I. Introduction

On January 30, 2020, New York Stock Exchange LLC (“NYSE”), NYSE American LLC (“NYSE American”), NYSE Arca, Inc. (“NYSE Arca”), NYSE Chicago, Inc. (“NYSE Chicago”), and NYSE National, Inc. (“NYSE National”) (collectively, the “Exchanges”) each filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Exchange Act” or “Act”) and Rule 19b-4 thereunder, a proposed rule change to establish a schedule of Wireless Connectivity Fees and Charges ("Wireless Fee Schedule") listing available wireless connections between the Mahwah, New Jersey data center ("Mahwah Data Center") and other data centers. The proposed rule changes (collectively, “Wireless I”) were published for comment in the Federal Register on February 18, 2020. On April 1, 2020, pursuant to Section 19(b)(2) of the Act, the Commission

designated a longer period within which to either approve the Wireless I proposed rule changes, disapprove the proposed rule changes, or institute proceedings to determine whether to disapprove the proposed rule changes.\(^5\)

On February 11, 2020, NYSE, NYSE Arca, NYSE Chicago, and NYSE National each filed with the Commission, pursuant to Section 19(b)(1) of the Act\(^6\) and Rule 19b-4 thereunder,\(^7\) a proposed rule change to amend the Wireless Fee Schedule to add wireless connections for the transport of certain market data of the Exchanges. NYSE American filed with the Commission a substantively identical filing on February 12, 2020. The proposed rule changes (collectively, “Wireless II”) were published for comment in the Federal Register on February 25, 2020.\(^8\) On April 1, 2020, pursuant to Section 19(b)(2) of the Act,\(^9\) the Commission designated a longer

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\(^5\) See Securities Exchange Act Release No. 88539 (April 1, 2020), 85 FR 19553 (April 7, 2020). The Commission designated May 18, 2020, as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule changes.


\(^7\) 17 CFR 240.19b-4.


period within which to either approve the Wireless II proposed rule changes, disapprove the proposed rule changes, or institute proceedings to determine whether to disapprove the proposed rule changes.  

This order institutes proceedings under Section 19(b)(2)(B) of the Exchange Act to determine whether to approve or disapprove the Wireless I and Wireless II proposed rule changes.

II. Description of the Proposed Rule Changes

A. Wireless I

In Wireless I, the Exchanges propose to establish the Wireless Fee Schedule, setting forth options for market participants to establish wireless connections for specified fees between the Mahwah Data Center and three data centers that are owned and operated by third parties unaffiliated with the Exchanges: (1) Carteret, New Jersey; (2) Secaucus, New Jersey; and (3) Markham, Canada (collectively, the “Third Party Data Centers”). As more fully set forth in the Wireless I Notices, the Exchanges state that a market participant opting to establish a wireless connection between the Mahwah Data Center and a Third Party Data Center may do so by requesting one from ICE Data Services (“IDS”). The Exchanges state that IDS operates

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10 See Securities Exchange Act Release No. 88540 (April 1, 2020), 85 FR 19562 (April 7, 2020). The Commission designated May 25, 2020, as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule changes.


12 See Wireless I Notice, supra note 3, at 8938.

13 See id. at 8939.
through several different Intercontinental Exchange, Inc. (“ICE”) affiliates, including NYSE Technologies Connectivity, Inc., an indirect subsidiary of NYSE.14

According to the Exchanges, once requested, IDS establishes the wireless connection (herein a “Wireless Bandwidth Connection”) between IDS’s equipment in the Third Party Data Center and IDS’s equipment in the Mahwah Data Center.15 IDS uses its own wireless network between the Markham Third Party Data Center and the Mahwah Data Center.16 IDS contracts with a non-ICE entity to provide Wireless Bandwidth Connections between the Secaucus and Carteret Third Party Data Centers and the Mahwah Data Center through a series of towers equipped with wireless equipment.17 With respect to connections between the Secaucus and Carteret Third Party Data Centers and the Mahwah Data Center, these towers include a pole on the grounds of the Mahwah Data Center property, to which access is restricted.18 At each end of the Wireless Bandwidth Connection, the customer uses a cross connect or other cable to connect its own equipment to the IDS equipment.19 Cross connects in the Mahwah Data Center lead to the customer’s server in co-location.20

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14 See id. at 8939 n.11. The Exchanges themselves are indirect subsidiaries of ICE. See id. at 8939.

15 See id. See also infra note 47 and accompanying text (further summarizing how the Exchanges describe the function and purpose of these connections).

16 See id. at 8939.

17 See id. at 8939.

18 See id. at 8943.

19 See id.

As discussed further below,\(^2\) the Exchanges take the position that the Wireless Bandwidth Connections are not “facilities of an exchange” within the meaning of Section 3(a)(1) of the Act (defining “exchange”) and Section 3(a)(2) of the Act (defining “facility”).\(^2\) The Exchanges thus take the position that the proposed Wireless Fee Schedule is not required to be filed with the Commission, and not subject to review for determination of consistency with Act standards.\(^3\) The Exchanges seek approval of the Wireless Fee Schedule, however, stating that they have filed the current proposals “solely because the Staff of the Commission” has advised that filing is required.\(^4\)

Proposed Wireless Fee Schedule (Wireless I)

The Exchanges propose that IDS would assess a non-recurring initial charge and a monthly recurring charge (“MRC”) for the Wireless Bandwidth Connections, with variations depending upon bandwidth size and the location of the connection. The proposed schedule set forth by the Exchanges is as follows:\(^5\)

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Description</th>
<th>Amount of Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless Connection between Mahwah Data Center and Secaucus access center</td>
<td>10 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $9,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Secaucus access center</td>
<td>50 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $13,500</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Secaucus access center</td>
<td>100 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $23,000</td>
</tr>
</tbody>
</table>

\(^2\) See Section II.C.1. infra.

\(^3\) See Wireless I Notice, supra note 3, at 8939-41.

\(^4\) See id. at 8938-39.

\(^5\) See id. at 8941-42.
<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Description</th>
<th>Amount of Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless Connection between Mahwah Data Center and Secaucus access center</td>
<td>200 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $44,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Carteret access center</td>
<td>10 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $10,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Carteret access center</td>
<td>50 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $15,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Carteret access center</td>
<td>100 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $25,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Carteret access center</td>
<td>200 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $45,000</td>
</tr>
<tr>
<td>Wireless Connections between (a) Mahwah Data Center and Carteret access center and (b) Mahwah Data Center and Secaucus Data Center</td>
<td>50 Mb Circuits</td>
<td>$15,000 initial charge for both connections plus monthly charge for both connections of $22,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Markham access center</td>
<td>1 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $6,000</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Markham access center</td>
<td>5 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $15,500</td>
</tr>
<tr>
<td>Wireless Connection between Mahwah Data Center and Markham access center</td>
<td>10 Mb Circuit</td>
<td>$10,000 per connection initial charge plus monthly charge per connection of $23,000</td>
</tr>
</tbody>
</table>

As an incentive, the first month’s MRC would be waived. In addition, the Exchanges propose to include a General Note on the Wireless Fee Schedule, stating that a market participant that obtains a Wireless Bandwidth Connection will not be charged more than once for that.

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26 See id. at 8942. If a customer had an existing Wireless Bandwidth Connection and opted to upgrade or downgrade to a different size circuit connecting to the same Third Party Access Center, it would not be subject to the initial charge. See id.
service, irrespective of whether it is a member of one, some or none of the Exchanges.\textsuperscript{27}

B. Wireless II

In Wireless II, the Exchanges propose to include additional connectivity options on the Wireless Fee Schedule for specified fees; namely, wireless connections for the transport of certain market data feeds (“Wireless Market Data Connections”) from the Mahwah Data Center to Third Party Data Centers.\textsuperscript{28} The market data feeds available via the Wireless Market Data Connections (the “Selected Market Data”) are certain proprietary market data feeds offered by NYSE, NYSE Arca, and/or NYSE National.\textsuperscript{29}

As more fully set forth in the Wireless II Notices, the Exchanges explain that a market participant seeking connectivity to a Selected Market Data feed chooses a connectivity provider.\textsuperscript{30} In the case of the proposed Wireless Market Data Connections, market participants


\textsuperscript{28} \textit{See Wireless II Notice, supra} note 8, at 10753.

\textsuperscript{29} The Exchanges state that the Selected Market Data is generated at the Mahwah Data Center in the trading and execution systems of NYSE, NYSE Arca and NYSE National. \textit{See id.} In each case, NYSE, NYSE Arca, or NYSE National, as applicable, files with the Commission for the Selected Market Data it generates, and the related fees. \textit{See id.} The filed market data fees apply to all Selected Market Data customers no matter what connectivity provider they use. \textit{See id.} at 10754.

\textsuperscript{30} \textit{See id.}
would be choosing IDS as wireless connectivity provider. Upon selection, IDS would first need to obtain authorization from the provider of the relevant Selected Market Data feed. Then, IDS would set up the Wireless Market Data Connection for the market participant by collecting the Selected Market Data and sending it over the Wireless Market Data Connection to the IDS access center in the Third Party Data Center, where the customer would then connect to the Selected Market Data at the Third Party Data Center.  

As discussed further below, the Exchanges maintain that the Wireless Market Data Connections are not “facilities of an exchange” within the meaning of Section 3(a)(1) of the Act (defining “exchange”) and Section 3(a)(2) of the Act (defining the term “facility”). They thus take the position that the proposed Wireless Fee Schedule itemizing the available Wireless Market Data Connections and associated fees are not proposed rules of an exchange, are not required to be filed with the Commission, and are not subject to review for determination of consistency with Act standards. The Exchanges seek approval of the addition of Wireless Market Data Connections to the Wireless Fee Schedule, however, stating that they have filed the current proposals “solely because the Staff of the Commission” has advised that filing is

31 See id. at 10754 n.17. See also infra note 48 and accompanying text (further summarizing how the Exchanges describe the function and purpose of these connections).

32 See id. at 10754. When requesting authorization from the NYSE, NYSE Arca, or NYSE National to provide a customer with Selected Market Data, the ICE affiliate providing the Wireless Market Data Connection uses the same online tool as all data vendors. See id. at 10754 n.15.

33 See id. at 10754. A cable connects the IDS and customer equipment in the Markham Third Party Data Center. If the customer is located in either the Carteret or Secaucus Third Party Data Center, the customer buys a cross connect from IDS. See id. at 10754 n.16.

34 See Section II.C.1. infra.

35 See Wireless II Notice, supra note 8, at 10754-56.

36 See id. at 10753.
required.\textsuperscript{37}

Proposed Additions to the Wireless Fee Schedule (Wireless II)

The Exchanges propose that IDS would assess a non-recurring initial charge and MRC for the Wireless Market Data Connections, with the variations depending upon the type of fees and location of the connection, set forth by the Exchanges as follows:\textsuperscript{38}

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Amount of Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSE Integrated Feed: Wireless Connection in Carteret access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $10,500</td>
</tr>
<tr>
<td>NYSE Arca Integrated Feed: Wireless Connection in Carteret access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $10,500</td>
</tr>
<tr>
<td>NYSE National Integrated Feed: Wireless Connection in Carteret access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $5,250</td>
</tr>
<tr>
<td>NYSE Integrated Feed and NYSE Arca Integrated Feed: Wireless Connection in Carteret access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $18,500</td>
</tr>
<tr>
<td>NYSE Integrated Feed, NYSE Arca Integrated Feed, and NYSE National Integrated Feed: Wireless Connection in Carteret access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $21,000</td>
</tr>
<tr>
<td>NYSE Integrated Feed: Wireless Connection in Secaucus access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $10,500</td>
</tr>
</tbody>
</table>

\textsuperscript{37} See id.

\textsuperscript{38}See id. at 10756. The Exchanges note that the customer is charged by IDS an initial and monthly fee for the Wireless Market Data Connection (whereas the applicable Exchange bills market data subscribers directly, irrespective of whether the market data subscribers receive the Selected Market Data over a Wireless Market Data Connection or from another connectivity provider). See id. at 10754.

The Exchanges further explain that there is limited bandwidth available on the wireless network to the Markham, Canada Third Party Data Center. Accordingly, such Wireless Market Data Connections do not transport information for all of the symbols included in the NYSE BBO and Trades and NYSE Arca BBO and Trades data feeds. Rather, IDS provides connectivity to a selection of such data feeds, including the data for which IDS believes there is demand. When a market participant requests a Wireless Market Data Connection to Markham, it receives connectivity to the portions of the NYSE BBO and Trades and NYSE Arca BBO and Trades data that IDS transmits wirelessly. The customer then determines the symbols for which it will receive data. The Exchanges do not have visibility into which portion of the data feed a given customer receives. See id. at 10756.
<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Amount of Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSE Arca Integrated Feed: Wireless Connection in Secaucus access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $10,500</td>
</tr>
<tr>
<td>NYSE National Integrated Feed: Wireless Connection in Secaucus access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $5,250</td>
</tr>
<tr>
<td>NYSE Integrated Feed and NYSE Arca Integrated Feed: Wireless Connection in Secaucus access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $18,500</td>
</tr>
<tr>
<td>NYSE Integrated Feed, NYSE Arca Integrated Feed, and NYSE National Integrated Feed: Wireless Connection in Secaucus access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $21,000</td>
</tr>
<tr>
<td>NYSE BBO and Trades: Wireless Connection in Markham, Canada access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $6,500</td>
</tr>
<tr>
<td>NYSE Arca BBO and Trades: Wireless Connection in Markham, Canada access center</td>
<td>$5,000 per connection initial charge plus monthly charge per connection of $6,500</td>
</tr>
</tbody>
</table>

C. Exchanges’ Justification and Comments Received

1. Facilities of an Exchange

As noted above, the Exchanges take the position that the Wireless Fee Schedule is not a proposed rule change required to be filed with the Commission because the Wireless Bandwidth Connections and Wireless Market Data Connections (collectively, “Wireless Connections”) are not “facilities of an exchange.” In sum, they urge that the Wireless Connections are not facilities of an exchange because they are services that are not offered by the Exchanges, nor are they offered by a group of persons constituting an exchange (within the definition of “exchange” in Section 3(a)(1) of the Act), and further, that the Wireless Connections are not within the

39 See Wireless I Notice, supra note 3, at 8938-39; Wireless II Notice, supra note 8, at 10753.

40 Exchange Act Section 3(a)(1) defines the term “exchange” as: “any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally
meaning of the definition of “facility” in Section 3(a)(2) of the Act. 41

With respect to the definition of facility, the Exchanges state that the definition has four “prongs,” none of which describes the Wireless Connections. 42 First, the Exchanges take the position that the Wireless Connections are not the “premises” of the Exchanges, reasoning that the network that runs between IDS’s equipment in the Mahwah Data Center and IDS’s equipment in Third Party Data Centers, much of which is actually owned, operated, and maintained by a non-ICE entity, do not constitute “premises.” 43

Second, the Exchanges state that the Wireless Connections are not the “property” of the

41 Under Exchange Act Section 3(a)(2): “The term ‘facility’ when used with respect to an exchange includes “its premises, tangible or intangible property whether on the premises or not, any right to the use of such premises or property or any service thereof for the purpose of effecting or reporting a transaction on an exchange (including, among other things, any system of communication to or from the exchange, by ticker or otherwise, maintained by or with the consent of the exchange), and any right of the exchange to the use of any property or service.” 15 U.S.C. 78c(a)(2).

42 See Wireless I Notice, supra note 3, at 8940 (using bracketed numbers placed by the Exchanges); Wireless II Notice, supra note 8, at 10754-55 (same).

For a full recitation of the Exchanges’ analysis of why the Wireless Bandwidth Connections and Wireless Market Data Connections are not, in their view, facilities of an exchange, see Wireless I Notice, supra note 3, at 8939-41; Wireless II Notice, supra note 8, at 10754-56 (same).

43 See Wireless I Notice, supra note 3, at 8940 (also stating with respect to the Wireless Bandwidth Connections that the network does not connect to Exchange trading and execution systems); Wireless II Notice, supra note 8, at 10755. They add that the portion of the Mahwah Data Center where the “exchange” functions are performed (i.e., the SRO Systems that bring together purchasers and sellers of securities and perform with respect to securities the functions commonly performed by a stock exchange) could be construed as the “premises” of the Exchange, but the same is not true for a wireless network that is almost completely outside of the Mahwah Data Center. See id.
Exchanges because they are “services,” and the underlying network is owned by ICE affiliates and a non-ICE entity. 44 Drawing further distinctions between the Exchanges and IDS, they also state that the Wireless Connections are a service offered strictly by IDS, over which the Exchanges lack control. 45

Third, the Exchanges maintain that the Wireless Connections do not constitute “any right to the use of such premises or property or service thereof for the purpose of effecting or reporting a transaction on an exchange,” because the Exchanges do not have the right to use the Wireless Connections to effect or report a transaction on the Exchanges. 46 In support of this position, the Exchanges note that the Wireless Bandwidth Connections do not connect directly to the Exchanges’ trading and execution systems 47 and the Wireless Market Data Connections are provided without the Exchanges involvement. 48

44 See Wireless I Notice, supra note 3, at 8940; Wireless II Notice, supra note 8, at 10755. The Exchanges add that the Act does not automatically collapse affiliates into the definition of an “exchange,” and something owned by an ICE affiliate is not owned by the Exchanges. Id.

45 See Wireless I Notice, supra note 3 at 8939; Wireless II Notice, supra note 8, at 10755. The Exchanges state that although all ICE affiliates are ultimately controlled by ICE (as the indirect parent company), the Exchanges do not control IDS. See id.

46 See id.

47 See Wireless I Notice, supra note 3, at 8939-41. The Exchanges urge that these connections are not provided for “the purpose of effecting or reporting a transaction on” the Exchanges, but rather are provided to facilitate the customer’s interaction with itself—that these connections are essentially an “empty pipe” that a customer can use to communicate between its equipment in co-location and its equipment in the Third Party Data Center. Id. The Exchanges also state that they have no control over these connections, and put no content on them. Rather, customers have control over the data that flows over these connections, which may include the sending of trading orders to their equipment in co-location; the relay of Exchange market data, third party market data, and public quote feeds; as well as risk management, billing, compliance, or other market information. Id.

48 See Wireless II Notice, supra note 8, at 10755. The Exchanges state that they do not know whether or when a customer has entered into an agreement for a Wireless Market
Fourth, the Exchanges state that “any right of the exchange to the use of any property or service” does not describe the Wireless Connections because the Exchanges do not have the right to use the Wireless Connections.\textsuperscript{49}

The Commission has received several comment letters expressing opposition to the Exchanges’ position that the Wireless Bandwidth and/or Wireless Market Data Connections are not facilities of an exchange.\textsuperscript{50} Broadly, commenters express the view that the Wireless Data Connection; have no right to approve or disapprove of the provision of a Wireless Market Data Connection, any more than it would if the provider were a third party; do not put the Selected Market Data content onto the Wireless Market Data Connections or send it to customers; and do not need to consent when a customer terminates a Wireless Market Data Connection. The Exchanges further state that it is not possible to use a Wireless Market Data Connection to effect a transaction on the Exchange, because they are one-way connections away from the Mahwah Data Center; that customers cannot use them to send trading orders or information of any sort to the Exchanges; and that the Exchanges do not use them to send confirmations of trades, and that they solely carry Selected Market Data. \textit{See id.}

In addition, the Exchanges state that the statute’s parenthetical language—“(including, among other things, any system of communication to or from the exchange, by ticker or otherwise, maintained by or with the consent of the exchange)”—is not an independent prong of the facility definition, but explains the preceding text. \textit{See Wireless I Notice, supra} note 3, at 8941; \textit{Wireless II Notice, supra} note 8, at 10755. \textsuperscript{49}

\textit{See id.} \textsuperscript{50}

\textit{See} Letter from Tyler Gellasch, Executive Director, Healthy Markets to Vanessa Countryman, Secretary, Commission, dated March 9, 2020 (“Healthy Markets Letter’’); Letters from Jim Considine, Chief Financial Officer, McKay Brothers, LLC to Vanessa Countryman, Secretary, Commission, dated March 10, 2020 (“McKay Letter I’’); Letter from Thomas M. Merritt, Deputy General Counsel, Virtu Financial to Vanessa Countryman, Secretary, Commission, dated March 10, 2020 (“Virtu Letter”); Letter from Gregory Babyak, Global Head of Regulatory Affairs, Bloomberg L.P to Vanessa Countryman, Secretary, Commission, dated March 10, 2020 (“Bloomberg Letter”) (the Bloomberg Letter addresses Wireless I specifically); Letter from Andrew Stevens, General Counsel, IMC Financial Markets to Vanessa Countryman, Secretary, Commission, dated March 12, 2020 (“IMC Letter’’); Letters from Matt Haraburda, President, XR Securities LLC to Vanessa Countryman, Secretary, Commission, dated March 18, 2020 (“XRS Letter”) (the XRS Letter addresses Wireless I specifically); Letters from Jim Considine, Chief Financial Officer, McKay Brothers, LLC to Vanessa Countryman, Secretary, Commission, dated March 17, 2020 (“McKay Letter II’’); Letter
Connections are designed to provide market participants the fastest means of communication into and out of the Exchanges to facilitate more competitive trading on the Exchanges, and that the Exchanges’ analysis is one of form over substance. More specifically, one commenter states that there can be “no dispute that both the private bandwidth and market data wireless connectivity offerings constitute systems of communication 100% controlled and maintained by NYSE, for its own benefit and the benefit of its customers,” and are therefore exchange facilities.

Other commenters state that the Wireless Connections rely on the Exchanges’ premises and property to effectuate systems of communication to and from the Exchanges, and that they

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51 See e.g., Virtu Letter at 4-6 (stating that the “only purpose” of the Wireless Connections is to facilitate faster connections for more competitive trading, and “[c]ustomers paying for the Wireless Connections are clearly doing so only in order to competitively trade on the NYSE exchanges”). See also Healthy Markets Letter at 8 (stating that the Exchanges’ analysis ignores the plain meaning of the Act); McKay Letter I at 4 (characterizing the Exchanges’ facility analysis as superficial and flawed); IMC Letter at 2 (stating that “the NYSE Pole offers direct access to [the NYSE] data center and thus its matching engine for purposes of transmitting data or orders”); XRS Letter at 3 (stating that “the Wireless Connections have the fastest means of access to the Exchange[,] via the on-premises pole.”).

52 See Virtu Letter at 5. According to this commenter, the contention that (i) the Wireless Bandwidth Connections are offered without the Exchanges knowing how they are used “ignores the reality of market connectivity,” and (ii) the Exchanges’ do not have the right to use the Wireless Market Data Connections, is “nonsensical,” because the Exchanges’ have “control over the data transmission.” See id. at 7.

53 See e.g., McKay Letter I at 4-7 (stating that the Wireless Connections are facilities of the Exchanges because they use the pole located on the premises of the Exchanges, and also
are designed for the purpose of effecting transactions on the Exchanges.\textsuperscript{54} According to one of these commenters, the fact that orders and market data have to traverse a cross connect at the Mahwah Data Center before reaching the Exchanges’ trading execution systems is an insufficient basis on which to conclude the Wireless Connections are not part of the facilities of an exchange.\textsuperscript{55} This commenter expresses concern that the Exchanges are attempting to circumvent categorizing a product or service as a facility by moving ownership to a parent company or an affiliate of the Exchanges.\textsuperscript{56} Another commenter urges that the Exchanges should not be able to defeat the operation of Exchange Act filing requirements by “interpositioning” an affiliate to provide connectivity to customers instead of providing it directly.\textsuperscript{57}

intangible property in the form of technical specifications relating to the Wireless Connections, available through NYSE’s website and branded with NYSE’s trademark and logo. \textit{See also} Bloomberg Letter at 4 (noting that the Wireless Connections are physically located on the property of the Mahwah Data Center); Healthy Markets Letter at 6 (noting that the Wireless Connections have access to the Exchanges’ physical facility); IMC Letter at 2 (noting that the pole offers direct access to each Exchange’s data center for purposes of transmitting data or orders).\textsuperscript{54}

\textit{See} Bloomberg Letter at 4 (“[I]t is clear that this is a system of communication to or from the exchange for ‘effecting or reporting a transaction of the exchange.’”); McKay Letter I, at 6 (stating that “The Wireless [Bandwidth] Connections are also facilities of the Exchange under the third prong of the definition because they may be used to effect transactions on the Exchange (and report transactions or other market data disseminated from the Exchange) using Exchange Property (e.g., the NYSE Private Pole).”); IMC Letter at 2 (citing the McKay Letter I) (“The Wireless Connections are facilities of the Exchange, in that they use the Exchange’s tangible and intangible property and are used for effecting or reporting a transaction.”). \textit{See also} SIFMA Letter at 2 (opining that the Wireless Market Data Connections are akin to a “ticker’ system,” but not conceding that that these connections do not meet other parts of the definition of facility).\textsuperscript{54}

\textit{See} McKay Letter I at 6.\textsuperscript{55}

\textit{See id.} at 5 n.20.\textsuperscript{56}

\textit{See} Healthy Markets Letter at 3-8. This commenter in particular expresses concern about Wireless Connections originating from the roof of Mahwah Data Center, which as noted below, the Exchanges state is not what is proposed. \textit{See infra} note 95 and accompanying text.\textsuperscript{57}
The Exchanges submitted a response to these comment letters.\textsuperscript{58} As an initial matter, the Exchanges urge that treating the Wireless Connections as “facilities of an exchange” would place an undue competitive burden on the ICE affiliates, as they would be required to make their services and fees public and subject to a Commission determination for consistency with the Act, whereas competitors are not subject to such requirements.\textsuperscript{59} The Exchanges maintain that IDS acts independently of the Exchanges in offering the Wireless Connections, and that it is a vendor selling connectivity, just like other vendors.\textsuperscript{60} In addition to reiterating the rationale provided in the Wireless I and Wireless II Notices, the Exchanges further state that, contrary to commenters’ beliefs, they do not have a right to use the Wireless Connections to effect or report a transaction or otherwise, nor do they own the Mahwah Data Center or the pole on its grounds.\textsuperscript{61}

2. Proposed Wireless Fee Schedule

In support of the proposed Wireless Fee Schedule, the Exchanges state that the Wireless I and Wireless II proposals are reasonable, equitable, and not unfairly discriminatory because use of the Wireless Connections is voluntary and alternatives to the Wireless Connections are available.\textsuperscript{62} Addressing the competitive environment, the Exchanges state that there are at least three other vendors that offer market participants wireless network connections between the Mahwah Data Center and the Secaucus and Carteret Third Party Access Centers using wireless

\textsuperscript{58} Letter from Elizabeth K. King, Chief Regulatory Officer, ICE, General Counsel & Corporate Secretary, NYSE, to Vanessa Countryman, Secretary, Commission, dated May 8, 2020, responding to comments on Wireless I and Wireless II (“NYSE Response”).

\textsuperscript{59} See id. at 3.

\textsuperscript{60} See id. at 8-16.

\textsuperscript{61} See id. at 8-15. See also id. at 11 (“The definition of facility focuses on ownership and the right to use properties and services, not corporate relationships.”).

\textsuperscript{62} See Wireless I Notice, supra note 3, at 8943-44; Wireless II Notice, supra note 8, at 10757-59.
equipment installed on towers and buildings near the Mahwah Data Center.  

With respect to the Wireless Market Data Connections specifically, they state that other providers offer connectivity to Selected Market Data in the Third Party Data Centers, and believe that a market participant in the Carteret or Secaucus Third Party Data Center may purchase a wireless connection to the NYSE and NYSE Arca Integrated Feed data feeds from at least two other providers of wireless connectivity.  

The Exchanges believe that competing wireless connections offered by non-ICE entities provide connectivity at the “same or similar speed” as the Wireless Connections, and at the “same or similar cost.” In addition, the Exchanges state that some market participants have their own proprietary wireless networks, and that market participants may create a new proprietary wireless connection, connect through another market participant, or use fiber connections offered by the Exchanges, ICE affiliates, other service providers, and third party telecommunications providers.

The Exchanges acknowledge that the Wireless Connections traverse wireless connections through a series of towers equipped with wireless equipment, including, in the case of the Carteret and Secaucus connections, a pole on the grounds of the Mahwah Data Center, and that third party access to the pole is restricted. However, the Exchanges state that access to the pole

63 See Wireless I Notice, supra note 3, at 8942; Wireless II Notice, supra note 8, at 10757. The Exchanges acknowledge that they believe the Wireless Bandwidth Connections between the Mahwah Data Center and the Markham Third Party Data Center to be the first public, commercially available wireless connections between the two points, creating a new connectivity option for customers in Markham. See id.

64 See Wireless II Notice, supra note 8, at 10757.

65 See Wireless I Notice, supra note 3, at 8943; Wireless II Notice, supra note 8, at 10757.

66 See id.

67 See Wireless I Notice, supra note 3, at 8943; Wireless II Notice, supra note 8, at 10759. The Exchanges state that IDS does not sell rights to third parties to operate wireless connections.
is not required for third parties to establish wireless networks that can compete. The Exchanges discount the significance of the location of the pole and the restrictions on access, urging that proximity to a data center is not the only determinant of a wireless network’s speed. The Exchanges also assert that latency is not the only consideration that a market participant may have in selecting a wireless network, and that fiber network connections may sometimes be more attractive since they are more reliable and less susceptible to weather conditions.

The Exchanges state that the proposed pricing is reasonable because the services are voluntary, market participants may to select the connectivity options that best suit their needs, and the fees reflect the benefit received by customers in term of lower latency over the fiber optics options. The Exchanges believe that the proposals involve an equitable allocation of fees among market participants because such fees would apply to all market participants equally and would not apply differently to distinct types or sizes of market participants. In addition, the services are “completely voluntary,” and the various options proposed offer market

68 See id.
69 See id. According to the Exchanges, other relevant variables include the wireless equipment utilized; the route of, and number of towers or buildings in, the network; and the fiber equipment used at either end of the connection. See id.
70 See id. According to the Exchanges, other considerations may include the bandwidth of the offered connection; amount of network uptime; the equipment that the network uses; the cost of the connection; and the applicable contractual provisions. See id.
71 See Wireless I Notice, supra note 3, at 8943; Wireless II Notice, supra note 8, at 10757.
72 See Wireless I Notice, supra note 3, at 8943-44; Wireless II Notice, supra note 8, at 10757-58.
73 See Wireless I Notice, supra note 3, at 8944; Wireless II Notice, supra note 8, at 10758.
participants additional choices that they can select to best suit their needs.\textsuperscript{74}

The Exchanges also state that, because numerous substitute connectivity providers are available, the proposals do not impose an unnecessary or inappropriate burden on competition.\textsuperscript{75} According to the Exchanges, the proposals do not affect competition among national securities exchanges or between members of Exchanges, but rather that the Exchanges’ filing of the proposals puts IDS at a competitive disadvantage relative to its commercial competitors that are not subject to filing requirements of Section 19(b) of the Act.\textsuperscript{76}

Commenters disagree, arguing that the Exchanges have not met their burden of demonstrating that the Wireless Connections are consistent with the Act.\textsuperscript{77} Broadly, commenters express concern that the Wireless Connections (those to the Secaucus and Carteret Third Party Data Centers) begin and end at an antenna on the grounds of the Mahwah Data Center, whereas competing services are not allowed on the Mahwah Data Center grounds to install wireless equipment and must instead end their wireless connections outside the grounds and use a wired connection into the Mahwah Data Center.\textsuperscript{78} According to commenters, this difference means

\textsuperscript{74} See id.

\textsuperscript{75} See Wireless I Notice, supra note 3, at 8944-45; Wireless II Notice, supra note 8, at 10759.

\textsuperscript{76} See id.

\textsuperscript{77} See e.g., McKay Letter I at 7-11; Bloomberg Letter at 4-5; XRS Letter at 2-4; Healthy Markets Letter at 8-10; IMC Letter at 2; Virtu Letter at 2-3. One commenter states that the Exchanges provide “almost none” of the information needed to establish that the Wireless Connections are consistent with the Act. See Healthy Markets Letter at 10.

\textsuperscript{78} See, e.g., McKay Letter I at 8; Virtu Letter at 3; IMC Letter at 2; XRS Letter at 1-2 (all generally questioning the basis of the disparity in access in to the Mahwah Data Center pole).
that the Wireless Connections have an insurmountable exclusive geographic latency advantage enabling the fastest possible access to the Exchanges that no competing service can offer.\textsuperscript{79}

One commenter observes that “conspicuously absent” from the Exchanges’ description of the Wireless Connections is that the pole on the Mahwah Data Center grounds is “approximately 700 feet closer to the NYSE matching engine than the closest public poles available to all other wireless connectivity vendors.”\textsuperscript{80} This commenter underscores that “timely receipt of market data is essential to trading competitively in today’s markets,”\textsuperscript{81} and while it may not seem like a significant distance, “the delay of data through 700 feet of fiber is meaningful in today’s markets.”\textsuperscript{82} This commenter objects that the Exchanges have designed the Wireless Connections with a geographic latency advantage, enabling these connectivity offerings to be the fastest means of access to the Exchanges, and have not provided factual details sufficient to demonstrate why this advantage is not unfairly discriminatory and an inappropriate burden on competition.\textsuperscript{83}

Another commenter agrees that a 700 foot difference is material, and states that without details regarding (among other things) the magnitude of the latency advantage, its availability, and its impact on participants who are unable to avail themselves of the Wireless Connections, the Commission and the public will be unable to reasonably determine whether the proposed rule

\textsuperscript{79} See, e.g., McKay Letter I at 8-10; McKay Letter II at 3; Bloomberg Letter at 4; IMC Letter at 2; XRS Letter at 1-2; Virtu Letter at 8-10; FIA Letter at 3.

\textsuperscript{80} See McKay Letter I at 8-11 (also noting that its distance estimate is a good-faith, educated guess, but that additional transparency on the matter is needed). This commenter also states that distribution of Selected Market Data via the Wireless Market Data Connections is discriminatory because it is distributed in a different manner than Selected Market Data obtained otherwise than via the Wireless Connections. See McKay Letter II at 2-3.

\textsuperscript{81} Id. at 3.

\textsuperscript{82} See McKay Letter I at 8.

\textsuperscript{83} See McKay Letter I at 2, 8-12; McKay Letter II at 2-3.
changes do not unfairly discriminate against market participants or unduly burden competition. An additional commenter states that the contention that there is competition for exchange connectivity, and that other providers can offer the same or similar access and latency is “simply false.” Some commenters express concern that the latency advantage that is unavailable to competing providers unfairly discriminates against market participants that do not choose to use the Wireless Connections.

Commenters also address the proposed fees. One commenter states that IDS’s exclusive geographic latency advantage establishes a monopoly service that enables it to charge “exorbitant fees.” Another commenter states that given the exclusivity of the service, it would be difficult for the Exchanges to demonstrate how the proposed fees are fair and reasonable without providing an in-depth assessment of the costs of the service, and “more difficult” to justify how the fees are not unfairly discriminatory. One commenter states that some market participants would be forced to purchase the fastest connectivity services to meet regulatory obligations, without regard to the price of such services.

84 See IMC Letter at 2. This commenter states, “In a market where equidistant cabling is required for connections between a participant’s co-located customer equipment to the Exchange’s matching engine, NYSE’s suggestion that the 700 foot difference between the NYSE Pole and others outside the their premises is immaterial is ludicrous.” Id.

85 See Virtu Letter at 9. This commenter also contrasts exclusive access to the private pole with the Exchanges’ offering third-party firms the option to co-locate on their premises through other means. See id. at 2.

86 See FIA Letter at 2; McKay Letter I at 11; XRS Letter at 2-3.

87 See Virtu Letter at 2.

88 See Bloomberg Letter at 5 (adding that the “little to no attempt” is made to discuss the implications of the exclusive privilege afforded to IDS to operate the Wireless Connections that are on the Mahwah Data Center property).

89 See SIFMA Letter at 2-3 (addressing the Wireless Market Data Connections specifically, and stating that broker-dealers with best execution obligation may, for regulatory and
In the NYSE Response, the Exchanges maintain that the Wireless Connections are subject to competition, and state that the subject services are not new and have been provided since 2016. In their view, the fact that competition has continued to proliferate over the intervening years demonstrates that use of the pole on the Mahwah Data Center grounds is not required for third parties to compete with the Wireless Connections. Moreover, they assert that market participants have for years had a choice about what wireless services to use, “and often choose not to use IDS.” The Exchanges state that disapproval of the proposals would result in less competition by reducing the availability of wireless connections between Mahwah and Secaucus or Carteret, because service would be available from only the two remaining commercial providers or would require customers to purchase space on a proprietary data network, if available. For those customers seeking connections to Markham, Canada, the Exchanges believe that disapproval would mean that customers would be left with no wireless connectivity services.

In response to comments that the Wireless Connections are offered on terms that are unfairly discriminatory because the Exchanges possess an exclusive geographic latency advantage that competitors cannot overcome, the Exchanges state that although having the pole 700 feet closer to the facility is a “positive factor for latency,” it is just one in a list of factors that competitive reasons, feel they must purchase the fastest connectivity services to remain in business).

90 See NYSE Response at 6.
91 See id.
92 Id.
93 See id. at 2.
94 See id.
determine the network’s latency levels.\textsuperscript{95} The Exchanges also defend IDS’s choice to limit access to the Mahwah Data Center pole, noting that it is smaller than commercial poles and that space limitations, security concerns, and interference are practical factors that are a “real concern.”\textsuperscript{96} They also state that IDS does not believe that its wireless network offers the fastest commercial option, and that market participants have chosen not to use it.\textsuperscript{97}

In response to comments that they should provide additional information regarding the geographic latency advantage, the Exchanges characterize these requests as “disingenuous” because IDS cannot describe the magnitude of a geographic latency advantage it does not believe it has, and it is not privy to its competitors’ latency information.\textsuperscript{98}

III. Proceedings to Determine Whether to Approve or Disapprove the Proposed Rule Changes

The Commission is instituting proceedings pursuant to Section 19(b)(2)(B) of the Act to determine whether the Exchanges’ proposed rule changes should be approved or disapproved.\textsuperscript{99} Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, the Commission seeks and encourages interested persons to provide additional comment on the proposed rule changes (Wireless I and

\textsuperscript{95} See id. at 6. The Exchanges note that contrary to the suggestion of several commenters, the Wireless Connections do not use the Mahwah Data Center roof, nor does IDS expect to put any equipment on the roof for any services it offers or allow others to do so. See id. at 5.

\textsuperscript{96} See id. at 7.

\textsuperscript{97} See id. at 5, 13. The Exchanges represent that there are 11 current customers with Wireless Bandwidth Connections and 11 current customers with Wireless Market Data Connections. See id. at 2.

\textsuperscript{98} See id. at 17, 18-19.

Wireless II) to inform the Commission’s analysis of whether to approve or disapprove the proposed rule changes.

Pursuant to Section 19(b)(2)(B) of the Act, the Commission is providing notice of the grounds for possible disapproval under consideration:

- Whether the Exchanges have demonstrated how the proposals are consistent with Section 6(b)(4) of the Act, 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;”

- Whether the Exchanges have demonstrated how the proposals are consistent with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national securities exchange be “designed to perfect the operation of a free and open market and a national market system” and “protect investors and the public interest,” and not be “designed to permit unfair discrimination between customers, issuers, brokers, or dealers;” and

- Whether the Exchanges have demonstrated how the proposals are consistent with Section 6(b)(8) of the Act, which requires that the rules of a national securities

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100  Id.  Section 19(b)(2)(B) of the Act also provides that proceedings to determine whether to disapprove a proposed rule change must be concluded within 180 days of the date of publication of notice of the filing of the proposed rule change. See id.  The time for conclusion of the proceedings may be extended for up to 60 days if the Commission finds good cause for such extension and publishes its reasons for so finding, or if the exchange consents to the longer period. See id.


exchange “not impose any burden on competition not necessary or appropriate in furtherance of the purposes of [the Act].”  

As discussed in Section II above, the Exchanges made various arguments in support of the Wireless I and Wireless II proposals and the Commission received comment letters that expressed concerns regarding the proposals, including that the Exchanges did not provide sufficient information to establish that the proposals are consistent with the Act and the rules thereunder.

Under the Commission’s Rules of Practice, the “burden to demonstrate that a proposed rule change is consistent with the Exchange Act and the rules and regulations issued thereunder is on the self-regulatory organization [‘SRO’] that proposed the rule change.”  The description of a proposed rule change, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding. Any failure of an SRO to provide this information may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Act and the applicable rules and regulations.

The Commission is instituting proceedings to allow for additional consideration and comment on the issues raised herein, including as to whether the proposals are consistent with the Act, specifically, with its requirements that the rules of a national securities exchange provide for the equitable allocation of reasonable dues, fees, and other charges among its members.

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104 17 CFR 201.700(b)(3).
105 See id.
106 See id.
issuers, and other persons using its facilities; are designed to perfect the operation of a free and open market and a national market system, and to protect investors and the public interest; are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers; and do not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act;\textsuperscript{107} as well as any other provision of the Act, or the rules and regulations thereunder.

IV. Commission’s Solicitation of Comments

The Commission requests written views, data, and arguments with respect to the concerns identified above as well as any other relevant concerns. Such comments should be submitted by [insert date 21 days from date of publication in the Federal Register]. Rebuttal comments should be submitted by [insert date 35 days from date of publication in the Federal Register]. Although there do not appear to be any issues relevant to approval or disapproval that would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 19b–4, any request for an opportunity to make an oral presentation.\textsuperscript{108}

The Commission asks that commenters address the sufficiency and merit of the Exchanges’ statements in support of the proposal, in addition to any other comments they may wish to submit about the proposed rule change.

\textsuperscript{107} See 15 U.S.C. 78f(b)(4), (5), and (8).

Interested persons are invited to submit written data, views, and arguments concerning the proposed rule changes, including whether the Wireless I and Wireless II proposals are 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

**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 Nos. SR-NYSE-2020-05, SR-NYSEAMER-2020-05, SR-NYSEArca-2020-08, SR-NYSECHX-2020-02, SR-NYSENAT-2020-03, SR-NYSE-2020-11, SR-NYSEAMER-2020-10, SR-NYSEArca-2020-15, SR-NYSECHX-2020-05, and SR-NYSENAT-2020-08. The file numbers 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 also will be available for inspection and copying at the principal office of the Exchanges. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make publicly available. All submissions should refer

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.109

J. Matthew DeLesDernier,
Assistant Secretary.

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