

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-68085; File No. SR-NASDAQ-2012-119)

October 23, 2012

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing of Proposed Rule Change to Establish Fees for New Optional Wireless Connectivity for Co-located Clients

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on October 10, 2012, The NASDAQ Stock Market LLC (“NASDAQ” 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. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes a rule change to establish fees for new optional means for clients to receive third party market data and NASDAQ TotalView ITCH market data. NASDAQ proposes to offer wireless connectivity for co-located clients in NASDAQ’s Carteret data center to receive Direct Edge, BATS, NYSE, and NYSE ARCA multi-cast market data feeds. It also proposes to offer remote multi-cast ITCH Wave Ports for clients co-located at other third party data centers, through which NASDAQ TotalView ITCH market data will be distributed after delivery to those data centers via wireless network. The text of the proposed rule change is available at <http://nasdaq.cchwallstreet.com>, at the Exchange’s principal office, and at the Commission’s Public Reference Room.

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

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

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

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

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

1. Purpose

NASDAQ is proposing to amend NASDAQ Rule 7034 to establish fees for the delivery of third party market data to market center clients via a wireless network using millimeter wave or microwave technology. It also proposes to amend NASDAQ Rule 7015 to establish fees for remote Multi-cast ITCH Wave Ports for clients co-located at other third-party data centers, through which NASDAQ TotalView ITCH market data will be distributed after delivery to those data centers via wireless network.

Wireless technology has been in existence for many years, used primarily by the defense, retail and telecommunications industries. Wireless connectivity involves the beaming of signals through the air between towers that are within sight of one another. Because the signals travel a straight, unimpeded line, and because light waves travel faster through air than through glass (fiber optics), message latency is reduced. The continued use of this technology by the defense industry and regulation of the spectrum by the FCC demonstrates the secure nature of wireless networks.

Over the last year, wireless technology has been introduced in the financial services

industry. In offering optional wireless connectivity, NASDAQ is responding to requests from clients that wish to utilize the technology. Clients have sought to buy roof rights so that they can install their own microwave dishes on the roof at the NASDAQ data center in Carteret, New Jersey. Some have already installed microwave dishes on nearby towers with fiber connectivity to the data center, or have reserved space to do so. Rather than sell roof rights to individual clients, which would quickly result in the lack of physical space on the data center roof to accommodate all clients fairly and equally, NASDAQ proposes to supply market data, via a vendor-supplied wireless network, for all data center clients that wish to avail themselves of it.

*Wireless Connectivity in Carteret.* NASDAQ will utilize a network vendor to supply wireless connectivity from the Carteret data center to the Secaucus Equinix data center (NY4) used by Direct Edge and other exchanges; the Newark data center used by NYSE as a SFTI Network Point of Presence; and the Weehawken Savvis data center (NJ2) used by BATS. The vendor will install, test and maintain the necessary communication equipment for this wireless network between the data centers.

Clients who choose this optional service will have their NASDAQ cross connect handoffs (1G, 10G, or 40G) enabled to receive the chosen raw, multicast market data for Direct Edge, BATS, and/or NYSE. NASDAQ OMX will continue to act as re-distributor of these third party market data feeds, capturing the data at the originating data centers and transporting the data to the Carteret data center. NASDAQ is offering these particular equity feeds because they are the feeds requested by clients. There is limited bandwidth available on the wireless connection, and the Exchange has opted to offer those that are in most demand to start. Additional feeds may be added based on overall client demand and bandwidth availability.

The wireless connectivity will be an optional offering, an alternative to fiber optic

network connectivity, and will provide lower latency. It will not provide a new market data product, but merely an alternative means of connectivity. NASDAQ's wireless connectivity offering, in conjunction with NASDAQ's equidistant cross connect handoffs (1G, 10G, or 40G), will ensure that all clients co-located within Carteret and electing to use this wireless connectivity offering will receive the chosen market data at the same low latency, equalizing any variances that might otherwise result from differences in the location of client cabinets within the facility or different wireless networks utilized by clients independently of this offering.

To obtain wireless connectivity, clients will be charged a \$2,500 installation fee (a non-recurring charge) and a monthly recurring charge (MRC) that will vary depending upon the feed. The MRC for the NYSE multi-cast equities data feed, which includes NYSE ArcaBook Highspeed and NYSE OpenBook (Aggregated or Ultra), will be \$10,000; the MRC for BATS Multicast PITCH, which includes BZX and BYX, will be \$7,500; and the MRC for Direct Edge Depth of Book multi-cast feed, which includes EDGA and EDGX, will be \$7,500. The rates are higher for the NYSE feeds because the two feeds are larger, and take up more bandwidth than the BATS and Direct Edge feeds.

Clients will place orders for the wireless connectivity via the CoLo Console<sup>3</sup> and would be subject to a one-year minimum lock-in period. The lock-in feature, which is common practice for collocation offerings, will ensure that the Exchange can recoup the substantial investment required to establish the wireless system. As an incentive to clients, NASDAQ will waive the first month's MRC. Clients will continue to be charged by NYSE, BATS and Direct Edge for the market data received, and NASDAQ will continue to be charged the redistribution fees by the other exchanges, as occurs today. No changes in these charges will occur as a result of this

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<sup>3</sup> The "CoLo Console" is a web-based ordering tool NASDAQ offers to enable members to place co-location orders.

proposed offering.

NASDAQ OMX will perform substantial network testing prior to offering the service for a fee to members. After this “beta” testing period, upon initial roll-out of the service, clients will be offered the service for a fee, and on a rolling basis, the Exchange will enable new clients to receive the feed(s) for a minimum of 30 days before incurring any monthly recurring fees. The wireless network will continue to be closely monitored and the client informed of any issues. Similar to receiving market data over fiber optic networks, the wireless network can encounter delays or outages due to equipment issues. As wireless networks may be affected by severe weather events, clients will be expected to have redundant methods to receive this market data and will be asked to attest to having alternate methods or establishing an alternate method in the near future when they order this service from the Exchange.

This new data feed delivery option will be available to all clients of the data center, and is in response to industry demand, as well as to changes in the technology for distributing market data. Clients opting not to pay for the wireless connectivity will still be able to receive market data via fiber optics and standard telecommunications connections, as they do currently, and under the same fees. Receipt of trade data via wireless technology is completely optional. In addition, clients can choose to receive market data via other third-party vendors (Extranets or Telecommunication vendors) via fiber optic networks or wireless networks.

*Remote Multi-cast ITCH (MITCH) Wave Ports.* NASDAQ also proposes to offer remote multi-cast ITCH Wave Ports for clients co-located at other third-party data centers. NASDAQ TotalView ITCH market data will be delivered to NASDAQ-owned cabinets at those data centers via a wireless network. Clients will have the option of cross-connecting to the MITCH Wave Ports in those data centers to receive the raw NASDAQ multi-cast data feed, TotalView

ITCH. An installation charge for the remote port would be, at each of the locations, \$2,500 for installation, and \$7,500 as a monthly recurring fee. This offering, which is entirely optional, will enable delivery of NASDAQ TotalView ITCH to the third-party data centers at the same low latency.<sup>4</sup> Clients opting to pay for the remote MITCH Wave Ports will continue to be fee liable for the applicable market data fees as described in NASDAQ Rule 7026, NASDAQ Rule 7019 and NASDAQ Rule 7023.

Competition for market data distribution is considerable and the Exchange believes that this proposal clearly evidences such competition. The Exchange is offering a new wireless connectivity option and remote wave ports to keep pace with changes in the industry and evolving customer needs as new technologies emerge and products continue to develop and change. They are incremental to existing offerings, entirely optional, and are geared towards attracting new customers, as well as retaining existing customers.

The proposed fees are based on the cost to NASDAQ of installing and maintaining the wireless connectivity and on the value provided to the customer, which receives low latency delivery of data feeds. The costs associated with the wireless connectivity system are incrementally higher than fiber optics-based solutions due to the expense of the wireless equipment, cost of installation, and testing. The fees also allow NASDAQ to make a profit, and reflect the premium received by the clients in terms of lower latency over the fiber optics option. Clients can choose to build and maintain their own wireless networks or choose their own third

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<sup>4</sup> NASDAQ cannot preclude minor latency variances in delivery of NASDAQ TotalView in the third-party data centers to individual clients because it does not control the cross-connects in those centers; however, the microwave connectivity will provide the same latency to all clients' MITCH Wave Ports and offers an improvement in latency over fiber optic network connectivity.

party network vendors but the upfront and ongoing costs will be much more substantial than this Exchange wireless offering.

## 2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act<sup>5</sup> in general, and with Sections 6(b)(4) and (b)(5) of the Act,<sup>6</sup> 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, and 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.

The Exchange operates in a highly competitive market in which exchanges offer co-location services as a means to facilitate the trading activities of those members who believe that co-location enhances the efficiency of their trading. Accordingly, fees charged for co-location services are constrained by the active competition for the order flow of such members. If a particular exchange charges excessive fees for co-location services, affected members will opt to terminate their co-location arrangements with that exchange, and adopt a possible range of alternative strategies, including co-locating with a different exchange, placing their servers in a physically proximate location outside the exchange's data center, or pursuing trading strategies not dependent upon co-location. Accordingly, the exchange charging excessive fees would stand to lose not only co-location revenues but also revenues associated with the execution of orders routed to it by affected members. Although currently no other exchange offers wireless connectivity, there are no constraints on their ability to do so, and it is probable that other

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

<sup>6</sup> 15 U.S.C. 78f(b)(4) and (5).

exchanges will make a similar offering in the near future. The Exchange believes that this competitive dynamic imposes powerful restraints on the ability of any exchange to charge unreasonable fees for co-location services, including fees for wireless connectivity.

A co-location customer may obtain a similar service by contracting with a wireless service provider to install the required dishes on towers near the data centers and paying the service provider to maintain the service. However, the cost involved in establishing service in this manner is substantial and could result in uneven access to wireless connectivity. The Exchange's proposed fees will allow these clients to utilize wireless connectivity and obtain the lower latency transmission of data from third parties and NASDAQ that is available to others, at a reasonable cost.<sup>7</sup>

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<sup>7</sup> The wireless network offered by the Exchange via the provider, although constrained by bandwidth with respect to the number of feeds it can carry, can be made available to an unlimited number of customers. The factors that differentiate this proposal from the Exchange's offerings of and initial fees for low latency network telecommunication connections approved by the Commission in Securities Exchange Act Release No. 66013 (December 20, 2011) 76 FR 80992 (December 27, 2011) (SR-NASDAQ-2011-146) are a function of technology and program concept, but neither approach implicates a burden on competition, for similar reasons: each offers, at a competitive price, a service that customers may obtain by dealing directly with the provider rather than the Exchange; and each is expected to result in a reduction in fees charged to market participants, the very essence of competition. Pursuant to the SEC's prior approval, the Exchange offers customers the opportunity to obtain low latency telecommunications connectivity by establishing a low-latency minimum standard and negotiating with multiple telecommunication providers to obtain discounted rates. It then passes these wholesale rates along to participating customers, with a markup to compensate for the Exchange's role in negotiating and establishing the arrangement, and integrating and maintaining each new connection. Co-located customers are free to choose the provider they wish to use from those participating in the program; or they may choose not to avail themselves of the service and obtain comparable services directly from the provider. The Exchange does not discriminate among telecommunications providers in its program, so long as they meet the required latency, destination, and fee standards. Wireless technology, in contrast, does not require separate avenues of connectivity for each customer, and thus the Exchange is not obtaining a wholesale price by negotiating with service providers. Rather, it is selecting, on a competitive basis, the service provider(s) to install and maintain the system, and charging customers for access to that particular system, offering



Moreover, the Exchange believes the proposed fees for wireless connectivity to NASDAQ are reasonable because they are based on the Exchange's costs to cover hardware, installation, testing and connection, as well expenses involved in maintaining and managing the enhanced connection. The proposed fees allow the Exchange to recoup these costs and make a profit, while providing customers the ability to reduce latency in the transmission of data from third parties and NASDAQ, and reducing the cost to them that would be involved if they build or buy their own wireless networks. The Exchange believes that the proposed fees are reasonable in that they reflect the costs of the connection and the benefit of the lower latency to clients.

The Exchange believes the proposed wireless connectivity fee is equitably allocated and non-discriminatory in that all Exchange members that voluntarily select this service option will be charged the same amount for the same services. As is true of all co-location services, all co-located clients have the option to select this voluntary connectivity option, and there is no differentiation among customers with regard to the fees charged for the service. Further, the latency reduction offered will be the same for all co-located clients, irrespective of the locations of their cabinets within the data center. The same cannot be said of the alternative where entities with substantial resources invest in private services and thereby obtain lower latency transmission, while those without resources are unable to invest in the necessary infrastructure.

The Exchange's proposal is also consistent with the requirement of Section 6(b)(5) of the Act that Exchange rules be designed to promote just and equitable principles of trade to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade,

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lower prices because it is spreading the substantial cost among multiple clients. The program, far from burdening competition among connectivity service providers, promotes it. A wireless provider that can offer to the Exchange -- or to a competitor exchange -- a lower price for installation and maintenance will no doubt get the exchanges' business, with the end result that prices for the end users will go down.

to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The proposal is consistent with these requirements inasmuch as it makes available to market participants, at a reasonable fee and on a non-discriminatory basis, access to low latency means of receiving market data feeds. Some market participants have already adopted wireless technology, using towers near the data centers, and others have approached the Exchange seeking to rent roof rights to mount their towers. Rather than lease out roof space to the highest bidders, a process that would stratify and limit access to the low latency delivery, this approach allows unlimited numbers of users to utilize the equipment that the Exchange will mount and accommodates all clients fairly and equally. It will allow the same low latency delivery to those unable to invest in the more expensive option of building or acquiring their own wireless network, as it does for those whose pockets are deeper.

Initially, NASDAQ will perform substantial network testing prior to making the service available to members. After this testing period, the wireless network will continue to be closely monitored and maintained by the vendor and the client will be informed of any issues. Additionally, during the initial roll-out of the service and on a rolling basis for future clients, the Exchange will enable clients to test the receipt of the feed(s) for a minimum of 30 days before incurring any monthly recurring fees. Similar to receiving market data over fiber optic networks, the wireless network can encounter delays or outages due to equipment issues. As wireless networks may be affected by severe weather events, clients will be expected to have redundant

methods to receive this market data and will be asked to attest to having alternate methods or establishing an alternate method in the near future when they order this service from the Exchange.

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

NASDAQ 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. To the contrary, this proposal will promote competition for distribution of market data by offering an optional and innovative product enhancement. Wireless technology has been in use for decades, is available from multiple providers, and may be adopted by other Exchanges that decide to offer microwave connectivity for delivery of market data. As discussed above, the Exchange believes that fees for co-location services, including those proposed for microwave connectivity, are constrained by the robust competition for order flow among exchanges and non-exchange markets, because co-location exists to advance that competition. Further, excessive fees for co-location services, including for wireless technology, would serve to impair an exchange's ability to compete for order flow rather than burdening competition.

Competition between the Exchange and competing trading venues will be enhanced by allowing the Exchange to offer its market participants a lower latency connectivity option. Competition among market participants will also be supported by allowing small and large participants the same price for this lower latency connectivity.

The proposed rule change will likewise enhance competition among service providers offering connections between market participants and the data centers. The offering will expand the multiple means of connectivity available, allowing customers to compare the benefits and

costs of lower latency transmission and related costs with reference to numerous variables. The Exchange, and presumably its competitors, select their service providers on a competitive basis in order to pass along price advantages to their customers, and to win and maintain their business. The offering is consistent with the Exchange's own economic incentives to facilitate as many market participants as possible in connecting to its market.

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

Written comments were neither solicited nor received.

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

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- A. by order approve or disapprove such proposed rule change, or
- B. institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

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

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-NASDAQ-2012-119 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-NASDAQ-2012-119. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should

submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NASDAQ-2012-119 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>8</sup>

Kevin M. O'Neill  
Deputy Secretary

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<sup>8</sup> 17 CFR 200.30-3(a)(12).