



## **CBSX Trader News Update**

### **Recommended Best Practices for CBSX CMi and FIX Interfaces**

#### **Overview**

This information is offered to assist those interfacing with CBSX to best handle a few of the most common communication issues specific to the CBSX CMi (CBOE Market Interface) and FIX (Financial Information eXchange) Interfaces. Users are strongly encouraged to follow these recommendations to mitigate confusion and exposure. This document is not to be interpreted as a comprehensive listing of all possible systems issues, but a guide to common communication questions.

#### **Execution and/or clearing reports in excess of original order quantity:**

In the event that a firm receives an execution and/or clearing report in excess of the original order quantity, the firm should immediately contact the Help Desk to inform the Exchange of the problem and determine whether further market action is required by the firm.

**Strong Passwords:** All users are required to use "strong" passwords for their CBOE Command log-ins. Strong passwords include:

- at least 8 characters;
- at least one non-alphabetic character (e.g., numbers (0-9) and punctuation); and
- at least one lower case and one upper case alphabetic character.

Firms may contact the Help Desk to inquire about password changes.

**Certification:** After API certification is complete in the API test environment, and after a successful initial production log-in, all users must contact the Help Desk, before production trading, to complete a final certification, which includes routing quotes, orders, and cancel messages in a production training symbol.

**Daily Log-in Time and Frequency of Log-in Attempts:** Users can log-in anytime after approximately 6:45 am CT but should connect no later than 7:15 am CT. Additionally, users are advised to wait after each attempt for at least 30 seconds before the next log-in attempt to ensure a properly functioning connection.

**Valid Trading Days:** Users should only process trade data for days recognized as valid trading days (holidays and weekends are not valid trading days). CBSX may run systems for testing purposes on these days, and firms that connect on these non-valid trading days may receive execution reports and must recognize that such reports are not valid.

**CBOE Streaming Markets (CSM):** To ensure uninterrupted market data availability, CSM users are advised to have both Primary (A side) and Secondary (B side) network connections for consuming CSM market data. Both Primary and Secondary connections allows users to receive uninterrupted market data if the A side primary network router is down and the B side router takes over.

**Possible Resend / Possible Dupe:** If PossResend or PossDupe reports are received, the receiving firm must acknowledge that these reports are only possible resends/duplicates that have been sent previously. Accordingly, the firm should contact the Help Desk before taking market action on such reports. To test this further in the API test environment, please contact the API group to schedule test time.

**Possible Corrupted Product:** If any of the following is encountered on an execution report, corruption is possible:

- EXECUTING BROKER is blank
- CONTRA BROKER or FIRM is blank
- PRICE is blank
- QUANTITY is blank

Do not consider this a valid execution. Follow the "protective actions" identified below.

**Remote Transaction Timeout (RTT):** An RTT message, rather than a standard acknowledgement, is returned to a user if a quote or order takes an extreme amount of time (currently configured to 30 seconds) to process within the CBOE Command system. The purpose is to release control of the inbound processing back to the user without waiting for the situation to clear. It is critical to understand that the order or quote update may or may not have processed successfully. Follow the "protective actions" identified below.

**Delayed Acknowledgement/Report:** If a quote update, quote cancel, order or order cancel acknowledgement or report is not received within a time interval that is acceptable to the sender, follow the “protective actions” identified below. Under normal conditions, executions received via CMi/FIX and trades received via Drop Copy sessions should be nearly simultaneous. If an imbalance or discrepancy is noticed between the two, the user should be on alert that there may be a problem.

**Protective Actions:** If any corrupted product or delay is suspected, the user must immediately:

- 1) If a quote message is affected, cancel the quote(s) in question or log-out.
- 2) If an order is affected, cancel the order in question and wait for a successful cancel report before re-routing. Failure to do so may result in an over-fill.
  - a. If the cancel attempt itself results in another delayed acknowledgement, wait or re-send another cancel, but no more than two cancel requests should be sent for any order.
  - b. If the cancel attempt returns a message indicating that the order was not found, then there is no current way to determine whether the order still exists on CBSX, as applicable, and re-sending the order could result in an eventual duplicate execution.
- 3) Contact the Help Desk immediately to determine the internal failure point and whether the message(s) in question successfully processed. Inform the Help Desk of the log-in ID experiencing the delay and the class in which the condition was seen. This will assist the Help Desk in finding the cause. Also, request a trade/order review.

**Timely Reporting:** Timely reporting is required of any problem that may need Help Desk’s assistance.

**Order Execution Discrepancies:** Firms should match and reconcile execution reports to the original order, even if the order appears to have been rejected or not acknowledged by the Exchange, and even if the order was subsequently re-routed to another marketplace. If executions cannot be reconciled for any reason, the firm should immediately contact the Help Desk.

**Guaranteed Message Delivery (GMD):** Firms should follow the GMD procedures in order to properly handle possible status message resends. Please note, resends may occur due to issues on either the exchange or on the firm side.

**Message Reject Text:** If a firm receives a reject message on a quote or order, and does not recognize the reason text given for the reject (e.g., FIX Tag 58,

Reject Reason in CMI) the firm should immediately contact the Help Desk for clarification.

The Help Desk can be reached at 866-458-2279.

For more detailed information regarding recommended best practices, contact the API Group at [api@cboe.com](mailto:api@cboe.com)/312-786-7300 or refer to documentation on the API systems website at <https://systems.cboe.com/>

**Contact Information**

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