

October 28, 2019

VIA EMAIL TO RULE-COMMENTS@SEC.GOV

Ms. Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: File No. S7-13-19
Proposed Amendments to the National Market System Plan Governing the
Consolidated Audit Trail

Dear Ms. Countryman:

The Participants of the CAT NMS Plan appreciate the opportunity to provide comments on the Proposed Amendments to the National Market System Plan Governing the Consolidated Audit Trail¹ published by the Securities and Exchange Commission (“SEC” or “Commission”) on September 9, 2019.² As discussed further herein, the Participants understand the Commission’s desire to promote greater transparency and accountability concerning the implementation of the Consolidated Audit Trail (“CAT”). However, the Participants believe that certain modifications and clarifications should be incorporated into the proposal.³ Specifically, as described further below, the Participants believe: (i) that the information to be filed by the Participants with the Commission in Quarterly Progress Reports should be modified; (ii) the Participants should be required to file such Quarterly Progress Reports within 30 days of the end of each calendar quarter (rather than within 15 days of the end of a quarter); and (iii) the proposed Financial Accountability Milestones that would determine the extent to which CAT LLC may collect Post-Amendment Industry Member Fees should be modified so that they include only criteria that are within the sole control of CAT LLC and the Participants.

¹ Proposed Amendments to the National Market System Plan Governing the Consolidated Audit Trail, Exchange Act Release No. 86901 (Sep. 9, 2019), 84 Fed. Reg. 48458 (Sep. 13, 2019) (the “Proposing Release”).

² The registered national securities exchanges and national securities association (collectively, the “Participants”) formed Consolidated Audit Trail, LLC (“CAT LLC”) to implement the requirements of Rule 613, promulgated under the Securities Exchange Act of 1934, as amended (“Exchange Act”). Rule 613 requires the Participants to create the CAT NMS Plan. The Limited Liability Company Agreement of Consolidated Audit Trail, LLC is the CAT NMS Plan. The twenty-three Participants of the CAT NMS Plan are: BOX Exchange LLC (“BOX”); Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe C2 Exchange, Inc. and Cboe Exchange, Inc. (collectively, “Cboe”); Financial Industry Regulatory Authority, Inc. (“FINRA”); Investors’ Exchange LLC (“IEX”); Miami International Securities Exchange LLC, MIAX Emerald, LLC, MIAX PEARL, LLC (collectively, “MIAX”); NASDAQ BX, Inc., Nasdaq GEMX, LLC, Nasdaq ISE, LLC, Nasdaq MRX, LLC, NASDAQ PHLX LLC, The NASDAQ Stock Market LLC (collectively, “NASDAQ”); and New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., NYSE Chicago, Inc. and NYSE National, Inc. (collectively, “NYSE”). Unless otherwise noted, capitalized terms are used as defined in Rule 613, in the CAT NMS Plan, or in this letter.

³ The comments set forth in this letter represent the consensus of the Participants, but each Participant reserves the right to submit its separate views to the Commission.

I. Background

At the outset, the Participants acknowledge their responsibility to develop, implement and maintain a fully functional CAT in accordance with Rule 613 and the CAT NMS Plan as expeditiously as possible. The Proposing Release notes that the CAT has been significantly delayed and expresses the Commission's concern about the continued potential for further delays to the implementation of the system. Without minimizing the concerns expressed by the Commission or the delays in implementing the CAT, the Participants recently have made significant progress in developing and implementing a fully functional CAT and are committed to doing so in accordance with the timeline set forth in the Updated Master Plan provided to the Commission.⁴

a. Recent Achievements Under the Successor Plan Processor

For instance, earlier this year, the Participants selected a successor Plan Processor, FINRA CAT, LLC ("FINRA CAT"), and transitioned the project to the successor Plan Processor in order to facilitate the timely development and implementation of the CAT. Since that time, the Plan Processor has made substantial and rapid progress in building the CAT. FINRA CAT has met all deadlines. FINRA CAT also has completed various releases related to Participant reporting in a timely manner, including finalization of the Participant reporting specification. It has collected all data from the Participants, validated and linked all equity exchange data and is on target to validate and link all option exchange data by February 2020. Under FINRA CAT, all data collected has been normalized. Technical Specifications for Industry Member reporting for Phases 2a and 2b have been finalized. Industry Member establishment of connectivity is currently underway, initial Industry Member registration has been completed, and Industry Member onboarding is in progress. As of October 28, 2019, the Participants have held 24 webinars and in-person events for Industry Members on Industry Member reporting, CAT onboarding, connectivity, security and other topics related to the CAT. The Plan Processor also has implemented a fully functional Help Desk that has responded to over 2,700 questions.

Together with FINRA CAT, the Participants are carefully and purposefully building the CAT in a manner designed to yield a reliable, robust and scalable system. Since transitioning the project to FINRA CAT as Plan Processor, there have been no production outages or major operational issues. Moreover, the CAT System receives over 105 billion equities and options records per day on average and has processed a peak of 182 billion records on a single day – an increase of approximately 73 %.⁵

⁴ See revised Updated Master Plan (May 16, 2019). As previously noted to the Commission, the Participants are implementing the Updated Master Plan through a detailed project plan related to the CAT and do not anticipate making further updates to the Updated Master Plan.

⁵ The CAT System leverages elastic cloud compute nodes by design and averaged running over 8,800 compute instances a day in Q3 2019 to process inbound data volumes. The CAT System observed a peak day running over 28,000 compute nodes on August 19, 2019, with the peak hour running over 4,400 compute nodes, to process the spike in market activity and corresponding inbound data volumes.

b. Continued Focus on Security

The Participants intensely focus on security concerns in developing the CAT, and have taken, and will continue to take, all appropriate precautions to safeguard all data within the CAT system. Understanding the importance of information security generally, CAT LLC itself is structured in a manner to appropriately emphasize the security of the CAT. For example, CAT LLC has both a Chief Information Security Officer (“CISO”) and Chief Compliance Officer, each of whom are fiduciaries of CAT LLC, and are responsible for ensuring compliance with Plan requirements.⁶ Specifically, the CAT LLC CISO is responsible for creating and enforcing appropriate policies, procedures, and control structures to monitor and address data security issues for the Plan Processor and the CAT System.⁷ The CAT LLC CISO also is obligated to review the Participants’ information security policies and procedures that are related to the CAT System to evaluate if the Participants that access CAT data have an information security program comparable to the Plan Processor’s program.⁸ Additionally, the CAT LLC Operating Committee established a Security Working Group, which is comprised of the CAT LLC CISO as well as CISOs and security experts from each Participant. Members of the working group collectively represent hundreds of years of experience in the information security space. SEC staff also has been an active observer at Security Working Group meetings.

In addition to structuring the oversight and responsibility of the CAT System in a manner that focuses on security, the Participants have designed the CAT System to meet stringent security standards.⁹ The system is subject to the robust controls framework set forth in National Institute of Standards and Technology (“NIST”) Special Publication (“SP”) 800-53 including, among other things the establishment of a System Security Plan and annual third-party independent verification and validation.¹⁰ This is the same standard required for federal information systems under the Federal Information Security Management Act. The Participants designed and built the CAT System with both architectural-level and program-level controls. The SEC and Participants can only query the CAT System via dedicated private circuits between them and the CAT System, mitigating the risk of an attack via the Internet. The CAT System further requires multi-factor authentication for regulatory use of the query tools, mitigating insider risk at the regulators, as well as for access to the Industry Member Reporter Portal.¹¹ Additionally, the CAT System and relevant personnel continuously monitor regulatory access and use of the system. The CAT System logs every instance of access to the CAT Central Repository and will maintain a full audit trail of access to customer data. The Operating Committee, the SEC, and Participants will periodically receive and review a list of authorized users and their most recent access; each user organization will regularly verify that its list of authorized users and the roles they are assigned remain accurate.¹²

⁶ See Limited Liability Company Agreement of Consolidated Audit Trail, LLC (“CAT NMS Plan” or “Plan”) at Section 4.6.

⁷ See *id.* at Section 6.2.

⁸ See *id.* at Section 6.2.

⁹ See *id.* at Appendix D Section 4.2.

¹⁰ The application of NIST SP800-53 to the CAT is further informed by ISO 27002, NIST Cybersecurity Framework.

¹¹ See Plan, *supra* note 2 at Appendix D Section 4.1.4.

¹² See *id.* at Appendix D Section 4.1.4.

The Participants have integrated security processes into the design and development of the CAT System. Threat analysis drives security requirements and design. Continuous automated testing along with rigorous security assessment by an expert team of security engineers is brought to bear during the design and build of the system. A highly qualified third-party cybersecurity testing organization regularly performs further security testing, including penetration testing and code security assessment.

The overall CAT security program also is subject to regular third-party review to verify that the program is operating in accordance with its System Security Plan and with applicable standards. The Plan Processor will continue to subject the CAT System to annual NIST SP 800-53 Independent Validation and Verification (“IV&V”). FINRA CAT delivered Release 1 (June) on time and with no major security defects, as confirmed by both internal and third-party security testing, as well as the third-party security controls assessment, *i.e.*, IV&V. FINRA CAT is on schedule to deploy Release 2 in November with no major defects as well; internal security testing is complete, third-party security testing is nearly complete, and a new IV&V is in progress.

In addition, to keep Industry Members and other interested persons apprised of CAT security efforts, in August, CAT LLC and FINRA CAT hosted an industry webinar focusing on the security of CAT data. During the webinar the Participants shared information about how the data reported to the CAT System will be safeguarded to ensure the security and confidentiality of the data. The Participants also shared their plan to request exemptive relief from certain requirements in the CAT NMS Plan related to Social Security Numbers, Dates of Birth and Account Numbers with Industry Members during the security webinar.

Finally, and in response to concerns about the security of data in the CAT by Congress, the Commission, the securities industry and the Participants themselves, the Participants have taken several steps. First, after soliciting input from the CAT LLC Advisory Committee, the Participants have determined to modify the Plan so that actual customer account and tax identification numbers may not be used as CAT Firm Designated ID numbers.¹³ In addition, the Participants have worked together with the Securities Industry and Financial Markets Association (“SIFMA”) to develop the CCID Alternative, and later developed the Modified PII Approach as a means to reduce sensitive data retained in the CAT. The CCID Alternative would obviate the need for the CAT System to collect and store social security numbers and tax ID numbers, and the Modified PII Approach similarly would make it unnecessary for the CAT System to collect account numbers and dates of birth. The Participants have filed a request for an exemption from the Commission that would allow for the implementation of the CCID Alternative and the Modified PII Approach.¹⁴

¹³ Letter from Mike Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, SEC, re: Notice of Filing of Amendment to the National Market System Plan Governing the Consolidated Audit Trail (Sept. 26, 2019).

¹⁴ See Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, SEC, Request for Exemptive Relief from Certain Provisions of the CAT NMS Plan related to Social Security Numbers, Dates of Birth and Account Numbers (Oct. 16, 2019), *available at* <https://www.catnmsplan.com/wp-content/uploads/2019/10/CCID-and-PII-Exemptive-Request-Oct-16-2019.pdf>.

c. Collaboration with the Advisory Committee and the Commission

Importantly, this significant progress has come about not only through the efforts of the Participants and the Plan Processor, but also due to the enhanced involvement of CAT NMS Plan Advisory Committee members and Industry Members more broadly. In addition to the CCID Alternative and Modified PII Approach noted above, Participants and FINRA CAT have worked regularly and productively with the Advisory Committee, SIFMA, the Securities Traders Association and FIF members to assess and answer numerous interpretive questions, develop Frequently Asked Questions (“FAQs”), assess timelines for Industry Member Technical Specifications and reporting and otherwise develop a workable CAT. The Commission staff, who generally attend all Committee, subcommittee and working group calls, also has played an important role in discussions related to the development of the CAT.

Thus, while the Participants acknowledge the concerns underlying the Proposed Amendments to the CAT NMS Plan, there has been much progress with respect to the CAT recently. These and other factors suggest that there will be continued progress toward the expeditious development and implementation of the CAT.

II. Implementation Plan and Quarterly Progress Reports

The Participants offer the following comments on the Implementation Plan and Quarterly Progress Reports that the Proposed Amendments would require. The Proposed Amendments would add a new Section 6.6(c) to the CAT NMS Plan 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) an Implementation Plan. The Implementation Plan would set forth how and when the Participants will achieve full CAT implementation, including the Participants’ timeline for achieving both (1) the objective milestones set forth in Section C.10 of Appendix C of the CAT NMS Plan, and (2) the CAT implementation milestones associated with the proposed financial accountability proposals discussed in the Proposing Release.

As an initial matter, the Participants believe it is important to confirm the Commission’s understanding, stated in the Proposing Release, that the objective milestones effectively formalize the status updates and other informal reports that are in the Updated Master Plan provided to the Commission by the Participants and which have been discussed with the Commission staff since May 16, 2019. The Participants carefully developed the Updated Master Plan in conjunction with FINRA CAT, and while unexpected issues always arise in complex technology projects like the CAT (discussed further below), basing the objective milestones on the Updated Master Plan is more appropriate than basing them on arbitrary milestones or milestones that have not been vetted by the Participants.

The Commission proposes to amend the Plan by adding Proposed Section 6.6(c)(i), which, as noted, would require the filing of the Implementation Plan with the Commission and the publication 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 states that it “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.”¹⁵ As noted above, the Participants, working with the Plan Processor, have developed a timeline for the completion of the CAT, and therefore believe that 30 days is sufficient to file with the Commission and publish the Implementation Plan.

The Commission also proposes to amend the CAT NMS Plan by adding Proposed Section 6.6(c)(ii), which would require Participants to file with the Commission and publish on each Participant website or on the CAT NMS Plan website, Quarterly Progress Reports that would describe in detail the progress made by the Participants during the prior quarter toward achieving each of the milestones in the Implementation Plan. The proposed Quarterly Progress Reports are designed to provide current and comprehensive information about the development of the CAT to the Commission, Industry Members and the public at large.

The Participants agree on the importance of transparency with respect to the development of the CAT but believe that the proposed Quarterly Progress Reports would impose requirements that are both unnecessary and, in many instances, at odds with maintaining the security of the CAT. For example, requiring the broad publication of detailed explanations related to connectivity and acceptance testing – including the number of Plan Processor functional requirements for which defects were found (categorized by criticality) – might provide information to unscrupulous persons set on finding a way to access and exploit information in the CAT. Publishing pass/fail percentages of test cases and information with respect to defects remediated in connection with reporting milestones, and the reasons that certain documentation under development has not been completed (e.g., security related policies, CAT Reporter monitoring/compliance policies), raise similar concerns. While it is appropriate to provide such information to the Commission and the staff – and, as noted above, the Commission staff is invited to and regularly attends virtually all meetings related to CAT, including those related to technology and functionality – the Participants do not believe that it is appropriate for such information to be provided more broadly.

Moreover, CAT LLC and FINRA CAT currently provide and will continue to provide Industry Members and the general public with extensive and appropriate information related to the progress of the CAT System build. FINRA CAT co-chairs the CAT LLC Industry Outreach Working Group. FINRA CAT and the Participants also hold bi-weekly Industry meetings to communicate schedule and implementation updates and answer questions. Industry Member framing calls and deep dive sessions are regularly held so that Industry Members have input into technical specifications related to the CAT. As noted above, CAT LLC also conducts regular webinars and publishes CAT alerts on issues material to the industry such as connectivity methods, onboarding, and FDID reporting among others. These and other measures have significantly enhanced the industry’s insight into the development of the CAT. The Participants would be pleased to discuss other ways in which they might enhance industry and public transparency of the development of the CAT with the CAT LLC Advisory Committee and the industry groups note above. We believe that this will result in the provision of information that

¹⁵ Proposing Release at 48462.

is both more relevant and appropriate for public distribution. As noted, the Commission and its staff, of course, have continued access to extensive information regarding the CAT.

Finally, and in addition to the concerns about the substance of public disclosure that would be required under the proposed Quarterly Progress Reports, the Participants believe that a fifteen-day turnaround period for reporting on the Implementation Plan would be too short. As a result, the Participants recommend modifying the proposal to require the filing and posting of the Quarterly Progress Report no later than 30 days after the end of each quarter.

Proposed Section 6.6(c)(iii) would require the Implementation Plan and each Quarterly Progress Report to be submitted to the CEO, President, or an equivalently situated senior officer of each Participant, prior to being voted on by the Operating Committee. While the Participants do not object to this requirement, they do not see a need to go further to require such CEOs, Presidents and equivalent officers to certify such reports, an issue raised for comment in the Proposing Release. Such a certification requirement would be inappropriate for two main reasons. First, the CAT is extraordinarily complex and requires a high degree of technical expertise and day to day involvement to remain fully informed of the intricacies of the project. The CEOs and equivalent officers are not involved in the day to day management of the CAT and do not have the same technical expertise as the core CAT team; thus, the Participants do not believe that the SEC should adopt this requirement. Second, the certification requirement noted in the Commission's request for comment is distinguishable, and would be a significant deviation, from certification requirements in other Commission rules. For instance, CEO certifications required under more general, policies and procedures-based rules, such as SEC Rule 15c3-5, do not necessarily require that a CEO has technical expertise and active, day to day involvement in a matter in order to make a certification. Similarly, CEO certifications implemented pursuant to the Sarbanes-Oxley Act of 2002 generally require that a CEO certifies as to the accuracy of broader, entity-wide matters, at times relying on sub-certifications, such as financial statements.¹⁶ These types of broader certifications are distinguishable from the type of certification noted in the Commission's request for comment. Notably, as previously mentioned, the latter would require a high degree of technical expertise and day to day involvement in the project in order for the CEO or similar officer to provide a certification. For these reasons, the Participants do not believe that the SEC should adopt this requirement.

III. Financial Accountability

The Commission also proposes to add a new Section 11.6 to the CAT NMS Plan to govern the recovery of any fees, costs and expenses incurred by CAT LLC in connection with the development, implementation and operation of the CAT from the effective date of the amendment until such time that the Participants have completed Full Implementation of the CAT

¹⁶ See, e.g., SEC Rule 13a-14; SEC Rule 15d-14. See also 18 U.S.C. § 1350.

NMS Plan Requirements (“Post-Amendment Expenses”).¹⁷ Proposed Section 11.6 would apply new conditions to the collection of any fees established by the CAT LLC Operating Committee, or implemented by Participants, to recover a portion of Post-Amendment Expenses¹⁸ from Industry Members. Specifically, Proposed Section 11.6 would require the Participants to meet four critical CAT implementation milestones (“Financial Accountability Milestones”)¹⁹ by certain dates to collect the full amount of any related Post-Amendment Expenses from Industry Members (“Post-Amendment Industry Member Fees”)²⁰ 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.

While the Financial Accountability Milestones are designed to impose financial accountability related to implementing the CAT, the Participants believe the ability of CAT LLC and the Participants to collect Post-Amendment Industry Member Fees should turn only on the timely completion of those tasks that are within their control. For example, the Commission proposes to define “Full Implementation of Core Equity Reporting Requirements” in Section 1.1 of the CAT NMS Plan as the point at which, among other requirements, Industry Member reporting (excluding 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 fully implemented at a five percent error rate or less. Under the CAT NMS Plan, the “Error Rate” is the percentage of Reportable Events collected by the Central Repository in which the data reported does not fully and accurately reflect the order event that occurred in the market.²¹ In addition, as discussed in greater detail below, FINRA has indicated that the retirement of its Order Audit Trail System (“OATS”) will be dependent not only on the achievement of the five percent error rate called for by the CAT NMS Plan, but also on the attainment of a two percent post correction error rate over a sustained period of time.

¹⁷ Proposed Amendment to Section 1.1 would add the definition of “Full Implementation of CAT NMS Plan Requirements.” This term will be defined as “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).”

¹⁸ Post-Amendment Expenses is defined in Proposed Section 11.6 as “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 the [amendment] . . . until Full Implementation of the CAT NMS Plan Requirements has been achieved.” *Id.* at 48492.

¹⁹ The four financial accountability milestones would include: (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. *Id.* at 48466.

²⁰ Post-Amendment Industry Member Fees is defined in Proposed Section 11.6(a) as “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.” *Id.* at 48492.

²¹ See Section 1.1 of CAT NMS Plan; see also 17 C.F.R. § 242.613(j)(6).

Although CAT LLC and the Participants are responsible for the development, testing and implementation of the CAT, achieving an error rate of five percent or less involves factors that are beyond their control. The ability and willingness of Industry Members to devote sufficient resources to accurately and timely report CAT events, for example, are outside the control of CAT LLC and the Participants, yet, will impact initial and subsequent error rates. The error rate also is a factor in the ability of CAT LLC and the Participants to meet the Full Availability and Regulatory Utilization of Transactional Database Functionality and the Full Implementation of CAT NMS Plan Requirements Financial Accountability Milestones. Similarly, the requirement that “reporting to the Order Audit Trail System is no longer required for new orders” depends upon a variety of factors outside the control of the Participants, including accurate reporting by Industry Members and FINRA’s determination to retire OATS. Finally, the requirement that there be “sufficient” intra-firm and interfirm linkages set forth in the Full Implementation of Core Equity Reporting Requirements Milestone relies, in part, on the quality of the data reported to CAT by Industry Members. As illustrated by the successive extensions granted by the Commission to Industry Members with respect to complying with recent amendments to SEC Rule 606, it is not uncommon for Industry Members to need additional time to design and implement system changes necessary to comply with major new reporting initiatives.²²

For all these reasons, the Participants should not be prohibited from collecting Post-Amendment Industry Member fees in the event of the failure to meet a Financial Accountability Milestone resulting from Industry Member activity. Indeed, by conditioning the ability of CAT LLC and the Participants to collect Post-Amendment Industry Member Fees on factors dependent on the efforts of Industry Members, the Commission’s proposals inadvertently establish a perverse incentive for Industry Members to devote less than maximum efforts to comply with their obligations related to the CAT as they will pay less in fees in such instances.

Accordingly, the Participants believe that the Financial Accountability Milestones should be revised so that CAT LLC may collect Post-Amendment Industry Member Fees so long as CAT LLC and the Participants have completed development and testing and made available to Industry Members and the SEC the CAT functionality applicable to a particular Milestone. The Participants believe that it would be inappropriate and unfair for the Commission to preclude CAT LLC and the Participants from collecting Post-Amendment Industry Member Fees based on factors beyond their control.

The Participants also believe that the Commission should build flexibility into the proposed Financial Accountability Milestones. As noted above, unanticipated issues invariably arise on large technology projects and CAT is no exception. Since submitting the Updated Master Plan to the Commission, CAT LLC, the Participants and the industry have engaged in discussions about accelerating the ability of CAT to incorporate the reporting of large trader identifications (“LTIDs”) at the request of Industry Members. Similarly, CAT LLC, the Commission, Congress and Industry Members have devoted significant time to discuss the scope of sensitive information that should be in CAT.²³ Further, the Commission staff, CAT LLC and

²² Exchange Act Release 86874 (September 4, 2019) (granting an extension from compliance with certain aspects of SEC Rule 6060).

²³ See *supra* note 14.

Industry Members engaged in a productive but extended discussion of Industry Member connectivity. The Participants believe that these efforts were warranted and productive – one would help alleviate the burden on the industry with respect to potentially costly and duplicative regulatory reporting; another would reduce the attractiveness of the CAT to potential hackers; and the third resulted in an efficient and effective connectivity solution – but each required the dedication of CAT LLC and Plan Processor resources in a manner not fully contemplated in the Updated Master Plan. Similar future requests that would impact the scope, timeline and priority of the build and implementation of the CAT undoubtedly will arise given the complexity of the CAT project. In addition, given the substantial implementation requirements for Industry Member CAT reporting, Industry Members may request or require unanticipated reporting delays to address Industry Member implementation issues or concerns. Faced with financial penalties for missed deadlines, the Participants may not be able to fully address legitimate industry concerns or accommodate requests for delays with respect to future deadlines. In addition to rationalizing the Financial Accountability Milestones as noted above, the Commission and all market participants would benefit from a more flexible approach in which the Commission would assess the appropriateness of the recovery of Post-Amendment Industry Member Fees in the context of particular facts and circumstances in the event of a delay in meeting such a Milestone.

Finally, while the Participants are committed to expeditiously retiring OATS, they are concerned about the proposed “Full Availability and Regulatory Utilization of Transactional Database Functionality” Financial Accountability Milestone, which would be defined as the point at which, among other things, (1) reporting to OATS is no longer required for new orders; (2) 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 so that regulatory users can analyze the full lifecycle of an order; and (3) CAT Error Rates satisfy the threshold specified by Section 6.5(d)(i) of the CAT NMS Plan. As the Commission explains in the Proposing Release, achievement of Full Availability and Regulatory Utilization of Transactional Database Functionality requires the Participants to demonstrate, through the retirement of OATS, that the CAT is sufficiently accurate, reliable, and accessible to regulators to be adopted as the audit trail system for equities transactions. The Commission proposes that in order for the Participants to be entitled to collect the full amount of any Post-Amendment Industry Member Fees for the applicable period, this milestone must be met by December 31, 2021.

However, FINRA has indicated that for purposes of retiring OATS, error thresholds must be measured in granular ways and include minimum error rates for post-correction data—which represents the data most likely to be used by FINRA to conduct surveillance—to determine the CAT’s accuracy and reliability. Specifically, FINRA believes that the CAT would generally need to achieve a sustained error rate for Industry Member reporting in a number of categories for a period of at least 180 days of 5% or lower, measured on a pre-correction or as-submitted basis, and 2% or lower on a post-correction basis (measured at T+5).²⁴ FINRA believes that

²⁴ The Plan requires that the Plan Processor must ensure that regulators have access to corrected and linked order and Customer data by 8:00 a.m. Eastern Time on T+5. *See* CAT NMS Plan, Appendix C, Section A.2(a).

threshold pre- and post-correction error rates must be met in a number of different categories, including those set forth in the proposed milestone (i.e., representative order linkages, intra-firm linkages, inter-firm linkages, national securities exchange linkages and trade reporting facilities linkages). FINRA believes that measuring each of the thresholds over the course of 180 days would ensure that the CAT consistently meets minimum accuracy and reliability thresholds for Industry Member reporting while also ensuring that single-day measurements do not unduly affect the overall measurements. The premature cessation of OATS before CAT data quality levels are acceptable also would expose the market to unnecessary risks because market surveillance would be compromised.

FINRA believes requiring such sustained error rates over such a time period is necessary to reveal any errors that may manifest themselves only after surveillance patterns and other queries have been run and analyzed and to confirm that the Plan Processor is meeting its obligations and performing its functions adequately. Based on its prior usage of audit trail data, FINRA believes that a minimum of 180 days is necessary to reliably establish that usage of the CAT over that time period has not revealed material issues that have not been corrected. In addition, this time period will allow contextual analysis of the data to take place to uncover errors in reporting or processing that may not be apparent from more standardized data validation processes.

In light of the foregoing, the Participants do not believe that the Financial Accountability Milestones should establish a hard and fast deadline for the retirement of OATS. OATS plays a critical role in FINRA's surveillance program and the regulatory services it provides to exchange Participants. Accordingly, the Participants are particularly concerned about the imposition of conditions that could potentially result in a degradation of the high-quality data they receive today and adversely impact the ability of Participants to meet their statutory obligations.

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Thank you for your attention to this matter. Please contact me at [REDACTED] if you have any questions or comments.

Respectfully submitted,



Michael Simon
CAT NMS Plan Operating Committee Chair

cc: The Hon. Jay Clayton, Chairman
The Hon. Robert J. Jackson, Jr., Commissioner
The Hon. Allison Herren Lee, Commissioner
The Hon. Hester M. Peirce, Commissioner
The Hon. Elad L. Roisman, Commissioner
Mr. Brett Redfearn, Director, Division of Trading and Markets
Mr. David S. Shillman, Associate Director, Division of Trading and Markets
Mr. David Hsu, Assistant Director, Division of Trading and Markets
Mr. Mark Donohue, Senior Policy Advisor, Division of Trading and Markets
Ms. Manisha Kimmel, Senior Policy Advisor, Regulatory Reporting to Chairman Clayton
CAT NMS Plan Participants