SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-80558; File No. SR-NASDAQ-2016-120)  

April 28, 2017  

Self-Regulatory Organizations; The Nasdaq Stock Market LLC; Notice of Filing of Amendments No. 1, 2, 3, 4, and 5 and Order Granting Accelerated Approval of a Proposed Rule Change, as Amended, to Establish the Third Party Connectivity Service  

I.  Introduction  

On August 16, 2016, the Nasdaq Stock Market LLC ("Nasdaq" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act") and Rule 19b-4 thereunder, a proposed rule change to establish the third party connectivity service. The proposed rule change was published for comment in the Federal Register on September 2, 2016. The Commission received one comment letter regarding the proposal on September 12, 2016. Nasdaq responded to the comment letter on October 4, 2016. On October 5, 2016, the Commission designated a longer period for Commission action on the proposed rule change. Subsequently, the Commission received three additional comment letters regarding the proposal: one from Virtu Financial,  

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5 See letter from Eric Swanson, Esq., General Counsel, Bats Global Markets, Inc., to Brent J. Fields, Secretary, Commission, dated September 12, 2016 ("Bats Letter I").  
6 See letter from Jeffrey S. Davis, Vice President and General Counsel, Nasdaq Stock Market LLC, to Brent J. Fields, Secretary, Commission, dated October 4, 2016 ("Nasdaq Letter I").  
another from Bats responding to Nasdaq’s Letter, and a third from SIFMA. On November 30, 2016, the Commission instituted proceedings to determine whether to approve or disapprove the proposed rule change. Thereafter, the Commission received comments from IEX, SIFMA, KCG Holdings, and Citadel Securities regarding the proposed rule change and Nasdaq responded to the comments and filed Amendment No. 1. On January 31, 2017, the Exchange filed Amendment No. 2 to the proposed rule change. The Commission received two comment letters one from Bats and another from IEX on the amended proposal. On April 3, 2017, the Exchange filed Amendment No. 3 to the proposed rule change.


10 See letters from John Ramsay, Chief Market Policy Officer, IEX Group, Inc. (“IEX”), dated December 9, 2016 (“IEX Letter I”), Melissa McGregor, Managing Director and Associate General Counsel, SIFMA, dated December 20, 2016 (“SIFMA Letter II”), John A. McCarthy, General Counsel, KCG Holdings, Inc. (“KCG Holdings”), dated December 23, 2016 (“KCG Letter”), and Adam C. Cooper, senior Managing Director and Chief Legal Officer, Citadel Securities (“Citadel”), dated December 27, 2016 (“Citadel Letter”), to Brent J. Fields, Secretary, Commission.

11 See letter from T. Sean Bennett, Principal Associate General Counsel, Nasdaq Inc., to Brent J. Fields, Secretary, Commission, dated January 26, 2017 (“Nasdaq Letter II”).

12 Amendment No. 1 was missing a required exhibit, therefore it was withdrawn and replaced by Amendment No. 2. See Amendment No. 2. The substance of Amendment No. 1 was the same as the substance of Amendment No. 2.


14 See Amendment No. 3. Amendment No. 3 amended the filing to include the Assumption of Liability form.
Exchange filed Amendment No. 4. On April 18, 2017, the Exchange filed Amendment No. 5 to the proposed rule change. The Commission is publishing this notice to solicit comment on the proposed rule change, as amended, and is approving the proposed rule change, as amended, on an accelerated basis.

II. Description of the Proposed Rule Change

The Exchange proposes to adopt the third party connectivity service that will segregate connectivity to the Exchange and its proprietary data feeds from connectivity to third party services and data feeds, including the UTP SIP data feeds. Nasdaq states that this segregation is necessary because of increased capacity requirements, noting recent changes to the Consolidated Tape Association (“CTA”) and Options Price Reporting Authority (“OPRA”) feeds as well as planned changes to the Unlisted Trading Privileges (“UTP”) Plan data feeds.

The third party connectivity service will be available to non-co-location and co-location customers and will enable customers to receive third party market data feeds, including SIP data,

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15 See Amendment No. 4 which was withdrawn and replaced by Amendment No. 5.
16 See Amendment No. 5. Amendment No. 5 amended the text of the proposed rule change in response to the comments and withdrew Amendment No. 4. Amendment No. 4 included the same substantive changes to the rule change however, it was not properly filed.
17 Third party services include not only SIP data feeds, but also data feeds from other exchanges and markets. For example, third party connectivity will support connectivity to the FINRA/Nasdaq Trade Reporting Facility, BATS Depth Feeds, and NYSE Feeds. See Notice, 81 FR at 60769 n.10.
19 The UTP SIP feeds are comprised of a UTP Quote Data Feed (“UQDF”) and a UTP Trade Data Feed (“UTDF”). The UQDF provides continuous quotations from all market centers trading Nasdaq-listed securities. The UTDF provides continuous last sale information from all market centers trading Nasdaq-listed securities. See http://www.utpplan.com/.
and other non-exchange services independent of Nasdaq proprietary feeds. In the proposal, Nasdaq stated that customers using 1Gb circuits to connect to the UTP SIP feeds would need to upgrade to a 10Gb Ultra circuit because of the increase in bandwidth requirements for the new feeds.\textsuperscript{20} Customers seeking connectivity to the Exchange and its proprietary data feeds may continue to do so through the existing connectivity options under Rule 7034(b) and Rule 7051(a).\textsuperscript{21} Customers that do not wish to subscribe to the third party connectivity service may connect through an extranet provider or a market data redistributor. The Exchange is proposing to offer services currently available to direct connectivity subscribers under Rule 7051 to subscribers to third party connectivity services because Nasdaq believes they may have the same connectivity needs as customers of the existing direct connectivity service.\textsuperscript{22}

The Exchange proposes to assess fees for the third party connectivity service. The fee for installation of either a 10Gb Ultra or 1Gb Ultra third party services co-location or direct connectivity subscription would be $1,500. The monthly fee for a 10Gb Ultra connection would be $5,000 and for a 1Gb Ultra connection the fee would be $2,000.

The proposal as amended provides that every customer may receive two third party circuit connections free of charge if used solely to receive the UTP SIP feeds (i.e., the UTDF and UQDF feeds)(“UTP-only use”).\textsuperscript{23} The Exchange proposes to provide UTP-only connectivity beyond the two free connections, for an installation fee of $100 per connection and an ongoing

\textsuperscript{20} In response to comments, Nasdaq amended the filing to permit the use of 1Gb Ultra connections and proposed that subscribers sign an Assumption of Liability form indicating that they were aware of the risks of using a 1Gb connection and would hold Nasdaq harmless. See Amendments No. 2 and 3. Nasdaq amended the proposal again to replace the Assumption of Liability form with the Capacity Acknowledgement form. See Amendment No. 5.

\textsuperscript{21} See Notice, 81 FR at 60769.

\textsuperscript{22} See id.

\textsuperscript{23} See Amendment No. 5.
monthly fee of $100 per connection and will offer UTP-only connectivity through either a 1Gb Ultra or a 10Gb Ultra connection.\textsuperscript{24} The Exchange also proposes to allow customers to elect to receive UTP SIP data through a 1Gb Ultra option in lieu of the 10Gb Ultra option if the customer acknowledges that the subscriber is aware of the risks associated with such an election.\textsuperscript{25} Finally, the Exchange proposes to extend the waiver of the fees from February 28, 2017, through the end of April 2017.

III. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change, as amended, is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange. In particular, the Commission finds that the proposed rule change is consistent with Section 6(b)(4) of the Act,\textsuperscript{26} which requires that the rules of a national securities exchange provide for the equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities, Section 6(b)(5) of the Act,\textsuperscript{27} which requires, among other things, that the rules of a national securities exchange be 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, to protect investors and the public interest, and not to permit unfair discrimination between customers, issuers, brokers, or dealers, and Section 6(b)(8) of the Act,\textsuperscript{28} which requires that the rules of a national securities exchanges

\textsuperscript{24} See Amendment No. 5.
\textsuperscript{25} See Amendment No. 5. Under the proposal, as amended by Amendment No. 5, the Exchange replaced the Assumption of Liability form with a Capacity Acknowledgement form, requiring each subscriber that elects to use the 1Gb Ultra connectivity to receive UTP-only data to acknowledge the risks associated with such connectivity.
\textsuperscript{26} 15 U.S.C. 78f(b)(4).
\textsuperscript{27} 15 U.S.C. 78f(b)(5).
\textsuperscript{28} 15 U.S.C. 78f(b)(8).
exchange not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

As noted above, the Commission received ten comment letters from six commenters on the proposed rule change.\textsuperscript{29} All of the commenters object to the proposal. The Commission also received two response letters from Nasdaq: one responding to Bats, the second responding to IEX, SIFMA, KCG Holdings, and Citadel.\textsuperscript{30} In addition, Nasdaq amended its proposal to address the concerns raised by commenters.\textsuperscript{31}

The commenters raise three main concerns with the proposal. First, commenters assert that the proposal addresses a matter properly governed by the UTP Plan, the terms of which require approval of the proposal by the UTP Operating Committee.\textsuperscript{32} Second, the commenters assert that Nasdaq would benefit from the proposal to the detriment of customers seeking access to UTP SIP data because subscribers who wish to continue to receive the UTP SIP feed would incur additional costs to receive data that they currently receive in a bundle with Nasdaq proprietary data.\textsuperscript{33}

\textsuperscript{29} See supra notes 5, 8, 10, 13.
\textsuperscript{30} See Nasdaq Letters I and II.
\textsuperscript{31} See Amendments No. 2, 3 and 5.
\textsuperscript{32} The Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis (“The UTP Plan”) is administered by its participants through an operating committee (“UTP Operating Committee”) which is composed of one representative designated by each participant of the plan. See, e.g., Sections IV.A., B.3, and IV.C.2 of the UTP Plan, and Securities Exchange Act Release No. 55647 (April 19, 2007), 72 FR 20891 (April 26, 2007).
\textsuperscript{33} See e.g., Bats Letter I at 3-5; Bats Letter II at 2-3; Bats Letter III at 3-4; Virtu Letter at 1-2; SIFMA Letter I at 2-3; IEX Letter I at 1; SIFMA Letter II at 2; KCG Letter at 2; Citadel Letter at 2; IEX Letter II at 2.
Third, the commenters question the need for enhanced capacity.\textsuperscript{34} Commenters argue that the proposal constitutes an access fee for direct access to UTP data which must be approved by the UTP operating committee under the UTP Plan.\textsuperscript{35} In addition, according to commenters, the proposal targets UTP data recipients and extends the scope of the UTP system to include customer connectivity, because Nasdaq is the sole provider of direct access to UTP data, and therefore firms seeking direct access to UTP data would be required to subscribe to and pay for the proposed third party connectivity service.\textsuperscript{36}

In response, Nasdaq notes that it has controlled the network and network connectivity without input from the UTP operating committee for over 25 years,\textsuperscript{37} and that neither the UTP Plan nor the processor agreement grants the UTP operating committee authority over the network or network connectivity associated with SIP data.\textsuperscript{38} Nasdaq also asserts that the proposal does not target UTP data recipients because UTP SIP data is combined with, and carried on, the same network as data from other sources.\textsuperscript{39} To further address these concerns, Nasdaq filed Amendment No. 5.\textsuperscript{40} First, Nasdaq will offer every customer two third party

\textsuperscript{34} See Bats Letter I at 3-5; Bats Letter II at 2-3; Bats Letter III at 3-4; Virtu Letter at 1-2; SIFMA Letter I at 2-3; IEX Letter I at 1; SIFMA Letter II at 2; KCG Letter at 2; Citadel Letter at 2; IEX Letter II at 2.

\textsuperscript{35} See Bats Letter I at 1-2; Bats Letter II at 3-4; Bats Letter III at 2-3; SIFMA Letter I at 2; IEX Letter I at 1; SIFMA Letter II at 2; KCG Letter at 3-4; IEX Letter II at 1-2.

\textsuperscript{36} See \textit{e.g.}, Bats Letter I at 3-5; Bats Letter II at 2-3; Bats Letter III at 3-4; Virtu Letter at 1-2; SIFMA Letter I at 2-3; IEX Letter I at 1; SIFMA Letter II at 2; KCG Letter at 2; Citadel Letter at 2; IEX Letter II at 2.

\textsuperscript{37} See Nasdaq Letter I at 2-4.

\textsuperscript{38} Nasdaq noted that the UTP Plan does not explicitly address connectivity fees. See Nasdaq Letter I at 2.

\textsuperscript{39} See Nasdaq Letter I at 3.

\textsuperscript{40} See Amendment No. 5.
connections for UTP-only use at no cost.\textsuperscript{41} Second, Nasdaq will allow customers to select a 1Gb Ultra or 10Gb Ultra port to connect to SIP data, both for the free connections provided by Nasdaq and for additional connections to which they subscribe.\textsuperscript{42} Furthermore, connections for UTP-only use beyond the two free connections will be available for $100 a month in addition to a $100 installation fee, significantly below the charge to receive Nasdaq proprietary data.\textsuperscript{43} Subscribers electing to receive UTP-only data using a 1Gb Ultra connection would be required to complete a Capacity Acknowledgement form acknowledging in writing the risks associated with such connectivity, though not relieving Nasdaq of liability.\textsuperscript{44} Nasdaq believes these changes are responsive to the concerns raised by the commenters.\textsuperscript{45}

All commenters challenge the technical necessity of the proposal. Bats asserts that the proposal is technically unnecessary and merely an attempt to increase revenues by charging fees for UTP access. More specifically, Bats argues that Nasdaq SIP bandwidth recommendations are excessive, inconsistent with current peak UTP message traffic, and much higher than recommendations for Nasdaq’s own proprietary data products.\textsuperscript{46} Citadel states that “Nasdaq has failed to provide a reasonable justification for requiring market participants to purchase a high bandwidth 10Gb Ultra connection” to access SIP data.\textsuperscript{47}

\begin{itemize}
\item \textsuperscript{41} See e.g. Nasdaq Letter II at 2-3; Amendment No. 5.
\item \textsuperscript{42} See id.
\item \textsuperscript{43} See id.
\item \textsuperscript{44} See Exhibit 3 to Amendment No. 5.
\item \textsuperscript{45} See Nasdaq Letter II.
\item \textsuperscript{46} See Bats Letter I at 3-5; Bats Letter II at 2-3; Bats Letter III at 3-4. Virtu, SIFMA, KCG Holdings, and IEX agree with Bats. See, e.g., Virtu Letter at 1-2; SIFMA Letter I at 2-3; IEX Letter I at 1; SIFMA Letter II at 2; KCG Letter at 2; IEX Letter II at 2.
\item \textsuperscript{47} See Citadel Letter at 2. See also Amendment No. 2 which amended the filing to permit the use of 1Gb connections.
\end{itemize}
In response, Nasdaq states that it has “done substantial analysis to support the recommendation and it believes the recommendation is consistent with its limited experience with the new Processor.” Nasdaq also states that “[d]uring a one month period (23 trading days) this summer, Nasdaq observed the new UTP Trade Data binary feed exceeding a 1G capacity for a 1 microsecond timeframe in 18 of the trading days. If you add the new UTP Quote Data binary feed to that same connection, the combined feeds exceed 1G capacity for 1 microsecond timeframe in 23 trading days.” In addition, Nasdaq asserts that the UTP operating committee has “input into the bandwidth recommendation” and could act to lower it further.

Bats responds stating its views that Nasdaq had not demonstrated that the proposal was technically necessary, because in Bat’s view, using a one microsecond burst to determine a bandwidth recommendation is misplaced, as the observed peak is not sustained over a full second. Bats states that Nasdaq’s bandwidth recommendation reflects the maximum burst rate capability of the new system rather than the current capacity requirement. SIFMA agrees with Bats on this issue, stating that Nasdaq has not provided any “reasonable justification for requiring member firms to use a 10Gb connection to receive SIP data.” SIFMA states that there is no compelling necessity, either technical or otherwise, for creating a separate connection for access to the SIP data.

Nasdaq disagrees with these arguments, stating its belief that they are reckless, because

48 See Nasdaq Letter I at 5.
49 See id.
50 See id.
51 See Bats Letter II at 2-3.
52 See id.
53 See SIFMA Letter I at 2.
54 See id.
“there is no disagreement that data feed requirements have increased significantly, and will
continue to do so.” Nasdaq further states that it continues to observe spikes in the UTP feeds
that exceed 1Gb, justifying the 10Gb offering. Nasdaq also asserts that the proposal would
segregate data for network resiliency and ensure that connectivity is adequate for intended use.
In addition, Nasdaq states that it developed the isolated the network carrying the SIP data to
reduce potential conflicts of interest arising from Nasdaq’s operation of the Processor and its
exchanges.

Nasdaq responded to the comments and amended the filing such that any customer that
wishes to receive only the data from the UTP SIP will be able receive two UTP-only data
connections free of charge via a 1Gb Ultra or 10Gb Ultra connection. Additional connections
for UTP-only use will be available for $100 per month with an installation fee of $100 per port.
Nasdaq represents that those costs are significantly lower than the proposed fees to be assessed
for other third party connectivity and will cover some of the costs associated with providing the
connectivity. Nasdaq noted that current subscribers to three or more connections under Rules
7034(b) and 7051 that contain a mix of Nasdaq proprietary data and UTP data will pay more
under the proposal to receive the same data, however, Nasdaq believes that such a fee increase is
reasonable in light of the costs incurred by the Exchange in offering separate networks for UTP
data feed connectivity and Nasdaq’s proprietary data feed connectivity, which will assist

55 See Nasdaq Letter II at 2.
56 See id.
57 See Nasdaq Letter II at 3.
58 See Amendment No. 5 p. 6.
59 See Amendment No. 5 p. 7 and 10.
subscribers with risk management. Further, Nasdaq removed the requirement that subscribers absolve Nasdaq of liability if they take a 1Gb Ultra connection.

Nasdaq noted that the UTP Plan does not explicitly address connectivity fees. As to concerns raised by the commenters that Nasdaq has not substantiated the need for the third party connectivity service, Nasdaq noted that the “UTP Operating Committee has had and continues to have input into the bandwidth recommendation” and states that Nasdaq lowered the recommendation in response to the Committee’s recommendation and would be ready to lower the recommendation again if the operating committee were to direct it to do so. In addition, as noted above, Nasdaq amended the proposal to provide two connections for UTP SIP data free of charge and additional connections at lower fees that reflect some of the costs associated with providing the connectivity. The Commission believes that Nasdaq has adequately addressed the concerns raised by the comments in its response letters and its amendments to the proposal.

IV. Solicitation of Comments on the Proposal as Amended

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the filing, 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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60 See Amendment No. 5.
61 See Amendment No. 5.
62 See Nasdaq Letter I at 5.
63 See id.
64 See Nasdaq Letter I and Nasdaq Letter II; Amendment No. 5.
65 See Nasdaq Letter I and Nasdaq Letter II and amendments to the proposal.
• Send an e-mail to rule-comments@sec.gov. Please include File Number SR-NASDAQ-2016-120 on the subject line.

Paper Comments:

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

   All submissions should refer to File Number SR-NASDAQ-2016-120. 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 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-2016-120 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

V. Accelerated Approval of Proposed Rule Change, as Amended

   The Commission finds good cause to approve the proposed rule change, as amended, prior to the 30th day after the date of publication of the notice of the amended proposal in the Federal
Register. As noted above, Nasdaq amended the proposal to respond to the concerns raised by the commenters. Specifically, the Exchange is proposing to offer two free UTP-only connections via a 1Gb Ultra or 10Gb Ultra port. Nasdaq also replaced the Assumption of Liability form with a Capacity Acknowledgement form, such that customers are no longer required to hold Nasdaq harmless if they choose to take a 1Gb Ultra connection. The Exchange also proposes to provide additional UTP-only connectivity for an installation fee of $100 per connection and an ongoing monthly fee of $100 per connection. Because these changes address concerns raised by the commenters, the Commission finds good cause for approving the proposed rule change, as amended, on an accelerated basis, pursuant to Section 19(b)(2) of the Act.66

VI. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act, that the proposed rule change (SR-NASDAQ-2016-120), as amended, be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.67

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