SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-86901; File No. S7-13-19]

RIN 3235-AM60

Proposed Amendments to the National Market System Plan Governing the Consolidated Audit Trail

AGENCY: Securities and Exchange Commission.

ACTION: Proposed amendments to national market system plan.

SUMMARY: The Securities and Exchange Commission ("Commission" or "SEC") is proposing amendments to the National Market System Plan Governing the Consolidated Audit Trail ("CAT NMS Plan"). The proposed amendments impose public transparency requirements on the self-regulatory organizations that are participants to the CAT NMS Plan (each, a "Participant" and collectively, the "Participants"). The Participants would be required to file with the Commission and publish a complete implementation plan for the Consolidated Audit Trail ("CAT") and quarterly progress reports, each of which must be approved by a supermajority vote of the Operating Committee of CAT NMS, LLC. The proposed amendments also establish financial accountability provisions.

DATES: Comments should be received on or before October 28, 2019.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (http://www.sec.gov/rules/proposed.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File No. S7-13-19 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 No. S7-13-19. This file number should be included on the subject line if e-mail is used. To help us process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (http://www.sec.gov/rules/proposed.shtml). Comments are also available for Web site 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. All comments received will be posted without change. Persons submitting comments are cautioned that the Commission does not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly.

Studies, memoranda, or other substantive items may be added by the Commission or staff to the comment file during this rulemaking. A notification of the inclusion in the comment file of any such materials will be made available on the Commission's website. To ensure direct electronic receipt of such notifications, sign up through the "Stay Connected" option at www.sec.gov to receive notifications by email.

FOR FURTHER INFORMATION CONTACT: Erika Berg, Special Counsel, at (202) 551-5925; Leigh Duffy, Special Counsel, at (202) 551-5928; or Susan Poklemba, Attorney-Advisor, at (202) 551-3360, Division of Trading and Markets, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-7010.

SUPPLEMENTARY INFORMATION: The Commission is proposing amendments to the CAT NMS Plan.[1]

[1] See Securities Exchange Act Release No. 78318 (November 15, 2016), 81 FR 84696 (November 23, 2016), at 84943.

TABLE OF CONTENTS

I. Background

In July 2012, the Commission adopted Rule 613 of Regulation NMS, which requires the national securities exchanges and national securities associations ("self-regulatory organizations") to jointly develop and submit to the Commission a national market system plan to create, implement and maintain a consolidated audit trail ("CAT").[2] Back then, and even today, trading data was and is inconsistent across the self-regulatory organizations and certain market activity is difficult to compile because it is not aggregated in one, directly accessible consolidated audit trail system. The goal of Rule 613 was to create a system that provides regulators with more timely access to a sufficiently comprehensive set of trading data, enabling regulators to more efficiently and effectively reconstruct market events, monitor market behavior, and identify and investigate misconduct. Rule 613 thus aims to modernize a reporting infrastructure to oversee the trading activity generated across numerous markets in today's national market system.

On November 15, 2016, the Commission approved the national market system plan required by Rule 613 ("CAT NMS Plan" or "Plan") that was submitted by the self-regulatory organizations (the "Participants").[3] In the CAT NMS Plan,[4] the Participants described the

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2 See Securities Exchange Act Release No. 67457 (July 18, 2012), 77 FR 45722 (August 1, 2012) ("Rule 613 Adopting Release").

3 The National Market System Plan Governing the Consolidated Audit Trail was filed with the Commission by the Participants who include BATS Exchange, Inc. (n/k/a Cboe BZX Exchange, Inc.), BATS-Y Exchange, Inc. (n/k/a Cboe BYX Exchange, Inc.), BOX Options Exchange LLC, C2 Options Exchange, Incorporated (n/k/a Cboe C2 Exchange, Inc.), Chicago Board Options Exchange, Incorporated (n/k/a Cboe Exchange, Inc.), Chicago Stock Exchange, Inc. (n/k/a NYSE Chicago, Inc.), EDGA Exchange, Inc. (n/k/a Cboe EDGA Exchange, Inc.), EDGX Exchange, Inc. (n/k/a Cboe EDGX Exchange, Inc.), Financial Industry Regulatory Authority, Inc. ("FINRA"), International Securities Exchange, LLC (n/k/a NASDAQ ISE, LLC), ISE Gemini, LLC (n/k/a NASDAQ GEMX, LLC), Miami International Securities Exchange LLC, NASDAQ OMX BX, Inc. (n/k/a

numerous elements they proposed to include in the CAT, including (1) requirements for the plan processor responsible for building, operating and maintaining the Central Repository ("Plan Processor"),[5] (2) requirements for the creation and functioning of the Central Repository, (3) requirements applicable to the reporting of CAT Data[6] by Participants and their members ("Industry Members"),[7] (4) requirements relating to the security and confidentiality of CAT Data, (5) governance principles for CAT NMS LLC ("Company"),[8] and (6) provisions for the

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NASDAQ BX, Inc.), NASDAQ OMX PHLX LLC (n/k/a NASDAQ PHLX LLC), The NASDAQ Stock Market LLC, National Stock Exchange, Inc. (n/k/a NYSE National, Inc.), New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc.

4 See Securities Exchange Act Release No. 78318 (November 15, 2016), 81 FR 84696, (November 23, 2016) ("CAT NMS Plan Approval Order"). The CAT NMS Plan is Exhibit A to the CAT NMS Plan Approval Order. See CAT NMS Plan Approval Order, at 84943–85034. In approving the CAT NMS Plan, the Commission added ISE Mercury, LLC (n/k/a Nasdaq MRX, LLC) and Investors Exchange LLC as Participants to the CAT NMS Plan. See id. at 84728. On January 30, 2017 and March 1, 2019, the Commission noticed for immediate effectiveness amendments to the Plan to add MIAX Pearl, LLC and MIAX Emerald, LLC, respectively, as Participants. See Securities Exchange Act Release Nos. 79898 (January 30, 2017), 82 FR 9250 (February 3, 2017), and 85230 (March 1, 2019), 84 FR 8356 (March 7, 2019). Unless otherwise noted, capitalized terms are used as defined in Rule 613, in the CAT NMS Plan, or in this release.

5 The Central Repository is the repository responsible for the receipt, consolidation, and retention of all information reported to the CAT. See CAT NMS Plan, supra note 4, at Section 1.1.

6 "CAT Data" is defined in the CAT NMS Plan as "data derived from Participant Data, Industry Member Data, SIP Data, and such other data as the Operating Committee [of the Company] may designate as 'CAT Data' from time to time." See id. The Operating Committee is the governing body of the Company. See id.

7 "Industry Member" is defined in the CAT NMS Plan as "a member of a national securities exchange or a member of a national securities association." See id.

8 The CAT NMS Plan is the limited liability company agreement of the Company, a jointly owned limited liability company formed under Delaware state law, through which the Participants conduct the activities of the CAT. Each Participant is a member of the Company and jointly owns the Company on an equal basis. The Participants submitted to the Commission a proposed amendment to the CAT NMS Plan on August 29, 2019, which they designated as effective on filing. With the proposed amendment, the limited liability company agreement of a new limited liability company named Consolidated

establishment of funding to pay for the operation of the CAT, including the establishment of fees that the Participants and Industry Members will pay.[9]

The Participants also set forth, in the CAT NMS Plan, deadlines related to the implementation of the CAT, including (1) the requirement that the Participants select a Plan Processor within two months following approval of the CAT NMS Plan,[10] (2) the requirement that the Participants begin recording and reporting data to the Central Repository by November 15, 2017,[11] and (3) the requirement that each Participant require Industry Members and Small

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Audit Trail, LLC would serve as the CAT NMS Plan, replacing in its entirety the CAT NMS Plan. See Notice of Filing of Amendment to the National Market System Governing the Consolidated Audit Trail, available at https://catnmsplan.com/wp-content/uploads/2019/09/CAT-2.0-Plan-Amendment(as-filed-with-SEC-8.29.19)_(175663431)_(1).pdf.

9 See CAT NMS Plan, supra note 4, at Section 11.1. The CAT NMS Plan notes that the Participants shall file with the Commission under Section 19(b) of the Act any such fees on Industry Members that the Operating Committee of the Company approves. See id. at Section 11.1(b).

10 17 CFR 242.613(a)(3)(i). See also CAT NMS Plan, supra note 4, at Section 6.1(a). Two months following approval of the CAT NMS Plan was January 15, 2017 (a Sunday).

11 See CAT NMS Plan, supra note 4, at Section 6.7(a)(iii).

Industry Members[12] to begin reporting information to the Central Repository by November 15, 2018,[13] and November 15, 2019, respectively.[14]

On January 18, 2017, the Participants filed with the Commission notice of their selection of the Plan Processor.[15] On January 17, 2017, the Participants selected Thesys Technologies LLC to build the CAT system, pending execution of a Plan Processor Agreement between Thesys Technologies LLC and the Participants.[16] The Plan Processor Agreement was executed on April 6, 2017, after which Thesys CAT LLC ("Thesys CAT"), a wholly owned subsidiary of Thesys Technologies LLC, became the Plan Processor for the CAT.

The next critical deadline required by the CAT NMS Plan was for the Participants to begin recording and reporting data to the Central Repository by November 15, 2017.[17] The Participants, however, did not begin reporting data by that deadline. On November 13, 2017, two days before the deadline for Participant reporting, and having previously provided

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12 The CAT NMS Plan defines Small Industry Member as "an Industry Member that qualifies as a small broker-dealer as defined in SEC Rule 613." See id. at Section 1.1. Rule 613(a)(3)(vi) uses the definition of small broker-dealer as defined in Rule 0-10(c), which defines such a broker-dealer as (1) having had total capital (net worth plus subordinated liabilities) of less than $500,000 on the date in the prior fiscal year as of which its audited financial statements were prepared pursuant to Rule 17a-5(d) or, if not required to file such statements, a broker or dealer that had total capital (net worth plus subordinated liabilities) of less than $500,000 on the last business day of the preceding fiscal year (or in the time that it has been in business, if shorter); and (2) is not affiliated with any person (other than a natural person) that is not a small business or small organization as defined in Rule 0-10. See Rule 613 Adopting Release, supra note 2, at 45804; 17 CFR 242.613(a)(3)(vi); 17 CFR 240.0-10(c).

13 See CAT NMS Plan, supra note 4, at Section 6.7(a)(v).

14 See id. at Section 6.7(a)(vi).

15 See Letter from Participants to Brent J. Fields, Secretary, Commission, dated January 18, 2017, available at https://www.sec.gov/divisions/marketreg/rule613-info-notice-of-plan-processor-selection.pdf.

16 Id.

17 See supra note 11.

assurances as late as the summer of 2017 that initial data reporting would commence on schedule and in accordance with the CAT NMS Plan, the Participants filed a request for exemptive relief in which they sought, among other things, to delay the deadline by which they must report to the CAT for one year, and to extend the deadlines by which Industry Members and Small Industry Members must report by 17 months.[18] The Commission did not grant this request.[19] SEC Chairman Clayton instead issued a statement on November 14, 2017 noting that he would not support extensions of the CAT deadlines on the terms proposed by the Participants.[20] Chairman Clayton stated the importance of the CAT in enhancing the protection of investors and the markets by providing regulators with consolidated oversight of the securities markets. Chairman Clayton also instructed Commission staff to engage with the Participants as necessary and appropriate.[21]

Since then, Commission staff has engaged with the Participants with a focus on trying to ensure that project management, resource, and governance deficiencies are addressed, including development of a credible and comprehensive work plan with verifiable milestones.[22] Among other things, Commission staff has encouraged the Participants to enhance their focus on project management and accountability.[23] As sophisticated market participants with vast experience

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18 See Letter from the Participants to Brent J. Fields, Secretary, Commission, dated November 13, 2017 ("November 2017 Exemption Request").

19 See Statement on Status of the Consolidated Audit Trail (November 14, 2017), available at https://www.sec.gov/news/public-statement/statement-status-consolidated-audit-trail-chairman-jay-clayton.

20 Id.

21 Id.

22 See Statement on Status of the Consolidated Audit Trail (August 27, 2018), available at https://www.sec.gov/news/public-statement/tm-status-consolidated-audit-trail.

23 Id.

related to various data systems and data management protocols, the Participants are capable of managing – and uniquely situated to manage – the implementation of the CAT.

On May 1, 2018, the SEC's Division of Trading and Markets ("Division") sent a letter to the Participants expressing concern about the lack of progress on CAT implementation. The Division called on senior personnel at each Participant to focus on completing the CAT as soon as practicable with all of the functionality required by the CAT NMS Plan. The Division also requested a master plan ("Master Plan") for completing the CAT,[24] including a timeline with development and completion milestones.[25] The Division requested that the Master Plan detail all material steps to fully implement both Participant and Industry Member reporting, and describe how the Participants will better manage the Plan Processor's performance. The Participants submitted the requested Master Plan on May 25, 2018. The Master Plan stated that Participant reporting would begin on November 15, 2018, one year past the deadline in the CAT NMS Plan.[26]

On November 15, 2018, the Participants began reporting quote, order, trade and other transaction data to the Central Repository; however, as the Participants acknowledge, the CAT system did not include all of the functionality required by the CAT NMS Plan, such as linkages

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24 The Division of Trading and Markets also requested that the Participants streamline their decision-making and governance processes to ensure more timely implementation. See Letter from Brett Redfearn, Director, Division of Trading and Markets, Commission, to Michael J. Simon, Chair, CAT NMS Plan Operating Committee, dated May 1, 2018. See also note 22.

25 The Master Plan projects Industry Member reporting will commence in phases, with equities reporting beginning in November 2019 and simple options reporting beginning in May 2020, with final implementation of the CAT through Small Industry Member reporting occurring by November 2022. See Industry Update on the Consolidated Audit Trail (June 28, 2018), at 4, available at https://www.catnmsplan.com/wp-content/uploads/2018/06/CAT-Industry-Webcast-6.28.18.pdf.

26 See supra note 22.

between reported events and regulators' query functionality.[27] On November 16, 2018, the Participants stated that Thesys CAT would complete all of the required functionality by March 31, 2019.[28] But on February 1, 2019, the Company announced that it would be transitioning from Thesys CAT to a new Plan Processor,[29] and on February 26, 2019, the Operating Committee voted to select FINRA as the successor Plan Processor to Thesys CAT.[30] As a result of this and various other factors, the functionality the Participants represented Thesys CAT would complete by March 31, 2019 was not delivered.

The Participants are responsible for their selection of a Plan Processor, for the management of the Plan Processor, and for compliance with the CAT NMS Plan. The Participants and the Plan Processor failed to comply with the following deadlines in the CAT NMS Plan and missed the following milestone completion dates:

- the November 15, 2017 milestone completion date for the Plan Processor publishing final technical specifications for the submission of order data for Industry Members;[31]
- the May 15, 2018 milestone completion date for the Plan Processor publishing technical specifications for Industry Member submission of customer data;[32]

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27 See CAT NMS Announces Initiation of Reporting to the Consolidated Audit Trail (November 16, 2018), available at https://www.catnmsplan.com/wp-content/uploads/2018/11/Press-Release-CAT-Launch-final.pdf.

28 Id.

29 See News, available at https://www.catnmsplan.com/news-page/index.html (February 1, 2019).

30 See Letter from Michael J. Simon, Chair, CAT NMS, LLC Operating Committee, to Brent J. Fields, Secretary, Commission, dated April 9, 2019, available at https://www.sec.gov/divisions/marketreg/rule613-info-notice-of-plan-processor-selection-040919.pdf.

31 See CAT NMS Plan, supra note 4, at Appendix C, Section C.10(b).

32 See id. at Appendix C, Section C.10(a).

- the May 15, 2018 milestone completion date for the Plan Processor making the testing environment available on a voluntary basis and beginning connectivity testing and accepting order data from Industry Members for testing purposes;[33]
- the August 15, 2018 milestone completion date for Industry Member order submission testing;[34]
- the October 15, 2018 milestone completion date for Industry Member reporting of customer information to the Central Repository;[35] and
- the November 15, 2018 deadline for full Industry Member reporting.[36]

In light of these missed deadlines and milestone completion dates, Chairman Clayton determined that it was necessary to dedicate additional oversight resources to this project. Accordingly, Chairman Clayton appointed a staff person to coordinate the Commission's efforts to monitor the Participants' development of the CAT.[37]

The Commission is concerned by the continued potential for delays to the implementation of the CAT. In an April 3, 2019 Industry Update presentation, the Operating Committee presented a revised implementation timeline for Industry Member reporting with deadlines that extend even further beyond those previously shared with Industry Members.[38]

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33 See id. at Appendix C, Section C.10(b).

34 See id. at Appendix C, Section C.10(a); id. at Appendix C, Section C.10(b).

35 See id. at Appendix C, Section C.10(a).

36 See id. at Section 6.4; Section 6.7(a)(v).

37 See SEC Names Manisha Kimmel as Senior Policy Advisor to the Chairman on the Consolidated Audit Trail (January 29, 2019), available at https://www.sec.gov/news/press-release/2019-5.

38 See Consolidated Audit Trail: CAT Reporting Technical Specifications for Industry Members Draft 2 Version 1.1 Key Changes (April 3, 2019), available at https://www.catnmsplan.com/wp-

The revised deadline for Industry Member reporting of all transaction data to the CAT is December 2021, with the exception of customer and account information which the Participants will require the reporting of by July 2022.[39] These deadlines further extend the initially established November 15, 2018 Industry Member reporting deadline in the CAT NMS Plan,[40] the phased deadlines for Industry Member reporting in the Master Plan, and the April 13, 2020 and the April 20, 2021 deadlines for Industry Member and Small Industry Member reporting proposed in the November 2017 Exemptive Request. The Commission has not approved these implementation deadlines.

The Commission preliminarily believes that amendments to the CAT NMS Plan are appropriate and necessary to help ensure the Participants' fulfillment of their obligations to deliver a functional CAT in a reasonable time frame. While the Commission believes that the Commission staff's continued engagement with the Participants is important to the effort to deliver a functional CAT, the Commission also preliminarily believes that increased transparency through formalized and public documentation of the Participants' implementation progress will increase the Participants' accountability for the efficient completion of CAT. The Commission also preliminarily believes that modifying the CAT NMS Plan to require additional financial accountability to meet implementation deadlines is appropriate to achieve the CAT's timely completion.

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content/uploads/2019/04/CAT_Industry_Call_04032019_Presentation.pdf. See also CAT Reporting Timelines, available at https://www.catnmsplan.com/timelines/. The Commission notes that it has not approved these dates.

39 See Consolidated Audit Trail: CAT Reporting Technical Specifications for Industry Members Draft 2 Version 1.1 Key Changes (April 3, 2019), available at https://www.catnmsplan.com/wp-content/uploads/2019/04/CAT_Industry_Call_04032019_Presentation.pdf, at 3, 4.

40 See CAT NMS Plan, supra note 4, at Section 6.7(a)(v).

The Commission therefore proposes to amend the CAT NMS Plan to require the Participants to develop a complete implementation plan containing a detailed timeline with objective milestones to achieve full CAT implementation (the "Implementation Plan"). This Implementation Plan would be filed with the Commission and made publicly available after approval by a Supermajority Vote[41] of the Operating Committee. The Implementation Plan must be submitted by the Operating Committee to the Chief Executive Officer ("CEO"), President, or an equivalently situated senior officer of each Participant, prior to being voted on by the Operating Committee. Additionally, to further improve implementation transparency, the Commission proposes requiring the Participants to provide the Commission and the public with quarterly progress reports ("Quarterly Progress Reports" or "Reports") approved by at least a Supermajority Vote of the Operating Committee.[42] The Quarterly Progress Reports must also be submitted by the Operating Committee to the CEO, President, or an equivalently situated senior officer of each Participant, prior to being voted on by the Operating Committee. The proposed amendments also include provisions regarding financial accountability to facilitate implementation of the CAT in an expeditious and efficient manner.

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41 Section 1.1 of the CAT NMS Plan defines a "Supermajority Vote" as an "affirmative vote of at least two-thirds of all of the members of the Operating Committee or any Subcommittee, as applicable, authorized to cast a vote with respect to a matter presented for a vote (whether or not such a member is present at any meeting at which a vote is taken) by the Operating Committee or any Subcommittee, as applicable (excluding, for the avoidance of doubt, any member of the Operating Committee or any Subcommittee, as applicable, that is recused or subject to a vote to recuse from such matter pursuant to Section 4.3(d)); provided that if two-thirds of all such members authorized to cast a vote is not a whole number then that number shall be rounded up to the nearest whole number."

42 The Commission does not believe, on a preliminary basis, that the requirements of the Implementation Plan or the Quarterly Progress Reports, discussed below in Part II.A., require the Participants to disclose any confidential or sensitive information related to the security of the CAT, the security of CAT Data, or the operation of the CAT.

II. Description of Proposed Amendments

In order to address shortcomings in the completeness, accuracy, accessibility, and timeliness of existing audit trail systems, the Commission adopted Rule 613 in 2012 to direct the Participants to create and file the CAT NMS Plan.[43] The CAT was intended not only to replace an existing regulatory data infrastructure that was "outdated and inadequate to effectively oversee a complex, dispersed, and highly automated national market system,"[44] but also to provide benefits to market participants in the form of improved market surveillance and related analyses.[45] Today, almost seven years after the adoption of Rule 613, the need for a better audit trail system is no less pressing. Yet, as described above,[46] the Participants' progress towards implementing the CAT has suffered multiple setbacks, and the Participants have repeatedly missed relevant deadlines.[47] These delays to CAT implementation have left the Commission and the Participants without access to a comprehensive database to help facilitate analyses of market events and other matters. Moreover, the repeated delays in CAT implementation have resulted in uncertainty for Industry Members and other market participants.[48]

A. Amendments to Increase Operational Transparency

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43 See supra note 2.

44 Id. at 45723.

45 Id. at 45730-33.

46 See Part I supra.

47 See, e.g., Industry Update on the Consolidated Audit Trail 9/7/2017 (August 25, 2017), available at https://catnmsplan.com/news-page/industry-update-on-the-consolidated-audit-trail/index.html (stating that "the implementation timelines for establishing the CAT are in effect"); Industry Update on the Consolidated Audit Trail (September 7, 2017), available at https://catnmsplan.com/wp-content/uploads/2017/09/Industry-Update-on-the-Consolidated-Audit-Trail-090817.pdf (indicating that the Participants were implementing the CAT according to the timeline set forth in the CAT NMS Plan).

48 See, e.g., Part IV.A.2.

Public disclosure of information about CAT implementation would furnish a better understanding of progress on the CAT to market participants and members of the investing public, all of whom stand to benefit from the improved efficiencies and regulatory capabilities of the CAT. Moreover, CAT implementation also affects Industry Members, who are required to report data to the CAT and are therefore keenly interested in the details and timing of CAT implementation. Currently, the CAT NMS Plan does not contain disclosure provisions that require the Participants to provide public updates on implementation progress and developments.

To address concerns about insufficient transparency and accountability regarding the CAT's implementation, the Commission proposes to amend Section 6.6 of the CAT NMS Plan. Specifically, the Commission proposes to amend the CAT NMS Plan by adding a new Section 6.6(c) to require the Participants to file with the Commission and publish on their own websites (or, if the Participants wish to publish collectively, on the CAT NMS Plan website) the Implementation Plan setting forth how and when the Participants will achieve full CAT implementation, including the Participants' timeline for achieving both (1) the objective milestones that are set forth in Section C.10 of Appendix C of the CAT NMS Plan to assess the progress of CAT implementation[49] ("Objective Milestones") and (2) the CAT implementation milestones associated with the proposed financial accountability provisions discussed below ("Financial Accountability Milestones")[50] (collectively, the "Implementation Milestones").[51]

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49 See CAT NMS Plan, supra note 4, at Appendix C Section C.10.

50 The Financial Accountability Milestones, and their relation to proposed financial accountability provisions, are described in more detail in Part II.B. infra.

51 The Participants would be free to include, as may be appropriate, additional Implementation Milestones not otherwise required by the proposed plan amendment. For example, the Participants may choose to add Implementation Milestones regarding system security or external testing with CAT Reporters.

If the Participants decide to complete any of the Implementation Milestones by releasing functionality in a phased approach, the proposed rule would require the Implementation Plan to also describe each phased release necessary to achieve the completion of the relevant Implementation Milestone and to provide completion dates for each such release.[52] The proposed rule also requires the Participants to include the completion date and a description of the status for each Implementation Milestone identified in the Implementation Plan, which, for example, could include discussion about the extent to which an Implementation Milestone has been successfully completed. The Implementation Plan would be required to be filed with the Commission and published on each Participant website or the CAT NMS Plan website no later than 30 calendar days following the effective date of this amendment.

The Commission preliminarily believes that requiring the proposed Implementation Plan is appropriate to facilitate public transparency of the CAT's development. The Commission believes 30 calendar days is a sufficient amount of time to create the Implementation Plan because the Participants have previously engaged in the exercise of considering and developing timelines and milestones for implementation purposes when developing the Master Plan, and many of the Participants are active in data systems development and operation.

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[52] For example, the CAT NMS Plan identifies "Industry Members (other than Small Industry Members) begin reporting customer / institutional / firm account information to the Central Repository for processing" as one of the Objective Milestones. See CAT NMS Plan, supra note 4, at Appendix C, Section 10. Recent timelines published by the Participants indicate, however, that the Participants have decided to complete this milestone by releasing functionality in a phased approach – first implementing Industry Member reporting for equities transactions and then implementing Industry Member reporting for options in a separate phase. See, e.g., CAT Reporting Timelines, available at https://catnmsplan.com/timelines/. The proposed amendment would therefore require the Implementation Plan to provide completion dates for each of these phases.

The Commission further believes that requiring this added transparency will aid the public in more easily monitoring the status of the implementation of the CAT. The CAT NMS Plan currently requires the Chief Compliance Officer of the Company to appropriately document objective milestones to the Commission. The Commission understands from the Participants' status update calls and discussions that the Participants are already engaged in documenting their progress toward CAT implementation for the Objective Milestones.[53] Therefore, the proposed amendment is requiring the incremental step that the information related to this documentation be made public via the Implementation Plan. The Commission does not expect that this incremental step would be unduly burdensome. The proposed amendment also requires the Participants to provide information regarding progress toward and completion of the Financial Accountability Milestones. Requiring the Participants to disclose their progress toward and completion of Financial Accountability Milestones will provide information not contained in the Objective Milestones regarding the development and availability of critical regulatory tools. The Commission believes that it is important to provide this information in a comprehensive timeline. Information related to the production of critical regulatory tools is also of interest to market participants, who will benefit from the increased regulatory capabilities of the CAT.[54]

Moreover, the Commission preliminarily believes it is appropriate to require the Participants to disclose whether they intend to complete any of the Implementation Milestones in phases and any related completion dates, because recent timelines published by the Participants indicate that the Participants intend to release certain functionality in phases. For example, while

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53 See also CAT NMS Plan, supra note 4, at Section 6.7(b).

54 Moreover, inclusion of the Financial Accountability Milestones in the Implementation Plan will provide the Commission and the public with more information regarding the implementation deadlines. See Part II.B. infra for additional discussion of the financial accountability provisions.

the CAT NMS Plan identifies only one implementation date for Industry Member reporting, the Participants have indicated that Industry Member reporting will be implemented in several phases that each have a different implementation deadline.[55] The Implementation Plan should reflect the current, phased approach to CAT implementation for this milestone, not the approach to CAT implementation that was contemplated at the time the CAT NMS Plan was approved. By requiring phasing to be addressed, the Implementation Plan will both furnish a common understanding of the status of CAT implementation at the time the Implementation Plan is made public, as well as indicate how completing the Implementation Milestones will lead to the achievement of full CAT implementation.

The Commission also believes that, to the extent the Participants meet the dates specified in the timeline, the publication of such timeline will reduce uncertainty as to the expected implementation timeline for Industry Members, which would aid Industry Members in staging their resources and otherwise managing implementation planning, which should reduce the risk of additional delays. The Commission further believes that the Implementation Plan's timeline, paired with Implementation Milestones, will serve to clarify what level of CAT system functionality will be delivered on a given date. Finally, the Commission anticipates that requiring the Participants to disclose their deadlines and the status of Implementation Milestones to the public through the Implementation Plan will provide accountability both to the Commission and to Industry Members regarding the Participants' progress toward CAT implementation.

The Commission also proposes to amend the CAT NMS Plan to add proposed Section 6.6(c)(ii) to require Participants to file with the Commission and publish on each Participant

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55 See note 52 supra.

website, or collectively on the CAT NMS Plan website, complete Quarterly Progress Reports. These Reports would be filed and made public no later than fifteen business days following the end of each calendar quarter (e.g., by April 21, 2020; July 22, 2020; October 22, 2020; or January 25, 2021) and would describe in detail the progress made by the Participants during the prior calendar quarter toward achieving each of the Implementation Milestones set forth in the Implementation Plan.[56] The initial Report to be filed by the Participants would be filed and made public no later than fifteen business days following the end of the calendar quarter in which the Implementation Plan was filed and made public.[57] The Reports would divide the Implementation Milestones into the following three categories: (1) Implementation Milestones that have been completed, (2) Implementation Milestones that are still in progress and (3) Implementation Milestones that have not yet been initiated.

For each Implementation Milestone completed by the end of a given calendar quarter, the Report would include the following: (1) the completion date provided in the Implementation Plan, (2) the date on which the Implementation Milestone was actually completed, and (3) a description of any variance from the Implementation Plan.[58]

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56 If, subsequent to the publication of the Implementation Plan, the Participants decide to complete any of the Implementation Milestones by releasing functionality in a phased approach, the proposed amendment requires the Participants to reflect this change in the Quarterly Progress Reports by describing the phases necessary to achieve the completion of the relevant milestones and providing specified information on the progress made for each release.

57 For example, if the Participants filed and made public the Implementation Plan on March 18, 2020 the initial Report would have to be filed no later than April 21, 2020.

58 For example, a description of any variance from the Implementation Plan could explain why the completion of a given Implementation Milestone was delayed from the date set forth in the Implementation Plan or, if the Implementation Milestone was broken out into multiple phases, the extent to which the completed Implementation Milestone satisfied the functionality required by the Implementation Plan for that milestone.

For each Implementation Milestone in progress at the end of a given calendar quarter, the Report would include the following: (1) the completion date provided in the Implementation Plan, (2) the currently targeted completion date, and (3) a description of (a) the current status of the Implementation Milestone, (b) any difference between the Implementation Plan completion date and the currently targeted completion date, including the basis for making the adjustment and the impact of this adjustment on any other Implementation Milestone, and (c) any other factual indicators that demonstrate the current level of completion with respect to the Implementation Milestone.[59] Factual indicators could include any data relevant to the Objective Milestone (e.g., (1) for milestones related to the publication of documentation: the current version of the documentation under development or published; the number of and explanation for any open issues not yet resolved; (2) for milestones related to connectivity and acceptance testing: the status of the publication of test plans; statistics on the amount of expected or actual activity in the test environment (e.g., number of testers, number of reportable events, error

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[59] For example, if an Implementation Milestone is the publication of Industry Member technical specifications, a description of the status could state: that the Plan Processor produced a draft that was circulated to Industry Members on [insert date]; that the Participants are reviewing feedback and expect to issue final technical specifications by [insert date]; and that the draft is complete except for a [specified topic], because of a [specified reason]. As an example of a description identifying any difference between the Implementation Plan completion date and the current targeted completion date, including the basis for making the adjustment and the impact of this adjustment on any other Implementation Milestone, the Participants could state: that the Implementation Plan completion date was [insert date], but the Participants are revising such date to [insert new targeted completion date], because [insert topic] proved to be more complicated than anticipated due to [insert reason]. The description could continue to state that the Participants believe the new targeted completion date is appropriate because, for example, they have designed a new approach to deliver the required functionality to address the issue in the technical specifications that is currently under development as of [insert date].

rates/trends observed), the number of Plan Processor functional requirements[60] for which defects were found categorized by criticality; progress remediating defects; (3) for milestones related to reporting: development progress as defined by the number of functional requirements not yet started, in progress, or complete; the number and percentage of functional requirements for which internal testing is in progress and the related pass/fail percentages of associated test cases; the number and percentage of functional requirements that have completed internal testing with all defects remediated; the number of Plan requirements met or outstanding; a list of Plan requirements met or outstanding).

For each Implementation Milestone that has not yet been initiated by the end of a given calendar quarter, the Report would include the following: (1) the completion date provided in the Implementation Plan, (2) the currently targeted completion date, and (3) a description of (a) the current status of the Implementation Milestone, and (b) any difference between the Implementation Plan completion date and the currently targeted completion date, including the basis for making the adjustment and the impact of this adjustment on any other Implementation Milestone.

The Commission preliminarily believes that the Quarterly Progress Reports will facilitate transparency by ensuring that current and comprehensive information about the CAT's state of development is regularly communicated to the Commission, Industry Members, and the public at

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60 Appendix D outlines minimum functional and technical requirements established by the Participants of the CAT NMS Plan for the Plan Processor. See CAT NMS Plan, supra note 4, Appendix D-1. Examples of such functional requirements for the CAT system include the ability to provide feedback on the reasons for errors in data submissions, and the ingestion of data submitted to the Central Repository by Industry Members. See id. at Appendix D, Sections 7.4, 7.5.

large.[61] Moreover, the Commission preliminarily believes that the requirements set forth for the proposed Quarterly Progress Reports are appropriate. Because the Participants should already be actively monitoring their progress on the implementation of the CAT, the Commission believes 15 business days is a reasonable amount of time in which to prepare Reports based on the information the Participants have already gathered.[62]

The Participants are required to provide both the Implementation Plan completion date and the actual or currently targeted completion date for each Implementation Milestone so that the original completion date will serve as a baseline against which to measure progress if there is a difference between the two dates, as supplemented by the information provided in the commentary. The Commission preliminarily believes that progress can be effectively evaluated based upon whether the Implementation Plan completion dates are being met.

The Commission also preliminarily believes that information provided in the required descriptions for the Implementation Milestones will yield valuable insights into the progress of CAT implementation, for example by providing an early indication of the potential for delays. The Commission also preliminarily believes that requiring the disclosure of the information provided in the descriptions would encourage the Participants to consider whether resources need to be realigned, so that adjustments can be made to the implementation process. In regard to the Implementation Milestones completed by the end of a given calendar quarter, the proposed

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61 For example, the Commission expects that the Quarterly Progress Reports will provide the Commission and the public with more granular and up-to-date information regarding the likelihood that the Participants will meet the target deadlines associated with the Financial Accountability Milestones and/or the likelihood that the Participants will be permitted to recover related fees, costs, or expenses from Industry Members. The Financial Accountability Milestones, and their related financial accountability provisions, are discussed in Part II.B. infra.

62 See, e.g., note 53 supra.

amendments would require the Participants to describe any variance from the Implementation Plan. The Commission preliminarily believes that such information could reflect whether the Participants have only partially achieved the functionality required by certain Implementation Milestones. In regard to the Implementation Milestones in progress at the end of a given calendar quarter, the proposed amendments would require the Participants to describe the status of the Implementation Milestone, any difference between the completion dates provided, including the basis for making the adjustment and the impact such adjustment might have on any other Implementation Milestone, and other factual indicators that demonstrate the current level of completion with respect to the milestone. The Commission preliminarily believes that such information could reveal if there is an increasingly negative variance between the Implementation Plan completion date and the targeted completion date, as well as the cause for such variance. The required information could also provide an indication of whether corrections are needed to get the implementation process back on track and whether the currently targeted completion dates provided in a Report are realistic. In regard to the Implementation Milestones that have not yet been initiated by the end of a given calendar quarter, the proposed amendments would require the Participants to describe the current status for the Implementation Milestone and any difference between the completion dates provided, including the basis for making the adjustment.

The Commission expects that quarterly communication of this information will aid Industry Members by providing more information on the timing of their CAT reporting obligations, which, correspondingly, should aid them in efficiently developing and implementing their regulatory data collection systems and allow them to make their own adjustments as needed. In addition, the Commission anticipates that the Quarterly Progress Reports will aid the

Commission, Industry Members and others in monitoring and better understanding the progress of CAT implementation.

The Commission also proposes to amend the CAT NMS Plan to add proposed Section 6.6(c)(iii) to require that the Implementation Plan and each Quarterly Progress Report be approved by at least a Supermajority Vote of the Operating Committee before such documents are filed with the Commission or made publicly available on each of the Participant websites or collectively on the CAT NMS Plan website. However, if the Implementation Plan or any Quarterly Progress Report is approved only by a Supermajority Vote of the Operating Committee, and not by a unanimous vote of the Operating Committee (including, for the avoidance of doubt, all members of the Operating Committee, whether or not present and whether or not recused), proposed Section 6.6(c)(iii) would require each Participant whose Operating Committee member did not vote to approve the Implementation Plan or Quarterly Progress Report separately file with the Commission and make publicly available on each of the Participant websites, or collectively on the CAT NMS Plan website, a statement identifying itself and explaining why the member did not vote to approve the Implementation Plan or Quarterly Progress Report. Prior to the Operating Committee's vote, the Implementation Plan and Quarterly Progress Reports shall also be submitted by the Operating Committee to the CEO, President, or an equivalently situated senior officer (or, "senior management") of each Participant.[63]

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63 In addition to the senior management personnel who will receive the Implementation Plan and Quarterly Progress Reports under the proposed amendment, each Participant has a voting member (and an alternate voting member) representing it on the Operating Committee who will receive these documents. One individual may serve as the voting member of the Operating Committee for multiple affiliated Participants. See CAT NMS Plan, supra note 4, at Section 4.2(a).

The Commission preliminarily believes that the Operating Committee should vote on the Implementation Plan and each Quarterly Report because the Operating Committee, as the manager of the Company, already votes on all actions for which a vote is required under the CAT NMS Plan.[64] The Commission further preliminarily believes that specifically requiring the approval of the Operating Committee by at least a Supermajority Vote will lend credibility to the timelines presented by Participants in the Implementation Plan and Reports, which may otherwise be lacking given that the timelines for Industry Member CAT implementation have been revised multiple times.[65] In addition, the requirement that the Implementation Plan and Quarterly Progress Reports be submitted to the CEO, President, or an equivalently situated senior officer of each Participant, prior to the Operating Committee's vote, is intended to promote senior management attention and promote accountability with respect to CAT implementation.

If the Operating Committee does not unanimously vote to approve the Implementation Plan or any Quarterly Progress Report, the proposed amendments require each Participant whose Operating Committee member did not vote to approve the Implementation Plan or Quarterly Progress Report to separately file with the Commission and make publicly available on each of the Participant websites, or collectively on the CAT NMS Plan website, a statement identifying itself and explaining why the member did not vote to approve the Implementation Plan or Quarterly Progress Report. The Commission preliminarily believes that the requirement may aid the Commission and the public to better monitor the progress of CAT implementation, because such an explanation may reveal critical information regarding whether currently targeted

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64 See CAT NMS Plan, supra note 4, at Sections 4.1 and 4.3.

65 See Part I supra.

completion dates are realistic, whether milestones are being or have been completed in accordance with the requirements of the CAT NMS Plan, and/or whether potential risks or delays may impede the progress of CAT implementation.

The Commission requests comment on the amendments to increase operational transparency. Specifically, the Commission solicits comment on the following:

1. Are the Implementation Plan and the Quarterly Progress Report effective mechanisms for providing the Commission and Industry Members with transparency into CAT implementation? Why or why not?
2. Are the details and requirements of the Implementation Plan appropriate and reasonable? Why or why not? Would additional details or requirements for the Implementation Plan be beneficial?
3. The proposed amendment requires the Participants to file and publish the Implementation Plan within 30 calendar days following the effective date of proposed Section 6.6(c). Is 30 calendar days a reasonable period of time in which to file and publish such a document? Why or why not? Does this timeline give the Operating Committee a sufficient amount of time to approve the Implementation Plan? Why or why not? Would a longer or shorter period of time, such as 45 calendar days or 15 calendar days, be more appropriate?
4. The proposed Amendment requires the Participants to file and publish a Quarterly Progress Report each calendar quarter on each Participant website or collectively on the CAT NMS Plan website. Is a quarterly interval the right interval? Would a longer or shorter interval be more effective?

5. The proposed amendment requires the Participants to file and publish the Quarterly Progress Report no later than fifteen business days following the end of each calendar quarter. Is fifteen business days a reasonable period of time in which to file and publish such a report? Why or why not? Does this timeline give the Operating Committee a sufficient amount of time to approve the Quarterly Progress Reports? Why or why not? Would a longer or shorter period of time, such as thirty business days or five business days, be more appropriate?

6. The proposed amendment establishes the deadline for filing and publishing the Quarterly Progress Report on the basis of business days. Are business days an appropriate measure by which to establish this deadline? Or would calendar days be more appropriate? Why or why not?

7. Are the details and requirements of the Quarterly Progress Report appropriate and reasonable? Why or why not? Would additional details or requirements for the report be beneficial? For example, should the Quarterly Progress Reports include financial information detailing the fees, costs, and expenses that the Participants have incurred to build and implement the CAT? If so, should these fees, costs, and expenses be clearly tied to the relevant Financial Accountability Milestone? Why or why not?

8. The proposed amendment requires the Operating Committee to approve the Implementation Plan and each Quarterly Progress Report by at least a Supermajority Vote. Is it appropriate to require a Supermajority Vote, or should the Commission require a majority vote or a unanimous vote of the Operating Committee? Why or why not? Is it appropriate to require that the Operating

Committee vote on this matter? Why or why not? If this matter should be delegated to a Subcommittee, please explain which Subcommittee should vote to approve the Implementation Plan and Quarterly Progress Report and why.

9. If the Implementation Plan or any Quarterly Progress Report is not approved by a unanimous vote of the Operating Committee, the proposed amendment requires each Participant whose Operating Committee member did not vote to approve the Implementation Plan or Quarterly Progress Report separately file with the Commission and make publicly available on each of the Participant websites, or collectively on the CAT NMS Plan website, a statement identifying itself and explaining why the member did not vote to approve the Implementation Plan or Quarterly Progress Report. Is this an appropriate requirement? Why or why not? Should the Commission require the Implementation Plan or the Quarterly Progress Reports, or the members who did not vote to approve the Implementation Plan or a Quarterly Report, as the case may be, to provide any additional information? If so, what information should be provided, and why?

10. The proposed amendment requires that the Implementation Plan and each Quarterly Progress Report be submitted to the CEO, President, or an equivalently situated senior officer of each Participant, prior to being voted on by the Operating Committee. Is this an appropriate requirement to promote senior management attention and promote accountability with respect to CAT implementation? Why or why not? Should the Commission specify when the Implementation Plan and Quarterly Progress Reports should be submitted to the CEO, President, or equivalently situated senior officer of each Participant? If so,

how many days prior to the Operating Committee vote should the Implementation Plan and Quarterly Progress Reports be submitted to senior management? To the extent that the Commission implements such a requirement, would the deadlines set forth in the proposed amendment for the submission of the Implementation Plan and Quarterly Progress Reports to the Commission need to be adjusted? Why or why not? By how many days should they be adjusted? Please explain your responses.

11. Please identify any alternative means to promote senior management attention and promote accountability with respect to CAT implementation. For example, should the Commission require the senior management of each Participant (e.g., the CEO, President, or an equivalently situated senior officer) to certify that the contents of the Implementation Plan and each Quarterly Progress Report are accurate and complete in all material respects? What should qualify as material? Should the certification be made to the best of an officer's knowledge and reasonable belief after reasonable investigation? Is the CEO or President the appropriate person to make the certification? If not, please explain why. If the CEO or President is not the appropriate person, which equivalently situated senior officer would be appropriate? Would additional details or requirements for such certifications be beneficial? If so, what are those details or requirements? Please explain your responses.

12. Are there other factors that impact the ability of the Participants to implement the CAT NMS Plan that would not be addressed by further disclosure that the Commission should address?

B. Financial Accountability Amendments for Implementation of the CAT

As discussed above, there have been multiple delays in CAT implementation since the adoption of Rule 613. To prevent additional delays, the Commission proposes to amend the CAT NMS Plan to include financial accountability provisions that are designed to align financial accountability with regulatory obligations and contribute to an expeditious implementation of the CAT.

Currently, Section 11.1 of the CAT NMS Plan contemplates that the Operating Committee will establish, and the Participants will implement, fees for Participants and Industry Members to recover the costs and expenses incurred by the Participants in connection with the development, implementation, and operation of the CAT.[66] Proposals for any such fees must be filed with the Commission pursuant to Section 19(b) of the Exchange Act and are subject to Commission review for consistency with the Exchange Act and Article XI of the CAT NMS Plan.[67] Specifically, each Participant must demonstrate, under Sections 6(b)(4) and 15A(b)(5) of the Exchange Act, that such fee filings provide for the equitable allocation of reasonable dues, fees, and other charges among its members and other persons using its facilities.[68] The proposed amendment would not alter this basic structure, but would add a new Section 11.6 to govern the recovery of any fees, costs, and expenses (including legal and consulting fees, costs,

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66 See, e.g., CAT NMS Plan, supra note 4, at Section 11.1(c).

67 Section 19(b) of the Exchange Act requires the Participants to submit proposed rule changes to the Commission. 15 U.S.C. 78s(b); see also CAT NMS Plan, supra note 4, at Section 11.1(b) (noting that the Participants must file proposed fees for Industry Members with the Commission).

68 See 15 U.S.C. 78f(b)(4) (applicable to the national securities exchanges); 15 U.S.C. 78o-3(b)(5) (applicable to FINRA, a national securities association).

and expenses) incurred[69] by or for the Company in connection with the development, implementation, and operation of the CAT,[70] from the effective date of this amendment, if adopted by the Commission, until such time that the Participants have completed Full Implementation of CAT NMS Plan Requirements[71] (collectively, the "Post-Amendment Expenses").

Proposed Section 11.6 would apply new conditions to the collection of any fees established by the Operating Committee, or implemented by the Participants, to recover a portion of Post-Amendment Expenses from Industry Members ("Post-Amendment Industry Member Fees"). Specifically, proposed Section 11.6 would require the Participants to meet four critical CAT implementation milestones – the Financial Accountability Milestones – by certain dates in

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69 For the purposes of proposed Section 11.6, determination of when a fee, cost, or expense is considered "incurred" shall be based on Generally Accepted Accounting Principles ("GAAP"), as those principles must also be applied to all accounting or financial statements prepared by the Operating Committee under Section 9.2 of the CAT NMS Plan. See note 4 supra. For example, a fee, cost, or expense related to a good or service would generally be considered incurred upon acquisition of the good or service in accordance with GAAP.

70 See, CAT NMS Plan, supra note 4, at Section 11.1(b)-(c), Section 11.2(a)-(b), and Section 11.3(c) (relating to the funding of the development, implementation and operating costs of the Company).

71 As part of the proposed amendment, Section 1.1 of the CAT NMS Plan will be amended to include a definition of "Full Implementation of CAT NMS Plan Requirements." This term will mean "the point at which: (a) the Participants have satisfied all of their obligations to build and implement the CAT, such that all CAT system functionality required by Rule 613 and the CAT NMS Plan has been developed, successfully tested, and fully implemented with the initial Error Rates specified by Section 6.5(d)(i) of the CAT NMS Plan, including, but not limited to, functionality that efficiently permits the Participants and the Commission to access all CAT Data required to be stored in the Central Repository pursuant to Section 6.5(a) of the CAT NMS Plan and to analyze the full lifecycle of an order, from order origination through order execution or order cancellation, across the national market system. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c)." This definition is discussed further below. See Part II.B.1.d. infra.

order to collect the full amount of any related Post-Amendment Industry Member Fees established by the Operating Committee or implemented by the Participants. If the Participants fail to meet the target deadlines set forth in proposed Section 11.6, they would only be entitled to collect a portion of the amount of the relevant Post-Amendment Industry Member Fees, as determined by the amount of time by which the Participants have missed the target deadlines.

The Commission preliminarily believes applying these new conditions to the Post-Amendment Industry Member Fees is appropriate. At the time the Commission approved the CAT NMS Plan, the Commission believed it was reasonable, in accordance with Section 6(b)(4) of the Exchange Act,[72] for the Participants to recover a portion of the fees, costs, and expenses associated with the development and implementation of the CAT from Industry Members.[73] This belief, however, was based on the Commission's expectation that the Participants would be complying with the CAT NMS Plan, which required the implementation of certain CAT functionality by the dates set forth in the CAT NMS Plan. As noted above, the Participants have missed multiple dates codified in the CAT NMS Plan.[74] Accordingly, the regulatory aims of the CAT NMS Plan have yet to be achieved. Accordingly, the Commission is proposing financial accountability rules that address the Commission's view of what it would consider to be "reasonable fees" and a reasonable exercise of the Participants' funding authority under the CAT NMS Plan in the context of CAT implementation going forward.

The specific terms of the proposed amendment are discussed in more detail below.

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72 15 U.S.C. 78f(b)(4) (requiring the rules of a national securities exchange to provide for "equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities").

73 See, e.g., CAT NMS Plan Approval Order, supra note 4, at 84794.

74 See Part I supra.

1. Financial Accountability Milestones and Target Deadlines

Proposed Section 11.6 identifies four critical CAT implementation milestones: (1) Initial Industry Member Core Equity Reporting, (2) Full Implementation of Core Equity Reporting Requirements, (3) Full Availability and Regulatory Utilization of Transactional Database Functionality, and (4) Full Implementation of CAT NMS Plan Requirements (collectively, the "Financial Accountability Milestones"[75]). For each Financial Accountability Milestone, the Commission has also identified a target deadline for completion.

a. Initial Industry Member Core Equity Reporting

The Commission proposes to amend Section 1.1 of the CAT NMS Plan to define "Initial Industry Member Core Equity Reporting" as the point at which Industry Members (excluding Small Industry Members[76] that are do not report to the Order Audit Trail System ("OATS")) have begun to report equities transaction data, excluding Customer Account Information, Customer-ID, and Customer Identifying Information,[77] to the CAT[78]. This Financial

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75 This term is defined at proposed Section 1.1.

76 As defined by Section 1.1 of the CAT NMS Plan, and for the purposes of this proposing release, "Small Industry Member" an Industry Member that qualifies as a small broker-dealer as defined in SEC Rule 613. See also 17 CFR 242.613(a)(3)(vi) (defining small broker-dealers by reference to 17 CFR 240.0-10(c), which defines a small broker dealer as one with "total capital . . . of less than $500,000 on the date in the prior fiscal year as of which its audited financial statements were prepared or, if not required to file such statements, a broker or dealer that had total capital . . . of less than $500,000 on the last business day of the preceding fiscal year" and one that is "not affiliated with any person . . . that is not a small business or small organization").

77 Customer Account Information, Customer-ID, and Customer Identifying Information are defined terms in Section 1.1 of the CAT NMS Plan and are the same definitions in the context of this proposing release.

78 The Commission notes that the equities transaction data required at this stage is consistent with the functionality that the Participants currently plan to implement at "Phase 2a" in the latest draft of the Technical Specifications. See CAT Reporting Technical Specifications for Industry Members, Version 2.2 (June 24, 2019), at vii,

Accountability Milestone shall be considered complete as of the date identified in a published Quarterly Progress Report meeting the requirements of proposed Section 6.6(c).[79] The Commission also proposes to add Section 11.6(a)(i)(A) to provide that the Participants will be entitled to collect the full amount of any Post-Amendment Industry Member Fees established or implemented to recover Post-Amendment Expenses incurred from the date of this amendment's adoption by the Commission[80] to the date of Initial Industry Member Core Equity Reporting ("Period 1"), so long as such date is no later than April 30, 2020.[81]

The Commission preliminarily believes that Initial Industry Member Core Equity Reporting is an appropriate Financial Accountability Milestone, because this milestone requires the Participants to develop, test, and implement essential infrastructure needed to support Industry Member reporting – one of the major goals identified by the CAT NMS Plan.[82] Before

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available at https://www.catnmsplan.com/wp-content/uploads/2019/06/Industry-Member-Tech-Specs-v2.2-Clean.pdf.

79 The target deadline for Initial Industry Member Core Equity Reporting falls on April 30, 2020 – between scheduled Quarterly Progress Reports. If the Participants wait to submit the Quarterly Progress Report to the Commission, it may delay their ability to begin recovering any Post-Amendment Industry Member Fees to which they may be entitled. Accordingly, the Commission notes that the Participants may file an interim Quarterly Progress Report, if they so choose, on the day they achieve this Financial Accountability Milestone (or any other Financial Accountability Milestone) in order to expedite their recovery of Post-Amendment Industry Member Fees.

80 The proposed amendment will not affect the Participants' ability to collect CAT-related fees, costs, or expenses incurred up to the date that proposed Section 11.6 is adopted. See proposed Section 11.6.

81 See proposed Section 11.6(a)(i)(A). To the extent that the Initial Industry Member Core Equity Reporting milestone is achieved at some later date, the Participants will only be entitled to collect a portion of the amount of the Post-Amendment Industry Member Fees established or implemented for Period 1. See proposed Section 11.6(a)(ii); see also Part II.B.2. infra for additional discussion regarding the conditions attached to Post-Amendment Industry Member Fee collection.

82 See CAT NMS Plan, supra note 4, at Section 6.7(a)(v).

Industry Members may begin reporting any equities transaction data to the CAT, the Participants must develop, and Industry Members must thoroughly test, file submission tools, data integrity controls, and various security measures to ensure that the CAT can safely receive and process this data, as well as identify data that may not be accurate. These are core operations that are fundamental to the success of the CAT. By requiring Industry Members – excluding Small Industry Members that are not OATS reporters[83] – to begin reporting the first phase of equities transaction data to the CAT, the Participants will demonstrate that they have made significant progress towards implementing foundational CAT functionality.

Furthermore, the Commission preliminarily believes that it is appropriate to require the Participants to achieve Initial Industry Member Core Equity Reporting by April 30, 2020 in order to recover the full amount of any related Post-Amendment Industry Member Fees, because the Participants have indicated that they plan to implement basic equities transaction reporting for Industry Members (excluding Small Industry Members that are not OATS reporters) by that date. Recent timelines published by the Participants indicate that the production environment for Industry Member equities reporting will go live in April 2020.[84] Based on this

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83 The Commission preliminarily believes that it is appropriate to exclude Small Industry Members that do not report to OATS from this Financial Accountability Milestone in order to mirror the timelines projected by the Participants. See, e.g., Industry Update on CAT Reporting Technical Specifications for Industry Members (April 3, 2019), available at https://www.catnmsplan.com/wp-content/uploads/2019/04/CAT_Industry_Call_04032019_Presentation.pdf; see also CAT Reporting Timelines, available at https://www.catnmsplan.com/timelines/

84 See, e.g., id. The Participants have also released finalized technical specifications for Industry Member reporting, as well as a symbol list providing the scope of securities for which Industry Member reporting will be required, which the Commission believes are critical steps towards achieving Initial Industry Member Core Equity Reporting by April 30, 2020. With this information, the Industry Members should be able to make meaningful progress towards developing the internal infrastructure needed to report to the CAT. See note 78 supra. See also, e.g., Industry Update on the Consolidated Audit Trail

representation, the Commission preliminarily believes the proposed deadline of April 30, 2020 for Initial Industry Member Core Equity Reporting is both reasonable and feasible.

b. Full Implementation of Core Equity Reporting Requirements

The Commission proposes to amend Section 1.1 of the CAT NMS Plan to define "Full Implementation of Core Equity Reporting Requirements" as the point at which: (a) Industry Member reporting (excluding reporting by Small Industry Members that are not OATS reporters) for equities transactions, excluding Customer Account Information, Customer-ID, and Customer Identifying Information,[85] is developed, tested, and fully implemented at a 5% Error Rate[86] or less and with sufficient intra-firm linkage, inter-firm linkage, national securities exchange linkage, and trade reporting facilities linkage to permit the Participants and the Commission to analyze the full lifecycle of an order across the national market system, excluding linkage of representative orders, from order origination through order execution or order cancellation[87]; and (b) the query tool functionality required by Section 6.10(c)(i)(A) and Appendix D, Sections 8.1.1-8.1.3 and Section 8.2.1 of the CAT NMS Plan incorporates the Industry Member equity transaction data described in condition (a) and is available to the Participants and to the

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(February 20, 2019), available at https://www.catnmsplan.com/wp-content/uploads/2019/02/CAT_Industry_Webcast_02.20.2019_vF.pdf (stating that there will be no material design changes to the technical specifications for Industry Member reporting and instructing Industry Members to continue as planned with development efforts); CAT Reportable Equity Securities Symbol Master, available at https://www.catnmsplan.com/symbol-master/index.html.

85 See note 77 supra.

86 "Error Rate" is a term defined in Section 1.1 of the CAT NMS Plan to mean "the percentage of reportable events collected by the central repository in which the data reported does not fully and accurately reflect the order even that occurred in the market." See also 17 CFR 242.613(j)(6).

87 The equities transaction data required at this stage is consistent with the functionality that the Participants currently plan to implement at "Phase 2a" in the latest draft of the Technical Specifications. See note 78 supra.

Commission. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c).[88] The Commission also proposes to add Section 11.6(a)(i)(B) to provide that the Participants will be entitled to collect the full amount of any Post-Amendment Industry Member Fees established or implemented to recover Post-Amendment Expenses incurred from the date immediately following the achievement of Initial Industry Member Core Equity Reporting to the date of Full Implementation of Core Equity Reporting Requirements ("Period 2"), so long as such date is no later than December 31, 2020.[89]

The Commission preliminarily believes that Full Implementation of Core Equity Reporting Requirements is an appropriate Financial Accountability Milestone, because this milestone requires the Participants to show that they have taken significant steps towards achieving one of the primary goals identified in the CAT NMS Plan – Industry Member reporting.[90] Whereas the previous Financial Accountability Milestone only required that the Participants sufficiently develop and test the CAT so as to allow Industry Members (excluding Small Industry Members that are not OATS reporters) to begin reporting equities transaction data, this Financial Accountability Milestone requires Participants to have fully implemented the first phase of equities transaction reporting for Industry Members (excluding Small Industry Members that are not OATS reporters) at an Error Rate that is consistent with the initial Error

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88 See also note 79 supra.

89 See proposed Section 11.6(a)(i)(B). To the extent that the Full Implementation of Core Equity Reporting Requirements milestone is achieved at some later date, the Participants will only be entitled to collect a portion of the amount of the Post-Amendment Industry Member Fees established or implemented for Period 2. See proposed Section 11.6(a)(iii); see also Part II.B.2. infra for additional discussion regarding the conditions attached to Post-Amendment Industry Member Fee collection.

90 See CAT NMS Plan, supra note 4, at Section 6.7(a)(v).

Rate threshold set forth in the CAT NMS Plan.[91] Equities transaction data produced by the CAT at this stage must also be sufficiently interlinked so as to permit full analysis of an order's lifecycle across the national market, excluding full linkage of representative orders.[92] These requirements are designed to ensure that the Participants have developed, tested, and implemented an audit trail system that produces meaningful and accurate equities transaction data, including data that can be used to evaluate the full lifecycle of an equities order.[93] The achievement of such benchmarks would demonstrate that the Participants have made significant progress towards full implementation of Industry Member reporting.[94]

The second prong of this Financial Accountability Milestone requires that the equities transaction data collected by the CAT at this stage be made available to regulators through two basic query tools required by the CAT NMS Plan – a targeted query tool that will enable

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91 See, e.g., CAT NMS Plan, supra note 4, at Section 6.5(d)(i) of the CAT NMS Plan (specifying that the "initial maximum Error Rate shall be set to 5%").

92 Although full linkage of representative orders is not required by this milestone, the technical specifications provided to Industry Members indicate that, by April 2020, linkage "between the representative street side order and the order being represented when the representative order was originated specifically to represent a single order . . . and there is: 1) an existing direct electronic link in the firm's system between the order being represented and the representative order, and 2) any resulting executions are immediately and automatically applied to the represented order in the firm's system[.]" See CAT Reporting Technical Specifications for Industry Members, Version 2.2 (June 24, 2019), available at https://www.catnmsplan.com/wp-content/uploads/2019/06/Industry-Member-Tech-Specs-v2.2-Clean.pdf.

93 See, e.g., id. at 6, 154 (setting forth specifications for a firm-designated ID and representative order flag, which are examples of two fields not available through OATS).

94 The Commission preliminarily believes that it is appropriate to exclude Small Industry Members that do not report to OATS from this Financial Accountability Milestone, in order to mirror the timelines projected by the Participants. See, e.g., Industry Update on CAT Reporting Technical Specifications for Industry Members (April 3, 2019), available at https://www.catnmsplan.com/wp-content/uploads/2019/04/CAT_Industry_Call_04032019_Presentation.pdf; see also CAT Reporting Timelines, available at https://www.catnmsplan.com/timelines/.

regulators to retrieve data via an online query screen with a variety of predefined selection criteria, and a user-defined direct query tool that will provide regulators with the ability to query data using all available attributes and data sources.[95] These query tools should enable regulators to access and use the provided data to perform essential analyses of the equities markets, including equity market reconstruction, and to pursue data-driven policy-making. By requiring the Participants to develop these tools and make them available to the Commission and other regulators at this stage, the second prong of this Financial Accountability Milestone is designed to ensure that the CAT is built in a manner that will allow regulators to access CAT Data in order to realize the regulatory benefits associated with the CAT.

The Commission preliminarily believes that it is appropriate to require the Participants to achieve Full Implementation of Core Equity Reporting Requirements by December 31, 2020 in order to receive the full amount of any related Post-Amendment Industry Member Fees. This deadline is consistent with the Participants' most recent projections – for example, the most recent timelines published by the Participants indicate that the Participants intend to substantially complete implementation of equities reporting for Industry Member (excluding Small Industry Members that do not report to OATS) by October 2020,[96] and the Commission understands that

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95 See, e.g., CAT NMS Plan, supra note 4, at Section 6.10(c)(i)(A)-(B); see id. at Appendix D, Sections 8.1.1-8.1.3, and Section 8.2.1. Section 6.10(c)(i)(A) of the CAT NMS Plan requires the Plan Processor to "provide Participants and the SEC with access to all CAT Data stored in the Central Repository" via an "online targeted query tool." Appendix D, Section 8.1.1-8.1.3 of the CAT NMS Plan describes the required functionality associated with this regulatory tool. Appendix D, Section 8.2.1 describes the required functionality associated with a user-defined direct query tool that will "deliver large sets of data that can then be used in internal surveillance or market analysis applications." See id. at Sections 8.2. This tool is also described at Section 6.10(c)(i)(B) of the CAT NMS Plan.

96 See, e.g., Industry Update on CAT Reporting Technical Specifications for Industry Members (April 3, 2019), available at https://www.catnmsplan.com/wp-

the relevant query tool functionality should go live into production on a timeline that is generally consistent with the proposed deadline of December 31, 2020. Accordingly, the Commission preliminarily believes the target deadline of December 31, 2020 for Full Implementation of Core Equity Reporting Requirements is both reasonable and feasible.

c. Full Availability and Regulatory Utilization of Transactional Database Functionality

The Commission proposes to amend Section 1.1 of the CAT NMS Plan to define "Full Availability and Regulatory Utilization of Transactional Database Functionality" as the point at which: (a) reporting to the Order Audit Trail System ("OATS") is no longer required for new orders; (b) Industry Member reporting for equities transactions, simple electronic options transactions, manual options transactions, and complex options transactions, including Allocation Reports,[97] but excluding Customer Account Information, Customer-ID, and Customer Identifying Information, is developed, tested, and fully implemented; (c) representative order linkages, as well as intra-firm linkages, inter-firm linkages, national securities exchange linkages, and trade reporting facilities linkages, are developed, tested, and fully implemented in a manner that permits the Participants and the Commission to analyze the full lifecycle of an order across the national market system, from order origination through order execution or order cancellation, including any related allocation information provided in an Allocation Report[98]; (d)

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content/uploads/2019/04/CAT_Industry_Call_04032019_Presentation.pdf; see also CAT Reporting Timelines, available at https://www.catnmsplan.com/timelines/.

97 "Allocation Report" is defined term in Section 1.1 of the CAT NMS Plan and carries the same meaning in the context of this proposing release.

98 The allocation information provided in an Allocation Report will be linked to person(s) having the authority to trade on behalf of the account using Firm Designated ID – a unique identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository, where each such identifier is unique among all identifiers from any given Industry Member for each business date. See CAT NMS

CAT Error Rates satisfy the threshold specified by Section 6.5(d)(i); (e) the query tool functionality required by Section 6.10(c)(i)(A) and Appendix D, Sections 8.1.1-8.1.3, Section 8.2.1, and Section 8.5 incorporates the data described in conditions (b) and (c) and is available to the Participants and to the Commission; and (f) the requirements of Section 6.10(a) are met. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report published meeting the requirements of Section 6.6(c).[99]

The Commission also proposes Section 11.6(a)(i)(C) to provide that the Participants will be entitled to collect the full amount of any Post-Amendment Industry Member Fees established or implemented to recover Post-Amendment Expenses incurred from the date immediately following the achievement of Full Implementation of Core Equity Reporting Requirements to the date of Full Availability and Regulatory Utilization of Transactional Database Functionality ("Period 3"), so long as such date is no later than December 31, 2021.[100]

The Commission preliminarily believes that Full Availability and Regulatory Utilization of Transactional Database Functionality is an appropriate Financial Accountability Milestone, because this milestone will require the Participants to demonstrate substantial completion of CAT implementation. Whereas the previous Financial Accountability Milestone focused only on the implementation of basic equities transaction reporting for Industry Members (excluding

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Plan, supra note 4, at Section 1.1. Allocations are not required to be directly linked to orders or executions. See id.

99 See also note 79 supra.

100 See proposed Section 11.6(a)(i)(C). To the extent that Full Availability and Regulatory Utilization of Transactional Database Functionality is achieved at some later date, the Participants will only be entitled to collect a portion of the amount of the Post-Amendment Industry Member Fees established or implemented for Period 3. See proposed Section 11.6(a)(iii); see also Part II.B.2. infra for additional discussion regarding the conditions attached to Post-Amendment Industry Member Fee collection.

Small Industry Members that are not OATS reporters), this Financial Accountability Milestone requires the Participants to have fully implemented the first phase of reporting for equities, simple options, manual options, and complex options. This Financial Accountability Milestone also requires the Participants to implement representative order linkages, in addition to intra-firm linkages, inter-firm linkages, national securities exchange linkages, and trade reporting linkages, including any related allocation information included in an Allocation Report. Therefore, at this stage, the CAT should contain sufficient equities and options transactional data and order linkages to enable regulators to analyze the full lifecycle of an order, from order origination through order execution or order cancellation, including any related allocation information provided in an Allocation Report, as well as conduct other sophisticated analyses of the markets. For instance, the CAT should give regulators access to an options audit trail system that, for the first time, makes possible options market reconstruction and cross-market analyses across full order lifecycles.[101]

Full Availability and Regulatory Utilization of Transactional Database Functionality further requires that core elements of the CAT are reasonably accurate, reliable, and accessible to regulators. For instance, this Financial Accountability Milestone requires that CAT Error Rates satisfy the 5% initial maximum Error Rate set forth in Section 6.5(d)(i) of the CAT NMS Plan.[102] The Commission preliminarily believes this is appropriate because the Participants have, in the

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101 Although the Consolidated Options Audit Trail System ("COATS") provides an audit trail for options, CAT will contain broker-dealer data and order data not currently available through COATS, enabling regulators to perform more sophisticated analyses on options data. Moreover, CAT will contain equities data as well as options data, which will enable regulators to conduct cross-market analyses and surveillances.

102 See proposed Section 1.1, "Full Availability and Regulatory Utilization of Transactional Database Functionality," at (b). See also CAT NMS Plan, supra note 4, at Section 6.5(d)(i).

past, expressed the belief that an initial Error Rate of 5% "strikes the balance of making allowances for adapting to a new reporting regime while ensuring that the data provided to regulators will be capable of being used to conduct surveillance and market reconstruction."[103] This Financial Accountability Milestone also requires that certain regulatory tools incorporate Industry Member data, are available to regulators, and have been implemented pursuant to the provisions of the CAT NMS Plan, including not only the online targeted query tool and the user-defined direct query tool discussed above,[104] but also surveillance systems reasonably designed to make use of CAT data.[105] Moreover, achievement of Full Availability and Regulatory Utilization of Transactional Database Functionality requires the Participants to demonstrate, through retirement of the existing OATS system,[106] that the CAT is sufficiently accurate, reliable, and accessible to regulators to be adopted as the audit trail system for equities transactions. The Commission believes that all of these requirements should ensure that

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103 See CAT NMS Plan Approval Order, supra note 4, at 84717.

104 See Section II.B.1.b. supra.

105 Full Availability and Regulatory Utilization of Transactional Database Functionality requires that the requirements of Appendix D, Section 8.1.1-8.1.3, Section 8.2.1, and Section 8.5 of the CAT NMS Plan, which describe the performance requirements and service level agreements for necessary regulatory tools, have been met for any data contained in the CAT. The "surveillance systems" required by Section 6.10(a) and the query tool functionality required by Section 6.10(c)(i)(A) of the CAT NMS Plan must also be implemented. See proposed Section 1.1, "Full Availability and Regulatory Utilization of Transaction Database Functionality," at (e)-(f).

106 To achieve this Financial Accountability Milestone, OATS reporting must no longer be required for new orders. This prong can only be accomplished by retiring OATS. Although FINRA is the only Participant in direct control of OATS retirement, the Commission still believes it is appropriate to apply this milestone to all Participants. All of the Participants are jointly responsible for creating a CAT that is capable of replacing OATS. All Participants are regulators that will benefit from the full implementation of the CAT. See, e.g., CAT NMS Plan, supra note 4, at Appendix C, Section C.9. (discussing retirement of OATS).

regulators are able to use and rely on the CAT at this stage to conduct the kind of improved market surveillance that the Commission envisioned when it adopted Rule 613.[107]

The Commission preliminarily believes that it is appropriate to require the Participants to achieve Full Availability and Regulatory Utilization of Transactional Database Functionality by December 31, 2021 in order to recover the full amount of any related Post-Amendment Industry Member Fees. This deadline is consistent with the Participants' most recent projections for completion of Industry Member reporting, representative order linkages, and the development of regulatory query tools for options and equities. The most recent timelines issued by the Participants suggest that Industry Member reporting and representative order linkages will be implemented by December 2021,[108] and the Commission further understands that the online targeted query tool and user-directed direct query tool for both options and equities should go live into production on a timeline that is generally consistent with the proposed deadline of December 31, 2021. Therefore, the Commission's proposed deadline of December 31, 2021 is consistent with the Participants' timeline for these items.

Moreover, so long as the Participants diligently work towards building the CAT according to the requirements of the CAT NMS Plan, the Commission preliminarily believes that the Participants should reasonably be able to demonstrate, by December 31, 2021, both that the CAT is fully and effectively functional for equities data such that the CAT is capable of replacing OATS such that reporting to OATS will no longer be required for new orders. The Participants' timelines indicate that, by December 31, 2021, Industry Members and Small Industry Members that report to OATS will have been reporting equities transaction data to CAT

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107 See Rule 613 Adopting Release, supra note 2, at 45788.

108 See, e.g., note 96 supra.

for approximately 20 months,[109] which should give the Participants and other CAT Reporters a reasonable opportunity to address or correct any material data quality issues. The Commission further notes that the conditions of Full Availability and Regulatory Utilization of Transactional Database Functionality are designed to ensure that regulators are able to perform at least their normal range of regulatory tasks using CAT Data instead of OATS data. The Commission therefore preliminarily believes that it is reasonable and feasible to establish December 31, 2021 as the deadline for this Financial Accountability Milestone.[110]

With respect to the additional requirements designed to ensure that the CAT Data provided by Industry Members will be reasonably accurate, reliable, and accessible to regulators, the Commission also preliminarily believes that the Participants should be able to meet these requirements by December 31, 2021. For example, proposed Section 11.6(a)(i)(C) and proposed Section 1.1 would provide the Participants with approximately two years from the date of this amendment's adoption to develop, test, and implement the surveillance systems required by Section 6.10(a) of the CAT NMS Plan,[111] whereas the CAT NMS Plan indicates that a shorter

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109 See supra note 96 and associated text. The Participants do not currently intend to implement transaction reporting for Small Industry Members that do not report to OATS until December 2021. However, because these Industry Members do not report to OATS, the Commission preliminarily believes that this should not impact the ability of the Participants to retire OATS by the target deadline of December 31, 2021.

110 The Commission also believes that tying full recovery of CAT-related expenses to this Financial Accountability Milestone will increase the likelihood that OATS will be retired by the proposed date, thereby reducing uncertainty amongst Industry Members and, potentially, compressing the period of duplicative reporting to which Industry Members might otherwise be subjected.

111 Section 6.10(a) of the CAT NMS Plan requires the Participants to use the tools described in Appendix D to "develop and implement a surveillance system, or enhance existing surveillance systems, reasonably designed to make use of the consolidated information contained in the Central Repository." See note 4 supra.

span of fourteen months would be a sufficient period of time to accomplish that task.[112] The Commission therefore preliminarily believes the target deadline of December 31, 2021 for Full Availability and Regulatory Utilization of Transactional Database Functionality is both reasonable and feasible.

d. Full Implementation of CAT NMS Plan Requirements

The Commission proposes to amend Section 1.1 of the CAT NMS Plan to define "Full Implementation of CAT NMS Plan Requirements" as the point at which the Participants have satisfied all of their obligations to build and implement the CAT, such that all CAT system functionality required by Rule 613 and the CAT NMS Plan has been developed, successfully tested, and fully implemented at the initial Error Rates specified by Section 6.5(d)(i) of the CAT NMS Plan or less, including functionality that efficiently permits the Participants and the Commission to access all CAT Data required to be stored in the Central Repository pursuant to Section 6.5(a) of the CAT NMS Plan, including Customer Account Information, Customer-ID, Customer Identifying Information, and Allocation Reports, and to analyze the full lifecycle of an order across the national market system, from order origination through order execution or order cancellation, including any related allocation information provided in an Allocation Report.[113] This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c).[114] The Commission also proposes to add Section 11.6(a)(i)(D) to provide that the Participants will be entitled to collect the full amount of any Post-Amendment Industry Member Fees established or

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112 See CAT NMS Plan, supra note 4, at Section 6.7(a)(iv); see also id. at Section 6.10(a).

113 See notes 97-98 supra.

114 See also note 79 supra.

implemented to recover Post-Amendment Expenses incurred from the date immediately following the achievement of Full Availability and Regulatory Utilization of Transactional Database Functionality to the date of Full Implementation of CAT NMS Plan Requirements ("Period 4"), so long as such date is no later than December 30, 2022.[115]

The Commission preliminarily believes that Full Implementation of CAT NMS Plan Requirements is appropriate as the final Financial Accountability Milestone.[116] This Financial Accountability Milestone will require the Participants to show that they have satisfied all of their obligations to build and implement the CAT system functionality required by Rule 613, including functionality that would allow the Participants and the Commission to efficiently access all transactional data and, for the first time, customer information stored in the Central Repository. Whereas the previous Financial Accountability Milestones do not require the Participants to provide customer information like Customer Account Information, Customer-ID, and Customer Identifying Information, the Participants must have developed, tested, and implemented reporting functionality for these elements to satisfy the parameters of Full Implementation of CAT NMS Plan Requirements.

The creation of a unique Customer-ID under the CAT NMS Plan, is critical to achieving the full regulatory benefit of the CAT.[117] In the Commission's experience, it is now common for

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115 See proposed Section 11.6(a)(i)(D). To the extent that Full CAT NMS Plan Requirements is achieved at some later date, the Participants will only be entitled to collect a portion of the amount of the Post-Amendment Industry Member Fees established or implemented for Period 4. See proposed Section 11.6(a)(iii); see also Part II.B.2. infra for additional discussion regarding the conditions attached to Post-Amendment Industry Member Fee collection.

116 Because the provisions of proposed Section 11.6 are meant to incentivize full CAT implementation, under the proposal, these provisions will not apply once Full Implementation of CAT NMS Plan Requirements is achieved.

117 See, e.g., Rule 613 Adopting Release, supra note 2, at 45756.

individuals and entities to trade through multiple broker-dealer accounts and for individuals engaged in wrongdoing to execute trades through multiple broker-dealers. A Customer-ID will be the key that ties all of the trading by one Customer together and as such, will facilitate the ability of regulators to identify all the orders and actions attributable to a specific Customer regardless of where that Customer routes orders or executes trades – a linkage which does not exist now.

Moreover, currently available audit trail data does not directly identify the customer associated with trading activity, so regulators conducting market surveillance must undertake multiple steps to request additional information after identifying suspect trades in order to link those trades with specific individuals. The inclusion of Customer-IDs in the CAT, at Full Implementation of CAT NMS Plan Requirements, would therefore significantly improve the capabilities of regulators because the CAT will be able to connect suspicious trading activity directly to a particular Customer through the Customer-ID. In addition, the Customer-ID will also enable a regulator to surveil the trading activity of market participants in both equity and options markets by Customer-ID, and thus a Customer-ID will improve regulators' efficiency in conducting cross-market and cross-product surveillance, which could in turn reduce violative behavior and protect investors from harm.

Accordingly, the Commission believes that it is important to require the Participants to demonstrate that the Participants have developed, tested, and fully implemented functionality that efficiently permits the Commission and other regulators to access Customer-IDs, along with other Customer and Account information.

In addition to providing this integral customer information, achievement of Full Implementation of CAT NMS Requirements would also mean that the Participants have created

an audit trail system that provides reasonably accurate, reliable and useful information. Full Implementation of CAT NMS Requirements mandates that the CAT produce data at the initial Error Rate specified by the CAT NMS Plan,[118] as well as functionality that would efficiently permit the Participants and the Commission to analyze the full lifecycle of an order, including any subsequent allocation, across the national market system. These requirements are designed to help facilitate the implementation of the CAT functions in a manner that enables the Commission and other regulators to conduct the improved market surveillance envisioned by the Commission when it adopted Rule 613 – the ultimate goal of this project.

Furthermore, the Commission preliminarily believes that it is appropriate to require the Participants to achieve Full Implementation of CAT NMS Plan Requirements by December 30, 2022 in order to recover the full amount of any Post-Amendment Industry Member Fees. This deadline is consistent with the Participants' most recent projections, which indicate that the Participants intend to achieve full CAT implementation by July 2022.[119] In fact, the Commission's target deadline of December 30, 2022 gives the Participants an additional five months to achieve Full Implementation of CAT NMS Plan Requirements. Accordingly, the Commission preliminarily believes that the proposed target deadline of December 30, 2022 for Full Implementation of CAT NMS Plan Requirements is both reasonable and feasible.

2. Collection of Post Amendment Industry Member Fees

As noted above, the Commission is proposing that the Participants will be entitled to collect the full amount[120] of any Post-Amendment Industry Member Fees related to the

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118 See CAT NMS Plan, supra note 4, at Section 6.5(d)(i). See also note 103 supra.

119 See, e.g., note 96 supra.

120 "Full amount" in this context does not mean that the Participants may collect all of their Post-Amendment Expenses from Industry Members. Rather, pursuant to the provisions

achievement of the Financial Accountability Milestones described above so long as they meet specified dates, which dates are consistent with the timelines most recently published by the Participants.[121] If the Participants do not meet the specified date for the achievement of Initial Industry Member Core Equity Reporting, proposed Section 11.6(a)(ii) will provide that the Participants' recovery of Post-Amendment Industry Member Fees will be reduced according to the following schedule:

- By 25% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i)(A) by less than 60 days;
- By 50% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i)(A) by 60 days or more, but less than 120 days;
- By 75% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i)(A) by 120 days or more, but less than 180 days;
- By 100% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i)(A) by 180 days or more.

If the Participants do not meet the specified dates for the achievement of Full Implementation of Core Equity Reporting Requirements, Full Availability and Regulatory Utilization of Transactional Database Functionality, or Full Implementation of CAT NMS Plan

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of Article XI of the CAT NMS Plan, the Participants may recover an appropriate portion of these fees from Industry Members. Specifically, to recover any Post-Amendment Expenses from Industry Members, the Participants must file with the Commission proposed rule changes under Section 19(b) of the Act, setting for their proposed allocation and justifying why the proposed allocation is consistent with the Act. The Commission would then review the proposed rule changes for consistency with the Exchange Act and the CAT NMS Plan.

121 See proposed Section 11.6(a)(i).

Requirements, proposed Section 11.6(a)(iii) will provide that the Participants' recovery of Post-Amendment Industry Member Fees will be reduced according to the following schedule:

- By 25% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i) by less than 90 days;
- By 50% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i) by 90 days or more, but less than 180 days;
- By 75% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i) by 180 days or more, but less than 270 days; and
- By 100% if the Participants miss the deadline set forth in proposed Section 11.6(a)(i) by 270 days or more.

Proposed Section 11.6(a)(iv) provides that the Participants will only be entitled to collect Post-Amendment Industry Member Fees for Period 1, Period 2, Period 3, or Period 4 at the end of each respective Period.

The Commission preliminarily believes these conditions on CAT funding are appropriate. It has been almost three years since the Commission approved the CAT NMS Plan, but insufficient progress has been made towards the implementation of CAT, and the Participants have repeatedly missed deadlines set forth by the CAT NMS Plan. The Commission preliminarily believes that the proposed rules will provide accountability to facilitate implementation of the CAT in an expeditious and efficient manner, and according to a schedule that is consistent with the most recent timelines published by the Participants.[122]

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122 See Part II.B.1. for more discussion of the deadlines established by the proposed amendments.

As explained above, the Commission has identified four meaningful Financial Accountability Milestones and paired those Financial Accountability Milestones with reasonable and feasible target deadlines set approximately eight months to one year apart. The Participants will be able to recover the full amount of any Post-Amendment Industry Member Fees if the Participants achieve the Financial Accountability Milestones identified in the proposed rule amendment by the specified dates. However, the Commission preliminarily believes that it is appropriate to impose financial accountability on the Participants by incrementally reducing the amount of CAT funding that Participants may recover from Industry Members, according to the schedules set forth above.

Fee recovery for most of the Financial Accountability Milestones – Full Implementation of Core Equity Reporting Requirements, Full Availability and Regulatory Utilization of Transactional Database Functionality, and Full Implementation of CAT NMS Plan Requirements – will be governed by a fee schedule that gradually reduces the amount of recovery that the Participants are entitled to by 25% for each quarter by which the Participants miss the target deadline. The Commission preliminarily believes this structure will appropriately balance the need to keep Participants on a firm implementation schedule with the need to incentivize the Participants to continue their progress towards implementation even if the target deadlines identified in the proposed amendment are missed. As discussed above,[123] the Commission believes that the target deadlines identified for these three milestones are reasonable and feasible, because these deadlines are consistent with recent timelines provided by the Participants. The Commission therefore does not believe that it is necessary to allow for a grace period before reducing the Participants' recovery. However, by providing a full quarter before each

[123] See Part II.B.1.b.-d. supra.

subsequent, and additional, reduction to fee recovery, the proposed schedule gives the Participants an ample amount of time to achieve each milestone before further reductions are imposed. Moreover, the Commission believes that the proposed amount of the reduction – 25% per quarter – is appropriate, because it is sufficiently large to incentivize prompt implementation, but not so large as to be unnecessarily punitive.

A slightly different schedule is proposed for Initial Industry Member Core Equity Reporting. For that milestone, the proposal would reduce the initial recovery by 25% if the Participants miss the proposed deadline by less than 60 days and by an additional 25% for every additional 60 days by which the Participants miss the proposed deadline. While the Commission is imposing the same 25% fee reduction in this instance, the proposed fee recovery schedule for Initial Industry Member Core Equity Reporting is tighter than the schedule for the other three Financial Accountability Milestones. The Commission preliminarily believes that this is an appropriate schedule because this Financial Accountability Milestone should be the easiest for the Participants to achieve. Industry Members have developed relevant experience in reporting equities transaction data to OATS, and the Participants have made significant progress towards development of the necessary technical specifications, suggesting that the Participants remain on track with their own projections. In addition, the Commission believes it is critically important that the Participants remain on schedule to achieve the first Financial Accountability Milestone, in order to minimize the possibility that the deadlines for subsequent Financial Accountability Milestones will be missed.[124] For those reasons, the Commission believes the fee recovery schedule for Initial Industry Member Core Equity Reporting is appropriate.

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[124] See, e.g., Part IV.E.1.

The Commission preliminarily believes that the incremental approach followed by both fee recovery schedules, which provide the Participants with a considerable amount of recovery unless the Participants miss the target deadline by a considerable amount of time, will also promote implementation of the CAT in accordance with the deadlines outlined by this proposed amendment. The sooner the Participants achieve each Financial Accountability Milestone, the sooner the Participants will be able to begin recovering any related Post-Amendment Industry Member Fees.[125] Moreover, so long as the Participants complete each particular Financial Accountability Milestone substantially before the target deadline for the next Financial Accountability Milestone arrives, the Participants should be able to recover a portion of their fees, costs, and expenses from Industry Members, subject to the Exchange Act and the provisions of the CAT NMS Plan. Although failing to meet one target deadline might make it more difficult to comply with the next target deadline, the proposed amendment does not preclude the possibility that the Participants may be entitled to some measure of recovery going forward.[126] The Commission preliminarily believes that the Participants will continue to make

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125 See, e.g., proposed Section 11.6(a)(iv) (providing that the Participants may only collect relevant Post-Amendment Industry Member Fees at the end of Period 1, 2, 3 and/or 4).

126 For example, suppose the Participants missed the deadline for Initial Industry Member Core Equity Reporting by 180 days or more and were therefore not entitled to any recovery for Period 1. In this scenario, the Participants might still be able to meet the deadline for the next Financial Accountability Milestone, Full Implementation of Core Equity Reporting Requirements, or achieve that Financial Accountability Milestone within 270 days of the proposed deadline, thus entitling them to partial recovery under the proposed amendment. As another example, suppose the Participants did not achieve Full Implementation of Core Equity Reporting Requirements until January 1, 2021, but were able to meet the target deadline for the next Financial Accountability Milestone – Full Availability and Regulatory Utilization of Transactional Database Functionality. Because the Participants did not achieve Full Implementation of Core Equity Reporting Requirements on schedule, but were less than 90 days late, the Participants would be entitled to collect 75% of the Post-Amendment Industry Member Fees established for Period 2 upon achievement of Full Implementation of Core Equity Reporting

progress towards full CAT implementation even if one target deadline is missed because they still will have the opportunity to recover fees, costs, and expenses from Industry Members, albeit a smaller portion of those fees, costs, and expenses.[127]

As noted above, the Commission must review fee filings submitted by the Participants pursuant to Section 19(b) of the Exchange Act to implement fees to recover the costs and expenses incurred by the Participants in connection with the development, implementation, and operation of the CAT.[128] These filings must specify the percentage of the costs and expenses that will be allocated to the Participants on the one hand and the Industry Members on the other hand, as well as explain how costs and expenses will be allocated within each group. Each Participant must also demonstrate, under Sections 6(b)(4) and 15A(b)(5), that such fee filings provide for the equitable allocation of reasonable dues, fees, and other charges among its members and other persons using its facilities.[129] In light of the continued delays to CAT implementation, the Commission preliminarily believes that it is appropriate, at this time, to set forth the circumstances under which the full recovery of fees, costs, and expenses from Industry Members would not be reasonable under Sections 6(b)(4) or 15A(b)(5) of the Exchange Act or reasonably related to the Participants' self-regulatory obligations under the CAT NMS Plan.[130] The Commission preliminarily believes that it would not be a reasonable exercise of the Participants' funding authority under the CAT NMS Plan to fully recover fees, costs, and

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Requirements and the full amount of Post-Amendment Industry Member Fees for Period 3 upon achievement of Full Availability and Regulatory Utilization of Transactional Database Functionality.

127 See, e.g., note 191 infra.

128 See notes 66-68 supra.

129 See note 68 supra.

130 See notes 72-73 and associated text supra.

expenses from Industry Members if the Participants miss the target deadlines specified in the proposed amendment, because any delays by the Participants could increase uncertainty for and, potentially, impose additional costs on Industry Members.[131] In addition, the proposed amendments will increase transparency for Industry Members by setting forth the circumstances under which the full recovery of fees, costs, and expenses from Industry Members would not be reasonable.

3. Identification of Post-Amendment Expenses in Submissions to the Commission

Under proposed Section 11.6(b), all CAT NMS Plan amendments submitted by the Operating Committee to the Commission pursuant to Rule 608(b)(3)(i),[132] and all filings submitted by the Participants to the Commission under Section 19(b) of the Exchange Act,[133] to establish or implement Post-Amendment Industry Member Fees pursuant to Article XI of the CAT NMS Plan, must clearly indicate whether such fees are related to Post-Amendment Expenses incurred during Period 1, Period 2, Period 3, or Period 4. Requiring the Participants to specify whether any proposed fees are related to Post-Amendment Expenses, and the Period to which they are related, will help the Commission to determine whether it must consider the provisions of proposed Section 11.6 in evaluating the proposed fees.

The Commission requests comment on these proposed financial accountability provisions. To the extent possible, please provide specific data, analyses, or studies for support. The Commission particularly solicits comment on the following issues:

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131 See, e.g., Section IV.B. infra.

132 17 CFR 242.608(b)(3)(i).

133 15 U.S.C. 78s(b).

13. Is it appropriate for the Commission to apply the financial accountability provisions of proposed Section 11.6 to Post-Amendment Expenses? Why or why not? Should the financial accountability provisions of proposed Section 11.6 be applied to fees, costs, or expenses incurred by the Company in connection with the development, implementation, and operation of the CAT, or to some other set of fees, costs, or expenses? Why or why not? Would it be appropriate to limit Section 11.6 to apply only to fees, costs, or expenses incurred by the Company in connection with the development or implementation of the CAT? Why or why not? Should the Commission further define what it means to "incur" an expense? If so, how? Can the current definition of "incurred" in the proposing release be used to avoid the application of proposed Section 11.6? If so, please explain and describe how the Commission should address this.

14. Is it appropriate for the Commission to tie CAT funding to the achievement of Financial Accountability Milestones? Why or why not? Please explain your response.

15. With respect to Period 1:

    a. Is the proposed Financial Accountability Milestone of Initial Industry Member Core Equity Reporting appropriate? Why or why not? What other milestone should be used to end Period 1? Why?

    b. Is the definition of Initial Industry Member Core Equity Reporting appropriate? Why or why not? Please explain your response.

        i. Should the definition of Initial Industry Member Core Equity Reporting be amended to include additional types of reporting or

data? Should it be amended to remove some of the reporting or data requirements currently identified? Why or why not? Please explain your response.

ii. If the definition is amended, should the target deadline for Period 1 be amended? Why or why not? Please explain your response.

c. Is the target deadline of April 30, 2020 appropriate? Why or why not? What alternative deadline would be more appropriate? Why? Please explain your response.

16. With respect to Period 2:

a. Is the proposed Financial Accountability Milestone of Full Implementation of Core Equity Reporting Requirements appropriate? Why or why not? What other milestone should be used to end Period 2? Why? Please explain your response.

b. Is the definition of Full Implementation of Core Equity Reporting Requirements appropriate? Why or why not? Please explain your response.

i. Should the definition of Full Implementation of Core Equity Reporting Requirements be amended to include other kinds of Industry Member reporting or linkages? If so, which additional kinds of Industry Member reporting or linkages should be included and why? Please explain your response.

ii. Should the definition of Full Implementation of Core Equity Reporting Requirements be amended to reduce or strike the

reporting linkages requirement? If reduced, how should the requirements be reduced? Why? Please explain your response.

iii. Should the definition of Full Implementation of Core Equity Reporting Requirements be amended to require a less stringent Error Rate? If so, what should the Error Rate be and why? Please explain your response.

iv. Should the definition of Full Implementation of Core Equity Reporting Requirements amend the requirement that the query tool functionality required by Section 6.10(c)(i)(A) and Appendix D, Sections 8.1.1-8.1.3 and Section 8.2.1 incorporates Industry Member equities data or the requirement that the query tool functionality is available to the Participants and the Commission? How should the requirement be amended? Why? Please explain your response.

v. If the definition is amended, should the target deadline for Period 2 be amended? Why or why not? Please explain your response.

c. Is the start date for Period 2 appropriate? Why or why not? Please explain your response.

d. Is the target deadline of December 31, 2020 appropriate? Why or why not? What alternative deadline would be more appropriate? Why? Please explain your response.

17. With respect to Period 3:

a. Is the proposed Financial Accountability Milestone of Full Availability and Regulatory Utilization of Transactional Database Functionality appropriate? Why or why not? What other milestone should be used to end Period 3? Why? Please explain your response.

b. Is the definition of Full Availability and Regulatory Utilization of Transactional Database Functionality appropriate? Why or why not? Please explain your response.

i. Should the definition of Full Availability and Regulatory Utilization of Transactional Database Functionality be amended to require that the Commission must have approved a filing from FINRA to retire OATS, as well as any filings from the Participants to remove OATS-related provisions from their rules, or to remove the requirement that OATS reporting is no longer required for new orders? Why or why not? Please explain your response.

ii. Should the definition of Full Implementation of Core Equity Reporting Requirements be amended to include other kinds of Industry Member reporting or linkages? If so, which additional kinds of Industry Member reporting or linkages should be included and why? Please explain your response.

iii. Should the definition of Full Availability and Regulatory Utilization of Transactional Database Functionality be amended to require a less stringent Error Rate? If so, what should the Error Rate be and why? Please explain your response. Should the

Commission require the Participants to demonstrate that Error Rates are stable? If so, how would Participants do that? If the Participants are in compliance with Appendix C, Section 3 of the CAT NMS Plan, would that sufficient? How long should the Error Rate remain below the specified threshold in order to be considered "stable"?

iv. Should the Commission amend the requirement that the query tool functionality required by Section 6.10(c)(i)(A) and Appendix D, Sections 8.1.1-8.1.3, Section 8.2.1, and Section 8.5 incorporates the data required by conditions (b) and (c) or the requirement that the query tool functionality is available to the Participants and the Commission? How should the requirement be amended? Why? Please explain your response.

v. Should the Commission amend the requirement that the requirements of Section 6.10(a) are met? How should the requirement be amended? Why? Please explain your response.

vi. If the definition is amended, should the target deadline for Period 3 be amended? Why or why not? Please explain your response.

c. Is the start date for Period 3 appropriate? Why or why not? Please explain your response.

d. Is the target deadline of December 31, 2020 appropriate? Why or why not? What alternative deadline would be more appropriate? Why? Please explain your response.

e. Are there any conditions that the Commission should consider in evaluating whether OATS can be retired? Please explain your response.

18. With respect to Period 4:

a. Is the proposed Financial Accountability Milestone of Full Implementation of CAT NMS Plan Requirements appropriate? Why or why not? What other milestone should be used to end Period 4? Why? Please explain your response.

b. Is the definition of Full Implementation of CAT NMS Plan Requirements appropriate? Why or why not? Please explain your response.

i. Is additional detail needed to describe the obligations of the Participants under Rule 613 and the CAT NMS Plan? If so, why, and what language would sufficiently describe these obligations? Please explain your response.

ii. If the definition is amended, should the target deadline for Period 4 be amended? Why or why not? Please explain your response.

c. Is the start date for Period 4 appropriate? Why or why not? Please explain your response.

d. Is the target deadline of December 30, 2022 appropriate? Why or why not? What alternative deadline would be more appropriate? Why? Please explain your response.

19. Are the selected Financial Accountability Milestones appropriate? If not, what other Financial Accountability Milestones should be included?

20. Is it appropriate for the Commission to permit the Participants to submit updated, interim or addendum Quarterly Progress Reports for completed Financial Accountability Milestones? Why or why not? What information should be required in these interim or addendum Quarterly Progress Reports so that the Commission can rely on such reports? Should the Participants only be able to submit interim or addendum Quarterly Progress Reports in connection with certain Financial Accountability Milestones? If so, which ones? Please explain your response.

21. Is it appropriate to end the application of proposed Section 11.6 once Full Implementation of CAT NMS Requirements has been achieved? Why or why not? Please explain your response.

22. Should the Commission establish more than 4 Periods and/or use more than 4 Financial Accountability Milestones? If so, how many Periods should the Commission establish? What should the other Financial Accountability Milestones be? Why? Please explain your response.

23. Should the Commission establish fewer than 4 Periods and/or use fewer Financial Accountability Milestones? If so, how many Periods should the Commission establish? What milestones should be removed, or how should the existing milestones be edited? Please explain your response.

24. Is it appropriate for the Commission to incrementally reduce the amount of Post-Amendment Industry Member Fees that the Participants may recover if they miss the target deadlines specified in Period 1, Period 2, Period 3, or Period 4? Why or why not? Would a different percentage of recovery be more appropriate if target

deadlines are missed? If so, what percentage and on what schedule? Why? Is it appropriate for the Commission to use different recovery schedules for Period 1 and for Periods 2-4? Why or why not? Should a different recovery schedule be used for Period 1? If so, how should the recovery schedule be amended? Why? Please explain your response.

25. Is it appropriate that the Participants may only collect Post-Amendment Industry Member Fees at the end of Period 1, Period 2, Period 3, or Period 4? Why or why not? If not, at what other point(s) should the Participants be able to collect these fees, and how would the Commission determine whether and how the provisions of Section 11.6 apply? Please explain your response.

26. Do commenters believe that the proposed incentives will motivate the Participants to implement the CAT in an expeditious and efficient manner? Why or why not? Would an alternative methodology be more effective? If so, please describe this methodology and explain why it would be more effective.

27. Is it appropriate for the Commission to require the Operating Committee or the Participants to clearly label any CAT NMS Plan amendments or fee filings submitted to establish or implement Post-Amendment Industry Member Fees to indicate whether such fees are related to Post-Amendment Expenses incurred during Period 1, Period 2, Period 3, or Period 4? Why or why not? If not, how would the Commission determine whether and how the provisions of Section 11.6 apply? Please explain your response.

28. Should the Commission require the Participants to provide an independent audit of the fees, costs, and expenses incurred from the effective date of this proposed amendment? Why or why not?

III. Paperwork Reduction Act

Certain provisions of the proposed rule contain "collection of information requirements" within the meaning of the Paperwork Reduction Act of 1995 ("PRA").[134] The Commission is submitting these collections of information to the Office of Management and Budget ("OMB") for review in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11.[135] An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the agency displays a currently valid control number.[136] The title of the new collection of information is "CAT NMS Plan Reports."

A. Summary of Collection of Information

The proposed amendment would require two new categories of information collection: (1) the Implementation Plan and (2) the Quarterly Progress Reports.[137] These categories are described more fully below.

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134 44 U.S.C. 3501 et seq.

135 44 U.S.C. 3507; 5 CFR 1320.11.

136 5 CFR 1320.11(l).

137 The proposed amendment also requires the Participants to include certain information in certain CAT NMS Plan amendments submitted by the Operating Committee to the Commission pursuant to Rule 608(b)(3) and all filings submitted by the Participants to the Commission under Section 19(b) of the Exchange Act to establish or implement Post-Amendment Industry Member Fees. However, the Commission does not expect the baseline number of CAT NMS Plan amendments or Section 19(b) filings, or the burdens associated with these submissions, to increase as a result of the proposed amendment. The Commission therefore believes that these burdens are already accounted for in the Paperwork Reduction Act Information Collection submissions for Form 19b-4 and Rule 11Aa3-2. See OMB Control No. 3235-0045 (Aug. 19, 2016), 81 FR 57946 (Aug. 24,

1. Implementation Plan

Proposed Section 6.6(c)(i) would require the Participants, within 30 calendar days following the effective date of this amendment, to file with the Commission and make publicly available on a website a complete Implementation Plan that includes the Participants' timeline for achieving Implementation Milestones setting forth how and when the Participants will facilitate the achievement of Full Implementation of CAT NMS Plan Requirements. Under proposed Section 6.6(c)(iii), the Operating Committee shall be required to submit the Implementation Plan to the CEO, President, or an equivalently situated senior officer of each Participant. A Supermajority Vote of the Operating Committee shall then be required to approve the Implementation Report. However, if the Implementation Plan is approved only by a Supermajority Vote of the Operating Committee, and not by a unanimous vote of the Operating Committee, each Participant whose Operating Committee member did not vote to approve the Implementation Plan shall separately file with the Commission and make publicly available on a website a statement identifying itself and explaining why the member did not vote to approve the Implementation Plan.

2. Quarterly Progress Reports

Proposed Section 6.6(c)(ii) would further require the Participants, within 15 business days after the end of each calendar quarter, to file with the Commission and make publicly available on a website a complete Report that provides a detailed description of the progress made by the Participants towards each of the Implementation Milestones. The Participants must provide specified information regarding Implementation Milestones that have been completed,

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2016) (Request to OMB for Extension of Rule 19b-4 and Form 19b-4 PRA); OMB Control No. 3235-0500 (December 22, 2004), 70 FR 929 (January 5, 2005) (Proposed Collection for Rule 11Aa3-2 and Request for Comment).

Implementation Milestones that are in progress, and Implementation Milestones that have not yet been initiated, such as updated information on currently targeted completion dates and descriptions of the current status of the Implementation Milestone, any adjustments to the targeted completion date, and supporting information demonstrating the current level of completion. Under proposed Section 6.6(c)(iii), the Operating Committee shall be required to submit each Quarterly Progress Report to the CEO, President, or an equivalently situated senior officer of each Participant. A Supermajority Vote of the Operating Committee shall be required to approve each Quarterly Progress Report. However, if a Quarterly Progress Report is approved only by a Supermajority Vote of the Operating Committee, and not by a unanimous vote of the Operating Committee, each Participant whose Operating Committee member did not vote to approve that Quarterly Progress Report shall separately file with the Commission and make publicly available on a website a statement identifying itself and explaining why the member did not vote to approve the Report.

B. Proposed Use of Information

1. Implementation Plan

The Commission believes that the publication of the proposed Implementation Plan will make available critical information to the Commission, other regulators, and market participants regarding the intended goals and deadlines of the Participants. Access to this information will help the Commission and market participants to monitor the progress of CAT implementation, thereby reducing uncertainty surrounding this process. The Commission also anticipates that requiring the Participants to make public target dates submitted to senior management of each Participant and approved by a Supermajority Vote of the Operating Committee in the Implementation Plan will increase the Participants' accountability to their intended timeline. In addition, the Commission believes that requiring any Participants whose Operating Committee

members do not vote to approve the Implementation Plan to disclose the basis for that decision may aid the Commission and the public to better monitor the progress of CAT implementation, because such an explanation may reveal critical information regarding whether currently targeted completion dates are realistic, whether milestones are being or have been completed in accordance with the requirements of the CAT NMS Plan, and/or whether potential risks or delays may impede the progress of CAT implementation.

2. Quarterly Progress Reports

The Commission believes that the publication of the proposed Quarterly Progress Reports will make available critical information to the Commission, other regulators, and market participants regarding the intended goals and deadlines of the Participants. Access to this information will help the Commission and market participants to monitor the progress of CAT implementation. The Commission also anticipates that requiring the Participants to make public their accomplishments in the Quarterly Progress Reports will keep the Participants accountable to their intended timeline. Finally, the Commission expects that the provision of updated quarterly information in a Report, submitted to senior management of each Participant and approved by a Supermajority Vote of the Operating Committee, regarding the Participants' progress towards CAT implementation, as well as any explanatory statements by Participants whose Operating Committee members do not vote to approve the Report, may reduce uncertainty regarding CAT's implementation deadlines and flag any concerns regarding the implementation process for the Commission and market participants.

C. Respondents

The respondents to all collections of information would be the Participants.

D. Total Initial and Annual Reporting and Recordkeeping Burdens

The estimated burdens associated with the proposed amendments are described fully below, but the below table briefly summarizes the relevant burdens set forth in this Proposing Release.

Category	Annual Ongoing Burden Per Participant (burden hours / external costs)	One-time Burden Per Participant (burden hours / external costs)
Implementation Plan	N/A	76.8 / $8,695.65
Quarterly Progress Reports	307.2 / $34,782.60	N/A

1. Implementation Plan

The Commission preliminarily believes that each Participant will incur, on average, a one-time burden of approximately 57.2 hours to confer with other Participants, to draft an Implementation Plan, and to vote as to whether to approve the Implementation Plan, as required by proposed Section 6.6(c)(iii). In the CAT NMS Plan Approval Order, the Commission noted that the Participants had estimated that approximately 20 full-time employees took approximately 30 months to develop the CAT NMS Plan, including "staff time contributed by each Participant to, among other things, determine the technological requirements for the Central Repository, develop the RFP, evaluate Bids received, design and collect the data necessary to evaluate costs and other economic impacts, meet with Industry Members to solicit feedback, and complete the CAT NMS Plan submitted to the Commission for consideration."[138] The

[138] See CAT NMS Plan Approval Order, supra note 4, at n.3285.

Commission then used this information to estimate that the development of the CAT NMS Plan would require, in aggregate, 14,407 burden hours for 12 months.[139]

This estimate, based on information provided by the Participants about the burdens they actually incurred in developing a related project, reflects the best data available to the Commission in estimating the number of initial burden hours required to develop the Implementation Plan. The Commission notes that developing the CAT NMS Plan was a far more complex project than the development of the Implementation Plan and that the burdens incurred in developing the CAT NMS Plan may be different in nature than the costs that the Participants would incur in developing the Implementation Plan. In this instance, for example, the Participants will only have 30 calendar days from the effective date of this amendment to prepare the Implementation Plan, and the Participants have already created a Master Plan that contains much of the information required by proposed Section 6.6(c)(i). In addition, the Commission believes that the Participants should already have gathered much of the information needed to create the Implementation Plan.[140] For these reasons, the Commission preliminarily believes that the estimated burden for preparing the Implementation Plan should be one-twelfth the amount of the burden estimated for the development of the CAT NMS Plan,[141] or, on average, 52.2 initial, one-time burden hours for each Participant.[142]

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139 See id.

140 See, e.g., note 53 supra.

141 Because the proposed amendment gives the Participants approximately one month to prepare and publish the Implementation Plan, the Commission has preliminarily used an estimate that mirrors the one-month burden that was incurred by the Participants in developing the CAT NMS Plan.

142 14,407 CAT NMS Plan burden hours / 12 months = 1,200.6 burden hours for all Participants. 1200.6 aggregate burden hours / 23 Participants = 52.2 burden hours per Participant for the Implementation Plan. The Commission preliminarily estimates that

In addition, the Commission estimates that it will take each Participant approximately 10 hours, on average, for its member of the Operating Committee to ensure that the Operating Committee submits the Implementation Plan to the CEO, President, or equivalently situated senior officer of each Participant, for each Participant to review the information contained in the Implementation Plan and for senior management consultations as needed, and to vote on approving the Implementation Plan.[143] The Commission expects each member of the Operating Committee to be familiar with the process of CAT implementation, which should ease the task of determining whether to vote in favor of the Implementation Plan. Accordingly, the Commission estimates that each Participant will incur, on average, a one-time burden of 62.2 hours to prepare the Implementation Plan and to vote as to whether to approve it,[144] for a one-time aggregate burden of approximately 1,430.6 hours.[145]

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each Participant will spend, on average, 52.2 internal burden hours = (Attorney at 7 hours) + (Systems Analyst at 22.6 hours) + (Compliance Manager at 22.6 hours). As discussed further in Section IV.C., all estimates in this section represent an average; the Commission expects that some Participants may incur greater costs and some lesser costs due to variances in economies of scale for Participants who share a common corporate parent. See note 217 infra.

143 For the purposes of the Paperwork Reduction Act, the Commission is assuming that the member of the Operating Committee is a Chief Regulatory Officer or a Chief Compliance Officer and will spend 5 hours on these tasks. However, the Commission notes that this task could be performed by any person designated by the Participant to serve as its representative on the Operating Committee. See Section 4.2(a) of the CAT NMS Plan. In addition, the Commission estimates that senior management who receive the Implementation Plan from the Operating Committee will spend 5 hours in consultations, including with their member of the Operating Committee regarding the Implementation Plan. Because one individual may serve as the representative for multiple affiliated Participants, the Commission expects that some Participants may incur greater costs and some lesser costs due to variances in economies of scale for Participants who share a common corporate parent.

144 52.2 burden hours + 10 burden hours = 62.2 burden hours.

145 62.2 burden hours x 23 Participants = 1,430.6 burden hours.

If the Implementation Plan is approved only by a Supermajority Vote, and not by a unanimous vote, the proposed amendments require each Participant whose Operating Committee member did not vote to approve the Implementation Plan to separately file with the Commission and make available on a public website an explanatory statement identifying itself and explaining why it did not vote to approve the Implementation Plan.[146] Because there are currently 23 Participants, an Implementation Plan would need to be approved by at least 16 members of the Operating Committee to satisfy the Supermajority Vote provisions of the CAT NMS Plan.[147] At maximum, then, only seven Participants would file an explanatory statement in connection with an Implementation Plan approved only by Supermajority Vote.[148] The Commission preliminarily estimates that each of the seven Participants submitting an explanatory statement will incur, on average, an initial, one-time burden of 15 hours to draft such statement.[149] When this aggregate burden is averaged across all Participants, it amounts to approximately 4.6 hours per Participant or 105 hours in aggregate.[150]

Finally, the Commission estimates that each Participant will incur, on average, a one-time burden of approximately 10 hours to ensure that the Implementation Plan, and any explanatory

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146 For the purposes of the Paperwork Reduction Act, the Commission is assuming that this task will be performed by a Chief Regulatory Officer or a Chief Compliance Officer. See note 143 supra.

147 23 Participants x 2/3 Participants = 15.33 Participants. Section 1.1 of the CAT NMS Plan indicates that, "if two-thirds of all . . . members authorized to cast a vote is not a whole number then that number shall be rounded up to the nearest whole number."

148 23 Participants – 16 Participants = 7 Participants.

149 The Commission bases this estimate on a full-time Compliance Manager and the Chief Regulatory Officer or Chief Compliance Officer each spending 7.5 hours to prepare the explanatory statement.

150 7 Participants * 15 burden hours = 105 burden hours in aggregate. 105 burden hours / 23 Participants = 4.6 burden hours.

statement (if applicable), is filed with the Commission and made publicly available on a website.[151] The Commission therefore estimates an aggregate burden of approximately 230 hours for the Participants to publicly post and submit to the Commission the Implementation Plan.[152]

In total, therefore, the Commission estimates that each Participant will incur, on average, a one-time burden of approximately 76.8 hours[153] and approximately 1,766.4 hours in aggregate to comply with the provisions of the proposed amendments that relate to the Implementation Plan.[154]

The Commission further estimates that each Participant will expend approximately $8,695.65, on average, in external public relations, legal, and consulting costs related to the development of the Implementation Plan. In the CAT NMS Plan Approval Order, the Commission estimated, based on information provided by the Participants, that the Participants had collectively spent approximately $2,400,000 in preparation of the CAT NMS Plan on external public relations, legal, and consulting costs.[155] The Commission preliminarily believes that the estimated burden for the Implementation Plan should be one-twelfth the amount estimated for the development of the CAT NMS Plan, because the Participants will only have 30 calendar days from the effective date of this amendment to prepare the Implementation Plan and

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151 The Commission bases this estimate on a full-time Compliance Manager and Programmer Analyst each spending approximately 5 hours, for a combined total of approximately 10 hours, to prepare and publicly post the relevant documents.

152 10 burden hours per Participant x 23 Participants = 230 burden hours.

153 52.2 hours + 10 hours + 4.6 hours + 10 hours = 76.8 burden hours.

154 76.8 hours x 23 Participants = 1,766.4 burden hours. See Section IV.C. infra for a dollar cost estimate of this burden.

155 See CAT NMS Plan Approval Order, at n.3287, supra note 4.

because preparation of the Implementation Plan is a much less complex project. Accordingly, the Commission estimates that the Participants will expend approximately $200,000 in aggregate, and $8,695.65 per Participant, in external public relations, legal, and consulting costs related to the preparation of the Implementation Plan.[156]

2. Quarterly Progress Reports

The Commission preliminarily believes that each Participant will incur, on average, an ongoing quarterly burden of approximately 62.2 hours to confer with other Participants, to draft a Quarterly Progress Report, to ensure that the Operating Committee submits each Quarterly Progress Report to the CEO, President, or equivalently situated senior officer of each Participant, and to vote as to whether to approve each Quarterly Progress Report, as required by proposed Section 6.6(c)(iii).[157] This estimate is approximately the same as the burden related to the development and approval of the Implementation Plan, because the Quarterly Progress Reports require the Participants to prepare a detailed description explaining, quantifying, and voting to approve the description of their progress towards the Implementation Milestones laid out in the Implementation Plan, including the impact that any such progress might have on the target completion dates for Implementation Milestones that have not yet been achieved. The Commission believes this estimate is appropriate because the Participants are likely already tracking some of the information required to be included in the Quarterly Progress Reports.[158]

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156 $2,400,000 CAT NMS Plan costs / 12 months = $200,000 for all Participants. $200,000 / 23 Participants = $8,695.65 per Participant for the Implementation Plan.

157 As discussed further in Section IV.C., all estimates in this section represent an average; the Commission expects that some exchanges may incur greater costs and some lesser costs due to variances in economies of scale for Participants who share a common corporate parent. See note 217 infra.

158 See, e.g., note 53 supra.

Accordingly, the Commission estimates, on average, an ongoing quarterly burden of approximately 62.2 hours for each Participant,[159] an ongoing annual burden of approximately 248.8 hours for each Participant,[160] and an aggregate annual burden of approximately 5,722.4 hours.[161]

If any Quarterly Progress Report is approved only by a Supermajority Vote, and not by a unanimous vote, the proposed amendments require each Participant whose Operating Committee member did not vote to approve that Quarterly Progress Report to separately file with the Commission and make available on a public website an explanatory statement identifying itself and explaining why it did not vote to approve the Report.[162] Because there are currently 23 Participants, each Quarterly Progress Report would need to be approved by at least 16 members

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159 The Commission preliminarily estimates that each Participant will spend, on average, 52.2 internal burden hours to confer with other Participants and to compile the Quarterly Progress Report = (Attorney at 7 hours) + (Systems Analyst at 22.6 hours) + (Compliance Manager at 22.6 hours). In addition the Commission preliminarily estimates, for the purposes of the Paperwork Reduction Act, that the chief Compliance Officer or Chief Regulatory Officer of each Participant will spend 5 hours, on average, to submit the Quarterly Progress Report to the CEO, President, or equivalently situated senior officer of each Participant, to review the information contained in each Quarterly Progress Report and for senior management consultations as needed, and to vote on approving the Quarterly Progress Report. In addition, the Commission estimates that the CEO, President, or equivalently situated senior officer of each Participant will spend 5 hours in consultations, including with their member of the Operating Committee regarding each Quarterly Progress Report. 52.2 hours + 5 hours + 5 hours = 62.2 hours. Because one individual may serve as the representative for multiple affiliated Participants, the Commission expects that some Participants may incur greater costs and some lesser costs due to variances in economies of scale for Participants who share a common corporate parent.

160 62.2 burden hours per Participant per Quarterly Progress Report * 4 Quarterly Progress Reports = 248.8 annual burden hours per Participant for the Quarterly Progress Reports.

161 248.8 annual burden hours per Participant * 23 Participants = 5,722.4 aggregate annual burden hours.

162 For the purposes of the Paperwork Reduction Act, the Commission is assuming that this task will be performed by a Chief Regulatory Officer or a Chief Compliance Officer. See note 143 supra.

of the Operating Committee to satisfy the Supermajority Vote provisions of the CAT NMS Plan.[163] At maximum, then, only seven Participants would file an explanatory statement in connection with a Quarterly Progress Report approved only by Supermajority Vote.[164] The Commission preliminarily estimates that each of the seven Participants submitting an explanatory statement will incur, on average, an ongoing burden of 15 hours to draft such statement.[165] When this aggregate burden is averaged across all Participants, it amounts to an ongoing quarterly burden of approximately 4.6 hours per Participant,[166] an ongoing annual burden of approximately 18.3 hours per Participant,[167] and an aggregate annual burden of approximately 420 hours.[168]

Additionally, the Commission estimates that each Participant will incur an ongoing quarterly burden, on average, of approximately 10 hours to ensure that each Quarterly Progress Report, and any explanatory statement (if applicable), is filed with the Commission and made publicly available on a website.[169] The Commission therefore estimates an annual burden, on

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163 See note 147 supra.

164 See note 148 supra.

165 See note 149 supra.

166 7 Participants * 15 burden hours = 105 burden hours in aggregate. 105 burden hours / 23 Participants = 4.6 burden hours.

167 4.6 burden hours x 4 Quarterly Progress Reports = 18.3 burden hours.

168 18.3 annual burden hours x 23 Participants = 420 burden hours.

169 The Commission bases this estimate on a full-time Compliance Manager and Programmer Analyst each spending approximately 5 hours, for a combined total of approximately 10 hours, to prepare and publicly post the relevant documents.

average, of approximately 40 hours for each Participant,[170] and an aggregate annual burden of 920 hours for all Participants,[171] to publicly post and submit to the Commission the Reports.

In total, therefore, the Commission estimates that each Participant will incur, on average, an ongoing burden of approximately 76.8 hours per Quarterly Progress Report,[172] for an annual average estimated burden of 307.2 hours[173] and approximately 7,065.6 hours in aggregate.[174]

Similarly, the Commission estimates that each Participant will expend, on an ongoing basis, approximately the same amount of external public relations, legal, and consulting costs associated with the Implementation Plan on each Quarterly Progress Report. Accordingly, the Commission estimates, on average, an ongoing quarterly cost of approximately $8,695.65 for each Participant, an ongoing annual cost of $34,782.60 for each Participant,[175] and an aggregate annual cost of approximately $799,999.80.[176] The Commission notes that a portion of these costs may be recoverable from Industry Members, if consistent with the Exchange Act and the CAT NMS Plan.[177]

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170 10 burden hours per Quarterly Progress Report x 4 quarters = 40 annual burden hours per Participant.

171 40 annual burden hours per Participant x 23 Participants = 920 aggregate annual burden.

172 62.2 hours + 4.6 hours + 10 hours = 76.8 burden hours.

173 76.8 hours x 4 Quarterly Progress Report = 307.2 hours.

174 307.2 hours x 23 Participants = 7,065.6 burden hours. See Section IV.C. infra for a dollar cost estimate of this burden.

175 $8,695.65 per Participant per Quarterly Progress Report * 4 Quarterly Progress Reports = $34,782.60 per Participant per year for the Quarterly Progress Reports.

176 $34,782.60 per Participant * 23 Participants = $799,999.80 aggregate annual cost.

177 See, e.g., Article XI of the CAT NMS Plan.

E. Collection of Information is Mandatory

Each collection of information discussed above would be a mandatory collection of information.

F. Confidentiality of Responses to Collection of Information

Neither the Implementation Plan nor the Quarterly Progress Reports would be confidential. Rather, each would be publicly posted by the Participants on a website.

G. Retention Period for Recordkeeping Requirements

National securities exchanges and national securities associations are required to retain records and information pursuant to Rule 17a-1 under the Exchange Act.[178]

H. Request for Comments

Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission solicits comments to:

29. Evaluate whether the proposed collections of information are necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility;

30. Evaluate the accuracy of our estimates of the burden of the proposed collection of information;

31. Determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected; and

32. Evaluate whether there are ways to minimize the burden of collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.

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[178] 17 CFR 240.17a-1.

Persons submitting comments on the collection of information requirements should direct them to the Office of Management and Budget, Attention: Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Washington, DC 20503, and should also send a copy of their comments to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090, with reference to File Number 4-698. Requests for materials submitted to OMB by the Commission with regard to this collection of information should be in writing, with reference to File Number 4-698 and be submitted to the Securities and Exchange Commission, Office of FOIA/PA Services, 100 F Street NE, Washington, DC 20549-2736. As OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

IV. Economic Analysis

Section 3(f) of the Exchange Act requires the Commission, whenever it engages in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action would promote efficiency, competition, and capital formation.[179] In addition, Section 23(a)(2) of the Exchange Act requires the Commission, when making rules under the Exchange Act, to consider the impact such rules would have on competition.[180] Exchange Act Section 23(a)(2) prohibits the Commission from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.

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179 15 U.S.C. 78c(f).

180 15 U.S.C. 78w(a)(2).

The discussion below addresses the likely economic effects of the proposed rule, including the likely effect of the proposed rule on efficiency, competition, and capital formation.

As discussed above, since the adoption of Rule 613 in 2012, CAT implementation has experienced recurrent delays.[181] These implementation delays postpone the benefits of the CAT NMS Plan to investors[182] and may result in additional costs to Industry Members.[183] In the Notice, the Commission discussed how the governance structure of the CAT NMS Plan could affect the costs and benefits of the CAT NMS Plan and noted that the Commission retains the ability to modify the CAT NMS Plan.[184] The CAT NMS Plan does not require the Participants to provide transparency to industry or investors regarding implementation, nor does it create financial accountability for the Participants to complete the implementation process. The Commission preliminarily believes that modifying the CAT NMS Plan to require operational transparency and provide financial accountability for meeting implementation milestones will impose more structure on the process and is appropriate to achieve timely completion of the CAT. The proposed amendments would: (1) provide more accountability and transparency by requiring the Operating Committee to approve by Supermajority Vote and file with the Commission and publish on a public website certain information, including the Implementation Plan as well as quarterly reports detailing progress made toward achieving the Implementation Milestones set forth in the Implementation Plan and (2) introduce financial accountability to the CAT NMS Plan by requiring the Participants to meet four critical CAT implementation

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181 See Part I supra.

182 See CAT NMS Plan Approval Order, supra note 4, at Section V.E.

183 See Part IV.A. infra.

184 See Securities Exchange Act Release No. 77724 (April 27, 2016), 81 FR 30614 (May 17, 2016) (File No. 4-698) ("Notice"), at Section IV.E.3.d.1.

milestones – the Financial Accountability Milestones – by certain dates in order to collect the full amount of any related Post-Amendment Industry Member Fees established by the Operating Committee or implemented by the Participants.[185]

The proposed amendments would increase operational transparency by requiring Participants to publish a complete CAT implementation plan, and publish a complete progress report quarterly.[186] Further, the proposed amendments require approval by a Supermajority Vote of the Operating Committee for both the implementation plan and the quarterly progress reports.[187] These operational transparency provisions of the proposed amendments should provide Industry Members with more certainty surrounding the implementation timeline of CAT, reducing associated and unnecessary implementation costs.[188]

The proposed amendments also establish Financial Accountability Milestones and Reduced Fee Recovery Rates ("RFRRs") that take effect and increase in magnitude in response to delays in meeting certain Financial Accountability Milestones.[189] Thus, the proposed

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185 See Part II supra.

186 See Part II.A. supra.

187 See Part IV.B, infra for further discussion of this approval requirement.

188 The Commission preliminarily believes that uncertainty in the CAT NMS Plan implementation timeline may potentially increase Industry Member implementation costs. See Part IV.B, infra for further discussion.

189 The Plan allows Participants to recover a percentage of certain CAT costs from Industry Members. The Plan anticipates that the Participants will submit a fee filing that establishes what percentage of CAT expenses will be passed on to Industry Members, and how CAT expenses will be shared among Participants and among Industry Members. Because no CAT fee filing has been approved, the proportion of CAT costs that will be borne by Industry Members is unknown. The magnitude of the incentives from RFRRs ultimately depends on the proportion of fees that Participants are permitted to recover from Industry Members.

amendments would shift some costs from Industry Members to Participants if the Participants fail to meet certain Financial Accountability Milestones.[190] The Commission preliminarily believes this cost shifting would offset any Industry Member costs imposed by delays in implementation. The Commission further believes that the RFRRs incentivize the Participants to implement the CAT NMS Plan expeditiously and efficiently, which would result in investors realizing the benefits of the CAT NMS Plan sooner. If the Participants miss the deadline for Initial Industry Member Core Equity Reporting by more than 180 days, or the deadlines for the other three Financial Accountability Milestones by more than 270 days, the structure of the RFRRs would not allow them to recover expenses incurred during the Period. The Commission acknowledges that after 270 days or 180 days, as applicable, the amendments would no longer directly incentivize the Participants, because the 0% recovery rate cannot be further reduced by continued delays. However, the Participants would continue to incur and be solely responsible for the operating costs of the Central Repository, and could not share any ongoing operational costs incurred during the Period with Industry Members.[191] Participants would only be allowed

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In the event that RFRRs are triggered, the Commission proposes to reduce the amount of fees that the Participants are allowed to recover from Industry Members according to the fee schedule described in Part II.B.2. supra.

190 Although some Industry Members provide advice to the Participants through the actions of the CAT Advisory Committee, they do not have votes on the CAT Operating Committee and thus cannot initiate or control actions taken by the Operating Committee that might facilitate expeditious and efficient implementation of the Plan. Furthermore, in later stages of CAT implementation, in the event that Industry Members' actions might delay implementation of the Plan, the Participants have regulatory authority over Industry Members and can use that authority to address failures by Industry Members to comply with reporting requirements under the Plan.

191 The Participants' Central Repository costs consist of both implementation costs and operating costs, as discussed below; see note 227 infra. If Participants missed a Financial Accountability Milestone by 270 days and triggered a 0% RFRR, none of the expenses the Participants incurred during the Period could be recovered from Industry Members. However, the Participants would continue to incur operating costs for the Central

to partially recover from Industry Members those expenses incurred after the Period ended, which could only be achieved by meeting the applicable Financial Accountability Milestones. Furthermore, to the extent that Financial Accountability Milestones are inherently sequential, Participants would continue to be incentivized to complete the current Period by achieving the Financial Accountability Milestones to avoid triggering RFRRs in the subsequent Period. Consequently, although incentives would be diminished, the Participants would continue to be incentivized to complete the Period by meeting the Financial Accountability Milestones.

Wherever possible, the Commission has quantified the likely economic effects of the amendments, including the direct costs to the Participants. However, some of the costs, benefits, and other economic effects we discuss are inherently difficult to quantify, including the benefits of accelerating the realization of the improvements to investor protection that are expected to result from the implementation of the CAT, the benefits of transparency to industry members and the public, and the potential impact on competition among exchanges. Additionally, the Commission preliminarily believes costs caused by uncertainty in the timeline for CAT implementation and retirement of duplicative reporting systems may vary significantly across Industry Members because of the diversity of their approaches to regulatory data reporting. Therefore, much of our discussion is qualitative in nature. Our inability to quantify certain costs, benefits, and effects does not imply that such costs, benefits, or effects are less significant. We

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Repository, and the magnitude of those operating costs during the period would be a function of the duration of the Period. To minimize the financial impact of the RFRRs, the Participants would continue to be incentivized to meet the Financial Accountability Milestones and end the Period, so that they would no longer be solely responsible for the operating costs of the Central Repository and could again, potentially, resume sharing these costs with Industry Members.

request that commenters provide relevant data and information to assist us in analyzing the economic consequences of the proposed amendments.

A. Baseline

1. Transparency of CAT Implementation Status

Industry Members obtain information about the implementation status of the CAT NMS Plan through several mechanisms.[192] These include information gleaned from participation in the CAT Advisory Committee; information provided on websites operated by the CAT Operating Committee; presentations to industry sponsored by the CAT Operating Committee; and information presented at meetings of the Industry Technical Specifications Working Group.

A few representatives of Industry Members are privy to information through their participation on the CAT Advisory Committee, but this information is not widely available to industry. These advisory committee members "have the right to attend meetings of the Operating Committee or any Subcommittee, to receive information concerning the operation of the Central Repository," subject to certain limitations outlined in the CAT NMS Plan.[193] Further, "Members of the Advisory Committee shall receive the same information concerning the operation of the Central Repository as the Operating Committee; provided, however, that the Operating Committee may withhold information it reasonably determines requires confidential treatment. Any information received by members of the Advisory Committee in furtherance of the performance of their functions pursuant to this Agreement shall remain confidential unless

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192 The Plan requires that the Chief Compliance Officer shall appropriately document objective milestones to assess progress toward the implementation of the Plan, but has no requirement that this information be disseminated to industry or the Commission. See CAT NMS Plan, supra note 4, at Section 6.7(b).

193 See CAT NMS Plan, supra note 4, at Section 4.13.

otherwise specified by the Operating Committee."[194] The Commission preliminarily believes that Industry Members of the CAT Advisory Committee may be provided with significant information regarding the status of implementation, but given the confidential treatment required by the CAT NMS Plan, the Industry Members on the Advisory Committee are not free to share it with other Industry Members. Consequently, the Commission preliminarily believes that most Industry Members obtain little information about CAT implementation through this mechanism.

In addition, the Operating Committee provides a website with information on the CAT NMS Plan, but there is no requirement in the CAT NMS Plan to keep it current.[195] The website provides access to the current CAT NMS Plan, current technical specifications, an archive of information presented at past industry events, and other information about the CAT of interest to industry.

Furthermore, the Operating Committee provides occasional updates to industry on the state of implementation. These updates are documented on the CAT NMS Plan website. These updates include the April 3, 2019, Industry Outreach presentation in which the Operating Committee presented a revised implementation timeline for Industry Member reporting with deadlines that extend even further beyond those in the CAT NMS Plan.[196] Subsequent to this presentation, the CAT NMS Plan website added a "Timeline" section. The CAT NMS Plan, however, has no requirement that this be updated.

Another source of information about CAT implementation available to the industry is the Industry Technical Specifications Working Group. This working group, which makes

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194 See CAT NMS Plan Approval Order, supra note 4, at Section VI.D.1.a, note 3243.

195 See https://www.catnmsplan.com/index.html. The public can also glean information about Plan implementation from this website.

196 See note 47 supra.

recommendations on Industry Member-specific implementation issues, is comprised of members of the Advisory Committee and additional industry organization representatives, with subject matter experts from the industry invited to lead or facilitate discussion of a particular issue. This working group is not bound by confidentiality agreements, so some information discussed in the working group is shared with members of the industry, primarily through outreach efforts by industry associations.

2. Status of Implementation

As discussed previously, there have been repeated delays to implementation and it remains uncertain when CAT will be fully implemented.[197] Although the Participants have not yet published a timeline detailing when full functionality of Participant reporting would be completed by the new plan processor, in a April 2019 Industry Outreach presentation, the Operating Committee presented a revised implementation timeline for Industry Member reporting with deadlines that extend even further beyond those in the CAT NMS Plan. The revised deadline for Industry Member reporting to the CAT would require the reporting by Industry Members of equities data by April 2020 and simple options data by May 2020.[198] These delays to implementation of the CAT NMS Plan delay the time at which investors will realize the significant benefits of the CAT contemplated in the CAT NMS Plan Approval Order.[199] Specifically, delays in the implementation of the CAT have delayed improvements in

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197 See Part I supra for a detailed discussion of Plan implementation status.

198 See note 47 supra.

199 See CAT NMS Plan Approval Order, supra note 4, at Section V.E.

regulatory activities such as market analysis and reconstruction, surveillance, and investigations, leading to delays in increased investor protection.[200]

In addition, the Commission preliminarily believes that the multiple missed deadlines in the CAT NMS Plan has led to uncertainty for Industry Members surrounding the timeline of CAT implementation.[201] In the CAT NMS Plan Approval Order, the Commission discussed the complexities of, and diversity of approaches to, Industry Member regulatory data reporting,[202] and the costs that Industry Members face in implementing CAT reporting.[203] The Commission understands that for many Industry Members, significant changes to regulatory data reporting systems require planning for the allocation of financial, technological, and human resources. The Commission lacks specific information on the status of Industry Member CAT reporting implementation efforts, but recognizes the possibility that some Industry Members, particularly those that self-report regulatory data, may already be incurring costs due to this uncertainty, as discussed further below.[204] Therefore, the Commission recognizes that it is possible that

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200 See id. The Approval Order noted that, by providing regulators with more complete, accurate, accessible, and timely trade and order data, the CAT would improve regulatory activities such as market analysis and reconstruction, surveillance, and investigations, leading to increased investor protection.

201 As discussed in the CAT NMS Plan Approval Order, many Industry Members rely on service bureaus to report their regulatory data. These service bureaus face the same uncertainty that is described here for Industry Members. Some but not all service bureaus are Industry Members. See CAT NMS Plan Approval Order, supra note 4, at Section V.F.1.c.(2).

202 See id.

203 See id. at Section V.F.2.

204 In the case of the majority of Industry Members that rely on service providers for their regulatory data reporting, those service providers face significant CAT implementation costs and similar uncertainty as large self-reporting Industry Members, and any additional costs the service providers face in implementing CAT reporting due to this uncertainty are likely to be passed on to their Industry Member customers.

Industry Members may be incurring additional costs, beyond those anticipated due to the delay.[205] Finally, the Commission believes that any Industry Members that have begun implementation activities are likely incurring costs for tracking and planning for CAT implementation and notes that the length of the implementation period has extended longer than anticipated. This may increase costs to Industry Members.

B. Benefits

The Commission preliminarily believes the proposed amendments offer two primary benefits. First, because the amendments include financial accountability provisions that may cause the CAT to be implemented more expeditiously and efficiently, investors could realize the benefits of the CAT sooner than they would be realized without the proposed amendments. Second, the Commission preliminarily believes that Industry Members would have more certainty surrounding the implementation timeline of CAT, and the timeline for retirement of OATS,[206] reducing possible associated and unnecessary implementation and maintenance costs.[207]

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205 See Part IV.B, infra.

206 The Commission continues to believe that the period of duplicative reporting of OATS data will be less than 2-2.5 years, but recognizes that the multiple delays in CAT implementation has increased uncertainty about when the duplicative reporting period will commence and end. Neither the Plan nor the Participants' industry outreach materials currently offer guidance to Industry Members on when duplicative reporting systems are likely to be retired. Consequently, Industry Members cannot reasonably estimate the expected duration of the period of duplicative reporting, or when it might begin and/or end. In the CAT Approval Order, duplicative reporting was anticipated to cost Industry Members up to $1.4 billion annually between the time when Industry Members begin to report data to the CAT and when duplicative regulatory data reporting systems are retired. See CAT NMS Plan Approval Order, supra note 4, at Section V.F.2.b.

207 See Part IV.D.1. infra for discussion of impacts on efficiency of Industry Member CAT implementation.

The amendment's financial accountability provisions may cause the CAT to be implemented more expeditiously and efficiently, which could allow investors to realize the benefits of the CAT sooner than they would be realized without the proposed amendments. While the Commission continues to believe that implementation of CAT will allow the Participants to improve their regulatory activities to the benefit of investors,[208] the Commission also notes that implementation of the proposed amendments may accelerate the Participants' realization of costs relative to the current state of development. These include costs to build and operate the Central Repository, report Participant data to CAT, and to update their regulatory surveillance to take advantage of data available in the Central Repository.[209] Consequently, the Commission preliminarily believes that the Participants may have a financial disincentive to implement CAT expeditiously and efficiently because delays in CAT implementation delay realization of some of these costs, such as costs to update their regulatory surveillance. By amending the CAT NMS Plan to provide RFRRs to encourage implementation, the Commission preliminarily believes the Participants will be more likely to implement CAT expeditiously and efficiently to the benefit of investors.[210]

As discussed in more detail in the CAT NMS Plan Approval Order, by providing regulators with more complete, accurate, accessible, and timely trade and order data, the CAT is expected to improve regulatory activities such as market analysis and reconstruction,

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208 See CAT NMS Plan Approval Order, supra note 4, at Section V.E.2 .

209 See CAT NMS Plan Approval Order, supra note 4, at Section V.F.

210 Missing Financial Accountability Milestones will result in Participants not being able to recoup certain costs from Industry Members. This will increase the costs for which Participants will ultimately be responsible, with those costs increasing as implementation delays persist.

surveillance, and investigations, leading to increased investor protection.[211] If the Participants complete the implementation of the CAT more expeditiously and efficiently as a result of the proposed amendments, these benefits will be realized more quickly.

The Commission preliminarily believes that the proposed amendments should provide Industry Members with more certainty surrounding the implementation timeline of CAT and the retirement schedule for OATS, which should help reduce any unnecessary implementation and maintenance costs associated with this uncertainty.[212] As discussed previously, the Commission recognizes that there is significant uncertainty regarding the CAT implementation timeline. Further, based on discussions with Industry Members and staff expertise, the Commission preliminarily believes that this uncertainty may be causing Industry Members to incur costs they would not have incurred had the CAT been completed on its original schedule.[213] As noted above, for many Industry Members, significant changes to regulatory data reporting systems require planning for the allocation of financial, technological, and human resources, and the Commission preliminarily believes that uncertainty surrounding CAT implementation timelines may be hampering Industry Members' ability to efficiently perform that planning. The amendments may result in the Participants implementing CAT more expeditiously and efficiently and should reduce uncertainty because Industry Members will be aware of the financial accountability measures that Participants face if Financial Accountability Milestones

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211 Id. at Section V.E.

212 See Part IV.A.2. supra for discussion of uncertainty surrounding CAT implementation timing.

213 In the course of reviewing the CAT NMS Plan and preparing the Notice, Commission staff gathered information in conversations with Industry Members on how Industry Members implement changes in regulatory data reporting requirements and what factors drive Industry Member costs when those requirements change. See Notice, supra Note 184, at n880.

are missed, and are likely to assume that the Participants will be incentivized to meet those milestones. Further, information in the Implementation Plan and Quarterly Progress Reports, and the associated requirement for approval by a Supermajority Vote of the Operating Committee, combined with any statement identifying Participants that did not vote to approve and explaining why the member did not vote to approve, would provide Industry Members with more complete and possibly more reliable information on implementation requirements and timing. This may allow them to implement CAT reporting more efficiently, particularly if the content of the disclosures provides sufficient information to provide greater certainty on implementation progress. However, the Commission preliminarily believes this benefit may be limited somewhat by the fact that Participants may be incentivized not to vote against approval of the Implementation Plan or Quarterly Progress Reports because doing so would cause them to incur costs associated with preparing, filing with the Commission and publishing an explanatory statement of their Operating Committee Member's vote. Consequently, in the event that a Participant is inclined to vote against approval of the Implementation Plan or a Quarterly Progress Report, in the absence of enough votes to prevent approval, the Participant may be incentivized to vote to approve the Implementation Plan or Quarterly Progress Report and thus not provide an explanatory statement that might contain information useful to Industry Members.

Based on staff expertise and discussions with Industry Members[214], the Commission preliminarily believes that potential reductions in cost due to uncertainty could be attributed to a number of factors. Less uncertainty about the CAT implementation timeline may allow Industry Members and service bureaus to make efficient decisions regarding when to commence implementation activities and how to implement in the most cost-efficient manner. More

[214] See Notice, supra Note 184, at n880.

certainty may allow Industry Members to negotiate more favorable contracts with vendors because they will have more certainty about date ranges when vendor services would be required for CAT reporting implementation activities. Furthermore, as discussed in the CAT NMS Plan Approval Order, maintaining legacy data reporting systems like those used to report OATS is likely to entail allocation of technological and human resources. If Industry Members have more certainty regarding how long these resources are required, they may make more cost-efficient decisions regarding maintaining or replacing hardware and software used to report legacy regulatory data. Finally, the uncertainty surrounding the timeline of CAT implementation may impose significant opportunity costs on Industry Members. Because changes to regulatory data reporting systems can be significant IT projects for Industry Members, Industry Members may defer other large projects that might require an overlapping set of resources until the operational and financial requirements and timing for CAT implementation are better known. Decreasing uncertainty may allow Industry Members to better plan for and proceed with other projects that may have been deferred due to uncertainty in the CAT implementation timeline.

The Commission recognizes that if the Participants continue to miss deadlines under the amendments, it would result in more uncertainty for Industry Members with respect to whether and when the Participants are capable of achieving CAT implementation, particularly if the Participants are unable to make progress with the financial accountability measures. The Commission preliminarily believes this uncertainty is mitigated by the increased transparency afforded by the Quarterly Progress Reports, which should allow Industry Members to see progress toward meeting Implementation Milestones.

Finally, the requirement that the Implementation Plan and Quarterly Progress Reports be submitted to the CEO, President, or an equivalently situated senior officer of each Participant

prior to the Operating Committee approval vote, is intended to promote senior management attention and promote accountability with respect to CAT implementation. The Commission preliminarily believes that this requirement may thereby facilitate the expeditious and efficient implementation of CAT.

C. Costs

The Commission preliminarily believes the proposed amendments are likely to have both direct and indirect costs, detailed below. The Commission preliminarily estimates that the direct costs to the Participants from the proposed amendments include up to approximately $3.7 MM in ongoing annual costs and total one-time costs of up to approximately $932,000.[215] If the RFRRs are triggered, during a one-year period during implementation, up to $120MM in costs of CAT implementation and operation could be shifted from Industry Members to Participants, but this would not change total costs to industry as a whole from the CAT NMS Plan. The Commission expects, however, that the proposed amendments would have additional indirect costs. These consist of potentially accelerated implementation costs to Participants, Industry Members, and Service Bureaus; possible costs related to the potential for inefficient acceleration of the implementation of the CAT; and costs related to the possible market exit of exchanges if the RFRRs in the amendments are triggered. These costs are likely to be passed on to investors.

For purposes of the PRA,[216] the Commission preliminarily estimates that the direct costs to Participants from the proposed amendments[217] include up to approximately $3.7MM[218] in

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215 These maximum totals assume that upon each approval vote, seven Participants incur costs to prepare and publish statements explaining why they did not vote to approve the document in question. These costs are discussed further below.

216 Direct costs cited in this paragraph are quantified from estimates in the PRA. See Part III supra. Discussion of other direct costs follows discussion of costs from the PRA.

annual costs and total one-time costs of up to approximately $932,000.[219] The ongoing annual costs per Participant are comprised of approximate labor costs of up to $145,000[220] and external

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217 The PRA estimates cost represent an average; the Commission expects that some Participants will incur greater costs, some lesser. In calculating the costs to prepare, review, and vote on the Implementation Plan and Quarterly Progress Reports on a per Participant basis, the Commission recognizes that its estimates per Participant may be overstated to the extent that there are economies of scale for Participants who share a common corporate parent. Specifically, the voting representative for one Participant may serve as the voting representative on the Operating Committee for multiple affiliated Participants under Section 4.2(a) of the CAT NMS Plan. Once this representative conducts the necessary background work to vote on the Implementation Plan or a Quarterly Progress Report, and, if applicable, for the Participant to prepare an explanation of why this representative did not vote to approve the Implementation Plan or Quarterly Progress Report, the representative would not need to duplicate all of his or her efforts for another Participant. Thus, the Commission believes that its estimates may be overstated for some Participants in the sense that one representative reviewing and voting on the Implementation Plan or Quarterly Progress Reports might not require 5 hours for each exchange for which he or she is performing this task. On the other hand, the Commission believes that its estimates for Participants who are not affiliated with other Participants might be understated for some Participants because they are unable to benefit from economies of scale. Representatives for unaffiliated exchanges may require more than 5 hours to perform this same task. The Commission preliminarily believes that 5 hours is a reasonable estimate of average representative time required.

218 Assuming that each Supermajority Vote has the minimum of 16 Participants voting to approve each Quarterly Progress Report, total annual ongoing maximum cost is (23 Participants x $119,471 per Participant + 28 explanatory statements x $6,472.50 per statement = $2,747,838) in labor costs plus (23 Participants x $34,800 = $800,400) in external consulting costs = $3,729,468 in total costs. See Note 220, infra.

219 Assuming that each Supermajority Vote has the minimum of 16 Participants voting to approve the Implementation Plan, total one-time maximum cost is (23 Participants x $29,868 per Participant = $686,959) in labor costs plus (23 Participants x $8,700 = $200,100) in external consulting costs = $932,367 in total costs. See Note 223, infra.

220 See Part III.D. supra. Annual labor costs per Participant assume preparation, approval through Supermajority Vote of the Operating Committee, and publication of four Quarterly Progress Reports and any accompanying statements explaining why a Participant did not vote to approve the Quarterly Progress Report. Preparation of each Quarterly Progress Report requires 7 hours of Attorney labor at $427 per hour; 22.6 hours of Systems Analyst labor at $270 per hour; 22.6 hours of Compliance Manager labor at $318 per hour. 4 x [($427 x 7) + ($270 x 22.6) + ($318 x 22.6)] = $65,111. Time for the Participant's Operating Committee Member to prepare for and vote on the Quarterly Progress Reports is assumed to be 5 hours at a rate of $545 per hour. 4 x ($545 x 5) =

consulting costs of $35,000[221] to prepare, approve through Supermajority Vote of the Operating Committee, publish, and when applicable, for each Participant whose Operating Committee member did not vote to approve the Implementation Plan to separately file with the Commission and make available on a public website an explanatory statement identifying itself and explaining why it did not vote to approve the Quarterly Progress Report.[222] The one-time costs

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$10,900, using the hourly rate for a Chief Compliance Officer. Publication and filing of the Quarterly Progress Reports and any explanatory statements of the Operating Committee Member's vote is assumed to require 5 hours of Compliance Manager labor at $318 per hour and 5 hours of Programmer/Analyst labor at $220 per hour. 4 x ($318 x 5) + ($220 x 5) = $10,760. The Quarterly Progress Report shall be submitted to the President, CEO or equivalently situated senior officer of each Participant prior to the approval vote of the Operating Committee, and any subsequent consultation, including with their Operating Committee member, is assumed to require five hours of labor at $1,635 per hour. 4 x ($1,635 x 5) = $32,700. See Note 225 infra, for discussion of this hourly rate. Total annual costs for each Participant are thus $65,111 + $10,900 + $10,760 + $32,700 = $119,471. If a Participant is required to prepare a statement explaining why it did not vote to approve a Quarterly Progress Report, preparation requires 7.5 hours of Compliance Manager Labor at $318 per hour and 7.5 hours of Chief Compliance Officer labor at $545 per hour. ($318 x 7.5) + ($545 x 7.5) = $6472.5. For each Quarterly Progress Report, 23 Participants will incur costs to prepare the report, but no more than 7 will incur costs to prepare statements explaining why they did not vote to approve the Quarterly Progress Report. See Part III.D.2, supra. Consequently, there may be up to 28 such quarterly statements (4 x 7) required annually. Thus, Quarterly Progress Report preparation, depending on the number of explanatory statements required, would have an annual aggregate maximum labor cost of (23 x $119,471) + (28 x $6472.5) = $3,729,468 with a per Participant average labor cost of $3,729,468 ÷ 23 = $127,351. Hourly rates are based on hourly rates for Attorneys, Systems Analysts, and Compliance Managers from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits, and overhead. Salary information for voting representatives uses the Chief Compliance Officer rate of from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified as above to $545 per hour.

221 See Part III.D. supra. External consulting costs assume four Quarterly Progress Reports. 4 x $8,696 = $34,784.

222 These annual costs would be incurred until completion of the CAT Implementation Plan. See Part III.D.2. supra.

per Participant include up to $36,000[223] in labor costs and $8,700[224] in external consulting costs to prepare, approve through Supermajority Vote of the Operating Committee, publish, and when applicable, for each Participant whose Operating Committee member did not vote to approve the Implementation Plan to separately file with the Commission and make available on a public website an explanatory statement identifying itself and explaining why it did not vote to approve the Implementation Plan.

The Proposed Amendments require that both the Implementation Plan and Quarterly Progress Reports be submitted to the President, CEO or equivalently situated senior officer of each Participant prior to the approval vote by the Operating Committee. In connection with this requirement, the Commission preliminarily estimates that each SRO will incur one-time

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223 See Part III.D.2. supra. Preparation and approval through Supermajority Vote of the Operating Committee of the Implementation Plan requires 7 hours of Attorney labor at $427 per hour; 22.6 hours of Systems Analyst labor at $270 per hour; 22.6 hours of Compliance Manager labor at $318 per hour. ($427 x 7) + ($270 x 22.6) + ($318 x 22.6) = $16,278. Time for the Participant's Operating Committee Member to prepare for and vote on the Implementation plan is assumed to be 5 hours at a rate of $545 per hour. ($545 x 5) = $2,725, using the hourly rate for a Chief Compliance Officer. Publication and filing of the Implementation Plan and any explanatory statement of the Operating Committee Member's vote is assumed to require 5 hours of Compliance Manager labor at $318 per hour and 5 hours of Programmer/Analyst labor at $220 per hour. ($318 x 5) + ($220 x 5) = $2,690. The Implementation Plan shall be submitted to the President, CEO or equivalently situated senior officer of each Participant prior to the approval vote of the Operating Committee, and any subsequent consultation, including with their Operating Committee Member, is assumed to require five hours of labor at $1,635 per hour. ($1,635 x 5) = $8,175. See Note 225, infra, for discussion of this hourly rate. Total one time labor costs are $16,278 + $2,725 + $2,690 + $8,175 = $29,868. If an explanatory statement of the Operating Committee Member's vote needs to be prepared, this would require 7.5 hours of labor by a Compliance Manager at $318 per hour and 7.5 hours of labor by the Chief Compliance Officer at $545 per hour. ($318 x 7.5) + ($545 x 7.5) = $6,473. Thus, Implementation Plan preparation, depending on the number of explanatory statements required, would have an annual aggregate maximum labor cost of (23 x $29,868) + (7 x $6472.5) = $732,267 with a per Participant average labor cost of $732,267 ÷ 23 = $31,838. Aggregate totals assume 23 Participants and 7 explanatory statements.

224 See Part III.D.2. supra.

consultation costs of $8,200 for the Implementation Plan, and ongoing annual costs of $33,000 for Quarterly Progress Reports until such time as CAT is fully implemented.[225]

If the RFRRs are triggered, during a one-year period during implementation, up to $120MM in costs of CAT implementation and operation could be shifted from Industry Members to Participants, but this would not change total costs to industry as a whole from the CAT NMS Plan.[226] In the absence of an approved fee filing, the Commission is unable to precisely estimate the magnitude of the costs associated with RFRRs that individual Participants would incur under such a scenario; however, the Commission believes RFRR costs during any one-year period for individual Participants are unlikely to exceed $46.4MM for the largest

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225 The Commission estimates that the President, CEO or equivalently situated senior officer of each Participant will spend approximately five hours in consultations, including with the Participant's Operating Committee member, and estimates this will cause each Participant to incur labor costs of (5 x $1635) = $8,175 for the Implementation Plan and (4 x $8,175) = $32,700 annually for Quarterly Progress Reports. Hourly rates are based on hourly rates for Chief Compliance Officers from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead. Salary information for CEO/presidents of exchanges are not generally publically available as they might be for CEO/presidents of exchange holding groups. The Commission estimates an hourly rate for the President, CEO or equivalently situated senior officer of an exchange by using the hourly rate for a Chief Compliance Officer of $545 and multiplying by 3 to account for the expected salary differential.

226 The Commission estimates a maximum cost during a Period of up to one year by making certain assumptions. First, in the CAT NMS Plan Approval Order, the Commission estimated maximum implementation costs and annual operating costs for the Central Repository of $65MM and $55MM respectively; see CAT NMS Plan Approval Order, supra note 4, at Section V.F.1.a. If the Participants were allowed to recover 100% of those costs from Industry Members, if milestones under these amendments were achieved, and if all implementation costs were incurred during a single Period, Central Repository costs for a Period of up to one year would likely be no higher than $65MM + 55MM = $120MM. In such a scenario, Participants could incur maximum RFRR costs during a single year of $120MM if they missed the Financial Accountability Milestone by more than 270 days. Because the first Period's duration is less than one year, its maximum would be lower because a full year's operating costs for the Central Repository would not be incurred.

Participant and $0.4MM for the smallest Participant, and are likely to be significantly lower than these maximums.[227] If RFRRs are triggered, there would be a reduction in exchange profitability and there might be transitory effects on exchange capital formation because the exchanges would face additional costs and may not be able to invest in projects or return profits to shareholders as they would have otherwise.[228] In the case of FINRA, which is organized as a nonprofit member organization, costs from RFRRs could not be passed to FINRA's Industry Members.[229] This may affect FINRA's ability to invest in other projects that could promote investor protection.

The Commission preliminarily believes that the proposed amendments are likely to have indirect costs to some Participants, Industry Members, and service bureaus due to acceleration of CAT implementation costs relative to the current delayed timeline. In the CAT NMS Plan Approval Order, the Commission estimated CAT implementation costs for Participants, Industry

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227 Assuming equity exchanges bore 100% of Participant fees and using widely reported equity trading volume for February 2019, and assuming fees were allocated by market share of equity trading volume, the largest equity venue would incur 38.7% x $120MM = $46.4MM and the smallest equity venue would incur 0.3% x $120MM = $0.4MM in RFRR costs. For an example of widely reported equity trading volume, see the CBOE's compilation of equity trading volume at http://markets.cboe.com/us/equities/market_statistics/historical_market_volume/. The actual RFRR costs would likely be significantly lower than these maximums. For example, it is unlikely that 100% of implementation costs that presumably cover expenses from pre-implementation through the entire implementation period would be incurred in a single year, and the Commission preliminarily believes that some of these costs have already been incurred. This is a maximum single one-year RFRR cost because the estimated Central Repository operating cost is an annual figure. During a one-year implementation Period, the Commission assumes the Central Repository would incur one year of operating costs. However, when a Financial Accountability Milestone is missed, the Period may exceed one year in duration and additional operating costs would be incurred. Consequently, the implementation Period RFRR cost incurred by the Participants would be a function of the length of the delay and the actual operating costs incurred by the Plan Processor during that implementation Period.

228 See Part IV.D.3. infra.

229 All of FINRA's members are Industry Members, while most but not all Industry Members are FINRA members.

Members, and service bureaus that provide certain order handling, connectivity, and clearing services to Industry Members.[230] These three groups may have indirectly benefited from implementation delays as implementation costs were deferred, while the benefits to investors anticipated by the CAT NMS Plan Approval Order have likewise been deferred. To the extent that the proposed amendments reduce those delays, the unintended cost deferral to these groups will be ended.

The Commission preliminarily believes that the amendments could result in an inefficiently accelerated implementation of the CAT, which could potentially increase overall CAT implementation costs to Participants, Industry Members, and ultimately to investors.[231] Because the Participants would have financial accountability for meeting the Financial Accountability Milestones, the Participants might choose to incur additional and inefficient costs to avoid missing deadlines because the magnitude of the additional costs incurred to meet the Financial Accountability Milestone dates may be less than the magnitude of the reduction in expenses the Participants could recover due to the RFRRs outlined in these amendments.[232] If the Participants do not exceed Financial Accountability Milestone dates by more than 180 or 270

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230 See CAT NMS Plan Approval Order, supra note 4, at Section V.F.1.

231 See CAT NMS Plan Approval Order, supra note 4, at Section V.F.2.a.

232 For example, Participants might incur $50MM in additional costs to avoid missing a Financial Accountability Milestone date by a week and incurring resultant RFRR costs of $30MM. Because the $50MM cost would be partially funded by Industry Members, incurring this expense might be financially rational for the Participants. Such an acceleration may be inefficient in the sense that accelerating implementation by one week might not provide benefits to industry and investors that warrant an additional $50MM in investment in the CAT. Inefficient acceleration might also result in missed opportunities for value-added features of CAT. For example, inefficient acceleration of implementation might cause the Participants to delay implementing an effective Help Desk, or to defer improvements to the reporters' portal.

days, as applicable, Industry Members would share in funding some of those additional costs.[233] Because the proposed amendments have provisions that improve transparency, these effects could be magnified to the extent that the Participants seek to avoid missing Implementation Milestones required in the amendments. Furthermore, accelerated implementation might result in inefficient implementation decisions. For example, Participants could deliver less help desk functionality, reporter portal features, or infrastructure design so that they can avoid missing a Financial Accountability Milestone deadline. While these reductions in functionality might still meet the requirements of the CAT NMS Plan, they might make the CAT less effective or efficient for reporters and users of CAT data than it would have been with greater functionality. The costs of such reductions in functionality may accrue primarily to Industry Members or users of CAT data.

The Commission preliminarily believes that the likelihood of an inefficiently accelerated CAT implementation is low for two reasons. First, the deadlines for Financial Accountability Milestones are aligned with the most recent timelines published by Participants. Therefore the Commission preliminarily believes that the dates are feasible and thus are unlikely to pressure the Participants to inefficiently accelerate CAT implementation to avoid triggering RFRRs. Second, the financial accountability measures in the proposed amendments are designed in a manner that should mitigate this risk because RFRRs continue to increase as delays persist, until the fee recovery rate becomes zero. Specifically, the costs associated with missing a deadline for a Financial Accountability Milestone by a short period (for example, less than 90 days) would be

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233 The CAT NMS Plan Approval Order contemplated a fee structure in which costs of developing, implementing, and operating the Central Repository would be shared between Participants and Industry Members. See CAT NMS Plan Approval Order, supra note 4, at Section IV.F.1.

less than the costs associated with missing a deadline for a Financial Accountability Milestone by a longer period (for example, more than 90 days). Consequently, Participants may be less likely to inefficiently accelerate implementation to avoid RFRRs because the RFRRs reduce rather than eliminate the Participants' ability to recoup costs from Industry Members for delays of less than 270 (or in the case of Period 1, 180) days.

The Commission also notes that additional indirect costs may accrue to market participants due to exchanges leaving the market for trading services, which could result from the impact of the amendments on competition, as discussed further below.[234] Market participants face certain fixed costs in establishing connectivity to exchanges and adapting their trading strategies for changes in available trading venues. Consequently, competitor exits from the market for exchange services may be costly to other market participants who must update trading strategies to reflect what trading venues are available. The Commission believes it is unlikely that such costs will accrue because the failure of exchanges due to the financial accountability provisions in the proposed amendments is unlikely. The Commission preliminarily believes that exchanges that might require additional capital to meet their financial obligations under the CAT NMS Plan could acquire it through financial markets because exchanges are generally profitable and investors in exchanges are likely to view costs from RFRRs as one-time events that do not affect long-term exchange profitability. Also, in many cases, exchanges are part of a larger exchange group that could provide additional capital if needed.[235]

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234 See Part IV.D.2. infra.

235 See Part IV.D.2. infra for a more in depth discussion of the competitive effects of the proposed amendments.

Finally, while triggering the RFRRs in these amendments would cause Participants to accrue additional costs because they could not recover these costs from Industry Members, there would be a corresponding financial benefit to Industry Members because they would not have to pay those costs. Consequently, the cost transfers from the RFRRs in the proposed amendments do not impose a net cost on industry as a whole. The Participants could attempt to shift the costs to Industry Members through changes to their broader fee structures. However, changes to the Participants' fees would need to be filed with the Commission.

D. Impact on Efficiency, Competition, and Capital Formation

1. Efficiency

The Commission preliminarily believes that the proposed amendments will have an effect on efficiency. In general, the Commission preliminarily believes that the proposed amendments will improve the efficiency of Plan implementation activities by Industry Members. However, the Commission preliminarily believes that the financial accountability provisions could also potentially reduce the efficiency of Plan implementation by the Participants by incentivizing them to delay certain later-period implementation activities if Participants believe there is a significant risk of missing a Financial Accountability Milestone date in an earlier period.

The Commission preliminarily believes that the proposed amendments will improve the efficiency of Industry Member implementation of CAT reporting. As discussed previously, uncertainty and delays in CAT implementation and OATS retirement could have costs for broker-dealers.[236] The financial accountability and public disclosures required by the proposed amendments should provide more certainty to Industry Members regarding when they will be required to begin reporting data to CAT and when they will be able to retire duplicative reporting

[236] See Part IV.A.1. supra.

systems. This should aid Industry Members in efficiently developing and implementing their CAT data reporting systems, planning the maintenance and eventual retirement of duplicative systems, and allowing them to make adjustments to those plans as needed.

However, the Commission preliminarily believes that the financial accountability provisions could incentivize Participants to inefficiently delay certain later-period implementation activities if Participants believe there is a significant risk of missing a Financial Accountability Milestone date in an earlier Period. To illustrate, during Period 1, in the absence of the proposed amendments, it may be efficient for Participants to invest in activities that enable meeting Financial Accountability Milestones in Periods 2, 3, and 4. If, however, Participants believe that they likely will not meet the Period 1 Financial Accountability Milestone and will thus likely trigger an RFRR during Period 1, Participants may defer investing in Period 2, 3, and 4 activities during Period 1 because investments that enable meeting later Period Financial Accountability Milestones would be subject to a Period 1 RFRR because the expenses were incurred during Period 1. Furthermore, some Participants might delay financial investment in some implementation activities if additional costs from triggering RFRRs provoke financial distress. The Commission preliminarily believes this outcome is unlikely because the Commission preliminarily believes that exchanges that might require additional capital to meet their financial obligations under the CAT NMS Plan could acquire it through financial markets. Exchanges are generally profitable, and investors in exchanges are likely to view costs from RFRRs as one-time events that do not affect long-term exchange profitability.[237] The Commission preliminarily believes that the structure of the financial accountability provisions may attenuate the risk of inefficient delay of financial investment in later Period Financial

[237] See Part IV.C.4. infra.

Accountability Milestones to some degree because delaying such investment is likely to increase the risk of triggering an RFRR in a later Period. This would make it relatively more costly to delay later Period implementation investments when facing potential RFRRs for those periods.

2. Competition

a. Competitive Baseline

The Commission described the structure of the market for trading in NMS securities, as of that time, in the Notice and the CAT NMS Plan Approval Order.[238] While the Commission's analysis of the state of competition in the Notice is fundamentally unchanged, the market for trading services in options and equities currently consists of 23 national securities exchanges, all but one of which are Plan Participants,[239] as well as off-exchange trading venues, including broker-dealer internalizers, and 31 ATSs,[240] which are not Plan Participants. The exchanges are currently controlled by 7 separate entities; three of these operate a single exchange.[241]

b. Competitive Effects

The Commission preliminarily believes that the proposed amendments might have competitive effects on the market for NMS security trading services and the market for equity

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238 See CAT NMS Plan Approval Order, supra note 4, at Section V.G.1.

239 LTSE is not yet a Participant to the CAT NMS Plan.

240 As of 8/26/19 there are 31 NMS Stock ATSs operating pursuant to an initial Form ATS-N. A list of NMS Stock ATSs, including access to initial Form ATS-N filings that are effective, can be found on the Commission website at https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm.

241 Cboe Global Markets, Inc. controls BYX, BZX, C2, EDGA, EDGX, and CBOE; Miami Internal Holdings, Inc. controls Miami International, MIAX Emerald, and MIAX PEARL; NASDAQ, Inc. controls BX, GEMX, ISE, MRX, PHLX, and Nasdaq; Intercontinental Exchange, Inc. controls NYSE, Arca, American, Chicago, and National. The three entities that control a single-exchange are IEX Group which controls IEX, a consortium of broker-dealers which controls BOX, and Long Term Stock Exchange, Inc. which controls LTSE.

listings. In the case that RFRRs are triggered, one or more exchanges might exit these markets, although the Commission preliminarily believes this is unlikely.[242] The Commission preliminarily believes that triggering an RFRR could also temporarily affect competition between exchanges and ATSs and broker-dealer internalizers, but does not believe the effects will be significant.

The Commission preliminarily believes that is it unlikely that exchanges that are part of an exchange group would exit the market for NMS security trading services or equity listings if the RFRRs in the proposed amendments are triggered because the larger exchange group could provide additional capital to an exchange that would otherwise exit the market. Such costs are one-time events and are unlikely to change an exchange operator's assessment of the long-term economics of operating the exchange.[243]

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242 A potential entrant to the market might be marginally more likely to delay entry due to the proposed amendments, but given that a new entrant's fee burden would be a function of its market share, presumably a new entrant would begin with a relatively low market share. The Commission, therefore, does not preliminarily believe that an entity considering forming an exchange would decline to do so because of additional uncertainty about CAT NMS Plan financial responsibilities. Consequently, the Commission preliminarily believes that the proposed amendments are unlikely to have effects on innovation by new entrants.

243 The Commission preliminarily believes that the license to operate an exchange is a valuable asset even when the extant exchange has low volume because exchange families and new entrants sometimes acquire both high and low volume exchanges. See, e.g., https://ir.theice.com/press/press-releases/all-categories/2018/07-18-2018-133237540 and http://cdn.batstrading.com/resources/press_releases/CBOE-Holdings-Announces-Close-of-Acquisition-of-Bats-Global-Markets-FINAL-3-1-17.pdf. As long as the RFRR-related costs incurred by an exchange are less than the cost of registering and implementing a new exchange from scratch, exchange families with adequate financial resources are likely to invest additional capital in an exchange that would otherwise fail due to the RFRRs.

The Commission recognizes that under the proposed amendments, exchanges do not incur RFRR costs in isolation; if one exchange incurs RFRR costs, all exchanges incur RFRR costs. Consequently, an exchange family might need to further capitalize multiple exchanges. The Commission believes failure of entire exchange groups is unlikely

However, for smaller exchanges that are not part of a larger exchange family that could provide additional capital, the Commission recognizes that it is possible that such exchanges could be forced to exit the market, although the Commission believes this is unlikely to occur. Specifically, the Commission believes it is unlikely that exchanges would be forced to leave the market because the Commission preliminarily believes that exchanges that required additional capital to meet their financial obligations under the CAT NMS Plan would be able to secure it through financial markets.

Even if an exchange were to exit, the Commission does not believe this would significantly impact competition in the market for exchange trading services or the market for equity listings because these markets are served by multiple competitors. Consequently, demand for these services in the event of the exit of a competitor is likely to be swiftly met by existing competitors. The Commission recognizes that small exchanges may have unique business models that are not currently offered by competitors to these independent exchanges, but the Commission preliminarily believes a competitor could create similar business models if demand were adequate, and if they did not do so, it seems likely new entrants would do so if the exiting exchange were otherwise profitable.

If the RFRRs are triggered, the Commission preliminarily believes that it could temporarily affect competition between exchanges and ATSs and broker-dealer internalizers. However, the Commission preliminarily believes that these effects would not be significant. As discussed previously, in the event RFRRs are triggered, up to $120MM in costs could be shifted

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because the Commission preliminarily believes that exchange groups that might require additional capital to meet their financial obligations under the Plan could acquire it through financial markets because exchanges are generally profitable and investors in exchanges are likely to view costs from RFRRs as one-time events that do not affect long-term exchange profitability.

from Industry Members to Participants in a one-year Period.[244] This increase in costs to Participants could have transient negative effects on Participants' ability to invest in their exchanges.[245] The corresponding cost savings to Industry Members could have transient positive effects on Industry Members' abilities to invest in their ATSs or internalization operations, which could include temporarily reducing fees in order to attract order flow. Although this may temporarily provide ATSs and broker-dealer internalizers with a competitive advantage over exchanges in attracting order flow, the Commission preliminarily believes that these effects will not be significant because broker-dealers make strategic decisions to expose orders on exchanges or route orders to ATSs or internalizers based on other factors, such as order characteristics and temporary market conditions, that will not be impacted by the proposed amendments.

3. Capital Formation

The Commission preliminarily believes the amendments will have negligible mixed effects on capital formation. The Commission preliminarily believes that it is possible the amendments' improvements to investor protections may allow improvements to capital formation anticipated in the CAT NMS Plan Approval Order to be realized sooner than they would be in the absence of the proposed amendments. As discussed previously, delays in implementation of the CAT NMS Plan have delayed investors' realization of improvements to investor protection anticipated in the CAT NMS Plan Approval Order. By incentivizing the Participants to implement the CAT NMS Plan expeditiously, the amendments may permit investors to realize these benefits sooner than they would otherwise. These improvements to

244 See Part IV.C. supra.

245 See Part IV.D.3. infra.

investor protections may improve capital formation.[246] However, some costs of the amendments – particularly the direct costs – are likely to be passed on to investors.[247] Because these are not ongoing costs, the Commission preliminarily believes any negative effects on capital formation will be transitory. If RFRRs are triggered, the exchanges could face significant costs associated with expenses that could not be shared with Industry Members. These additional costs to Participants would be offset by savings by Industry Members. The Commission preliminarily believes these transfers between Participants and Industry Members are unlikely to affect capital formation because while the costs to Participants might be passed on to investors through relatively higher prices to transact on exchanges for broker-dealers that would then pass these costs on to their customers, the savings to Industry Members might be passed on by broker-dealers to their customers as well, so the net impact to investors should be negligible.

If RFRRs are triggered, exchanges could experience short-term, transitory negative effects on exchange capital formation because the exchanges would face additional costs and may not be able to invest in projects or return profits to shareholders that they would otherwise. However, the Commission preliminarily believes costs from RFRRs would be viewed as transitory by investors because they would end with full CAT implementation. Consequently, the Commission preliminarily believes that the amendments would not permanently affect investors' assessment of expected profitability for exchanges, and thus would not reduce this capital formation long-term.

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246 See CAT NMS Plan Approval Order, supra note 4, at Section V.G.1.

247 Costs associated with triggering RFRRs would not increase the cost of the CAT, but rather constitute a transfer between Participants and Industry Members. The Commission preliminarily believes these costs are unlikely to be directly transferred to investors, but notes competitive effects of these transfers in Part IV.D.2. supra.

E. Alternatives

1. Fixed versus Relative Financial Accountability Milestone Dates

The Commission considered an alternative approach that would use relative Financial Accountability Milestone dates in a scenario when a Financial Accountability Milestone was not met on schedule. Under the proposed amendments, Financial Accountability Milestone dates are fixed calendar dates. Under this alternative approach, the duration of the time period between two Financial Accountability Milestone dates would be static but the Financial Accountability Milestone dates would be relative. Thus, if a Financial Accountability Milestone were not achieved on schedule, the next Financial Accountability Milestone date would be delayed such that the duration of Periods between Financial Accountability Milestone dates was unchanged.[248] For example, if sequential Financial Accountability Milestone dates are April 30, 2020 and December 31, 2020, achieving the first Financial Accountability Milestone on May 31, 2020 would automatically reset the next Financial Accountability Milestone date to January 31, 2021, leaving the duration of the period between the two dates unchanged.

The primary economic impact of this approach relative to the proposal is that it avoids a risk inherent in the fixed Financial Accountability Milestone date approach of the proposal. Under the fixed Financial Accountability Milestone date approach, if the Participants encounter a

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248 The alternative could be structured such that upon the end of a Period, the next Financial Accountability Milestone date would become the later of the Financial Accountability Milestone date in the amendments or the relative date from this alternative approach. This approach would prevent the subsequent relative Financial Accountability Milestone date from becoming earlier in the event that the Participants achieve a Financial Accountability Milestone ahead of schedule. This would avoid the problem of incentivizing the Participants to delay Financial Accountability Milestone achievement to avoid accelerating Financial Accountability Milestone dates, and would mitigate any risk Industry Members would have from accelerating Financial Accountability Milestone dates.

delay early in the implementation process that causes them to miss a Financial Accountability Milestone date by a significant margin, it may become more difficult for them to meet future Financial Accountability Milestone dates. Under such a scenario, the proposed amendments may lose some of their incentive value because the Participants may not be able to avoid triggering at least some of the RFRRs after missing an early Financial Accountability Milestone date. Under the alternative approach with relative Financial Accountability Milestone dates, if the Participants miss a deadline early in the implementation timeline and trigger the RFRRs, they would not necessarily find later deadlines so difficult to meet that they lose their economic incentive to meet the later Financial Accountability Milestone dates.

This alternative approach has two significant costs relative to the proposed amendments. First, in a case where a significant delay arises in an early implementation Period such that financial RFRRs are triggered during that Period, the Participants may be incentivized to delay meeting the Period-ending requirement in order to give themselves more time to achieve later-Period Financial Accountability Milestones in order to decrease their risk of triggering RFRRs in later Periods. Such a scenario could significantly delay the retirement of OATS, which would be costly to Industry Members if it extended their period of duplicative reporting.[249] Under both the proposed amendments and in this alternative, the structure of the financial accountability provisions might mitigate but not eliminate this risk because RFRRs increase over time; consequently, if a Financial Accountability Milestone is missed and an RFRR is triggered, Participants should remain incentivized to implement in an expeditious manner to avoid triggering a higher RFRR during the same Period of implementation. However, under the alternative approach, the Financial Accountability Milestone date for OATS retirement could be

[249] See CAT NMS Plan Approval Order, supra note 4, at Section V.F.2.b.

pushed back due to missing an earlier Financial Accountability Milestone, which could necessitate a longer period of costly duplicative reporting for Industry Members.

The second likely additional cost relative to the proposal is that the alternative approach would make the ultimate CAT implementation timeline less certain than in the proposal, because delays in early Periods would push back implementation dates for later Periods of implementation. However, under the proposed approach, missing an early-Period Financial Accountability Milestone could also result in delays in meeting later Financial Accountability Milestones, and because the potential length of future delays would not be defined by the structure of the proposed amendments, they would be less transparent to Industry Members. However, under the proposed amendments, realized delays would be documented in Quarterly Progress Reports and thus should aid Industry Members in updating expectations on implementation timelines.

2. Different Timelines for Onset of RFRRs

The Commission considered alternative approaches with different Financial Accountability Milestone dates. These approaches would have certain additional benefits and costs as compared to the proposal. For example, earlier Financial Accountability Milestones might accelerate the time at which investors realize the benefits of the CAT, but would increase the likelihood that the implementation of CAT would be accelerated to a degree that is inefficient.[250] Alternatively, delaying Financial Accountability Milestone dates would increase the time that investors do not realize the benefits of CAT and that Industry Members experience uncertainty that increases their implementation costs, but might avoid the risk of inefficiently

[250] See Note 232, supra.

accelerating the implementation of CAT.[251] The Commission further notes that alternative milestone dates that are not generally aligned with dates published by or discussed with the Participants are less likely to reflect realistic expectations for the Participants in implementing the CAT.[252]

3. Alternate Magnitudes of RFRRs

The Commission considered alternative approaches with different levels of RFRRs. Under the proposed amendments, for each period of up to 90 days by which the Participants miss Financial Accountability Milestone dates, they would trigger RFRRs such that they would be allowed to recover 25% less of the CAT costs they would otherwise recover from Industry Members. Alternative approaches could have higher or lower marginal RFRRs.

The Commission preliminarily believes that alternative approaches with higher marginal RFRRs (allowing the Participants to recover a lower share of CAT costs from Industry Members when RFRRs are triggered) would potentially further incentivize the Participants to meet Financial Accountability Milestone deadlines, but would also increase the risk of inefficient acceleration of CAT implementation.[253]

The Commission preliminarily believes that alternative approaches with lower RFRRs (allowing the Participants to recover a higher share of CAT costs from Industry Members when RFRRs are triggered) would decrease the incentives Participants have to meet Financial Accountability Milestone deadlines, but would reduce the risk of inefficient acceleration of CAT implementation.

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251 See Part IV.C. supra.

252 See Part II.B.1. supra.

253 See Note 233, supra.

F. Request for Comment on the Economic Analysis

The Commission is sensitive to the potential economic effects, including the costs and benefits, of the proposed amendments to the CAT NMS Plan. The Commission has identified above certain costs and benefits associated with the proposal and requests comment on all aspects of its preliminary economic analysis. The Commission encourages commenters to identify, discuss, analyze, and supply relevant data, information, or statistics regarding any such costs or benefits. In particular, the Commission seeks comment on the following:

33. Do you believe the Commission's analysis of the potential effects of the proposed amendments to the CAT NMS Plan is reasonable? Why or why not? Please explain in detail.

34. Do you believe the Commission's description of the state of implementation of the CAT NMS Plan is accurate? Why or why not? Please explain in detail.

35. Do you believe that the multiple delays in implementation of the CAT NMS Plan has led to uncertainty surrounding CAT implementation that may be causing Industry Members to incur costs they would not have incurred had the CAT been completed on its original schedule? Why or why not? Please explain in detail.

36. The structure of the RFRRs provides that after missing a Financial Accountability Milestone by 270 days (or 180 days as applicable), Participants would not be allowed to recover any implementation costs for the delayed implementation Period. For the remainder of the implementation Period, Participants would continue to incur expenses associated with the Plan Processor's operation of the Central Repository, and would not be able to share those expenses with Industry Members. Do you believe the Participants' inability to share those expenses with

Industry Members will continue to incentivize the Participants to proceed with Plan implementation? Why or why not? Please explain in detail.

37. Do you agree with the Commission's assessment of the transparency of Plan implementation? Why or why not? Please explain in detail.

38. Do you agree with the Commission's assessment of the status of Plan implementation? Why or why not? Please explain in detail.

39. The Commission requests that commenters provide relevant data and information to assist us in analyzing the economic consequences of the proposed amendments. In particular, the Commission requests data and information regarding the costs incurred by Industry Members because of uncertainty surrounding CAT implementation.

40. Do you agree with the Commission's assessment of the benefits of the proposed amendments? Why or why not? Please explain in detail.

41. Do you believe that the proposed amendments increase the likelihood that OATS will be retired by December 31, 2021? Do you believe that the amendments are likely to compress the period of duplicative reporting by Industry Members? Why or why not? Please explain in detail.

42. Do you believe the proposed amendments will decrease uncertainty for Industry Members regarding the timing and requirements of Plan implementation? Why or why not? Please explain in detail.

43. Do you believe this reduction in uncertainty will reduce costs of Plan Implementation by Industry Members? Why or why not? Please explain in detail.

44. Do the Participants have economic disincentives to Plan implementation that the Commission has not recognized? What are they? Please describe in detail.

45. Are there other economic incentives the Commission could propose to incentivize the Participants to implement the CAT NMS Plan expeditiously and efficiently? Please describe them in detail.

46. Do you agree with the Commission's analysis of the direct costs of the proposed amendments? Why or why not?

47. Do commenters agree that Participants' costs related to approval of the Implementation Plan and Quarterly Progress Reports are likely to have economies of scale, whereby the representatives of Participants that are members of exchange groups may spend less time per exchange on this task, while representatives of Participants that are not part of an exchange group may require more time to review and vote on the Implementation Plan and/or Quarterly Progress Reports, and prepare and publish on each of the Participant websites or collectively on the CAT NMS Plan website any statements identifying Participants that did not vote to approve and explaining why? Why or why not?

48. Do commenters agree with the Commission's estimate for hourly costs for Operating Committee members performing activities necessary for approval by a Supermajority Vote under the amendments? If not, please provide alternate estimates if possible.

49. Do commenters agree with the Commission's estimate for hourly costs associated with the President, CEO or equivalently situated senior officer of each Participant? If not, please provide alternative estimates of the hourly costs for the

President, CEO or equivalently situated senior officer of each Participant to consult as needed with the Participant's Operating Committee member.

50. Please provide estimates of the time required for a Participant and publish a statement identifying itself and explaining why it did not vote to approve the Implementation Plan or Quarterly Report. Also, please identify who (i.e. General Counsel, Chief Compliance Officer or other executive) would be involved in preparing such a statement.

51. Please comment on the Commission's estimate of the maximum cost of RFRRs to the Participants. Are there alternative methodologies to estimate these costs? Please describe and provide detailed analysis if possible.

52. Do you agree with the Commission's analysis of the indirect costs of the proposed amendments? Why or why not?

53. Are the proposed amendments likely to cause an inefficient acceleration as described above of Plan implementation as described above? Why or why not?

54. Do you believe the proposed amendments are likely to improve the efficiency of Plan implementation? Why or why not?

55. Do you believe the proposed amendments' incentive structure could potentially reduce the efficiency of Plan implementation by incentivizing Participants to delay certain later-Period implementation activities if Participants believe there is a significant risk of missing a Financial Accountability Milestone date in an earlier Period? Why or why not? Please describe how in detail.

56. The Commission requests comment on all aspects of this analysis and, in particular, on whether the Proposed Amendments would place a burden on

competition not necessary or appropriate in furtherance of the purposes of the Exchange Act, as well as the effect of the proposal on efficiency, competition, and capital formation.

57. Do you agree with the Commission's assessment of the current state of competition in the market for trading services? Why or why not?

58. Do you agree with the Commission's assessment of the current state of competition in the market for NMS stock listings? Why or why not?

59. Do you believe that in the event that RFRRs are triggered, one or more exchanges might exit the market for trading services? Please explain in detail.

60. If one or more exchanges were to exit the market for trading services, would competition in this market suffer? Why or why not? Are there exchanges that might leave this market that have business models that could not be copied by an existing competitor or new entrant? Would such business models be likely to be copied by an existing competitor or new entrant? Why or why not? Please explain in detail.

61. Do you believe that some Participants might be motivated to trigger RFRRs to financially distress competitors? Why or why not? Please explain in detail.

62. Do you believe the proposed amendments will have effects on capital formation that the Commission has not recognized? Please explain in detail.

63. Do you agree that the proposed amendments may improve capital formation by accelerating the investor protection benefits anticipated by the CAT Approval Order? Why or why not?

64. Would an alternative approach that used relative Financial Accountability Milestone dates rather than fixed Financial Accountability Milestone dates better incentivize the Participants to implement the CAT NMS Plan expeditiously and efficiently? Why or why not? Would such an approach have benefits or costs that the Commission has not recognized? Please explain in detail.

65. Are there alternative Financial Accountability Milestone dates that the Commission should use? What economic benefits and costs would those alternative dates have? Please describe in detail.

66. The Commission requests comment on alternative incentive structures. Is the proposed schedule for reducing the fee recovery levels by 25% for each period of up to 90 days that the Participants miss implementation Financial Accountability Milestone dates adequate to incentivize the Participants to implement CAT expeditiously and efficiently? Is there some other RFRR level that is more appropriate? Should the time period between reductions in RFRR levels be shorter or longer than 90 days? Please explain.

V. Consideration of Impact on the Economy

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"),[254] the Commission requests comment on the potential effect of this proposal on the United States economy on an annual basis. The Commission also requests comment on any potential increases in costs or prices for consumers or individual industries, and any potential

[254] Public Law 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C., 15 U.S.C. and as a note to 5 U.S.C. 601).

effect on competition, investment, or innovation. Commenters are requested to provide empirical data and other factual support for their views, to the extent possible.

VI. Regulatory Flexibility Act Certification

The Regulatory Flexibility Act ("RFA")[255] requires Federal agencies, in promulgating rules, to consider the impact of those rules on small entities. Section 603(a)[256] of the Administrative Procedure Act,[257] as amended by the RFA, generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules, or proposed rule amendments, to determine the impact of such rulemaking on "small entities."[258] Section 605(b) of the RFA states that this requirement shall not apply "to any proposed or final rule if the head of the agency certifies that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."[259]

The proposed rule amendments would only impose requirements on national securities exchanges registered with the Commission under Section 6 of the Exchange Act and FINRA. With respect to the national securities exchanges, the Commission's definition of a small entity is an exchange that has been exempt from the reporting requirements of Rule 601 of Regulation NMS, and is not affiliated with any person (other than a natural person) that is not a small

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255 5 U.S.C. 601 et seq.

256 5 U.S.C. 603(a).

257 5 U.S.C. 551 et seq.

258 The Commission has adopted definitions for the term "small entity" for purposes of Commission rulemaking in accordance with the RFA. Those definitions, as relevant to this proposed rulemaking, are set forth in 17 CFR 240.0-10. See Securities Exchange Act Release No. 18451 (January 28, 1982), 47 FR 5215 (February 4, 1982) (File No. AS-305).

259 5 U.S.C. 605(b).

business or small organization.[260] None of the national securities exchanges registered under Section 6 of the Exchange Act that would be subject to the proposed rule are "small entities" for purposes of the RFA. In addition, FINRA is not a "small entity."[261] For these reasons, the proposed rule will not apply to any "small entities." Therefore, for the purposes of the RFA, the Commission certifies that the proposed rule would not have a significant economic impact on a substantial number of small entities.

The Commission requests comment regarding this certification. In particular, the Commission solicits comment on the following:

67. Do commenters agree with the Commission's certification that the proposed rule would not have a significant economic impact on a substantial number of small entities? If not, please describe the nature of any impact on small entities and provide empirical data to illustrate the extent of the impact.

VII. Statutory Authority and Text of the Proposed Amendments to the CAT NMS Plan

Pursuant to the Exchange Act and, particularly, Sections 2, 3(b), 5, 6, 11A, 15, 15A, 17(a) and (b), 19, and 23(a) thereof, 15 U.S.C. 78b, 78c(b), 78e, 78f, 78k-1, 78o, 78o-3, 78q(a) and (b), 78s, 78w(a), and pursuant to Rule 608(a)(2) and (b)(2),[262] the Commission proposes to amend the CAT NMS Plan in the manner set forth below.

Additions are underlined; deletions are [bracketed].

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260 See 17 CFR 240.0-10(e).

261 See 13 CFR § 121.201

262 17 CFR 242.608(a)(2) and (b)(2). These provisions enable the Commission to propose amendments to any effective NMS Plan by "publishing the text thereof, together with a statement of the purpose of such amendment," and providing "interested persons an opportunity to submit written comments."

ARTICLE I
DEFINITIONS

Section 1.1 Definitions. As used throughout this Agreement (including, for the avoidance of doubt, the Exhibits, Appendices, Attachments, Recitals and Schedules identified in this Agreement):

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"Financial Accountability Milestone" means, as the case may be, Initial Industry Member Core Equity Reporting, Full Implementation of Core Equity Reporting, Full Availability and Regulatory Utilization of Transactional Database Functionality, and Full Implementation of CAT NMS Plan Requirements.

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"Full Availability and Regulatory Utilization of Transactional Database Functionality" means the point at which: (a) reporting to the Order Audit Trail System is no longer required for new orders; (b) Industry Member reporting for equities transactions, simple electronic options transactions, manual options transactions, and complex options transactions, including Allocation Reports, but excluding Customer Account Information, Customer-ID, and Customer Identifying Information, is developed, tested, and implemented; (c) representative order linkages, as well as intra-firm linkages, inter-firm linkages, national securities exchange linkages, and trade reporting facilities linkages, are developed, tested, and implemented in a manner that permits the Participants and the Commission to analyze the full lifecycle of an order across the national market system, from order origination through order execution or order cancellation, including any related allocation information provided in an Allocation Report; (d) CAT Error Rates satisfy the threshold specified by Section 6.5(d)(i); (e) the query tool functionality required by Section 6.10(c)(i)(A) and Appendix D, Sections 8.1.1-8.1.3, Section 8.2.1, and Section 8.5 incorporates the data described in conditions (b) and (c) and is available to the Participants and to the Commission; and (f) the requirements of Section 6.10(a) are met. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c).

"Full Implementation of CAT NMS Plan Requirements" means the point at which the Participants have satisfied all of their obligations to build and implement the CAT, such that all CAT system functionality required by Rule 613 and the CAT NMS Plan has been developed, successfully tested, and fully implemented at the initial Error Rates specified by Section 6.5(d)(i) or less, including functionality that efficiently permits the Participants and the Commission to access all CAT Data required to be stored in the Central Repository pursuant to Section 6.5(a), including Customer Account Information, Customer-ID, Customer Identifying Information, and Allocation Reports, and to analyze the full lifecycle of an order across the national market system, from order origination through order execution or order cancellation, including any related allocation information provided in an Allocation Report. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c).

"Full Implementation of Core Equity Reporting Requirements" means the point at which: (a) Industry Member reporting (excluding reporting by Small Industry Members that are not OATS reporters) for equities transactions, excluding Customer Account Information, Customer-ID, and Customer Identifying Information, is developed, tested, and implemented at a 5% Error Rate or less and with sufficient intra-firm linkage, inter-firm linkage, national securities exchange linkage, and trade reporting facilities linkage to permit the Participants and the Commission to analyze the full lifecycle of an order across the national market system, excluding linkage of representative orders, from order origination through order execution or order cancellation; and (b) the query tool functionality required by Section 6.10(c)(i)(A) and Appendix D, Sections 8.1.1-8.1.3 and Section 8.2.1 incorporates the Industry Member equities transaction data described in condition (a) and is available to the Participants and to the Commission. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c).

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"Initial Industry Member Core Equity Reporting" means the point at which Industry Members (excluding Small Industry Members that are not OATS reporters) have begun to report equities transaction data, excluding Customer Account Information, Customer-ID, and Customer Identifying Information, to the CAT. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c).

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ARTICLE VI
FUNCTIONS AND ACTIVITIES OF CAT SYSTEM

Section 6.1. – Section 6.5. No change.

Section 6.6. Written Assessments, Audits and Reports.

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(c) Implementation Plan and Quarterly Progress Reports.

(i) Within 30 calendar days following the effective date of this provision, the Participants shall file with the Commission and make publicly available on each of the Participant websites, or collectively on the CAT NMS Plan website, a complete CAT implementation plan that includes the Participants' timeline for achieving the objective milestones setting forth how and when the Participants will facilitate the achievement of Full Implementation of CAT NMS Plan Requirements (the "Implementation Plan"). The Implementation Plan shall include:

(A) For each of the objective milestones set forth in Section C.10 of Appendix C of this Agreement to assess progress toward implementation of the CAT, the completion date and a description of the status; and

(B) For each of the Financial Accountability Milestones, the completion date and a description of the status.

If the Participants decide to complete any of the milestones identified in the Implementation Plan by releasing functionality in a phased approach, the Implementation Plan shall describe each phased release necessary to achieve the completion of the relevant milestone and provide completion dates for each such release identified.

(ii) Within 15 business days after the end of each calendar quarter, Participants shall file with the Commission and make publicly available on each of the Participant websites, or collectively on the CAT NMS Plan website, a complete report that provides a detailed description of the progress made by the Participants during that calendar quarter toward achieving each of the milestones set forth in the Implementation Plan (the "Quarterly Progress Report"). If, subsequent to the publication of the Implementation Plan, the Participants decide to complete any of the milestones set forth therein by releasing functionality in a phased approach, each Quarterly Progress Report shall reflect this change by describing the phases necessary to achieve the completion of the relevant milestone and providing the information specified below for each phase. The first of such reports shall be filed and made publicly available within 15 business days after the end of the calendar quarter in which the Implementation Plan was filed and made publicly available.

(A) For each milestone completed by the end of a given calendar quarter, the report shall include the following: (1) the CAT implementation plan completion date, (2) the date on which the milestone was completed, and (3) a description of any variance from the Implementation Plan.

(B) For each milestone in progress at the end of a given calendar quarter, the report shall include the following: (1) the CAT implementation plan completion date, (2) the currently targeted completion date, and (3) a description of:

(a) the current status of the milestone;

(b) any difference between the CAT implementation plan completion date and the currently targeted completion date, including the basis for making the adjustment and the impact of this adjustment on any other milestone; and

(c) any other factual indicators that demonstrate the current level of completion with respect to the milestone.

(C) For each milestone that has not yet been initiated by the end of a given calendar quarter, the report shall include the following: (1) the CAT implementation plan completion date, (2) the currently targeted completion date, and (3) a description of:

(a) the current status of the milestone; and

(b) any difference between the Implementation Plan completion date and the currently targeted completion date, including the basis for making the adjustment and the impact of this adjustment on any other milestone.

(iii) The Implementation Plan and each Quarterly Progress Report shall be approved by at least a Supermajority Vote of the Operating Committee before such documents are filed with the Commission or made publicly available on each of the Participant websites or collectively on the CAT NMS Plan website. However, if the Implementation Plan or any Quarterly Progress Report is approved only by a Supermajority Vote of the Operating Committee, and not by a unanimous vote of the Operating Committee (including, for the avoidance of doubt, all members of the Operating Committee, whether or not present and whether or not recused), each Participant whose Operating Committee member did not vote to approve the Implementation Plan or Quarterly Progress Report shall separately file with the Commission and make publicly available on each of the Participant websites, or collectively on the CAT NMS Plan website, a statement identifying itself and explaining why the member did not vote to approve the Implementation Plan or Quarterly Progress Report. The Operating Committee shall submit the Implementation Plan and Quarterly Progress Reports to the Chief Executive Officer, President, or an equivalently situated senior officer of each Participant, prior to being voted on by the Operating Committee.

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ARTICLE XI
FUNDING OF THE COMPANY

Section 11.1. – Section 11.5. No change.

Section 11.6. Funding Incentives for Post-Amendment Expenses. Notwithstanding the foregoing provisions, this Section shall apply with respect to all fees, costs, and expenses (including legal and consulting fees, costs, and expenses) incurred by or for the Company in connection with the development, implementation, and operation of the CAT from the effective date of this Section until such time as Full Implementation of CAT NMS Plan Requirements has been achieved ("Post-Amendment Expenses").

(a) The following conditions shall apply to the collection of any fees established by the Operating Committee or implemented by the Participants to recover a portion of Post-Amendment Expenses from Industry Members ("Post-Amendment Industry Member Fees").

(i) The Participants will be entitled to collect the full amount of:

(A) Any Post-Amendment Industry Member Fees established or implemented to recover Post-Amendment Expenses incurred from the effective date of this Section to the date of Initial Industry Member Core Equity Reporting ("Period 1"), so long as such date is no later than April 30, 2020;

(B) Any Post-Amendment Industry Member Fees established or implemented to recover the Post-Amendment Expenses incurred from the date immediately following the achievement of Initial Industry Member Core Equity Reporting to the date of Full Implementation of Core Equity Reporting Requirements ("Period 2"), so long as such date is no later than December 31, 2020;

(C) Any Post-Amendment Industry Member Fees established or implemented to recover the Post-Amendment Expenses incurred from the date immediately following the achievement of Full Implementation of Core Equity Reporting Requirements to the date of Full Availability and Regulatory Utilization of Transactional Database Functionality ("Period 3"), so long as such date is no later than December 31, 2021; and

(D) Any Post-Amendment Industry Member Fees established or implemented to recover the Post-Amendment Expenses incurred from the date immediately following the achievement of Full Availability and Regulatory Utilization of Transactional Database Functionality to the date of Full Implementation of CAT NMS Plan Requirements ("Period 4"), so long as such date is no later than December 30, 2022.

(ii) The amount of Post-Amendment Industry Member Fees that the Participants are entitled to collect for Period 1will be reduced according to the following schedule if the Participants miss the deadline set forth for that Period:

(A) By 25% if the Participants miss the deadline set forth in Section 11.6(a)(i)(A) by less than 60 days;

(B) By 50% if the Participants miss the deadline set forth in Section 11.6(a)(i)(A) by 60 days or more, but less than 120 days;

(C) By 75% if the Participants miss the deadline set forth in Section 11.6(a)(i)(A) by 120 days or more, but less than 180 days; and

(D) By 100% if the Participants miss the deadline set forth in Section 11.6(a)(i) by 180 days or more.

(iii) The amount of Post-Amendment Industry Member Fees that the Participants are entitled to collect for each Period will be reduced according to the following schedule if the Participants miss the deadline set forth for that Period:

(A) By 25% if the Participants miss the deadline set forth in Section 11.6(a)(i) by less than 90 days;

(B) By 50% if the Participants miss the deadline set forth in Section 11.6(a)(i) by 90 days or more, but less than 180 days;

(C) By 75% if the Participants miss the deadline set forth in Section 11.6(a)(i) by 180 days or more, but less than 270 days; and

(D) By 100% if the Participants miss the deadline set forth in Section 11.6(a)(i) by 270 days or more.

(iv) The Participants will only be permitted to collect Post-Amendment Industry Member Fees for Period 1, Period 2, Period 3, or Period 4 at the end of each respective Period.

(b) In all CAT NMS Plan amendments submitted by the Operating Committee to the Commission pursuant to Rule 608(b)(3)(i), and in all filings submitted by the Participants to the Commission under Section 19(b) of the Exchange Act, to establish or implement Post-Amendment Industry Member Fees pursuant to this Article, the Operating Committee or the Participants shall clearly indicate whether such fees are related to Post-Amendment Expenses incurred during Period 1, Period 2, Period 3, or Period 4.

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By the Commission.

Dated: September 9, 2019

Vanessa A. Countryman
Secretary