March 28, 2023

By Electronic Submission

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

Re: SEC Proposal on Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders (Release No. 34-96494), 87 FR 80266 (December 29, 2022) (No. S7-30-22) (the "Proposal")

Dear Ms. Countryman:

On behalf of the Participants of the CTA Plan (the "CTA Plan"), the Restated CQ Plan (the "CQ Plan"), and 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," together with the CTA Plan and the CQ Plan, the "Plans"), the Operating Committees of the Plans ("Operating Committee") appreciate the opportunity to comment on the Proposal.¹

The Operating Committee is submitting this comment letter to provide the Securities and Exchange Commission (the "SEC" or "Commission") and the public with additional information regarding its initial review and analysis of the Commission's proposed timeline for the securities information processors ("SIPs") to implement changes specified in the Proposal. As discussed below, based on feedback from the SIPs, the Operating Committee does not believe implementing all of the proposed changes can be accomplished in the 90-day implementation period proposed by the Commission. Due to a number of factors, including, but not limited to, the time needed for system design, procure necessary equipment, and accommodate industry testing, the SIPs have indicated that it will likely take more than 12 months to implement.

The Operating Committee hopes that the information provided in this letter is helpful to the Commission as it assesses the Proposal and associated timelines. However, given the complexity and interrelated components of the Proposal and impact on implementation steps, the Operating Committee believes further dialogue with SEC staff would be beneficial to facilitate a more in-depth discussion of the implementation steps and timeline necessary to establish a reasonable implementation period for any changes contemplated by a final rule.

Overview

As contemplated by the Proposal, the following changes would need to be implemented within 90 days after the Federal Register publication of a final rule: (1) dissemination of odd-lot quotation information, including a best odd-lot order to buy and a best odd-lot order to sell ("BOLO") for each security; (2) dissemination of new regulatory indicators of the applicable round lot size and applicable minimum pricing increment for each security; and (3)

¹ IEX agrees that further discussion between Participants and SEC staff would be needed in regard to the timeline for implementing the proposed changes if adopted but does not join in the submission of this letter.

implementation the new round lot definition, including representing quotation sizes in terms of the number of shares, rounded down to the nearest multiple of the applicable round lot.

In March 2022, the Operating Committee solicited comments on a proposal to include top-of-book odd-lot quotations on the SIPs (the "2022 Odd Lots Proposal"), i.e., similar to the BOLO, without including information about additional odd lot quotes within the national best bid and offer ("NBBO").² Working off of finalized design requirements, the SIPs estimated that the work described in that 2022 Odd Lots Proposal could be completed in a 10-12 month time frame. Given the significant additional work required by the Proposal, implementing all changes would take significantly longer than estimated for the 2022 Odd Lots Proposal.

Process for Implementing SIP Technology Changes

There are multiple steps to the system development life cycle for SIPs. While the timing of each phase of the life cycle can vary depending on the scope of a project, these steps must be completed before implementing any technology changes, particularly when new message types are introduced:

- The SIPs need detailed written requirements. This is an iterative process as identifying requirements can raise new issues that impact delivery time frames and data recipients.
 - O While here, the Proposal describes at a high level that (1) odd-lot information needs to be collected, consolidated and disseminated by the SIPs, including calculating the BOLO, (2) there will be new regulatory indicators for round lot size and tick size, and (3) quotes need to be disseminated in shares rounded down to the round lot, it does not specify *how* the SIPs would implement these changes.
 - How those questions are resolved could have meaningful differences to implementation time frames. Examples of open questions include:
 - Whether to deliver odd-lot information via existing multicast channels or creating a separate channel.
 - What quote conditions would need to be included with odd-lot information.
 - Whether the exchanges or the SIPs would be expected to round down to the applicable round lot size.
- *Time to Delivery Estimates*. Once design elements are finalized, the SIPs can develop a time estimate to implement the necessary changes. Various factors impact time-to-deliver estimates, including:
 - Assessing system and network capacity as well as data center space and power needs, which are based on capacity projections provided by Participants.
 - Factoring in any time delays for hardware delivery, expansion of network capabilities, and power to support expanded SIP capacity requirements. The SIPs

See Proposal of the CTA and UTP Operating Committees Regarding Odd Lots on the SIPs, March 2022, available here:

 $[\]underline{https://www.ctaplan.com/publicdocs/ctaplan/CTA_Odd_Lots_Proposal_2022.pdf} \ and \ here: \\ \underline{https://www.utpplan.com/DOC/Odd_Lots_Proposal.pdf}.$

- have advised that there are currently significant delays and lead times (e.g., up to a year or more) associated with acquiring the type of hardware, network capabilities, and power needed to support expanded SIP capacity requirements.
- Estimating the time necessary to code for these changes and to conduct both internal and external testing.
- o Factoring in any additional work they would be expected to make during the same time frame. For example, the SIPs have been asked to assess potential changes to report transactions in fractional share quantities and providing connectivity and capacity changes to accommodate new exchanges/ADF.
- Cost estimates. Once detailed requirements are understood, the SIPs can also estimate the cost to implement the changes. Based on preliminary understandings of capacity increases that would be needed, it is likely that the SIPs would need to order new hardware and procure more space and power in their respective data centers. As noted, currently long lead times are sometimes needed to procure such hardware.
- *Implementation Process*. Once detailed requirements and timeline estimates are finalized, the SIPs can proceed to the next stages of the development life cycle.
 - o Coding for software changes.
 - o Internal testing of any software changes.
 - O Drafting updated input and output specifications for both the Participants and data recipients. Specifications must be published by SIPs so both exchanges and recipients can perform the technological work necessary to either deliver or receive data messages from the SIPs.
 - o *Input testing*. Once both exchanges and the SIPs have completed their respective tasks (including that the delivery, installation, and configuration of hardware has been completed), the SIPs can begin testing input of data from the exchanges.
 - Output testing. The SIPs follow SIFMA best practices, which require at least 120 days prior notice for introducing new message types between announcement and implementation. In addition, before introducing new message types, the SIPs hold multiple Saturday tests that include functional, non-functional (e.g., failure/recovery), and performance testing (capacity/latency) plus a confidence test, before going live.

Conclusion

The Operating Committee thanks the Commission in advance for consideration of this comment letter. The Operating Committee believes that providing additional transparency regarding the process for making SIP technology changes will provide both the Commission and other interested parties with information necessary to determine how to proceed with the Proposal.

For the reasons discussed above based on review and analysis provided by the SIPs, the Operating Committee does not believe the proposed 90-day time frame can be achieved, and because of a number of factors, including, but not limited to, the time needed for system design, procure necessary equipment, and accommodate industry testing, the timeframe for the SIPs to implement will likely take more than 12 months. The Operating Committee welcomes further

dialogue with the Commission on these issues to assess the appropriate timeframe for implementing any changes contemplated by a final rule.

Respectfully submitted,

Robert Books

Chair of the Operating Committee

cc: Honorable Gary Gensler, Chair

Honorable Hester M. Peirce, Commissioner

Honorable Caroline A. Crenshaw, Commissioner

Honorable Mark T. Uyeda Honorable Jaime Lizárraga

Haoxiang Zhu, Director of the Division of Trading and Markets