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November 8, 2019

**Via Email & FedEx**

Ms. Vanessa Countryman  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street NE  
Washington, D.C. 20549

Re: Securities Exchange Act Release Nos. 86865 (September 4, 2019) (SR-NYSE-2019-46); 86868 (September 4, 2019) (SR-NYSEArca-2019-61); 86867 (September 4, 2019) (SR-NYSEAmer-2019-34); and 86869 (September 4, 2019) (SR-NYSENAT-2019-19) (collectively, “NMS Network Filings”).

Dear Ms. Countryman:

NYSE Group, Inc. (“NYSE”) submits this comment letter on behalf of the New York Stock Exchange LLC, NYSE Arca, Inc., NYSE American LLC, and NYSE National, Inc. (together, the “NYSE Exchanges”) to respond to a comment letter submitted by the Nasdaq Stock Market LLC (“Nasdaq”)<sup>1</sup> objecting to the NMS Network Filings.

For the reasons set forth below and in the NMS Network Filings, NYSE respectfully requests that the Commission approve the NMS Network Filings before November 25, 2019 so that the enhancements to SIAC performance as described in those filings can be implemented without delay.

**Overview of the NMS Network Filings**

NYSE’s wholly-owned subsidiary, the Securities Industry Automation Corporation (“SIAC”), is the exclusive securities information processor (“SIP”) for the Consolidated Tape Association and Consolidated Quotation System (together, “CTA”) and Options Price Reporting Authority (“OPRA”).<sup>2</sup> Currently, Users of the co-location services offered by the NYSE Exchanges can connect to the CTA and OPRA data streams (the “NMS Feeds”) at no extra cost when they purchase a connection to either of the local area

<sup>1</sup> See Letter from John Yetter, Vice President and Senior Deputy General Counsel, Nasdaq, to Ms. Vanessa Countryman, Secretary, Securities and Exchange Commission, dated October 24, 2019, available here: <https://www.sec.gov/comments/sr-nyse-2019-46/srnyses201946-6332253-195114.pdf> (the “Nasdaq Letter”).

<sup>2</sup> The CTA Plan is available here: <https://www.nyse.com/publicdocs/ctaplan/notifications/trader-update/CTA%20Plan%20-Composite%20as%20of%20August%202018.pdf>. The CQ Plan is available here: [https://www.nyse.com/publicdocs/ctaplan/notifications/trader-update/CQ\\_Plan\\_Composite\\_as\\_of\\_July\\_9\\_2018.pdf](https://www.nyse.com/publicdocs/ctaplan/notifications/trader-update/CQ_Plan_Composite_as_of_July_9_2018.pdf). The OPRA Plan is available here: [https://uploads-ssl.webflow.com/5ba40927ac854d8c97bc92d7/5bf419a6b7c4f5085340f9af\\_opra\\_plan.pdf](https://uploads-ssl.webflow.com/5ba40927ac854d8c97bc92d7/5bf419a6b7c4f5085340f9af_opra_plan.pdf).

networks in co-location.<sup>3</sup> The NMS Network Filings do not make any changes to the availability of this connectivity to the NMS Feeds for Users or the fees for this connectivity alternative<sup>4</sup> and all Users of this current connectivity alternative may, if they choose, continue to receive NMS Feeds in this manner. The NMS Network Filings propose another network to connect to NMS Feeds, but do not require any market participant to use this alternate network.

The NMS network has been designed to enhance the SIP by proposing to provide a dedicated, alternate, low-latency network to connect to the NMS Feeds in the Mahwah data center. As noted in the NMS Network Filings, NYSE anticipates that this network would have a one-way reduction in latency to access the NMS Feeds of over 140 microseconds as compared to the current connection options. The proposed NMS network is just one of the changes that NYSE is proposing to enhance SIAC's performance as the SIP.

As described in the NMS Network Filings, Users that already purchase either an LCN or IP network connection and use it to connect to the NMS Feeds would have the option to instead connect to the NMS Feeds via the NMS network connection at no additional cost, subject to limitations described in the NMS Network Filings.<sup>5</sup> A User would also be able to purchase an NMS network connection individually and would not need to also purchase an LCN or IP network connection. For example, a Hosting User without connectivity to the LCN or IP network could purchase individual NMS network connections and provide connectivity to the NMS Feeds to its Hosted Customers using such low-latency NMS network connections. The fees that a Hosting User would then charge its Hosted Customers for such connectivity are neither regulated nor transparent.

For over a year, NYSE has been discussing the proposed NMS network with the CTA Operating Committee, which is comprised of representatives of all Participants of the CTA (including Nasdaq), members of the CTA Advisory Committee, which is comprised of non-exchange representatives from the industry, and the OPRA Management Committee, which is comprised of representatives of all members of OPRA (including Nasdaq).

At the February 2019 quarterly meetings of the CTA Operating Committee and OPRA Management Committee, NYSE sought and received approval from both the CTA Operating Committee and OPRA Management Committee to proceed with building the

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<sup>3</sup> Capitalized terms in this letter have the same meaning as in the NMS Network Filing.

<sup>4</sup> Because exchanges vigorously compete with other execution venues for both transaction and executions services and related market data products, NYSE believes that the fees an exchange charges to access its services are constrained by competition. Because SIAC, as an affiliated entity, is also the SIP, NYSE has leveraged those existing connections to provide connectivity to the SIP for that same fee. This has historically kept connectivity costs low for direct SIP data recipients, which benefits investors and the public.

<sup>5</sup> Specifically, as proposed, a User and its Affiliates together would be eligible for up to eight free connections to the NMS network if a User already purchases an LCN or IP network connection (each a "No Fee NMS Network Connection") and meets the additional requirements set forth in the NMS Network Filings.

NMS network. At that time, NYSE advised the Committees that it would fund the capital and operational expenses to build the NMS network and disclosed those costs, which are also described in the NMS Network Filings. NYSE also advised that it would not charge direct SIP data recipients for the NMS network if such customers already purchase connectivity to the NYSE and use such ports to connect to the NMS Feeds. NYSE further advised that it anticipated that the NMS network would be available in the fourth quarter of 2019. NYSE also shared the specific details of the NMS Network Filings with members of CTA's advisory committee. Based on the approval of the CTA Operating Committee and OPRA Management Committee, NYSE proceeded with the development efforts to build the NMS network, which included incurring nearly \$4 million in capital expenses.<sup>6</sup>

*Summary of the Nasdaq Letter*

On October 24, 2019, one day before the Commission's first action date on the NMS Network Filings, Nasdaq submitted its comment letter. In its letter, Nasdaq argues that NYSE should expand its analysis to address what Nasdaq believes are anti-competitive effects of the proposal. First, Nasdaq claims that the proposal creates a burden on inter-market competition because the proposed pricing hinders potential providers from competing to serve as a SIP. Second, Nasdaq complains that Users would not be able to purchase the NMS network connection individually, and that this would also hinder competition. Finally, Nasdaq claims that the proposal burdens inter-market competition because other self-regulatory organizations are unable to include pricing for the NMS feeds together with pricing to connect to their trading venues.

*The NMS Network Filings are Consistent with Section 6(b)(8) of the Exchange Act*

Section (6)(b)(8) of the Securities Exchange Act of 1934 ("Exchange Act")<sup>7</sup> provides that a rule of an exchange should not impose any burden on competition *that is not necessary or appropriate* in furtherance of the purposes of the Exchange Act. Accordingly, the applicable statutory standard contemplates that a proposed rule change can impose a burden on competition, but that such burden must be necessary or appropriate in furtherance of the purposes of the Exchange Act.

As set forth in detail in the NMS Network Filings, the NYSE Exchanges do not believe that the proposal is designed to address any competitive issues contemplated by the Exchange Act. Rather, the proposal would facilitate enhancements to how SIAC performs its functions as the exclusive SIP for CTA and OPRA by providing an alternate, dedicated, low-latency network for Users to connect to the NMS Feeds. Users can already purchase a port that provides connectivity to the NMS Feeds. The NMS Network Filings do not propose any changes to this type of connectivity to the NMS Feeds. The proposal would allow such Users to opt to use the NMS network in lieu of their existing connections to connect to the NMS Feeds, typically at no additional cost. The proposal would also permit a User to opt to purchase an NMS network connection

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<sup>6</sup> Nasdaq, in its role as a member of the CTA Operating Committee and OPRA Management Committee, did not raise objections to NYSE's proposal to fund and enhance SIAC performance at these meetings.

<sup>7</sup> 15 U.S.C. 78f(b)(8).

directly. In either case, NYSE anticipates that the NMS network would deliver performance enhancements over current connection network paths by reducing one-way latency by over 140 microseconds. NYSE believes that implementing such widely-endorsed enhancements to the SIP at no additional cost to Users promotes the protection of investors and the public interest and outweighs any purported concerns that Nasdaq has identified regarding burden on competition.

*1. The NMS Network Filings Do Not Impose a Burden on Inter-Market Competition*

Contrary to Nasdaq's first assertion, the NMS Network Filings do not raise inter-market competition concerns. Inter-market competition refers to competition for services between or among more than one market, which means that it must be feasible for there to be at least two markets providing such services at the same time. But that is not how SIPs function. As provided for under the Regulation NMS Plans governing consolidated market data, there is an *exclusive* SIP that functions to collect, consolidate, and disseminate last-sale and quotation information for each of the equities and options NMS Plans. In other words, it is legally impossible for there ever to be more than one entity providing services as a SIP for an NMS Plan at the same time. Therefore, there is no inter-market competition with respect to SIPs.

What Nasdaq is referring to as "inter-market" competition is in fact the limited circumstances when there is a bidding process to replace who will function as the exclusive SIP for an NMS Plan. This commercial competition through the bidding process to be a SIP provider is not inter-market competition as contemplated by the Exchange Act. Determining the entity that serves as the SIP is governed by each respective NMS Plan.<sup>8</sup> It is therefore the participants or members of each NMS Plan, which are the registered exchanges and, for the equities NMS Plans, FINRA, that would determine whether to replace a SIP, and if so, determine which entity should become the SIP. The Commission does not approve the entity that serves as the SIP to collect, consolidate and disseminate last-sale and quotation information for an NMS Plan as a rule of an exchange and thus Section 6(b)(8) of the Exchange Act does not directly apply to this decision.<sup>9</sup>

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<sup>8</sup> As noted above, SIAC is the SIP for the CTA and OPRA NMS Plans. Nasdaq is the SIP for the NMS Plan for Nasdaq-listed securities (the "UTP NMS Plan"). To replace SIAC as the SIP for the CTA NMS Plans would require unanimous agreement among the Participants of the Operating Committee and an amendment filed with the SEC. The OPRA NMS Plan requires an affirmative vote of 75% of its members to enter into a contract with an entity to be the OPRA SIP. The UTP NMS Plan requires the affirmative vote of two-thirds of the Participants entitled to vote to select a new processor.

<sup>9</sup> If an NMS Plan chooses to open a bidding process to replace its exclusive SIP, whether an entity -- including an exchange -- chooses to bid to is a commercial decision. And how, and how much, a bidder chooses to charge for connectivity to its SIP would be part of its proposed bid. From NYSE's perspective as a participant of CTA and the UTP NMS Plan and a member of OPRA, the overall costs to the industry to switch a processor are important factors to consider in which bidder to select (whether it is to replace SIAC or Nasdaq). If a bidder offers *materially* superior technology compared to other bidders, it may be in the public interest to select that bidder even if it proposes connectivity costs that are higher to data recipients than the current processor. On the other hand, if the technology offered by a bidder is either on par with, or only marginally better than another

*2. Nasdaq Is Incorrect that Users Cannot Purchase NMS Network Connections Without Also Purchasing Connections to NYSE's Trading Venues*

Second, Nasdaq contends that Users would not be able to purchase the NMS network connection without also purchasing connections to NYSE's proprietary market data feeds and that this would also hinder competition. Nasdaq's contention is baseless. The NMS Network Filings explain clearly that a User would be able to purchase a stand-alone NMS network connection and would not need to purchase an IP network or LCN connection to access NYSE Exchange services to connect to the NMS network. Accordingly, this premise on which Nasdaq bases its complaint that the NYSE Exchanges' proposed pricing would hinder competition does not exist.

*3. There is Competition to Provide Connectivity Services to the NMS Feeds in the Mahwah Data Center*

Nasdaq's final assertion that inter-market competition is burdened because other self-regulatory organizations would be unable to couple connectivity to their trading venues together with pricing for connectivity to the NMS Feeds is also unfounded. Because SIAC functions as the exclusive SIP for CTA and OPRA, there is no competition for services among self-regulatory organizations to provide direct connectivity to SIAC. Nasdaq's premise for concern of impact on competition is thus unfounded.

But there is competition to provide connectivity to the NMS Feeds in the Mahwah data center. As noted above, Hosting Users could purchase NMS network connections and then sell connectivity to the NMS Feeds to Hosted Customers. Hosting Users already provide such services with respect to the LCN and IP network in competition with the NYSE Exchanges' co-location services. Indeed, the NYSE Exchanges believe Hosting Users often provide services at fee discounts. NYSE has limited insight into what fees are charged by Hosting Users because they are neither regulated nor transparent. But the point is, there is competition for connectivity services to access SIAC and the NMS Network Filings do not change that.

*4. The Only Way to Address Nasdaq's Concerns About Competition Would Be to Increase Fees*

The only way to address the purported burdens on competition Nasdaq asserts would be to require the NYSE Exchanges to *increase* the fees that they propose to charge for connectivity to the NMS Feeds. That way, if a competitor wanted to replace SIAC, that bidder could justify its commercial determination to charge for connectivity by arguing that data recipients would no longer need to pay for separate connectivity costs to NYSE, and instead would pay those fees to the replacement processor. Of course, to achieve this sought-after parity in competition to be a processor, the overall industry costs would need to increase so that there could be a stand-alone SIP connectivity revenue stream that could transfer to the replacement processor. NYSE believes this trade-off would be a perverse result that benefits neither investors nor the public.

NYSE notes that when Nasdaq attempted to increase costs to connect to its SIP, its proposal was met with significant resistance. In 2016, Nasdaq made a *commercial* decision to segregate connections to what Nasdaq refers to as “third-party feeds,” which includes connectivity to the SIP that Nasdaq operates, from its connections to Nasdaq’s exchange and charge separate fees for the new third-party connections.<sup>10</sup>

Multiple commenters noted that Nasdaq’s new approach would increase costs to recipients of the UTP NMS Plan data while at the same time benefiting Nasdaq with a new revenue stream. One commenter highlighted the benefits of the prior Nasdaq framework to SIP data recipients (which was the same as the current NYSE model): “By leveraging a single physical connection for access to both Nasdaq and UTP services, firms can save on the total cost of access, which is a worthwhile benefit to direct UTP data recipients.”<sup>11</sup> That commenter further noted that Nasdaq’s ability to leverage existing connectivity was a factor in the process to select Nasdaq as the SIP for the UTP NMS Plans.<sup>12</sup>

Ultimately, Nasdaq revised its proposal. As finally approved, UTP NMS Plan customers connecting to Nasdaq’s new third-party connections could receive the first two connections free of charge if such connections were used solely to receive the UTP NMS Plan data feeds, and any additional UTP-only connectivity beyond the two free connections would be charged at only \$100/month.<sup>13</sup>

NYSE believes that Nasdaq’s experience established an important principle for how an exchange that operates a SIP should charge for connectivity to that SIP. Namely, if an exchange is also a SIP and offers a network that connects only to SIP data, that exchange should leverage the fees it charges to connect to its own exchanges in order to keep costs down for providing connectivity to the SIP. Nasdaq achieved this by amending its proposal to provide two free ports and then charging nominal fees for connectivity to a third-party network that connects only to the UTP NMS Plan data stream.

NYSE has applied the same principle to its proposed pricing for the NMS network. Similar to Nasdaq’s structure, the proposed NMS network provides connectivity only to SIP data. But unlike Nasdaq, NYSE is not proposing that current Users receiving NMS

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<sup>10</sup> See Securities Exchange Act Release No. 78713 (August 29, 2016), 81 FR 60768 (September 2, 2016) (SR-Nasdaq-2016-120) (Original Notice of filing) (the “Nasdaq Proposal”). When Nasdaq proposed to segregate its services and fees for third-party connectivity, it did not propose to lower any of its existing exchange connectivity fees, even though those connections could no longer be used to connect to the UTP NMS Plan data.

<sup>11</sup> See Letter from Eric Swanson, EVP, General Counsel and Secretary, Bats Global Markets, Inc. to Mr. Brent J. Fields, Secretary, U.S. Securities and Exchange Commission, dated October 12, 2016, available here: <https://www.sec.gov/comments/sr-nasdaq-2016-120/nasdaq2016120.shtml>.

<sup>12</sup> Id.

<sup>13</sup> See Securities Exchange Act Release No. 80558 (April 28, 2017),(SR-NASDAQ-2016-120) (Approval Order).

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Feeds must use the NMS network. The NMS Feeds will continue to be available over existing connections and the NYSE Exchanges are not proposing any changes to those fees. The sole purpose of the NMS Network Filings is to establish the basis for connecting to the NMS Feeds via the standalone, high-performance network that the industry and the Operating Committee and its advisors demanded. Users would be able to opt to use the proposed low-latency NMS network to connect to the NMS Feeds in lieu of using their existing connections, but they do not have to.

Applying the principle established in the amended Nasdaq Proposal, the NYSE Exchanges have proposed pricing for the NMS network that, based on NYSE's analysis, should not result in any current Users incurring higher fees if they choose to connect to the NMS network than they currently pay. As set forth in the NMS Network Filings, NYSE believes that all current Users would be able to meet their connectivity needs with the proposed No Fee NMS Network Connections.

When providing a network that connects exclusively to the SIP, NYSE believes that keeping costs low for data recipients should be the prevailing principle. If an exchange that also operates a SIP can achieve this goal by leveraging the existing fees it charges for connectivity to its exchanges, that benefits SIP data recipients. Further, NYSE believes that the benefit of providing enhancements to the SIP at no additional cost to Users that already connect to the NMS Feeds outweighs any concerns about how an alternate bidder would make its commercial decision to replace the SIP, and specifically, how it would charge for connectivity. Accordingly, NYSE believes that the NMS Network Filings are consistent with Section 6(b)(8) of the Exchange Act because they do not impose any burden on competition that is not necessary or appropriate in furtherance of keeping connectivity costs low for SIP data recipients.

*Commission Approval of the NMS Network Filings Would Allow Enhancements to SIAC That Would Benefit Investors and the Public*

As noted above, NYSE has been discussing the NMS network and the performance enhancements it would provide with members of both the Operating Committee and Advisory Committee of the CTA and the Management Committee of OPRA for well over a year.

Separately, SIAC has been working with the participants of the CTA and members of OPRA to set up testing for the new NMS network. Subject to Commission approval, there will be a two-phase implementation for the NMS network. Because exchanges are responsible for inputting data to the SIPs, the NMS network will first be available to participants of the CTA and members of OPRA. SIAC has scheduled test dates in November 2019 for exchanges, and based on that testing schedule, the new NMS network will be available in production for exchanges on November 25, 2019. Subject to Commission approval and successful testing, NYSE anticipates the NMS network will be available in production for all other SIP data recipients in the first quarter of 2020.

Because NYSE cannot offer the NMS network as a service in its co-location facilities until the NMS Network Filing is approved, any delay in that approval puts this schedule in jeopardy, which means that SIAC will be prevented from implementing performance enhancements.

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NYSE therefore respectfully requests that the Commission approve the filing before November 25, 2019 so that the NMS network can be implemented without any delay.

Respectfully submitted,

A handwritten signature in blue ink that reads "Elizabeth K. King".

Elizabeth K. King

cc: Honorable Jay Clayton, Chairman  
Honorable Robert J. Jackson, Jr., Commissioner  
Honorable Hester M. Peirce, Commissioner  
Honorable Elad L. Roisman, Commissioner  
Honorable Allison Herren Lee, Commissioner  
Brett Redfearn, Director, Division of Trading and Markets