

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-80151; File No. SR-MIAX-2017-08)

March 3, 2017

Self-Regulatory Organizations; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by Miami International Securities Exchange LLC to Amend MIAX Options Rule 519C, Mass Cancellation of Trading Interest

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² notice is hereby given that, on February 23, 2017, Miami International Securities Exchange, LLC (“MIAX” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is filing a proposal to amend Exchange Rule 519C.

The text of the proposed rule change is available on the Exchange’s website at http://www.miaxoptions.com/filter/wotitle/rule_filing, at MIAX’s principal office, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below,

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Rule 519C, Mass Cancellation of Trading Interest, to adopt new section (c) entitled “Detection of Loss of Communication,” to codify the use of current functionality in the Exchange’s System³ which is designed to assist market participants in the event of a loss of communication with either their assigned MIAX Express Interface (“MEI”)⁴ or Financial Information eXchange (“FIX”)⁵ port due to a loss of connectivity. This functionality is designed to protect Market Makers⁶ and other market participants from inadvertent exposure to excessive risk. Additionally, the Exchange proposes to adopt new Interpretations and Policies .01 and .02 as discussed below.

Exchange Members⁷ enter quotes⁸ and orders⁹ utilizing either an MEI port or a FIX port respectively. MEI is utilized by Market Makers of the Exchange and FIX is utilized by

³ The term “System” means the automated trading system used by the Exchange for the trading of securities. See Exchange Rule 100.

⁴ MEI is a connection to MIAX systems that enables Market Makers to submit electronic quotes to the Exchange.

⁵ FIX connections to the Exchange permit the entry of orders.

⁶ The term “Market Makers” refers to “Lead Market Makers”, “Primary Lead Market Makers” and Registered Market Makers” collectively. See Exchange Rule 100.

⁷ The term “Member” means an individual or organization approved to exercise the trading rights associated with a Trading Permit. Members are deemed “members” under the Exchange Act. See Exchange Rule 100.

⁸ The term “quote” or “quotation” means a bid or offer entered by a Market Maker that is firm and may update the Market Maker’s previous quote, if any. The Rules of the Exchange provide for the use of different type of quotes, including Standard quotes and eQuotes, as more fully described in Rule 517. See Exchange Rule 100.

⁹ The term “order” means a firm commitment to buy or sell option contracts. See Exchange Rule 100.

Electronic Exchange Members (“EEMs”).¹⁰ These ports provide the mechanism by which Members maintain a connection to the Exchange and through which a Member communicates its quotes and/or orders to the System. Market Makers may submit quotes to the Exchange from one or more MEI ports. Similarly, Members may submit orders to the Exchange from one or more FIX ports. When the System detects a loss of communication with a Member, the System has the capability to remove the Member’s quotes and/or orders, if so elected and configured by the Member. The Exchange notes that this functionality is mandatory for Market Makers using MEI and optional for EEMs using FIX as discussed in more detail below.

MEI Connections

Market Makers connect to their assigned MEI port using the MIA Session Management Protocol (“SesM”). The SesM protocol uses heartbeat¹¹ packets to detect link failures between the Member and the Exchange. The SesM protocol requires that the Exchange must send a heartbeat packet anytime more than one (1) second has passed since the Exchange last sent any data. Further, the SesM protocol requires that the Member must send a heartbeat packet anytime more than one (1) second has passed since the Member last sent any data. If a certain number of consecutive heartbeats are missed,¹² or if the Member fails to send data or heartbeats within “xx” period of time (“Heartbeat Interval”), the System will automatically close the connection and listen for the Member to establish a new connection. The default Heartbeat Interval setting is

¹⁰ The term “Electronic Exchange Member” means the holder of a Trading Permit who is not a Market Maker. Electronic Exchange Members are deemed “members” under the Exchange Act. See Exchange Rule 100.

¹¹ A heartbeat is a message that is generated at regular intervals to indicate that two way communication has been established. A loss of heartbeats or the lack of a response to a heartbeat request indicates a loss of communication.

¹² The Exchange notes that the current System setting is three (3) heartbeats and that any change to this setting will be determined by the Exchange and communicated to Members via a Regulatory Circular.

determined by the Exchange and configured directly into the System.¹³ Any change to this setting will be communicated to Members accordingly.

The Exchange offers Market Makers two different types of MEI port connections. A Full Service Port¹⁴ which supports all message types and a Limited Service Port which provides slightly less functionality.¹⁵ The Exchange limits Members to two (2) Full Service Ports and allows up to eight (8) Limited Service Ports per MIAX matching engine.¹⁶ Both Full Service and Limited Service Ports can have “Cancel on Disconnect” enabled. By default, Cancel on Disconnect functionality will be triggered upon establishing a loss of communication to the Market Maker’s last MEI Full Service Port connection to a matching engine. When Cancel on Disconnect is triggered, the System will close the session and remove a Market Maker’s quotes and eQuotes from the Exchange, for the impacted matching engine only.

Market Makers have the ability to group MEI ports together by port and/or Market Participant ID (“MPID”) for the purpose of establishing groups of connections to tailor Cancel on Disconnect functionality to the Member’s business needs. Cancel on Disconnect may be enabled for any Port, however by selectively grouping ports and/or MPIDs, a Member can customize the loss of communication scenario which would result in Cancel on Disconnect functionality ultimately being invoked.

¹³ The Exchange notes the current setting is three (3) seconds.

¹⁴ Full Service MEI Ports provide Market Makers with the ability to send Market Maker quotes, eQuotes, and quote purge messages to the MIAX System. Full Service MEI Ports are also capable of receiving administrative information. Market Makers are limited to two Full Service MEI Ports per matching engine.

¹⁵ Limited Service MEI Ports provide Market Makers with the ability to send eQuotes and quote purge messages only, but not Market Maker Quotes, to the System. Limited Service MEI Ports are also capable of receiving administrative information.

¹⁶ A “matching engine” is a part of the MIAX electronic system that processes options quotes and trades on a symbol-by-symbol basis. The Exchange currently hosts 24 separate matching engines.

Examples for illustration purposes are provided below.

Example 1: Default Behavior

Group 1: MEI Full Service Ports: MEI Port 1 & MEI Port 2

Scenario 1: MEI Port 1 disconnects, (MEI Port 2 connected) no quotes removed.

Scenario 2: MEI Port 2 disconnects, (MEI Port 1 connected) no quotes removed.

Scenario 3: MEI Port 1 disconnects, MEI Port 2 disconnects, Cancel on Disconnect triggered

Scenario 4: MEI Port 2 disconnects, MEI Port 1 disconnects, Cancel on Disconnect triggered

Example 2: A Member requiring a configuration which separates their eQuotes, Mass-Quote-Cancel or Notifications to a separate port.

Group 1: MEI Full Service Ports: MEI Port 1 & MEI Port 2

Group 2: MEI Limited Service Port: MEI Port 3

Group 1 is configured for Cancel on Disconnect; Group 2 is not.

Assuming that the Firm is connected on all ports:

Scenario 1: MEI Port 1 disconnects, no quotes removed.

Scenario 2: MEI Port 1 and Port 2 disconnect, Cancel on Disconnect triggered, quotes removed.

Scenario 3: MEI Port 3 disconnects, no quotes removed.

Scenario 4: MEI Port 1 and Port 3 disconnect, no quotes removed.

Example 3: A Member requiring a configuration to divide the ports to separate computers or traders.

Group 1: MEI Full Service Port: MEI Port 1; MEI Limited Service Port: MEI Port 2

Group 2: MEI Full Service Port: MEI Port 3; MEI Limited Service Port: MEI Port 4

Group 1 MPIDs: MPID_1, MPID_2, MPID_3

Group 2 MPIDs: MPID_3, MPID_4, MPID_5

Both groups are configured for Cancel on Disconnect, and MPID_3 is in both groups.

Assuming the Member is connected on all ports:

Scenario 1: MEI Port 1 disconnects, no quotes removed.

Scenario 2: MEI Port 1 and Port 2 disconnect, Cancel on Disconnect triggered for MPID_1, MPID_2, and MPID_3.

Scenario 3: MEI Port 3 disconnects, no quotes removed.

Scenario 4: MEI Port 1 and MEI Port 3 disconnect, Cancel on Disconnect triggered for all MPIDs.

FIX Connections

EEMs connect to their assigned FIX port using the MIAX FIX Order Interface (“FOI”) which is a flexible interface that uses the FIX protocol for both application and session level messages. As per the FIX protocol, a connection is established by the Member submitting a logon message to the Exchange. This logon message establishes the heartbeat interval that will be used by the session. This value must be greater than zero seconds and the same value must be used by both the Member and the Exchange.

Within the logon message a Member can enable “Auto Cancel on Disconnect” for all orders sent through a session by setting a flag in the logon message. This would result in all

eligible orders¹⁷ submitted through the FIX connection to be canceled upon a loss of communication. Alternatively, a Member can identify individual orders on a per order basis that are to be considered for Auto Cancel on Disconnect treatment.

Upon missing a single heartbeat, FOI will send a Test Request message¹⁸ to the Member to check the status of the connection. Upon missing a certain number of heartbeats,¹⁹ FOI will send a logout message and terminate the connection. When FOI detects a disconnection for any reason it will trigger the Auto Cancel on Disconnect process, whereby, if enabled, FOI will cancel all eligible orders. If Auto Cancel on Disconnect is not enabled for the session or for any orders, FOI will simply disconnect the FIX session and not cancel any orders. Once disconnected, a FIX user would have to commence a new session to add, modify, or cancel its orders. After a disconnect FOI will not accept connections from the Member for a pre-configured period of time.²⁰ This allows the Exchange to cancel orders without the Member being able to reconnect and attempt to interact with an order in the process of being canceled. Any change to this setting will be announced to Members accordingly.

The Auto Cancel on Disconnect functionality is designed to react to external connection loss scenarios only. Therefore, it does not cancel orders in the event of a MIAX system failure.

¹⁷ Good 'Til Cancelled ("GTC") orders are not eligible for Auto Cancel on Disconnect. A GTC order is an order to buy or sell which remains in effect until it is either executed, cancelled or the underlying option expires. See Exchange Rule 516. PRIME orders are not eligible for Auto Cancel on Disconnect. See Exchange Rule 515A.

¹⁸ The test request message is a FIX Protocol message that forces a heartbeat from the opposing application. The test request message checks sequence numbers or verifies communication line status. The opposite application responds to the Test Request with a Heartbeat containing the Test Request ID. Financial Information Exchange Protocol (FIX), Version 4.2 with errata. May 1, 2001.

¹⁹ The Exchange notes that the current System setting is two (2) heartbeats, and that any change to this setting will be determined by the Exchange and communicated to Members via Regulatory Circular.

²⁰ The Exchange notes the current setting is five (5) seconds.

The execution reports resulting from cancels or trades during the period a Member is disconnected can be received upon a subsequent reconnection by the Member on the same trading day.

The Exchange also proposes to adopt new Interpretations and Policies .01 to enumerate order types that are not eligible for removal by the Auto Cancel on Disconnect functionality. Proposed Interpretation and Policies .01 will state that Good 'Til Cancelled (“GTC”)²¹ orders and PRIME orders are not eligible for automatic cancellation. PRIME is the Exchange’s Price Improvement Mechanism²² and PRIME orders are stopped orders which are used to start an auction process whereby the execution price the order receives may be improved as a result of the auction. A PRIME auction has a maximum duration of 500 milliseconds. PRIME orders are not resting orders and are used solely to facilitate the PRIME auction process.

Further, the Exchange proposes to adopt new Interpretations and Policies .02 (i) to define what a “Heartbeat” message is and how it used by the Exchange, and (ii) to define the requirements for establishing a “Loss of Communication” on the Exchange.

The functionality discussed above is designed to mitigate potential risks associated with a loss of communication to the Exchange. In today’s market, Market Makers’ quotes are rapidly changing and can have a lifespan of only milliseconds. Therefore, if a Member is disconnected for any period of time, and its quotes remained in the System, it is very possible that the quotes would be stale by the time the Member was able to reestablish connectivity. Consequently, any resulting execution of such quotes is more likely to be erroneous or unintended. Conversely, the Exchange notes that orders tend to be static in nature and often rest on the Book. Certain orders, such as GTC orders are intended to rest on the Book for an extended period of time. As such,

²¹ See Exchange Rule 516.

²² See Exchange Rule 515A.

there is a lower risk of erroneous or unintended executions resulting from orders that remained in the System after a Member experienced a loss of communication.

The Exchange believes that while information relating to connectivity and loss of communication is already available to Members via technical specifications, codifying this information in the rule text will provide additional transparency and further reduce the potential for confusion.

2. Statutory Basis

MIAX believes that its proposed rule change is consistent with Section 6(b) of the Act²³ in general, and furthers the objectives of Section 6(b)(5) of the Act²⁴ in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanisms of a free and open market and a national market system and, in general, to protect investors and the public interest.

The proposed rule will remove impediments to and perfect the mechanism of a free and open market and a national market system and protect investors and the public interest by providing Market Makers with a mechanism by which quotes may be removed in the event of a loss of connectivity with the System.

Market Makers provide liquidity to the market place and have obligations unlike other Members.²⁵

²³ 15 U.S.C. 78f(b).

²⁴ 15 U.S.C. 78f(b)(5).

²⁵ See Exchange Rule 603.

This risk protection feature is important because it will enable Market Makers to avoid risks associated with inadvertent executions in the event of a loss of communication with the Exchange. The proposed rule change is not unfairly discriminatory among market participants, as it is available equally to all market participants utilizing MEI. The obligation of Market Makers on the Exchange to provide continuous two-sided quotes in their assigned series on a daily basis²⁶ is not diminished by the removal of such quotes triggered by the disconnect. The Exchange will not be prohibited from taking disciplinary action against a Market Maker for failing to meet its continuous quoting obligation each trading day as a result of disconnections.

The disconnect feature of FIX connections is mandatory, however Members have the option to enable the cancellation of all orders for an entire session or select orders for cancellation on an order-by-order basis, which would result in the cancellation of orders submitted over a FIX port when such port disconnects. It is appropriate to offer two different removal features to all Members utilizing FIX, as these Members may desire that their orders remain on the order book despite a technical disconnection, so as not to miss any opportunities for execution of such orders while the FIX session is disconnected. Offering to cancel all orders, specifically selected orders, or no orders, upon disconnect allows the Member to customize the functionality to align to its business needs. Offering this type of order cancellation functionality to Members is consistent with the Act because it enables Members to avoid risks associated with inadvertent executions in the event of a loss of communication with the Exchange. The order cancellation functionality is designed to mitigate the risk of missed and/or unintended executions associated with a loss in communication with the Exchange. The proposed rule change is not

²⁶ See Exchange Rule 604.

unfairly discriminatory among market participants, as it is available equally to all market participants utilizing FIX.

The disconnect feature is mandatory under the FIX protocol. The Exchange will disconnect Members from the Exchange and not cancel orders if the Auto Cancel on Disconnect functionality is not enabled. This feature is consistent with the Act because it provides FIX users the ability to disconnect from the Exchange and assess the current market conditions to make a determination concerning their risk exposure. The Exchange notes that in the event Auto Cancel on Disconnect functionality is not enabled and such orders need to be cancelled after a disconnection occurs, an Exchange participant can contact Exchange staff to have its orders cancelled from the System.²⁷ The Exchange believes requiring a disconnect when a loss of communication is detected to be a rational course of action for the Exchange to alert the Member of the technical connectivity issue.

The Exchange believes that the proposed rule change will assist with the maintenance of a fair and orderly market by codifying risk protections for orders and quotes. The Exchange's proposal is consistent with the Act because it will mitigate the risk of potential erroneous or unintended executions associated with a loss in communication which protects investors and the public interest. Additionally, the proposed rule adds another risk protection tool for Members and protects investors and the public interest by increasing the risk protection tools available to Members of the Exchange. The Exchange believes codifying existing functionality by rule will remove impediments to and perfect the mechanisms of a free and open market by adding precision and ease of reference to the Exchange's Rules, thus promoting transparency and clarity for Members.

²⁷ See Exchange Rule 519C.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

The Exchange believes the proposed rule change will not impose any burden on intra-market competition because every Member of the Exchange has the opportunity to benefit from the functionality described in the proposed rule.

The Exchange provides two separate and distinct mechanisms for communicating with the Exchange, MEI and FIX. MEI Ports support the submission of quotes to the Exchange and are used by Market Makers who have heightened quoting obligations because of their role.²⁸ Market Makers are provided the ability to configure their MEI Ports to leverage the functionality provided by the Exchange to remove quotes to align to their risk tolerance. Because of the volume of series that a Market Maker is obligated quote, the Exchange believes that removing all quotes for an affected matching engine on behalf of a Market Maker who has lost its last MEI connection to that engine to be in the best interest of both the Market Maker, to mitigate risk; and the Exchange, to ensure a fair and orderly market.

FIX connections to the Exchange only support order submission. FIX users may set a timeframe for disconnection that is appropriate for their risk tolerance. Offering functionality to cancel all, some, or none, of the orders in the System upon establishing a loss of communication does not create an undue burden on intra-market competition as Members do not equally bear the same risks of potential erroneous or unintended executions. Further, FIX users have greater control over their orders and may designate a number of different Time in Force instructions which can be used to determine the duration an order rests on the Book, from Immediate-or-

²⁸ See Exchange Rule 603.

Cancel, which is executed in whole or part upon receipt, with any unexecuted portion being cancelled; to a Good 'Til Cancelled order, which may rest on the Book until it is executed, cancelled by the user, or until the underlying option expires.²⁹

The Exchange does not believe the proposed rule change will impose any burden on inter-market competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange notes that other option exchanges offer similar functionality.³⁰ For all the reasons stated, the Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate, it has become effective pursuant to 19(b)(3)(A) of the Act³¹ and Rule 19b-4(f)(6)³² thereunder.

At any time within 60 days of the filing of the proposed rule change, the Commission

²⁹ See Exchange Rule 516.

³⁰ See BOX Rule 8140; CBOE Rule 6.23C; NASDAQ BX Chapter VI, Section 6; and NASDAQ Phlx Rule 1019.

³¹ 15 U.S.C. 78s(b)(3)(A).

³² 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-MIAX-2017-08 on the subject line.

Paper comments:

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-MIAX-2017-08. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>).

Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those

that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-MIAX-2017-08 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³³

Eduardo A. Aleman
Assistant Secretary

³³ 17 CFR 200.30-3(a)(12).