X** = Route to floor if unable to process electronically

1.5.8.1   Floor Representation Restatements (C1 Only)

Orders routed to the trading floor will be represented to the open outcry crowd before being traded in the crowd. The Cboe FIX protocol provides a mechanism for clients to request restatement of orders at the time of representation. See Sections 'FIX Port Attributes' and 'FIX Drop Port Attributes' for information on available port attributes, including Floor Representation Restatements.

When enabled, Floor Representation Restatements are sent to connected clients for each order when the floor broker reports representation of the order to the crowd. Floor Representation Restatements sent to the FIX and BOE ports will also be sent to connected Order by Order Drop clients having the *Floor Representation Restatements* port attribute enabled.

Execution Report messages for floor representation will have *ExecTransType* (20) = "3" (Status), *ExecType* (150) = "D" (Restated) and *ExecRestatementReason* (378) = "7" (Represented in Crowd). The *TransactTime* (60) will be the recorded time of the representation.

To enable *Floor Representation Restatements* via port attribute setting, customers should complete a modification request using the Logical Port Request form within the Cboe Customer Web Portal.

1.6   Auction Orders

For more information on the following Auction Only Orders, please refer to the Opening Process Specification.

Order Type	Order Entry Details	
Market-On-Open (MOO)	*OrdType* (40) = 1 (*Market*)	*TimeInForce* (59) = 2 (*At the open*)
Limit-On-Open (LOO)	*OrdType* (40) = 2 (*Limit*) *Price* (44) = [price]	*TimeInForce* (59) = 2 (*At the open*)
Settlement Liquidity On Open(SLOO)		*TimeInForce* (59) = 2 (*At the open*) *ExecInst* (18) = r (*Settlement Liquidity*)

2   Protocol

2.1   Message Format

FIX messages are ASCII formatted. The user will be provided with a *SenderCompId* and *SenderSubId* that must be sent on every message. The *TargetCompId* for all messages the user sends will be "BATS", "CBOE", "CTWO", or "EDGX". All messages the user receives will have the Sender and Target fields swapped.

Destination Exchange	TargetCompID
BZX Options	BATS
Cboe Options (C1)	CBOE
C2 Options	CTWO
EDGX Options	EDGX

2.2   Sequence Numbers

Sequence numbers, both inbound and outbound, will be reset to 1 each night during system down time.

Messages are processed in sequence order. Behind sequence messages (other than Sequence Reset – Reset) will cause an immediate logout. Ahead of sequence messages (other than a Resend Request) will trigger a message recovery via a Resend Request.

2.3   Version Compatibility

Cboe uses the FIX 4.2 session protocol.

3 Sessions

The following session messages are supported in both directions:

Message	Type	Comment
Logon	A	Begin session (or resume a broken session).
Heartbeat	0	
Test Request	1	
Resend Request	2	
Reject	3	Malformed message or improper session level handling.
Sequence Reset	4	Both Gap Fill (*GapFillFlag*=Y) and Reset.
Logout	5	Used to gracefully close session.

3.1 Connectivity

IP Address	Address to connect to.	Supplied by Cboe.
TCP Port	Port to connect to.	Supplied by Cboe.
SenderCompID	Sent in every FIX message to Cboe.	Supplied by Cboe.
SenderSubID	Sent in every FIX message to Cboe.	Supplied by Cboe.
TargetCompID (BZX Options)	Sent in every FIX message to BZX Options.	"BATS"
TargetCompID (C1 Options)	Sent in every FIX message to C1 Options.	"CBOE"
TargetCompID (C2 Options)	Sent in every FIX message to C2 Options.	"CTWO"
TargetCompID (EDGX Options)	Sent in every FIX message to EDGX Options.	"EDGX"
TargetSubID	Sent in every FIX message to Cboe.	"TEST" for test system. "PROD" for production.

For information on connectivity options to Cboe, refer to the [Cboe US Equity/Options Connectivity Manual](#).

3.2 Logon

Tag	Field Name	Required	Description
35	*MsgType*	Y	A
108	*HeartbeatInterval*	Y	Client Heartbeat Interval (in seconds).

The `Logon` must be the first message sent by the user after the TCP connection is established. EncryptMethod is ignored (FIX level encryption is not supported).

Cboe will wait one second after a `Logon` is received to ensure that no `Resend Request` messages are in flight from the Member. A `Heartbeat` will be sent to indicate that the one second wait period has ended. **Members should not send any orders prior to receiving this first `Heartbeat` from Cboe.**

The IP Address of the user, the *SenderCompId*, *SenderSubId* and *TargetCompId* (defined in table above) and *TargetSubId* ("TEST"/"PROD") will be validated. If validation fails the connection will be dropped without a reject (to avoid corrupting the users sequence in the case that the user merely mistakenly connected to the wrong port).

If connection is unexpectedly broken, upon reconnection the user may receive a login reply with a sequence number greater than expected. This means that in-flight messages were missed (likely important execution reports). The user should issue a `Resend Request` to retrieve the missed messages.

Similarly Cboe will issue a `Resend Request` to the user for messages that it missed. The user may wish to send gap fill messages in place of new orders to avoid re-submission of potentially stale orders.

HeartbeatInterval must be specified by the user in the `Logon` message. This value will be clamped between 5 and 300 seconds and returned in the logon reply message. We recommend using as low a value as the reliability and latency of your telecommunications channel will allow.

3.2.1 Logon and Carried Order Restatement

If the *Carried Order Restatements* port attribute is set, unsolicited `Execution Report` messages representing "carried" orders loaded by the system at startup will be sent after the Logon response. Carried orders are orders that persist across trading days. Good 'Til Cancel (GTC) and Good 'Til Day ("GTD") orders and Day orders persisting across holiday trading segments comprising a single business date are the only order types that will appear in Carried Order Restatements (see Carried Order Restatements).

3.3 Heartbeat

Tag	Field Name	Required	Description
35	*MsgType*	Y	0
112	*TestReqID*	N	Required in response to a `Test Request`.

A `Heartbeat` message should be sent if the agreed upon *HeartbeatInterval* has elapsed since the last message sent. If any message has been sent during the preceding *HeartbeatInterval* a `Heartbeat` message need not be sent.

3.4 Test Request

Tag	Field Name	Required	Description
35	*MsgType*	Y	1
112	*TestReqID*	Y	Auto-generated request ID.

If a *HearbeatInterval* + 1 seconds have elapsed since the last message received, a Test Request should be issued. If another *HearbeatInterval* + 1 seconds go by without receiving a message, the TCP connection should be dropped. This ensures a broken TCP connection will be detected even if the TCP stack doesn't notice (this has been observed to happen in WAN environments, particularly when a VPN is involved).

3.5 Resend Request

Tag	Field Name	Required	Description
35	MsgType	Y	2
7	BeginSeqNo	Y	Auto-generated request ID.
16	EndSeqNo	Y	0 means + infinity

A `Resend Request` message should be processed even if it is received ahead of sequence. Only after resending the requested range (all marked *PossDup*="Y", including any gap fills) should `Resend Request` be issued in the opposite direction.

As discussed in the FIX 4.2 specification, it is possible to send an open or closed sequence range in a `Resend Request` (an open range uses sequence zero as the *EndSeqNo*). Cboe will honor either type of request, but will always issue `Resend Requests` with a closed sequence range.

3.6 Reject

Tag	Field Name	Required	Description
35	*MsgType*	Y	3
45	*RefSeqNum*	Y	*MsgSeqNum* of rejected message.
371	*RefTagID*	N	
372	*RefMsgType*	N	
373	*SessionRejectReason*	N	
58	*Text*	N	

Session level rejects are used to indicate violations of the session protocol or missing/bogus fields. These are to be expected during development and certification while the user adapts for Cboe, but should be extremely rare in production. Application layer rejects (like Order Reject and Cancel Reject) are normal.

3.7 Sequence Reset

Tag	Field Name	Required	Description
35	*MsgType*	Y	4
36	*NewSeqNo*	Y	*Next expected sequence number.*
123	*GapFillFlag*	N	Sequence Reset - Gap Fill messages (*GapFillFlag*="Y") must be received in sequence. Any messages (including any Gap Fills) sent in response to a Resend Request should have *PossDup*="Y".

			Sequence Reset - Reset (*GapFillFlag* not "Y") is used only as a last resort, and always by human intervention, to allow an otherwise hopelessly confused session to be resumed. In these cases all chance at automatic message recovery are lost.

3.8   Logout

Tag	Field Name	Required	Description
35	*MsgType*	Y	5
58	*Text*	N	*Indicates reason for Logout.*

Either side may issue a `Logout` to gracefully close the session. The side that issues the logout should process messages normally until it sees the logout reply, and then break the TCP connection. Cboe will typically only request logout after the scheduled end of FIX session.

4   FIX Messages

4.1   Standard Message Header

Tag	Field Name	Req'd	Description
8	BeginString	Y	FIX.4.2 Must be first field in message.
9	BodyLength	Y	Length of message following BodyLength field up to and including the delimiter preceding the CheckSum field. Must be second field in message.
35	MsgType	Y	Must be third field in message.
49	SenderCompID	Y	ID of sender: Assigned by Cboe for messages sent to Cboe. (TargetCompID for messages from Cboe)
50	SenderSubID	Y	Sub ID of sender: Assigned by Cboe for messages sent to Cboe. (TargetSubID for messages from Cboe)
56	TargetCompID	Y	ID of destination: "BATS" for messages sent to BZX Options "CBOE" for messages sent to C1 Options "CTWO" for messages sent to C2 Options "EDGX" for messages sent to EDGX Options (SenderCompID for messages from Cboe)
57	TargetSubID	Y	Sub ID of destination: "TEST" for messages sent to Cboe test system. "PROD" for messages sent to Cboe production system. (SenderSubID for messages from Cboe)
34	MsgSeqNum	Y	Sequential sequence number for session.
43	PossDupFlag	N	Indicates a message resent from the admin level (has a duplicate sequence number). Default is "N".
52	SendingTime	Y	GMT date-time that message was sent. If SendingTime Acknowlegement is different by 1 second or greater, the order will be rejected.
122	OrigSendingTime	N	For messages with PossDupFlag = "Y", indicates time that message was first sent.
115	OnBehalfOfCompId	N	Identifies end-client EFID on messages **to** the exchange. Used to specify clearing information.
116	OnBehalfOfSubID	N	End-client sub identifier. 4 Characters alphanumeric, otherwise not validated. Recorded and returned in DeliverToSubID. Available via Drop.

| 128 | DeliverToCompId | N | Identifies end-client on messages **from** Cboe. Used to specify clearing information. |
| 129 | DeliverToSubID | N | Returns OnBehalfOfSubID optionally sent by client. |

4.2   Standard Message Trailer

Tag	Field Name	Req'd	Description
10	*CheckSum*	Y	Modulo 256 checksum of all characters in message up to and including the delimiter preceding the CheckSum field. Three digits with leading zeroes if necessary.

4.3   User Defined FIX Fields

The following FIX fields are used by Cboe:

Tag	Field Name	Description
6655	*CorrectedSize*	Refer to definition in the `Trade Cancel/Correct` section.
7692	*RiskReset*	Refer to definition in the `New Order Single`, `New Order Multileg`, `Order Cancel Request` and `Purge Request` sections.
7693	*MassCancel*	Refer to the definition in the `Order Cancel Request` and `Purge Request` sections.
7700	*MassCancelInst*	Refer to definition in the `Order Cancel Request` and `Purge Request` sections.
7694	*ContraCapacity*	Refer to definition in the `Execution Report` section.
7695	*MassCancelID*	Refer to definition in the `Order Cancel Request`, `Execution Report`, `Cancel Reject`, `Purge Request`, `Purge Acknowledgement` and `Purge Reject` sections.
7697	*MassCancelLockout*	Refer to definition in the `Order Cancel Request` and `Purge Request` sections.
7928	*PreventMatch*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
7933	*RoutingFirmID* *(C1, C2 and EDGX only)*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, `New Order Multileg`, `Order Cancel Request`, `Order Cancel/Replace Request` and `Purge Request` sections.
8020	*DisplayRange*	Refer to definition in the `New Order Single`, `New Order Multileg` and `Execution Report` sections.
9303	*RoutingInst*	Refer to definition in the `New Order Single` and `New Order Multileg` sections.
9350	*RoutDeliveryMethod*	Refer to definition in the `New Order Single` section.
9400	*RoutStrategy*	Refer to definition in the `New Order Single` section.
9479	*DisplayIndicator*	Refer to definition in the `New Order Single` section.
9617	*ModifySequence*	Refer to definition in the `Execution Report` section.
9618	*MaxRemovePct*	Refer to definition in the `New Order Single` section.

	(BZX only)	
9619	*CancelOrigOnReject*	Refer to definition in the `Order Cancel/Replace Request Cancel Reject` and sections.
9620	*CorrectedPrice*	Refer to definition in the `Trade Cancel/Correct` section.
9688	*OrigCompID*	Refer to definition in the `Execution Report` section.
9689	*OrigSubID*	Refer to definition in the `Execution Report` section.
9690	*WorkingPrice*	Refer to definition in the `Execution Report` section.
9691	*InitialDisplayPrice*	Refer to definition in the `Execution Report` section.
9730	*TradeLiquidityIndicator*	Refer to definitions in the `Execution Report` and `Trade Cancel/Correct` sections.
9732	*AttributedQuote*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg` and `New Order Multileg` sections.
9882	*FeeCode*	Refer to definition in the `Execution Report` section.
5937	*MarketingFeeCode* *(C1 and EDGX only)*	Refer to definition in the `Execution Report` section.
9370	*AuctionID* *(C1, C2 and EDGX only)*	Refer to definition in the `New Order Single`, `New Order Multileg` and `Execution Report` sections.
9040	*AutoMatch* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross` and `New Order Cross Multileg` sections.
9044	*AutoMatchPrice* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross Multileg` and `New Order Cross` sections.
9849	*LastPriority* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross Multileg` and `New Order Cross` sections.
9946	*GiveUpFirmID* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross Multileg` and `New Order Cross` sections.
7699	*CustomGroupID*	Refer to definition in the `New Order Single`, `New Order Multileg`, `Order Cancel Request` and `Purge Request` sections.
6253	*DrillThruProtection* *(C1, C2 and EDGX only)*	Refer to definition in the `New Order Cross Multileg` and `New Order Cross` sections.
8641	*NoOfSecurities* *(C1, C2 and EDGX only)*	Refer to definition in the `Security Definition` section.
7698	*CustomGroupIDCnt*	Refer to definition in the `Purge Request` section.
9324	*ClearingOptionalData*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, `New Order Multileg`, `Add Floor Trade`, and `Execution Report` sections.
21097	*FrequentTraderID* *(C1 only)*	Refer to definition in the `New Order Single` and `Order Cancel/Replace` sections.
22003	*ORS* *(C1 only)*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, `New Order Multileg`, `Floor Trade Confirmation`, and `Execution Report` sections.
22006	*Compression* *(C1 only)*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, `New Order Multileg` and `Execution Report` sections.

22303	*FloorRoutingInst* *(C1 only)*	Refer to definition in the `New Order Single` and `New Order Multileg` sections.
22100	*FloorDestination* *(C1 only)*	Refer to definition in the `New Order Single` and `New Order Multileg` sections.
423	*PriceType* *(C1 only)*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
9465	*OrderOrigin* *(C1 only)*	Refer to definition in the `New Order Single New Order Multileg`, and `Execution Report` sections.
21010	*FLEXAuctionDuration* *(C1 only)*	Refer to definition in the `New Order Single`, `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22011	*EquityTradePrice* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22012	*EquityTradeSize* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22013	*EquityTradeVenue* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22014	*EquityBuyClearingFirm* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22015	*EquitySellClearingFirm* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22060	*EquityTransactTime* *(C1 and EDGX only)*	Refer to definition in the `New Order Cross`, `New Order Cross Multileg`, and `New Order Multileg` sections.
22008	*EquityPartyID* *(C1 only)* ***Effective on EDGX with C1 Feature Pack 9.***	Refer to definition in the `New Order Cross Multileg` and `New Order Multileg` sections.
22016	*EquityExDestination* *(C1 only)* ***Effective on EDGX with C1 Feature Pack 9.***	Refer to definition in the `New Order Cross Multileg` and `New Order Multileg` sections.
22624	*EquityLegShortSell* *(C1 only)* ***Effective on EDGX with C1 Feature Pack 9.***	Refer to definition in the `New Order Cross Multileg` and `New Order Multileg` sections.
22002	*StrategyID* *(C1 only)*	Refer to definition in the `New Order Multileg` and `Execution Report` section.
22005	*ComboOrder* *(C1 only)*	Refer to definition in the `New Order Multileg`, `Add Floor Trade`, and `Execution Report` sections.
22049	*FloorTraderAcr* *(C1 only)*	Refer to definition in the `Add Floor Trade` and `Execution Report` sections.
22019	*LegPositionEffects* *(C1 only)*	Refer to definition in the `New Order Cross Multileg` section.
21098	*TradeThroughAlertType* *(C1 only)*	Refer to definition in the `Execution Report` section.

21005	*FLEXHedgeExecInst* *(C1 only)*	Refer to definition in the `New Order Cross` and `New Order Cross Multileg` sections.
21008	*FLEXPreFacilPrice* *(C1 only)*	Refer to definition in the `New Order Cross` and `New Order Cross Multileg` sections.
22017	*SessionEligibility* *(C1, C2 and EDGX only)*	Refer to definition in the `New Order Single and New Order Multileg` sections.
22018	*TiedHedge* *(C1 only)*	Refer to definition in the `New Order Multileg` section.

4.4 Order Protocol – Member to Cboe

4.4.1 New Order Single

A `New Order Single` message is used to submit a single-leg order for both standard listed options and FLEX options. Complex orders *(C1, C2 and EDGX only)* must use the `New Order Multileg` message.

Tag	Field Name	Req'd	Description
35	*Standard Message Header*	Y	*MsgType*="D"
97	*PossResend*	N	N = (Default) indicates a new order. Y = Indicates an application level resend and is NOT SUPPORTED. For reasons of economy, Cboe does not track in primary storage the *ClOrdID* values of orders that are no longer live. For reasons of performance, Cboe does not access secondary storage to enforce unique *ClOrdID* values against orders that are no longer live. Without full duplicate *ClOrdID* value enforcement, it is not possible to safely implement the full behavior specified in the FIX 4.2 Protocol for *PossResend*="Y". To remain economical, fast and safe, all messages with *PossResend*="Y" will be simply ignored.
1	*Account*	N	*Account* (1) will only be mapped to the OCC via the Customer ID field (max 10 characters) and the new *ClearingOptionalData* (9324) field will be mapped to the OCC via the Optional Data field (16 characters). Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
11	*ClOrdId*	Y	ID chosen by client. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe. If the *ClOrdId* matches a live order it will be rejected as duplicate (unless PossResend="Y", see above).

			Note: Cboe only enforces the uniqueness of ClOrdID values among currently live orders, which includes long-lived, persisting GTC/GTD orders. However it is strongly recommend Users maintain unique *ClOrdID* values.
60	*TransactTime*	Y	Time the order was initiated/released. Required by FIX 4.2 but not used by Cboe.
77	*OpenClose*	Y*	Indicates status of client position in the option. O = Open C = Close N = None* *Orders with an *OrderCapacity* (47) of "M" or "N" will not be required to specify *OpenClose* on their orders or may specify a value of "N". A <blank> will be sent to OCC. Note that orders in series which are limited to closing only transactions will not support an *OpenClose* value of <blank>., while orders submitted for series that are restricted to closing only transactions with an *OpenClose* value of "O" will be rejected with a message of "c: Close Only" unless *OrderCapacity* (47) = "M".
167	*SecurityType*	Y	Indicates the type of security OPT = Options
200	*MaturityMonth*	N	Indicates Maturity Month (YYYYMM)
205	*MaturityDay*	N	Expiration date day of the month Format: DD
201	*PutOrCall*	N	0 = Put 1 = Call
202	*StrikePrice*	N	Strike Price for option, 0 – 999,999.999
55	*Symbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive)
54	*Side*	Y	1 = Buy 2 = Sell
38	*OrderQty*	Y	Number of contracts for order, 1 to 999,999

111	*MaxFloor*	N	Portion of *OrderQty* to display. The balance is reserve. `0` = Display entire quantity (Default). The displayed quantity of each order at a price level is decremented first. When displayed quantity is fully decremented, it is reloaded up to MaxFloor from reserve. Ignored if order is IOC. An order with a *MaxFloor* greater than 0 will be rejected for Cboe proprietary classes (such as DJX, RUT, SPX, XSP, and VIX).
8020	*DisplayRange*	N	Used for random replenishment of reserve orders. This is the random replenishment amount in contracts. The value specified will create a *DisplayRange* around *MaxFloor*. Value must be less than the value specified for *MaxFloor*. **<u>Example</u>** If *MaxFloor* = 20 and *DisplayRange* = 2, the displayed quantity will be selected randomly from one of the following values: 18, 19, 20, 21, 22.
40	*OrdType*	Y	1 = Market (implies *TimeInForce* (59) of IOC) 2 = Limit 3 = Stop 4 = Stop Limit Stop/Stop Limit orders must be set to *TimeInForce* (59) = "0" (DAY), "1" (GTC), or "6" (GTD).
44	*Price*	N	If *PriceType* (423) = 0 Limit price of cabinet order $0.0001 - $0.01 If *PriceType* (423) = 1 Traded as percentage (FLEX Only) 0.01%-100% If *PriceType* (423) = 2 Limit price for this order. Order rejected if priced finer than the minimum trading increment for the option. Numeric $0.01 - $99,999,999.99
99	*StopPx*	N	The trigger price for Stop and Stop Limit orders. Required if *OrdType* (40) is equal to "3" or "4". Stop and Stop Limit orders will trigger off bids and offers in addition to executions. Complex executions outside of the NBBO will <u>not</u> trigger Stop and Stop Limit Orders.

110	*MinQty*	N	**Optional** minimum* fill quantity for Book-Only IOC orders. **Ignored** unless order is Book-Only IOC.
			Default is zero.
			*When removing liquidity, limits the minimum **total** fill size, which may be made up of several **consecutive** smaller fills. Not compatible with Step-Up Mechanism (SUM).
47	*Rule80A (OrderCapacity)*	Y	The capacity for the order.
			C = Customer
			F = Firm
			M = Market Maker
			U = Professional Customer
			N = Away Market Maker
			B = Broker-Dealer
			J = Joint Back Office
			L = Non-TPH Affiliate (C1 and C2 only)
			D = Non-TPH Broker-Dealer (FLEX only) (C1 only)
59	*TimeInForce*	N	0 = DAY (Default). Expires at end of market day.
			1 = GTC. Remains in system until executed, cancelled or option expires.
			2 = At The Open. Will remain queued and only interact in the Opening Process
			3 = IOC. Portion not filled immediately is cancelled. Market orders are implicitly IOC.
			4 = FOK. An IOC where the entire size must be filled, otherwise the order will be cancelled back. Not compatible with Step-Up Mechanism (SUM).
			6 = GTD. Expires at specified *ExpireTime* for a specified day.
			7 = At The Close. Orders held for execution until 180 seconds before series is scheduled to close.
22017	*SessionEligibility*	N	R = (Default) Order participates in Regular Trading Hours only.
			A = Order participates in both Global and Regular Trading Hours (C1, C2, and EDGX only).
126	*ExpireTime*	N	Required for *TimeInForce* (59) = "6" (GTD) orders, specifies the date-time (in GMT) that the order expires. Values may be specified at a millisecond level.
18	*ExecInst*	N	Single value only (with no trailing space)
			1 = Not held. Must be routed to the floor. (C1 only) [2]
			f = Intermarket Sweep (Directed or Book Only) [2]
			r = Settlement Liquidity[1,2] (C1 only)
			G = All or None (AON) (C1 and EDGX only)
			All other values are ignored.

			[1]requires *TimeInForce*(59)=2 and *Price*(44) [2]Not compatible with Step-Up Mechanism (SUM)
7692	*RiskReset*	N	For use by Users using Cboe's Risk Management tools to reset or release EFID Group, EFID, Risk Root, or Custom Group ID-level lockout conditions resulting from risk profile trips or self-imposed lockouts issued via `Cancel Order` or `Purge Orders` messages. **Single Character Values:** S = Risk Root-level risk/lockout reset F = EFID risk/lockout reset C = CustomGroupID lockout reset G = EFID Group risk/lockout reset Values may be combined together to allow for resets of multiple risk trips or self-imposed lockouts in a single message. For example, "GS", "SC", "FC", and "SFC" are all acceptable values. When a resting or inbound order is executed and a Risk Root-level risk profile limit is reached, resting orders on the associated Risk Root will be cancelled and inbound orders on the Risk Root will be rejected until this field is filled with the value "S" on a subsequent `New Order` or `New Complex Order` message corresponding to a symbol on the same Risk Root. All active Risk Root level rules in the risk profile are reset at this time. Individual rules cannot be reset on their own. If an EFID-level rule is tripped, this tag can be filled with the value "F" to reset all EFID-level rules. While this will reset EFID-level rules, it is possible that both EFID and Risk Root level rules are currently tripped. Setting this field to "F" will not clear Risk Root-level rules and the order may still be rejected. To clear both Risk Root and EFID-level rules, set this field to "SF" to reset all associated Risk Root and EFID-level lockouts. If orders have been locked out at the Custom Group ID level, inbound orders for the locked Custom Group ID will be rejected until this field is filled with the value "C" on a `New Order` or `New Complex` order that uses the locked Custom Group ID. EFID and EFID Group resets are not allowed by default. Customers should contact the Cboe Trade Desk to reset these limits or request a change to the "EFID Risk Reset" port setting using the Logical Port Request form. For more information, refer to the [Cboe US Options Risk Management Specification](#).

7928	*PreventMatch*	N	Three characters: **1st character - MTP Modifier:** N = Cancel Newest O = Cancel Oldest B = Cancel Both S = Cancel Smallest D = Decrement larger / Cancel Smaller d = Same as D above, but only decrement *LeavesQty*. Do not restate *OrderQty*. **2nd character - Unique ID Level:** F = Prevent Match at Firm(Member) Level M = Prevent Match *at* EFID Level **3rd character - Trading Group ID (optional):** User specified alphanumeric value 0-9, A-Z, or a-z. The Unique ID level (2nd character) of both orders must match to prevent a trade. If specified on both orders, Trading Group ID (3rd character) must match to prevent a trade. The MTP Modifier (1st character) of the inbound order will be honored, except that if the inbound order specifies Decrement and the resting order does not, and the resting order is larger, then both orders will be cancelled. This exception is to protect the order entry software for the resting order from receiving an unexpected restatement message. If order entry software is prepared to handle unexpected restatement messages, this exception may be override at the port level by requesting "Allow MTP Decrement Override" functionality. Uses of MTP Modifier "D" or "d" and users of "Allow MTP Decrement Override" functionality must be prepared to receive an `Order Restated` message that decrements *LeavesQty* (and, for method "D", *OrdQty* as well).

9303	*RoutingInst*	N	**1st character** B = Book Only (Not routable but will remove from local book) P = Post Only (Not routable) [1] Q = Post Only At Limit (removes shares that improve upon limit price and up to MaxRemovePct of remaining OrdQty at limit price) (BZX only) R = (Default) Routable S = Super Aggressive - Cross or Lock (Order will be removed from book and routed to any quote that is crossing or locking the order) X = Aggressive - Cross only (Order will be removed from book and routed to any quote that is crossing) **2nd character** (C1 and EDGX only) L = Do **not** Expose order via Step-Up Mechanism (SUM) S = Expose order via Step-Up Mechanism (SUM)[2] [1]Post Only orders with *DisplayIndicator* (9479) = R will be cancelled back even if they would be immediately executable with price improvement. [2] Marketable, routable orders identified as *RoutingInst* (9303) = "R, RS, S, SS, X or XS" and *RoutStrategy* (9400) = "ROUT" and *AuctionID* (9370) not supplied **or** marketable non-routable orders identified as *RoutingInst* (9303) = "BS" and *ExecInst* (18) not "f" and *TimeInForce* (59) not "4" and *MinQty* (110) not supplied will be eligible to initiate a Step-Up Mechanism (SUM) auction before routing, posting to book with Price Adjust or cancelling off book.
9350	*RoutDeliveryMethod*	N	RTI = (Default) Route to Improve RTF = Route to Fill Route to Improve: Ability to receive price improvement will take priority over speed of execution. Route to Fill: Speed of execution will take priority over potential price improvement. Only applicable to *RoutStrategy* = "ROUT".
9400	*RoutStrategy*	N	ROUT = Book + Street DIRC = Book + Directed IOC or Directed ISO if *ExecInst*="f"[1] SWPA = Book + Sweep Street (Default) [1] Must be specified when sending a non-Book Only ISO 9303=R, 18=f otherwise the order will be rejected.

100	*ExDestination*	N	Used to specify the designated away venue for *RoutStrategy* (9400) = "DIRC". A = NYSE Arca E = Nasdaq ISE F = MIAX Options Exchange P = MIAX PEARL D = MIAX Emerald G = EDGX Options H = C2 K = BOX N = Nasdaq S = Nasdaq BX U = NYSE American W = CBOE X = Nasdaq PHLX Z = BZX Options g = Nasdaq GEMX m = Nasdaq MRX
9479	*DisplayIndicator*	N	V = (Default) As determined by port level setting (defaults to "S" for BZX only and to "P" for C1, C2, and EDGX). S = Display-Price Sliding (this is to override an opt-out of Display-Price Sliding at the port level). (BZX only) L = Display-Price Sliding, but reject if order *crosses* NBBO on entry. (BZX only) M = Multiple Display-Price Sliding (BZX only) P = Price Adjust m = Multiple Price Adjust R = Reject the order if it cannot be booked and displayed without adjustment. N = NoRescrapeAtLimit (BZX only) See Display Indicator Features for more details on sliding options.
439	*ClearingFirm*	N	CMTA Number of the firm that will clear the trade. Must be supplied for CMTA orders and left unspecified for non-CMTA orders.

440	*ClearingAccount*	N	Supplemental identifier (optional)
			When *OrderCapacity* (47) is set to a value of "M" or "N" this field should be filled with desired market maker ID. When using CMTA, this value is the market maker ID for the CMTA member instead of the Cboe member executing the trade. This field will be passed through to the OCC Sub Account ID field and may be up to four alphanumeric characters.
			If *OrderCapacity* (47) is not set to "M" or "N" and *ClearingAccount* is populated the order will be rejected by default on C1 and C2 and will be accepted by default for BZX and EDGX Only. This field is recorded and returned in execution reports. Available via FIX Drop.
9618	*MaxRemovePct* (BZX only)	N	For PostOnlyAtLimit (9303=Q), specifies what percentage of the order quantity which remains after price improvement may be removed at the limit price.
			Integer 0-100 0 = Don't remove any contracts at limit price. 100 = Remove any amount at limit price.
9732	*AttributedQuote*	N	Allow for order to be attributed to firm's Executing Firm ID (EFID) in Cboe market data feeds. The order may also be included within attributed summary information displays related to quote/trade information on the Cboe web site. Must opt-in to support through the Cboe Trade Desk.
			N = (Default) Do not attribute firm Executing Firm ID to this order. Y = Attribute firm Executing Firm ID to this order. C = Attribute *ClientID (109)* only. Z = Attribute both *EFID* (115) and *ClientID* (109).
109	*ClientID*	N	User defined identifier for quote attribution.
			Four alpha characters or less.
9324	*ClearingOptionalData*	N	This field will be reflected back on execution reports and FIX DROP ports, and will be passed through to the OCC in the Optional Data field.
			16 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
1462	*TargetPartyID* (C1 and EDGX only)	N	A valid ParentID of the Directed Market Maker (EDGX only) or Preferred Market Maker (C1 only) is required for Directed Orders.
9370	*AuctionID* (C1, C2 and EDGX only)	N	Auction order identifier supplied by Cboe. This identifier corresponds to the identifiers used in Cboe market data products.
7933	*RoutingFirmID*	N	Used to optionally convey the routing firm of the order.

	(C1, C2 and EDGX only)		If supplied, value must be a valid EFID .
7699	*CustomGroupID*	N	Optional User-specified ID for the order. Cancellation by *CustomGroupID* available using [Purge Port](#) only. Integer 1-65535
21097	*FrequentTraderID* *(C1 only)*	N	Identifies the frequent trader program in which the order is participating. 6 characters or less (ASCII 33-126).
22003	*ORS* *(C1 only)*	N	Order router subsidy eligible (used for billing purposes). N = No (Default) Y = Yes
22006	*Compression* *(C1 only)*	N	Order is a compression trade. N = No (Default) Y = Yes
22303	*FloorRoutingInst* *(C1 only)*	N	D = Direct. Do not attempt to process electronically [1] E = Electronic only (default) X = Route to floor if unable to process electronically [1] <blank> = Port level default The default value for any given port can be changed by requesting an update to the "Default FloorRoutingInst" port attribute. [1] When *FloorRoutingInst* is "D" or "X", *RoutingInst* (9303) must be set to "R".
22100	*FloorDestination* *(C1 only)*	N	Floor route destination. Specifies a PAR workstation (ex. W001), or "PARO" to route to the Floor PAR Official of the underlying symbol. 4 characters or less (ASCII 33-126).
423	*PriceType* *(C1 only)*	N	0 = Fixed cabinet trade price 1 = Percentage (when trading FLEX percentage instruments) 2 = (default) Price per unit (contract)
9465	*OrderOrigin* *(C1 only)*	N	Floor acronym of Market Maker on whose behalf this order is being entered by a floor broker.
21010	*FLEXAuctionDuration* *(C1 only)*	N	Duration of the FLEX Auction in milliseconds. Applicable only to FLEX instruments.
21005	*FLEXHedgeExecInst* *(C1 only)*	N	Hedge execution instruction to carry the hedge information for the order. Applicable only the FLEX instruments.

Tag	Field Name	Req'd	Description
21008	*FLEXPreFacilPrice* (C1 only)	N	The pre-facilitation price for the hedge instruction. Applicable only to FLEX instruments.
	Standard Message Trailer	Y	

4.4.2 New Order Cross (C1 and EDGX Only)

A `New Order Cross` message contains the details for both the agency (initiating) and contra side(s) of a cross order (such as a AIM, QCC or SAM order). The two-sided order consists of a number of required fields including symbol, price, quantity, and relevant clearing information for both the agency and contra sides, as well as a number of optional fields. A maximum of ten (10) contra-parties will be accepted per order.

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	*MsgType*="s"
97	*PossResend*	N	`N` = (Default) indicates a new order. `Y` = Indicates an application level resend and is NOT SUPPORTED. For reasons of economy, Cboe does not track in primary storage the *ClOrdID* values of orders that are no longer live. For reasons of performance, Cboe does not access secondary storage to enforce unique *ClOrdID* values against orders that are no longer live. Without full duplicate *ClOrdID* value enforcement, it is not possible to safely implement the full behavior specified in the FIX 4.2 Protocol for *PossResend*="Y". To remain economical, fast *and* safe, all messages with *PossResend*="Y" will be simply ignored.
548	*CrossID*	Y	Identifier for the cross order. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
549	*CrossType*	Y	Type of auction order being submitted. This indicates the type of auction that will be initiated upon order entry. 1 = Automated Improvement Mechanism ("AIM") 2 = Qualified Contingent Cross ("QCC") 3 = Solicitation Cross ("SAM") (C1 only) [1] [1] **Effective on EDGX TBD**

550		*CrossPrioritization*	Y	Indicates which side of the cross order will be prioritized for execution. This identifies the Agency side. 1 = Buy 2 = Sell
552 *Repeating Group*		*NoSides*	Y	Indicates the number of sides for the cross order. This value must be set to "2". The first side is the Agency side, the second side is the Contra side.
➔	54	*Side*	Y	*Required tag to start each repeated group.* 1 = Buy 2 = Sell
➔	9732	*AttributedQuote*	N	Allow for order to be attributed to order's EFID in Cboe market data feeds. The order may also be included within attributed summary information displays related to quote/trade information on the Cboe web site. **Valid for Agency Side only.** Ignored on Contra Side. N = (Default) Do not attribute *EFID* (115) to this order. Y = Attribute *EFID* (115) to this order. C = Attribute *ClientID* (109) only. Z = Attribute both *EFID* (115) and *ClientID* (109).
➔	109	*ClientID*	N	User-defined identifier for quote attribution if *AttributedQuote* (9732) = "C" or "Z". Four alpha characters or less.
➔	1462	*TargetPartyID* *(C1 and EDGX only)*	N	A valid ParentID of the Directed Market Maker (EDGX only) or Preferred Market Maker (C1 only) is required for Directed Orders. Valid for Agency Side only. Ignored on Contra Side.
➔	7928	*PreventMatch*	N	Cboe Match Trade Prevention: 3 characters (not space separated): **1st character – MTP Modifier:** N = Cancel Newest O = Cancel Oldest **2nd character – Unique ID Level:** F = Prevent Match at Cboe Exchange Member level M = Prevent Match at MPID Level **3rd character – Trading Group ID (optional):** Member specified alphanumeric value 0-9, A-Z, or a-z.

					The Unique ID Level (character 2) of both orders must match to prevent a trade. If specified on both orders, Trading Group ID (character 3) must match to prevent a trade.
					MTP instructions on the AIM order will be used to prevent executions against AIM responses only; executions against resting or unrelated orders will still be permitted. Responses may only employ "Cancel Newest", in which case the response will be cancelled and the auction order will continue.
					Valid for Agency Side only. Ignored on Contra Side.
➔		78 *Repeating Group*	*NoAllocs*	Y	Number of Repeating Groups for contra-party responses. Should be set to "1" for Agency side.
➔	➔	80	*AllocQty*	Y	*Required tag to start each repeated group.* Number of contracts for this party.
➔	➔	11	*ClOrdId*	Y	Day-unique ID chosen by client. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
➔	➔	1	*Account*	N	*Account* (1) will only be mapped to the OCC via the Customer ID field (max 10 characters), and the new *ClearingOptionalData* (9324) field will be mapped to the OCC via the Optional Data field (16 characters). Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
➔	➔	9324	*ClearingOptionalData*	N	This field will be reflected back on execution reports and FIX DROP ports, and will be passed through to the OCC in their Optional Data field. 16 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
➔	➔	47	*Rule80A (aka OrderCapacity)*	Y	The capacity for the order. C = Customer F = Firm M = Market Maker U = Professional Customer N = Away Market Maker B = Broker-Dealer J = Joint Back Office L = Non-TPH Affiliate (C1 and C2 only)
➔	➔	77	*OpenClose*	Y	Indicates status of client position in the option.

					O = Open C = Close N = None* *Orders with an *OrderCapacity* (47) of "M" or "N" will not be required to specify *OpenClose* on their orders or may specify a value of "N". A <blank> will be sent to OCC. Orders submitted for series that are restricted to closing only transactions with an *OpenClose* value of "O" will be rejected with a message of "c: Close Only" unless *OrderCapacity* (47) = "M".
➔	➔	439	*ClearingFirm*	N	CMTA Number of the firm that will clear the trade. Must be supplied for CMTA orders and left unspecified for non-CMTA orders.
➔	➔	440	*ClearingAccount*	N	When *OrderCapacity* (47) is set to a value of "M" or "N" this field should be filled with desired market maker ID. When using CMTA, this value is the market maker ID for the CMTA member instead of the Cboe member executing the trade. This field will be passed through to the OCC Sub Account ID field and may be up to four alphanumeric characters. If *OrderCapacity* (47) is not set to "M" or "N" and *ClearingAccount* is populated the order will be rejected by default on C1 and C2 and will be accepted by default for BZX and EDGX Only. This field is recorded and returned in execution reports. Available via FIX Drop.
➔	➔	9946	*GiveUpFirmID*	Y	For the Agency Side, this field must equal the value of *OnBehalfOfCompId* (EFID). Each Contra allocation will use this field instead of *OnBehalfOfCompId* for clearing information.
➔	➔	21097	*FrequentTraderID* *(C1 only)*	N	Identifies the frequent trader program in which the order is participating. 6 characters or less (ASCII 33-126).
7933			*RoutingFirmID*	N	Used to optionally convey the routing firm of the order. If supplied, value must be a valid EFID.

18	*ExecInst*	N	Single value only (with no trailing space) f = Intermarket Sweep (Directed or Book Only) s = Sweep[1] All other values are ignored. [1] Requires CrossType(549)=1 (AIM)
167	*SecurityType*	Y	Indicates the type of security OPT = Options
200	*MaturityMonth*	N	Indicates Maturity Month (YYYYMM)
205	*MaturityDay*	N	Expiration date day of the month Format: DD
201	*PutOrCall*	N	0 = Put 1 = Call
202	*StrikePrice*	N	Strike Price for option, 0 – 99999.999
55	*Symbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive)
38	*OrderQty*	Y	Number of contracts for order, 1 to 999,999
40	*OrdType*	Y	2 = Limit
44	*Price*	Y	Auction Price
9040	*AutoMatch*	N	0 = Disabled 1 = Market 2 = Limit Better-priced responses will be automatically matched by the Contra side. Indicates the type of Auto Match the Contra Order will use. Mutually exclusive with *LastPriority* (9849).
9044	*AutoMatchPrice*	N	Required if *AutoMatch* (9040) is set to "2", ignored otherwise. Sets the limit price at which the Contra Order will Auto Match. Format is the same as *Price* (44).
9849	*LastPriority*	N	0 = Disabled 1 = Enabled When enabled, allocation will go to other participants' responses before requiring the Contra Order to satisfy remaining contracts of the Agency Order. Mutually exclusive with *AutoMatch* (9040).
423	*PriceType* *(C1 only)*	N	1 = Percentage, when trading FLEX percentage instruments 2 = (Default) Price per unit (contract)

21010	*FLEXAuctionDuration* (C1 only)	N	Duration of the FLEX Auction in milliseconds. Applicable only to FLEX instruments.
21005	*FLEXHedgeExecInst* (C1 only)	N	Hedge execution instruction to carry the hedge information for the order. Applicable only the FLEX instruments.
22003	*ORS* (C1 only)	N	Order router subsidy eligible (used for billing purposes). N = No (Default) Y = Yes
22006	*Compression* (C1 only)	N	Order is a compression trade. N = No (Default) Y = Yes
22011	*EquityTradePrice*	N	Price at which the equity associated with a QCC trade. Valid when *CrossType (549)* = '2'.
22012	*EquityTradeSize*	N	Number of shares executed in the equity associated with a QCC trade. Valid when *CrossType (549)* = '2'.
22013	*EquityTradeVenue*	N	Exchange venue where equity associated with a QCC traded. Valid when *CrossType (549)* = '2'. A = NYSE American B = Nasdaq BX C = NYSE National I = Investors Exchange J = Cboe EDGA Exchange K = Cboe EDGX Exchange M = CHX N = NYSE P = NYSE Arca Q = Nasdaq X = Nasdaq PSX Y = Cboe BYX Exchange Z = Cboe BZX Exchange
22014	*EquityBuyClearingFirm*	N	Clearing firm on buy side of the equity trade associated with a QCC trade. Valid when *CrossType (549)* = '2'.

Tag	Field Name	Req'd	Description
22015	*EquitySellClearingFirm*	N	Clearing firm on sell side of the equity trade associated with a QCC trade. Valid when *CrossType (549)* = '2'.
22060	*EquityTransactTime*	N	GMT date-time of equity trade associated with a QCC trade. Valid when CrossType (549) = '2'. YYYYMMDD-HH:MM:SS.000

4.4.3   New Order Cross Multileg (C1 and EDGX Only)

A `New Order Cross Multileg` message contains the details for both the agency (initiating) and contra side(s) of a cross order (such as an AIM order). The two-sided order consists of a number of required fields including symbol, price, quantity, and relevant clearing information for both the agency and contra sides, as well as a number of optional fields. A maximum of ten (10) contra-parties will be accepted per order.

Short Form

If the complex symbol is known at the time of entry, a short form of the `New Order Cross Multileg` message can be utilized. Note that Complex Symbol ID's may be different between all Cboe Exchanges.

  ➢ *Symbol* (55) and *Side* (54) are required.
  ➢ *NoLegs*(555) and *LegRefID* (654) is required if specifying *LegPrice* (566) for FLEX. The order of the legs must match the Security Definition response, as legs can be re-ordered during security definition.
  ➢ The order of position effects in *LegPositionEffects* (22019) must match the Security Definition response, as legs can be re-ordered during security definition.
  ➢ Sending any additional fields in the legs repeating group (*LegSymbol, LegCFICode, LegMaturityDate, LegStrikePrice, LegRatioQty, or LegSide*) will result in the order being rejected to avoid confusion with an invalid long form request.

Long Form

If the complex symbol is not known, a long form of the request exists to enter the symbol legs at the same time as the order. The legs will be used to find an appropriate complex symbol in the Cboe Complex Order Book; the resulting symbol (if accepted by the system) will be returned on the `Execution Report` in *Symbol* (55). A minimum of two (2) legs must be specified and a maximum of 12 legs will be accepted.

  ➢ If *Symbol* (55) or *Side* (54) are present and non-blank, the order will be rejected to avoid confusion with an invalid short form request.
  ➢ The order of position effects in *LegPositionEffects* (22019) must match the order of the symbol legs in the message.
  ➢ Each leg must be fully entered as described below.

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	*MsgType*="As"
97	*PossResend*	N	N = (Default) indicates a new order.

			Y = Indicates an application level resend and is NOT SUPPORTED.
			For reasons of economy, Cboe does not track in primary storage the *ClOrdID* values of orders that are no longer live.
			For reasons of performance, Cboe does not access secondary storage to enforce unique *ClOrdID* values against orders that are no longer live.
			Without full duplicate *ClOrdID* value enforcement, it is not possible to safely implement the full behavior specified in the FIX 4.2 Protocol for *PossResend*="Y".
			To remain economical, fast *and* safe, all messages with *PossResend*="Y" will be simply ignored.
548	*CrossID*	Y	Identifier for the cross order. 20 characters or less.
			Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
549	*CrossType*	Y	Type of auction order being submitted, corresponding to the type of auction that will be initiated upon order entry.
			1 = Automated Improvement Mechanism ("AIM") (C1 only) **Effective on EDGX TBD**. 2 = Qualified Contingent Cross ("QCC") 3 = Solicitation Cross ("SAM") (C1 only)
54	*Side*	Y	**Required for Short format only** Represents Side of Agency Order. 1 = Buy 2 = Sell
55	*Symbol*	Y	**Required for Short Format Only** Cboe Complex Instrument ID
38	*OrderQty*	Y	Number of contracts for order, 1 to 999,999
40	*OrdType*	Y	2 = Limit
44	*Price*	Y	***Price is from the perspective of the Agency Side.*** **Short form request** Net Auction Price of the Strategy. **Buy Orders:** Positive Value, Debit

				Y	Negative Value, Credit Even Order - 0 (Zero)
					Sell Orders: Positive Value, Credit Negative Value, Debit Even Order - 0 (Zero)
					Long form request Net Auction Price of the Strategy. Positive Value, Debit Negative Value, Credit Even Order - 0 (Zero)
					Price must be in whole pennies for option-only spreads. Can be up to 4 decimal places for spreads with stock legs and FLEX instruments.
552 *Repeating Group*			*NoSides*	Y	Indicates the number of sides for the cross order. This value must be set to "2". The first side is the Agency side, the second side is the Contra side.
➜	78 *Repeating Group*		*NoAllocs*	Y	Number of Repeating Groups for contra-party responses. Max of 10 contra parties. Should be set to "1" for Agency side.
➜	➜	80	*AllocQty*	Y	*Required tag to start each repeated group.* Number of contracts for this party.
➜	➜	11	*ClOrdId*	Y	Day-unique ID chosen by client. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
➜	➜	1	*Account*	N	*Account* (1) will only be mapped to the OCC via the Customer ID field (max 10 characters) and the new *ClearingOptionalData* (9324) field will be mapped to the OCC via the Optional Data field (16 characters). Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
➜	➜	9324	*ClearingOptionalData*	N	This field will be reflected back on execution reports and FIX DROP ports, and will be passed through to the OCC in their Optional Data field. 16 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.

➔	➔	47	*Rule80A* *(aka OrderCapacity)*	Y	The capacity for the order `C` = Customer `F` = Firm `M` = Market Maker `U` = Professional Customer `N` = Away Market Maker `B` = Broker-Dealer `J` = Joint Back Office `L` = Non-TPH Affiliate (C1 only)
➔	➔	439	*ClearingFirm*	N	CMTA Number of the firm that will clear the trade. Must be supplied for CMTA orders and left unspecified for non-CMTA orders.
➔	➔	440	*ClearingAccount*	N	When *OrderCapacity* (47) is set to a value of "M" or "N" this field should be filled with desired market maker ID. When using CMTA, this value is the market maker ID for the CMTA member instead of the Cboe member executing the trade. This field will be passed through to the OCC Sub Account ID field and may be up to four alphanumeric characters. If *OrderCapacity* (47) is not set to "M" or "N" and *ClearingAccount* is populated the order will be rejected by default on C1 and C2 and will be accepted by default for BZX and EDGX Only. This field is recorded and returned in execution reports. Available via FIX Drop.
➔	➔	9946	*GiveUpFirmID*	Y	For the Agency Side, this field must equal the value of *OnBehalfOfCompId* (EFID). Each Contra allocation will use this field instead of *OnBehalfOfCompId* for clearing information.
➔	➔	22008	*EquityPartyID* *(C1 only)* ***Effective on EDGX with C1 Feature Pack 9.***	N	MPID used to clear the equity leg being cleared via the Exchange. Required if the complex order includes a stock leg.
➔	➔	22624	*EquityLegShortSell* *(C1 only)* ***Effective on EDGX with C1 Feature Pack 9.***	N	5 = Sell Short (stock leg only) 6 = Sell Short Exempt (stock leg only)
➔	➔	21097	*FrequentTraderID* *(C1 only)*	N	Identifies the frequent trader program in which the order is participating. 6 characters or less (ASCII 33-126).

		22019	LegPositionEffects	Y	A string of position effects with one value per leg. For example, if five legs, then this field must have five position effects specified. Ordering of position effects matches the order specified in *LegRefID* (654) repeating group (below), or the instrument definition if using a short form request.
→	→				O = Open C = Close N = None*
					*Orders with an *OrderCapacity* (47) of "M" or "N" will not be required to specify *OpenClose* on their orders or may specify a value of "N". A \<blank\> will be sent to OCC.
					Note that orders in series which are limited to closing only transactions will not support an *OpenClose* value of \<blank\>, while orders submitted for series that are restricted to closing only transactions with an *OpenClose* value of "O" will be rejected with a message of "c: Close Only" unless *OrderCapacity* (47) = "M".
555 *Repeating Group*			*NoLegs*	Y	Indicates the number of legs in this complex order. Minimum of 2, maximum of 12 total legs, including 1 equity leg.
→	654		*LegRefID*	Y	***Required tag to start each repeated group.*** Leg ID chosen by client. Five alphanumeric or space characters or less.
→	600		*LegSymbol*	Y	OSI root symbol (upper case), underlying symbol, or Cboe format symbol (case sensitive). **Not required for short form requests**
→	608		*LegCFICode*	N	CFI Code for leg. Required if tag 600 is an OSI root. OP = Option Put OC = Option Call E = Equity. Required for equity legs of complex orders **Not required for short form requests**
→	611		*LegMaturityDate*	N	Indicates maturity date (YYYYMMDD) for the option contract in leg. Required if tag 600 is an OSI root. **Not required for short form requests**

	612	LegStrikePrice	N	Indicates strike price for option contract in leg. Required if tag 600 is an OSI root. 0 – 999999.999 **Not required for short form requests**
→	623	LegRatioQty	Y	Ratio of number of contracts in this leg per order quantity. All legs must be reduced (i.e., 2:2 must be sent as 1:1) in order to be accepted by the system when using this message type. **Not required for short form requests**
→	624	LegSide	Y	Side is from the Agency side's perspective: 1 = Buy 2 = Sell **Not required for short form requests**
→	566	LegPrice	N	Only applies for FLEX orders.
	7933	RoutingFirmID	N	Used to optionally convey the routing firm of the order. If supplied, value must be a valid EFID.
	6253	DrillThruProtection	N	Amount sender is willing to trade through SNBBO at time of order entry. A zero value provides full SNBBO protection. The amount should be entered as a non-negative dollar value. Exchange default values are 3% of the opposite of the SNBBO, with a minimum value of $0.02 and a maximum value of $0.10 for the default value. Values provided on the `New Order Cross Multileg` message do not have a minimum or maximum.
	423	PriceType	N	1 = Percentage, when trading FLEX percentage instruments 2 = (Default) Price per unit (contract)
	9040	AutoMatch	N	0 = Disabled 1 = Market 2 = Limit Better-priced responses will be automatically matched by the Contra side. Indicates the type of Auto Match the Contra Order will use. Mutually exclusive with *LastPriority* (9849).
	9044	AutoMatchPrice	N	Required if *AutoMatch* is set to "2", ignored otherwise. Sets the limit price at which the

			Contra Order will Auto Match. Format is the same as *Price* (44).
9732	*AttributedQuote*	N	Allow for order to be attributed to order's EFID in Cboe market data feeds. The order may also be included within attributed summary information displays related to quote/trade information on the Cboe web site. **Applies to Agency Side only.** N = (Default) Do not attribute EFID to this order. Y = Attribute EFID to this order. C = Atrribute *ClientID* (109) Only Z = Attribute both EFID (115) and *ClientID* (109)
109	*ClientID*	N	User defined identifier for quote attribution if *AttributedQuote* (9732) = "C" or "Z". **Applies to Agency Side only.**
1462	*TargetPartyID*	N	Preferred Market Maker is required for Directed Orders. **Applies to Agency Side only.**
7928	*PreventMatch*	N	Cboe Match Trade Prevention: 3 characters (not space separated): **1st character – MTP Modifier:** N = Cancel Newest O = Cancel Oldest **2nd character – Unique ID Level:** F = Prevent Match at Cboe Exchange Member level M = Prevent Match at MPID Level **3rd character – Trading Group ID (optional):** Member specified alphanumeric value 0-9, A-Z, or a-z. The Unique ID Level (character 2) of both orders must match to prevent a trade. If specified on both orders, Trading Group ID (character 3) must match to prevent a trade. MTP instructions on the cross order will be used to prevent executions against responses only; executions against resting or unrelated orders will be permitted. Responses may only employ "Cancel Newest", in which case the response will be cancelled and the auction order will continue. **Applies to Agency Side only.**

9849	*LastPriority*	N	0 = Disabled 1 = Enabled When enabled, allocation will go to other participants' responses before requiring the Contra Order to satisfy remaining contracts of the Agency Order. Mutually exclusive with *AutoMatch* (9040).
21010	*FLEXAuctionDuration*	N	Duration of the FLEX Auction in milliseconds. Applicable only to FLEX instruments.
21005	*FLEXHedgeExecInst* *(C1 only)*	N	Hedge execution instruction to carry the hedge information for the order. Applicable only the FLEX instruments.
22003	*ORS* *(C1 only)*	N	Order router subsidy eligible (used for billing purposes). N = No (Default) Y = Yes
22006	*Compression* *(C1 only)*	N	Order is a compression trade. N = No (Default) Y = Yes
22011	*EquityTradePrice*	N	Price at which the equity associated with a QCC traded. Valid when *CrossType (549)* = '2'.
22012	*EquityTradeSize*	N	Number of shares executed in the equity associated with a QCC trade. Valid when *CrossType (549)* = '2'.
22013	*EquityTradeVenue*	N	Exchange venue where equity associated with a QCC traded. Valid when *CrossType (549)* = '2. A = NYSE American B = Nasdaq BX C = NYSE National I = Investors Exchange J = Cboe EDGA Exchange K = Cboe EDGX Exchange M = CHX N = NYSE P = NYSE Arca Q = Nasdaq X = Nasdaq PSX

			Y = Cboe BYX Exchange Z = Cboe BZX Exchange
22014	*EquityBuyClearingFirm*	N	Clearing firm on buy side of the equity associated trade associated with a QCC. Valid when *CrossType (549)* = '2'.
22015	*EquitySellClearingFirm*	N	Clearing firm on sell side of the equity associated trade associated with a QCC. Valid when *CrossType (549)* = '2'.
22016	*EquityExDestination* (C1 only) ***Effective on EDGX with C1 Feature Pack 9.***	N	Valid when *LegSymbol* (600) = Equity symbol. Exchange venue to which equity leg matching will be submitted. Supported values are: C = Cowen (default) Additional targets planned after C1 migration. If buyer and seller do not match venues, then the equity match will be reported to Cowen ("C").
22060	*EquityTransactTime*	N	GMT date-time of equity trade associated with a QCC trade. Valid when CrossType (549) = '2'. YYYYMMDD-HH:MM:SS.000

4.4.4   New Order Multileg (C1, C2 and EDGX Only)

A New Order Multileg message is used to submit a complex order. The message consists of all order details including a number of required fields such as *Price* (44), *OrdQty* (38), and relevant clearing information, as well as a number of optional fields. Complex orders in cross product spreads (ie SPX/SPXW, IWM/RUT, DIA/DJX, VIX/VXX, MNX/NDX) where the products do not operate on the same matching unit cannot leg into the simple book.

The New Order Multileg message supports two distinct styles of request:

Short Form
If the complex symbol is known at the time of entry, a short form of the New Order Multileg message can be utilized. Note that Complex Symbol ID's may be different between all Cboe Options Exchanges.

> *Symbol* (55) and *Side* (54) are required.
> *LegRefID* (654) and *LegPositionEffect* (564) are required for each of the legs. The order of the legs (and *LegPositionEffect*) must match the Security Definition response, as legs can be re-ordered during security definition.
> Sending any additional fields in the legs repeating group (*LegSymbol, LegCFICode, LegMaturityDate, LegStrikePrice, LegRatioQty, or LegSide*) will result in the order being rejected to avoid confusion with an invalid long form request.

Long Form

If the complex symbol is not known, a long form of the request exists to enter the symbol legs at the same time as the order. The legs will be used to find an appropriate complex symbol in the Cboe Complex Order Book; the resulting symbol (if accepted by the system) will be returned on the `Execution Report` in *Symbol* (55). A minimum of two (2) legs must be specified and a maximum of 12 legs will be accepted.

➢ If *Symbol* (55) or *Side* (54) are present and non-blank, the order will be rejected to avoid confusion with an invalid short form request.
➢ Each leg must be fully entered as described below.

Please see the US Options Complex Book Process Specification for more information on complex orders.

Tag	Field Name	Req'd	Description
35	*Standard Message Header*	Y	*MsgType*="AB"
97	*PossResend*	N	N = (Default) Indicates a new order. Y = Indicates an application level resend and is NOT SUPPORTED. For reasons of economy, Cboe does not track in primary storage the *ClOrdID* values of orders that are no longer live. For reasons of performance, Cboe does not access secondary storage to enforce unique *ClOrdID* values against orders that are no longer live. Without full duplicate *ClOrdID* value enforcement, it is not possible to safely implement the full behavior specified in the FIX 4.2 Protocol for *PossResend*="Y". To remain economical, fast *and* safe, all messages with *PossResend*="Y" will be simply ignored.
1	*Account*	N	This field will be reflected back on execution reports and on FIX DROP ports on an opt-in basis. It will also be passed through to the OCC in the Optional Data field (16 characters) and Customer ID field (max 10 characters). 16 characters or less (ASCII 33-126 except comma,semicolon and pipe). A maximum of 10 characters will be passed through to the OCC Customer ID Field but up to 16 characters will be maintain internally. *Account* (1) will only be mapped to the OCC via the Customer ID field (max 10 characters) and the new *ClearingOptionalData* (9324) field will be mapped

			to the OCC via the Optional Data field (16 characters).
9324	*ClearingOptionalData*	N	This field will be reflected back on execution reports and FIX DROP ports, and will be passed through to the OCC in their Optional Data field. 16 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
11	*ClOrdId*	Y	ID chosen by client. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe. If the *ClOrdId* matches a live order it will be rejected as duplicate (unless PossResend="Y", see above). Note: Cboe only enforces the uniqueness of ClOrdID values among currently live orders, which includes long-lived, persisting GTC/GTD orders. However it is strongly recommend users maintain unique *ClOrdID* values.
60	*TransactTime*	Y	Time order initiated/released. Required by FIX 4.2 but not used by Cboe.
167	*SecurityType*	Y	Indicates the type of security MLEG = Multileg
9465	*OrderOrigin (C1 only)*		Floor acronym of MM on whose behalf this order is being entered by a floor broker.
54	*Side*	Y	***Required only for short form request*** 1 = Buy 2 = Sell
55	*Symbol*	Y	***Required only for short form request*** Cboe Complex Order Book symbol (case sensitive)
555 *Repeating Group*	*NoLegs*	Y	Indicates the number of legs in this complex order. Minimum of 2, maximum of 12 total legs, including 1 equity leg.
➔ 654	*LegRefID*	Y	***Required tag to start each repeated group.*** Leg ID chosen by client. Five alphanumeric or space characters or less.
➔ 600	*LegSymbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive) **Not required for short form requests**

	608	*LegCFICode*	N	CFI Code for leg. Required if tag 600 is an OSI root. OP = Option Put OC = Option Call E = Equity – Required for Equity legs of complex orders (C1 Only)
➔	611	*LegMaturityDate*	N	Indicates maturity date (YYYYMMDD) for the option contract in leg. Required if tag 600 is an OSI root.
➔	612	*LegStrikePrice*	N	Indicates strike price for option contract in leg. Required if tag 600 is an OSI root. 0 – 999999.999
➔	623	*LegRatioQty*	Y	Ratio of number of contracts in this leg per order quantity. All legs must be reduced (i.e., 2:2 must be sent as 1:1) in order to be accepted by the system when using this message type. **C2 and EDGX Only** In addition, when reduced, the ratio between the smallest and largest leg must be no more than 1:3. Accepted values are 1 – 999,999. **Not required for short form requests**
➔	624	*LegSide*	Y	1 = Buy 2 = Sell 5 = Sell Short (stock leg only) 6 = Sell Short Exempt (stock leg only) **Not required for short form requests**
➔	566	*LegPrice* (C1 only)	Y	Only applies for FLEX orders.
➔	564	*LegPositionEffect*	Y*	Indicates status of client position in option for this leg. O = Open C = Close N = None* *Orders with an *OrderCapacity* (47) of "M" or "N" will not be required to specify *LegPositionEffect* on their orders or may specify a value of "N". A <blank> will be sent to OCC. Note that contracts which are limited to closing-only transactions with a *LegPositionEffect* value of "O" will be rejected with a message of "c: Close Only" unless *OrderCapacity* (47) = "M" AND *TimeInForce* (59) = "3" (Immediate or Cancel).

7933	*RoutingFirmID*	N	Used to optionally convey the routing firm of the order. If supplied, value must be a valid EFID.
18	*ExecInst*	N	Single value only (with no trailing space) G = All or None (AON). Order must be DAY and COA eligible (C1 and EDGX only) All other values are ignored.
38	*OrderQty*	Y	Number of contracts for order, 1 to 999,999
111	*MaxFloor*	N	Portion of *OrderQty* to display. The balance is reserve. 0 = Display entire quantity (Default). The displayed quantity of each order at a price level is decremented first. When displayed quantity is fully decremented, it is reloaded up to MaxFloor from reserve. Ignored if order is IOC. An order with a *MaxFloor* greater than 0 will be rejected for Cboe proprietary classes (such as DJX, RUT, SPX, XSP, and VIX).
8020	*DisplayRange*	N	Used for random replenishment of reserve orders. This is the random replenishment amount in contracts. The value specified will create a *DisplayRange* around *MaxFloor*. Value must be less than the value specified for *MaxFloor.* **Example** If *MaxFloor* = 20 and *DisplayRange* = 2, the displayed quantity will be selected randomly from one of the following values: 18, 19, 20, 21, 22.
40	*OrdType*	Y	1 = Market 2 = Limit
44	*Price*	Y	**Short form request** Net Price of the Strategy. **Buy Orders:** Positive Value, Debit Negative Value, Credit Even Order - 0 (Zero) **Sell Orders:** Positive Value, Credit Negative Value, Debit Even Order - 0 (Zero)

			Long form request Net Price of the Strategy. Positive Value, Debit Negative Value, Credit Even Order - 0 (Zero) Price must be in whole pennies for option-only spreads. Can be up to 4 decimal places for spreads with stock legs and FLEX instruments.
439	*ClearingFirm*	N	CMTA Number of the firm that will clear the trade. Must be supplied for CMTA orders and left unspecified for non-CMTA orders.
440	*ClearingAccount*	N	When *OrderCapacity* (47) is set to a value of "M" or "N" this field should be filled with desired market maker ID. When using CMTA, this value is the market maker ID for the CMTA member instead of the Cboe member executing the trade. This field will be passed through to the OCC Sub Account ID field and may be up to four alphanumeric characters. If *OrderCapacity* (47) is not set to "M" or "N" and *ClearingAccount* is populated the order will be rejected by default on C1 and C2 and will be accepted by default for BZX and EDGX Only. This field is recorded and returned in execution reports. Available via FIX Drop.
6253	*DrillThruProtection*	N	Amount sender is willing to trade through SNBBO at time of order entry. A zero value provides full SNBBO protection. The amount should be entered as a non-negative dollar value. Exchange default values are 3% of the opposite of the SNBBO, with a minimum value of $0.02 and a maximum value of $0.10 for the default value. Values provided on the `New Order Multileg` message do not have a minimum or maximum.
9303	*RoutingInst*	N	**1st character** B = Book Only (Default) Allowed to interact with single-leg orders and other complex orders P = Post Only[1] D = Complex Book Only. Allowed to interact with other complex orders only. Requires *TimeInForce* (59) = "0" (DAY) or "3" (IOC) AND *OrderCapacity* (47) = "M".

			2nd character L = Do **not** Expose order via Complex Option Auction (COA) S = Expose order via Complex Option Auction (COA)[1] (Default) Non-IOC orders will default the 2nd character to "S" and IOC orders will default the 2nd character to "L" unless otherwise specified. [1]Post Only COA eligible orders *RoutingInst* (9303) = PS not supported.
9732	*AttributedQuote*	N	Allow for order to be attributed to firm's Executing Firm ID (EFID) in Cboe market data feeds. The order may also be included within attributed summary information displays related to quote/trade information on the Cboe web site. Must opt-in to support through the Cboe Trade Desk. N = (Default) Do not attribute *EFID* (115) to this order. Y = Attribute *EFID* (115) to this order. C = Attribute *ClientID* (109) only. Z = Attribute both *EFID* (115) and *ClientID* (109).
109	*ClientID*	N	User-defined identifier for quote attribution if *AttributedQuote* (9732) = "C" or "Z".
1462	*TargetPartyID* *(C1 and EDGX only)*	N	A valid ParentID of the Directed Market Maker (EDGX only) or Preferred Market Maker (C1 only) is required for Directed Orders.
9370	*AuctionID*	N	Auction order identifier supplied by Cboe. This identifier corresponds to the identifiers used in Cboe market data products.
47	*Rule80A (aka OrderCapacity)*	Y	The capacity for the order. C = Customer F = Firm M = Market Maker U = Professional Customer N = Away Market Maker B = Broker-Dealer J = Joint Back Office L = Non-TPH Affiliate (C1 and C2 only) D = Non-TPH Broker-Dealer (FLEX only) (C1 only)
59	*TimeInForce*	N	0 = DAY (Default) Expires at end of market day. 1 = GTC. Remains in system until executed, canceled or option expires.

			2 = At The Open. Will remain queued and only interact in the Opening Process 3 = IOC. Portion not filled immediately is cancelled. 6 = GTD. Expires at specified *ExpireTime* for a specified day. 7 = At The Close. Will remain queued and roll into the book in time priority before the scheduled close. (C1 only)
22017	*SessionEligibility* *(C1, C2, and EDGX only)*	N	R = (Default) Order participates in Regular trading hours only. A = Order participates in both Global and Regular Trading Hours
126	*ExpireTime*	N	Required for *TimeInForce* = "6" (GTD) orders. Specifies the date-time (in GMT) that the order expires. Values may be specified at a millisecond level.
7928	*PreventMatch*	N	Cboe Match Trade Prevention. 3 characters (not space separated): **1st character – MTP Modifier ***:** N = Cancel Newest O = Cancel Oldest B = Cancel Both **2nd character – Unique ID Level:** F = Prevent Match at Cboe Exchange Member level M = Prevent Match at MPID Level **3rd character – Trading Group ID (optional):** Member specified alphanumeric value 0-9, A-Z, or a-z. The Unique ID Level (character 2) of both orders must match to prevent a trade. If specified on both orders, Trading Group ID (character 3) must match to prevent a trade. ***** Note:** These values only apply on complex vs. complex matches. When a complex order with Match Trade Prevention interacts with a single-leg order with Match Trade Prevention, the complex order will always be cancelled.
7692	*RiskReset*	N	For use by Users using Cboe's Risk Management tools to reset or release firm, symbol or Custom Group ID level lockout conditions resulting from risk profile trips or self-imposed lockouts issued

			via `Cancel Order` or `Purge Orders` messages.
			Single Character Values: S = Risk Root-level risk/lockout reset F = EFID level risk/lockout reset G = EFID Group level risk/lockout reset[1] C = CustomGroupID lockout reset Values may be combined together to allow for resets of multiple risk trips or self-imposed lockouts in a single message. For example, "FS", "SC", "FC", and "SFC" are all acceptable values. For more information, refer to the [Cboe US Options Risk Management Specification](#).
7699	*CustomGroupID*	N	Optional User-specified ID for the order. Cancellation by *CustomGroupID* available using [Purge Port](#) only. Integer 1-65535
423	*PriceType* (C1 only)	N	1 = Percentage, when trading FLEX percentage instruments 2 = (Default) Price per unit (contract) 3 = Fixed amount (cash spread pricing) – only for complex orders routed to floor.
9465	*OrderOrigin* (C1 only)	N	Floor acronym of Market Maker on whose behalf this order is being entered by a floor broker.
21010	*FLEXAuctionDuration* (C1 Only)	N	Duration of the FLEX Auction in milliseconds. Applicable only to FLEX instruments.
21005	*FLEXHedgeExecInst* (C1 only)	N	Hedge execution instruction to carry the hedge information for the order. Applicable only the FLEX instruments.
21008	*FLEXPreFacilPrice* (C1 only)	N	The pre-facilitation price for the hedge instruction. Applicable only to FLEX instruments.
21097	*FrequentTraderID* (C1 only)	N	Identifies the frequent trader program in which the order is participating. 6 characters or less (ASCII 33-126).
22303	*FloorRoutingInst* (C1 only)	N	D = Direct. Do not attempt to process electronically [1] E = Electronic only X = Route to floor if unable to process electronically [1]

			<blank> = Port level default
			The default value for any given port can be changed by requesting an update to the "Default FloorRoutingInst" port attribute. **1** When *FloorRoutingInst* is "D" or "X", *RoutingInst* (9303) must be set to "R".
22002	*StrategyID* (C1 only)	N	Used to declare when a strategy is used. C = Conversion R = Reversal M = Merger S = Short stock interest J = Jelly roll
22003	*ORS* (C1 only)	N	Order router subsidy eligible (used for billing purposes). N = No (Default) Y = Yes
22005	*ComboOrder* (C1 only)	N	Used to declare the order as a Combo (for regulatory relief if trading SPX on the floor). N = (Default) No Y = Yes
22006	*Compression* (C1 only)	N	Order is a compression trade. N = No (Default) Y = Yes
22018	*TiedHedge* (C1 only)	N	Order is a tied hedge. N = No (Default) Y = Yes
22008	*EquityPartyID* (C1 only) ***Effective on EDGX with C1 Feature Pack 9.***	N	MPID used to clear the equity leg being cleared via the Exchange.
22016	*EquityExDestination* (C1 only) ***Effective on EDGX with C1 Feature Pack 9.***	N	Valid when *LegSymbol* (600) = Equity symbol. Exchange venue to which equity leg matching will be submitted. Supported values are: C = Cowen (default) Additional targets planned after C1 migration. If buyer and seller do not match venues, then the equity match will be reported to Cowen("C").
22624	*EquityLegShortSell* (C1 only)	N	5 = Sell Short (stock leg only) 6 = Sell Short Exempt (stock leg only)

Tag	Field Name	Req'd	Description
	Effective on EDGX with C1 Feature Pack 9.		**Valid for short form requests only**
22100	*FloorDestination (C1 only)*	N	Specifies a default PAR workstation (ex. W001) to route to on the floor (or "PARO" to route to the Floor PAR Official of the underlying symbol) if not specified on inbound messages. 4 characters or less (ASCII 33-126).
	Standard Message Trailer	Y	

4.4.5   Security Definition Request (C1, C2 and EDGX only)

A `Security Definition Request` message is used to request that the system create a complex strategy. The resulting symbol (if accepted by the system) will be returned in a `Security Definition` message with the Cboe symbol in *Symbol* (55). A minimum of two legs must be specified and a maximum of twelve option legs (12) plus one equity leg (C1 only) will be accepted.

Complex FLEX instruments may not be created using the `Security Definition Request.`

Tag	Field Name	Req'd	Description
35	*Standard Message Header*	Y	*MsgType*="c"
97	*PossResend*	N	`N` = (Default) indicates a new order. `Y` = Indicates an application level resend and is NOT SUPPORTED. For reasons of economy, Cboe does not track in primary storage the *ClOrdID* values of orders that are no longer live. For reasons of performance, Cboe does not access secondary storage to enforce unique *ClOrdID* values against orders that are no longer live. Without full duplicate *ClOrdID* value enforcement, it is not possible to safely implement the full behavior specified in the FIX 4.2 Protocol for *PossResend*="Y". To remain economical, fast *and* safe, all messages with *PossResend*="Y" will be simply ignored.

11		*ClOrdId*	Y	ID chosen by client. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe. If the *ClOrdId* matches a live order it will be rejected as duplicate (unless PossResend="Y", see above). Note: Cboe only enforces the uniqueness of ClOrdID values among currently live orders, ==which includes long-lived, persisting GTC/GTD orders==. However it is strongly recommended users maintain unique ClOrdID values.
60		*TransactTime*	Y	Time request initiated/released. Required by FIX 4.2 but not used by Cboe.
167		*SecurityType*	Y	Indicates the type of security MLEG = Multileg
555 *Repeating Group*		*NoLegs*	Y	Indicates the number of legs in this complex order. Minimum of 2, maximum of 12.
➔	654	*LegRefID*	Y	***Required tag to start each repeated group.*** Leg ID chosen by client. Five alphanumeric or space characters or less.
➔	600	*LegSymbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive).
➔	608	*LegCFICode*	N	CFI Code for leg. Required if tag 600 is an OSI root. OP = Option Put OC = Option Call E = Equity. Required for equity legs of complex orders ==(C1 only)==
➔	611	*LegMaturityDate*	N	Indicates maturity date (YYYYMMDD) for the option contract in leg. Required if tag 600 is an OSI root.
➔	612	*LegStrikePrice*	N	Indicates strike price for option contract in leg. Required if tag 600 is an OSI root. 0 – 999999.999
➔	623	*LegRatioQty*	Y	Ratio of number of contracts in this leg per order quantity. All legs must be reduced (i.e., 2:2 must be sent as 1:1) in order to be accepted by the system when using this message type.

				C2 and EDGX Only In addition, when reduced, the ratio between the smallest and largest leg must be no more than 1:3. Accepted values are 1 – 999,999.
➔	624	*LegSide*	Y	`1` = Buy `2` = Sell

4.4.6 Order Cancel Request

Request the cancellation of a single order or multiple orders on the FIX session. Note that `Order Cancel Requests` do not apply to open orders across multiple sessions unless submitted on a Purge Port.

A single order cancellation uses the *ClOrdID* from a previous order using the *OrigClOrdID* (41) field.

`Order Cancel Request` messages for GTC and GTD orders may continue to be issued anytime after the trading session ends at 4:00 PM ET (4:15 PM ET for select ETFs) and prior to the trading session disconnecting at 4:45 PM ET. All other order message types received after the market closes at 4:00 PM ET (4:15 PM ET for select ETFs) will be rejected.

Mass cancellation of a group of orders can be done with one of two methods, using either the *MassCancel* (legacy) or *MassCancelInst* optional fields. If both optional fields *MassCancel* and *MassCancelInst* are specified, the `Cancel Order Request` will be rejected. **Users are encouraged to use the *MassCancelInst* method, as the legacy *MassCancel* method will be deprecated in the future with notice.**

Legacy MassCancel method:

- Populate the *MassCancel* (7693) field; do not specify the *MassCancelInst* field.
- Specify the *OnBehalfOfCompId (115)* field, optionally the Risk Root in *Symbol* (55), and optionally the *MassCancelID* (7695) if a single `Mass Cancel Acknowledgement` is requested.
- Specify the *MassCancelLockout* (7697) optional field to request subsequent rejection of new orders based on the level of the *MassCancel* (i.e., EFID level and optionally Risk Root level).

MassCancelInst method:

- Specify the *MassCancelInst* (7700) field
- Specify the *OnBehalfOfCompId (115)* field, optionally specify Risk Root in *Symbol* (55) field, and optionally *MassCancelID* (7695) if the Acknowledgement Style is set to "S" or "B".

When specifying the RiskRoot field, using the underlying symbol is strongly recommended. Mass cancellations are always performed at the risk root (underlying) level.

The system limits the rate at which identical Mass Cancel and Purge Orders requests can be submitted to the system. Requests are restricted to twenty (20) messages per second per port.

An identical Mass Cancel message is defined as a message having all of the same *CustomGroupID*, *Symbol*, *Clearing Firm*, *Lockout Instruction*, *Instrument Type Filter* and *GTC Order Filter* field values as a previously received message.

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	*MsgType*="F"
97	*PossResend*	N	Y = Indicates an application level unsolicited resend. If *ClOrdID* has not yet been seen, the cancel is treated as normal. If *ClOrdID* already exists, the resent cancel is ignored. N = (Default) Indicates a new cancel.
11	*ClOrdID*	Y	ID chosen by user. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe. Duplicate cancel order *ClOrdID*s will be rejected (or ignored if *PossResend*="Y").
41	*OrigClOrdID*	Y	*ClOrdID* of the order to cancel. Either *OrigClOrdID* or *OrderId* must be populated.
37	*OrderId*	N	*OrderID* supplied by Cboe on the order acknowledgement. Optional but recommended for performance. Either *OrigClOrdID* or *OrderId* must be populated.
60	*TransactTime*	Y	Time cancel initiated/released. Required by FIX 4.2 but not used by Cboe.
55	*Symbol*	N	Risk Root symbol for a mass cancel.
77	*OpenClose*	N	Open/Close position indicator O = Open C = Close N = None
200	*MaturityMonthYear*	N	Maturity Month
205	*MaturityDay*	N	Expiration date day of month Format: DD
201	*PutOrCall*	N	0 = Put 1 = Call
202	*StrikePrice*	N	Strike Price for option 0 – 999,999.99
54	*Side*	N	1 = Buy 2 = Sell
38	*OrderQty*	N	Number of contracts for order. Must match original order.

| 7693 | *MassCancel* | N | 1 = Cancel all orders for this session.
2 = Cancel all orders for this session that were used under the EFID specified in *OnBehalfOfCompId* (115).
3 = Same as "1" except individual cancel acknowledgements will not be sent. Instead, a single execution report containing *MassCancelID* (7695) and *CancelledOrderCount* (7696) will be sent once all cancels have been processed.
4 = Same as "2" except individual cancel acknowledgements will not be sent. Instead, a single execution report containing *MassCancelID* (7695) and *CancelledOrderCount* (7696) will be sent once all cancels have been processed.

If *Symbol* (55) is included, then the value must be a valid Risk Root, not a Cboe symbol name. By specifying *Symbol*, cancels will be limited to a single Risk Root.

Tags 37, 77, 200, 205, 201, 202, 54 and 38 will be ignored if the *MassCancel* tag has been defined.
MassCancel requests that contain tag *OrigClOrdID* (41) will be rejected.

<mark>MassCancel requests will not cancel initiating orders for AIM Auctions.</mark>

MassCancelInst(7700) supercedes the use of MassCancel(7693). Users are encouraged to use MassCancelInst(7700) instead as MassCancel(7693) will be deprecated in the future with notice. |
| 7700 | *MassCancelInst* | N | Used to perform Mass Cancel operation as opposed to a single order cancel. If *MassCancelInst* is provided, tags 37, 41, 77, 200, 205, 201, 202, 54 and 38 will be ignored.
At least one character must be provided (Clearing Firm Filter). Contiguous characters must be specified up to total length. Truncated (unspecified) characters will default to values indicated below.

1st Character : Clearing Firm Filter
A = No filtering by EFID is performed.
F = All orders that were sent under the EFID specified in *OnBehalfOfCompId (115)* will be cancelled. If "F" specified and *OnBehalfOfCompId (115)* is not provided, the `Mass Cancel` or `Purge Orders` will be rejected. If "F" specified and *OnBehalfOfCompId (115* is provided but has a null value, the `Mass Cancel` or `Purge Orders` will be treated like "A" No filtering by EFID.

2nd Character : Acknowledgement Style
M = (Default) Individual Execution Reports are sent for each cancelled order.
S = Single Execution Report sent once all cancels have been processed. Single Execution Report will contain *MassCancelId (7695)* and *CancelledOrderCount (7696)*. *MassCancelId (7695)* |

			must be specified or the `Order Cancel Request` will be rejected. B = Both Individual Execution Reports and summary Single Execution Report. Also requires *MassCancelId* (7695) to be specified, or the Order Cancel Request will be rejected. **3rd Character : Lockout Instruction** N = (Default) No lockout L = Lockout until corresponding Risk Reset received. Lockout can be used only with Clearing Firm Filter set to "F", otherwise the `Order Cancel Request` will be rejected. Lockout will apply to all new orders and cancel/replace orders for the EFID (and *Symbol* (55), if specified), regardless of other filtering in the *MassCancelInst*. **4th Character : Instrument Type Filter (C2 and EDGX only)** B = (Default) Cancel both Simple and Complex orders S = Cancel Simple orders only C = Cancel Complex orders only **5th Character : GTC/GTD Order Filter** C = (Default) Cancel GTC/GTD orders P = Don't cancel (preserve) GTC/GTD orders If *Symbol* (55) is specified, it must contain a valid Risk Root, not the Cboe symbol name. By specifying *Symbol* (55), cancels will be limited to a single Risk Root. A self-imposed lockout can be released using the *RiskReset (7692)* field of the `New Order Single` or `New Order Multileg` message. For more information, refer to the Cboe US Options Risk Management Specification.
7695	*MassCancelID*	N	Mass Cancel ID. This field will be echoed back in the resulting order execution report when *MassCancel* (7693) is set to "No". Mass Cancel requests containing a currently outstanding *MassCancelID* will be rejected.
7697	*MassCancelLockout*	N	0 = No Lockout 1 = Lockout Users may initiate a new self-imposed order lockout in conjunction with a mass cancel for all resting orders and in-flight orders. The *MassCancelLockout* value of "1" is only applicable in conjunction with *MassCancel* values of "2" or "4"; other usage results in a reject. The self-imposed lockout can be released using the existing *RiskReset* field (FIX Tag 7692). For more information, refer to the http://cdn.cboe.com/resources/membership/US_Options_Risk_Management_Specification.pdf.

7933	*RoutingFirmID* <mark>*(C1, C2, and EDGX only)*</mark>	N	Required if *RoutingFirmID* is populated on original order message. May be combined with *MassCancel* type "2" or "4"
	Standard Message Trailer	Y	

4.4.7 Order Cancel/Replace Request

Only *Price, OrderQty, OrdType, MaxFloor, FrequentTraderID* (<mark>C1 only</mark>) and *StopPx* may be adjusted. Modifies will result in a loss of time priority unless the modification involves a decrease in *OrderQty*, a change to *MaxFloor*, or a change to *StopPx*. *OrdType* may be adjusted from Limit to Market.

Other fields (including *ExecInst*) **will be ignored**, and the value from the original order will be re-used. Note in particular that when a Day ISO is modified, the ISO designation is applied to the new order.

Changes in *OrderQty* result in an adjustment of the current order's *OrderQty*. The new *OrderQty* does **not** directly replace the current order's *LeavesQty*. Rather, a delta is computed from the current *OrderQty* and the replacement *OrderQty*. This delta is then applied to the current *LeavesQty*. If the resulting *LeavesQty* is less than or equal to zero, the order is cancelled. This results in safer behavior when the replace request overlaps partial fills for the current order, leaving the user in total control of the share exposure of the order.

MaxFloor if not specified is preserved from the original order and applied to the new size and price. A change in *MaxFloor* takes effect on the next reserve reload.

A `Cancel/Replace` should not be issued until the ack for the previous `Cancel/Replace` (or the acknowledgement for the first `Cancel/Replace`) for that order has been received. The FIX handler will reject a new `Cancel/Replace` if it has not seen the prior `Cancel/Replace` from the Matching Engine.

`Cancel/Replace` requests that merely reduce *OrderQty* may be overlapped if the existing *ClOrdID* is re-used. This is the only case where re-use of the existing *ClOrdID* is allowed.

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	*MsgType*="G"
97	*PossResend*	N	"Y" Indicates an application level resend. If the *ClOrdID* does not indicate an already pending Cancel/Replace, the cancel is treated as normal. If *ClOrdID* does indicate an already pending Cancel/Replace then the resent Cancel/Replace is ignored. "N" (default) indicates a new cancel.
1	*Account*	N	**Ignored** – value preserved from original order
11	*ClOrdId*	Y	ID chosen by user. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.

			Duplicate order *ClOrdId*s will be rejected (or ignored if *PossResend*="Y").
41	*OrigClOrdID*	Y*	ClOrdID of the order to replace. In the case of multiple changes to a single order, this will be the ClOrdID of the most recent accepted change.
			*Either *OrigClOrdID* or *OrderId* must be populated.
37	*OrderId*	N	OrderId supplied by Cboe on the order acknowledgement.
60	*TransactTime*	Y	Time Cancel/Replace initiated/released.
55	*Symbol*	N	Ignored – value preserved from original order
77	*OpenClose*	N	Ignored – value preserved from original order
200	*MaturityMonth*	N	Ignored – value preserved from original order
205	*MaturityDay*	N	Ignored – value preserved from original order
201	*PutOrCall*	N	Ignored – value preserved from original order
202	*StrikePrice*	N	Ignored – value preserved from original order
54	*Side*	N	Must match original order.
38	*OrderQty*	Y	Number of contracts for order. This will modify the *OrderQty* of the current order; it does not directly set the remaining quantity.
40	*OrdType*	N	Defaults to original order value if not sent. 1 = Market 2 = Limit 3 = Stop 4 = Stop Limit May replace Limit with Market <u>or</u> Stop with Stop Limit and vice versa, but otherwise must match original order, if sent.
44	*Price*	Y	Limit Price. Order rejected if priced finer than the minimum trading increment for the option.
18	*ExecInst*	N	Ignored. Value preserved from original order
111	*MaxFloor*	N	If specified, the displayed quantity of a reserve order may be changed on the next reload.
99	*StopPx*	N	Optional. Defaults to original order if not sent.
9619	*CancelOrigOnReject*	N	N = (Default) Leave original order alive. Y = Cancel original order if replacement fails (an unsolicited cancel report will be sent for original order in this case).

7933	*RoutingFirmID* *(C1, C2 and EDGX only)*	N	Used to optionally convey the routing firm of the order. Required if *RoutingFirmID* is populated on `New Order Single` or `New Order Multileg` message.
21097	*FrequentTraderID* *(C1 only)*	N	Identifies the frequent trader program in which the order is participating. 6 characters or less (ASCII 33-126).
	Standard Message Trailer	Y	

4.4.8 Floor Trade Confirmation (C1 Only)

TPHs having in-person Market Makers on the Cboe trading floor may optionally receive floor trade notifications as `Execution Report` messages with *ExecType* (150) = T. TPHs must enable and opt-in to the *Market Maker Floor Trade Notifications* port default to receive `Execution Report` messages with *ExecType* (150) = T.

TPHs are encouraged to use `Floor Trade Confirmation` messages to respond to floor broker allocations (`Execution Report` messages having *ExecType* (150) = T) if they agree with the terms of the trade in the `Execution Report`. Alternatively, an `Add Floor Trade` message may be used to enter their version of the floor trade. If the floor trade notification is not known to the user (for example, if the TPH is misidentified as a contra party to a floor trade), the message can be disregarded; a response is not required. TPHs configured to be automatically endorsed on floor broker trades will not receive trade notifications and will therefore not be required to respond with a `Floor Trade Confirmation` message.

The exchange will respond to a `Floor Trade Confirmation` message with an `Execution Report` message having either *OrdStatus* set to either "0" (new) or "8" (rejected).

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	MsgType="U03" (Confirm Floor Trade)
11	*ClOrdId*	Y	Client order id to be used to identify this floor trade report in execution reports.
17	*ExecId*	Y	Execution ID identifying the floor trade report to be confirmed.
55	*Symbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive)
200	*MaturityMonth*	N	Indicates Maturity Month Format: YYYYMM
205	*MaturityDay*	N	Expiration date day of the month Format: DD

201	*PutOrCall*	N	`0` = Put `1` = Call
202	*StrikePrice*	N	Strike Price for option, 0 – 999,999.999
60	*TransactTime*	Y	GMT date-time. Report send time (for audit)

4.4.9   Add Floor Trade (C1 Only)

TPHs having in-person Market Makers on the Cboe trading floor can enter their version of a floor trade via this FIX message type.

This message may be used to report any floor trades, but is primarily meant to be used to report floor trades between Market Makers. TPHs are encouraged to use `Floor Trade Confirmation` messages to respond to floor broker allocations (`Execution Report` messages having *ExecTransType* = T) if they agree with the terms of the trade in the `Execution Report`.

TPHs configured to be automatically endorsed on floor broker trades will not receive trade notifications and will therefore not be required to respond with an `Add Floor Trade` message.

The Exchange will respond to an `Add Floor Trade` message with an `Execution Report` message having either *OrdStatus* (39) set to either "0" (new) or "8" (rejected). Once the floor trade is matched the Exchange will send an `Execution Report` message having *OrdStatus* (39) set to "2" (filled).

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	MsgType="U01" (Add Floor Trade)
97	*PossResend*	N	`N` = (Default) indicates a new order. `Y` = Indicates an application level resend and is NOT SUPPORTED. For reasons of economy, Cboe does not track in primary storage the *ClOrdID* values of orders that are no longer live. For reasons of performance, Cboe does not access secondary storage to enforce unique *ClOrdID* values against orders that are no longer live. Without full duplicate *ClOrdID* value enforcement, it is not possible to safely implement the full behavior specified in the FIX 4.2 Protocol for *PossResend*="Y". To remain economical, fast *and* safe, all messages with *PossResend*="Y" will be simply ignored.
11	*ClOrdId*	Y	ID chosen by client. 20 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe. If the *ClOrdId* matches a live order it will be rejected

			as duplicate (unless PossResend="Y", see above).
			Note: Cboe only enforces the uniqueness of ClOrdID values among currently live orders, which includes long-lived, persisting GTC/GTD orders. However it is strongly recommended users maintain unique ClOrdID values.
55	*Symbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive)
200	*MaturityMonth*	N	Indicates Maturity Month Format: YYYYMM
205	*MaturityDay*	N	Expiration date day of the month Format: DD
201	*PutOrCall*	N	0 = Put 1 = Call
202	*StrikePrice*	N	Strike Price for option, 0 – 999,999.999
442	*MultilegReportingType*	N	1 = (Default) Single-leg instrument execution 2 = Individual leg of a multi-leg instrument 4 = Individual leg of a Combo multi-leg instrument
22005	*ComboOrder*	N	Declare the order as a Combo (for regulatory relief if trading SPX on the floor). N = (Default) No Y = Yes
76	*ExecBroker*	N	Valid Cboe clearing firm number for trade matching (an OCC number) Field is ignored and is not validated. Default Market Maker EFID Association Tool in Web Portal is used to identify OCC give-up number. ExecBroker will be deprecated from the spec at a future date.
1	*Account*	N	*Account* (1) will be mapped to the OCC via the Customer ID field. 10 Characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe. Account field may be defaulted using the Market Maker EFID Association Tool in the Web Portal.

9324	*ClearingOptionalData*	N	This field will be reflected back on execution reports and FIX DROP ports, and will be mapped to the OCC via the Optional Data field.
			16 characters or less. Characters in ASCII range 33-126 are allowed, except for comma, semicolon, and pipe.
440	*ClearingAccount*	Y unless default within the Market Maker EFID Association Tool in Web Portal	When *OrderCapacity* (47) is set to a value of "M" or "N" this field should be filled with desired market maker ID. When using CMTA, this value is the market maker ID for the CMTA user instead of the Cboe user executing the trade. This field will be passed through to the OCC Sub Account ID field and may be up to four alphanumeric characters.
			If *OrderCapacity* (47) is not set to "M" or "N" and *ClearingAccount* is populated the order will be rejected by default on C1 and C2 and will be accepted by default for BZX and EDGX Only.
			This field is recorded and returned in execution reports. Available via FIX Drop.
			ClearingAccount field may be defaulted using the Market Maker EFID Association Tool in the Web Portal.
439	*ClearingFirm*	N	CMTA Number of the firm that will clear the trade.
			Must be supplied for CMTA orders and left unspecified for non-CMTA orders.
22049	*FloorTraderAcr*	Y	Floor acronym of participant submitting trade.
375	*ContraBroker*	N	Floor-matched executions will identify the OCC Clearing Firm # of contra party on the execution. Field is ignored and is not validated. Default Market Maker EFID Association Tool in Web Portal is used to identify OCC give-up number. ContraBroker will be deprecated from the spec at a future date.
54	*Side*	Y	1 = Buy 2 = Sell
38	*OrderQty*	Y	Instrument quantity, 1 to 999,999.
44	*Price*	Y	Limit Price. Order rejected if priced finer than the minimum trading increment for the option.
60	*TransactTime*	Y	Time order initiated/released. Required by FIX 4.2 but not used by Cboe.

77	*OpenClose*	Y*	Indicates status of position in the option. O = Open C = Close N = None* *Orders with an *OrderCapacity* (47) of "M" or "N" will not be required to specify *OpenClose* on their orders or may specify a value of "N". A <blank> will be sent to OCC. Note that orders in series which are limited to closing only transactions will not support an OpenClose value of <blank>. Also, orders submitted for series that are restricted to closing only transactions with an *OpenClose* value of "O" will be rejected with a message of "c: Close Only" unless *OrderCapacity* (47) = "M".
5179	*TradeTime*	Y	Time of the execution of the floor trade. GMT date-time that transaction occurred.
337	*ContraTrader*	Y	Floor-matched executions will identify the Floor acronym of contra party on the execution.

4.4.10 Delete Floor Trade (C1 Only)

TPHs having in-person Market Makers on the Cboe trading floor can request the deletion of their version of a floor trade via this FIX message type. The trade report to delete will be identified by the *ExecId* (17) of an `Execution Report`. The TPH entering the floor trade deletion message must be on the specified side of the identified trade. The Exchange will respond to a `Delete Floor Trade` message with an `Execution Report`. If the floor trade report is successfully deleted, an `Execution Report` will be issued with *OrdStatus* (39) set to "4" (cancelled).

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	MsgType="U02" (Delete Floor Trade)
17	*ExecId*	Y	*ExecId* of the trade to be deleted.
11	*ClOrdID*	Y	*ClOrdID* of the delete floor trade message.
55	*Symbol*	Y	OSI root symbol (upper case) or Cboe format symbol (case sensitive)
60	*TransactTime*	Y	GMT date-time of delete.
200	*MaturityMonth*	N	Indicates Maturity Month (YYYYMM)
205	*MaturityDay*	N	Expiration date day of the month Format: DD
201	*PutOrCall*	N	0 = Put 1 = Call
202	*StrikePrice*	N	Strike Price for option, 0 – 999,999.999
54	*Side*	Y	1 = Buy 2 = Sell

4.5 Order Protocol – Cboe to Member

4.5.1 Execution Report

`Execution Reports` with *ExecType* (150) = "M" are responses to Mass Cancel requests. Mass Cancel Execution Report are compact and will only carry fields as stated in the description of *ExecType* (150) that follows.

The *MultilegReportingType* (442) field can be used to determine whether a fill or partial fill corresponds to a complex instrument, a single-leg instrument that is part of a complex instrument execution, or a single-leg instrument fill only (field will not be present in this case). Similarly, the *SecondaryExecID* (527) field can be used to distinguish single-leg instrument executions from complex instrument executions and to identify single-leg instrument executions that comprise a complex instrument execution.

- If the *SecondaryExecId* (527) field is not present, the `Execution Report` is associated with a simple instrument.
- If the *SecondaryExecId* (527) field is present and is identical to the *ExecId* (17) field, the `Execution Report` represents a complex instrument execution for which associate individual leg `Execution Reports` will follow.
- If the *SecondaryExecId* (527) field is present and not identical to the *ExecId* (17) field, the `Execution Report` represents a single-leg execution that comprises a complex execution and the *SecondaryExecId* (527) field is set to the *ExecId* (17) field of the associated complex execution.

For complex order executions (150=1 or 2), `Execution Reports` (i.e. fills) will be generated for the complex order (442=3) followed by `Execution  Reports` for each leg (442=2). In addition, the symbology used on executions for complex orders, including the legs, will **always** be Cboe symbology.

Tag	Field Name	Description
35	Standard Message Header	*MsgType*="8"
52	*SendingTime*	GMT date-time that execution report was sent by Cboe.
20	*ExecTransType*	0 = New 3 = Status *ExecTransType* ="3" (Status). Used for Done For Day and Carried Order Restatements if associated port attributes are set.
442	*MultilegReportingType* (C1, C2 and EDGX only)	1 = Single-leg instrument execution 2 = Individual leg of a multi-leg instrument 3 = Multi-leg instrument
17	*ExecID*	Day-unique id of execution message.
527	*SecondaryExecID* (C1, C2 and EDGX only)	Field indicates whether a fill or partial fill (*ExecType* (150) = "1" or "2") is a complex instrument fill or a single-leg fill that comprises a complex execution. If *SecondaryExecID* (527) is not present, the fill is a single-leg fill only.

		If *SecondaryExecID* (527) is present and is the same as the *ExecID* (17), the fill represents a complex execution for which associated single-leg fills will follow.
		Single-leg fills associated with a complex execution will contain a *SecondaryExecID* (527) of the associated complex execution.
18	*ExecInst*	*ExecInst* from order (if any)
150	*ExecType*	Reason for this execution report:
		0 = New (acknowledgement of new order) 1 = Partial Fill 2 = Fill 3 = Done For Day 4 = Canceled 5 = Replaced 8 = Rejected D = Restated M = Mass Cancel Complete T = Floor Market Maker Trade Notification (C1 only)
		For Standard FIX Drop, only "1" or "2" will be sent and will always equal *OrdStatus* (39). For Order by Order FIX Drop, all *ExecType* values will be sent. Refer to section 6.2.
		When responding to a mass cancel request, *ExecType* is set to a value of "M". This indicates the only tags present in this message are the following:
		Standard Message Header (35) *SendingTime* (52) *ExecTransType* (20) *ExecType* (150) *MassCancelID* (7695) *CancelledOrderCount* (7696)
		ExecType = T is a non-standard value optionally used to indicate the exec report is a notification to the MM firm that the MM identified in *FloorTraderAcr* (20049) is a contra to a floor execution. TPHs must enable and opt-in using the *Market Maker Trade Notifications* port default to receive `Execution Report` messages with *ExecType* = T.
		ExecType = 0 and *OrdStatus* (39) = 0 is used to indicate that `Add Floor Trade` and `Floor Trade Confirmation` has been accepted. *ExecType* = 4 is and *OrdStatus* (39) = 4 used to indicate a `Delete Floor Trade` has been accepted.

		ExecType =8 and *OrdStatus* (39) = 8 if `Add Floor Trade`, `Floor Trade Confirmation` or `Delete Floor Trade` has been rejected.
378	*ExecRestatementReason*	Only present when 150=D 1 = GTC/GTD Restatement 3 = Repricing of order 4 = State Change 5 = Reduction of OrdQty 6 = Price Sliding Reprice 7 = Represented in crowd. Issued on order restatement when the order has been represented on the floor (C1 only). 8 = Reduction of OrdQty due to Equity Leg Reject (C1 only). 9 = FLEX price restatement (C1 only). The value "1" is used for GTC/GTD Carried Order Restatements if associated port attribute is set.
11	*ClOrdID*	*ClOrdID* of the order being accepted, executed or rejected, -or- *ClOrdID* of the cancel or replace **request**, -or- *ClOrdID* of the order subject to unsolicited cancel (*OrigClOrdID* will not be present).
41	*OrigClOrdID*	*ClOrdID* of the order being cancelled or replaced. Used for a solicited Cancel or Cancel/Replace, otherwise not present.
37	*OrderId*	*OrderId* (supplied by Cboe).
382	*NoContraBrokers*	Only present on trades. Always "1".
375	*ContraBroker*	Only present on trades. Internally matched executions will identify the OCC clearing number of the contra on the execution. All externally matched (routed) executions will identify the away exchange. AMEX = Routed to NYSE American ARCA = Routed to NYSE Arca BATS = Routed to Cboe BZX Options BOX = Routed to BOX CBOE = Routed to Cboe Options CTWO = Routed to C2 Options EDGX = Routed to Cboe EDGX Options EMLD = Routed to MIAX Emerald GMNI = Routed to Nasdaq GEMX

			ISE = Routed to Nasdaq ISE MERC = Routed to Nasdaq MRX MIAX = Routed to MIAX Options Exchange NOMX = Routed to Nasdaq NOBX = Routed to Nasdaq BX PERL = Routed to MIAX PEARL PHLX = Routed to Nasdaq PHLX
337		*ContraTrader*	Only present on trades. Displays the EFID (Contra *OnBehalfOfCompId*) of the contra side firm on all internally matched executions.
39		*OrdStatus*	State of order. 0 = New 1 = Partially Filled 2 = Filled 3 = DoneForDay 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected A = Pending Ack E = Pending Replace For Standard FIX Drop, only "1" or "2" will be sent and will always equal *ExecType* (150). For Order by Order FIX Drop, all execution information will be sent. Refer to section 6.2.
534 *Repeating Group*		*NoAffectedOrders* *(C1 and EDGX only)*	Number of repeating *AffectedOrigClOrdIDs* (1824) included in this message resulting from an AIM or QCC order reject. Integer 0-10 **Must request opt-in at firm or port level to receive this field.**
➜	1824	*AffectedOrigClOrdID* *(C1 and EDGX only)*	Repeating Group of *ClOrdIDs* of the Agency and Contra sides of a AIM or QCC rejected order. **Must request opt-in at firm or port level to receive this field.**
548		*CrossID*	Copied from order.
549		*CrossType*	Copied from order.
550		*CrossPrioritization*	Copied from order.
103		*OrdRejReason*	Optional when *ExecType* is "8" (Rejected). 0 = Broker option 1 = Unknown symbol 2 = Exchange closed

		3 = Order exceeds limit 5 = Unknown order 6 = Duplicate order 8 = Stale order
654	*LegRefID* *(C1, C2 and EDGX only)*	Copied from order. Applies only to single-leg execution messages generated from a complex execution.
1	*Account*	Copied from order (available in FIX DROP).
55	*Symbol*	Copied from order. For Market Maker Trade Notifications *(ExecType (150) = T)* then default will be Cboe Symbol ID unless port attribute configured to send OSI Symbology.
167	*SecurityType*	Indicates the type of security. OPT = Option MLEG = Complex package or option leg EQ = Equity leg (C1 only) For C1 Options, the value of MLEG will only be used for the complex packages. A value of OPT or EQ will be used for each individual leg depending on the leg type.
9465	*OrderOrigin* *(C1 only)*	Copied from order.
21097	*FrequentTraderID* *(C1 only)*	Copied from order.
22002	*StrategyID* *(C1 only)*	Copied from order.
22003	*ORS* *(C1 only)*	Copied from order.
22005	*ComboOrder* *(C1 only)*	Copied from order.
22006	*Compression* *(C1 only)*	Copied from order.
555 *Repeating Group*	*NoLegs* *(C1, C2 and EDGX only)*	Copied from order.
➔	654	*LegRefID* *(C1, C2 and EDGX only)*	Copied from order. Applies only to complex orders or trades.
➔	600	*LegSymbol* *(C1, C2 and EDGX only)*	Copied from order.
➔	608	*LegCFICode*	Copied from order.

		(C1, C2 and EDGX only)	
➜	611	*LegMaturityDate* *(C1, C2 and EDGX only)*	Copied from order.
➜	612	*LegStrikePrice* *(C1, C2 and EDGX only)*	Copied from order.
➜	623	*LegRatioQty* *(C1, C2 and EDGX only)*	Copied from order.
➜	624	*LegSide* *(C1, C2 and EDGX only)*	Copied from order.
➜	564	*LegPositionEffect* *(C1, C2 and EDGX only)*	Copied from order.
➜	566	*LegPrice* *(C1 only)*	Copied from order if complex order is FLEX.
77		*OpenClose*	Copied from order.
200		*MaturityMonth*	Copied from order. For Market Maker Trade Notifications *(ExecType (150) = T)* then default will be Cboe Symbol ID unless the port attribute is configured to send OSI Symbology.
205		*MaturityDay*	Copied from order. For Market Maker Trade Notifications *(ExecType (150) = T)* then default will be Cboe Symbol ID unless the port attribute is configured to send OSI Symbology.
201		*PutOrCall*	Copied from order. For Market Maker Trade Notifications *(ExecType (150) = T)* then default will be Cboe Symbol ID unless the port attribute is configured to send OSI Symbology.
202		*StrikePrice*	Copied from order. For Market Maker Trade Notifications *(ExecType (150) = T)* then default will be Cboe Symbol ID unless the port attribute is configured to send OSI Symbology.
54		*Side*	Copied from order.
38		*OrderQty*	Copied from order.
111		*MaxFloor*	Copied from order.
44		*Price*	Copied from order.
8020		*DisplayRange*	Copied from order.
59		*TimeInForce*	Copied from order unless overriden by the system. For example, Market orders are implicitly IOC for `New Order Single` messages.

22017	*SessionEligibility*	Copied from order.
126	*ExpireTime*	Copied from order if *TimeInForce* "6" (GTD).
439	*ClearingFirm*	Copied from order if present.
440	*ClearingAccount*	Copied from order if present.
424	*DayOrderQty*	For persisting GTC/GTD orders only. Contracts remaining to be filled for the order at the beginning of the current business day (i.e., *OrderQty* minus *CumQty* at the end of the previous business day).
14	*CumQty*	Cumulative quantity of contracts (or complex instruments) executed for this order over the life of the order, which may be multiple business days in the case of persisting GTC/GTD orders.
425	*DayCumQty*	For persisting GTC/GTD orders only. Cumulative quantity of contracts executed for the order during the current business day.
32	*LastShares*	Quantity of contracts (or complex instruments) traded on this fill (zero for non-fills). Must request opt-in at firm or port level for "Report MTP Fields" to receive this field on a MTP-triggered cancel/restatement where both sides were either reduced or cancelled (i.e. inbound Cancel Both or Decrement). With MTP, the number of contracts that would have matched.
31	*LastPx*	Price of this fill (zero for non-fills). Must request opt-in at firm or port level for "Report MTP Fields" to receive this field on a MTP-triggered cancel/restatement where both sides were either reduced or cancelled (i.e. inbound Cancel Both or Decrement). With MTP, the price at which LastShares would have matched.
151	*LeavesQty*	Quantity of contracts (or complex instruments) still open for further execution. Will be zero if order is dead, otherwise will be *OrderQty* minus *CumQty*. Note: It is possible for *LeavesQty* to be zero when *ExecType* = "5" indicating that the order is dead.
6	*AvgPx*	Average price of executions for this order weighted by trade size. Zero if *CumQty* is zero or if *MultiLegReportingType* (442) is "2".

426	*DayAvgPx*	For persisting GTC/GTD orders only. Average price per contract of executions on current business date. Zero if *DayCumQty* is zero.
99	*StopPx*	Copied from order.
198	*SecondaryOrderID*	Present on a MTP triggered cancel/restatement, on a reserve reload restatement, and on an order modify acknowledgement that increases the size of a reserve order. Cboe *OrderId* of contra side of prevented match (MTP), or Cboe PITCH OrderId for displayed portion of reserve order after reload, or Cboe PITCH OrderId for the displayed portion of a reserve order after a Cancel/Replace increased the size of the reserve order. **Must request opt-in at firm or port level for "Report MTP Fields" or "Restate on Reload" to receive this field.**
7694	*ContraCapacity*	The capacity of the contra for this execution. C = Customer F = Firm M = Market Maker U = Professional Customer N = Away Market Maker B = Broker-Dealer J = Joint Back Office L = Non-Trading Permit Holder Affiliate (C1 and C2 only) **Must request opt-in to "Send Contra Capacity" at firm or port level receive this field.**
9730	*TradeLiquidityIndicator*	Present for acknowledgements and fills (150=0, 150=1 or 150=2): **1st Character** A = Trade Added Liquidity R = Trade Removed Liquidity X = Routed C = Market Opening/Re-Opening Trade **2nd Character** S = Execution from Order that Set the NBBO B = Step-Up Mechanism (SUM) (C1 and EDGX only) U = Market Turner (C1 only) b = Automated Improvement Mechanism (AIM) (C1 and EDGX only) q = QCC (C1 and EDGX only) s = Solicitation Auction Mechanism (SAM) (C1 only) **Effective on EDGX TBD**

		Must request opt-in port level to receive the 2nd characters in this field. To allow for future expansion of this field, please ignore values with an unknown character in the 2nd position.
		MTP For users who opt-in to Report MTP Fields functionality (at firm or port level), the A / R values may be presented on an MTP triggered cancel/restatement.
		State Change Tracking For users who opt-in to State Change Tracking at the port level, order acks (*ExecType* = 0), modify acks (*ExecType*=5), and restatements (*ExecType*=D with *ExecRestatementReason*=4) will carry values defined as follows:
		A = Zero or more immediate partial remove fills followed by posting. R = Zero or more immediate partial remove fills followed by a cancel (or full fill). X = Zero or more immediate partial remove fills followed by routing.
9882	*FeeCode*	Specific fee code associated with execution. See the Fee Schedule for the respective market for possible values.
5937	*MarketingFeeCode* *(C1 and EDGX only)*	P = Penny Pilot N = Non-Penny Pilot X = Not Eligible for Marketing Fees C = Penny Auctions E = Non-Penny Auctions R = RUT
9690	*WorkingPrice*	Optional. Must be enabled at the port level. Only present on Accepted or Replaced, and only when order is fully or partially booked. If *Price* had to be adjusted to a less aggressive value to avoid crossing the NBBO, the adjusted price will be reported here, otherwise equals *Price*.
9691	*InitialDisplayPrice*	Optional. Must be enabled at the port level. Only present on Accepted or Replaced, and only when order is fully or partially booked. If order had to be temporarily displayed at a less aggressive value to avoid locking the NBBO, the initial displayed price will be reported here, otherwise equals *WorkingPrice*.
9617	*ModifySequence*	FIX Drop only. Base 36 number of times order has been replaced.

9688	*OrigCompID*	FIX Drop and ODrop only. *TargetCompID* of original FIX exec report. FIX Drop and ODrop ports must be configured to send this optional field.
9689	*OrigSubID*	FIX Drop and ODrop only. *TargetSubID* of original FIX exec report. FIX Drop and ODrop ports must be configured to send this optional field.
60	*TransactTime*	GMT date-time that transaction occurred.
1462	*TargetPartyID* *(C1 and EDGX only)*	Copied from order.
58	*Text*	If present, indicates reason for reject or cancel. Format is one letter reason code followed by colon and space followed by free form text (e.g., "N: No Liquidity at price"). See 'Section 8 – Reason Codes' for a list of valid reason codes.
7695	*MassCancelID*	Copied from order.
7696	*CancelledOrderCount*	Number of orders cancelled from a mass cancel request *MassCancelID*.
9370	*AuctionID* *(C1, C2 and EDGX only)*	Exposed order identifier supplied by Cboe. This identifier corresponds to the identifiers used in Cboe market data products.
6438	*CrossExclusionIndicator* *(C1 and EDGX only)*	N = Contracts were executed in auction against contra party, or against a resting order when auction was initiated. Y = Contracts were executed in auction against another party.
7933	*Routing FirmID* *(C1, C2 and EDGX only)*	Copied from order.
6253	*DrillThruProtection* *(C1, C2 and EDGX only)*	Copied from order.
9324	*ClearingOptionalData*	Copied from order.
21098	*TradeThroughAlertType* *(C1 only)*	Indication of a type of trade through. 1 = NBBO 2 = BBO (local best bid or offer) 3 = SBBO (market quote of complex derived by legs) 4 = Book trade through (trade through customer size) 5 = Due Dilligence trade through
22049	*FloorTraderAcr* *(C1 only)*	Floor Broker, PAR Broker, or Market Maker Acronym responsible for the execution. Present if *ExecType*=T or for a floor order fill report.

142	*SenderLocationID* <mark>*(C1 only)*</mark>	F = Floor `<blank>` = (or not present) for electronic execution.
	Standard Message Trailer	

* Not present when ExecType is Rejected (8) in response to a New Order Cross (MsgType = s).

4.5.1.1 State Change Tracking

Members wishing to track the state of their routable orders may **opt-in** to the following functionality at the port level by contacting the Cboe Trade Desk.

Order acks (*ExecType* = 0), modify acks (*ExecType* = 5), and restatements (*ExecType* = D with *ExecRestatementReason* = 4) will carry *TradeLiquidityIndicator* (9730) as follows:

- A = Zero or more immediate partial remove fills followed by posting.
- R = Zero or more immediate partial remove fills followed by a cancel (or full fill).
- X = Zero or more immediate partial remove fills followed by routing.

When an order returns from the router, a restatement will be generated with:

- *ExecType* (150) = D (Restated)
- *ExecRestatementReason* (378) = 4 (State Change)
- *Text* (58) = A (Admin)
- *TradeLiquidityIndicator* (9730) = A, X or R (as defined above)
- Order details to match the order (*OrdQty*, *Price*, etc.)
- Cumulative execution details to match the current status (*CumQty*, *LeavesQty*, etc.)
- Current execution details zeroed (*LastPx*, *LastShares*, etc.)

4.5.2 Cancel Reject

Rejects a `Order Cancel Request` or an `Order Cancel/Replace Request`.

When a Cancel/Replace is rejected, by default the original order is left alive. A Cancel Reject should not be used as a sign that the original order has been cancelled. Even if the *CancelOrigOnReject* = Y option is being used, a separate "unsolicited" cancel will be sent to close out the original order.

Tag	Field Name	Description
35	*Standard Message Header*	*MsgType*="9"
11	*ClOrdID*	*ClOrdID* from the Cancel or Cancel/Replace request.
41	*OrigClOrdID*	*ClOrdID* of the order that failed to be cancelled or replaced.
37	*OrderId*	*OrderId* of order that failed to be cancelled or replaced. "NONE" if CxlRejReason is Unknown (1).
39	*OrdStatus*	OrdStatus of order that failed to be cancelled or replaced.
1	*Account*	Copied from Cancel or Cancel/Replace request.
434	*CxlRejResponseTo*	1 = Cancel 2 = Cancel/Replace
102	*CxlRejReason*	0 = Too late to cancel.

		1 = Unknown order. 2 = BrokerOption. 3 = Already pending cancel or pending replace. **Optional** This field will not be reflected back on risk rejects.
58	*Text*	Free form text message.
7695	*MassCancelID*	*MassCancelID* from a mass cancel request.
	Standard Message Trailer	

4.5.3   Trade Cancel/Correct

Sends a trade/cancel or correct message for trade breaks and adjustments.

Trade Cancel/Correct (UCC) is an optional message that must be enabled at the port level. It may be enabled for current-day only or for all cancels and corrections. Only the *Price* and/or *Size* of a trade may be corrected, all other details remain the same. Trade cancels and corrections do not alter live order state.

Trade cancels or corrections to complex instruments will result in individual `Trade  Cancel/Correct` messages being sent for each leg. No cancels or corrections will be sent for complex instruments.

Tag	Field Name	Description
35	*Standard Message Header*	*MsgType*="UCC"
20	*ExecTransType*	1 = Trade Cancel 2 = Trade Correct
17	*ExecID*	Day-unique id of execution message.
19	*ExecRefID*	Refers to the *ExecID* (17) of the message being cancelled or corrected.
37	*OrderId*	*OrderId* of the original trade being cancelled/corrected.
11	*ClOrdID*	*ClOrdID* of the original trade being cancelled/corrected.
55	*Symbol*	Copied from original trade being cancelled/corrected.
77	*OpenClose*	Copied from original trade being cancelled/corrected.
200	*MaturityMonth*	Copied from original trade being cancelled/corrected.
205	*MaturityDay*	Copied from original trade being cancelled/corrected.
201	*PutOrCall*	Copied from original trade being cancelled/corrected.
202	*StrikePrice*	Copied from original trade being cancelled/corrected.
54	*Side*	Copied from original trade being cancelled/corrected.
9730	*TradeLiquidityIndicator*	Copied from original trade being cancelled/corrected.
128	*DeliverToCompId*	Copied from Tag 115 (*OnBehalfOfCompId*).
439	*ClearingFirm*	Copied from original trade being cancelled/corrected (if present).
440	*ClearingAccount*	Copied from original trade being cancelled/corrected (if present).
9620	*CorrectedPrice*	Only for Trade Corrects. Corrected price.
6655	*CorrectedSize*	Only for Trade Corrects. Corrected size
32	*LastShares*	Quantity of contracts on the original trade being cancelled/corrected.
31	*LastPx*	Price on the original trade being cancelled/corrected.
42	*OrigTime*	GMT date-time of original trade.
60	*TransactTime*	GMT date-time of cancel/correct.

4.5.3.1   *Trade Cancel/Correct FIX Drop Clearing Edit (C1 only)*

On the Cboe Options Exchange (C1) FIX Drop ports will optionally receive post-trade clearing edits via UCC messages. These messages will communicate changes that have been made using the Cboe Clearing Editor.

The message structure contains repeating groups of size and clearing information for each trade that communicate the previous and current trade details. Note that a single trade may be allocated into smaller trade records that total the original trade size. For example, a single trade for 10 contracts may be allocated into five smaller trade records of two contracts each where each smaller trade has a different CMTA. In this example, there

would be six repeating groups. The first group would contain details of the original trade and associated clearing information and the next five would communicate the split of the original trade into five smaller pieces with different clearing information on each record. This is demonstrated below using *ListSeqNo* (67), *WaveNo* (105), *AllocID* (70), *AllocShares* (80), and *AllocClearingFirm* (25008).

Example: Single trade split into five smaller trade records with updated CMTA values:

ListSeqNo	WaveNo	AllocID	AllocShares	AllocClearingFirm	Comments
1	0	0	10	123	Original trade details
2	1	1	2	123	Allocation 1
3	1	2	2	456	Allocation 2
4	1	3	2	789	Allocation 3
5	1	4	2	321	Allocation 4
6	1	5	2	654	Allocation 5

Tag		Field Name	Description
35		*Standard Message Header*	*MsgType*="UCC"
20		*ExecTransType*	5 = Clearing Edit
17		*ExecID*	Day-unique id of execution message.
78 *Repeating Group*		*NoAllocs*	Number of allocation groups (repeating group)
➔	67	*ListSeqNo*	Item number. Starts at '1' and increments upwards.
➔	105	*WaveNo*	Trade record identifier. A '0' indicates original trade and numbers greater than zero indicate revisions. Note that it is possible for a trade to be edited multiple times.
➔	70	*AllocID*	Clearing edit revision number. There will be multiple revisions contained under the same *WaveNo* if a single trade is allocated into multiple trade records.
➔	25007	*AllocExecRefID*	Refers to the *ExecID* (17) of the message being edited.
➔	80	*AllocShares*	Contracts allocated to this trade record
➔	77	*OpenClose*	*OpenClose* of the trade record
➔	25008	*AllocClearingFirm*	CMTA number of the trade record (if present)
➔	1	*Account*	*Account* (1) for the trade record (if present)
➔	448	*PartyID*	EFID of the trade record

➜	523	*PartySubID*	*ClearingAccount* (440) for the trade record (if present)
➜	9324	*ClearingOptionalData*	*ClearingOptionalData* (9324) for the trade record (if present)
➜	25009	*AllocClOrdID*	*ClOrdID* of the original trade being edited.
➜	47	*Capacity (Rule80A)*	Capacity of the order trade record
37		*OrderId*	*OrderId* of the original trade being edited.
55		*Symbol*	Copied from original trade being edited.
200		*MaturityMonth*	Copied from original trade being edited.
205		*MaturityDay*	Copied from original trade being edited.
201		*PutOrCall*	Copied from original trade being edited.
202		*StrikePrice*	Copied from original trade being edited.
54		*Side*	Copied from original trade being edited.
9730		*TradeLiquidityIndicator*	Copied from original trade being edited.
128		*DeliverToCompId*	Copied from Tag 115 (*OnBehalfOfCompId*).
32		*LastShares*	Quantity of contracts on the original trade being edited.
31		*LastPx*	Price on the original trade being edited.
42		*OrigTime*	GMT date-time of original trade.
60		*TransactTime*	GMT date-time of cancel/correct.
440		*ClearingAccount*	(if present)
439		*ClearingFirm*	(if present)
11		*ClOrdID*	Copied from the original trade being edited.
19		*ExecRefID*	

4.5.4 Security Definition (C1, C2 and EDGX only)

This message is a response to a `Security Definition Request` where the `Security Definition Request` is accepted or rejected.

Tag	Field Name	Description
35	*Standard Message Header*	*MsgType*="d"
11	*ClOrdID*	*ClOrdID* from the Security Definition Request request.
167	*SecurityType*	Copied from Security Definition Request.
1	*Account*	Copied from Security Definition Request.
55	*Symbol*	Cboe Symbol ID of created instrument.
323	*SecurityResponseType*	1 = Accept As-Is (legs were not modified) 2 = Accept With Revisions (legs were modified)

			5 = Reject Security Proposal "Accept As-Is" only applies if the input legs matches exactly the complex security definition. Any re-ordering of legs, reduction of ratios, or other changes will result in a value of "Accept with Revisions".
555 *Repeating Group*		*NoLegs*	Copied from `Security Definition Request`. Note ordering of legs may be different if *SecurityResponseType* (323) = "2".
➔	654	*LegRefID*	Copied from Security Definition Request.
➔	600	*LegSymbol*	Copied from Security Definition Request.
➔	608	*LegCFICode*	Copied from Security Definition Request.
➔	611	*LegMaturityDate*	Copied from Security Definition Request.
➔	612	*LegStrikePrice*	Copied from Security Definition Request.
➔	623	*LegRatioQty*	Copied from Security Definition Request. Note ratio may be reduced if *SecurityResponseType* (323) = "2".
➔	624	*LegSide*	Copied from Security Definition Request.
8641		*NoOfSecurities*	Number of complex strategies created by sender for this OSI Root.
58		*Text*	Free form text message.
		Standard Message Trailer	

4.6 Purge Port Protocol – Member to Cboe

A Purge port may be created using either the FIX or BOE protocol. For BOE Purge Port messaging please refer to the [Cboe US Options BOE Specification](#).

4.6.1 Purge Request

Request to cancel a group of orders across all the firm's sessions. This differs from a mass cancel request sent via a `Order Cancel Request` messages as the purge request is applied across all the firm's sessions, not just the session on which the `Order Cancel Request` was received.

A purge request requires sending the *MassCancel* (Legacy) or *MassCancelInst* optional field. If both *MassCancel* and *MassCancelInst* fields are sent, or if neither are sent, the purge request will be rejected. **Users are encouraged to use the *MassCancelInst* method as the legacy *MassCancel* method will be deprecated in the future with notice.**

The `Purge Request` message accepts a list of *CustomGroupID(7699)* values as part of the order matching filter. *CustomGroupID* and *Symbol* (Risk Root) specification are mutually exclusive. Messages containing both will be rejected. A maximum of 10 *CustomGroupID* values may be sent in one message.

Legacy MassCancel method:

- Populate the *MassCancel* (7693) field; do not specify the *MassCancelInst* field.
- Specify the *OnBehalfOfCompId (115)* field, optionally the Risk Root in *Symbol* (55), and optionally the *MassCancelID* (7695) if a single `Mass Cancel Acknowledgement` is requested.
- Specify the *MassCancelLockout* (7697) optional field to request subsequent rejection of new orders based on the level of the *MassCancel* (i.e., Firm level, Risk Root level, or CustomGroupId level).

MassCancelInst method:

- Specify the *MassCancelInst* (7700) field
- Specify the *OnBehalfOfCompId (115)* field, optionally specify Risk Root in *Symbol* (55) field, and optionally *MassCancelID* (7695) if the Acknowledgement Style is set to "S" or "B".

When specifying the RiskRoot field, using the underlying symbol is strongly recommended. Mass cancellations are always performed at the risk root (underlying) level.

The system limits the rate at which identical Mass Cancel and Purge Orders requests can be submitted to the system. Requests are restricted to twenty (20) messages per second per port.

An identical Mass Cancel message is defined as a message having all of the same *CustomGroupID*, *Symbol*, *Clearing Firm*, *Lockout Instruction*, *Instrument Type Filter* and *GTC Order Filter* field values, as a previously received message.

Tag	Field Name	Req'd	Description
35	Standard Message Header	Y	*MsgType*="F"
97	*PossResend*	N	Y = Indicates an application level unsolicited resend. If *ClOrdID* has not yet been seen, the cancel is treated as normal. If *ClOrdID* already exists, the resent cancel is ignored. N = (Default) indicates a new cancel.
7933	*RoutingFirmID (C1, C2, and EDGX only)*	N	Used to optionally convey the routing firm of the order. May be combined with *MassCancel* type "2" or "4".
60	*TransactTime*	Y	Time cancel initiated/released. Required by FIX 4.2 but not used by Cboe.
7693	*MassCancel*	Y*	1 = Cancel all orders. 2 = Cancel all orders that were used under the EFID specified in *OnBehalfOfCompId* (115). 3 = Same as "1" except individual cancel acknowledgements will not be sent. Instead, a single execution report containing *MassCancelID* (7695) and *CancelledOrderCount* (7696) will be sent once all cancels have been processed. 4 = Same as "2" except individual cancel acknowledgements will not be sent. Instead, a single execution report

			containing *MassCancelID* (7695) and *CancelledOrderCount* (7696) will be sent once all cancels have been processed.
			If *Symbol* (55) is included, the value must be a valid Risk Root, not the Cboe symbol name. By specifying *Symbol*, cancels will be limited to a single Risk Root.
			Tags 37, 77, 200, 205, 201, 202, 54 and 38 will be ignored if the *MassCancel* tag has been defined.
			MassCancel requests that contain tag *OrigClOrdID* (41) will be rejected.
			<mark>MassCancel requests will not cancel initiating orders for AIM Auctions.</mark>
			***MassCancelInst(7700) supercedes the use of MassCancel(7693). Users are encouraged to use MassCancelInst(7700) instead as MassCancel(7693) will be deprecated in the future with notice.**
7700	*MassCancelInst*	Y	Used to perform Mass Cancel operation rather than single order cancel. If *MassCancelInst* is provided, tags 37, 41, 77, 200, 205, 201, 202, 54 and 38 will be ignored.
			At least one character must be provided (Clearing Firm Filter). Contiguous characters must be specified up to total length. Truncated (unspecified) characters will default to values indicated below.
			1st Character : Clearing Firm Filter A = No filtering by EFID is performed. F = All orders that were sent under the EFID specified in *OnBehalfOfCompId (115*) will be cancelled. If "F" specified and *OnBehalfOfCompId (115)* is not provided, the `Mass Cancel` or `Purge Orders` will be rejected. If "F" specified and *OnBehalfOfCompId (115* is provided but has a null value, the `Mass Cancel` or `Purge Orders` will be treated like "A" No filtering by EFID.
			2nd Character : Acknowledgement Style M = (Default) Individual Execution Reports are sent for each cancelled order. S = Single Execution Report sent once all cancels have been processed. Single Execution Report will contain MassCancelId *(7695)* and *CancelledOrderCount (7696)*. *MassCancelId* (7695) must be specified or the `Order Cancel Request` will be rejected. B = Both Individual Execution Reports and summary Single Execution Report. Also requires *MassCancelId* (7695) to be specified or the Order Cancel Request will be rejected.
			3rd Character : Lockout Instruction

			N = (Default) No lockout L = Lockout until corresponding Risk Reset received. Lockout can be used only with Clearing Firm Filter set to "F", otherwise the `Order Cancel Request` will be rejected. Lockout will apply to all new orders and cancel/replace orders for the EFID (and *Symbol* (55) or *CustomGroupId* (7699), if specified), regardless of other filtering in the MassCancelInst. **4th Character : Instrument Type Filter** *(C1, C2, and EDGX only)* B = (Default) Cancel both Simple and Complex *orders* S = Cancel Simple orders only C = Cancel Complex orders only **5th Character : GTC/GTD Order Filter** C = (Default) Cancel GTC/GTD orders P = Don't cancel (preserve) GTC/GTD orders If *Symbol* (55) is specified, it must contain a valid Risk Root, not the Cboe symbol name. By specifying tag 55, cancels will be limited to a single Risk Root. A self-imposed lockout can be released using the *RiskReset (7692)* field of the `New Order Single` or `New Order Multileg` message. For more information, refer to the US Options Risk Management Specification.
7695	*MassCancelID*	N	Mass Cancel ID. This field will be echoed back in the resulting order execution report when *MassCancel* (7693) is set to "No". Mass Cancel requests containing a *MassCancelID* that is currently outstanding will be rejected.
7697	*MassCancelLockout*	N	0 = No Lockout 1 = Lockout Users may initiate a new self-imposed order lockout in conjunction with a mass cancel for all resting orders and in-flight orders. The *MassCancelLockout* value of "1" is only applicable in conjunction with *MassCancel* values of "2" or "4"; other usage results in a reject. The self-imposed lockout can be released using the existing *RiskReset* field (FIX Tag 7692). For more information, refer to the Cboe US Options Risk Management Specification.
55	*Symbol*	N	Risk Root symbol (upper case). Limits cancellations to only orders with the specified Risk Root.
7698 *Repeating Group*	*CustomGroupIDCnt*	N	Number of repeating *CustomGroupIDs* (7699) included in this message. Integer 0-10

	7699	*CustomGroupID*	N	*CustomGroupID* (7699) to cancel. Only present if *CustomGroupIDCnt* (7698) is non-zero. Number of repeating groups must match number specified in *CustomGroupIDCnt* (7698).
		Standard Message Trailer	Y	

4.7 Purge Port Protocol – Cboe to Member

4.7.1 Purge Acknowledgement

A response to a `Purge Request` will only be sent when the *MassCancelID* (7695) is populated on a `Purge Request`. This includes cases where Mass Cancel type "1" or "2" is selected or where the Acknowledgement Style of *MassCancelInst* is "S" or "B".

Tag	Field Name	Description
35	Standard Message Header	*MsgType*="8"
52	*SendingTime*	GMT date-time that execution report was sent by Cboe.
20	*ExecTransType*	3 = Status
150	*ExecType*	Reason for this execution report: M = Mass Cancel Complete
7695	*MassCancelID*	Copied from original `Purge Request`.
7696	*CancelledOrderCount*	Number of orders cancelled from a `Purge Request` with the specified *MassCancelID*.

4.7.2 Purge Reject

Rejects a `Purge Request`.

Tag	Field Name	Description
35	Standard Message Header	*MsgType*="9"
39	*OrdStatus*	8 = Rejected
434	*CxlRejResponseTo*	1 = Cancel
102	*CxlRejReason*	2 = Broker Option
58	*Text*	Free form text message with additional reject information.
7695	*MassCancelID*	*MassCancelID* from the `Purge Request`
	Standard Message Trailer	

5 Implementation Issues

5.1 Automatic Cancel on Disconnect or Malfunction

All open orders for a member will be cancelled automatically if no messages have been received from the member for two heartbeat intervals. The set of open orders cancelled will include Good 'Til Cancel ("GTC") and Good 'Til Day ("GTD") orders if the CancelOnDisconnect port setting is configured to include GTC/GTD orders. This is done to prevent orders from being stuck in an unknown state in the event of telecommunications failure. Users should choose their heartbeat interval carefully based on the latency and reliability of their telecommunications channel. The minimum supported interval is 5 seconds, which is the recommended interval if supported by the latency and reliability of user telecommunications channels. Execution reports for the automatically cancelled orders are available upon reconnection. Users are responsible for rerouting orders to other market centers based on their business needs. All open orders may also be cancelled in the rare event of a complete or partial system malfunction.

5.2 Access Fees Returned on Execution Reports

The access fee associated with each fill is calculated to 5 decimals and returned on each execution report. Negative numbers indicate liquidity rebates. Users should program their systems to read, validate, and pass along this field in order to avoid making software changes to their systems when the Cboe fee schedule changes. The sum of the access fees received during a month should equal the access fee charged or rebated on a member's monthly bill, rounded to the nearest penny.

5.3 Service Bureau Configuration

Service Bureaus require special configuration. *OnBehalfOfCompId* should be set for Order, Cancel and Cancel/Replace messages sent to Cboe. Orders with an unknown *OnBehalfOfCompId* will be rejected. *ClOrdId* values are required to be unique only within a given *OnBehalfOfCompId*. Execution Report and Cancel Reject messages sent by Cboe will have the *DeliverToCompId* set. **Orders must be cancelled or replaced using the same *OnBehalfOfCompId* as was sent on the Order**.

5.4 Common Session Level Issues

Cboe uses FIX 4.2 as specified by the FPL document **Version 4.2 (with Errata 20010501)** with business level extensions described in our own FIX spec. The session level of the FPL spec is followed as closely as possible.

The version with errata cleared up **many** ambiguities with session level present in the earlier Version 4.2 (March 1, 2000).

Important notes direct from the public FPL spec (**blue lines are anchor locations in the FPL document**, **bold emphasis is from original spec**, **purple emphasis added by Cboe**, **green notes added by Cboe**) :

5.4.1 FINANCIAL INFORMATION EXCHANGE PROTOCOL / FIX MESSAGE FORMAT AND DELIVERY / Ordered Message Processing

The FIX protocol assumes complete ordered delivery of messages between parties. Implementers should consider this when designing message gap fill processes. Two options exist for dealing with gaps, **either request all messages subsequent to the last message received or ask for the specific message missed while maintaining**

an ordered list of all newer messages. For example, if the receiver misses the second of five messages, the application **could ignore messages 3 through 5 and generate a resend request for messages 2 through 5**, **or**, preferably **2 through 0 (where 0 represents infinity).** Another option would involve saving messages 3 through 5 and resending only message 2. **In both cases, messages 3 through 5 should not be processed before message 2**.

5.4.2 FINANCIAL INFORMATION EXCHANGE PROTOCOL / SESSION PROTOCOL / Logon

After the initiator has been authenticated, the acceptor will respond **immediately** with a confirming *Logon* message.

5.4.3 FINANCIAL INFORMATION EXCHANGE PROTOCOL / SESSION PROTOCOL / Message Recovery

When the incoming sequence number does not match the expected number corrective processing is required. Note that the SeqReset-**Reset** message (**[Cboe: this refers only to GapFillFlag=No 123=N]** to be used only to recover from a disaster scenario vs. normal resend request processing) is an exception to this rule as it should be processed without regards to its MsgSeqNum. **If the incoming message has a sequence number less than expected and the PossDupFlag is not set, it indicates a serious error. It is strongly recommended that the session be terminated and manual intervention be initiated.** If the **incoming sequence number is greater than expected, it indicates that messages were missed and retransmission of the messages is requested via the *Resend Request*** (see the earlier section, *Ordered Message Processing).*

…

 If there are consecutive administrative messages to be resent, **it is suggested that only one *SeqReset-GapFill* message be sent in their place**. The sequence number of the *SeqReset-GapFill* message is the next expected outbound sequence number. **The *NewSeqNo* field of the GapFill message contains the sequence number of the highest administrative message in this group plus 1.** For example, during a Resend operation there are 7 sequential administrative messages waiting to be resent. They start with sequence number 9 and end with sequence number 15. Instead of transmitting 7 Gap Fill messages (which is perfectly legal, but not network friendly), a *SeqReset-GapFill* message may be sent. **The sequence number of the Gap Fill message is set to 9 because the remote side is expecting that as the next sequence number.** The *NewSeqNo* field of the GapFill message contains the number 16, because that will be the sequence number of the next message to be transmitted.

Sequence number checking is a vital part of FIX session management. However, a discrepancy in the sequence number stream is **handled differently for certain classes of FIX messages**. The table below lists the actions to be taken when the incoming sequence number is greater than the expected incoming sequence number.

> **NOTE: In *ALL* cases except the Sequence Reset - Reset message, the FIX session should be terminated if the incoming sequence number is less than expected and the PossDupFlag is not set. A *Logout* message with some descriptive text should be sent to the other side before closing the session.**

Response by Message Type

Message Type	Action to Be Taken on Sequence # Mismatch
Logon	Must always be the first message transmitted. Authenticate and accept the connection. **After sending a *Logon* confirmation back, send a *ResendRequest*** if a message gap was detected in the *Logon* sequence number.

....

5.4.4 FINANCIAL INFORMATION EXCHANGE PROTOCOL / ADMINISTRATIVE MESSAGES / Resend Request

Note: the **sending application may wish to consider the message type when resending messages**; e.g. if a new order is in the resend series and a significant time period has elapsed since its original inception, the sender may not wish to retransmit the order given the potential for changed market conditions. (The Sequence Reset-GapFill message is used to skip messages that a sender does not wish to resend.)

5.4.5 FINANCIAL INFORMATION EXCHANGE PROTOCOL / ADMINISTRATIVE MESSAGES / Sequence Reset (Gap Fill)

The sequence reset message is used by the sending application to reset the incoming sequence number on the opposing side. **This message has two modes**: **"Sequence Reset-Gap Fill" when GapFillFlag is 'Y'** and "Sequence Reset-Reset" when GapFillFlag is N or not present. The "Sequence Reset-Reset" mode should **ONLY** be used to recover from a disaster situation which cannot be otherwise recovered via "Gap Fill" mode. The sequence reset message can be used in the following situations:

- During normal resend processing, the sending application may choose not to send a message (e.g. an aged order). The Sequence Reset – Gap Fill is used to mark the place of that message.
- During normal resend processing, a number of **administrative messages are not resent, the Sequence Reset – Gap Fill message is used to fill the sequence gap** created.

...

The sending application will initiate the sequence reset. **The message in all situations specifies NewSeqNo to reset as the value of the <u>next</u> sequence number immediately following the messages and/or sequence numbers being skipped.**

...

If the GapFillFlag field is present (and equal to Y), the MsgSeqNum should conform to standard message sequencing rules (i.e. the MsgSeqNum of the Sequence Reset-GapFill message **should represent the beginning MsgSeqNum in the GapFill range** because the remote side is expecting that next message).

The sequence reset can only increase the sequence number. If a sequence reset is received attempting to decrease the next expected sequence number the message should be rejected and treated as a serious error. It is possible to have multiple ResendRequests issued in a row (i.e. 5 to 10 followed by 5 to 11). **If sequence number 8, 10, and 11 represent application messages while the 5-7 and 9 represent administrative messages**, the

series of messages as result of the Resend Request may appear as **SeqReset-GapFill with NewSeqNo of 8, message 8, SeqReset-GapFill with NewSeqNo of 10, and message 10**. This could then followed by SeqReset-GapFill with NewSeqNo of 8, message 8, SeqReset-GapFill with NewSeqNo of 10, message 10, and message 11. One must be careful to ignore the duplicate SeqReset-GapFill which is attempting to lower the next expected sequence number. This can be detected by checking to see if its MsgSeqNum is less than expected. If so, the SeqReset-GapFill is a duplicate and should be discarded.

6   FIX DROP

Cboe offers two types of FIX Drop ports, Standard FIX Drop and Order by Order FIX Drop. Neither port type accepts orders. Their purpose is to provide real-time information about order flow. The ports may be configured to send various combinations of order flow information related to specific member firms, clearing MPIDS, and/or sessions. With proper authorization (e.g. clearing or sponsored relationships), a single FIX Drop session can be used to obtain information about multiple Users.

6.1   Standard FIX Drop

Standard FIX Drop ports only send execution information (i.e. execution reports where *ExecType* (Tag 150) is Partially Filled (1) or Filled (2)).

6.2   Order by Order FIX Drop

Order by Order FIX Drop ports are designed to send more than execution information.

All order message types are supported including, but not limited to, Acknowledgements (150=0), Partially Filled (150=1), Filled (150=2), Cancelled (150=4), Replaced (150=5), Restated (150=D), Rejected (150=8), Order Cancel Rejects (35=9), and optionally (if configured at the port level) Trade Breaks (35=UCC) and Floor Representation (378=7). Quotes sent over BOE Bulk Quoting ports as well as all BOE rejects are not available on Order by Order FIX DROP. Quote execution messages will also not be available over ODROP, but are available over FIXDROP. If the Rejects/Cancels are due to incomplete clearing information, they may be unavailable on Order by Order FIX Drop ports.

Users of Order by Order FIX Drop must always be prepared to receive new/unknown FIX tag and FIX tag values for BOE/FIX ports being monitored. Cboe reserves the right to add new FIX tags and to update values distributed on Order by Order FIX Drop with no notice.

6.3   FIX Drop Port Attributes

Unless specified, both types of FIX Drop ports can be configured with the following features:

Attribute	Default	Description
Send Trade Breaks	No	Enables Trade Break Messages (35=UCC). Please note that enabling trade breaks on Order by Order FIX Drop port is dependent on enabling trade breaks on corresponding BOE and/or FIX order entry ports.
Unique Wash Execution Ids	No	Appends a ".B" or ".S" to *ExecID* (17) on all trades.
Concatenate CompId and SubId	No	Requires all FIX traffic to contain concatenated (combined) Comp and Sub Id's.
Send *OrigCompID*/*OrigSubID*	No	Send *OrigCompID* (9688) and *OrigSubID* (9689).
Send Account	No	Send *Account* (1).
Send 2nd Liquidity Character	No	Sends the second character in *TradeLiquidityIndicator* (9730).
Send *OrdType*	No	Send *OrdType* (40). **Standard FIX Drop only**. Order by Order FIX Drop will receive *OrdType* (40) based on FIX order entry port attribute "Echo Tag 40 on Ack".
Send *RoutingInst*	No	**Order by Order FIX Drop only.**

		Send *RoutingInst* (9303), *RoutDeliverMethod* (9350) and *RoutStrategy* (9400).
Send *ContraCapacity*	No	Send *ContraCapacity* (7694). This attribute must also be set on the respective FIX ports in order for this field to be populated.
Floor Representation Restatements *(C1 only)*	No	Send order restatement execution reports when *ExecRestatementReason* (378) = 7 (Represented in Crowd). Please note that enabling floor representation restatements on Order by Order FIX Drop port is dependent on enabling floor representation restatements on corresponding BOE and/or FIX order entry ports. **Order by Order FIX Drop only.**
FLEX Percentage Trade Restatements *(C1 only)*	No	If the FLEX Percentage Trade Restatements port attribute is set, Execution Report messages will be sent at the end of the day for all FLEX trades that were done in percentage terms. These trades will be restated with prices in dollar terms. FLEX trade restatements will carry an *ExecType* (150) = D and *ExecRestatementReason* (378) = 9.
Enable Market Maker Floor Trade Notifications *(C1 only)*	No	Enables Market Maker floor trade notifications (Execution Reports with *ExecType* (150) = T).
Allow Executions *(C1 only)*	Yes	Enables Execution Reports, except Execution Reports with *ExecType* (150) = T .
Send Clearing Edits *(C1 only)*	No	Enables sending of clearing edits. See Trade Cancel/Correct Fix Drop Clearing Edit section for details.

7 FIX Port Attributes

The table below lists FIX port attributes that are configurable on the port or firm level. Changes to these attributes can be made by submitting a request to the Cboe Trade Desk through the Logical Port Request form.

Attribute	Default	Description
Allowed Executing Firm Id(s)*	All Executing Firm Ids	Executing Firm Id(s) allowed for trading on port.
Default Executing Firm Id	None	Default Executing Firm Id to use if none is sent.
Allow ISO*	Yes	Allows or disallows ISO orders.
Allow Directed ISO*	Yes	Allows or disallows ISO orders directed to other market centers.
Allow Test Symbols Only	No	Allow or disallow orders in non-test symbols.
Default Routing Instruction†	9303=RS 9350=RTI 9400=SWPA	Specifies a default value for *RoutingInst* (9303), *RoutDeliveryMethod* (9350), and *RoutStrategy* (9400). Fields can be overridden at the order level.
Maximum Order Size*	25,000 99,000 (C1)	Maximum number of contracts allowed per order.
Maximum Order Dollar Value*	Unlimited	Maximum order dollar value per order.
Default Price Sliding†	"S" (BZX) "P" (C2 and EDGX)	Default price sliding behavior. See Display Indicator Features for more details..
Cancel on Disconnect	All	Cancels open orders upon order handler session disconnect; both graceful and ungraceful. If Cancel On Disconnect is set, open orders in Symbols that are not in Closed state at the time of the disconnect are cancelled. `All` = Cancel Day and GTC/GTD orders `Day` = Cancel only Day orders `None` = Disabled
Cancel on ME Disconnect	All	Controls whether orders are cancelled or preserved on a Matching Unit failover and provides for the ability to preserve GTC/GTD orders. In any event, if a failover takes longer than 5 minutes, all orders are cancelled (including GTC/GTD Orders). `All` = Cancel Day and GTC/GTD orders `Day` = Cancel only Day orders `None` = Disabled
Market Maker Reject if Cancel on Disconnect disabled	No Yes *(C1 only)*	Rejection of Market Maker or Away-Market Maker orders if Cancel on Disconnect is not enabled. Non-Market Maker capacity orders are unaffected with this configuration.
Send Trade Breaks^	No	Enables `Trade Cancel/Correct` messages (*MsgType*=UCC).
Default MTP Value*^†	None	Specifies Default value for *PreventMatch* (7928).

Report MTP Fields*^	No	Enables *LastPx* (31), *LeavesQty* (32) and *SecondaryOrderId* (198) on `Execution Reports` caused by MTP.
Allow MTP Decrement Override*^	No	Overrides the exception that requires both the resting and inbound order to be marked as "Decrement".
Allow Sponsored Participant MTP Control*^	No	Allows Sponsored Participant to override port default for MTP by using *PreventMatch* (7928) on order-level.
Concatenate CompId and SubId	No	Requires all FIX traffic to contain concatenated (combined) Comp and Sub Id's.
Cancel on Reject†	No	Cancels an order upon a cancel or modify reject.
Report Working Price	No	Reports *WorkingPrice* (9690) and *InitialDisplayPrice* (9691).
Unique Wash Execution Ids	No	Appends a ".B" or ".S" to *ExecID* (17) on all trades.
Enable State Change Tracking^	No	Allows for tracking of the state of routable orders. See Section 4.5.1.1 (State Change Tracking) for more information.
Send 2nd Liquidity Character	No	Sends the second character in *TradeLiquidityIndicator* (9730).
Decrement Remainder Only^	No	Enables "d" option for MTP. See *PreventMatch* (7928) for details.
Restate on Reload^ <mark>(BZX, C1 and C2 only)</mark>	No	Generates FIX Restatement on reserve order reload with new PITCH Order Id in *SecondaryOrderId* (198), and populates the new PITCH Order ID in (198) of a Cancel/Replace acknowledgement that increases the size of a reserve order.
Echo Tag 40 on Ack	No	Return *OrdType* (40) value on acknowledgement. Note that this value will also be returned on Order by Order FIX DROP.
Echo Tag 47 on Ack	No	Return *Rule80A/OrderCapacity* (47) value on FIX Ack. Note that this value will also be returned on Order by Order FIX DROP.
Microsecond Timestamp Granularity	No	Display microsecond level timestamp granularity for *TransactTime* (60), *OrigTime* (42) and *SendingTime* (52). These tags default to millisecond or second granularity.
Fat Finger Protection*	<mark>Yes See Web Portal Port Controls Specification for updated defaults</mark>	Orders entered through the NBBO by a specified percentage or dollar based limit price tolerance will be rejected. Limits may be different for different price ranges and price ranges may vary across markets. Please see the Web Portal Port Controls Specification for complete details.
Reject Orders on DROP Port Disconnect*	No	If all associated Standard FIX DROP ports associated with an order entry session experience disconnection, new orders will be rejected until at

		least one Standard FIX DROP port session has been reestablished. Note this parameter does not apply to Order-By-Order drop ports (ODROP).
Reject Orders on DROP Port Timeout (s)*	30 seconds	Only applicable if "Reject Orders on DROP Port Disconnect" has been enabled. When the last Standard FIX DROP port associated with an order entry session has disconnected, begin rejecting orders on the order entry session if a Standard FIX DROP session has not been reestablished within this timeout. Minimum value allowed is 0 seconds.
Cancel Open Orders on DROP Port Disconnect*	None	Only applicable if "Reject Orders on DROP Port Disconnect" has been enabled. When the last Standard FIX DROP port associated with an order handler session has disconnected, open orders, associated with the session are cancelled. `All` = Cancel Day and GTC/GTD orders `Day` = Cancel only Day orders `None` = Disabled Note this parameter applies to Standard FIX DROP ports and not Order-By-Order DROP ports (ODROP).
Carried Order Restatements	No	If the "Carried Order Restatements "port attribute is set, Execution Report messages representing orders carried forward from the previous session will be sent. See Section 1.5.2 Carried Order Restatements for details.
Done For Day Restatements	No	If the "Done For Day Restatements"port attribute is set, Execution Report messages representing orders persisted during the current day session to carry over to the next session will be sent after the end of trading for the associated product and before system recycle. See Section 1.5.1 Done For Day Restatements for details.

Notional Cutoff Aggregation Methods*	None	Gross exposure = CBB + CBO + CEB + CEO Net exposure = |(CEO + CBO) – (CEB + CBB)| On a given port, Cboe will calculate an track four values: CBB = Cumulative Notional Booked Bid Value *The sum of limit price x size for all booked sell limit orders.* CBO = Cumulative Notional Booked Offer Value *The sum of limit price x size for all booked sell limit orders.* CEB = Cumulative Notional Executed Bid Value *The sum of size x trade price for all executed buy orders* CEO = Cumulative Notional Executed Sell Value *The sum of size x trade price on all executed sell orders*
Gross Daily Risk Limit Order Notional Cutoff*	None	Optional parameter that if specified will result in rejects for **limit** orders when **gross** exposure of limit orders exceeds this value. Whole dollar value not to exceed $1B/port.
Gross Daily Risk Market Order Notional Cutoff*	None	Optional parameter that if specified will result in rejects for **market** orders when **gross** exposure of limit orders exceeds this value. Whole dollar value not to exceed $1B/port.
Net Daily Risk Limit Order Notional Cutoff*	None	Optional parameter that if specified will result in rejects for **limit** orders when **net** exposure of limit orders exceeds this value. Whole dollar value not to exceed $1B/port.
Net Daily Risk Market Order Notional Cutoff*	None	Optional parameter that if specified will result in rejects for **market** orders when **net** exposure of limit orders exceeds this value. Whole dollar value not to exceed $1B/port.
Send Routing Instruction	No	Include *RoutingInst* (9303) on Order by Order FIX Drop execution reports.
Send Contra Capacity	No	Include *ContraCapacity* (7694) on Execution Reports.
Default Attributed Quote*†	Never	Default value for *AttributedQuote* (9732). May override at order level. C† = Attribute *ClientID* (109) only (C1 only) N = Don't Attribute (may override at order level) Y = Attribute EFID only Z = Attribute EFID and *ClientID* (109) X* = (Default) Never Attribute (may not be overriden at order level) *On EDGX and BZX, this setting may only be changed after executing Attribution Addendum to Exchange User Agreement.

Crossed Market Reject / Cancel	No	Reject new orders when the NBBO in the security is crossed. Routable orders will have any remaining quantity cancelled back when the order returns to the book. Order modifications which cause a loss in priority will result in a cancel of the original order if the NBBO is crossed upon receipt of the modify request.
Cancel on Regulatory Halt	All (BZX and EDGX Only) None (C1 and C2 Only)	Cancels open orders upon receipt of a Regulatory Halt. All = Cancel Day and GTC/GTD orders Day = Cancel only Day orders None = Disabled
Session Close Handling	Yes	Customize message that would normally be sent at the regular market (4PM ET) and session close. Also functional during early close situations. Options supported are as follows: Yes = A cancel message will be sent for all expired orders (excluding GTC/GTD Orders). No = No message will be sent and it is the customer's responsibility to close all expired orders in their system. DFD = A DoneForDay message will be sent in place of the cancel message for each order (including GTC/GTD Orders) that is no longer eligible for execution. DoneForDay messages are sent via *OrdStatus* (39) = "3" **and** *ExecType* (150) = "3".
Duplicative Order Protection Time Threshold	None	Time window, in seconds, for Duplicative Order Protection check.
Duplicative Order Protection Order Count Threshold	None	Number of orders with the same EFID (115), *Price* (44), *OrdQty* (38), and *Symbol* (55) that must be seen within the Duplicative Order Time Threshold to initiate Duplicative Order Protection Action.
Duplicative Order Protection Action	1	Action taken when Duplicative Order Protection criteria is met. 1 = Not enabled. 2 = Reject new orders for the remainder of Duplicative Order Time Threshold. 3 = Disable port for EFID (115). Must call Cboe Trade Desk to reenable.
Firm Risk Reset	Disabled	Disabled = Requires manually resetting all firm-level risk trips by contacting the Cboe Trade Desk. Enabled = Allows firm-level risk resets using FIX or BOE *RiskReset* field (7692) of "F".
Send Client Order IDs for AIM/SAM/QCC Rejects	No	Enable sending of *AffectedOrigClOrdID*s (1824) for AIM, SAM and QCC rejects.

(C1 and EDGX Only)		
Port Order Rate Threshold	5,000 msgs/sec	The maximum allowed message rate on the session.
		When the first non-session level message is received, a one second window begins. During the second no more than 4,999 additional non-session level messages will be allowed within that window. If the rate is exceeded, all new orders in the time window are rejected, modifies are treated as cancels, and cancels are processed.
		Maximum value is 5,000 msgs/sec.
Symbol Order Rate Threshold	5,000 msgs/sec	Functions the same as the Port Order Rate Threshold but is calculated at the symbol level. It is capped by the Port Order Rate Threshold. Maximum value is 5,000 msgs/sec.
Reject Non-Market Maker With Clearing Account	Yes (C1 and C2 Only) No (BZX and EDGX Only)	If *OrderCapacity* (47) is not set to "M" or "N" and *ClearingAccount* is populated the order will be rejected by default on C1 and C2 and will be accepted by default for BZX and EDGX Only.
Default *Account*†	None	Default *Account* (1) to be used if none is sent on inbound messages. Allows 16 characters or less (ASCII 33-126) but a max of 10 characters will be passed through to the OCC Customer ID Field.
Default *ClearingOptionalData*†	None	Default *ClearingOptionalData* (9324) to be used if none is sent on inbound messages. Allows 16 characters or less (ASCII 33-126).
Default *FloorRoutingInst* (22303)† (C1 only)	E	D = Direct. Do not attempt to process electronically[1] E = Electronic only X = Route to floor if unable to process electronically.[1] [1]If *FloorRoutingInst* is default to "D" or "X", then *RoutingInst* (9303) must be sent as "R".
Default *FloorDestination* (22100)† (C1 only)	None	Specifies a default PAR workstation (ex. W001) to route to on the floor (or "PARO" to route to the Floor PAR Official of the underlying symbol) if not specified on inbound messages. 4 characters or less (ASCII 33-126).
Floor Representation Restatements (C1 only)	No	Send order restatement execution reports when *ExecRestatementReason* (378) = 7 (Represented in Crowd).
Default *EquityPartyID* (22008)† (C1 only)	None	Default *EquityPartyID* (22008) to be used if none is specified on inbound messages.
Default *ClientID* (109)† (C1 only)	None	Default *ClientID* (109) to be used if none is specified on inbound messages.

FLEX Percentage Trade Restatements (C1 only)	Yes	If the FLEX Percentage Trade Restatements port attribute is set, Execution Report messages will be sent at the end of the day for all FLEX trades that were done in percentage terms. These trades will be restated with prices in dollar terms. FLEX trade restatements will carry an *ExecType* (150) = D and *ExecRestatementReason* (378) = 9.
Send ClearingOptionalData	Yes	*If set to "No", Account* (1) will instead be mapped to the OCC via **both** the Customer ID field and the new the Optional Data field.
Enable Market Maker Floor Trade Notifications (C1 only)	No	Enables Market Maker floor trade notifications for specific Market Maker Acronyms on a port (Execution Reports with *ExecType* (150) = T).
Enable OSI Symbology on Market Maker Floor Trade Notifications (C1 only)	OSI	Optionally configure OSI Symbology on Market Maker floor trade notifications (Execution Reports with *ExecType* (150) = T) instead of defaulted Cboe Symbol ID.

* Sponsored Participants require written approval from Sponsors to update these settings on ports associated to a Sponsor's MPID.

† Port attribute can be overridden via FIX on an order by order basis.

^ Requires certification.

8 Reason Codes

The following is a list of reason and subreason codes used to indicate the reason for order rejections or cancellations. Cboe may add additional values without notice. Users must gracefully ignore unknown values.

A = Admin
D = Duplicate *ClOrdId*
F = Could not reflect to consolidated quote (OPRA)
H = Halted
I = Incorrect data center
J = Too late to cancel
K = Order rate threshold exceeded
L = Order would lock or cross NBBO
M = Order size exceeded
N = Ran out of liquidity to execute against
O = *ClOrdId* doesn't match a known order
P = Can't modify an order that is pending fill
Q = Waiting for first trade
R = Routing unavailable
T = Fill would trade-through NBBO
U = User requested
V = Would wash
W = AddLiquidityOnly order would remove
X = Order expired
Y = Symbol not supported
Z = Unforeseen reason
c = Close only
f = Risk management firm level
f = Risk management Custom Group ID level
m = Market access risk limit exceeded
o = Max open orders count exceeded
r = Reserve reload
s = Risk management symbol level
t = Auctions
w = Would Remove on unslide
u = Limit up/down
x = Crossed market
y = Order received during replay
z = Session End
+ = Risk management EFID Group level

9 References

For more information on Cboe Symbology, please refer to the [Cboe Symbology Reference](#) specification.

For more information on Cboe Opening Process, please refer to the [Cboe Opening Process](#) Specification.

10 Support

Please e-mail questions or comments regarding this specification to tradedesk@cboe.com.

Revision History

Version	Date	Description
0.1	09/17/09	Initial draft version.
1.0	10/05/09	Release 1.0 distributed.
1.0.1	10/08/09	Various minor updates.
1.1.0	10/28/09	New technical specification template and tag 115/128 info updates.
1.1.1	01/29/10	Added State Change Tracking. Removed 375=NYSE
1.1.2	02/04/10	Added Common Session Level Issues.
1.1.3	03/04/10	Corrected example for price data type. Corrected description for tag 116.
1.1.4	03/05/10	Updated description for tag 1 and 440.
1.1.5	05/14/10	Opt-in support added for MMTP Decrement method to work with other method types. Opt-in support added to allow Sponsored Participants to override port level MMTP settings on an order by order basis with approval of Sponsor.
1.2.0	08/06/10	Added FIX Drop section and updated DROP/FIX Drop references.
1.3.0	08/27/10	Updated 9303 definitions to match equity specification format. Bats Specific Fields section converted into a reference table.
1.4.0	09/15/10	Updated 9303 to add 3rd character support for strategy definition (in support of Parallel routing strategies) that will be effective by 10/01/10. Corrected tag 375 (*Contra*) parameter for NASDAQ (NOMX). Replaced RECYCLE references with Re-Route.
1.4.1	09/28/10	Default routing strategy changing effective 10/01/10 to Parallel-D.
1.4.2	10/08/10	Added support for C2 in tag 9303.
1.4.3	10/11/10	Added tag 7692 (*RiskReset*).
1.4.4	10/27/10	Added support for C2 in tag 375.
1.4.5	11/04/10	Parallel T and Parallel 2D effective date noted.
1.4.6	11/08/10	Parallel T strategy reference removed.
1.4.7	12/08/10	Updated 9621 definition.
1.4.8	12/20/10	Added 9730=S in 2nd character position (optional feature).
1.4.9	12/21/10	Added MMTP reference for 7928=d.
1.5.0	12/28/10	Added Port Attributes section. Renamed MMTP to MTP.
1.5.1	01/14/11	Added tag 167 (*SecurityType*) to `Execution Report`.

1.5.2	02/10/11	Added tag 6655 (*CorrectedSize*) to the `Trade Cancel/Correct` message type.
1.6.0	03/03/11	Removing 9622 *DiscretionAmount* effective 04/01/11.
1.6.1	03/25/11	Allow for opt-in of echoing Tag 47 (*Rule80A/OrderCapacity*) on FIX Ack effective 04/01/11.
1.6.2	04/01/11	Removal of 9622 *DiscretionAmount* postponed.
1.6.3	05/24/11	Added Microsecond Timestamp Granularity port attribute to allow for microsecond level timestamps for certain tags.
1.7.0	06/28/11	Added Mass Cancel effective 07/01/11. Added support for Firm level Risk Management rule Risk Resets effective 07/15/11.
1.7.1	07/12/11	Added Fat Finger Protection port attribute definition. Added some clarification to Mass Cancel definition.
1.7.2	07/22/11	Added Echo Tag 40 on Ack and Reject Orders on DROP Port Disconnect port attribute definition.
1.7.3	08/24/11	Added 9622 *DiscretionAmount*. Added additional DROP Port Disconnect port attribute definitions.
1.7.4	09/20/11	Added support for Professional Customer capacity (effective date 11/01/11). Added tag 58 value for Market Access Risk Limit cancel or reject.
1.7.5	11/07/11	Added Notional Cutoff Aggregation Method, Limit Order Notional Cutoff, and Market Order Notional Cutoff to **Port Attributes** section.
1.7.6	12/01/11	Added clarification to tag 102 usage with regard to `Cancel Rejects` messages.
1.7.7	12/08/11	Added Send Routing Instruction to **Port Attributes** section.
1.8.0	12/16/11	Updated **FIX Drop Port Attributes** section and renamed Port Attributes section FIX Port Attributes. Added Send Contra Capacity Instruction to **FIX Port Attributes** and **FIX Drop Port Attributes** section. Add tag 58 value "o = Max Open Orders Count Exceeded" as a reject reason code.
1.8.1	12/21/11	Noted that Bats reserves the right to add new FIX tags and to update values distributed on Order by Order FIX Drop with no notice.
1.8.2	01/05/12	Added Multiple Display-Price Sliding (9479=M).
1.8.3	01/17/12	Added capability within Order Cancel Request message to specify a *MassCancel* (tag 7693) option that will limit cancel acknowledgements to a single Execution Report message. Effective 01/27/12.
1.8.4	01/18/12	Updated Multiple Display-Price Sliding effective date to effective pending SEC Approval.

1.8.5	01/19/12	Added capability to echo *MassCancelID* in `Cancel Reject` messages.
1.8.6	01/25/12	Correction to *MassCancel* (tag 7693) definition. *MassCancel* requests that contain tag 41 (*OrigClOrdID*) will be rejected. *ClOrdID* was noted incorrectly.
1.9.0	02/01/12	Added support for using either Net, Gross, <u>or a combination of both</u> Notional Cutoff Aggregation Methods to the **Port Attributes** section. Effective 02/03/12. Removed Notional Cutoff Aggregation Method attribute and added specific attributes for both Gross and Net Daily Risk Limit/Market Cutoffs. Effective 02/03/12.
1.9.1	02/17/12	`Trade Cancel/Correct` message section stated that tag 439 was copied from original order. This was not correct. Corrected to note that tag 115 is copied to tag 128.
1.10.0	03/07/12	Added *AttributedQuote* (9732). Effective 05/07/12.
1.10.1	05/17/12	Clarified tag 55 description. Updated *PreventMatch* tag 7928 to include a 3rd character for Trading Group Id. Effective 05/25/12.
1.11.0	05/25/12	Post Only Orders will execute against resting orders if the value of price improvement associated with the execution equals or exceeds the sum of fees charged for the execution plus the value of the rebate that would have been provided if the order posted to the Bats book and subsequently provided liquidity. Effective 06/08/12.
1.11.1	06/14/12	Added support for NASDAQ BX in tags 9303 and 375. Effective 06/29/12. Clarified the cases in which Tag 198 *SecondaryOrderID* is sent.
1.11.2	06/19/12	Added reason code of 'x = Crossed Market' to *OrderRejectReason*, *ModifyRejectReason* and *CancelReason*. Added Crossed Market Reject/Cancel to **Port Attributes** section.
1.11.3	06/26/12	Added support to allow Market Makers to facilitate trades in Closing Only Series using Opening IOC orders. Effective 06/29/12.
1.11.4	08/07/12	Updated Multiple Display-Price Sliding effective date to effective 08/24/12.
1.11.5	09/05/12	Added support for Miami Stock Exchange in tags 9303 and 375.
1.11.6	09/26/12	Mass Cancel requests containing a *MassCancelID* that is currently outstanding will be rejected. Effective 09/28/12.
1.12.0	01/09/13	Removed support for discretion orders (*DiscretionAmount* Tag 9622). Effective 02/01/13.
1.12.1	01/23/13	Added reason code of 'u = LimitUpDown' to *Text* (Tag 58).
1.13.0	04/04/13	Include *TradeLiquidityIndicator* (Tag 9730) by default on order acknowledgements. Effective 06/06/13. Updated *ExchangeAccessFee* (Tag 9621) description.
1.14.0	07/10/13	CYCLE routing strategy, where 3rd character of *RoutingInst* (Tag 9303) = "C" to be deprecated in favor of Parallel routing strategies. Effective 09/03/13.
1.14.1	08/05/13	Details added to *RoutingInst* (Tag 9303), *ExecInst* (Tag 18), and *ContraBroker* (Tag 375) to support Gemini.

1.14.2	10/21/13	Added support for MassCancelLockOut to *Order Cancel Request* message type.
1.14.3	12/10/13	Updated CYCLE routing strategy where 3rd character of *RoutingInst* (Tag 9303) = "C" will be rejected effective 01/02/14.
1.14.4	01/29/14	Added reference to cancel on regulatory halt to the **Port Attributes** section. Effective 03/06/14.
1.14.5	01/30/14	Added maximum of 20% for Fat Finger Percentage in **Port Attributes** section.
1.14.6	02/07/14	Updated Hours of Operation to reflect Pre-Market Opening Process.
1.14.7	03/14/14	Add *TradeLiquidityIndicator* (Tag 9730) value of "C" for market opening/re-opening trade.
1.15.0	06/05/14	Added support for Random Replenishment, *DisplayRange* (8020). Effective 07/11/14. Added support for modification of displayed quantity, *MaxFloor* (111), on the next reload. Effective 07/11/14. Added support for *TimeInForce* (59) = "4", FOK. Effective 07/11/14. Added support for *OrdType* (40) = "3" (Stop) and *OrdType* (40) = "4" (Stop Limit) orders as well as *StopPx* (99). Effective 07/11/14.
1.16.0	07/31/14	Added "Session Close Handling" Port Attribute**.** Effective 08/22/14. Added MTP Modifier of Cancel Smallest, *PreventMatch* (7928) = "S". Effective 08/22/14.
1.16.1	08/29/14	Added Aggressive and Super Aggressive routing strategies to *RoutingInst* (9303). Effective 09/12/14.
1.16.2	09/23/14	Added support for Price Adjust and Multiple Price Adjust, *DisplayIndicator* (9479) = "P" and "m" respectively. Effective 10/17/14.
1.16.3	10/27/14	*FeeCode* (9882) support added for opt-in through the Bats Trade Desk effective 11/07/14. *FeeCode* (9882) will be distributed on all Execution Reports effective 11/21/14. *ExchangeAccessFee* (9621) will be deprecated effective 3/31/15.
1.16.4	02/13/15	Added support for *Capacity* (47) and *ContraCapacity* (7694) designations of Broker-Dealer, Non-Bats Market Maker and Joint Back Office. Effective 06/01/15
1.16.5	03/02/15	Updated description of Unique Wash Execution Ids port attribute. Added language to `Logon` message clarifying behavior around one second wait period after `Logon` is received.
1.17.0	07/01/15	References in support of EDGX Options added. Added *MarketingFeeCode* (5937) and *TargetPartyID* (1462). *ContraCapacity* (7694) added to FIX DROP.
1.17.1	08/21/15	Updated description of *Fat Finger Protection* port attribute. Added *Duplicative Order Protection* port attributes.
1.17.2	10/26/15	Updated description of *DisplayIndicator* (FIX Tag 9479) with EDGX Options-specific behavior.
1.17.3	10/31/15	Updated values for *MarketingFeeCode* (FIX Tag 5937) to match current EDGX Options Fee Schedule. Updated description of *TargetPartyID* (FIX Tag 1462). Updated description of *MassCancel* (FIX Tag 7693).

1.17.4	11/12/15	Updated Pre-Market Queueing session start time to 7:30 AM effective 12/11/15 pending SEC approval.
1.17.5	12/24/15	Updated descriptions of *TargetPartyID* (FIX Tag 1462) and *OrderCapacity* (FIX Tag 47) for revised directed order functionality. Effective 01/19/16.
2.0.0	01/21/16	Added Mercury support to *ContraBroker* (FIX Tag 375) and *RoutingInst* (FIX Tag 9303). Added Routing V2 support to *RoutingInst* (FIX Tag 9303). Added three new fields in support of Routing V2: *RoutDeliveryMethod* (FIX Tag 9350), *RoutStrategy* (FIX Tag 9400), and *ExDestination* (FIX Tag 100). Changed major revision of spec to V2 to match equities FIX spec version convention.
2.1.0	02/19/16	Bats branding/logo changes.
2.1.1	02/24/16	Updated reason code for restatement messages *ExecRestatementReason* (FIX Tag 378). Effective 03/10/16
2.1.2	03/24/16	Update description of *RoutStrategy* (v2) (FIX Tag 9400) to state routable ISOs must be sent with "DIRC". Updated the minimum value of the "Reject Orders on DROP Port Timeout (s)*" Port Attribute. Effective 04/25/16.
2.1.3	05/17/16	Updated Display Price Sliding and Price Adjust functionality. Effective 05/16/16. Added functionality for AuctionID and S as possible second character for *RoutingInst*. Effective 07/11/16.
2.1.4	06/13/16	Display Price Sliding support eliminated for EDGX Options Effective 07/11/16.
2.1.5	07/13/16	Added new second character to *TradeLiquidityIndicator (FIX Tag 9730)* of B for Step-Up Mechanism (SUM)
2.1.6	08/03/16	WAIT orders (FIX Tag 9303) = "C" will be eliminated upon migration to the Bats NextGen Matching Engine. Price Adjust behavior on BZX Options will be unified with EDGX Options Price Adjust behavior on the Bats NextGen Matching Engine. Refer to Release Notes on Bats Public Web Site for NextGen Matching Engine deployment schedule.
2.1.7	08/19/16	Added support for BAM Auction functionality (available in EDGX Options Certification 10/11/16 and EDGX Options Production 01/03/17)
2.1.8	10/04/16	Added support for *RoutingFirmID* (Tag 7933) on the `New Order Single` Message. Effective 01/03/17.
2.1.9	11/11/16	Removed legacy Display Price Sliding functionality. Added new second character to *TradeLiquidityIndicator (FIX Tag 9730)* of 'b' for Bats Auction Mechanism. Updated *ClearingAccount* to clarify and include *Capacity* of 'N'.
2.1.10	12/6/16	Updated Fix Port Attribute for Market Maker Reject if Cancel on Disconnect disabled.

2.1.11	01/24/17	Removed legcy Routing v1 functionality Added support for MIAX Pearl routing. Updated *RoutingFirmID* (Tag 7933) for `Execution Report`, `Order Cancel Request`, and `Cancel/Replace Request`. Added Support for Qualified Contingent Cross (QCC) to include an updated *CrossType* (549). Effective 03/03/17.
2.2.0	01/27/17	Added Purge Port functionality. Effective 03/01/17. Added new *RiskReset* (7692) values to support reset by *CustomGroupID* (7699). Effective 03/01/17.
2.2.1	03/06/17	Added new opt-in *AffectedOrigClOrdID (Tag 1824)* repeating group to echo *ClOrdID (Tag 11)* of BAM and QCC rejects. Removed references to legacy DROP protocol. Added "Port Order Rate Threshold", "Symbol Order Rate Threshold", "Allow Test Symbols Only", and "Send Client Order IDs for BAM/QCC Rejects (EDGX Only)" Port Attributes.
2.2.2	04/13/17	Defined whether a FIX Tag is optional or required on all inbound message types.
2.3.0	05/11/17	Added support for Complex orders. Available in Certification effective 08/01/17 and in Production effective 10/23/17. Added Cancel on ME Disconnect Port Attribute.
2.3.1	06/13/17	Added *LegRefID* (654) to `New Order Multileg` message for both long and short form messages. Added *LegRefID* (654) to `Security Definition Request` and `Security Definition` messages. Added complex order Tags to `Execution Report` message. Updated available *TimeInForce* (59) and *RoutingInst* (9303) values when used with complex orders.
2.3.2	06/27/17	*AvgPx* (6) and *CumQty* (14) will be zero when *MultiLegReportingType* (442) is "2".
2.3.3	07/07/17	Symbology used on executions for complex orders, including the legs, will always be Bats symbology
2.3.4	07/25/17	Added *SecondaryExecId* (527) to Execution Report. Added new Mass Cancel/Purge Request specification style using *MassCancelInst*(7700) field (Available in Certification effective 8/14/17 and in Production effective 10/23/17). Added new Reason Codes section.
2.3.5	08/04/17	Added *RiskReset* and *CustomGroupID* to `New Complex Order` message.
2.4.0	09/01/17	References and fields in support of C2 Options added. Updated Mass Cancel and Purge fields to add additional filtering based on GTC orders and Complex instruments. Updated Cancel on Disconnect, Cancel on ME Disconnect, Cancel on DROP Port Disconnect and Cancel on Regulatory Halt to all provide GTC filter capability.
2.4.1	09/15/17	Added support for C2 Feature Pack 1. Available in Certification effective 9/15/17 and in Production effective 10/13/17.
2.4.2	09/25/17	Updated description of *MassCancel* (7693) and *MassCancelInst* (7600). Added *TimeInForce* (59)=2 (At The Open) for `New Order Single` effective 10/23/17.

2.4.3	10/05/17	Updated C2 Feature Pack 1 effective date from 10/6/17 to 10/13/17. Removed introduction of *ContraTrader* and *ContraBroker* and deprecated of *ContraCapacity* from C2 Feature Pack 1 release.
2.4.4	10/17/17	Cboe branding/logo changes.
2.4.5	11/07/17	Added C2 Feature Pack 2 enhancements for *ContraTrader* and *ContraBroker* values to be effective on 12/8/17.
2.4.6	12/06/17	Updated effective date of C2 Feature Pack 2 to 12/15/17.
2.4.7	12/15/17	Updated description of *Leg Ref ID* (654) to allow 5 alphanumeric or space characters or less. Updated effective date of C2 Feature Pack 2 to 01/05/18.
2.4.8	12/27/17	Added 'Done For Day Restatements' functionality including Section 1.5.1 introduction and new port attribute 'Done For Day Restatements.', which is disabled by default. Changed default for 'Carried Order Restatements' to disabled. Updated `Cancel/Replace Request` message to clarify when an order loses time priority.
2.4.9	01/12/18	Added GTC/GTD persistence across trading sessions to BZX and EDGX (Effective in EDGX on 1/26/18 and BZX on 2/2/18).
2.5.0	02/20/18	The *TimeInForce* value on an `Execution Report` may differ from what was sent in cases where the value is overridden by the system. Update GTC/GTD functionality to allow order cancelation after trading sessions ends.
2.5.1	03/21/18	Updated OSI Root to Underlying symbology for EDGX Options (effective 6/11/18) and BZX Options (effective 6/25/18).
2.5.2	03/26/18	Updating *RoutStrategy* (9400) default behavior to 'SWPA' for EDGX on 04/13/18 and BZX on 04/19/18.
2.5.3	04/04/18	Removed 'P'ost Only as a valid *RoutingInst* value for New Order Multileg on C2. Changed the Default Attributed Quote value for EDGX to Never.
2.5.4	04/10/18	*CumQty* (14) to be populated on leg fills related to complex executions (effective 4/27/18).
2.5.5	05/23/18	Complex Orders with a *RoutingInst* (9303) = D must be Market Maker capacity.Corrected OSI to Underlying effective dates
2.5.6	08/07/18	Updated information about mass cancel message rate limitations. (effective 08/15/18) Added clarification to *CxlRejReason* (Tag 102) with reason of BrokerOptions on Cancel Rejects messages.
2.5.7	10/19/18	Added support for C1 Migration Feature Pack 1, including support for complex reserve orders, *ClearingOptionalData* (9324) and EFID Group level risk functionality. Available in Certification effective 11/2/18 and in Production effective 11/29/18.
2.5.8	11/05/18	Added Complex Post Only value of 'P' to *RoutingInst* (9303) (Effective in EDGX and C2 - TBD).
2.6.0	11/16/18	Add additional message types, references, and fields in support of Cboe Options migration to Bats Tech.

2.6.1	11/27/18	Added *TradeLiquidityIndicator* (9730) values for SAM and QCC. Updated effective date for Complex Post Only to TBD. Updated values for Default Attributed Order port attribute for Cboe Options Exchange.
2.6.2	12/06/18	Updated FIX Tag 1 (*Account*) description to match behavior per release of C1 Feature Pack 1. Added *Send ClearingOptionalData* to list of Fix Port Attributes. Added notes to *ClientID* (109)*, AttributedQuote* (9732) indicating availability in C1 Feature Pack 4. Updated FIX port attributes for Cancel on Regulatory Halt to indicate Cancel All is default for BZX and EDGX and Cancel None is default for for C1 and C2.
2.6.3	12/20/18	Attributing by *ClientID* (109) requires a value of "C" rather than "X" for the *AttributedQuote* (9732) field.
2.6.4	01/11/19	Corrected default value for *Default FloorRoutingInst* port attribute to 'E' for Electronic only. Added support for MIAX Emerald routing (effective 03/01/19). Added Floor Routing protocol feature for C1. Added support for Not Held orders (*ExecInst* (18) = 1) for C1.
2.6.5	01/17/19	Removed Cancel/Correct references from `Execution Report` (35=8) message type description to ensure clarity on the fact that Cancel/Correct messages are only sent using the UCC (35=UCC) message type. Added effective dates for Complex Post Only (EDGX 01/30/19, C2 02/06/19).
2.6.6	02/06/19	Added Reason Code `'z'` to section 8. Market Orders are not implicitly IOC for `New Order Multileg` orders. Added Simple Order Auction information related to BAM/AIM, SUM, and QCC for C1 Feature Pack 5.
2.6.7	02/19/19	Cabinet orders must be routed to the floor. Support added Floor Representation Restatements including new protocol feature section and new port attributes. Added *FLEXHedgeExecInst* (21005) and *FLEXPreFacilPrice* (21008) to `New Order Cross` and `New Order Cross Multileg`. Removed *MultiClassSpd* (22004). Tag is not needed. Changed *TradingSessionID* (336) to *SessionEligibility* (22017). Also changed tag values to be a single character, from 'RTH' and 'ALL' to 'R' and 'A'.
2.6.8	03/01/19	Updated `New Order Multileg` message type to not support legging in to the simple book on cross product spreads. Added note indicating FIX Tag 111 (*MaxFloor*) and FIX Tag 8020 (*DisplayRange*) will be effective in C2 on 03/15/19 to support Complex Reserve orders.
2.6.9	03/13/19	Updated effective date for SAM auctions to **TBD**.
2.6.10	03/18/19	Added support for AON orders on EDGX effective with C1 Feature Pack 6.

2.6.11	03/29/2019	Added new *TiedHedge* indicator tag to `New Order Multileg`. Moved *FrequentTraderID* to the Allocs repeating group of `New Order Cross` and `New Order Cross Multileg`. Removed *FLEXPreFacilPrice* from `New Order Cross` and `New Order Cross Multileg`. Added *FLEXHedgeExecInst* and *FLEXPreFacilPrice* to `New Order Single` and `New Order Multileg`. Updated `Delete Floor Trade` message descriptive text to specify that we only allow trade deletion by *execID* (deletion by *clOrdID* will not be supported). Replaced all references to BAM with AIM. Updated GTH trading hours to end at 9:15 a.m. ET. Renamed Late-Limit-On-Open orders to Settlement Liquidity orders.
2.6.12	05/02/2019	Updated *Price* (44) description with supportive values based on *PriceType* (423) to support pricing as a percentage (FLEX only) or Cabinet orders. Updated *SecurityType* (167) on `Execution Reports`, including those sent to FIX DROP, to more accurately reflect how this will be used on the Cboe Options (C1) Exchange. In `New Order Cross Multileg`, removed *LegPositionEffect* (564) & *ContraPositionEffects* (22564), added *LegPositionEffects* (22019). Added clarification to *MassCancelInst* behavior when the Clearing Firm Filter is set to 'F'. Clarified acceptable ASCII values for for *Account* and *ClearingOptionalData*. Added GTH times for DJX and XSP and added note to indicate C2 and EDGX will support *SessionEligibility*, effective with C1 Feature Pack 7. Added note indicating reserve orders (*MaxFloor* greater than 0) will be rejected for Cboe proprietary classes, effective with C1 Feature Pack 7.
2.6.13	05/31/2019	Removed Market Maker Floor Trade Notifications from FIX port attributes and added to Drop Port attributes. Added FLEX Percentage Trade Restatements and Allow Executions to Drop Port Attributes. Added *TradeLiquidityIndicator* 2nd character value of "U" for Market Turner on C1. Added Trade Cancel/Corect FIX Drop Clearing Edit section that is applicable to C1 only. Added Send Clearing Edits FIX Drop port attribute for C1 only.
2.6.14	06/14/2019	Updated description of *EquityTransactTime* (22060) field. Added note indicating `New Order Cross Multileg` will be supported on EDGX, effective on EDGX with C1 Feature Pack 8. Added *TimeInForce* (59) value of 'At the Close ', effective on BZX, C2, and EDGX with C1 Feature Pack 8.
2.6.15	06/19/2019	Updated `Add Floor Trade` message for ContraBroker and ExecBroker fields. Fields are not validated if sent. Default Market Maker EFID Association Tool in Web Portal is used to identify OCC give-up number for these fields. **ContraBroker and ExecBroker fields will be deprecated from the spec at a future date.**

2.6.16	06/21/2019	Added *ExecRestatementReason*(378) value of "3 = Repricing of order" for use with SLOO order restatement reason.
2.6.17	06/28/2019	Added notes indicating *EquityExDestination*, *EquityLegShortSell*, and *EquityPartyID* fields in the `New Order Cross Multileg` and `New Order Multileg` messages will be **effective on EDGX with C1 Feature Pack 9** to support Complex Orders with equity legs.
2.6.18	07/01/2019	Clarified preferred use of underlying when specifying RiskRoot field. Removed "Will be zero for *ExecTransType* (20) = "3" (Status)" from description of *ExecID (17) in* `Execution Report` message.
2.6.19	07/10/2019	Updated note indicating `New Order Cross Multileg` value for C-AIM will be supported on EDGX at a date TBD.
2.6.20	07/16/2019	Corrected details for Execution Report fields *OrigCompID* (9688) and *OrigSubID* (9689) to indicate that both are FIX and ODROP only.
2.6.21	07/25/2019	Corrected description of *FrequentTraderID* from "10 characters or less" to "6 characters or less". Corrected description of the 'G' value for the *ExecInst* (18) field in `New Order Multileg` message to include DAY instead of IOC. Added support for Market Maker Floor Trade Notifications for FIX port attributes to specify list of Market Maker Acronyms on a port. `Floor Trade Confirmation` messages now support full OSI Symbology in addition to Cboe Symbol ID. *FloorRoutingInst* of "D" or "X", only compatible when *RoutingInst* (9303) is set to "R".
2.6.22	07/26/2019	Removal of Execution Report with *ExecType (150) = F* for Floor Trade Match Record and clarification around correct Execution Report messages for `Add Floor Trade`, `Floor Trade Confirmation` and `Delete Floor Trade` messages.