Cboe Options Technology Integration Feature Pack 1

Reference ID: C2018101901

Overview

Effective November 29, 2018 Cboe Global Market will introduce multiple features for BZX Options ("BZX"), C2 Options ("C2"), and EDGX Options ("EDGX") Exchanges, *subject to regulatory review and approval*. These new features, as listed below, are in preparation for migration of Cboe Options Exchange ("C1") to Bats technology.

- ➢ Harmonization of Designated Primary Market-Maker ("DPM") entitlements **(EDGX only)**
- ➢ DPM small order entitlement allocation **(EDGX only)**
- ➢ Implementation of Reserve orders **(EDGX only)**
- ➢ Implementation of Complex Reserve orders **(C2 and EDGX)**
- ➢ Implementation of new Execution Firm ID ("EFID") Group Risk Control **(BZX, EDGX, and C2)**
- ➢ OCC Customer ID and Clearing Member optional data field mapping **(BZX, EDGX, and C2)**
- ➢ New sell market order behavior in a no bid series **(BZX, EDGX, and C2)**

Harmonization of DPM Entitlements

On EDGX, the Primary Market-Maker ("PMM") designation will be renamed to Designated Primary Market-Maker ("DPM") to be consistent with the Cboe Options Exchange. DPM participation entitlement levels will be harmonized to correspond with the Cboe Options Exchange. The current EDGX DPM entitlement levels are 60% or 40%, depending on the number of participants on the book. These entitlement levels will be changed to 50% when there is one other non-Customer participant at the quote with the DPM, 40% when there are two other non-Customer participants at the quote, and 30% when there are three or more other non-Customer participants.

DPM Small Order Entitlement Allocation

On EDGX, DPMs will be allocated 100% of remaining contracts, after all customer orders have executed, when incoming orders consist of five contracts or less. The DPM entitlement allocation will be based upon the original number of contracts in an order, not the number of contracts remaining after customer orders have been satisfied.

Implementation of Reserve Orders

EDGX will support reserve orders for simple book transactions. The reserve portion of an order will only be executed after all displayed quantity at that price level has been executed. Members can designate a reserve order using the BOE or FIX protocol to send the following instructions:

FIX Tag	BOE Field	Description
40	*OrdType*	2 = Limit
111	*MaxFloor*	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.
8020	*DisplayRange*	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*.

Implementation of Complex Reserve Orders

C2 and EDGX will support complex reserve orders. The reserve portion of an order will only be executed after all displayed quantity at that price level has been executed. When a Reserve order legs in, the entire quantity (displayed and reserve) will be legged in. Random replenishment will be supported for Complex Reserve, as defined by FIX Tag 8020 (*DisplayRange*).

Implementation of New EFID Group Risk Control

In addition to the existing EFID level and Risk Root ("Symbol") level Risk Types, BZX, C2, and EDGX will introduce a new EFID Group level Risk Type that provides the ability to group EFIDs that are to be governed by this new aggregated risk control. An EFID will not be able to be assigned to more than one group. In addition to the new EFID Group Risk Type, a new Risk Trip Limit Type will be introduced that allows Customers to set a maximum number of class-level and EFID-level events that can occur for a defined group of EFIDs within a specified time frame. If the specified number of events occurs within the set time frame, all orders for the EFID Group risk count will be tripped and all open orders will be cancelled in all classes and for all EFIDs defined within the EFID Group. An event is the occurrence of any Risk Limit Type as defined in the US Options Risk Management Specification. Customers will have the ability to upload the new risk profile with this new functionality via the Risk Management Tool in the Customer Web Portal or through the Secure Web API.

OCC Customer ID and Clearing Member Optional Data Field Mapping

BZX, EDGX and C2 will support data field mapping to capture the order data reflected back on execution reports. Members can use this information to help reconcile and balance accounts each day.

FIX Tag 1 (*Account*) will continue to be sent to the OCC via the Customer ID field, which can contain up to 10 characters. A new FIX Tag, 9324 (BOE field *ClearingOptionalData*), will be sent to the OCC via the Optional Data field, which can contain up to 16 characters.

New Sell Market Orders in No Bid Series Behavior

BZX, EDGX, and C2 will support new sell market order behavior. When a sell market order is received for a no-bid series and the NBBO width is ≤ $0.50, the order will be converted to a minimum tick increment limit order. For example, a sell market order in a nickel tick security will be converted to a limit order and priced at $0.05.

Testing Opportunities

Testing will be available in the BZX, C2, and EDGX Options certification environments beginning November 2, 2018.

Additional Information

For more information, refer to the following technical specifications:
- US Options Risk Management Specification
- US Options FIX Specification
- US Options BOE 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.

Cboe Trade Desk
913.815.7001
tradedesk@cboe.com