SECURITIES AND EXCHANGE COMMISSION (Release No. 34-99598; File No. SR-BX-2024-006)

February 26, 2024

Self-Regulatory Organizations; Nasdaq BX, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Adopt an OTTO Protocol

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 15, 2024, Nasdaq BX, Inc. ("BX" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the 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. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed</u> <u>Rule Change</u>

The Exchange proposes to adopt a new protocol, "Ouch to Trade Options" or "OTTO"

and establish pricing for this new protocol.

The text of the proposed rule change is available on the Exchange's Website at

https://listingcenter.nasdaq.com/rulebook/nasdaq/rules, at the principal office of the Exchange,

and at the Commission's Public Reference Room.

II. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Proposed Rule Change</u>

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

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> for, the Proposed Rule Change

1. <u>Purpose</u>

BX proposes to offer a new order entry protocol called OTTO. Today, BX Participants may enter orders into the Exchange through the "Financial Information eXchange" or "FIX."³ The proposed new OTTO protocol is identical to the OTTO protocol offered today on 3 Nasdaq affiliated exchanges, Nasdaq ISE, LLC ("ISE"), Nasdaq GEMX, LLC ("GEMX") and Nasdaq MRX, LLC ("MRX").

The OTTO protocol is a proprietary protocol of Nasdaq, Inc. The Exchange continues to innovate and modernize technology so that it may continue to compete among options markets. The ability to continue to innovate with technology and offer new products to market participants allows BX to remain competitive in the options space which currently has seventeen options markets and potential new entrants.

OTTO Protocol

As proposed, OTTO would allow Participants and their Sponsored Customers⁴ to connect, send, and receive messages related to orders, auction orders, and auction responses to the Exchange. OTTO features would include the following: (1) options symbol directory

³ FIX is an interface that allows Participants and their Sponsored Customers to connect, send, and receive messages related to orders and auction orders and responses to and from the Exchange. Features include the following: (1) execution messages; (2) order messages; and (3) risk protection triggers and cancel notifications. In addition, a BX Participant may elect to utilize FIX to send a message and PRISM Order, as defined within Options 3, Section 13, to all BX Participants that opt in to receive Requests for PRISM requesting that it submit the sender's PRISM Order with responder's Initiating Order, as defined within Options 3, Section 13, into the Price Improvement Auction ("PRISM") mechanism, pursuant to Options 3, Section 13 ("Request for PRISM"). See Options 3, Section 7(e)(1)(A).

⁴ General 2, Section 22 describes Sponsored Access arrangements.

messages (e.g., underlying and complex instruments); (2) System⁵ event messages (e.g., start of trading hours messages and start of opening); (3) trading action messages (e.g., halts and resumes); (4) execution messages; (5) order messages; (6) risk protection triggers and cancel notifications; (7) auction notifications; (8) auction responses; and (9) post trade allocation messages. The Exchange notes that unlike FIX, which offers routing capability, OTTO does not permit routing. The Exchange proposes to include this description of OTTO in new Options 3, Section 7(e)(1)(B) and re-letter current "B" as "C".

Only one order protocol is required for a BX Participant to submit orders into BX. Only BX Participants may utilize ports on BX. Any market participant that sends orders to a BX Participant would not need to utilize a port. The BX Participant may send all orders, proprietary and agency, through one port to BX. Participants may elect to obtain multiple ports to organize their business,⁶ however only one port is necessary for a Participant to enter orders on BX.

Participants may elect to enter their orders through FIX, OTTO, or both protocols, although both protocols are not necessary. Participants may prefer one protocol as compared to another protocol, for example, the ability to route may cause a Participant to utilize FIX and a

⁵ The term "System" or "Trading System" means the automated system for order execution and trade reporting owned and operated by BX as the BX Options market. The BX Options market comprises: (A) an order execution service that enables Participants to automatically execute transactions in option series; and provides Participants with sufficient monitoring and updating capability to participate in an automated execution environment; (B) a trade reporting service that submits "locked-in" trades for clearing to a registered clearing agency for clearance and settlement; transmits last-sale reports of transactions automatically to the Options Price Reporting Authority for dissemination to the public and industry; and provides participants with monitoring and risk management capabilities to facilitate participation in a "locked-in" trading environment; and (C) the data feeds described in Options 3, Section 23. <u>See</u> BX Options 1, Section 1(a)(59).

⁶ For example, a Participant may desire to utilize multiple FIX or OTTO Ports for accounting purposes, to measure performance, for regulatory reasons, segregating order flow among different trading desks, or other determinations that are specific to that Participant. A market participant may utilize multiple ports in some cases to send multiple orders through different ports to avoid any latency or queuing of orders. The Exchange notes that to the extent that different OTTO Ports are used to send multiple orders as compared to sending multiple orders through one OTTO Port the difference from a latency standpoint would be in nanoseconds.

Participant that desires to execute an order locally may prefer OTTO. Also, the OTTO Port offers lower latency as compared to the FIX Port, which may be attractive to Participants depending on their trading behavior. Nasdaq believes that the addition of OTTO will provide BX Participants with additional choice when submitting orders to BX.

While the Exchange has no way of predicting with certainty the amount or type of OTTO Ports market participants will in fact purchase, the Exchange anticipates that some Participants will subscribe to multiple OTTO Ports in combination with FIX Ports. The Exchange notes that Options Participants may use varying number of OTTO ports based on their business needs.

Other Amendments

In connection with offering OTTO, the Exchange proposes to amend other rules within Options 3. Each amendment is described below.

Options 3, Section 7

BX proposes to amend Options 3, Section 7, Types of Orders and Quote Protocols. Specifically, BX proposes to amend Options 3, Section 7 (b)(2) that describes the Immediate-or-Cancel" or "IOC" order. Today, Options 3, Section 7(b)(2)(B) notes that an IOC order may be entered through FIX or SQF, provided that an IOC Order entered by a Market Maker through SQF is not subject to the Order Price Protection, the Market Order Spread Protection, or Size Limitation in Options 3, Section 15(a)(1), (a)(2), and (b)(2), respectively. The Exchange proposes to add "OTTO" to the list of protocols to note that an IOC order may also be entered through OTTO.

BX also proposes to amend the "DAY" order in Options 3, Section 7(b)(3) that currently provides that a Day order may be entered through FIX. With the addition of OTTO, a Day order may also be entered through OTTO.

BX also proposes to amend the "Good Til Cancelled" or "GTC" order which currently does not specify that a GTC order may be entered through FIX. GTC orders would only be able to be entered through FIX and not OTTO. The Exchange proposes to amend Options 3, Section 7(b)(4) to add a sentence to note that GTC orders may be entered through FIX.

Options 3, Section 8

BX proposes to amend Options 3, Section 8, Options Opening Process. BX proposes to amend Options 3, Section 8(1) that describes the Opening Process Cancel Timer. The Opening Process Cancel Timer represents a period of time since the underlying market has opened. If an option series has not opened before the conclusion of the Opening Process Cancel Timer, a Participant may elect to have orders returned by providing written notification to the Exchange. Today, these orders include all non-Good Til Cancelled Orders received over the FIX protocol. The Exchange proposes to add the OTTO protocol as well to the rule text language in that paragraph.

Options 3, Section 12

The Exchange proposes to amend the Options 3, Section 12, Crossing Orders. Specifically, the Exchange proposes to amend Customer Crossing Orders in Options 3, Section 12(a) that currently provides Public Customer-to-Public Customer Cross Orders are automatically executed upon entry provided that the execution is at or between the best bid and offer on the Exchange and (i) is not at the same price as a Public Customer Order on the Exchange's limit order book and (ii) will not trade through the NBBO. Public Customer-to-Public Customer Cross Orders must be entered through FIX. The Exchange proposes to remove the sentence that provides that Public Customer-to-Public Customer Cross Orders must be entered through FIX and OTTO.

Options 3, Section 17

The Exchange proposes to amend the Kill Switch at Options 3, Section 17. The Kill Switch provides Participants with an optional risk management tool to promptly cancel and restrict orders. With the introduction of OTTO, the Exchange proposes to align its Kill Switch rule text with MRX's Kill Switch.⁷ The Exchange proposes to note in Options 3, Section 17(a) that BX Participants may initiate a message(s) to the System to promptly cancel and restrict their order activity on the Exchange, as is the case today, as described in section (a)(1). This amendment simply rewords the rule text without a substantive amendment to the rule text.

The Exchange proposes to renumber Options 3, Section 17(a)(i) and (ii) as (a)(1) and (2). Current Options 3, Section 17(a)(i) states, "If orders are cancelled by the BX Participant utilizing the Kill Switch, it will result in the cancellation of all orders requested for the Identifier(s). The BX Participant will be unable to enter additional orders for the affected Identifier(s) until reentry has been enabled pursuant to section (a)(ii)." The Exchange proposes to instead provide, "A BX Participant may submit a request to the System through FIX or OTTO to cancel all existing orders and restrict entry of additional orders for the requested Identifier(s) on a user level on the Exchange." With the addition of OTTO, the Exchange notes that both FIX and OTTO orders may be_cancelled. Further, today, BX Participants utilize an interface to send a message to the Exchange to initiate a Kill Switch.⁸ The Exchange notes that in lieu of the interface, BX Participants will only be able to initiate a cancellation of their orders by sending a mass purge request through FIX or OTTO. This change will align the Kill Switch functionality to that of ISE, GEMX and MRX Options 3, Section 17 and will enable BX Participants to initiate

⁷ <u>See MRX Options 3, Section 17.</u>

⁸ See Securities Exchange Act Release No. 76116 (October 8, 2015), 80 FR 62147 (October 15, 2015) (SR-BX-2015-050) (Order Approving Proposed Rule Change To Adopt a Kill Switch).

the Kill Switch more seamlessly without the need to utilize a separate interface. When initiating a cancellation of their orders by sending a mass purge request through FIX or OTTO, Participants will be able to submit a Kill Switch request on a user level only. This is a change from the ability to cancel orders on either a user or group level⁹ with the interface. The Exchange proposes to amend Options 3, Section 17(a) to note this change by removing the words "or group" and the following sentence that applies to a group.¹⁰

Finally, the Exchange proposes to amend proposed Options 3, Section 17(a)(2) to align to MRX's rule text by providing "Once a BX Participant initiates a Kill Switch pursuant to (a)(1) above..." in the first sentence. This amendment simply rewords the rule text without a substantive amendment to the rule text.

Options 3, Section 18

The Exchange proposes to amend Options 3, Section 18, Detection of Loss of Communication. The Exchange proposes to add OTTO to Options 3, Section 18 as OTTO would also be subject to this rule. Today, when the SQF Port or the FIX Port detects the loss of communication with a Participant's Client Application because the Exchange's server does not receive a Heartbeat message for a certain time period, the Exchange will automatically logoff the Participant's affected Client Application and automatically cancel all of the Participant's open quotes through SQF and open orders through FIX. Quotes and orders are cancelled across all Client Applications that are associated with the same BX Options Market Maker ID and underlying issues.

⁹ A permissible group could include all badges associated with a Market Maker. Today, a Participant is able to set up these groups in the interface to include all or some of the Identifiers associated with the Participant firm so that a GUI Kill Switch request could apply to this pre-defined group.

¹⁰ The Exchange proposes to remove this sentence, "Permissible groups must reside within a single brokerdealer" as the group option would no longer exist.

At this time, the Exchange proposes to permit orders entered through OTTO to be cancelled similar to FIX orders when the Exchange's server does not receive a Heartbeat message for a certain time period. The Exchange is proposing to amend Options 3, Section 18 to also rearrange the rule text to add the word "Definitions" next to "a" and move the rule text in current "a" to "b" and re-letter the other paragraphs accordingly. Also, the Exchange proposes to define "Session of Connectivity" for purposes of this rule to mean each time the Participant connects to the Exchange's System. Further, each new connection, intra-day or otherwise, is a new Session of Connectivity. The Exchange proposes to use the new definition throughout Options 3, Section 18.

Similar to FIX, when the OTTO Port detects the loss of communication with a Participant's Client Application because the Exchange's server does not receive a Heartbeat message for a certain time period, the Exchange will automatically logoff the Participant's affected Client Application and automatically cancel all of the Participant's open orders through OTTO. Orders would be cancelled across all Client Applications that are associated with the same BX Options Market Maker ID and underlying issues. The Exchange proposes to update Options 3, Section 18 to provide in proposed Options 3, Section 18(a)(3) that the OTTO Port is the Exchange's proprietary System component through which Participants communicate their orders from the Client Application. Further, the Exchange would note in proposed Options 3, Section 18(c) that when the OTTO Port detects the loss of communication with a Participant's Client Application because the Exchange's server does not receive a Heartbeat message for a certain time period ("nn" seconds), the Exchange will automatically logoff the Participant's affected Client Application and if the Participant has elected to have its orders cancelled pursuant to proposed Section 18(f), automatically cancel all orders. Proposed Options 3, Section 18(f)

would provide that the default period of "nn" seconds for OTTO Ports would be fifteen (15) seconds for the disconnect and, if elected, the removal of orders. A Participant may determine another time period of "nn" seconds of no technical connectivity, as required in proposed paragraph (c), to trigger the disconnect and, if so elected, the removal of orders and communicate that time to the Exchange. The period of "nn" seconds may be modified to a number between one hundred (100) milliseconds and 99,999 milliseconds for OTTO Ports prior to each Session of Connectivity to the Exchange. This feature may be disabled for the removal of orders, however the Participant will be disconnected.

Proposed Options 3, Section 18(f)(1) would provide that if the Participant changes the default number of "nn" seconds, that new setting shall be in effect throughout the current Session of Connectivity and will then default back to fifteen seconds. The Participant may change the default setting prior to each Session of Connectivity. Finally, as proposed in Options 3, Section 18(f)(2), if the time period is communicated to the Exchange by calling Exchange operations, the number of "nn" seconds selected by the Participant will persist for each subsequent Session of Connectivity until the Participant either contacts Exchange operations by phone and changes the setting or the Participant selects another time period through the Client Application prior to the next Session of Connectivity. The trigger for OTTO Ports is event and Client Application specific. The automatic cancellation of the BX Options Market Maker's open orders for OTTO Ports entered into the respective OTTO Ports via a particular Client Application will neither impact nor determine the treatment of orders of the same or other Participants entered into the OTTO Ports via a separate and distinct Client Application. The proposed amendments for

OTTO mirror the manner in which FIX Ports are treated when the Exchange's server does not receive a Heartbeat message for a certain time period for a FIX Port.¹¹

Pricing

BX proposes to amend its Pricing Schedule at Options 7, Section 3, BX Options Market – Ports and other Services, to add pricing for the new OTTO protocol. Specifically, BX proposes to offer Participants the first OTTO Port at no cost. The one OTTO Port would permit BX Participants to submit orders into BX. Today, only one account number¹² is necessary to transact an options business on BX and account numbers are available to Participants at no cost. The Exchange proposes to note in the Pricing Schedule at Options 7, Section 3 that BX does not assess a fee for an account number to provide greater transparency to Participants.

The Exchange proposes to assess an OTTO Port Fee of \$650 per port, per month, per account number for each subsequent port beyond the first port. This is the same fee assessed for OTTO Ports on MRX and GEMX.¹³ Additional OTTO Ports beyond the first OTTO Port would be optional for Participants to utilize as the Exchange is offering the first OTTO order protocol, per Participant, at no cost and only one port is necessary to enter orders into BX.¹⁴

Implementation

The Exchange will implement this rule change on or before December 20, 2025. The Exchange will announce the operative date to Participants in an Options Trader Alert.

¹¹ The Exchange proposes to update internal cross-references to accommodate relocated text.

¹² An "account number" means a number assigned to a Participant. Participants may have more than one account number. <u>See</u> Options 1, Section 1(a)(2).

¹³ See MRX Options 7, Section 6 and GEMX Options 7, Section 6, C. MRX and GEMX do not offer an OTTO Port at no cost. MRX offers the first FIX Port at no cost.

¹⁴ The Exchange proposes to renumber the SQF Port Fee and SQF Purge Port Fee in Options 7, Section 3(i).

2. <u>Statutory Basis</u>

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,¹⁵ in general, and furthers the objectives of Section 6(b)(5) of the Act,¹⁶ in particular, in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest. Additionally, the Exchange believes that its proposal furthers the objectives of Sections 6(b)(4) and 6(b)(5) of the Act,¹⁷ in particular, in that it provides for the equitable allocation of reasonable dues, fees, and other charges among members and issuers and other persons using any facility, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

OTTO Protocol

The Exchange's proposal to adopt OTTO is consistent with the Act because OTTO would provide BX Participants with an alternative protocol to submit orders to the Exchange. As proposed, BX would offer the first OTTO Port at no cost to submit orders into BX, which would remove impediments to and perfect the mechanism of a free and open market. While BX Participants may elect to obtain multiple ports to organize their business,¹⁸ only one order port is necessary for a Participant to enter orders on BX. A BX Participant may send all orders, proprietary and agency, through one port to BX without incurring any cost with this proposal. In the alternative, BX Participants may elect to obtain multiple ports to organize their business.¹⁹

¹⁵ 15 U.S.C. 78f(b).

¹⁶ 15 U.S.C. 78f(b)(5).

¹⁷ <u>See</u> 15 U.S.C. 78f(b)(4) and (5).

¹⁸ For example, a Participant may desire to utilize multiple FIX or OTTO Ports for accounting purposes, to measure performance, for regulatory reasons or other determinations that are specific to that Participant.

¹⁹ For example, a Participant may desire to utilize multiple FIX or OTTO Ports for accounting purposes, to measure performance, for regulatory reasons or other determinations that are specific to that Participant.

With the addition of OTTO, a BX Participant may elect to enter their orders through FIX, OTTO, or both protocols, although both protocols are not necessary. Each BX Participant would receive one OTTO Port at no cost, thereby promoting just and equitable principles of trade. The Exchange notes that Participants may prefer one order protocol as compared to another order protocol, for example, the ability to route an order may cause a Participant to utilize FIX and a Participant that desires to execute an order locally may utilize OTTO. Also, the OTTO Port offers lower latency as compared to the FIX Port, which may be attractive to Participants depending on their trading behavior. With this proposal, BX Participant may organize their business as they chose with the ability to send orders to BX at no cost. The proposed new OTTO protocol is identical to the OTTO protocol offered today on ISE, GEMX, MRX.

Other Amendments

In connection with offering OTTO, the Exchange proposes to amend other rules within Options 3 to make clear where the FIX and OTTO protocols may be utilized. IOC Orders may be entered through FIX, OTTO or SQF. A Day order may be entered through FIX or OTTO. A GTC order may only be entered through FIX. A Public Customer-to-Public Customer Cross Order may be entered through FIX or OTTO. Other processes such the Opening Cancel Timer would impact FIX and OTTO equally.

The Exchange's proposal to amend the Kill Switch at Options 3, Section 17 to align its rule text in proposed Options 3, Section 17(a) and (a)(2) with MRX's Options 3, Section 17 is consistent with the Act because it does not substantively amend the functionality beyond removing the group level cancel capability. The Exchange's proposal to amend proposed Options 3, Section 17(a)(2) to specify that FIX and OTTO orders may be cancelled is consistent with the Act as it will make clear that all orders entered on BX may be purged through the Kill

Switch. Finally, allowing BX Participants to send a mass purge request through FIX or OTTO, in lieu of an interface, is consistent with Act and the protection of investors and the general public because it will enable BX Participants to initiate the Kill Switch more seamlessly without the need to utilize a separate interface. Further, utilizing the order protocols directly, in lieu of the interface, will align the Kill Switch functionality to that of ISE, GEMX and MRX. When initiating a cancellation of their orders by sending a mass purge request through FIX or OTTO, Participants will be able to submit a Kill Switch request on a user level only because the purge will be specific to a FIX or OTTO user for these ports.

Finally, the Detection of Loss of Communication would apply equally to FIX and OTTO. The Exchange believes that its proposal is consistent with the Act and protects investors as the Exchange is making clear what types of order types and other mechanisms may utilize OTTO. Today, BX Participants utilize FIX to enter their orders. Despite the fact that OTTO would not be available for the GTC Time-In-Force modifier, the Exchange notes that one OTTO Port is being provided to Participants at no cost. Today, FIX is the only manner in which to enter orders into BX.

Pricing

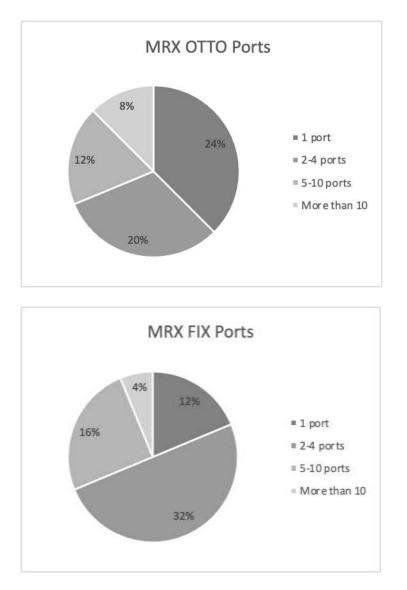
BX's proposal to amend its Pricing Schedule at Options 7, Section 3 will offer BX Participants the first OTTO Port at no cost to submit orders into BX. Only BX Participants may utilize ports on BX. A Participant can send all orders, proprietary and agency, through one port to BX. Only one order entry protocol is required for BX Participants to submit orders into BX to meet its regulatory requirements.²⁰ Additional ports beyond one port are not required for a BX Participant to meet its regulatory obligations. Participants may elect to obtain multiple account

²⁰ BX Participants have trade-through requirements under Regulation NMS as well as broker-dealers' best execution obligations. <u>See</u> Rule 611 of Regulation NMS; 17 CFR 242.611 and FINRA Rule 5310.

numbers to organize their business, however only one account number is necessary to transact options business on BX and account numbers are available to Participants at no cost.

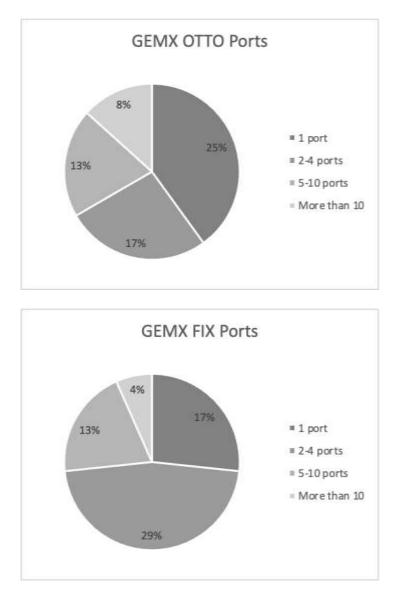
The Exchange's proposal is reasonable, equitable and not unfairly discriminatory as BX is providing Participants the first OTTO Port to submit orders at no cost. One OTTO Port would allow a BX Participant to meet its regulatory requirements. Additional OTTO Ports, beyond the first port which is being offered at no cost, are not required for a BX Participant to meet its regulatory obligations. For the foregoing reasons, the Exchange believes that it is reasonable to assess no fee for the first OTTO Port obtained by a BX Participant as a BX Participant is able to meet its regulatory requirements with one OTTO Port. Additionally, the OTTO protocol is a proprietary protocol of Nasdaq, Inc. The Exchange continues to innovate and modernize technology so that it may continue to compete among options markets. The ability to continue to innovate with technology and offer new products to market participants allows BX to remain competitive in the options space which currently has seventeen options markets and potential new entrants.

Today, a Member on ISE, GEMX, or MRX may utilize either a FIX or an OTTO Port to submit orders to the respective exchange. In analyzing the data provided below for ISE, GEMX and MRX, it is important to note that 30% of members on ISE subscribe to 1 OTTO Port and 24% of members subscribe to 1 FIX Port. ISE had a market share of 5.90% in 2023. Below are charts which display the number of members that subscribe to OTTO and FIX Ports on MRX.

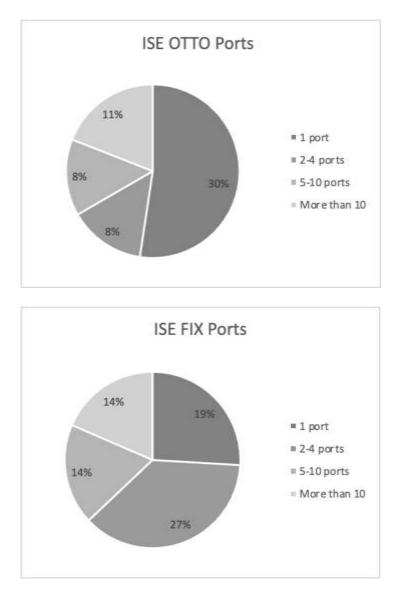


Below are charts which display the number of members that subscribe to OTTO and FIX

Ports on GEMX.



Below are charts which display the number of members that subscribe to OTTO and FIX Ports on ISE.



Further it is equitable and not unfairly discriminatory to assess no fee for the first OTTO Port to a BX Participant as all BX Participants would be entitled to the first OTTO Port at no cost. With this proposal, BX Participants may organize their business in such a way as to submit orders to BX at no cost.

The Exchange's proposal to assess BX Participants \$650 per port, per month, per account number for OTTO Ports beyond the first port is reasonable because these ports are not required for a member to meet its regulatory requirements. BX Participants only require one order entry port to submit orders to BX. The Exchange is offering Participants one free OTTO Port. Participants that subscribe to FIX could utilize their FIX Port to submit orders and would not need to utilize an OTTO Port. Participants electing to subscribe to more than one OTTO Port are choosing the additional ports to accommodate their business model. For example, a Participant may purchase one or more OTTO Ports for its market making business, and then purchase separate OTTO Ports for proprietary trading or customer facing businesses, allowing the firm to send multiple messages into the Exchange's System in parallel rather than sequentially. Some Participants that provide direct market access to their customers may also choose to purchase separate ports for different clients. While a smaller Participant may choose to subscribe to two OTTO Ports, a larger market participant with a substantial and diversified U.S. options business may opt to purchase multiple OTTO Ports to support both the volume and types of activity that they conduct on the Exchange. While the Exchange has no way of predicting with certainty the amount of OTTO Ports market participants will in fact purchase, the Exchange anticipates that some Participants will subscribe to multiple OTTO Ports. The Exchange believes that the proposed OTTO Port fees beyond the first port are reasonable because these ports are not required for a member to meet its regulatory requirements. Additionally, the proposed OTTO Port fee of \$650 per port, per month, per account number is the same fee charged for OTTO Ports on MRX and GEMX.²¹

The Exchange's proposal to assess BX Participants \$650 per port, per month, per account number for OTTO Ports beyond the first port is equitable and not unfairly discriminatory because any BX Participant may elect to subscribe to additional OTTO Ports, however BX Participants only require one order entry port to submit orders to BX. The Exchange is offering Participants one free OTTO Port. Participants that subscribe to FIX could utilize their FIX Port

²¹ <u>See MRX Options 7, Section 6 and GEMX Options 7, Section 6, C. MRX and GEMX do not offer an OTTO Port at no cost. MRX offers the first FIX Port at no cost.</u>

to submit orders and would not need to utilize an OTTO Port. As noted herein, all BX Participants would be subject to the same fees for OTTO Ports. Also, as noted herein, account numbers are available on BX at no cost.

Unlike ISE, GEMX and MRX, BX only offers its Participants a FIX Port to submit orders to BX. As noted herein, the proposed OTTO Port Fee for additional ports is comparable to GEMX and MRX, which markets assess an OTTO Port Fee of \$650 per port, per month, per account number.²² GEMX and MRX do not offer the first OTTO Port at no cost, however MRX offers the first FIX Port at no cost.²³ Cboe offers more than one order entry port. Cboe port fees²⁴ are within the range of the proposed fees. Cboe does not offer a free order entry port and tiers its BOE and FIX Logical ports so that each subsequent port fee is higher than BX's port fees. Additionally, Cboe limits usage on each port and assesses fees for incremental usage²⁵ thereby increasing the expense for ports if the usage is exceeded and potentially requiring market participants to acquire additional ports to avoid additional costs. BOX port fees²⁶ are within the range of the proposed fees. While BOX does not offer an order entry port at no cost, it tiers its FIX and SAIL port fees and each subsequent port fee is lower. MIAX port fees²⁷ are within the

²² <u>See GEMX Options 7, Section 6.C and MRX Options 7, Section 6.</u>

²³ <u>See GEMX Options 7, Section 6.C and MRX Options 7, Section 6.</u>

²⁴ Cboe assesses a fee of \$750 per port up to 5 BOE/FIX Logical Ports, and \$800 per port for over 5 BOE/FIX Logical Ports. See Cboe's Fees Schedule.

²⁵ Each Cboe BOE or FIX Logical Port incur the logical port fee indicated when used to enter up to 70,000 orders per trading day per logical port as measured on average in a single month. For each incremental usage of up to 70,000 per day per logical port will incur an additional logical port fee of \$800 per month. <u>See</u> Cboe's Fees Schedule.

BOX assesses tiered FIX Port Fees as follows: \$500 per port per month for the first FIX Port, \$250 per port per month for FIX Ports 2-5 and \$150 per port per month for over 5 FIX Ports. BOX assesses \$1000 per month for all SAIL Ports for Market Making and \$500 per month per port up to 5 ports for order entry and \$150 per month for each additional port. See BOX's Fee Schedule.

²⁷ MIAX tiers its FIX Port fees as follows: \$550 per month for the 1st FIX Port, \$350 per month per port for the FIX Ports 2 through 5 and \$150 per month for over 5 FIX Ports. MIAX tiers its MEI Port Fees and assesses fees per number of classes and as a percentage of National Average Daily Volume. MEI Port fees range from \$5,000 to \$20,500 per month. The applicable fee rate is the lesser of either the per class basis

range of the proposed fees. MIAX Port users are allocated two (2) Full Service MEI Ports and two (2) Limited Service MEI Ports per matching engine to which they connect.²⁸ NYSE Arca port fees²⁹ are within the range of the proposed fees. For each order/quote entry port utilized, NYSE Arca Market Makers may utilize, free of charge, one port dedicated to quote cancellation or "quote takedown," which port(s) will not be included in the count of order/quote entry ports utilized.³⁰

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

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.

The OTTO protocol is a proprietary protocol of Nasdaq, Inc. The Exchange continues to innovate and modernize technology so that it may continue to compete among options markets. The ability to continue to innovate with technology and offer new products to market participants allows BX to remain competitive in the options space which currently has seventeen options markets and potential new entrants. If BX were unable to offer and price new protocols, it would result in an undue burden on competition as BX would not have the ability to innovate and

or percentage of total national average daily volume measurement. However, if the Market Maker's total monthly executed volume during the relevant month is less than 0.060% of the total monthly executed volume reported by The Options Clearing Corporation in the market maker account type for MIAX-listed option classes for that month, then the fee will be \$14,500 instead of the fee otherwise applicable. MIAX will assess monthly MEI Port Fees on Market Makers in each month the Member has been credentialed to use the MEI Port in the production environment and has been assigned to quote in at least one class. See MIAX's Fee Schedule.

²⁸ MEI Port Fees include MEI Ports at the Primary, Secondary and Disaster Recovery data centers. MIAX Market Makers may request additional Limited Service MEI Ports for which MIAX will assess MIAX Market Makers \$100 per month per additional Limited Service MEI Port for each engine. See MIAX's Fee Schedule.

²⁹ NYSE Arca assesses a tiered order/quote entry port fee of \$450 for the first 40 ports and \$150 per port per month for the 41 ports or greater. For purpose of calculating the number of order/quote entry ports and quote takedown ports, NYSE Arca aggregates the ports of affiliates. See NYSE Arca Options Fees and Charges.

³⁰ Any quote takedown port utilized by a NYSE Arca Market Maker that is in excess of the number of order/quote entry ports utilized will be counted and charged as an order/quote entry port. <u>See</u> NYSE Arca Options Fees and Charges.

modernize its technology to compete effectively in the options space. BX's ability to offer OTTO will enable it to compete with other options markets that provide its market participants a choice as to the type of order entry protocols that may be utilized. BX's ability to offer and price new and innovative products and continue to modernize its technology, similar to other options markets, supports intermarket competition.

OTTO Protocol

The Exchange's proposal to adopt an OTTO Protocol does not impose an undue burden on intramarket competition. Today, all BX Participants utilize FIX to send orders to BX. The Exchange would offer each BX Participant the first OTTO Port at no cost with this proposal. With the addition of OTTO Ports, a BX Participant may elect to enter their orders through FIX, OTTO, or both protocols, although both protocols are not necessary. The Exchange's proposal to adopt an OTTO Protocol does not impose an undue burden on intermarket competition as other options exchanges offer multiple protocols today such as ISE, GEMX and MRX.

Other Amendments

The Exchange's proposal to amend other rules within Options 3 to make clear where the FIX and OTTO protocols may be utilized does not impose an undue burden on intramarket competition as these rules will apply in the same manner to all Participants. The Exchange's proposal to amend other rules within Options 3 to make clear where the FIX and OTTO protocols may be utilized does not impose an undue burden on intermarket competition as other options exchanges may elect to utilize their order entry protocols in different ways.

Pricing

Nothing in the proposal burdens intermarket competition because BX's proposal to offer the first OTTO Port for free permits BX to set fees, similar to other options markets, while

continuing to allow BX Participants to meet their regulatory obligations. BX's proposal would permit BX Participants the ability to submit orders to BX at no cost through OTTO. Additional OTTO Ports are not required for BX Participants to meet their regulatory obligations. The proposed port fees are similar to port fees assessed by other options markets as noted in this proposal. Further, the Exchange does not believe that the proposed rule change would place certain market participants at the Exchange at a relative disadvantage compared to other market participants or affect the ability of such market participants to compete. The Exchange notes that while the manner in which an order is sent to the Exchange may have an impact on latency, the difference from a latency standpoint would be in nanoseconds, and it would depend on the manner in which the order is being sent to the Exchange. A market participant sending 30 sequential orders through an OTTO Port may experience a slight latency of certain nanoseconds (less than a few nanoseconds) to permit serialized processing in the port and the match engine per order in certain cases. This is compared to a BX participant who submits 30 orders through multiple OTTO Ports at the same time. This distinction exists today on other options exchanges that offer market participants the ability to submit order flow in bulk,³¹ which results in a larger number of orders being sent to the exchange's match engine in a quicker timeframe as compared to market participants that utilize a port that does not support bulk orders. Also, as noted herein, OTTO Orders do not route and therefore have a lower latency as compared to orders sent via a FIX Port. The Exchange notes that other factors may also contribute to the time it takes for an

³¹ Cboe offers BOE Bulk Logical Ports. <u>See</u> Cboe's Fee Schedule. <u>See</u> Securities Exchange Act Release No. 90333 (November 4, 2020), 85 FR 71666 (November 10, 2020) (SR-CBOE-2020-105). Cboe amended access and connectivity fees, including port fees. Specifically, Cboe adopted certain logical ports to allow for the delivery and/or receipt of trading messages – i.e., orders, accepts, cancels, transactions, etc. Cboe established tiered pricing for BOE/FIX Logical Ports, with the lowest tier starting at \$750 per port, per month for 1 to 5 ports, and for BOE Bulk Logical Ports with separate tiered pricing starting at \$1,5000 per port, per month for 1 to 5 ports. Cboe also established flat prices for DROP, Purge Ports, GRP Ports and Multicast PITCH/Top Spin Server Ports.

order to be executed. For example, on an exchange that offers complex orders, such orders with a stock component, may take additional time to execute as compared to a market order. In short, while latency may play a very small factor in the quantity of ports that are being utilized to send an order to the Exchange, all market participants may elect how their order is sent to an exchange. The Exchange notes that there is no correlation between the number of orders executed on the Exchange by a Participant and the number of ports subscribed to by a Participant. There are Participants that subscribe to a larger number of ports that have lower executed volumes on BX than those with half of the number of ports. Also, not all ports subscribed to by a Participant are active. Further, all Participants are entitled to obtain additional OTTO Ports or a mix of OTTO and FIX Ports. The Exchange is providing each Participant the first OTTO Port at no cost. To the extent Participants elect to utilize different technologies and connections to the Exchange, including different numbers and combinations of ports, the Exchange believes that the combinations may result in varying latencies as is the case on all other options exchanges today.

Nothing in the proposal burdens intra-market competition because the Exchange would uniformly assess the OTTO Port fees to all BX Participants, as applicable. Further, other exchanges have increased or added port fees in recent years. As recently as 2020, Cboe amended its port fees.³² Specifically, Cboe adopted certain logical ports to allow for the delivery and/or receipt of trading messages – i.e., orders, accepts, cancels, transactions, etc. Cboe established tiered pricing for BOE and FIX logical ports, tiered pricing for BOE Bulk ports, and flat prices for DROP, Purge Ports, GRP Ports and Multicast PITCH/Top Spin Server Ports. Cboe argued in its fee proposal that the proposed pricing more closely aligned its access fees to those of its

³² <u>See</u> Securities Exchange Act Release No. 90333 (November 4, 2020), 85 FR 71666 (November 10, 2020) (SR-CBOE-2020-105).

affiliated exchanges, and reasonably so, as the affiliated exchanges offer substantially similar connectivity and functionality and are on the same platform that Cboe migrated to as part of its migration. Cboe also justified its pricing by stating that, "...the Exchange believes substitutable products and services are in fact available to market participants, including, among other things, other options exchanges a market participant may connect to in lieu of the Exchange, indirect connectivity to the Exchange via a third-party reseller of connectivity and/or trading of any options product, including proprietary products, in the Over-the-Counter (OTC) markets."³³

Cboe stated in its proposal that,

The rule structure for options exchanges are also fundamentally different from those of equities exchanges. In particular, options market participants are not forced to connect to (and purchase market data from) all options exchanges. For example, there are many order types that are available in the equities markets that are not utilized in the options markets, which relate to mid-point pricing and pegged pricing which require connection to the SIPs and each of the equities exchanges in order to properly execute those orders in compliance with best execution obligations. Additionally, in the options markets, the linkage routing and trade through protection are handled by the exchanges, not by the individual members. Thus not connecting to an options exchange or disconnecting from an options exchange does not potentially subject a broker-dealer to violate order protection requirements. Gone are the days when the retail brokerage firms (such as Fidelity, Schwab, and eTrade) were members of the options exchanges – they are not members of the Exchange or its affiliates, they do not purchase connectivity to the Exchange, and they do not purchase market data from the Exchange. Accordingly, not only is there not an actual regulatory requirement to connect to every options exchange, the Exchange believes there is also no "de facto" or practical requirement as well, as further evidenced by the recent significant reduction in the number of broker-dealers that are members of all options exchanges.³⁴

³³ <u>Id.</u> at 71676.

³⁴ <u>Id.</u> at 71677.

The proposal also referenced the National Market System Plan Governing the

Consolidated Audit Trail ("CAT NMS Plan"),³⁵ wherein the Commission discussed the existence of competition in the marketplace generally, and particularly for exchanges with unique business models. The Commission acknowledged that, even if an exchange were to exit the marketplace due to its proposed fee-related change, it would not significantly impact competition in the market for exchange trading services because these markets are served by multiple competitors.³⁶ Further, the Commission explicitly stated that "[c]onsequently, demand for these services in the event of the exit of a competitor is likely to be swiftly met by existing competitors."³⁷ Finally, the Commission recognized that while some exchanges may have a unique business model that is not currently offered by competitors, a competitor could create similar business models if demand were adequate, and if a competitor did not do so, the Commission believes it would be likely that new entrants would do so if the exchange with that unique business model was otherwise profitable.³⁸ Cboe concluded that the Exchange is subject to significant substitutionbased competitive forces in pricing its connectivity and access fees.³⁹ Cboe stressed that the proof of competitive constraints does not depend on showing that members walked away, or threatened to walk away, from a product due to a pricing change. Rather, the very absence of such negative feedback (in and of itself, and particularly when coupled with positive feedback) is

³⁵ <u>See</u> Securities Exchange Act Release No. 86901 (September 9, 2019), 84 FR 48458 (September 13, 2019) (File No. S7-13-19).

³⁶ <u>Id.</u>

³⁷ <u>Id.</u>

³⁸ <u>Id.</u>

³⁹ <u>Id.</u> at 71679.

indicative that the proposed fees are, in fact, reasonable and consistent with the Exchange being subject to competitive forces in setting fees.⁴⁰

MRX recently filed to establish port fees.⁴¹ In SR-MRX-2023-05, MRX proposed to assess no fee for the first FIX Port obtained by an MRX Member and established fees for additional FIX Ports of \$650 per port, per month for each subsequent port beyond the first port. MRX noted in SR-MRX-2023-05 that:

Only MRX Members may utilize ports on MRX. Any market participant that sends orders to a Member would not need to utilize a port. The Member can send all orders, proprietary and agency, through one port to MRX. Members may elect to obtain multiple account numbers to organize their business, however only one account number and one port for orders and one port for quotes is necessary for a Member to trade on MRX. All other ports offered by MRX are not required for an MRX Member to meet its regulatory obligations.

MRX also established fees for OTTO Ports, which ports are identical to the ports being offered

on BX, and priced them the same as the proposed OTTO fees for BX. MRX assesses an OTTO

Port Fee of \$650 per port, per month, per account number but does not offer the first OTTO Port

at no cost because it was offering one FIX Port at no cost for order entry.

If the Commission were to apply a different standard of review to this proposal than it applied to other exchange fee filings, such as the Cboe or MRX fee filings,⁴² it would create a burden on competition such that it would impair BX's ability to innovate new products, modernize its technology, and compete with other options markets.

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

No written comments were either solicited or received.

⁴⁰ <u>Id.</u> at 71680.

⁴¹ See Securities Exchange Act No. 96824(February 7, 2023), 88 FR 8975 (February 10, 2023) (SR-MRX-2023-05) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend MRX Options 7, Section 6).

⁴² <u>See notes 30 and 39 above.</u>

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 from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(iii) of the Act⁴³ and subparagraph (f)(6) of Rule 19b-4 thereunder.⁴⁴

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

(https://www.sec.gov/rules/sro.shtml); or

• Send an email to <u>rule-comments@sec.gov</u>. Please include file number

⁴³ 15 U.S.C. 78s(b)(3)(A)(iii).

⁴⁴ 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.

SR-BX-2024-006 on the subject line.

Paper Comments:

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

All submissions should refer to file number SR-BX-2024-006. This file number should be included on the subject line if email 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 (https://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 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright

protection. All submissions should refer to file number SR-BX-2024-006 and should be submitted on or before [INSERT DATE 21 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁴⁵

Sherry R. Haywood,

Assistant Secretary.

⁴⁵ 17 CFR 200.30-3(a)(12).