



Update - Cboe Options Technology Integration Feature Pack 8 – Support for ~~Complex AIM~~, Complex QCC, Market on Close, and Limit on Close

Reference ID: C2019071000

Overview (UPDATED)

Effective **July 12, 2019**, Cboe will introduce enhancements to complex order auction functionality for the EDGX Options (“EDGX”) Exchange. Additionally, BZX Options (“BZX”), C2 Options (“C2”), and EDGX Options (“EDGX”) will add support for Market on Close (MOC) and Limit on Close Orders (LOC).

The addition of support for Complex AIM auctions on EDGX has been postponed until a future date, **pending regulatory approval**. The new effective date for Complex AIM on EDGX will be communicated in a future notice.

These enhancements are in preparation for the migration of Cboe Options Exchange (“C1”) to Bats technology.

Addition of Complex AIM to EDGX (UPDATED)

On the effective date, **yet to be determined**, EDGX Options will add new functionality to support Complex AIM auctions. Members may initiate a Complex AIM Order by submitting a `New Order Cross Multileg` message, specifying AIM in the `CrossType` (FIX Tag 549) instruction. A maximum of ten counterparties will be allowed per order. C1 Feature Pack 4 added the `Auction Notification` message to the US Options Complex PITCH feed, and this message will now be utilized to disseminate Complex AIM auction messages on both the US Options Complex PITCH and US Options Complex Auction PITCH feeds.

Complex AIM Orders will generally have the same requirements as AIM orders with the following exceptions.

- Complex AIM orders may only be entered after component legs have opened or the order will be rejected.
- Executions will be allowed outside of the SNBBO for the Complex Instrument but must be within the SBBO.
- The system will always enforce Customer Priority for both Simple Book orders and Complex Book orders for Complex AIM auctions even if Customer Priority is not enabled for the series.

- Drill Through protections will be applied to both the Agency side and contra side of the Complex AIM order.
- All Complex Pricing Checks that apply to standard COB orders (i.e. Minimum or Maximum Price, Strategy Specific Price Restrictions) will apply to Complex AIM orders.
- Customer to Customer Complex AIM orders, regardless of size, will be executed immediately and will not be subjected to an exposure period if the auction price is in between the SBBO, or equal to or better than resting COB orders.

Addition of Complex QCC with Support for Sending Stock Leg Information to EDGX

Effective **July 12, 2019**, EDGX Options will support Complex QCC auctions. A Complex QCC Auction is an unexposed cross comprised of an initiating order where the smallest options leg is at least 1,000 contracts identified as being part of a Qualified Contingent Trade (QCT), coupled with a contra-side order or orders totaling an equal number of options contracts. Trade messages resulting from Complex QCC executions will be disseminated on the Options Multicast PITCH, Multicast TOP and OPRA feeds.

QCC orders also involve an underlying stock component which is executed separately. To initiate a Complex QCC order, specify QCC in the *CrossType* (FIX Tag 549) instruction. Members may provide stock leg information in an end-of-day file via the Customer Web Portal, or alternatively they may provide stock leg information in the *New Order Cross Multileg* messages by sending the following instructions:

FIX Tag	BOE Field	Descriptions
22011	<i>EquityTradePrice</i>	Price at which the equity associated with a QCC trade. Valid when <i>CrossType</i> (549) = '2'.
22012	<i>EquityTradeSize</i>	Number of shares executed in the equity associated with a QCC trade. Valid when <i>CrossType</i> (549) = '2'.
22013	<i>EquityTradeVenue</i>	Exchange venue where equity associated with a QCC traded. Valid when <i>CrossType</i> (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	<i>EquityBuyClearingFirm</i>	Clearing firm on buy side of the equity trade associated with a QCC trade. Valid when <i>CrossType</i> (549) = '2'.

FIX Tag	BOE Field	Descriptions
22015	<i>EquitySellClearingFirm</i>	Clearing firm on sell side of the equity trade associated with a QCC trade. Valid when <i>CrossType (549)</i> = '2'.
22060	<i>EquityTransactTime</i>	Time of equity trade associated with a QCC trade. Valid when <i>CrossType (549)</i> = '2'.

Complex QCCs will generally have the same requirements as QCCs with the following exceptions.

- Price protections, including Drill Through, will not apply to Complex QCCs.
- Complex QCCs will not be restricted by other auction types occurring simultaneously in the Complex or Simple Book.
- Complex QCCs are either immediately executed or cancelled on entry.

Addition of MOC and LOC Orders to BZX, C2 and EDGX (UPDATED)

Effective **July 12, 2019**, BZX, C2, and EDGX will add new functionality to support MOC and LOC Orders during Regular Trading Hours (RTH). Members may initiate MOC and LOC orders by submitting a New Order Single ~~or New Order Multileg~~ message, specifying 'At The Close' in the *TimeInForce* (FIX Tag 59) instruction. Although only executed during RTH, MOC and LOC orders can be submitted during any trading session. When submitted, these orders are held for execution until 180 seconds before the series is scheduled to close. Actual closing time may vary between options series. MOC and LOC orders are displayed on market data feeds when they are processed and in the order they are received by the matching engine.

Testing Opportunities

Testing of the new complex order auction enhancements is currently available in the EDGX Options certification environment.

Testing of MOC and LOC orders is currently available in the BZX, C2, and EDGX Options certification environments.

Fee Code Updates (UPDATED)

Effective **July 12, 2019**, the following base Fee Codes for Qualified Contingent Cross (QCC) executions will be updated to support the addition of Complex orders:

Fee Code	Fee/(Rebate)	Description
QA	Free	QCC Agency (Customer)
QC	Free	QCC Contra (Customer)
QM	\$0.08	QCC Agency (Non-Customer)
QN	\$0.08	QCC Contra (Non-Customer)

~~Effective July 12, 2019,~~ **On the effective date, yet to be determined,** the following base Fee Codes for Automated Improvement Mechanism (AIM) executions will be updated to support the addition of Complex orders:

Fee Code	Fee/(Rebate)	Description
BA	\$0.20	AIM Agency (Non-Customer)
BB	\$0.05	AIM Contra
BC	(\$0.14)	AIM Agency (Customer)
BD	\$0.50	AIM Responder, Penny
BE	\$1.05	AIM Responder, Non-Penny

Additional Information

For more information, refer to the following technical specifications:

- [US Options FIX Specification](#)
- [US Options BOE Specification](#)
- [US Options Auction Process Specification](#)
- [US Options Complex Book Process](#)
- [US Options Complex Multicast PITCH Specification](#)
- [US Options Complex Auction Multicast PITCH Specification](#)

Please contact the Cboe Trade Desk, for support or with any questions. Additionally, you may refer to the C1 integration website for more details at <http://batsintegration.cboe.com/c1>.

We appreciate your business and remain committed to powering your potential with Cboe products, technologies, and solutions.

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