

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-74745; File No. SR-NASDAQ-2015-035)

April 16, 2015

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Establish Distributor and Managed Data Solution Distributor Fees for an Optional Hardware-Based Version of NASDAQ ITCH to Trade Options

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 April 7, 2015, The NASDAQ Stock Market LLC (“NASDAQ”) 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 NASDAQ. 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 the Substance of the Proposed Rule Change

NASDAQ proposes to amend Chapter XV, entitled “Options Pricing,” at Section 4 governing pricing for NASDAQ members using the NASDAQ Options Market (“NOM”), NASDAQ’s facility for executing and routing standardized equity and index options. Specifically, the Exchange proposes to establish Distributor and Managed Data Solution (“MDS”) Distributor fees for an optional hardware-based version of NASDAQ ITCH to Trade Options (“ITTO”) data and is not offering a new market data product.

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

In its filing with the Commission, NASDAQ included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the

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

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

proposed rule change. The text of these statements may be examined at the places specified in Item IV below. NASDAQ 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 Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to amend Chapter XV, entitled “Options Pricing,” at Section 4 governing pricing for NASDAQ members using NOM. Specifically, the Exchange proposes to establish Distributor and MDS Distributor fees for an optional hardware-based version of ITTO. This is a data feed that provides quotation information for individual orders on the NOM book, last sale information for trades executed on NOM, and Order Imbalance Information as set forth in NOM Rules Chapter VI, Section 8. ITTO is the options equivalent of the NASDAQ TotalView/ITCH data feed that NASDAQ offers under NASDAQ Rule 7023 with respect to equities traded on NASDAQ. As with TotalView, Distributors use ITTO to “build” their view of the NOM book by adding individual orders that appear on the data feed, and subtracting individual orders that are executed, cancelled or removed.

This hardware-delivery mechanism option of ITTO uses field-programmable gate array (“FPGA”) technology. In offering an FPGA hardware-delivery mechanism, NASDAQ is serving those customers requiring a predictable latency profile throughout the trading day. By taking advantage of hardware parallelism, FPGA technology is capable of processing more data packets during peak market conditions without the introduction of variable queuing latency.

The proposed Distributor fee for utilizing the optional FPGA hardware-based delivery of NASDAQ ITTO data is \$10,000 for internal only distribution, \$1,000 for external only distribution and \$11,000 for internal and external distribution. The FPGA fee is in addition to

any other fees for NASDAQ ITTO. There will be no change in NASDAQ ITTO Subscriber fees as a result of the new product implementation.

The proposed MDS Distributor fees for Distributors utilizing the optional FPGA hardware-based delivery of NASDAQ ITTO data are tiered based upon the number of MDS Subscribers, with fees starting at \$1,000 for one MDS Subscriber, \$1,250 for two MDS Subscribers, \$1,500 for three MDS Subscribers, and \$250 for each additional MDS Subscriber. The MDS Distributor fee is in addition to any other MDS fees.

This new pricing option is available to all firms, regardless of how they choose to access the FPGA hardware-based version of NASDAQ ITTO, and is in response to industry demand, as well as due to changes in the technology to distribute and consume market data. Distributors opting to pay for the FPGA hardware-based delivery of NASDAQ ITTO data would still be fee liable for the applicable market data fees, as described in this rule.

Competition for depth data is considerable and the Exchange believes that this proposal clearly evidences such competition. The Exchange is offering a new pricing model in order to keep pace with changes in the industry and evolving customer needs as new technologies emerge and products continue to develop and change. The FPGA hardware-based version of NASDAQ ITTO is entirely optional and is geared towards attracting new customers, as well as retaining existing customers.

The proposed fees are based on pricing conventions and distinctions that exist in NOM's current fee schedule, and the fee schedules of other exchanges. These distinctions (e.g., internal versus external distribution, as well as for MDS) for the proposed optional Distributor and MDS Distributor fees for FPGA hardware-based delivery of NASDAQ ITTO are based on a careful analysis of empirical data and the application of time-tested pricing principles already accepted

by the Commission and discussed in greater depth in the Statutory Basis section below. Also, the costs associated with the FPGA hardware-based delivery system for NASDAQ ITTO data are higher than a software-based solution since it involves the expense of creating and maintaining the product, as well as creating, shipping, installing and maintaining the new equipment and codebase. Because it uses a distinct technology, the overall costs of creation and maintenance of the hardware-based version of ITTO are higher than the software-based version. From a messaging perspective, the data content and sequencing will be identical on both the FPGA hardware- and software-based versions of the ITTO product.

The proposed FPGA hardware-based delivery of NASDAQ ITTO data is completely optional. NASDAQ is offering this FPGA hardware-based delivery mechanism for the NASDAQ ITTO product that is designed to deliver NASDAQ direct data content in a predictable manner throughout the trading day.

## 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,<sup>3</sup> in general, and with Section 6(b)(4) and 6(b)(5) of the Act,<sup>4</sup> in particular, in that it provides an equitable allocation of reasonable fees among Subscribers and recipients of NASDAQ data and is not designed to permit unfair discrimination between them. NASDAQ believes that its proposal to establish Distributor and MDS Distributor fees for an optional FPGA hardware-based version of NASDAQ ITTO reflects an equitable allocation of reasonable fees.

In adopting Regulation NMS, the Commission granted self-regulatory organizations (“SRO”) and broker-dealers increased authority and flexibility to offer new and unique market data to the public.

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<sup>3</sup> 15 U.S.C. 78f.

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

The Commission concluded that Regulation NMS—by deregulating the market in proprietary data—would itself further the Act’s goals of facilitating efficiency and competition:

[E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.<sup>5</sup>

By removing “unnecessary regulatory restrictions” on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history. If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well.

On July 21, 2010, President Barack Obama signed into law H.R. 4173, the Dodd- Frank Wall Street Reform and Consumer Protection Act of 2010 (“Dodd-Frank Act”), which amended Section 19 of the Act. Among other things, Section 916 of the Dodd-Frank Act amended paragraph (A) of Section 19(b)(3) of the Act by inserting the phrase “on any person, whether or not the person is a member of the self-regulatory organization” after “due, fee or other charge imposed by the self-regulatory organization.” As a result, all SRO rule proposals establishing or changing dues, fees, or other charges are immediately effective upon filing regardless of whether such dues, fees, or other charges are imposed on members of the SRO, non-members, or both. Section 916 further amended paragraph (C) of Section 19(b)(3) of the Act to read, in pertinent part, “At any time within the 60-day period beginning on the date of filing of such a proposed rule change in accordance with the provisions of paragraph (1) [of Section 19(b)], the Commission summarily may temporarily suspend the change in the rules of the self-regulatory

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<sup>5</sup> Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

organization made thereby, 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 this title. If the Commission takes such action, the Commission shall institute proceedings under paragraph (2)(B) [of Section 19(b)] to determine whether the proposed rule should be approved or disapproved.”

The decision of the United States Court of Appeals for the District of Columbia Circuit in NetCoalition v. SEC, 615 F.3d 525 (D.C. Cir. 2010) (“NetCoalition I”), upheld the Commission’s reliance upon competitive markets to set reasonable and equitably allocated fees for market data. “In fact, the legislative history indicates that the Congress intended that the market system ‘evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed’ and that the SEC wield its regulatory power ‘in those situations where competition may not be sufficient,’ such as in the creation of a ‘consolidated transactional reporting system.’ NetCoalition I, at 535 (quoting H.R. Rep. No. 94–229, at 92 (1975), as reprinted in 1975 U.S.C.C.A.N. 321, 323).

For the reasons stated above, NASDAQ believes that the allocation of the proposed fee is fair and equitable in accordance with Section 6(b)(4) of the Act, and not unreasonably discriminatory in accordance with Section 6(b)(5) of the Act. As described above, the proposed fee is based on pricing conventions and distinctions that exist in NASDAQ’s current fee schedule. These distinctions are each based on principles of fairness and equity that have helped for many years to maintain fair, equitable, and not unreasonably discriminatory fees, and that apply with equal or greater force to the current proposal.

As described in greater detail below, if NASDAQ has calculated improperly and the market deems the proposed fees to be unfair, inequitable, or unreasonably discriminatory, firms

can discontinue the use of their data because the proposed product is entirely optional to all parties. Firms are not required to purchase data and NASDAQ is not required to make data available or to offer specific pricing alternatives for potential purchases. NASDAQ can discontinue offering a pricing alternative (as it has in the past) and firms can discontinue their use at any time and for any reason (as they often do), including due to their assessment of the reasonableness of fees charged. NASDAQ continues to establish and revise pricing policies aimed at increasing fairness and equitable allocation of fees among Subscribers. This also reflects that the market for this Depth-of-Book information is highly competitive and continually evolves as products develop and change.

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. Notwithstanding its determination that the Commission may rely upon competition to establish fair and equitably allocated fees for market data, the NetCoalition court found that the Commission had not, in that case, compiled a record that adequately supported its conclusion that the market for the data at issue in the case was competitive. NASDAQ believes that a record may readily be established to demonstrate the competitive nature of the market in question.

There is intense competition between trading platforms that provide transaction execution and routing services and proprietary data products. Transaction execution and proprietary data products are complementary in that market data is both an input and a by-product of the execution service. In fact, market data and trade execution are a paradigmatic example of joint products with joint costs. Data products are valuable to many end Subscribers only insofar as they provide information that end Subscribers expect will assist them or their customers in making trading decisions.

The costs of producing market data include not only the costs of the data distribution infrastructure, but also the costs of designing, maintaining, and operating the exchange's transaction execution platform and the cost of regulating the exchange to ensure its fair operation and maintain investor confidence. The total return that a trading platform earns reflects both the revenues it receives from products and the joint costs it incurs. Moreover, an exchange's customers view the costs of transaction executions and of data as a unified cost of doing business with the exchange. A broker-dealer will direct orders to a particular exchange only if the expected revenues from executing trades on the exchange exceed net transaction execution costs and the cost of data that the broker-dealer chooses to buy to support its trading decisions (or those of its customers). The choice of data products is, in turn, a product of the value of the products in making profitable trading decisions. If the cost of the product exceeds its expected value, the broker-dealer will choose not to buy it. Moreover, as a broker-dealer chooses to direct fewer orders to a particular exchange, the value of the product to that broker-dealer decreases, for two reasons. First, the product will contain less information, because executions of the broker-dealer's orders will not be reflected in it. Second, and perhaps more important, the product will be less valuable to that broker-dealer because it does not provide information about the venue to which it is directing its orders. Data from the competing venue to which the broker-dealer is directing orders will become correspondingly more valuable.

Thus, an increase in the fees charged for either transactions or data has the potential to impair revenues from both products. "No one disputes that competition for order flow is 'fierce'." NetCoalition at 24. However, the existence of fierce competition for order flow implies a high degree of price sensitivity on the part of broker-dealers with order flow, since they may readily reduce costs by directing orders toward the lowest-cost trading venues. A broker-



dealer that shifted its order flow from one platform to another in response to order execution price differentials would both reduce the value of that platform's market data and reduce its own need to consume data from the disfavored platform. Similarly, if a platform increases its market data fees, the change will affect the overall cost of doing business with the platform, and affected broker-dealers will assess whether they can lower their trading costs by directing orders elsewhere and thereby lessening the need for the more expensive data.

Analyzing the cost of market data distribution in isolation from the cost of all of the inputs supporting the creation of market data will inevitably underestimate the cost of the data. Thus, because it is impossible to create data without a fast, technologically robust, and well-regulated execution system, system costs and regulatory costs affect the price of market data. It would be equally misleading, however, to attribute all of the exchange's costs to the market data portion of an exchange's joint product. Rather, all of the exchange's costs are incurred for the unified purposes of attracting order flow, executing and/or routing orders, and generating and selling data about market activity. The total return that an exchange earns reflects the revenues it receives from the joint products and the total costs of the joint products.

Competition among trading platforms can be expected to constrain the aggregate return each platform earns from the sale of its joint products, but different platforms may choose from a range of possible, and equally reasonable, pricing strategies as the means of recovering total costs. For example, some platforms may choose to pay rebates to attract orders, charge relatively low prices for market information (or provide information free of charge) and charge relatively high prices for accessing posted liquidity. Other platforms may choose a strategy of paying lower rebates (or no rebates) to attract orders, setting relatively high prices for market information, and setting relatively low prices for accessing posted liquidity. In this environment,

there is no economic basis for regulating maximum prices for one of the joint products in an industry in which suppliers face competitive constraints with regard to the joint offering. This would be akin to strictly regulating the price that an automobile manufacturer can charge for car sound systems despite the existence of a highly competitive market for cars and the availability of after-market alternatives to the manufacturer-supplied system.

The market for market data products is competitive and inherently contestable because there is fierce competition for the inputs necessary to the creation of proprietary data and strict pricing discipline for the proprietary products themselves. Numerous exchanges compete with each other for listings, trades, and market data itself, providing virtually limitless opportunities for entrepreneurs who wish to produce and distribute their own market data. This proprietary data is produced by each individual exchange, as well as other entities, in a vigorously competitive market.

Broker-dealers currently have numerous alternative venues for their order flow, including thirteen SRO markets, as well as internalizing broker-dealers (“BDs”) and various forms of alternative trading systems (“ATs”), including dark pools and electronic communication networks (“ECNs”). Each SRO market competes to produce transaction reports via trade executions, and two FINRA-regulated Trade Reporting Facilities (“TRFs”) compete to attract internalized transaction reports. Competitive markets for order flow, executions, and transaction reports provide pricing discipline for the inputs of proprietary data products.

The large number of SROs, TRFs, BDs, and ATs that currently produce proprietary data or are currently capable of producing it provides further pricing discipline for proprietary data products. Each SRO, TRF, ATs, and BD is currently permitted to produce proprietary data products, and many currently do or have announced plans to do so, including NASDAQ, New

York Stock Exchange LLC (“NYSE”), NYSE MKT LLC, NYSE Arca LLC (“ARCA”), and BATS Exchange, Inc. (“BATS”).

Any ATS or BD can combine with any other ATS, BD, or multiple ATSs or BDs to produce joint proprietary data products. Additionally, order routers and market data vendors can facilitate single or multiple broker-dealers’ production of proprietary data products. The potential sources of proprietary products are virtually limitless.

The fact that proprietary data from ATSs, BDs, and vendors can by-pass SROs is significant in two respects. First, non-SROs can compete directly with SROs for the production and sale of proprietary data products, as BATS and Arca did before registering as exchanges by publishing data on the Internet. Second, because a single order or transaction report can appear in an SRO proprietary product, a non-SRO proprietary product, or both, the data available in proprietary products is exponentially greater than the actual number of orders and transaction reports that exist in the marketplace.

Market data vendors provide another form of price discipline for proprietary data products because they control the primary means of access to end Subscribers. Vendors impose price restraints based upon their business models. For example, vendors such as Bloomberg and Thomson Reuters that assess a surcharge on data they sell may refuse to offer proprietary products that end Subscribers will not purchase in sufficient numbers. Internet portals, such as Google, impose a discipline by providing only data that will enable them to attract “eyeballs” that contribute to their advertising revenue. Retail broker-dealers, such as Schwab and Fidelity, offer their customers proprietary data only if it promotes trading and generates sufficient commission revenue. Although the business models may differ, these vendors’ pricing discipline is the same: they can simply refuse to purchase any proprietary data product that fails to provide

sufficient value. NASDAQ and other producers of proprietary data products must understand and respond to these varying business models and pricing disciplines in order to market proprietary data products successfully.

In addition to the competition and price discipline described above, the market for proprietary data products is also highly contestable because market entry is rapid, inexpensive, and profitable. The history of electronic trading is replete with examples of entrants that swiftly grew into some of the largest electronic trading platforms and proprietary data producers: Archipelago, Bloomberg Tradebook, Island, RediBook, Attain, TracECN and BATS Trading. A proliferation of dark pools and other ATSS operate profitably with fragmentary shares of consolidated market volume.

Regulation NMS, by deregulating the market for proprietary data, has increased the contestability of that market. While broker-dealers have previously published their proprietary data individually, Regulation NMS encourages market data vendors and broker-dealers to produce proprietary products cooperatively in a manner never before possible. Multiple market data vendors already have the capability to aggregate data and disseminate it on a profitable scale, including Bloomberg, and Thomson Reuters.

The vigor of competition for information is significant. NASDAQ has made a determination to adjust the fees associated with these products in order to reflect more accurately the value of its products and the investments made to enhance them, as well as to keep pace with changes in the industry and evolving customer needs. These products are entirely optional and are geared towards attracting new customers, as well as retaining existing customers.

In all cases, firms make decisions on how much and what types of data to consume on the basis of the total cost of interacting with NASDAQ or other exchanges. Of course, the explicit

data fees are but one factor in a total platform analysis. Some competitors have lower transactions fees and higher data fees, and others are vice versa. For example, NOM offers one distributor fee which allows firms to access both the BONO and ITTO data feeds. The market for this information is highly competitive and continually evolves as products develop and change.

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.<sup>6</sup> 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

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<sup>6</sup> 15 U.S.C. 78s(b)(3)(A)(ii).

- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-NASDAQ-2015-035 on the subject line.

Paper comments:

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

All submissions should refer to File Number SR-NASDAQ-2015-035. 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 such filing will also 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-2015-035 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>7</sup>

Brent J. Fields  
Secretary

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<sup>7</sup> 17 CFR 200.30-3(a)(12).