Required fields are shown with yellow backgrounds and asterisks.

OMB Number: 3235-0045
Estimated average burden hours per response......38

Page 1 of * 27		SECURITIES AND EXCHANGE COMMISSION File No.* SR - 2013 - * 048 WASHINGTON, D.C. 20549 Form 19b-4 Amendment No. (req. for Amendments *)						
Filing by NASDAQ OMX BX, Inc.  Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934								
Initial *		Amendment *	Withdrawal	Section 19(t	0)(2) *	Section .	on 19(b)(3)(A) *	Section 19(b)(3)(B) *
Pilot		ension of Time Period Commission Action *	Date Expires *			19b-4(f) 19b-4(f) 19b-4(f)	)(1)	
Notice of Section		posed change pursuant	section 806(e)(2)	ing, and Settler	ment Act	of 2010	Security-Based Swa to the Securities Exch Section 3C(b)(2	-
Exhibit 2	Sent A		Exhibit 3 Sent As Paper Do	ocument				
Description  Provide a brief description of the action (limit 250 characters, required when Initial is checked *).  A proposed rule change to modify BX connectivity options and fees								
Contact Information  Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.								
First Na	ame *	Sean		Last Name *	Bennet	t		
Title *		Associate General Co	ounsel					
E-mail	*	sean.bennett@nasda						
Telepho		(301) 978-8499	Fax (301) 978-8472	2				
Signature  Pursuant to the requirements of the Securities Exchange Act of 1934,  has duly caused this filling to be signed on its behalf by the undersigned thereunto duly authorized.								
	08/01 Edwa	/2013 rd S. Knight		Executive Vice	e Presid	(Title *) lent and Ge	neral Counsel	
(Name *)  NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.								

#### SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 For complete Form 19b-4 instructions please refer to the EFFS website. The self-regulatory organization must provide all required information, presented in a Form 19b-4 Information \* clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal Remove is consistent with the Act and applicable rules and regulations under the Act. The Notice section of this Form 19b-4 must comply with the guidelines for publication Exhibit 1 - Notice of Proposed Rule Change \* in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Add Remove View Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3) **Exhibit 1A- Notice of Proposed Rule** The Notice section of this Form 19b-4 must comply with the guidelines for publication Change, Security-Based Swap Submission, in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers or Advance Notice by Clearing Agencies guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3) Exhibit 2 - Notices, Written Comments, Copies of notices, written comments, transcripts, other communications. If such Transcripts, Other Communications documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G. Remove View Add Exhibit Sent As Paper Document П Exhibit 3 - Form, Report, or Questionnaire Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is Add Remove View referred to by the proposed rule change. Exhibit Sent As Paper Document The full text shall be marked, in any convenient manner, to indicate additions to and **Exhibit 4 - Marked Copies** deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit Add Remove View the staff to identify immediately the changes made from the text of the rule with which it has been working. **Exhibit 5 - Proposed Rule Text** The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part Add View Remove of the proposed rule change. If the self-regulatory organization is amending only part of the text of a lengthy **Partial Amendment** proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

SR-BX-2013-048 Page 3 of 27

## 1. Text of Proposed Rule Change

(a) Pursuant to the provisions of Section 19(b)(1) under the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> NASDAQ OMX BX, Inc. ("BX" or "Exchange") is filing with the Securities and Exchange Commission ("Commission") a proposed rule change to modify BX connectivity options and fees.

A notice of the proposed rule change for publication in the <u>Federal Register</u> is attached hereto as <u>Exhibit 1</u> and a copy of the applicable portion of Rule 7034 is attached hereto as Exhibit 5.

- (b) Not applicable.
- (c) Not applicable.

## 2. <u>Procedures of the Self-Regulatory Organization</u>

The proposed rule change was approved by senior management of the Exchange pursuant to authority delegated by the Board of Directors of the Exchange on July 17, 2013. Exchange staff will advise the Board of Directors of the Exchange of any action taken pursuant to delegated authority. No other action by the Exchange is necessary for the filing of the rule change.

Questions regarding this rule filing may be directed to T. Sean Bennett, Associate General Counsel, The NASDAQ OMX Group, Inc., at (301) 978-8499.

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>2</sup> 17 CFR 240.19b-4.

SR-BX-2013-048 Page 4 of 27

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

### a. <u>Purpose</u>

The Exchange proposes to modify Rule 7034(b) regarding connectivity to BX. Specifically, the Exchange proposes to establish connectivity and installation fees for a 10Gb Ultra low latency fiber connection option, and provide a waiver of installation fees for subscriptions through August 31, 2013.

The Exchange currently offers various bandwidth options for connectivity to the Exchange, including a 40Gb fiber connection, a 10Gb fiber connection, a 1Gb fiber connection, and a 1Gb copper connection.<sup>3</sup> In keeping with changes in technology, the Exchange now proposes to provide a second 10Gb fiber connection offering, which uses new ultra-low latency switches.<sup>4</sup> A switch is a type of network hardware that acts as the "gatekeeper" for all of a co-located client's orders sent to the System<sup>5</sup> at the Exchange's co-location facility and orders them in sequence for entry into the System for execution. Each of BX's current connection offerings uses different switches between the offerings, but the switches are of uniform type within each offering. As a consequence, all co-located client subscribers to a particular connectivity option receive the same latency in terms of the capabilities of their switches. The 10Gb Ultra offering uses a new ultra-low latency switch, which provides faster processing of orders sent to it in comparison to the current switch in use for co-location connectivity. As a consequence, co-located clients needing only 10Gb of bandwidth, but that seek faster processing of those orders as they

<sup>&</sup>lt;sup>3</sup> Rule 7034(b).

The term "Latency" for these purposes is a measure of the time it takes for an order to enter into a switch and then exit for entry into the System.

<sup>5</sup> As defined by Rule 4751(a).

SR-BX-2013-048 Page 5 of 27

enter the Exchange's co-location facility now have the option to subscribe to a faster and more efficient connection to the Exchange.<sup>6</sup>

The Exchange proposes a monthly subscription fee of \$15,000 for a 10Gb Ultra connection, and a one-time installation fee of \$1,500, which is identical to the 40Gb fiber connectivity option. The Exchange believes that the pricing is reflective of the value the option will provide and the hardware and other infrastructure and maintenance costs to the Exchange associated with offering technology that is at the forefront of the industry. The growth in the size of consolidated and proprietary data feeds has resulted in demand for faster processing of message traffic, and ultra-low latency switches meet this demand by decreasing the time individual orders are processed and market data is transmitted by these new switches. The Exchange's proposal provides the co-located client the option for faster switch processing, which is highly valued among some market participants. The Exchange notes that other markets have adopted low-latency connectivity options for their clients. For example, the International Securities Exchange LLC ("ISE") offers a 10Gb low latency Ethernet connectivity option to its clients, which provides a "higher speed network to access [ISE's] Optimise trading system."

The Exchange also proposes to provide a waiver of the installation fees for client orders of 10Gb Ultra fiber connectivity to the Exchange completed between the effectiveness of this proposal and August 31, 2013. The Exchange is providing the waiver to assist its co-located clients in upgrading to lower latency connections to meet

The Exchange is not offering a low latency option for other bandwidth connections at this time, but may do so in the future.

See Securities Exchange Act Release No. 66525 (March 7, 2012), 77 FR 14847 (March 13, 2012) (SR-ISE-2012-09).

SR-BX-2013-048 Page 6 of 27

text to the rule that makes it clear that the connectivity option also provides connection to the markets of The NASDAQ Stock Market LLC ("NASDAQ") and NASDAQ OMX PHLX LLC ("Phlx"). The Exchange is deleting typographical errors in the title and text of the rule that refer to connectivity to NASDAQ and replacing them with references to BX, since it is a BX connectivity option. Last, the Exchange is deleting text under the rule that refers to an installation fee waiver time period for 10Gb and 40Gb fiber connections, which has since expired.

#### b. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act, and with Section 6(b)(4) of the Act, 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 or system which the Exchange operates or controls. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act<sup>10</sup> 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 and is not designed to permit unfair discrimination between customer, issuers, brokers and dealers.

<sup>&</sup>lt;sup>8</sup> 15 U.S.C. 78f(b).

<sup>&</sup>lt;sup>9</sup> 15 U.S.C. 78f(b)(4).

<sup>&</sup>lt;sup>10</sup> 15 U.S.C. 78f(b)(5).

SR-BX-2013-048 Page 7 of 27

The Exchange believes that its proposal is consistent with Section 6(b)(4) of the Act because the fees assessed for 10Gb Ultra fiber connectivity fee allow the Exchange to cover the costs associated with the purchase of new, state-of-the-art switches for this new offering. Because the switches are best in breed, they are priced at a premium, the cost of which the Exchange must bear. The Exchange is offering 10Gb Ultra fiber connectivity at the same price as 40Gb fiber connectivity. Both the proposed 10Gb Ultra fiber connectivity and 40Gb fiber connectivity represent the best performance available to colocated clients. 40Gb fiber connectivity provides the greatest bandwidth available on the Exchange, which is important for co-located clients that have high order flow and ingest large amounts of market data and demand the greatest bandwidth possible to handle such message flow. Some co-located clients, however, do not have bandwidth demands that would require 40Gb fiber bandwidth but rather put a premium on reducing latency. The 10Gb Ultra fiber connectivity it designed to meet this demand. As a consequence, both 40Gb and 10Gb Ultra fiber connectivity represent the best connectivity the Exchange offers in terms of bandwidth and latency, respectively.

The Exchange believes that the proposed one-time installation fee is consistent with Section 6(b)(4) of the Act because it is identical to the installation fees assessed for 40Gb fiber connectivity under the rule. The Exchange notes that it will incur the same costs associated with setting up a subscriber with either 40Gb fiber or 10Gb Ultra fiber connectivity. As a consequence, the Exchange believes that it is reasonable to assess the same installation fee as 40Gb fiber. The Exchange also believes that its proposal to waive temporarily the 10Gb Ultra fiber connection installation fee is reasonable because it will assist its co-located clients in upgrading to lower latency connections to meet the

SR-BX-2013-048 Page 8 of 27

growing needs of the co-located clients' business operations at a time in the industry when speed continues to be a driver of the U.S. securities markets. Moreover, the Exchange notes that it has previously waived the installation fees for the 10Gb and 40Gb fiber connections for a limited time after these connectivity options were first introduced.<sup>11</sup>

In addition to covering costs, the proposed fees will allow the Exchange to recoup costs associated with providing the 10Gb Ultra fiber connection and provide the Exchange a profit while providing clients the possibility of reducing the number of their connections to the Exchange. As discussed above, ISE offers different connectivity options with respect to latency and NYSE Arca, Inc. offers what the Exchange believes is a similar connectivity option, yet both options do not provide the breadth of connectivity at the same latency as the Exchange's proposed 10Gb Ultra fiber connectivity option. The Exchange notes that the 10Gb Ultra fiber option provides connectivity to seven of the NASDAQ OMX Group's U.S. markets (specifically, the cash equities and options markets operated by NASDAQ, BX, and Phlx, and the NASDAQ OMX Futures Exchange), whereas the offerings of other exchanges provide far fewer. Moreover, as

 <sup>&</sup>lt;u>See</u> Securities Exchange Act Release No. 66542 (March 8, 2012), 77 FR 15169 (March 14, 2012) (SR-BX-2012-012).

NYSE Arca charges \$10,000 per month for a 10Gb LCN (Liquidity Center Network) Connection. See <a href="https://usequities.nyx.com/sites/usequities.nyx.com/files/nyse\_arca\_marketplace\_fees\_1.3.2012.pdf">https://usequities.nyx.com/sites/usequities.nyx.com/files/nyse\_arca\_marketplace\_fees\_1.3.2012.pdf</a>, page 13. Although similar, the Exchange's 10Gb Ultra connection provides even lower latency connectivity to a larger number of markets, which represents the premium over the NYSE Arca 10Gb LCN connectivity option.

The ISE connectivity offering provides access to one market and the NYSE Arca connectivity offering provides connectivity to the four markets of NYSE Euronext.

SR-BX-2013-048 Page 9 of 27

new leading-edge technology, the switches to be used for 10Gb Ultra fiber connectivity have lower latency than the switches currently in use by other markets. For these reasons, the Exchange believes the proposed fees for 10Gb Ultra fiber connectivity to the Exchange are reasonable.

The Exchange also believes the proposed 10Gb Ultra fiber installation and connectivity fees are equitably allocated in that all co-located clients that voluntarily select this service option will be charged the same amount to cover the hardware, installation, testing and connection costs to maintain and manage the enhanced connection. The proposed fees allow the Exchange to recoup costs associated with providing the 10Gb Ultra fiber connection and provide the Exchange a profit while providing clients with the most efficient connection to the System in terms of latency. All co-located clients have the option to select this voluntary co-location connectivity option; however, the Exchange is not eliminating any existing connectivity options. Accordingly, a co-located client may elect not to subscribe to the 10Gb Ultra fiber connectivity option and retain the option to which it is currently subscribed.

The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act<sup>14</sup> 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 and is not designed to permit unfair discrimination between customer, issuers, brokers and dealers. The 10Gb Ultra fiber connectivity option assists co-located clients in making their network connectivity more efficient by reducing the time orders take to reach the

<sup>15</sup> U.S.C. 78f(b)(5).

SR-BX-2013-048 Page 10 of 27

System once sent from their co-located server and also the time that market data takes to reach their co-located server. Speed and efficiency are important drivers of the U.S. securities markets and the Exchange is offering a co-location connectivity solution that promotes these drivers by providing state of the art technology that is available to all co-located clients. The Exchange believes the enhanced 10Gb Ultra connection will remove impediments to and perfect the mechanism of a free and open market and a national market system because the Exchange will provide state of the art switching technology to market participants, which will improve the speed and efficiency of processing orders arriving at the market from clients' co-located servers.

The Exchange also believes that the reduction in latencies attributed to the enhanced 10Gb Ultra connection option serves to protect investors and the public interest. The reduction in latency will provide investors with the most efficient means of processing orders once they reach the Exchange. Higher bandwidth options like the Exchange's current 10Gb and 40Gb fiber connectivity and the proposed 10Gb Ultra fiber option also remove the potential for data spikes and data gapping issues that result from the transmission of the growing size of the consolidated and proprietary market data feeds. Such data spiking and data gapping issues have the potential for disrupting the marketplace which could negatively impact investors as well as the public interest.

The Exchange also believes the proposed installation and subscription fees for the 10Gb Ultra fiber connectivity option are not unfairly discriminatory because all clients have the option to subscribe to co-locate with the Exchange and subscribe to the 10Gb Ultra connection. There is no differentiation among co-located clients with regard to the fees charged for these services. The Exchange believes the proposal to waive the 10Gb

SR-BX-2013-048 Page 11 of 27

Ultra fiber connection installation fee is not unfairly discriminatory because the waiver of fees is provided to all co-located clients that volunteer for this particular service option during the prescribed timeframe, and there is no differentiation among co-located clients with regard to the waiver of fees for this option.

## 4. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Specifically, the Exchange believes that the changes will promote competition by offering co-located clients an additional connectivity option that will enhance their trading operations and ultimately bring greater speed and efficiency to trading in the marketplace.

- 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.
- Extension of Time Period for Commission Action
   Not applicable.
- 7. <u>Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated</u> Effectiveness Pursuant to Section 19(b)(2)

Pursuant to Section 19(b)(3)(A) of the Act<sup>15</sup> and Rule 19b-4(f)(6)<sup>16</sup> thereunder, the Exchange has designated this proposal as one that effects a change that: (i) does not significantly affect the protection of investors or the public interest; (ii) does not impose any significant burden on competition; and (iii) by its terms, does not become operative

<sup>15</sup> U.S.C. 78s(b)(3)(A).

<sup>&</sup>lt;sup>16</sup> 17 CFR 240.19b-4(f)(6).

SR-BX-2013-048 Page 12 of 27

for 30 days after the date of the filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest. This proposal provides co-located clients the option to improve their business operations by upgrading to the enhanced connectivity service. Furthermore, the price is transparent not only to the co-located clients, but also to all market participants, thus providing the opportunity for others to provide the Exchange co-located client the same service at competitive prices. Since other exchanges may offer upgraded, low-latency hardware to their clients, the Exchange does not believe that this proposal imposes any significant burden on competition and further believes the proposal is noncontroversial. As noted, ISE and NYSE Arca provide different connectivity options to their clients segregated by latency and price.

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. Furthermore, a proposed rule change filed pursuant to Rule 19b-4(f)(6) under the Act<sup>17</sup> normally does not become operative for 30 days after the date of its filing. However, Rule 19b-4(f)(6)<sup>18</sup> permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest.

The Exchange has requested that the Commission waive the 30-day operative delay and designate the proposed rule change to become operative upon filing. The

<sup>&</sup>lt;sup>17</sup> 17 CFR 240.19b-4(f)(6).

<sup>&</sup>lt;sup>18</sup> 17 CFR 240.19b-4(f)(6).

SR-BX-2013-048 Page 13 of 27

Exchange operates in a highly competitive market in which exchanges offer co-location services as a means to facilitate the trading activities of those clients who believe that co-location enhances the efficiency of their trading. The Exchange's proposal provides co-located clients an option to enhance the efficiency of their trading through the 10Gb Ultra connectivity. The Exchange is also providing a waiver of the installation fee for the 10Gb Ultra connection service to allow the co-located clients who select this service to receive its benefits immediately. The Exchange believes that the benefits gained in the facilitation of trading activities warrants the waiver of the 30-day operative delay.

8. <u>Proposed Rule Change Based on Rules of Another Self-Regulatory Organization</u> or of the Commission

The proposed rule change is not specifically based upon the rules of any other self-regulatory organization; however, the Exchange notes that ISE and NYSE Arca offer their clients connectivity options segregated by latency, which is precisely what the Exchange is proposing herein.

- Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act
   Not applicable.
- 10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

#### 11. Exhibits

- Completed notice of proposed rule change for publication in the <u>Federal</u> <u>Register</u>.
  - 5. Text of the proposed rule change.

SR-BX-2013-048 Page 14 of 27

**EXHIBIT 1** 

SECURITIES AND EXCHANGE COMMISSION (Release No. 34- ; File No. SR-BX-2013-048)

Self-Regulatory Organizations; NASDAQ OMX BX, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Modify BX Connectivity Options and Fees

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), and Rule 19b-4 thereunder, notice is hereby given that on August 01, 2013, NASDAQ OMX BX, Inc. ("BX" or "Exchange") filed with the Securities and Exchange Commission ("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 the Substance of the Proposed Rule Change</u>

The Exchange proposes to modify BX connectivity options and fees. The text of the proposed rule change is available at <a href="http://nasdaqomxbx.cchwallstreet.com/">http://nasdaqomxbx.cchwallstreet.com/</a>, at the Exchange's principal office, and at the Commission's Public Reference Room.

II. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> 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, of the most significant aspects of such statements.

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>2</sup> 17 CFR 240.19b-4.

SR-BX-2013-048 Page 15 of 27

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

### 1. <u>Purpose</u>

The Exchange proposes to modify Rule 7034(b) regarding connectivity to BX. Specifically, the Exchange proposes to establish connectivity and installation fees for a 10Gb Ultra low latency fiber connection option, and provide a waiver of installation fees for subscriptions through August 31, 2013.

The Exchange currently offers various bandwidth options for connectivity to the Exchange, including a 40Gb fiber connection, a 10Gb fiber connection, a 1Gb fiber connection, and a 1Gb copper connection.<sup>3</sup> In keeping with changes in technology, the Exchange now proposes to provide a second 10Gb fiber connection offering, which uses new ultra-low latency switches.<sup>4</sup> A switch is a type of network hardware that acts as the "gatekeeper" for all of a co-located client's orders sent to the System<sup>5</sup> at the Exchange's co-location facility and orders them in sequence for entry into the System for execution. Each of BX's current connection offerings uses different switches between the offerings, but the switches are of uniform type within each offering. As a consequence, all co-located client subscribers to a particular connectivity option receive the same latency in terms of the capabilities of their switches. The 10Gb Ultra offering uses a new ultra-low latency switch, which provides faster processing of orders sent to it in comparison to the current switch in use for co-location connectivity. As a consequence, co-located clients needing only 10Gb of bandwidth, but that seek faster processing of those orders as they

<sup>&</sup>lt;sup>3</sup> Rule 7034(b).

The term "Latency" for these purposes is a measure of the time it takes for an order to enter into a switch and then exit for entry into the System.

<sup>5</sup> As defined by Rule 4751(a).

SR-BX-2013-048 Page 16 of 27

enter the Exchange's co-location facility now have the option to subscribe to a faster and more efficient connection to the Exchange.<sup>6</sup>

The Exchange proposes a monthly subscription fee of \$15,000 for a 10Gb Ultra connection, and a one-time installation fee of \$1,500, which is identical to the 40Gb fiber connectivity option. The Exchange believes that the pricing is reflective of the value the option will provide and the hardware and other infrastructure and maintenance costs to the Exchange associated with offering technology that is at the forefront of the industry. The growth in the size of consolidated and proprietary data feeds has resulted in demand for faster processing of message traffic, and ultra-low latency switches meet this demand by decreasing the time individual orders are processed and market data is transmitted by these new switches. The Exchange's proposal provides the co-located client the option for faster switch processing, which is highly valued among some market participants. The Exchange notes that other markets have adopted low-latency connectivity options for their clients. For example, the International Securities Exchange LLC ("ISE") offers a 10Gb low latency Ethernet connectivity option to its clients, which provides a "higher speed network to access [ISE's] Optimise trading system."

The Exchange also proposes to provide a waiver of the installation fees for client orders of 10Gb Ultra fiber connectivity to the Exchange completed between the effectiveness of this proposal and August 31, 2013. The Exchange is providing the waiver to assist its co-located clients in upgrading to lower latency connections to meet

The Exchange is not offering a low latency option for other bandwidth connections at this time, but may do so in the future.

See Securities Exchange Act Release No. 66525 (March 7, 2012), 77 FR 14847 (March 13, 2012) (SR-ISE-2012-09).

SR-BX-2013-048 Page 17 of 27

text to the rule that makes it clear that the connectivity option also provides connection to the markets of The NASDAQ Stock Market LLC ("NASDAQ") and NASDAQ OMX PHLX LLC ("Phlx"). The Exchange is deleting typographical errors in the title and text of the rule that refer to connectivity to NASDAQ and replacing them with references to BX, since it is a BX connectivity option. Last, the Exchange is deleting text under the rule that refers to an installation fee waiver time period for 10Gb and 40Gb fiber connections, which has since expired.

## 2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act, and with Section 6(b)(4) of the Act, 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 or system which the Exchange operates or controls. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act<sup>10</sup> 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 and is not designed to permit unfair discrimination between customer, issuers, brokers and dealers.

<sup>&</sup>lt;sup>8</sup> 15 U.S.C. 78f(b).

<sup>9 15</sup> U.S.C. 78f(b)(4).

<sup>15</sup> U.S.C. 78f(b)(5).

SR-BX-2013-048 Page 18 of 27

The Exchange believes that its proposal is consistent with Section 6(b)(4) of the Act because the fees assessed for 10Gb Ultra fiber connectivity fee allow the Exchange to cover the costs associated with the purchase of new, state-of-the-art switches for this new offering. Because the switches are best in breed, they are priced at a premium, the cost of which the Exchange must bear. The Exchange is offering 10Gb Ultra fiber connectivity at the same price as 40Gb fiber connectivity. Both the proposed 10Gb Ultra fiber connectivity and 40Gb fiber connectivity represent the best performance available to colocated clients. 40Gb fiber connectivity provides the greatest bandwidth available on the Exchange, which is important for co-located clients that have high order flow and ingest large amounts of market data and demand the greatest bandwidth possible to handle such message flow. Some co-located clients, however, do not have bandwidth demands that would require 40Gb fiber bandwidth but rather put a premium on reducing latency. The 10Gb Ultra fiber connectivity it designed to meet this demand. As a consequence, both 40Gb and 10Gb Ultra fiber connectivity represent the best connectivity the Exchange offers in terms of bandwidth and latency, respectively.

The Exchange believes that the proposed one-time installation fee is consistent with Section 6(b)(4) of the Act because it is identical to the installation fees assessed for 40Gb fiber connectivity under the rule. The Exchange notes that it will incur the same costs associated with setting up a subscriber with either 40Gb fiber or 10Gb Ultra fiber connectivity. As a consequence, the Exchange believes that it is reasonable to assess the same installation fee as 40Gb fiber. The Exchange also believes that its proposal to waive temporarily the 10Gb Ultra fiber connection installation fee is reasonable because it will assist its co-located clients in upgrading to lower latency connections to meet the

SR-BX-2013-048 Page 19 of 27

growing needs of the co-located clients' business operations at a time in the industry when speed continues to be a driver of the U.S. securities markets. Moreover, the Exchange notes that it has previously waived the installation fees for the 10Gb and 40Gb fiber connections for a limited time after these connectivity options were first introduced.<sup>11</sup>

In addition to covering costs, the proposed fees will allow the Exchange to recoup costs associated with providing the 10Gb Ultra fiber connection and provide the Exchange a profit while providing clients the possibility of reducing the number of their connections to the Exchange. As discussed above, ISE offers different connectivity options with respect to latency and NYSE Arca, Inc. offers what the Exchange believes is a similar connectivity option, yet both options do not provide the breadth of connectivity at the same latency as the Exchange's proposed 10Gb Ultra fiber connectivity option. The Exchange notes that the 10Gb Ultra fiber option provides connectivity to seven of the NASDAQ OMX Group U.S. markets (specifically, the cash equities and options markets operated by NASDAQ, BX, and Phlx, and the NASDAQ OMX Futures Exchange), whereas the offerings of other exchanges provide far fewer. Moreover, as

 <sup>&</sup>lt;u>See</u> Securities Exchange Act Release No. 66542 (March 8, 2012), 77 FR 15169 (March 14, 2012) (SR-BX-2012-012).

NYSE Arca charges \$10,000 per month for a 10Gb LCN (Liquidity Center Network) Connection. See <a href="https://usequities.nyx.com/sites/usequities.nyx.com/files/nyse\_arca\_marketplace\_fees\_1.3.2012.pdf">https://usequities.nyx.com/sites/usequities.nyx.com/files/nyse\_arca\_marketplace\_fees\_1.3.2012.pdf</a>, page 13. Although similar, the Exchange's 10Gb Ultra connection provides even lower latency connectivity to a larger number of markets, which represents the premium over the NYSE Arca 10Gb LCN connectivity option.

The ISE connectivity offering provides access to one market and the NYSE Arca connectivity offering provides connectivity to the four markets of NYSE Euronext.

SR-BX-2013-048 Page 20 of 27

new leading-edge technology, the switches to be used for 10Gb Ultra fiber connectivity have lower latency than the switches currently in use by other markets. For these reasons, the Exchange believes the proposed fees for 10Gb Ultra fiber connectivity to the Exchange are reasonable.

The Exchange also believes the proposed 10Gb Ultra fiber installation and connectivity fees are equitably allocated in that all co-located clients that voluntarily select this service option will be charged the same amount to cover the hardware, installation, testing and connection costs to maintain and manage the enhanced connection. The proposed fees allow the Exchange to recoup costs associated with providing the 10Gb Ultra fiber connection and provide the Exchange a profit while providing clients with the most efficient connection to the System in terms of latency. All co-located clients have the option to select this voluntary co-location connectivity option; however, the Exchange is not eliminating any existing connectivity options. Accordingly, a co-located client may elect not to subscribe to the 10Gb Ultra fiber connectivity option and retain the option to which it is currently subscribed.

The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act<sup>14</sup> 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 and is not designed to permit unfair discrimination between customer, issuers, brokers and dealers. The 10Gb Ultra fiber connectivity option assists co-located clients in making their network connectivity more efficient by reducing the time orders take to reach the

<sup>15</sup> U.S.C. 78f(b)(5).

SR-BX-2013-048 Page 21 of 27

System once sent from their co-located server and also the time that market data takes to reach their co-located server. Speed and efficiency are important drivers of the U.S. securities markets and the Exchange is offering a co-location connectivity solution that promotes these drivers by providing state of the art technology that is available to all co-located clients. The Exchange believes the enhanced 10Gb Ultra connection will remove impediments to and perfect the mechanism of a free and open market and a national market system because the Exchange will provide state of the art switching technology to market participants, which will improve the speed and efficiency of processing orders arriving at the market from clients' co-located servers.

The Exchange also believes that the reduction in latencies attributed to the enhanced 10Gb Ultra connection option serves to protect investors and the public interest. The reduction in latency will provide investors with the most efficient means of processing orders once they reach the Exchange. Higher bandwidth options like the Exchange's current 10Gb and 40Gb fiber connectivity and the proposed 10Gb Ultra fiber option also remove the potential for data spikes and data gapping issues that result from the transmission of the growing size of the consolidated and proprietary market data feeds. Such data spiking and data gapping issues have the potential for disrupting the marketplace which could negatively impact investors as well as the public interest.

The Exchange also believes the proposed installation and subscription fees for the 10Gb Ultra fiber connectivity option are not unfairly discriminatory because all clients have the option to subscribe to co-locate with the Exchange and subscribe to the 10Gb Ultra connection. There is no differentiation among co-located clients with regard to the fees charged for these services. The Exchange believes the proposal to waive the 10Gb

SR-BX-2013-048 Page 22 of 27

Ultra fiber connection installation fee is not unfairly discriminatory because the waiver of fees is provided to all co-located clients that volunteer for this particular service option during the prescribed timeframe, and there is no differentiation among co-located clients with regard to the waiver of fees for this option.

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

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Specifically, the Exchange believes that the changes will promote competition by offering co-located clients an additional connectivity option that will enhance their trading operations and ultimately bring greater speed and efficiency to trading in the marketplace.

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

Written comments were neither solicited nor received.

III. <u>Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action</u>

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 Act<sup>15</sup> and Rule  $19b-4(f)(6)^{16}$  thereunder.

<sup>&</sup>lt;sup>15</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>17</sup> 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

SR-BX-2013-048 Page 23 of 27

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, as amended, 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 <u>rule-comments@sec.gov</u>. Please include File Number SR-BX-2013-048 on the subject line.

#### Paper comments:

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

All submissions should refer to File Number SR-BX-2013-048. 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

proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

SR-BX-2013-048 Page 24 of 27

Commission's Internet Web site (<a href="http://www.sec.gov/rules/sro.shtml">http://www.sec.gov/rules/sro.shtml</a>). 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 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal offices 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-BX-2013-048, 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.<sup>17</sup>

Kevin M. O'Neill Deputy Secretary

<sup>&</sup>lt;sup>17</sup> 17 CFR 200.30-3(a)(12).

SR-BX-2013-048 Page 25 of 27

## **EXHIBIT 5**

The text of the proposed rule change is below. Proposed new language is underlined; deletions are bracketed.

\* \* \* \* \*

## 7034. Co-Location Services

The following charges are assessed by NASDAQ OMX BX, Inc., for co-location services:<sup>1</sup>

- (a) No change.
- **(b)** Connectivity

# **External Telco /Inter- Cabinet Connectivity**

Description	<b>Installation Fee</b>	<b>Ongoing Monthly Fee</b>
Category 6 Cable patch	\$300	\$300*
DS-3 Connection	\$500	\$300*
Fiber	\$500	\$300*
POTS Line	\$0	\$0
One-Time Telco Connectivity Expedite Fee	\$1,400	\$0
Inter-Cabinet Telco connection outside Nasdaq space		\$1,000
100MB Connectivity - Metro NY/NJ Area Destination	\$1,165**	\$1,650**
1G Connectivity - Metro NY/NJ Area Destination	\$2,150**	\$2,150**
10G Connectivity - Metro NY/NJ Area Destination	\$5,000**	\$5,000**
100MB Connectivity - Toronto Area Destination	\$4,850**	\$4,100**

SR-BX-2013-048 Page 26 of 27

1G Connectivity - Toronto Area Destination	\$7,700**	\$9,850**
10G Connectivity - Toronto Area Destination	\$14,200**	\$28,400**
100MB Connectivity - Chicago Area Destination	\$3,500**	\$7,350**
1G Connectivity - Chicago Area Destination	\$4,900**	\$12,800**
10G Connectivity - Chicago Area Destination	\$10,650**	\$26,900**

<sup>\*</sup> Requesting party only. Not applicable to inter-cabinet connections among the same customer.

## Connectivity to $\underline{BX*}[Nasdaq]$

Description	Installation Fee	Ongoing Monthly Fee
Fiber Connection to BX[Nasdaq] (10Gb)	\$1,000[**]	\$5000
Fiber Connection to BX (10Gb Ultra)	\$1,500**	\$15,000
Fiber Connection to <u>BX</u> [Nasdaq] (40Gb)	\$1,500[**]	\$15,000
Fiber Connection to <u>BX</u> [Nasdaq] (1Gb)	\$1,000	\$1,000

<sup>\*\*</sup> Includes fiber telco cross connect within NASDAQ OMX data center.

SR-BX-2013-048 Page 27 of 27

1Gb Copper Connection to	\$1,000	\$1,000
BX[Nasdaq]		

<sup>\*</sup> The connectivity provided under this rule also provides connectivity to the other markets of The NASDAQ Stock Market LLC and NASDAQ OMX PHLX LLC.

\* \* \* \* \*

<sup>\*\*</sup>The[se] installation fee[s] will be waived for customers that complete new orders for 10Gb\_Ultra [or 40Gb ]connection[s] to BX[Nasdaq during the period commencing immediately upon the effectiveness of this filing and ending May 31, 2012]prior to August 31, 2013.