

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * 127		SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4		File No.* SR - 2017 - * 02 Amendment No. (req. for Amendments *)	
Filing by Bats BYX Exchange, Inc. Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934					
Initial * ☒ Amendment * ☐ Withdrawal ☐		Section 19(b)(2) * ☒ Section 19(b)(3)(A) * ☐ Section 19(b)(3)(B) * ☐		Rule ☐ 19b-4(f)(1) ☐ 19b-4(f)(4) ☐ 19b-4(f)(2) ☐ 19b-4(f)(5) ☐ 19b-4(f)(3) ☐ 19b-4(f)(6)	
Pilot ☐ Extension of Time Period for Commission Action * ☐ Date Expires *	Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010 Section 806(e)(1) * ☐ Section 806(e)(2) * ☐ Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934 Section 3C(b)(2) * ☐				
Exhibit 2 Sent As Paper Document ☐		Exhibit 3 Sent As Paper Document ☐			
Description Provide a brief description of the action (limit 250 characters, required when Initial is checked *). The Exchange proposes a rule change to adopt Rules 4.5 through 4.16 to implement the compliance rule regarding the National Market System Plan governing the Consolidated Audit Trail.					
Contact Information Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action. First Name * Anders Last Name * Franzon Title * SVP, Associate General Counsel E-mail * afranzon@bats.com Telephone * (913) 815-7154 Fax					
Signature Pursuant to the requirements of the Securities Exchange Act of 1934, has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized. (Title *) Date 01/30/2017 By Anders Franzon (Name *) SVP, Associate General Counsel afranzon@bats.com					

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549	
For complete Form 19b-4 instructions please refer to the EFFT website.	
Form 19b-4 Information * Add Remove View	The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.
Exhibit 1 - Notice of Proposed Rule Change * Add Remove View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)
Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies * Add Remove View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)
Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications Add Remove View Exhibit Sent As Paper Document ☐	Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.
Exhibit 3 - Form, Report, or Questionnaire Add Remove View Exhibit Sent As Paper Document ☐	Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.
Exhibit 4 - Marked Copies Add Remove View	The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.
Exhibit 5 - Proposed Rule Text Add Remove View	The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.
Partial Amendment Add Remove View	If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of the Proposed Rule Change

(a) Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),¹ and Rule 19b-4 thereunder,² Bats BYX Exchange, Inc. (the “Exchange” or “Bats”) is filing with the Securities and Exchange Commission (“Commission”) a proposed rule change to adopt Rules 4.5 through 4.16 to implement the compliance rule (“Compliance Rule”) regarding the National Market System Plan Governing the Consolidated Audit Trail (the “CAT NMS Plan” or “Plan”).³

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by senior management of the Exchange pursuant to authority delegated by the Board of Directors of the Exchange on February 11, 2014. Exchange staff will advise the Board of Directors of the Exchange of any action taken pursuant to delegated authority. No other action is necessary for the filing of the rule change.

The persons on the Exchange staff prepared to respond to questions and comments on the proposed rule change are:

Eric Swanson
EVP, General Counsel
(913) 815-7000

Anders Franzon
SVP, Associate General Counsel
(913) 815-7154

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Unless otherwise specified, capitalized terms used in this rule filing are defined as set forth herein or in the CAT NMS Plan.

3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change.

(a) Purpose

Bats BYX Exchange, Inc., Bats BZX Exchange, Inc., Bats EDGA Exchange, Inc., Bats EDGX Exchange, Inc., BOX Options Exchange LLC, C2 Options Exchange, Incorporated, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange, LLC, Investors' Exchange LLC, ISE Gemini, LLC, ISE Mercury, LLC, Miami International Securities Exchange LLC, MIAX PEARL, LLC, NASDAQ BX, Inc., NASDAQ PHLX LLC, The NASDAQ Stock Market LLC, National Stock Exchange, Inc., New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc. (collectively, the "Participants") filed with the Commission, pursuant to Section 11A of the Exchange Act⁴ and Rule 608 of Regulation NMS thereunder,⁵ the CAT NMS Plan.⁶ The Participants filed the Plan to comply with Rule 613 of Regulation NMS under the Exchange Act. The Plan was published for comment in the Federal Register on May 17, 2016,⁷ and approved by the Commission, as modified, on November 15, 2016.⁸

⁴ 15 U.S.C. 78k-1.

⁵ 17 CFR 242.608.

⁶ See Letter from the Participants to Brent J. Fields, Secretary, Commission, dated September 30, 2014; and Letter from Participants to Brent J. Fields, Secretary, Commission, dated February 27, 2015. On December 24, 2015, the Participants submitted an amendment to the CAT NMS Plan. See Letter from Participants to Brent J. Fields, Secretary, Commission, dated December 23, 2015.

⁷ Securities Exchange Act Rel. No. 77724 (Apr. 27, 2016), 81 Fed. Reg. 30614 (May 17, 2016).

⁸ Securities Exchange Act Rel. No. 79318 (Nov. 15, 2016), 81 Fed. Reg. 84696 (Nov. 23, 2016) ("Approval Order").

The Plan is designed to create, implement and maintain a consolidated audit trail (“CAT”) that would capture customer and order event information for orders in NMS Securities and OTC Equity Securities, across all markets, from the time of order inception through routing, cancellation, modification, or execution in a single consolidated data source. Each Participant is required to enforce compliance by its Industry Members, as applicable, with the provisions of the Plan, by adopting a Compliance Rule applicable to their Industry Members.⁹ As is described more fully below, the Proposed Rules 4.5 through 4.16 set forth the Compliance Rule to require Industry Members to comply with the provisions of the CAT NMS Plan. The Proposed Rules 4.5 through 4.16 include twelve Proposed Rules covering the following areas: (1) definitions; (2) clock synchronization; (3) Industry Member Data reporting; (4) Customer information reporting; (5) Industry Member information reporting; (6) time stamps; (7) clock synchronization rule violations; (8) connectivity and data transmission; (9) development and testing; (10) recordkeeping; (11) timely, accurate and complete data; and (12) compliance dates. Each of these Proposed Rules are discussed in detail below.

(i) Definitions

Proposed Rule 4.5 (Consolidated Audit Trail – Definitions) sets forth the definitions for the terms used in the Proposed Rules 4.5 through 4.16. Each of the defined terms in Proposed Rule 4.5 is discussed in detail in this section.

(A) Account Effective Date

⁹ See SEC Rule 613(g)(1).

(I) Customer Information Approach

SEC Rule 613 requires that numerous data elements be reported to the CAT to ensure there is sufficient information to create the lifecycle of an order, and provide regulators with sufficient detail about an order to perform their regulatory duties. Certain required elements are intended to ensure that the regulators can identify the Customer's associated with orders. For example, SEC Rule 613(c)(7)(i)(A) requires an Industry Member to report the "Customer-ID" for each Customer for the original receipt or origination of an order. "Customer-ID" is defined in SEC Rule 613(j)(5) to mean "with respect to a customer, a code that uniquely and consistently identifies such customer for purposes of providing data to the Central Repository." SEC Rule 613(c)(8) requires Industry Members to use the same Customer-ID for each Customer. The SEC granted the Participants exemptive relief to permit the use of an alternative approach to the requirement that an Industry Member report a Customer-ID for every Customer upon original receipt or origination.¹⁰ The alternative approach is called the Customer Information Approach.

Under the Customer Information Approach, the CAT NMS Plan would require each Industry Member to assign a unique Firm Designated ID to each Customer. As the Firm Designated ID, Industry Members would be permitted to use an account number or any other identifier defined by the firm, provided each identifier is unique across the firm

¹⁰ See Securities Exchange Act Release No. 77265 (March 1, 2016), 81 FR 11856 (March 7, 2016) ("Exemption Order"). See also Letter from Participants to Brent J. Fields, Secretary, Commission, dated January 30, 2015 at 12 ("Exemptive Request Letter"); and CAT NMS Plan at Appendix C, Section A.1(a)(iii).

for each business date (*i.e.*, a single firm may not have multiple separate customers with the same identifier on any given date). Prior to their commencement of reporting to the CAT, Industry Members would submit an initial set of Customer information to the Central Repository, including the Firm Designated ID, Customer Identifying Information and Customer Account Information (which may include, as applicable, the Customer's name, address, date of birth, individual tax payer identifier number ("ITIN")/social security number ("SSN"), individual's role in the account (*e.g.*, primary holder, joint holder, guardian, trustee, person with power of attorney) and LEI and/or Larger Trader ID ("LTID")). This process is referred to as the customer definition process.

In accordance with the Customer Information Approach, Industry Members would be required to report only the Firm Designated ID for each new order submitted to the Central Repository, rather than the "Customer-ID" with individual order events. Within the Central Repository, each Customer would be uniquely identified by identifiers or a combination of identifiers such as ITIN/SSN, date of birth, and as applicable, LEI and LTID. The Plan Processor would be required to use these unique identifiers to map orders to specific Customers across all Industry Members and Participants. To ensure information identifying a Customer is up to date, Industry Members would be required to submit to the Central Repository daily and periodic updates for reactivated accounts, newly established accounts, and revised Firm Designated IDs or associated reportable Customer information.

(II) Definition of Account Effective Date

In connection with the Customer Information Approach, Industry Members would be required to report Customer Account Information to the Central Repository.

“Customer Account Information” is defined in SEC Rule 613(j)(4) to “include, but not be limited to, account number, account type, customer type, date account opened, and large trader identifier (if applicable).” Therefore, when reporting Customer Account Information, an Industry Member is required to report the date an account was opened. The Participants requested and received an exemption to allow an “Account Effective Date” to be reported in lieu of an account open date in certain limited circumstances. The definition of “Account Effective Date” as set forth in Paragraph (a) of Proposed Rule 4.5 describes those limited circumstances in which an Industry Member may report an “Account Effective Date” rather than the account open date. The proposed definition is the same as the definition of “Account Effective Date” set forth in Section 1.1 of the CAT NMS Plan, provided, however, that specific dates have replaced the descriptions of those dates set forth in Section 1.1 of the Plan.

Specifically, Paragraph (a)(1) defines “Account Effective Date to mean, with regard to those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution: (1) when the trading relationship was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, either (a) the date the relationship identifier was established within the Industry Member; (b) the date when trading began (*i.e.*, the date the first order was received) using the relevant relationship identifier; or (c) if both dates are available, the earlier date will be used to the extent that the dates differ; or (2) when the trading

relationship was established on or after November 15, 2018 for Industry Members other than Small Industry Members, or on or after November 15, 2019 for Small Industry Members, the date the Industry Member established the relationship identifier, which would be no later than the date the first order was received.

Paragraph (a)(2) of Proposed Rule 4.5 states that an “Account Effective Date” means, where an Industry Member changes back office providers or clearing firms prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer.

Paragraph (a)(3) states that an “Account Effective Date” means, where an Industry Member acquires another Industry Member prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer.

Paragraph (a)(4) states that “Account Effective Date” means, where there are multiple dates associated with an account established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the earliest available date.

Paragraph (a)(5) states that an “Account Effective Date” means, with regard to Industry Member proprietary accounts established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members: (1) the date established for the account in the Industry

Member or in a system of the Industry Member or (2) the date when proprietary trading began in the account (i.e., the date on which the first orders were submitted from the account). With regard to paragraphs (a)(2) – (5), the Account Effective Date will be no later than the date trading occurs at the Industry Member or in the Industry Member's system.

(B) Active Account

Under the Customer Information Approach, Industry Members are required to report Customer Identifying Information and Customer Account Information for only those accounts that are active. This will alleviate the need for Industry Members to update such information for non-active accounts, but still ensure that the Central Repository will collect audit trail data for Customer accounts that have any Reportable Events. Accordingly, paragraph (b) of Proposed Rule 4.5 defines an "Active Account" as an account that has had activity in Eligible Securities within the last six months. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(C) Allocation Report

(I) Allocation Report Approach

SEC Rule 613(c)(7)(vi)(A) requires each Industry Member to record and report to the Central Repository "the account number for any subaccounts to which the execution is allocated (in whole or in part)." The SROs requested and received from the SEC exemptive relief from SEC Rule 613 for an alternative to this approach ("Allocation Report Approach"). The Allocation Report Approach would permit Industry Members to

record and report to the Central Repository an Allocation Report that includes, among other things, the Firm Designated ID for any account(s) to which executed shares are allocated when an execution is allocated in whole or part in lieu of requiring the reporting of the account number for any subaccount to which an execution is allocated, as is required by SEC Rule 613.¹¹ Under SEC Rule 613, regulators would be able to link the subaccount to which an allocation was made to a specific order. In contrast, under the Allocation Report Approach, regulators would only be able to link an allocation to the account to which it was made, and not to a specific order.

(II) Definition of Allocation Report

To assist in implementing the Allocation Report Approach, paragraph (c) of Proposed Rule 4.5 defines an “Allocation Report.” Specifically, an “Allocation Report” means a report made to the Central Repository by an Industry Member that identifies the Firm Designated ID for any account(s), including subaccount(s), to which executed shares are allocated and provides the security that has been allocated, the identifier of the firm reporting the allocation, the price per share of shares allocated, the side of shares allocated, the number of shares allocated to each account, and the time of the allocation; provided, for the avoidance of doubt, any such Allocation Report shall not be required to be linked to particular orders or executions. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(D) Business Clock

¹¹ See Exemptive Request Letter at 26-27; and Exemption Order.

To create the required audit trail, Industry Members are required to record the date and time of various Reportable Events to the Central Repository. Industry Members will use “Business Clocks” to record such dates and times. Accordingly, paragraph (d) of Proposed Rule 4.5 defines the term “Business Clock” as a clock used to record the date and time of any Reportable Event required to be reported under Rules 4.5 through 4.16. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, except the Exchange proposes to replace the phrase “under SEC Rule 613” at the end of the definition in Section 1.1 of the Plan with the phrase “under Rules 4.5 through 4.16.” This change is intended to recognize that the Industry Members’ obligations with regard to the CAT are set forth in Rules 4.5 through 4.16.

(E) CAT

Paragraph (e) of Proposed Rule 4.5 defines the term “CAT” to mean the consolidated audit trail contemplated by SEC Rule 613. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(F) CAT NMS Plan

Paragraph (f) of Proposed Rule 4.5 defines the term “CAT NMS Plan” to mean the National Market System Plan Governing the Consolidated Audit Trail, as amended from time to time.

(G) CAT-Order-ID

(I) Daisy Chain Approach

Under the CAT NMS Plan, the Daisy Chain Approach is used to link and reconstruct the complete lifecycle of each Reportable Event in CAT. According to this Approach, Industry Members assign their own identifiers to each order event. Within the Central Repository, the Plan Processor later replaces the identifier provided by the Industry Member for each Reportable Event with a single identifier, called the CAT Order-ID, for all order events pertaining to the same order. This CAT Order-ID is used to link the Reportable Events related to the same order.

(II) Definition of CAT-Order-ID

To implement the Daisy Chain Approach, Paragraph (g) of Proposed Rule 4.5 defines the term “CAT-Order-ID.” The term “CAT-Order-ID” is defined to mean a unique order identifier or series of unique order identifiers that allows the Central Repository to efficiently and accurately link all Reportable Events for an order, and all orders that result from the aggregation or disaggregation of such order. This is the same definition as set forth in SEC Rule 613(j)(1), and Section 1.1 of the CAT NMS Plan defines “CAT-Order-ID” by reference to SEC Rule 613(j)(1).

(H) CAT Reporting Agent

The CAT NMS Plan permits an Industry Member to use a third party, such as a vendor, to report the required data to the Central Repository on behalf of the Industry Member.¹² Such a third party, referred to in the Proposed Rules 4.5 through 4.16 as a “CAT Reporting Agent,” would be one type of a Data Submitter, that is, a party that

¹² Appendix C, Section A.1(a) of the CAT NMS Plan.

submits data to the Central Repository. Paragraph (h) of Proposed Rule 4.5 defines the term “CAT Reporting Agent” to mean a Data Submitter that is a third party that enters into an agreement with an Industry Member pursuant to which the CAT Reporting Agent agrees to fulfill such Industry Member’s reporting obligations under Rules 4.5 through 4.16.

This definition is based on FINRA’s definition of a “Reporting Agent” as set forth in FINRA’s rule related to its Order Audit Trail System (“OATS”). Specifically, FINRA Rule 7410(n) defines a “Reporting Agent” as a third party that enters into any agreement with a member pursuant to which the Reporting Agent agrees to fulfill such member’s obligations under Rule 7450. The Reporting Agent for OATS fulfills a similar role to the CAT Reporting Agent.

(I) Central Repository

Paragraph (i) of Proposed Rule 4.5 defines the term “Central Repository” to mean the repository responsible for the receipt, consolidation, and retention of all information reported to the CAT pursuant to SEC Rule 613 and the CAT NMS Plan. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, except the Exchange uses the phrase “CAT NMS Plan” in place of the phrase “this Agreement.”

(J) Compliance Threshold

Paragraph (j) of Proposed Rule 4.5 defines the term “Compliance Threshold” as having the meaning set forth in Proposed Rule 4.15(d). This definition has the same substantive meaning as the definition set forth in Section 1.1 of the CAT NMS Plan. As

discussed in detail below with regard to Proposed Rule 4.15(d), each Industry Member is required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member's performance with regard to the CAT. This Industry Member-specific rate is the "Compliance Threshold."

(K) Customer

Industry Members are required to submit to the Central Repository certain information related to their Customers, including Customer Identifying Information and Customer Account Information, as well as data related to their Customer's Reportable Events. Accordingly, Paragraph (k) of Proposed Rule 4.5 proposes to define the term "Customer." Specifically, the term "Customer" would be defined to mean: (1) the account holder(s) of the account at an Industry Member originating the order; and (2) any person from whom the Industry Member is authorized to accept trading instructions for such account, if different from the account holder(s). This is the same definition as set forth in SEC Rule 613(j)(3), except the Exchange proposes to replace the references to a registered broker-dealer or broker-dealer with a reference to an Industry Member for consistency of terms used in the Proposed Rules 4.5 through 4.16. The Exchange also notes that Section 1.1 of the CAT NMS Plan defines "Customer" by reference to SEC Rule 613(j)(3).

(L) Customer Account Information

As discussed above, under the Customer Information Approach, Industry Members are required to report Customer Account Information to the Central Repository as

part of the customer definition process. Accordingly, the Exchange proposes to define the term “Customer Account Information” to clarify what customer information would need to be reported to the Central Repository.

Paragraph (l) of Proposed Rule 4.5 defines the term “Customer Account Information” to include, in part, account number, account type, customer type, date account opened, and large trader identifier (if applicable). Proposed Rule 4.5(l), however, provides an alternative definition of “Customer Account Information” in two limited circumstances. First, in those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution, the Industry Member will: (1) provide the Account Effective Date in lieu of the “date account opened”; (2) provide the relationship identifier in lieu of the “account number”; and (3) identify the “account type” as a “relationship.” Second, in those circumstances in which the relevant account was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, and no “date account opened” is available for the account, the Industry Member will provide the Account Effective Date in the following circumstances: (1) where an Industry Member changes back office providers or clearing firms and the date account opened is changed to the date the account was opened on the new back office/clearing firm system; (2) where an Industry Member acquires another Industry Member and the date account opened is changed to the date the account was opened on the post-merger back office/clearing firm system; (3) where there are multiple dates associated with an account in an Industry Member’s system, and the parameters of each date are determined by the individual Industry Member; and (4) where the relevant

account is an Industry Member proprietary account. The proposed definition is the same as the definition of “Customer Account Information” set forth in Section 1.1 of the CAT NMS Plan, provided, however, that specific dates have replaced the descriptions of those dates set forth in Section 1.1 of the Plan.

(M) Customer Identifying Information

As discussed above, under the Customer Information Approach, Industry Members are required to report Customer Identifying Information to the Central Repository as part of the customer definition process. Accordingly, the Exchange proposes to define the term “Customer Account Information” to clarify what Customer information would need to be reported to the Central Repository.

Paragraph (m) of Proposed Rule 4.5 defines the term “Customer Identifying Information” to mean information of sufficient detail to identify a Customer. With respect to individuals, “Customer Identifying Information” includes, but is not limited to: name, address, date of birth, individual tax payer identification number (“ITIN”)/social security number (“SSN”), individual’s role in the account (*e.g.*, primary holder, joint holder, guardian, trustee, person with the power of attorney). With respect to legal entities, “Customer Identifying Information” includes, but is not limited to, name, address, Employer Identification Number (“EIN”)/Legal Entity Identifier (“LEI”) or other comparable common entity identifier, if applicable. The definition further notes that an Industry Member that has an LEI for a Customer must submit the Customer’s LEI in addition to other information of sufficient detail to identify the Customer. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(N) Data Submitter

The CAT NMS Plan uses the term “Data Submitter” to refer to any person that reports data to the Central Repository.¹³ Such Data Submitters may include those entities that are required to submit data to the Central Repository (*e.g.*, national securities exchanges, national securities associations and Industry Members), third-parties that may submit data to the CAT on behalf of CAT Reporters (*i.e.*, CAT Reporting Agents), and outside parties that are not required to submit data to the CAT but from which the CAT may receive data (*e.g.*, securities information processors (“SIPs”)). To include this term in the Proposed Rules 4.5 through 4.16, the Exchange proposes to define “Data Submitter” in paragraph (n) of Proposed Rule 4.5. Specifically, paragraph (n) of Proposed Rule 4.5 defines a “Data Submitter” to mean any person that reports data to the Central Repository, including national securities exchanges, national securities associations, broker-dealers, the SIPs for the CQS, CTA, UTP and Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information (“OPRA”) Plans, and certain other vendors or third parties that may submit data to the Central Repository on behalf of Industry Members.

(O) Eligible Security

The reporting requirements of the Proposed Rules 4.5 through 4.16 only apply to Reportable Events in Eligible Securities. Currently, an Eligible Security includes NMS Securities and OTC Equity Securities. Accordingly, paragraph (p) of Proposed Rule 4.5

¹³ Appendix C, Section A.1(a) of the CAT NMS Plan.

defines the term “Eligible Security” to include: (1) all NMS Securities; and (2) all OTC Equity Securities. The terms “NMS Securities” and “OTC Equity Securities” are defined, in turn, below. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(P) Error Rate

(I) Maximum Error Rate

Under the CAT NMS Plan, the Operating Committee sets the maximum Error Rate that the Central Repository would tolerate from an Industry Member reporting data to the Central Repository.¹⁴ The Operating Committee reviews and resets the maximum Error Rate, at least annually.¹⁵ If an Industry Member reports CAT data to the Central Repository with errors such that their error percentage exceeds the maximum Error Rate, then such Industry Member would not be in compliance with the CAT NMS Plan or Rule 613.¹⁶ As such, the Exchange or the SEC “may take appropriate action against an Industry Member for failing to comply with its CAT reporting obligations.”¹⁷ The CAT NMS Plan sets the initial Error Rate at 5%.¹⁸ It is anticipated that the maximum Error

¹⁴ Section 6.5(d)(i) of the CAT NMS Plan.

¹⁵ Appendix C, Section A.3(b) of the CAT NMS Plan.

¹⁶ Appendix C, Section A.3(b) of the CAT NMS Plan; Rule 613(g)-(h).

¹⁷ Appendix C, Section A.3(b) of the CAT NMS Plan.

¹⁸ Section 6.5(d)(i) of the CAT NMS Plan.

Rate will be reviewed and lowered by the Operating Committee once Industry Members begin to report to the Central Repository.¹⁹

The CAT NMS Plan requires the Plan Processor to: (1) measure and report errors every business day; (2) provide Industry Members daily statistics and error reports as they become available, including a description of such errors; (3) provide monthly reports to Industry Members that detail an Industry Member's performance and comparison statistics; (4) define educational and support programs for Industry Members to minimize Error Rates; and (5) identify, daily, all Industry Members exceeding the maximum allowable Error Rate. To timely correct data-submitted errors to the Central Repository, the CAT NMS Plan requires that the Central Repository receive and process error corrections at all times. Further, the CAT NMS Plan requires that Industry Members be able to submit error corrections to the Central Repository through a web-interface or via bulk uploads or file submissions, and that the Plan Processor, subject to the Operating Committee's approval, support the bulk replacement of records and the reprocessing of such records. The Participants, furthermore, require that the Plan Processor identify Industry Member data submission errors based on the Plan Processor's validation processes.²⁰

(II) Definition of Error Rate

To implement the requirements of the CAT NMS Plan related to the Error Rate, the Exchange proposes to define the term "Error Rate" in Proposed Rule 4.5. Paragraph

¹⁹ Appendix C, Section A.3(b) of the CAT NMS Plan.

²⁰ Approval Order at 84718.

(p) of Proposed Rule 4.5 defines the term “Error Rate” 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 event that occurred in the market. This is the same definition as set forth in SEC Rule 613(j)(6), and Section 1.1 of the CAT NMS Plan defines “Error Rate” by reference to SEC Rule 613(j)(6).

(Q) Firm Designated ID

As discussed above, under the Customer Information Approach, the CAT NMS Plan would require each Industry Member to assign a unique Firm Designated ID to each Customer. Industry Members would be permitted to use as the Firm Designated ID an account number or any other identifier defined by the firm, provided each identifier is unique across the firm for each business date (*i.e.*, a single firm may not have multiple separate customers with the same identifier on any given date). Industry Members would be required to report only the Firm Designated ID for each new order submitted to the Central Repository, rather than the “Customer-ID” with individual order events. Accordingly, the Exchange proposes to define the term “Firm Designated ID” in Proposed Rule 4.5. Specifically, paragraph (q) of Proposed Rule 4.5 defines the term “Firm Designated ID” to mean 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. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan. Industry Members would be permitted to use an account number or any other identifier defined by the firm, provided each identifier is unique across the firm for each

business date (*i.e.*, a single firm may not have multiple separate customers with the same identifier on any given date).

(R) Industry Member

Paragraph (r) of Proposed Rule 4.5 defines the term “Industry Member” to mean a member of a national securities exchange or a member of a national securities association.” This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(S) Industry Member Data

Paragraph (s) of Proposed Rule 4.5 states that the term “Industry Member Data” has the meaning set forth in Rule 4.7(a)(2). This definition has the same substantive meaning as the definition set forth in Section 1.1 of the CAT NMS Plan. The definition of “Industry Member Data” is discussed more fully in the discussion below regarding Proposed Rule 4.7(a)(2).

(T) Initial Plan Processor

Paragraph (t) of Proposed Rule 4.5 defines the term “Initial Plan Processor” to mean the first Plan Processor selected by the Operating Committee in accordance with SEC Rule 613, Section 6.1 of the CAT NMS Plan and the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, although the proposed definition uses the full name of the “Selection Plan.”

(U) Listed Option or Option

The CAT NMS Plan and the Proposed Rules 4.5 through 4.16 apply to Eligible Securities, which includes NMS Securities, which, in turn, includes Listed Options. Certain requirements of the Proposed Rules 4.5 through 4.16 apply specifically to Listed Options. Accordingly, Paragraph (u) of Proposed Rule 4.5 defines the term “Listed Option” or “Option.” Specifically, paragraph (u) of Proposed Rule 4.5 states that the term “Listed Option” or “Option” has the meaning set forth in SEC Rule 600(b)(35) of Regulation NMS. SEC Rule 600(b)(35), in turn, defines a listed option as “any option traded on a registered national securities exchange or automated facility of a national securities association.” The Exchange notes that the proposed definition of “Listed Option” is the same definition as the definition set forth in Section 1.1 of the CAT NMS Plan.

(V) Manual Order Event**(I) Manual Order Event Approach**

The CAT NMS Plan sets forth clock synchronization and timestamp requirements for Industry Members which reflect exemptions for Manual Order Events granted by the Commission.²¹ Specifically, the Plan requires Industry Members to record and report the time of each Reportable Event using timestamps reflecting current industry standards (which must be at least to the millisecond) or, if an Industry Member’s order handling or execution systems use timestamps in increments finer than milliseconds, such finer

²¹ Exemption Order.

increments, when reporting to the Central Repository. For Manual Order Events, however, the Plan provides that such events must be recorded in increments up to and including one second, provided that Industry Members record and report the time the event is captured electronically in an order handling and execution system (“Electronic Capture Time”) in milliseconds. In addition, Industry Members are required to synchronize their respective Business Clocks (other than such Business Clocks used solely for Manual Order Events) at a minimum to within 50 milliseconds of the time maintained by the National Institute of Standards and Technology (“NIST”), and maintain such a synchronization. Each Industry Member is required to synchronize their Business Clocks used solely for Manual Order Events, however, at a minimum to within one second of the time maintained by the NIST.

(II) Definition of Manual Order Event

In order to clarify what a Manual Order Event is for clock synchronization and time stamp purposes, the Exchange proposes to define the term “Manual Order Event” in Proposed Rule 4.5. Specifically, paragraph (v) of Proposed Rule 4.5 defines the term “Manual Order Event” to mean a non-electronic communication of order-related information for which Industry Members must record and report the time of the event. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(W) Material Terms of the Order

Proposed Rule 4.7 requires Industry Members to record and report to the Central Repository Material Terms of the Order with certain Reportable Events (*e.g.*, for the original receipt or origination of an order, for the routing of an order). Accordingly, the

Exchange proposes to define the term “Material Terms of the Order” in Proposed Rule 4.5. Specifically, paragraph (w) of Proposed Rule 4.5 defines the term “Material Terms of the Order” to include: the NMS Security or OTC Equity Security symbol; security type; price (if applicable); size (displayed and non-displayed); side (buy/sell); order type; if a sell order, whether the order is long, short, short exempt; open/close indicator (except on transactions in equities); time in force (if applicable); if the order is for a Listed Option, option type (put/call), option symbol or root symbol, underlying symbol, strike price, expiration date, and open/close (except on market maker quotations); and any special handling instructions. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(X) NMS Security

NMS Securities are one of the types of Eligible Securities for the CAT. Therefore, the Exchange proposes to define the term “NMS Security” in Proposed Rule 4.5. Specifically, paragraph (x) of Proposed Rule 4.5 defines the term “NMS Security” to mean any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(Y) NMS Stock

Under the CAT NMS Plan, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47)), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from

time to time. Accordingly, the Exchange proposes to define the term “NMS Stock” in Paragraph (y) of Proposed Rule 4.5 to mean any NMS Security other than an option. This is the same definition as set forth in SEC Rule 600(b)(47) of Regulation NMS.

(Z) Operating Committee

Paragraph (z) of Proposed Rule 4.5 defines the term “Operating Committee” to mean the governing body of the CAT NMS, LLC designated as such and described in Article IV of the CAT NMS Plan. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, except the Exchange proposes to use the phrase “CAT NMS LLC” in place of the phrase “the Company” for clarity.

(AA) Options Market Maker

(I) Options Market Maker Quote Exemption

SEC Rule 613(c)(7) provides that the CAT NMS Plan must require each Industry Member to record and electronically report to the Central Repository details for each order and each reportable event, including the routing and modification or cancellation of an order. SEC Rule 613(j)(8) defines “order” to include “any bid or offer.” Therefore, under SEC Rule 613, the details for each Options Market Maker quotation must be reported to the Central Repository by both the Options Market Maker and the options exchange to which it routes its quote.

The SROs, however, requested and received exemptive relief from SEC Rule 613 so that the CAT NMS Plan may permit Options Market Maker quotes to be reported to the Central Repository by the relevant options exchange in lieu of requiring that such

reporting be done by both the options exchange and the Options Market Maker, as is required by SEC Rule 613.²² In accordance with the exemptive relief, Options Market Makers would be required to report to the options exchange the time at which a quote in a Listed Option is sent to the options exchange. Such time information also will be reported to the Central Repository by the options exchange in lieu of reporting by the Options Market Maker

(II) Definition of Options Market Maker

To implement the requirements related to Option Market Maker quotes, the Exchange proposes to define the term “Options Market Maker” in Proposed Rule 4.5. Specifically, paragraph (aa) of Proposed Rule 4.5 defines the term “Options Market Makers” to mean a broker-dealer registered with an exchange for the purpose of making markets in options contracts traded on the exchange. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(BB) Order

The Proposed Rules 4.5 through 4.16 require each Industry Member to record and electronically report to the Central Repository certain details for each order. Accordingly, the Exchange proposes to define the term “Order” in Proposed Rule 4.5. Specifically, paragraph (bb) of Proposed Rule 4.5 defines the term “Order”, with respect to Eligible Securities, to include: (1) any order received by an Industry Member from any person; (2) any order originated by an Industry Member; or (3) any bid or offer. This is

²² See Exemptive Request Letter at 2, and Exemption Order.

the same definition as set forth in SEC Rule 613(j)(8), except the Exchange proposes to replace the phrase “member of a national securities exchange or national securities association” with the term “Industry Member.” The Exchange notes that Section 1.1 of the CAT NMS Plan defines “Order” by reference to SEC Rule 613(j)(8).

(CC) OTC Equity Security

OTC Equity Securities are one of the types of Eligible Securities for the CAT. Therefore, the Exchange proposes to define the term “OTC Equity Security” in Proposed Rule 4.5. Specifically, paragraph (cc) of Proposed Rule 4.5 defines the term “OTC Equity Security” to mean any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association’s equity trade reporting facilities. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(DD) Participant

Paragraph (dd) of Proposed Rule 4.5 defines the term “Participant” to mean each Person identified as such in Exhibit A of the CAT NMS Plan, as amended, in such Person’s capacity as a Participant in CAT NMS, LLC. This is the same definition in substance as set forth in Section 1.1 of the CAT NMS Plan.

(EE) Person

Paragraph (ee) of Proposed Rule 4.5 defines the term “Person” to mean any individual, partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or association and any heirs, executors, administrators, legal

representatives, successors and assigns of such Person where the context so permits. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(FF) Plan Processor

Paragraph (ff) of Proposed Rule 4.5 defines the term “Plan Processor” to mean the Initial Plan Processor or any other Person selected by the Operating Committee pursuant to SEC Rule 613 and Sections 4.3(b)(i) and 6.1 of the CAT NMS Plan, and with regard to the Initial Plan Processor, the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail, to perform the CAT processing functions required by SEC Rule 613 and set forth in the CAT NMS Plan.

(GG) Received Industry Member Data

Paragraph (gg) of Proposed Rule 4.5 states that the term “Received Industry Member Data” has the meaning set forth in Rule 4.7(a)(2). This definition has the same substantive meaning as the definition set forth in Section 1.1 of the CAT NMS Plan. The definition of “Received Industry Member Data” is discussed more fully in the discussion below regarding Proposed Rule 4.7(a)(2).

(HH) Recorded Industry Member Data

Paragraph (hh) of Proposed Rule 4.5 states that the term “Recorded Industry Member Data” has the meaning set forth in Rule 4.7(a)(1). This definition has the same substantive meaning as the definition set forth in in Section 1.1 of the CAT NMS Plan.

The definition of “Recorded Industry Member Data” is discussed more fully in the discussion below regarding Proposed Rule 4.7(a)(1).

(II) Reportable Event

The Proposed Rules 4.5 through 4.16 require each Industry Member to record and electronically report to the Central Repository certain details for each Reportable Event. To clarify these requirements, the Exchange proposes to define the term “Reportable Event” in Proposed Rule 4.5. Specifically, paragraph (ii) of Proposed Rule 4.5 states that the term “Reportable Event” includes, but is not limited to, the original receipt or origination, modification, cancellation, routing, execution (in whole or in part) and allocation of an order, and receipt of a routed order. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(JJ) SRO

Paragraph (jj) of Proposed Rule 4.5 defines the term “SRO” to mean any self-regulatory organization within the meaning of Section 3(a)(26) of the Exchange Act. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(KK) SRO-Assigned Market Participant Identifier

(I) Existing Identifier Approach

The SROs requested and received exemptive relief from SEC Rule 613 so that the CAT NMS Plan may permit the Existing Identifier Approach, which would allow an Industry Member to report an existing SRO-Assigned Market Participant Identifier in lieu

of requiring the reporting of a universal CAT-Reporter-ID (that is, a code that uniquely and consistently identifies an Industry Member for purposes of providing data to the Central Repository).²³ The CAT NMS Plan reflects the “Existing Identifier Approach” for purposes of identifying each Industry Member associated with an order or Reportable Event. Under the Existing Identifier Approach, Industry Members are required to record and report to the Central Repository an SRO-Assigned Market Participant Identifier for orders and certain Reportable Events to be used by the Central Repository to assign a unique CAT-Reporter-ID to identify Industry Members.

For the Central Repository to link the SRO-Assigned Market Participant Identifier to the CAT-Reporter-ID, each SRO will submit to the Central Repository, on a daily basis, all SRO-Assigned Market Participant Identifiers used by its Industry Members or itself; and information to identify each such Industry Member, including the CRD number and LEI if such LEI has been obtained, and itself, including LEI, if such LEI has been obtained. Additionally, each Industry Member is required to submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained. The Plan Processor will use this information to assign a CAT-Reporter-ID to each Industry Member for internal use within the Central Repository.

(II) Definition of SRO-Assigned Market Participant Identifier

²³ See Exemptive Request Letter at 19, and Exemption Order.

To implement the Existing Identifier Approach, the Exchange proposes to define the term “SRO-Assigned Market Participant Identifier” in Proposed Rule 4.5.

Specifically, paragraph (kk) of Proposed Rule 4.5 defines the term “SRO-Assigned Market Participant Identifier” to mean an identifier assigned to an Industry Member by an SRO or an identifier used by a Participant. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan. For example, an Industry Member would be permitted to use any existing SRO-Assigned Market Participant Identifier (*e.g.*, FINRA MPID, NASDAQ MPID, NYSE Mnemonic, CBOE User Acronym and CHX Acronym) when reporting order information to the Central Repository.

(LL) Small Industry Member

The requirements of the Proposed Rules 4.5 through 4.16 differ to some extent for Small Industry Members versus Industry Members other than Small Industry Members. For example, the compliance dates for reporting data to the CAT are different for Small Industry Members versus other Industry Members. Accordingly, to clarify the requirements that apply to which Industry Members, the Exchange proposes to define the term “Small Industry Member” in Proposed Rule 4.5. Specifically, paragraph (ll) of Proposed Rule 4.5 defines the term “Small Industry Member” to mean an Industry Member that qualifies as a small broker-dealer as defined in Rule 0-10(c) under the Securities Exchange Act of 1934, as amended. This is the same in substance as the definition of “Small Industry Member” as set forth in Section 1.1 of the CAT NMS Plan. Specifically, Section 1.1 of the CAT NMS Plan defines a “Small Industry Member” as “an Industry Member that qualifies as a small broker-dealer as defined in SEC Rule 613.”

The definition of a small broker-dealer under SEC Rule 613, in turn, is a small broker-dealer as defined in SEC Rule 0-10(c).

(MM) Trading Day

Proposed Rule 4.7(b) establishes the deadlines for reporting certain data to the Central Repository using the term “Trading Day.” Accordingly, the Exchange proposes to define the term “Trading Day” in Proposed Rule 4.5. Specifically, Paragraph (mm) of Proposed Rule 4.5 states that the term “Trading Day” shall have the meaning as is determined by the Operating Committee. For the avoidance of doubt, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from time to time.

(ii) Clock Synchronization

SEC Rule 613(d)(1) under Regulation NMS requires Industry Members to synchronize their Business Clocks to the time maintained by NIST, consistent with industry standards. To comply with this provision, Section 6.8 of the Plan sets forth the clock synchronization requirements for Industry Members.²⁴ To implement these provisions with regard to its Industry Members, the Exchange proposes Rule 4.6 (Consolidated Audit Trail - Clock Synchronization) to require its Industry Members to comply with the clock synchronization requirements of the Plan.

²⁴ In addition, Section 6.7(a)(ii) of the Plan sets forth the timeline for CAT Reporters to comply with the clock synchronization requirements.

Paragraph (a) of Proposed Rule 4.6 sets forth the manner in which Industry Members must synchronize their Business Clocks. Paragraph (a)(1) of Proposed Rule 4.6 requires each Industry Member to synchronize its Business Clocks, other than such Business Clocks used solely for Manual Order Events or used solely for the time of allocation on Allocation Reports, at a minimum to within a fifty (50) millisecond tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization. This is the same requirement as set forth in Section 6.8(a)(ii)(A) of the CAT NMS Plan.

Paragraph (a)(2) of Proposed Rule 4.6 requires each Industry Member to synchronize (1) its Business Clocks used solely for Manual Order Events and (2) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum to within a one second tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization. This is the same requirement as set forth in Section 6.8(a)(iii) and (iv) of the CAT NMS Plan.

Paragraph (a)(3) of Proposed Rule 4.6 clarifies that the tolerance described in paragraphs (a)(1) and (2) of the Proposed Rule 4.6 includes all of the following: (1) the time difference between the NIST atomic clock and the Industry Member's Business Clock; (2) the transmission delay from the source; and (3) the amount of drift of the Industry Member's Business Clock. This description of the clock synchronization tolerance is the same as set forth in paragraph (b) of FINRA Rule 4590 (Synchronization of Member Business Clocks).

Paragraph (a)(4) of Proposed Rule 4.6 requires Industry Members to synchronize their Business Clocks every business day before market open to ensure that timestamps for Reportable Events are accurate. In addition, to maintain clock synchronization, Business Clocks must be checked against the NIST atomic clock and re-synchronized, as necessary, throughout the day. This description of the required frequency of clock synchronization is the same as set forth in paragraph (c) of FINRA Rule 4590 (Synchronization of Member Business Clocks).

Paragraph (b) of Proposed Rule 4.6 sets forth documentation requirements with regard to clock synchronization. Specifically, paragraph (b) requires Industry Members to document and maintain their synchronization procedures for their Business Clocks. The Proposed Rule requires Industry Members to keep a log of the times when they synchronize their Business Clocks and the results of the synchronization process. This log is required to include notice of any time a Business Clock drifts more than the applicable tolerance specified in paragraph (a) of the Proposed Rule. Such logs must include results for a period of not less than five years ending on the then current date, or for the entire period for which the Industry Member has been required to comply with this Rule if less than five years. These documentation requirements are the same as those set forth in the “Sequencing Orders and Clock Synchronization” section of Appendix C of the CAT NMS Plan. Moreover, these documentation requirements regarding clock synchronization are comparable to those set forth in Supplementary Material .01 of FINRA Rule 4590 (Synchronization of Member Business Clocks).

Paragraph (c) of Proposed Rule 4.6 sets forth certification requirements with regard to clock synchronization. Specifically, paragraph (c) of Proposed Rule 4.6 requires each Industry Member to certify to the Exchange that its Business Clocks satisfy the synchronization requirements set forth in paragraph (a) of Proposed Rule 4.6 periodically in accordance with the certification schedule established by the Operating Committee pursuant to the CAT NMS Plan. This requirement is the same requirement as set forth in Section 6.8(a)(ii)(B), (iii) and (iv) of the CAT NMS Plan. The Exchange intends to announce to its Industry Members the certification schedule established by the Operating Committee via Regulatory Circular.

Paragraph (d) of Proposed Rule 4.6 establishes reporting requirements with regard to clock synchronization. Paragraph (d) of Proposed Rule 4.6 requires Industry Members to report to the Plan Processor and the Exchange, violations of paragraph (a) of this Rule pursuant to the thresholds set by the Operating Committee pursuant to the CAT NMS Plan. This requirement is the same requirement as set forth in Section 6.8(a)(ii)(C), (iii) and (iv) of the CAT NMS Plan. The Exchange intends to announce to its Industry Members the relevant thresholds established by the Operating Committee via Regulatory Circular.

(iii) Industry Member Data Reporting

SEC Rule 613(c) under Regulation NMS requires the CAT NMS Plan to set forth certain provisions requiring Industry Members to record and report data to the CAT. To comply with this provision, Section 6.4 of the CAT NMS Plan sets forth the data reporting requirements for Industry Members. To implement these provisions with

regard to its Industry Members, the Exchange proposes Rule 4.7 (Consolidated Audit Trail – Industry Member Data Reporting) to require its Industry Members to comply with the Industry Member Data reporting requirements of the Plan. Proposed Rule 4.7 has six sections covering: (1) recording and reporting Industry Member Data, (2) timing of the recording and reporting, (3) the applicable securities covered by the recording and reporting requirements, (4) the security symbology to be used in the recording and reporting, and (5) error correction requirements, each of which is described below.

(A) Recording and Reporting Industry Member Data

Paragraph (a) of Proposed Rule 4.7 describes the recording and reporting of Industry Member Data to the Central Repository. Paragraph (a) consists of paragraphs (a)(1) – (a)(3), which cover Recorded Industry Member Data, Received Industry Member Data and Options Market Maker data, respectively. Paragraphs (a)(1) – (a)(3) of Proposed Rule 4.7 set forth the recording and reporting requirements required in Section 6.4(d)(i) – (iii) of the CAT NMS Plan, respectively.

Paragraph (a)(1) requires, subject to paragraph (a)(3) regarding Options Market Makers, each Industry Member to record and electronically report to the Central Repository the following details for each order and each Reportable Event, as applicable (“Recorded Industry Member Data”) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:

- for original receipt or origination of an order: (1) Firm Designated ID(s) for each Customer; (2) CAT-Order-ID; (3) SRO-Assigned Market Participant Identifier of the Industry Member receiving or originating the order; (4) date of order receipt

or origination; (5) time of order receipt or origination (using timestamps pursuant to Proposed Rule 4.10); and (6) Material Terms of the Order;

- for the routing of an order: (1) CAT-Order-ID; (2) date on which the order is routed; (3) time at which the order is routed (using timestamps pursuant to Proposed Rule 4.10); (4) SRO-Assigned Market Participant Identifier of the Industry Member routing the order; (5) SRO-Assigned Market Participant Identifier of the Industry Member or Participant to which the order is being routed; (6) if routed internally at the Industry Member, the identity and nature of the department or desk to which the order is routed; and (7) Material Terms of the Order;
- for the receipt of an order that has been routed, the following information: (1) CAT-Order-ID; (2) date on which the order is received; (3) time at which the order is received (using timestamps pursuant to Proposed Rule 4.10); (4) SRO-Assigned Market Participant Identifier of the Industry Member receiving the order; (5) SRO-Assigned Market Participant Identifier of the Industry Member or Participant routing the order; and (6) Material Terms of the Order;
- if the order is modified or cancelled: (1) CAT-Order-ID; (2) date the modification or cancellation is received or originated; (3) time at which the modification or cancellation is received or originated (using timestamps pursuant to Proposed Rule 4.10); (4) price and remaining size of the order, if modified; (5) other changes in the Material Terms of the Order, if modified; and (6) whether the

modification or cancellation instruction was given by the Customer or was initiated by the Industry Member;

- if the order is executed, in whole or in part: (1) CAT-Order-ID; (2) date of execution; (3) time of execution (using timestamps pursuant to Proposed Rule 4.10; (4) execution capacity (principal, agency or riskless principal); (5) execution price and size; (6) SRO-Assigned Market Participant Identifier of the Industry Member executing the order; (7) whether the execution was reported pursuant to an effective transaction reporting plan or the Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information; and
- other information or additional events as may be prescribed pursuant to the CAT NMS Plan.

Paragraph (a)(2) of Proposed Rule 4.7 requires, subject to paragraph (a)(3) regarding Options Market Makers, each Industry Member to record and report to the Central Repository the following, as applicable (“Received Industry Member Data” and collectively with the information referred to in Rule 4.7(a)(1) “Industry Member Data”)) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:

- if the order is executed, in whole or in part: (1) an Allocation Report; (2) SRO-Assigned Market Participant Identifier of the clearing broker or prime broker, if applicable; and (3) CAT-Order-ID of any contra-side order(s);
- if the trade is cancelled, a cancelled trade indicator; and

- for original receipt or origination of an order, the Firm Designated ID for the relevant Customer, and in accordance with Proposed Rule 4.8, Customer Account Information and Customer Identifying Information for the relevant Customer.

Paragraph (a)(3) of Proposed Rule 4.7 states that each Industry Member that is an Options Market Maker is not required to report to the Central Repository the Industry Member Data regarding the routing, modification or cancellation of its quotes in Listed Options. Each Industry Member that is an Options Market Maker, however, is required to report to the Exchange the time at which its quote in a Listed Option is sent to the Exchange (and, if applicable, any subsequent quote modification time and/or cancellation time when such modification or cancellation is originated by the Options Market Maker). This paragraph implements the Options Market Maker Quote Exemption, as discussed above.

(B) Timing of Recording and Reporting

Paragraph (b) of Proposed Rule 4.7 describes the requirements related to the timing of recording and reporting of Industry Member Data. Paragraphs (b)(1) – (b)(3) of Proposed Rule 4.7 set forth the requirements related to the timing of the recording and reporting requirements required in Section 6.4(b)(i) – (ii) of the CAT NMS Plan.

Paragraph (b)(1) of Proposed Rule 4.7 requires each Industry Member to record Recorded Industry Member Data contemporaneously with the applicable Reportable Event. Paragraph (b)(2) of Proposed Rule 4.7 requires each Industry Member to report: (1) Recorded Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member records such Recorded

Industry Member Data; and (2) Received Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member receives such Received Industry Member Data. Paragraph (b)(3) states that Industry Members may, but are not required to, voluntarily report Industry Member Data prior to the applicable 8:00 a.m. Eastern Time deadline.

(C) Applicable Securities

Paragraph (c) of Proposed Rule 4.7 describes the securities to which the recording and reporting requirements of Proposed Rule 4.7 apply. Paragraphs (c)(1) and (c)(2) of Proposed Rule 4.7 set forth the description of applicable securities as set forth in Section 6.4(c)(i) and (ii) of the CAT NMS Plan, respectively. Paragraph (c)(1) of Proposed Rule 4.7 requires each Industry Member to record and report to the Central Repository the Industry Member Data as set forth in paragraph (a) of Proposed Rule 4.7 for each NMS Security registered or listed for trading on such exchange or admitted to unlisted trading privileges on such exchange. Paragraph (c)(2) of Proposed Rule 4.7 requires each Industry Member to record and report to the Central Repository the Industry Member Data as set forth in paragraph (a) of this Proposed Rule 4.7 for each Eligible Security for which transaction reports are required to be submitted to FINRA.

(D) Security Symbolology

Paragraph (d) of Proposed Rule 4.7 describes the security symbolology that Industry Members are required to use when reporting Industry Member Data to the Central Repository. Paragraph (d)(1) of Proposed Rule 4.7 requires, for each exchange-listed Eligible Security, each Industry Member to report Industry Member Data to the

Central Repository using the symbology format of the exchange listing the security. This requirement implements the requirement set forth in Section 2 of Appendix D of the CAT NMS Plan to use the listing exchange symbology when reporting data to the Central Repository for exchange-listed Eligible Securities.

For each Eligible Security that is not exchange-listed, however, there is no listing exchange to provide the symbology format. Moreover, to date, the requisite symbology format has not been determined. Therefore, Paragraph (d)(2) of Proposed Rule 4.7 requires, for each Eligible Security that is not exchange-listed, each Industry Member to report Industry Member Data to the Central Repository using such symbology format as approved by the Operating Committee pursuant to the CAT NMS Plan. The Exchange intends to announce to its Industry Members the relevant symbology formats established by the Operating Committee via Regulatory Circular.

(E) Error Correction

To ensure that the CAT contains accurate data, the CAT NMS Plan requires Industry Members to correct erroneous data submitted to the Central Repository. Therefore, the Exchange proposes to adopt paragraph (e) of Proposed Rule 4.7, which addresses the correction of erroneous data reported to the Central Repository. Paragraph (e) of Proposed Rule 4.7 requires, for each Industry Member for which errors in Industry Member Data submitted to the Central Repository have been identified by the Plan Processor or otherwise, that such Industry Member submit corrected Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on T+3. This requirement

implements the error correction requirement set forth in Section 6 of Appendix D of the CAT NMS Plan.

(iv) Customer Information Reporting

Section 6.4(d)(iv) of the CAT NMS Plan requires Industry Members to submit to the Central Repository certain information related to their Customers in accordance with the Customer Information Approach discussed above. The Exchange proposes Rule 4.8 (Consolidated Audit Trail – Customer Information Reporting) to implement this provision of the CAT NMS Plan with regard to its Industry Members. Specifically, paragraph (a) of Proposed Rule 4.8 requires each Industry Member to submit to the Central Repository the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 4.13. Paragraph (b) of Proposed Rule 4.8 requires each Industry Member to submit to the Central Repository any updates, additions or other changes to the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account on a daily basis. Paragraph (c) of Proposed Rule 4.8 requires each Industry Member, on a periodic basis as designated by the Plan Processor and approved by the Operating Committee, to submit to the Central Repository a complete set of Firm Designated IDs, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account. This periodic refresh is intended to ensure that the Central Repository has the most current information identifying a Customer. The

Exchange intends to announce to its Industry Members when such a periodic refresh is required by the Plan Processor and the Operating Committee via Regulatory Circular.

Finally, paragraph (d) of Proposed Rule 4.8 addresses the correction of erroneous Customer data reported to the Central Repository to ensure an accurate audit trail. Paragraph (d) requires, for each Industry Member for which errors in Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Member to submit corrected data to the Central Repository by 5:00 p.m. Eastern Time on T+3. This requirement implements the error correction requirement set forth in Appendix C of the CAT NMS Plan.

(v) Industry Member Information Reporting

Section 6.4(d)(vi) of the CAT NMS Plan requires Industry Members to submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, in accordance with the Existing Identifier Approach discussed above. The Exchange proposes Rule 4.9 (Consolidated Audit Trail – Industry Member Information Reporting) to implement this provision of the CAT NMS Plan with regard to its Industry Members. Specifically, Proposed Rule 4.9 requires each Industry Member to submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 4.13, and keep such information up to date as necessary.

(vi) Time Stamps

SEC Rule 613(d)(3) under Regulation NMS sets forth requirements for time stamps used by CAT Reporters in recording and reporting data to the CAT.²⁵ To comply with this provision, Section 6.8(b) of the Plan sets forth time stamp requirements for Industry Members. To implement this provision with regard to its Industry Members, the Exchange proposes new Rule 4.10 (Consolidated Audit Trail – Time Stamps) to require its Industry Members to comply with the time stamp requirements of the Plan.

Paragraph (a) of Proposed Rule 4.10 sets forth the time stamp increments to be used by Industry Members in their CAT reporting. Paragraph (a)(1) of Proposed Rule 4.10 requires each Industry Member to record and report Industry Member Data to the Central Repository with time stamps in milliseconds, subject to paragraphs (a)(2) and (b) of Proposed Rule 4.10. To the extent that any Industry Member's order handling or execution systems utilize time stamps in increments finer than milliseconds, paragraph (a)(2) of Proposed Rule 4.10 requires such Industry Member to record and report Industry Member Data to the Central Repository with time stamps in such finer increment, subject to paragraph (b) of Proposed Rule 4.10 regarding Manual Order Events and Allocation Reports.

Paragraph (b) of Proposed Rule 4.10 sets forth the permissible time stamp increments for Manual Order Events and Allocation Reports. Specifically, paragraph (b)(1) of Proposed Rule 4.10 permits each Industry Member to record and report Manual

²⁵ 17 CFR 242.613(d)(3).

Order Events to the Central Repository in increments up to and including one second, provided that each Industry Member is required to record and report the time when a Manual Order Event has been captured electronically in an order handling and execution system of such Member (“Electronic Capture Time”) in milliseconds. In addition, paragraph (b)(2) of Proposed Rule 4.10 permits each Industry Member to record and report the time of Allocation Reports in increments up to and including one second.

(vii) Clock Synchronization Rule Violations

Proposed Rule 4.11 (Consolidated Audit Trail – Clock Synchronization Rule Violations) describes potential violations of the clock synchronization time period requirements set forth in the Proposed Rules 4.5 through 4.16. Proposed Rule 4.11 states that an Industry Member that engages in a pattern or practice of reporting Reportable Events outside of the required clock synchronization time period as set forth in the Proposed Rules 4.5 through 4.16 without reasonable justification or exceptional circumstances may be considered in violation of this Rule. This provision implements the requirements of Section 6.8 of the CAT NMS Plan which requires the Compliance Rule to provide that a pattern or practice of reporting events outside of the required clock synchronization time period without reasonable justification or exceptional circumstances may be considered a violation of SEC Rule 613 or the CAT NMS Plan.

(viii) Connectivity and Data Transmission

Proposed Rule 4.12 (Consolidated Audit Trail – Connectivity and Data Transmission) addresses connectivity and data transmission requirements related to the CAT. Paragraph (a) of Proposed Rule 4.12 describes the format(s) for reporting Industry

Member Data to the Central Repository, thereby implementing the formatting requirements as set forth in Section 6.4(a) of the CAT NMS Plan. Specifically, paragraph (a) of Proposed Rule 4.12 requires each Industry Member to transmit data as required under the CAT NMS Plan to the Central Repository utilizing such format(s) as may be provided by the Plan Processor and approved by the Operating Committee.

Paragraph (b) of Proposed Rule 4.12 addresses connectivity requirements related to the CAT. Paragraph (b) of Proposed Rule 4.12 requires each Industry Member to connect to the Central Repository using a secure method(s), including, but not limited to, private line(s) and virtual private network connection(s). This provision implements the connectivity requirements set forth in Section 4 of Appendix D to the CAT NMS Plan.

Paragraph (c) permits Industry Members to use CAT Reporting Agents to fulfill their data reporting obligations related to the CAT. Paragraph (c) is based on FINRA Rule 7450(c), which permits OATS Reporting Members to enter into agreements with Reporting Agents to fulfill the OATS obligations of the OATS Reporting Member. Specifically, Paragraph (c)(1) of Proposed Rule 4.12 states that any Industry Member may enter into an agreement with a CAT Reporting Agent pursuant to which the CAT Reporting Agent agrees to fulfill the obligations of such Industry Member under the Proposed Rules 4.5 through 4.16. Any such agreement must be evidenced in writing, which specifies the respective functions and responsibilities of each party to the agreement that are required to effect full compliance with the requirements of the Proposed Rules 4.5 through 4.16. The Exchange notes that, currently, no standardized form agreement for CAT Reporting Agent arrangements has been adopted. Paragraph

(c)(2) of Proposed Rule 4.12 requires that all written documents evidencing an agreement with a CAT Reporting Agent be maintained by each party to the agreement. Paragraph (c)(3) states that each Industry Member remains primarily responsible for compliance with the requirements of the Proposed Rules 4.5 through 4.16, notwithstanding the existence of an agreement described in paragraph (c) of Proposed Rule 4.12.

(ix) Development and Testing

The Exchange proposes Rule 4.13 (Consolidated Audit Trail – Development and Testing) to address requirements for Industry Members related to CAT development and testing. Paragraph (a) of Proposed Rule 4.13 sets forth the testing requirements and deadlines for Industry Members to develop and commence reporting to the Central Repository. These requirements are set forth in Appendix C to the CAT NMS Plan.

Paragraph (a)(1) sets forth the deadlines related to connectivity and acceptance testing. Industry Members (other than Small Industry Members) are required to begin connectivity and acceptance testing with the Central Repository no later than August 15, 2018, and Small Industry Members are required to begin connectivity and acceptance testing with the Central Repository no later than August 15, 2019.

Paragraph (a)(2) sets forth the deadlines related to reporting Customer and Industry Member information. Paragraph (a)(2)(i) requires Industry Members (other than Small Industry Members) to begin reporting Customer and Industry Member information, as required by Rules 4.8(a) and 4.9, respectively, to the Central Repository for processing no later than October 15, 2018. Paragraph (a)(2)(ii) requires Small Industry Members to begin reporting Customer and Industry Member information, as required by Rules 4.8(a)

and 4.9, respectively, to the Central Repository for processing no later than October 15, 2019.

Paragraph (a)(3) sets forth the deadlines related to the submission of order data. Under paragraph (a)(3)(i), Industry Members (other than Small Industry Members) are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2018. In addition, Industry Members (other than Small Industry Members) are required to participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2018. Under paragraph (a)(3)(ii), Small Industry Members are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2019. In addition, Small Industry Members are required to participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2019.

Paragraph (a)(4) states that Industry Members are permitted, but not required to, submit Quote Sent Times on Options Market Maker quotes, beginning no later than October 15, 2018

Paragraph (b) of Proposed Rule 4.13 implements the requirement under the CAT NMS Plan that Industry Members participate in required industry testing with the Central Repository.²⁶ Specifically, Proposed Rule 4.13 requires that each Industry Member participate in testing related to the Central Repository, including any industry-wide disaster recovery testing, pursuant to the schedule established pursuant to the CAT NMS

²⁶ Approval Order at 84725.

Plan. The Exchange intends to announce to its Industry Members the schedule established pursuant to the CAT NMS Plan via Regulatory Circular.

(x) Recordkeeping

Proposed Rule 4.14 (Consolidated Audit Trail – Recordkeeping) sets forth the recordkeeping obligations related to the CAT for Industry Members. Proposed Rule 4.14 requires each Industry Member to maintain and preserve records of the information required to be recorded in accordance with the Proposed Rules 4.5 through 4.16, for the period of time and accessibility specified in SEC Rule 17a-4(b). The records required to be maintained and preserved in accordance with Proposed Rules 4.5 through 4.16, may be immediately produced or reproduced on “micrographic media” as defined in SEC Rule 17a-4(f)(1)(i) or by means of “electronic storage media” as defined in SEC Rule 17a-4(f)(1)(ii) that meet the conditions set forth in SEC Rule 17a-4(f) and be maintained and preserved for the required time in that form. Proposed Rule 4.14 is based on FINRA Rule 7440(a)(5), which sets forth the recordkeeping requirements related to OATS.

(xi) Timely, Accurate and Complete Data

SEC Rule 613 and the CAT NMS Plan emphasize the importance of the timeliness, accuracy, completeness and integrity of the data submitted to the CAT.²⁷ Accordingly, Proposed Rule 4.15 (Consolidated Audit Trail – Timely, Accurate and Complete Data) implements this requirement with regard to Industry Members. Paragraph (a) of Proposed Rule 4.15 requires that Industry Members record and report

²⁷ See SEC Rule 613(e)(4)(i)(D)(ii); and Section 6.5(d) of the CAT NMS Plan.

data to the Central Repository as required by the Proposed Rules 4.5 through 4.16 in a manner that ensures the timeliness, accuracy, integrity and completeness of such data.

In addition, without limiting the general requirement as set forth in paragraph (a), paragraph (b) of Proposed Rule 4.15 requires Industry Members to accurately provide the LEIs in their records as required by the Proposed Rules 4.5 through 4.16 and states that Industry Members may not knowingly submit inaccurate LEIs to the Central Repository. Paragraph (b) notes, however, that this requirement does not impose any additional due diligence obligations on Industry Members with regard to LEIs for CAT purposes. Accordingly, this provision does not impose any due diligence obligations beyond those that may exist today with respect to information associated with an LEI. Although Industry Members will not be required to perform additional due diligence with regard to the LEIs for CAT purposes, Industry Members will be required to accurately provide the LEIs in their records and may not knowingly submit inaccurate LEIs to the CAT. Paragraph (b) is consistent with the SEC's statements in the Approval Order for the CAT NMS Plan regarding an Industry Member's obligations regarding LEIs.²⁸

Paragraph (c) states that, if an Industry Member reports data to the Central Repository with errors such that its error percentage exceeds the maximum Error Rate established by the Operating Committee pursuant to the CAT NMS Plan, then such Industry Member would not be in compliance with the Rules 4.5 through 4.16. As discussed above, the initial maximum Error Rate is 5%, although the Error Rate is expected to be reduced over time. The Exchange intends to announce to its Industry

²⁸ Approval Order at 84745.

Members changes to the Error Rate established pursuant to the CAT NMS Plan via Regulatory Circular.

Furthermore, paragraph (d) of Proposed Rule 4.15 addresses Compliance Thresholds related to reporting data to the CAT. Proposed Rule 4.15 states that each Industry Member is required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member's performance with regard to the CAT (the "Compliance Thresholds"). Compliance Thresholds will compare an Industry Member's error rate to the aggregate Error Rate over a period of time to be defined by the Operating Committee. Compliance Thresholds will be set by the Operating Committee, and will be calculated at intervals to be set by the Operating Committee.²⁹ Compliance Thresholds will include compliance with the data reporting and clock synchronization requirements. Proposed Rule 4.15 states that an Industry Member's performance with respect to its Compliance Threshold will not signify, as a matter of law, that such Industry Member has violated the Proposed Rules 4.5 through 4.16.

(xii) Compliance Dates

Proposed Rule 4.16 (Consolidated Audit Trail – Compliance Dates) sets forth the compliance dates for the various provisions of the Proposed Rules 4.5 through 4.16. Paragraphs (b) and (c) of this Rule set forth the additional details with respect to the compliance date of the Proposed Rules 4.5 through 4.16. Unless otherwise noted, the

²⁹ Appendix C of the CAT NMS Plan.

Proposed Rules 4.5 through 4.16 will be fully effective upon approval by the Commission and Members must comply with their terms.

Paragraph (b) of Proposed Rule 4.16 establishes the compliance dates for the clock synchronization requirements as set forth in Proposed Rule 4.6. Paragraph (b)(1) states that each Industry Member shall comply with Rule 4.6 with regard to Business Clocks that capture time in milliseconds commencing on or before March 15, 2017. Paragraph (b)(2) states that each Industry Member shall comply with Rule 4.6 with regard to Business Clocks that do not capture time in milliseconds commencing on or before February 19, 2018. The compliance date set forth in paragraph (b)(1) reflects the exemptive relief requested by the Participants with regard to the clock synchronization requirements related to Business Clocks that do not capture time in milliseconds.³⁰

Paragraph (c) of Proposed Rule 4.16 establishes the compliance dates for the data recording and reporting requirements for Industry Members. Paragraph (c)(1) requires each Industry Member (other than Small Industry Members) to record and report the Industry Member Data to the Central Repository by November 15, 2018. Paragraph (c)(2) requires that each Industry Member that is a Small Industry Member to record and report the Industry Member Data to the Central Repository by November 15, 2019. Such compliance dates are consistent with the compliance dates set forth in SEC Rule 613(a)(3)(v) and (vi), and Section 6.7(a)(v) and (vi) of the CAT NMS Plan.

³⁰ See Letter from Participants to Brent J. Fields, Secretary, U.S. Securities and Exchange Commission, dated January 17, 2017, requesting exemptive relief from SEC Rule 613(a)(3)(iii) and Section 6.7(a)(ii) of the CAT NMS Plan.

(b) Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6(b)(5) of the Act³¹, which require, among other things, that the Exchange's rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest, and Section 6(b)(8) of the Act³², which requires that the Exchange's rules not impose any burden on competition that is not necessary or appropriate.

The Exchange believes that this proposal is consistent with the Act because it implements, interprets or clarifies the provisions of the Plan, and is designed to assist the Exchange and its Industry Members in meeting regulatory obligations pursuant to the Plan. In approving the Plan, the SEC noted that the Plan "is necessary and appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act."³³ To the extent that this proposal implements, interprets or clarifies the Plan and applies specific requirements to Industry Members, the Exchange believes that this proposal furthers the objectives of the Plan, as identified by the SEC, and is therefore consistent with the Act.

4. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any

³¹ 15 U.S.C. 78f(b)(5).

³² 15 U.S.C. 78f(b)(8).

³³ Approval Order at 84697.

burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange notes that the proposed rule change implements provisions of the CAT NMS Plan, and is designed to assist the Exchange in meeting its regulatory obligations pursuant to the Plan. The Exchange also notes that the Proposed Rules 4.5 through 4.16 implement provisions of the CAT NMS Plan will apply equally to all firms that trade NMS Securities and OTC Equity Securities. In addition, all national securities exchanges and FINRA are proposing similar rules to apply the requirements of the CAT NMS Plan to their members. Therefore, this is not a competitive rule filing, and, therefore, it does not impose a burden on competition.

5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments were neither solicited nor received.

6. Extension of Time Period for Commission Action

Not applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

Not applicable.

8. Proposed Rule Change Based on Rule of Another Self-Regulatory Organization or of the Commission

Not applicable.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

Exhibit 1: Completed Notice of the Proposed Rule Change for publication in the Federal Register.

Exhibit 2 – 4: Not applicable.

Exhibit 5: Text of the proposed rule change.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION

(Release No. 34-_____; File No. SR-BatsBYX-2017-02)

Self-Regulatory Organizations; Bats BYX Exchange, Inc.; Notice of Filing of a Proposed Rule Change to Adopt Rules 4.5 Through 4.16 to Implement the Compliance Rule Regarding the National Market System Plan Governing the Consolidated Audit Trail

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that on _____, Bats BYX Exchange, Inc. (the “Exchange” or “BYX”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange filed a proposal to adopt Rules 4.5 through 4.16 to implement the compliance rule (“Compliance Rule”) regarding the National Market System Plan Governing the Consolidated Audit Trail (the “CAT NMS Plan” or “Plan”).³

The text of the proposed rule change is available at the Exchange’s website at www.bats.com, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Unless otherwise specified, capitalized terms used in this rule filing are defined as set forth herein or in the CAT NMS Plan.

for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

(A) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

Bats BYX Exchange, Inc., Bats BZX Exchange, Inc., Bats EDGA Exchange, Inc., Bats EDGX Exchange, Inc., BOX Options Exchange LLC, C2 Options Exchange, Incorporated, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange, LLC, Investors' Exchange LLC, ISE Gemini, LLC, ISE Mercury, LLC, Miami International Securities Exchange LLC, MIAX PEARL, LLC, NASDAQ BX, Inc., NASDAQ PHLX LLC, The NASDAQ Stock Market LLC, National Stock Exchange, Inc., New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc. (collectively, the "Participants") filed with the Commission, pursuant to Section 11A of the Exchange Act⁴ and Rule 608 of Regulation NMS thereunder,⁵ the CAT NMS Plan.⁶

⁴ 15 U.S.C. 78k-1.

⁵ 17 CFR 242.608.

⁶ See Letter from the Participants to Brent J. Fields, Secretary, Commission, dated September 30, 2014; and Letter from Participants to Brent J. Fields, Secretary, Commission, dated February 27, 2015. On December 24, 2015, the Participants submitted an amendment to the CAT NMS Plan. See Letter from Participants to Brent J. Fields, Secretary, Commission, dated December 23, 2015.

The Participants filed the Plan to comply with Rule 613 of Regulation NMS under the Exchange Act. The Plan was published for comment in the Federal Register on May 17, 2016,⁷ and approved by the Commission, as modified, on November 15, 2016.⁸

The Plan is designed to create, implement and maintain a consolidated audit trail (“CAT”) that would capture customer and order event information for orders in NMS Securities and OTC Equity Securities, across all markets, from the time of order inception through routing, cancellation, modification, or execution in a single consolidated data source. Each Participant is required to enforce compliance by its Industry Members, as applicable, with the provisions of the Plan, by adopting a Compliance Rule applicable to their Industry Members.⁹ As is described more fully below, the Proposed Rules 4.5 through 4.16 set forth the Compliance Rule to require Industry Members to comply with the provisions of the CAT NMS Plan. The Proposed Rules 4.5 through 4.16 include twelve Proposed Rules covering the following areas: (1) definitions; (2) clock synchronization; (3) Industry Member Data reporting; (4) Customer information reporting; (5) Industry Member information reporting; (6) time stamps; (7) clock synchronization rule violations; (8) connectivity and data transmission; (9) development and testing; (10) recordkeeping; (11) timely, accurate and complete data; and (12) compliance dates. Each of these Proposed Rules are discussed in detail below.

⁷ Securities Exchange Act Rel. No. 77724 (Apr. 27, 2016), 81 Fed. Reg. 30614 (May 17, 2016).

⁸ Securities Exchange Act Rel. No. 79318 (Nov. 15, 2016), 81 Fed. Reg. 84696 (Nov. 23, 2016) (“Approval Order”).

⁹ See SEC Rule 613(g)(1).

(i) Definitions

Proposed Rule 4.5 (Consolidated Audit Trail – Definitions) sets forth the definitions for the terms used in the Proposed Rules 4.5 through 4.16. Each of the defined terms in Proposed Rule 4.5 is discussed in detail in this section.

(A) Account Effective Date

(I) Customer Information Approach

SEC Rule 613 requires that numerous data elements be reported to the CAT to ensure there is sufficient information to create the lifecycle of an order, and provide regulators with sufficient detail about an order to perform their regulatory duties. Certain required elements are intended to ensure that the regulators can identify the Customer's associated with orders. For example, SEC Rule 613(c)(7)(i)(A) requires an Industry Member to report the "Customer-ID" for each Customer for the original receipt or origination of an order. "Customer-ID" is defined in SEC Rule 613(j)(5) to mean "with respect to a customer, a code that uniquely and consistently identifies such customer for purposes of providing data to the Central Repository." SEC Rule 613(c)(8) requires Industry Members to use the same Customer-ID for each Customer. The SEC granted the Participants exemptive relief to permit the use of an alternative approach to the requirement that an Industry Member report a Customer-ID for every Customer upon

original receipt or origination.¹⁰ The alternative approach is called the Customer Information Approach.

Under the Customer Information Approach, the CAT NMS Plan would require each Industry Member to assign a unique Firm Designated ID to each Customer. As the Firm Designated ID, Industry Members would be permitted to use an account number or any other identifier defined by the firm, provided each identifier is unique across the firm for each business date (*i.e.*, a single firm may not have multiple separate customers with the same identifier on any given date). Prior to their commencement of reporting to the CAT, Industry Members would submit an initial set of Customer information to the Central Repository, including the Firm Designated ID, Customer Identifying Information and Customer Account Information (which may include, as applicable, the Customer's name, address, date of birth, individual tax payer identifier number ("ITIN")/social security number ("SSN"), individual's role in the account (*e.g.*, primary holder, joint holder, guardian, trustee, person with power of attorney) and LEI and/or Larger Trader ID ("LTID")). This process is referred to as the customer definition process.

In accordance with the Customer Information Approach, Industry Members would be required to report only the Firm Designated ID for each new order submitted to the Central Repository, rather than the "Customer-ID" with individual order events. Within the Central Repository, each Customer would be uniquely identified by identifiers

¹⁰ See Securities Exchange Act Release No. 77265 (March 1, 2016), 81 FR 11856 (March 7, 2016) ("Exemption Order"). See also Letter from Participants to Brent J. Fields, Secretary, Commission, dated January 30, 2015 at 12 ("Exemptive Request Letter"); and CAT NMS Plan at Appendix C, Section A.1(a)(iii).

or a combination of identifiers such as ITIN/SSN, date of birth, and as applicable, LEI and LTID. The Plan Processor would be required to use these unique identifiers to map orders to specific Customers across all Industry Members and Participants. To ensure information identifying a Customer is up to date, Industry Members would be required to submit to the Central Repository daily and periodic updates for reactivated accounts, newly established accounts, and revised Firm Designated IDs or associated reportable Customer information.

(II) Definition of Account Effective Date

In connection with the Customer Information Approach, Industry Members would be required to report Customer Account Information to the Central Repository.

“Customer Account Information” is defined in SEC Rule 613(j)(4) to “include, but not be limited to, account number, account type, customer type, date account opened, and large trader identifier (if applicable).” Therefore, when reporting Customer Account Information, an Industry Member is required to report the date an account was opened. The Participants requested and received an exemption to allow an “Account Effective Date” to be reported in lieu of an account open date in certain limited circumstances. The definition of “Account Effective Date” as set forth in Paragraph (a) of Proposed Rule 4.5 describes those limited circumstances in which an Industry Member may report an “Account Effective Date” rather than the account open date. The proposed definition is the same as the definition of “Account Effective Date” set forth in Section 1.1 of the CAT NMS Plan, provided, however, that specific dates have replaced the descriptions of those dates set forth in Section 1.1 of the Plan.

Specifically, Paragraph (a)(1) defines “Account Effective Date to mean, with regard to those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution: (1) when the trading relationship was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, either (a) the date the relationship identifier was established within the Industry Member; (b) the date when trading began (*i.e.*, the date the first order was received) using the relevant relationship identifier; or (c) if both dates are available, the earlier date will be used to the extent that the dates differ; or (2) when the trading relationship was established on or after November 15, 2018 for Industry Members other than Small Industry Members, or on or after November 15, 2019 for Small Industry Members, the date the Industry Member established the relationship identifier, which would be no later than the date the first order was received.

Paragraph (a)(2) of Proposed Rule 4.5 states that an “Account Effective Date” means, where an Industry Member changes back office providers or clearing firms prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer.

Paragraph (a)(3) states that an “Account Effective Date” means, where an Industry Member acquires another Industry Member prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019

for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer.

Paragraph (a)(4) states that “Account Effective Date” means, where there are multiple dates associated with an account established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the earliest available date.

Paragraph (a)(5) states that an “Account Effective Date” means, with regard to Industry Member proprietary accounts established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members: (1) the date established for the account in the Industry Member or in a system of the Industry Member or (2) the date when proprietary trading began in the account (i.e., the date on which the first orders were submitted from the account). With regard to paragraphs (a)(2) – (5), the Account Effective Date will be no later than the date trading occurs at the Industry Member or in the Industry Member’s system.

(B) Active Account

Under the Customer Information Approach, Industry Members are required to report Customer Identifying Information and Customer Account Information for only those accounts that are active. This will alleviate the need for Industry Members to update such information for non-active accounts, but still ensure that the Central Repository will collect audit trail data for Customer accounts that have any Reportable Events. Accordingly, paragraph (b) of Proposed Rule 4.5 defines an “Active Account” as

an account that has had activity in Eligible Securities within the last six months. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(C) Allocation Report

(I) Allocation Report Approach

SEC Rule 613(c)(7)(vi)(A) requires each Industry Member to record and report to the Central Repository “the account number for any subaccounts to which the execution is allocated (in whole or in part).” The SROs requested and received from the SEC exemptive relief from SEC Rule 613 for an alternative to this approach (“Allocation Report Approach”). The Allocation Report Approach would permit Industry Members to record and report to the Central Repository an Allocation Report that includes, among other things, the Firm Designated ID for any account(s) to which executed shares are allocated when an execution is allocated in whole or part in lieu of requiring the reporting of the account number for any subaccount to which an execution is allocated, as is required by SEC Rule 613.¹¹ Under SEC Rule 613, regulators would be able to link the subaccount to which an allocation was made to a specific order. In contrast, under the Allocation Report Approach, regulators would only be able to link an allocation to the account to which it was made, and not to a specific order.

(II) Definition of Allocation Report

¹¹ See Exemptive Request Letter at 26-27; and Exemption Order.

To assist in implementing the Allocation Report Approach, paragraph (c) of Proposed Rule 4.5 defines an “Allocation Report.” Specifically, an “Allocation Report” means a report made to the Central Repository by an Industry Member that identifies the Firm Designated ID for any account(s), including subaccount(s), to which executed shares are allocated and provides the security that has been allocated, the identifier of the firm reporting the allocation, the price per share of shares allocated, the side of shares allocated, the number of shares allocated to each account, and the time of the allocation; provided, for the avoidance of doubt, any such Allocation Report shall not be required to be linked to particular orders or executions. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(D) Business Clock

To create the required audit trail, Industry Members are required to record the date and time of various Reportable Events to the Central Repository. Industry Members will use “Business Clocks” to record such dates and times. Accordingly, paragraph (d) of Proposed Rule 4.5 defines the term “Business Clock” as a clock used to record the date and time of any Reportable Event required to be reported under Rules 4.5 through 4.16. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, except the Exchange proposes to replace the phrase “under SEC Rule 613” at the end of the definition in Section 1.1 of the Plan with the phrase “under Rules 4.5 through 4.16.” This change is intended to recognize that the Industry Members’ obligations with regard to the CAT are set forth in Rules 4.5 through 4.16.

(E) CAT

Paragraph (e) of Proposed Rule 4.5 defines the term “CAT” to mean the consolidated audit trail contemplated by SEC Rule 613. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(F) CAT NMS Plan

Paragraph (f) of Proposed Rule 4.5 defines the term “CAT NMS Plan” to mean the National Market System Plan Governing the Consolidated Audit Trail, as amended from time to time.

(G) CAT-Order-ID**(I) Daisy Chain Approach**

Under the CAT NMS Plan, the Daisy Chain Approach is used to link and reconstruct the complete lifecycle of each Reportable Event in CAT. According to this Approach, Industry Members assign their own identifiers to each order event. Within the Central Repository, the Plan Processor later replaces the identifier provided by the Industry Member for each Reportable Event with a single identifier, called the CAT Order-ID, for all order events pertaining to the same order. This CAT Order-ID is used to link the Reportable Events related to the same order.

(II) Definition of CAT-Order-ID

To implement the Daisy Chain Approach, Paragraph (g) of Proposed Rule 4.5 defines the term “CAT-Order-ID.” The term “CAT-Order-ID” is defined to mean a

unique order identifier or series of unique order identifiers that allows the Central Repository to efficiently and accurately link all Reportable Events for an order, and all orders that result from the aggregation or disaggregation of such order. This is the same definition as set forth in SEC Rule 613(j)(1), and Section 1.1 of the CAT NMS Plan defines “CAT-Order-ID” by reference to SEC Rule 613(j)(1).

(H) CAT Reporting Agent

The CAT NMS Plan permits an Industry Member to use a third party, such as a vendor, to report the required data to the Central Repository on behalf of the Industry Member.¹² Such a third party, referred to in the Proposed Rules 4.5 through 4.16 as a “CAT Reporting Agent,” would be one type of a Data Submitter, that is, a party that submits data to the Central Repository. Paragraph (h) of Proposed Rule 4.5 defines the term “CAT Reporting Agent” to mean a Data Submitter that is a third party that enters into an agreement with an Industry Member pursuant to which the CAT Reporting Agent agrees to fulfill such Industry Member’s reporting obligations under Rules 4.5 through 4.16.

This definition is based on FINRA’s definition of a “Reporting Agent” as set forth in FINRA’s rule related to its Order Audit Trail System (“OATS”). Specifically, FINRA Rule 7410(n) defines a “Reporting Agent” as a third party that enters into any agreement with a member pursuant to which the Reporting Agent agrees to fulfill such member’s

¹² Appendix C, Section A.1(a) of the CAT NMS Plan.

obligations under Rule 7450. The Reporting Agent for OATS fulfills a similar role to the CAT Reporting Agent.

(I) Central Repository

Paragraph (i) of Proposed Rule 4.5 defines the term “Central Repository” to mean the repository responsible for the receipt, consolidation, and retention of all information reported to the CAT pursuant to SEC Rule 613 and the CAT NMS Plan. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, except the Exchange uses the phrase “CAT NMS Plan” in place of the phrase “this Agreement.”

(J) Compliance Threshold

Paragraph (j) of Proposed Rule 4.5 defines the term “Compliance Threshold” as having the meaning set forth in Proposed Rule 4.15(d). This definition has the same substantive meaning as the definition set forth in Section 1.1 of the CAT NMS Plan. As discussed in detail below with regard to Proposed Rule 4.15(d), each Industry Member is required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member’s performance with regard to the CAT. This Industry Member-specific rate is the “Compliance Threshold.”

(K) Customer

Industry Members are required to submit to the Central Repository certain information related to their Customers, including Customer Identifying Information and Customer Account Information, as well as data related to their Customer’s Reportable

Events. Accordingly, Paragraph (k) of Proposed Rule 4.5 proposes to define the term “Customer.” Specifically, the term “Customer” would be defined to mean: (1) the account holder(s) of the account at an Industry Member originating the order; and (2) any person from whom the Industry Member is authorized to accept trading instructions for such account, if different from the account holder(s). This is the same definition as set forth in SEC Rule 613(j)(3), except the Exchange proposes to replace the references to a registered broker-dealer or broker-dealer with a reference to an Industry Member for consistency of terms used in the Proposed Rules 4.5 through 4.16. The Exchange also notes that Section 1.1 of the CAT NMS Plan defines “Customer” by reference to SEC Rule 613(j)(3).

(L) Customer Account Information

As discussed above, under the Customer Information Approach, Industry Members are required to report Customer Account Information to the Central Repository as part of the customer definition process. Accordingly, the Exchange proposes to define the term “Customer Account Information” to clarify what customer information would need to be reported to the Central Repository.

Paragraph (l) of Proposed Rule 4.5 defines the term “Customer Account Information” to include, in part, account number, account type, customer type, date account opened, and large trader identifier (if applicable). Proposed Rule 4.5(l), however, provides an alternative definition of “Customer Account Information” in two limited circumstances. First, in those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account

with that institution, the Industry Member will: (1) provide the Account Effective Date in lieu of the “date account opened”; (2) provide the relationship identifier in lieu of the “account number”; and (3) identify the “account type” as a “relationship.” Second, in those circumstances in which the relevant account was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, and no “date account opened” is available for the account, the Industry Member will provide the Account Effective Date in the following circumstances: (1) where an Industry Member changes back office providers or clearing firms and the date account opened is changed to the date the account was opened on the new back office/clearing firm system; (2) where an Industry Member acquires another Industry Member and the date account opened is changed to the date the account was opened on the post-merger back office/clearing firm system; (3) where there are multiple dates associated with an account in an Industry Member’s system, and the parameters of each date are determined by the individual Industry Member; and (4) where the relevant account is an Industry Member proprietary account. The proposed definition is the same as the definition of “Customer Account Information” set forth in Section 1.1 of the CAT NMS Plan, provided, however, that specific dates have replaced the descriptions of those dates set forth in Section 1.1 of the Plan.

(M) Customer Identifying Information

As discussed above, under the Customer Information Approach, Industry Members are required to report Customer Identifying Information to the Central Repository as part of the customer definition process. Accordingly, the Exchange

proposes to define the term “Customer Account Information” to clarify what Customer information would need to be reported to the Central Repository.

Paragraph (m) of Proposed Rule 4.5 defines the term “Customer Identifying Information” to mean information of sufficient detail to identify a Customer. With respect to individuals, “Customer Identifying Information” includes, but is not limited to: name, address, date of birth, individual tax payer identification number (“ITIN”)/social security number (“SSN”), individual’s role in the account (*e.g.*, primary holder, joint holder, guardian, trustee, person with the power of attorney). With respect to legal entities, “Customer Identifying Information” includes, but is not limited to, name, address, Employer Identification Number (“EIN”)/Legal Entity Identifier (“LEI”) or other comparable common entity identifier, if applicable. The definition further notes that an Industry Member that has an LEI for a Customer must submit the Customer’s LEI in addition to other information of sufficient detail to identify the Customer. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(N) Data Submitter

The CAT NMS Plan uses the term “Data Submitter” to refer to any person that reports data to the Central Repository.¹³ Such Data Submitters may include those entities that are required to submit data to the Central Repository (*e.g.*, national securities exchanges, national securities associations and Industry Members), third-parties that may submit data to the CAT on behalf of CAT Reporters (*i.e.*, CAT Reporting Agents), and

¹³ Appendix C, Section A.1(a) of the CAT NMS Plan.

outside parties that are not required to submit data to the CAT but from which the CAT may receive data (*e.g.*, securities information processors (“SIPs”)). To include this term in the Proposed Rules 4.5 through 4.16, the Exchange proposes to define “Data Submitter” in paragraph (n) of Proposed Rule 4.5. Specifically, paragraph (n) of Proposed Rule 4.5 defines a “Data Submitter” to mean any person that reports data to the Central Repository, including national securities exchanges, national securities associations, broker-dealers, the SIPs for the CQS, CTA, UTP and Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information (“OPRA”) Plans, and certain other vendors or third parties that may submit data to the Central Repository on behalf of Industry Members.

(O) Eligible Security

The reporting requirements of the Proposed Rules 4.5 through 4.16 only apply to Reportable Events in Eligible Securities. Currently, an Eligible Security includes NMS Securities and OTC Equity Securities. Accordingly, paragraph (p) of Proposed Rule 4.5 defines the term “Eligible Security” to include: (1) all NMS Securities; and (2) all OTC Equity Securities. The terms “NMS Securities” and “OTC Equity Securities” are defined, in turn, below. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(P) Error Rate

(I) Maximum Error Rate

Under the CAT NMS Plan, the Operating Committee sets the maximum Error Rate that the Central Repository would tolerate from an Industry Member reporting data to the Central Repository.¹⁴ The Operating Committee reviews and resets the maximum Error Rate, at least annually.¹⁵ If an Industry Member reports CAT data to the Central Repository with errors such that their error percentage exceeds the maximum Error Rate, then such Industry Member would not be in compliance with the CAT NMS Plan or Rule 613.¹⁶ As such, the Exchange or the SEC “may take appropriate action against an Industry Member for failing to comply with its CAT reporting obligations.”¹⁷ The CAT NMS Plan sets the initial Error Rate at 5%.¹⁸ It is anticipated that the maximum Error Rate will be reviewed and lowered by the Operating Committee once Industry Members begin to report to the Central Repository.¹⁹

The CAT NMS Plan requires the Plan Processor to: (1) measure and report errors every business day; (2) provide Industry Members daily statistics and error reports as they become available, including a description of such errors; (3) provide monthly reports to Industry Members that detail an Industry Member’s performance and comparison statistics; (4) define educational and support programs for Industry Members to minimize Error Rates; and (5) identify, daily, all Industry Members exceeding the maximum allowable Error Rate. To timely correct data-submitted errors to the Central Repository,

¹⁴ Section 6.5(d)(i) of the CAT NMS Plan.

¹⁵ Appendix C, Section A.3(b) of the CAT NMS Plan.

¹⁶ Appendix C, Section A.3(b) of the CAT NMS Plan; Rule 613(g)-(h).

¹⁷ Appendix C, Section A.3(b) of the CAT NMS Plan.

¹⁸ Section 6.5(d)(i) of the CAT NMS Plan.

¹⁹ Appendix C, Section A.3(b) of the CAT NMS Plan.

the CAT NMS Plan requires that the Central Repository receive and process error corrections at all times. Further, the CAT NMS Plan requires that Industry Members be able to submit error corrections to the Central Repository through a web-interface or via bulk uploads or file submissions, and that the Plan Processor, subject to the Operating Committee's approval, support the bulk replacement of records and the reprocessing of such records. The Participants, furthermore, require that the Plan Processor identify Industry Member data submission errors based on the Plan Processor's validation processes.²⁰

(II) Definition of Error Rate

To implement the requirements of the CAT NMS Plan related to the Error Rate, the Exchange proposes to define the term "Error Rate" in Proposed Rule 4.5. Paragraph (p) of Proposed Rule 4.5 defines the term "Error Rate" 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 event that occurred in the market. This is the same definition as set forth in SEC Rule 613(j)(6), and Section 1.1 of the CAT NMS Plan defines "Error Rate" by reference to SEC Rule 613(j)(6).

(Q) Firm Designated ID

As discussed above, under the Customer Information Approach, the CAT NMS Plan would require each Industry Member to assign a unique Firm Designated ID to each Customer. Industry Members would be permitted to use as the Firm Designated ID an

²⁰ Approval Order at 84718.

account number or any other identifier defined by the firm, provided each identifier is unique across the firm for each business date (*i.e.*, a single firm may not have multiple separate customers with the same identifier on any given date). Industry Members would be required to report only the Firm Designated ID for each new order submitted to the Central Repository, rather than the “Customer-ID” with individual order events. Accordingly, the Exchange proposes to define the term “Firm Designated ID” in Proposed Rule 4.5. Specifically, paragraph (q) of Proposed Rule 4.5 defines the term “Firm Designated ID” to mean 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. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan. Industry Members would be permitted to use an account number or any other identifier defined by the firm, provided each identifier is unique across the firm for each business date (*i.e.*, a single firm may not have multiple separate customers with the same identifier on any given date).

(R) Industry Member

Paragraph (r) of Proposed Rule 4.5 defines the term “Industry Member” to mean a member of a national securities exchange or a member of a national securities association.” This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(S) Industry Member Data

Paragraph (s) of Proposed Rule 4.5 states that the term “Industry Member Data” has the meaning set forth in Rule 4.7(a)(2). This definition has the same substantive meaning as the definition set forth in Section 1.1 of the CAT NMS Plan. The definition of “Industry Member Data” is discussed more fully in the discussion below regarding Proposed Rule 4.7(a)(2).

(T) Initial Plan Processor

Paragraph (t) of Proposed Rule 4.5 defines the term “Initial Plan Processor” to mean the first Plan Processor selected by the Operating Committee in accordance with SEC Rule 613, Section 6.1 of the CAT NMS Plan and the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan, although the proposed definition uses the full name of the “Selection Plan.”

(U) Listed Option or Option

The CAT NMS Plan and the Proposed Rules 4.5 through 4.16 apply to Eligible Securities, which includes NMS Securities, which, in turn, includes Listed Options. Certain requirements of the Proposed Rules 4.5 through 4.16 apply specifically to Listed Options. Accordingly, Paragraph (u) of Proposed Rule 4.5 defines the term “Listed Option” or “Option.” Specifically, paragraph (u) of Proposed Rule 4.5 states that the term “Listed Option” or “Option” has the meaning set forth in SEC Rule 600(b)(35) of Regulation NMS. SEC Rule 600(b)(35), in turn, defines a listed option as “any option traded on a registered national securities exchange or automated facility of a national

securities association.” The Exchange notes that the proposed definition of “Listed Option” is the same definition as the definition set forth in Section 1.1 of the CAT NMS Plan.

(V) Manual Order Event

(I) Manual Order Event Approach

The CAT NMS Plan sets forth clock synchronization and timestamp requirements for Industry Members which reflect exemptions for Manual Order Events granted by the Commission.²¹ Specifically, the Plan requires Industry Members to record and report the time of each Reportable Event using timestamps reflecting current industry standards (which must be at least to the millisecond) or, if an Industry Member’s order handling or execution systems use timestamps in increments finer than milliseconds, such finer increments, when reporting to the Central Repository. For Manual Order Events, however, the Plan provides that such events must be recorded in increments up to and including one second, provided that Industry Members record and report the time the event is captured electronically in an order handling and execution system (“Electronic Capture Time”) in milliseconds. In addition, Industry Members are required to synchronize their respective Business Clocks (other than such Business Clocks used solely for Manual Order Events) at a minimum to within 50 milliseconds of the time maintained by the National Institute of Standards and Technology (“NIST”), and maintain such a synchronization. Each Industry Member is required to synchronize their

²¹ Exemption Order.

Business Clocks used solely for Manual Order Events, however, at a minimum to within one second of the time maintained by the NIST.

(II) Definition of Manual Order Event

In order to clarify what a Manual Order Event is for clock synchronization and time stamp purposes, the Exchange proposes to define the term “Manual Order Event” in Proposed Rule 4.5. Specifically, paragraph (v) of Proposed Rule 4.5 defines the term “Manual Order Event” to mean a non-electronic communication of order-related information for which Industry Members must record and report the time of the event. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(W) Material Terms of the Order

Proposed Rule 4.7 requires Industry Members to record and report to the Central Repository Material Terms of the Order with certain Reportable Events (*e.g.*, for the original receipt or origination of an order, for the routing of an order). Accordingly, the Exchange proposes to define the term “Material Terms of the Order” in Proposed Rule 4.5. Specifically, paragraph (w) of Proposed Rule 4.5 defines the term “Material Terms of the Order” to include: the NMS Security or OTC Equity Security symbol; security type; price (if applicable); size (displayed and non-displayed); side (buy/sell); order type; if a sell order, whether the order is long, short, short exempt; open/close indicator (except on transactions in equities); time in force (if applicable); if the order is for a Listed Option, option type (put/call), option symbol or root symbol, underlying symbol, strike price, expiration date, and open/close (except on market maker quotations); and any

special handling instructions. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(X) NMS Security

NMS Securities are one of the types of Eligible Securities for the CAT.

Therefore, the Exchange proposes to define the term “NMS Security” in Proposed Rule 4.5. Specifically, paragraph (x) of Proposed Rule 4.5 defines the term “NMS Security” to mean any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(Y) NMS Stock

Under the CAT NMS Plan, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47)), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from time to time. Accordingly, the Exchange proposes to define the term “NMS Stock” in Paragraph (y) of Proposed Rule 4.5 to mean any NMS Security other than an option. This is the same definition as set forth in SEC Rule 600(b)(47) of Regulation NMS.

(Z) Operating Committee

Paragraph (z) of Proposed Rule 4.5 defines the term “Operating Committee” to mean the governing body of the CAT NMS, LLC designated as such and described in Article IV of the CAT NMS Plan. This is the same definition as set forth in Section 1.1

of the CAT NMS Plan, except the Exchange proposes to use the phrase “CAT NMS LLC” in place of the phrase “the Company” for clarity.

(AA) Options Market Maker

(I) Options Market Maker Quote Exemption

SEC Rule 613(c)(7) provides that the CAT NMS Plan must require each Industry Member to record and electronically report to the Central Repository details for each order and each reportable event, including the routing and modification or cancellation of an order. SEC Rule 613(j)(8) defines “order” to include “any bid or offer.” Therefore, under SEC Rule 613, the details for each Options Market Maker quotation must be reported to the Central Repository by both the Options Market Maker and the options exchange to which it routes its quote.

The SROs, however, requested and received exemptive relief from SEC Rule 613 so that the CAT NMS Plan may permit Options Market Maker quotes to be reported to the Central Repository by the relevant options exchange in lieu of requiring that such reporting be done by both the options exchange and the Options Market Maker, as is required by SEC Rule 613.²² In accordance with the exemptive relief, Options Market Makers would be required to report to the options exchange the time at which a quote in a Listed Option is sent to the options exchange. Such time information also will be reported to the Central Repository by the options exchange in lieu of reporting by the Options Market Maker

²² See Exemptive Request Letter at 2, and Exemption Order.

(II) Definition of Options Market Maker

To implement the requirements related to Option Market Maker quotes, the Exchange proposes to define the term “Options Market Maker” in Proposed Rule 4.5. Specifically, paragraph (aa) of Proposed Rule 4.5 defines the term “Options Market Makers” to mean a broker-dealer registered with an exchange for the purpose of making markets in options contracts traded on the exchange. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(BB) Order

The Proposed Rules 4.5 through 4.16 require each Industry Member to record and electronically report to the Central Repository certain details for each order. Accordingly, the Exchange proposes to define the term “Order” in Proposed Rule 4.5. Specifically, paragraph (bb) of Proposed Rule 4.5 defines the term “Order”, with respect to Eligible Securities, to include: (1) any order received by an Industry Member from any person; (2) any order originated by an Industry Member; or (3) any bid or offer. This is the same definition as set forth in SEC Rule 613(j)(8), except the Exchange proposes to replace the phrase “member of a national securities exchange or national securities association” with the term “Industry Member.” The Exchange notes that Section 1.1 of the CAT NMS Plan defines “Order” by reference to SEC Rule 613(j)(8).

(CC) OTC Equity Security

OTC Equity Securities are one of the types of Eligible Securities for the CAT. Therefore, the Exchange proposes to define the term “OTC Equity Security” in Proposed

Rule 4.5. Specifically, paragraph (cc) of Proposed Rule 4.5 defines the term “OTC Equity Security” to mean any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association’s equity trade reporting facilities. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(DD) Participant

Paragraph (dd) of Proposed Rule 4.5 defines the term “Participant” to mean each Person identified as such in Exhibit A of the CAT NMS Plan, as amended, in such Person’s capacity as a Participant in CAT NMS, LLC. This is the same definition in substance as set forth in Section 1.1 of the CAT NMS Plan.

(EE) Person

Paragraph (ee) of Proposed Rule 4.5 defines the term “Person” to mean any individual, partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or association and any heirs, executors, administrators, legal representatives, successors and assigns of such Person where the context so permits. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(FF) Plan Processor

Paragraph (ff) of Proposed Rule 4.5 defines the term “Plan Processor” to mean the Initial Plan Processor or any other Person selected by the Operating Committee pursuant to SEC Rule 613 and Sections 4.3(b)(i) and 6.1 of the CAT NMS Plan, and with regard to the Initial Plan Processor, the National Market System Plan Governing the Process for

Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail, to perform the CAT processing functions required by SEC Rule 613 and set forth in the CAT NMS Plan.

(GG) Received Industry Member Data

Paragraph (gg) of Proposed Rule 4.5 states that the term “Received Industry Member Data” has the meaning set forth in Rule 4.7(a)(2). This definition has the same substantive meaning as the definition set forth in Section 1.1 of the CAT NMS Plan. The definition of “Received Industry Member Data” is discussed more fully in the discussion below regarding Proposed Rule 4.7(a)(2).

(HH) Recorded Industry Member Data

Paragraph (hh) of Proposed Rule 4.5 states that the term “Recorded Industry Member Data” has the meaning set forth in Rule 4.7(a)(1). This definition has the same substantive meaning as the definition set forth in in Section 1.1 of the CAT NMS Plan. The definition of “Recorded Industry Member Data” is discussed more fully in the discussion below regarding Proposed Rule 4.7(a)(1).

(II) Reportable Event

The Proposed Rules 4.5 through 4.16 require each Industry Member to record and electronically report to the Central Repository certain details for each Reportable Event. To clarify these requirements, the Exchange proposes to define the term “Reportable Event” in Proposed Rule 4.5. Specifically, paragraph (ii) of Proposed Rule 4.5 states that the term “Reportable Event” includes, but is not limited to, the original receipt or

origination, modification, cancellation, routing, execution (in whole or in part) and allocation of an order, and receipt of a routed order. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(JJ) SRO

Paragraph (jj) of Proposed Rule 4.5 defines the term “SRO” to mean any self-regulatory organization within the meaning of Section 3(a)(26) of the Exchange Act. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan.

(KK) SRO-Assigned Market Participant Identifier

(I) Existing Identifier Approach

The SROs requested and received exemptive relief from SEC Rule 613 so that the CAT NMS Plan may permit the Existing Identifier Approach, which would allow an Industry Member to report an existing SRO-Assigned Market Participant Identifier in lieu of requiring the reporting of a universal CAT-Reporter-ID (that is, a code that uniquely and consistently identifies an Industry Member for purposes of providing data to the Central Repository).²³ The CAT NMS Plan reflects the “Existing Identifier Approach” for purposes of identifying each Industry Member associated with an order or Reportable Event. Under the Existing Identifier Approach, Industry Members are required to record and report to the Central Repository an SRO-Assigned Market Participant Identifier for

²³ See Exemptive Request Letter at 19, and Exemption Order.

orders and certain Reportable Events to be used by the Central Repository to assign a unique CAT-Reporter-ID to identify Industry Members.

For the Central Repository to link the SRO-Assigned Market Participant Identifier to the CAT-Reporter-ID, each SRO will submit to the Central Repository, on a daily basis, all SRO-Assigned Market Participant Identifiers used by its Industry Members or itself; and information to identify each such Industry Member, including the CRD number and LEI if such LEI has been obtained, and itself, including LEI, if such LEI has been obtained. Additionally, each Industry Member is required to submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained. The Plan Processor will use this information to assign a CAT-Reporter-ID to each Industry Member for internal use within the Central Repository.

(II) Definition of SRO-Assigned Market Participant Identifier

To implement the Existing Identifier Approach, the Exchange proposes to define the term “SRO-Assigned Market Participant Identifier” in Proposed Rule 4.5. Specifically, paragraph (kk) of Proposed Rule 4.5 defines the term “SRO-Assigned Market Participant Identifier” to mean an identifier assigned to an Industry Member by an SRO or an identifier used by a Participant. This is the same definition as set forth in Section 1.1 of the CAT NMS Plan. For example, an Industry Member would be permitted to use any existing SRO-Assigned Market Participant Identifier (*e.g.*, FINRA

MPID, NASDAQ MPID, NYSE Mnemonic, CBOE User Acronym and CHX Acronym) when reporting order information to the Central Repository.

(LL) Small Industry Member

The requirements of the Proposed Rules 4.5 through 4.16 differ to some extent for Small Industry Members versus Industry Members other than Small Industry Members. For example, the compliance dates for reporting data to the CAT are different for Small Industry Members versus other Industry Members. Accordingly, to clarify the requirements that apply to which Industry Members, the Exchange proposes to define the term “Small Industry Member” in Proposed Rule 4.5. Specifically, paragraph (ll) of Proposed Rule 4.5 defines the term “Small Industry Member” to mean an Industry Member that qualifies as a small broker-dealer as defined in Rule 0-10(c) under the Securities Exchange Act of 1934, as amended. This is the same in substance as the definition of “Small Industry Member” as set forth in Section 1.1 of the CAT NMS Plan. Specifically, Section 1.1 of the CAT NMS Plan defines a “Small Industry Member” as “an Industry Member that qualifies as a small broker-dealer as defined in SEC Rule 613.” The definition of a small broker-dealer under SEC Rule 613, in turn, is a small broker-dealer as defined in SEC Rule 0-10(c).

(MM) Trading Day

Proposed Rule 4.7(b) establishes the deadlines for reporting certain data to the Central Repository using the term “Trading Day.” Accordingly, the Exchange proposes to define the term “Trading Day” in Proposed Rule 4.5. Specifically, Paragraph (mm) of Proposed Rule 4.5 states that the term “Trading Day” shall have the meaning as is

determined by the Operating Committee. For the avoidance of doubt, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from time to time.

(ii) Clock Synchronization

SEC Rule 613(d)(1) under Regulation NMS requires Industry Members to synchronize their Business Clocks to the time maintained by NIST, consistent with industry standards. To comply with this provision, Section 6.8 of the Plan sets forth the clock synchronization requirements for Industry Members.²⁴ To implement these provisions with regard to its Industry Members, the Exchange proposes Rule 4.6 (Consolidated Audit Trail - Clock Synchronization) to require its Industry Members to comply with the clock synchronization requirements of the Plan.

Paragraph (a) of Proposed Rule 4.6 sets forth the manner in which Industry Members must synchronize their Business Clocks. Paragraph (a)(1) of Proposed Rule 4.6 requires each Industry Member to synchronize its Business Clocks, other than such Business Clocks used solely for Manual Order Events or used solely for the time of allocation on Allocation Reports, at a minimum to within a fifty (50) millisecond tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization. This is the same requirement as set forth in Section 6.8(a)(ii)(A) of the CAT NMS Plan.

²⁴ In addition, Section 6.7(a)(ii) of the Plan sets forth the timeline for CAT Reporters to comply with the clock synchronization requirements.

Paragraph (a)(2) of Proposed Rule 4.6 requires each Industry Member to synchronize (1) its Business Clocks used solely for Manual Order Events and (2) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum to within a one second tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization. This is the same requirement as set forth in Section 6.8(a)(iii) and (iv) of the CAT NMS Plan.

Paragraph (a)(3) of Proposed Rule 4.6 clarifies that the tolerance described in paragraphs (a)(1) and (2) of the Proposed Rule 4.6 includes all of the following: (1) the time difference between the NIST atomic clock and the Industry Member's Business Clock; (2) the transmission delay from the source; and (3) the amount of drift of the Industry Member's Business Clock. This description of the clock synchronization tolerance is the same as set forth in paragraph (b) of FINRA Rule 4590 (Synchronization of Member Business Clocks).

Paragraph (a)(4) of Proposed Rule 4.6 requires Industry Members to synchronize their Business Clocks every business day before market open to ensure that timestamps for Reportable Events are accurate. In addition, to maintain clock synchronization, Business Clocks must be checked against the NIST atomic clock and re-synchronized, as necessary, throughout the day. This description of the required frequency of clock synchronization is the same as set forth in paragraph (c) of FINRA Rule 4590 (Synchronization of Member Business Clocks).

Paragraph (b) of Proposed Rule 4.6 sets forth documentation requirements with regard to clock synchronization. Specifically, paragraph (b) requires Industry Members

to document and maintain their synchronization procedures for their Business Clocks.

The Proposed Rule requires Industry Members to keep a log of the times when they synchronize their Business Clocks and the results of the synchronization process. This log is required to include notice of any time a Business Clock drifts more than the applicable tolerance specified in paragraph (a) of the Proposed Rule. Such logs must include results for a period of not less than five years ending on the then current date, or for the entire period for which the Industry Member has been required to comply with this Rule if less than five years. These documentation requirements are the same as those set forth in the “Sequencing Orders and Clock Synchronization” section of Appendix C of the CAT NMS Plan. Moreover, these documentation requirements regarding clock synchronization are comparable to those set forth in Supplementary Material .01 of FINRA Rule 4590 (Synchronization of Member Business Clocks).

Paragraph (c) of Proposed Rule 4.6 sets forth certification requirements with regard to clock synchronization. Specifically, paragraph (c) of Proposed Rule 4.6 requires each Industry Member to certify to the Exchange that its Business Clocks satisfy the synchronization requirements set forth in paragraph (a) of Proposed Rule 4.6 periodically in accordance with the certification schedule established by the Operating Committee pursuant to the CAT NMS Plan. This requirement is the same requirement as set forth in Section 6.8(a)(ii)(B), (iii) and (iv) of the CAT NMS Plan. The Exchange intends to announce to its Industry Members the certification schedule established by the Operating Committee via Regulatory Circular.

Paragraph (d) of Proposed Rule 4.6 establishes reporting requirements with regard to clock synchronization. Paragraph (d) of Proposed Rule 4.6 requires Industry Members to report to the Plan Processor and the Exchange, violations of paragraph (a) of this Rule pursuant to the thresholds set by the Operating Committee pursuant to the CAT NMS Plan. This requirement is the same requirement as set forth in Section 6.8(a)(ii)(C), (iii) and (iv) of the CAT NMS Plan. The Exchange intends to announce to its Industry Members the relevant thresholds established by the Operating Committee via Regulatory Circular.

(iii) Industry Member Data Reporting

SEC Rule 613(c) under Regulation NMS requires the CAT NMS Plan to set forth certain provisions requiring Industry Members to record and report data to the CAT. To comply with this provision, Section 6.4 of the CAT NMS Plan sets forth the data reporting requirements for Industry Members. To implement these provisions with regard to its Industry Members, the Exchange proposes Rule 4.7 (Consolidated Audit Trail – Industry Member Data Reporting) to require its Industry Members to comply with the Industry Member Data reporting requirements of the Plan. Proposed Rule 4.7 has six sections covering: (1) recording and reporting Industry Member Data, (2) timing of the recording and reporting, (3) the applicable securities covered by the recording and reporting requirements, (4) the security symbology to be used in the recording and reporting, and (5) error correction requirements, each of which is described below.

(A) Recording and Reporting Industry Member Data

Paragraph (a) of Proposed Rule 4.7 describes the recording and reporting of Industry Member Data to the Central Repository. Paragraph (a) consists of paragraphs (a)(1) – (a)(3), which cover Recorded Industry Member Data, Received Industry Member Data and Options Market Maker data, respectively. Paragraphs (a)(1) – (a)(3) of Proposed Rule 4.7 set forth the recording and reporting requirements required in Section 6.4(d)(i) – (iii) of the CAT NMS Plan, respectively.

Paragraph (a)(1) requires, subject to paragraph (a)(3) regarding Options Market Makers, each Industry Member to record and electronically report to the Central Repository the following details for each order and each Reportable Event, as applicable (“Recorded Industry Member Data”) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:

- for original receipt or origination of an order: (1) Firm Designated ID(s) for each Customer; (2) CAT-Order-ID; (3) SRO-Assigned Market Participant Identifier of the Industry Member receiving or originating the order; (4) date of order receipt or origination; (5) time of order receipt or origination (using timestamps pursuant to Proposed Rule 4.10); and (6) Material Terms of the Order;
- for the routing of an order: (1) CAT-Order-ID; (2) date on which the order is routed; (3) time at which the order is routed (using timestamps pursuant to Proposed Rule 4.10); (4) SRO-Assigned Market Participant Identifier of the Industry Member routing the order; (5) SRO-Assigned Market Participant Identifier of the Industry Member or Participant to which the order is being routed; (6) if routed internally at the Industry Member, the identity and nature of

the department or desk to which the order is routed; and (7) Material Terms of the Order;

- for the receipt of an order that has been routed, the following information: (1) CAT-Order-ID; (2) date on which the order is received; (3) time at which the order is received (using timestamps pursuant to Proposed Rule 4.10); (4) SRO-Assigned Market Participant Identifier of the Industry Member receiving the order; (5) SRO-Assigned Market Participant Identifier of the Industry Member or Participant routing the order; and (6) Material Terms of the Order;
- if the order is modified or cancelled: (1) CAT-Order-ID; (2) date the modification or cancellation is received or originated; (3) time at which the modification or cancellation is received or originated (using timestamps pursuant to Proposed Rule 4.10); (4) price and remaining size of the order, if modified; (5) other changes in the Material Terms of the Order, if modified; and (6) whether the modification or cancellation instruction was given by the Customer or was initiated by the Industry Member;
- if the order is executed, in whole or in part: (1) CAT-Order-ID; (2) date of execution; (3) time of execution (using timestamps pursuant to Proposed Rule 4.10); (4) execution capacity (principal, agency or riskless principal); (5) execution price and size; (6) SRO-Assigned Market Participant Identifier of the Industry Member executing the order; (7) whether the execution was reported pursuant to an effective transaction reporting plan or the Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information; and

- other information or additional events as may be prescribed pursuant to the CAT NMS Plan.

Paragraph (a)(2) of Proposed Rule 4.7 requires, subject to paragraph (a)(3) regarding Options Market Makers, each Industry Member to record and report to the Central Repository the following, as applicable (“Received Industry Member Data” and collectively with the information referred to in Rule 4.7(a)(1) “Industry Member Data”)) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:

- if the order is executed, in whole or in part: (1) an Allocation Report; (2) SRO-Assigned Market Participant Identifier of the clearing broker or prime broker, if applicable; and (3) CAT-Order-ID of any contra-side order(s);
- if the trade is cancelled, a cancelled trade indicator; and
- for original receipt or origination of an order, the Firm Designated ID for the relevant Customer, and in accordance with Proposed Rule 4.8, Customer Account Information and Customer Identifying Information for the relevant Customer.

Paragraph (a)(3) of Proposed Rule 4.7 states that each Industry Member that is an Options Market Maker is not required to report to the Central Repository the Industry Member Data regarding the routing, modification or cancellation of its quotes in Listed Options. Each Industry Member that is an Options Market Maker, however, is required to report to the Exchange the time at which its quote in a Listed Option is sent to the Exchange (and, if applicable, any subsequent quote modification time and/or cancellation time when such modification or cancellation is originated by the Options Market Maker).

This paragraph implements the Options Market Maker Quote Exemption, as discussed above.

(B) Timing of Recording and Reporting

Paragraph (b) of Proposed Rule 4.7 describes the requirements related to the timing of recording and reporting of Industry Member Data. Paragraphs (b)(1) – (b)(3) of Proposed Rule 4.7 set forth the requirements related to the timing of the recording and reporting requirements required in Section 6.4(b)(i) – (ii) of the CAT NMS Plan.

Paragraph (b)(1) of Proposed Rule 4.7 requires each Industry Member to record Recorded Industry Member Data contemporaneously with the applicable Reportable Event. Paragraph (b)(2) of Proposed Rule 4.7 requires each Industry Member to report: (1) Recorded Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member records such Recorded Industry Member Data; and (2) Received Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member receives such Received Industry Member Data. Paragraph (b)(3) states that Industry Members may, but are not required to, voluntarily report Industry Member Data prior to the applicable 8:00 a.m. Eastern Time deadline.

(C) Applicable Securities

Paragraph (c) of Proposed Rule 4.7 describes the securities to which the recording and reporting requirements of Proposed Rule 4.7 apply. Paragraphs (c)(1) and (c)(2) of Proposed Rule 4.7 set forth the description of applicable securities as set forth in Section

6.4(c)(i) and (ii) of the CAT NMS Plan, respectively. Paragraph (c)(1) of Proposed Rule 4.7 requires each Industry Member to record and report to the Central Repository the Industry Member Data as set forth in paragraph (a) of Proposed Rule 4.7 for each NMS Security registered or listed for trading on such exchange or admitted to unlisted trading privileges on such exchange. Paragraph (c)(2) of Proposed Rule 4.7 requires each Industry Member to record and report to the Central Repository the Industry Member Data as set forth in paragraph (a) of this Proposed Rule 4.7 for each Eligible Security for which transaction reports are required to be submitted to FINRA.

(D) Security Symbolology

Paragraph (d) of Proposed Rule 4.7 describes the security symbolology that Industry Members are required to use when reporting Industry Member Data to the Central Repository. Paragraph (d)(1) of Proposed Rule 4.7 requires, for each exchange-listed Eligible Security, each Industry Member to report Industry Member Data to the Central Repository using the symbolology format of the exchange listing the security. This requirement implements the requirement set forth in Section 2 of Appendix D of the CAT NMS Plan to use the listing exchange symbolology when reporting data to the Central Repository for exchange-listed Eligible Securities.

For each Eligible Security that is not exchange-listed, however, there is no listing exchange to provide the symbolology format. Moreover, to date, the requisite symbolology format has not been determined. Therefore, Paragraph (d)(2) of Proposed Rule 4.7 requires, for each Eligible Security that is not exchange-listed, each Industry Member to report Industry Member Data to the Central Repository using such symbolology format as

approved by the Operating Committee pursuant to the CAT NMS Plan. The Exchange intends to announce to its Industry Members the relevant symbology formats established by the Operating Committee via Regulatory Circular.

(E) Error Correction

To ensure that the CAT contains accurate data, the CAT NMS Plan requires Industry Members to correct erroneous data submitted to the Central Repository. Therefore, the Exchange proposes to adopt paragraph (e) of Proposed Rule 4.7, which addresses the correction of erroneous data reported to the Central Repository. Paragraph (e) of Proposed Rule 4.7 requires, for each Industry Member for which errors in Industry Member Data submitted to the Central Repository have been identified by the Plan Processor or otherwise, that such Industry Member submit corrected Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on T+3. This requirement implements the error correction requirement set forth in Section 6 of Appendix D of the CAT NMS Plan.

(iv) Customer Information Reporting

Section 6.4(d)(iv) of the CAT NMS Plan requires Industry Members to submit to the Central Repository certain information related to their Customers in accordance with the Customer Information Approach discussed above. The Exchange proposes Rule 4.8 (Consolidated Audit Trail – Customer Information Reporting) to implement this provision of the CAT NMS Plan with regard to its Industry Members. Specifically, paragraph (a) of Proposed Rule 4.8 requires each Industry Member to submit to the Central Repository the Firm Designated ID, Customer Account Information and

Customer Identifying Information for each of its Customers with an Active Account prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 4.13. Paragraph (b) of Proposed Rule 4.8 requires each Industry Member to submit to the Central Repository any updates, additions or other changes to the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account on a daily basis. Paragraph (c) of Proposed Rule 4.8 requires each Industry Member, on a periodic basis as designated by the Plan Processor and approved by the Operating Committee, to submit to the Central Repository a complete set of Firm Designated IDs, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account. This periodic refresh is intended to ensure that the Central Repository has the most current information identifying a Customer. The Exchange intends to announce to its Industry Members when such a periodic refresh is required by the Plan Processor and the Operating Committee via Regulatory Circular.

Finally, paragraph (d) of Proposed Rule 4.8 addresses the correction of erroneous Customer data reported to the Central Repository to ensure an accurate audit trail. Paragraph (d) requires, for each Industry Member for which errors in Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Member to submit corrected data to the Central Repository by 5:00 p.m. Eastern Time on T+3. This requirement implements the error correction requirement set forth in Appendix C of the CAT NMS Plan.

(v) Industry Member Information Reporting

Section 6.4(d)(vi) of the CAT NMS Plan requires Industry Members to submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, in accordance with the Existing Identifier Approach discussed above. The Exchange proposes Rule 4.9 (Consolidated Audit Trail – Industry Member Information Reporting) to implement this provision of the CAT NMS Plan with regard to its Industry Members. Specifically, Proposed Rule 4.9 requires each Industry Member to submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, prior to such Industry Member’s commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 4.13, and keep such information up to date as necessary.

(vi) Time Stamps

SEC Rule 613(d)(3) under Regulation NMS sets forth requirements for time stamps used by CAT Reporters in recording and reporting data to the CAT.²⁵ To comply with this provision, Section 6.8(b) of the Plan sets forth time stamp requirements for Industry Members. To implement this provision with regard to its Industry Members, the Exchange proposes new Rule 4.10 (Consolidated Audit Trail – Time Stamps) to require its Industry Members to comply with the time stamp requirements of the Plan.

²⁵ 17 CFR 242.613(d)(3).

Paragraph (a) of Proposed Rule 4.10 sets forth the time stamp increments to be used by Industry Members in their CAT reporting. Paragraph (a)(1) of Proposed Rule 4.10 requires each Industry Member to record and report Industry Member Data to the Central Repository with time stamps in milliseconds, subject to paragraphs (a)(2) and (b) of Proposed Rule 4.10. To the extent that any Industry Member's order handling or execution systems utilize time stamps in increments finer than milliseconds, paragraph (a)(2) of Proposed Rule 4.10 requires such Industry Member to record and report Industry Member Data to the Central Repository with time stamps in such finer increment, subject to paragraph (b) of Proposed Rule 4.10 regarding Manual Order Events and Allocation Reports.

Paragraph (b) of Proposed Rule 4.10 sets forth the permissible time stamp increments for Manual Order Events and Allocation Reports. Specifically, paragraph (b)(1) of Proposed Rule 4.10 permits each Industry Member to record and report Manual Order Events to the Central Repository in increments up to and including one second, provided that each Industry Member is required to record and report the time when a Manual Order Event has been captured electronically in an order handling and execution system of such Member ("Electronic Capture Time") in milliseconds. In addition, paragraph (b)(2) of Proposed Rule 4.10 permits each Industry Member to record and report the time of Allocation Reports in increments up to and including one second.

(vii) Clock Synchronization Rule Violations

Proposed Rule 4.11 (Consolidated Audit Trail – Clock Synchronization Rule Violations) describes potential violations of the clock synchronization time period

requirements set forth in the Proposed Rules 4.5 through 4.16. Proposed Rule 4.11 states that an Industry Member that engages in a pattern or practice of reporting Reportable Events outside of the required clock synchronization time period as set forth in the Proposed Rules 4.5 through 4.16 without reasonable justification or exceptional circumstances may be considered in violation of this Rule. This provision implements the requirements of Section 6.8 of the CAT NMS Plan which requires the Compliance Rule to provide that a pattern or practice of reporting events outside of the required clock synchronization time period without reasonable justification or exceptional circumstances may be considered a violation of SEC Rule 613 or the CAT NMS Plan.

(viii) Connectivity and Data Transmission

Proposed Rule 4.12 (Consolidated Audit Trail – Connectivity and Data Transmission) addresses connectivity and data transmission requirements related to the CAT. Paragraph (a) of Proposed Rule 4.12 describes the format(s) for reporting Industry Member Data to the Central Repository, thereby implementing the formatting requirements as set forth in Section 6.4(a) of the CAT NMS Plan. Specifically, paragraph (a) of Proposed Rule 4.12 requires each Industry Member to transmit data as required under the CAT NMS Plan to the Central Repository utilizing such format(s) as may be provided by the Plan Processor and approved by the Operating Committee.

Paragraph (b) of Proposed Rule 4.12 addresses connectivity requirements related to the CAT. Paragraph (b) of Proposed Rule 4.12 requires each Industry Member to connect to the Central Repository using a secure method(s), including, but not limited to,

private line(s) and virtual private network connection(s). This provision implements the connectivity requirements set forth in Section 4 of Appendix D to the CAT NMS Plan.

Paragraph (c) permits Industry Members to use CAT Reporting Agents to fulfill their data reporting obligations related to the CAT. Paragraph (c) is based on FINRA Rule 7450(c), which permits OATS Reporting Members to enter into agreements with Reporting Agents to fulfill the OATS obligations of the OATS Reporting Member. Specifically, Paragraph (c)(1) of Proposed Rule 4.12 states that any Industry Member may enter into an agreement with a CAT Reporting Agent pursuant to which the CAT Reporting Agent agrees to fulfill the obligations of such Industry Member under the Proposed Rules 4.5 through 4.16. Any such agreement must be evidenced in writing, which specifies the respective functions and responsibilities of each party to the agreement that are required to effect full compliance with the requirements of the Proposed Rules 4.5 through 4.16. The Exchange notes that, currently, no standardized form agreement for CAT Reporting Agent arrangements has been adopted. Paragraph (c)(2) of Proposed Rule 4.12 requires that all written documents evidencing an agreement with a CAT Reporting Agent be maintained by each party to the agreement. Paragraph (c)(3) states that each Industry Member remains primarily responsible for compliance with the requirements of the Proposed Rules 4.5 through 4.16, notwithstanding the existence of an agreement described in paragraph (c) of Proposed Rule 4.12.

(ix) Development and Testing

The Exchange proposes Rule 4.13 (Consolidated Audit Trail – Development and Testing) to address requirements for Industry Members related to CAT development and

testing. Paragraph (a) of Proposed Rule 4.13 sets forth the testing requirements and deadlines for Industry Members to develop and commence reporting to the Central Repository. These requirements are set forth in Appendix C to the CAT NMS Plan.

Paragraph (a)(1) sets forth the deadlines related to connectivity and acceptance testing. Industry Members (other than Small Industry Members) are required to begin connectivity and acceptance testing with the Central Repository no later than August 15, 2018, and Small Industry Members are required to begin connectivity and acceptance testing with the Central Repository no later than August 15, 2019.

Paragraph (a)(2) sets forth the deadlines related to reporting Customer and Industry Member information. Paragraph (a)(2)(i) requires Industry Members (other than Small Industry Members) to begin reporting Customer and Industry Member information, as required by Rules 4.8(a) and 4.9, respectively, to the Central Repository for processing no later than October 15, 2018. Paragraph (a)(2)(ii) requires Small Industry Members to begin reporting Customer and Industry Member information, as required by Rules 4.8(a) and 4.9, respectively, to the Central Repository for processing no later than October 15, 2019.

Paragraph (a)(3) sets forth the deadlines related to the submission of order data. Under paragraph (a)(3)(i), Industry Members (other than Small Industry Members) are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2018. In addition, Industry Members (other than Small Industry Members) are required to participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2018. Under paragraph (a)(3)(ii), Small

Industry Members are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2019. In addition, Small Industry Members are required to participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2019.

Paragraph (a)(4) states that Industry Members are permitted, but not required to, submit Quote Sent Times on Options Market Maker quotes, beginning no later than October 15, 2018

Paragraph (b) of Proposed Rule 4.13 implements the requirement under the CAT NMS Plan that Industry Members participate in required industry testing with the Central Repository.²⁶ Specifically, Proposed Rule 4.13 requires that each Industry Member participate in testing related to the Central Repository, including any industry-wide disaster recovery testing, pursuant to the schedule established pursuant to the CAT NMS Plan. The Exchange intends to announce to its Industry Members the schedule established pursuant to the CAT NMS Plan via Regulatory Circular.

(x) Recordkeeping

Proposed Rule 4.14 (Consolidated Audit Trail – Recordkeeping) sets forth the recordkeeping obligations related to the CAT for Industry Members. Proposed Rule 4.14 requires each Industry Member to maintain and preserve records of the information required to be recorded in accordance with the Proposed Rules 4.5 through 4.16, for the period of time and accessibility specified in SEC Rule 17a-4(b). The records required to

²⁶ Approval Order at 84725.

be maintained and preserved in accordance with Proposed Rules 4.5 through 4.16, may be immediately produced or reproduced on “micrographic media” as defined in SEC Rule 17a-4(f)(1)(i) or by means of “electronic storage media” as defined in SEC Rule 17a-4(f)(1)(ii) that meet the conditions set forth in SEC Rule 17a-4(f) and be maintained and preserved for the required time in that form. Proposed Rule 4.14 is based on FINRA Rule 7440(a)(5), which sets forth the recordkeeping requirements related to OATS.

(xi) Timely, Accurate and Complete Data

SEC Rule 613 and the CAT NMS Plan emphasize the importance of the timeliness, accuracy, completeness and integrity of the data submitted to the CAT.²⁷ Accordingly, Proposed Rule 4.15 (Consolidated Audit Trail – Timely, Accurate and Complete Data) implements this requirement with regard to Industry Members. Paragraph (a) of Proposed Rule 4.15 requires that Industry Members record and report data to the Central Repository as required by the Proposed Rules 4.5 through 4.16 in a manner that ensures the timeliness, accuracy, integrity and completeness of such data.

In addition, without limiting the general requirement as set forth in paragraph (a), paragraph (b) of Proposed Rule 4.15 requires Industry Members to accurately provide the LEIs in their records as required by the Proposed Rules 4.5 through 4.16 and states that Industry Members may not knowingly submit inaccurate LEIs to the Central Repository. Paragraph (b) notes, however, that this requirement does not impose any additional due diligence obligations on Industry Members with regard to LEIs for CAT purposes.

²⁷ See SEC Rule 613(e)(4)(i)(D)(ii); and Section 6.5(d) of the CAT NMS Plan.

Accordingly, this provision does not impose any due diligence obligations beyond those that may exist today with respect to information associated with an LEI. Although Industry Members will not be required to perform additional due diligence with regard to the LEIs for CAT purposes, Industry Members will be required to accurately provide the LEIs in their records and may not knowingly submit inaccurate LEIs to the CAT.

Paragraph (b) is consistent with the SEC's statements in the Approval Order for the CAT NMS Plan regarding an Industry Member's obligations regarding LEIs.²⁸

Paragraph (c) states that, if an Industry Member reports data to the Central Repository with errors such that its error percentage exceeds the maximum Error Rate established by the Operating Committee pursuant to the CAT NMS Plan, then such Industry Member would not be in compliance with the Rules 4.5 through 4.16. As discussed above, the initial maximum Error Rate is 5%, although the Error Rate is expected to be reduced over time. The Exchange intends to announce to its Industry Members changes to the Error Rate established pursuant to the CAT NMS Plan via Regulatory Circular.

Furthermore, paragraph (d) of Proposed Rule 4.15 addresses Compliance Thresholds related to reporting data to the CAT. Proposed Rule 4.15 states that each Industry Member is required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member's performance with regard to the CAT (the "Compliance Thresholds"). Compliance Thresholds will compare an Industry Member's

²⁸ Approval Order at 84745.

error rate to the aggregate Error Rate over a period of time to be defined by the Operating Committee. Compliance Thresholds will be set by the Operating Committee, and will be calculated at intervals to be set by the Operating Committee.²⁹ Compliance Thresholds will include compliance with the data reporting and clock synchronization requirements. Proposed Rule 4.15 states that an Industry Member's performance with respect to its Compliance Threshold will not signify, as a matter of law, that such Industry Member has violated the Proposed Rules 4.5 through 4.16.

(xii) Compliance Dates

Proposed Rule 4.16 (Consolidated Audit Trail – Compliance Dates) sets forth the compliance dates for the various provisions of the Proposed Rules 4.5 through 4.16. Paragraphs (b) and (c) of this Rule set forth the additional details with respect to the compliance date of the Proposed Rules 4.5 through 4.16. Unless otherwise noted, the Proposed Rules 4.5 through 4.16 will be fully effective upon approval by the Commission and Members must comply with their terms.

Paragraph (b) of Proposed Rule 4.16 establishes the compliance dates for the clock synchronization requirements as set forth in Proposed Rule 4.6. Paragraph (b)(1) states that each Industry Member shall comply with Rule 4.6 with regard to Business Clocks that capture time in milliseconds commencing on or before March 15, 2017. Paragraph (b)(2) states that each Industry Member shall comply with Rule 4.6 with regard to Business Clocks that do not capture time in milliseconds commencing on or

²⁹ Appendix C of the CAT NMS Plan.

before February 19, 2018. The compliance date set forth in paragraph (b)(1) reflects the exemptive relief requested by the Participants with regard to the clock synchronization requirements related to Business Clocks that do not capture time in milliseconds.³⁰

Paragraph (c) of Proposed Rule 4.16 establishes the compliance dates for the data recording and reporting requirements for Industry Members. Paragraph (c)(1) requires each Industry Member (other than Small Industry Members) to record and report the Industry Member Data to the Central Repository by November 15, 2018. Paragraph (c)(2) requires that each Industry Member that is a Small Industry Member to record and report the Industry Member Data to the Central Repository by November 15, 2019. Such compliance dates are consistent with the compliance dates set forth in SEC Rule 613(a)(3)(v) and (vi), and Section 6.7(a)(v) and (vi) of the CAT NMS Plan.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6(b)(5) of the Act³¹, which require, among other things, that the Exchange's rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest, and Section 6(b)(8) of the Act³², which requires that the Exchange's rules not impose any burden on competition that is not necessary or appropriate.

³⁰ See Letter from Participants to Brent J. Fields, Secretary, U.S. Securities and Exchange Commission, dated January 17, 2017, requesting exemptive relief from SEC Rule 613(a)(3)(iii) and Section 6.7(a)(ii) of the CAT NMS Plan.

³¹ 15 U.S.C. 78f(b)(5).

³² 15 U.S.C. 78f(b)(8).

The Exchange believes that this proposal is consistent with the Act because it implements, interprets or clarifies the provisions of the Plan, and is designed to assist the Exchange and its Industry Members in meeting regulatory obligations pursuant to the Plan. In approving the Plan, the SEC noted that the Plan “is necessary and appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act.”³³ To the extent that this proposal implements, interprets or clarifies the Plan and applies specific requirements to Industry Members, the Exchange believes that this proposal furthers the objectives of the Plan, as identified by the SEC, and is therefore consistent with the Act.

(B) Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange notes that the proposed rule change implements provisions of the CAT NMS Plan, and is designed to assist the Exchange in meeting its regulatory obligations pursuant to the Plan. The Exchange also notes that the Proposed Rules 4.5 through 4.16 implement provisions of the CAT NMS Plan will apply equally to all firms that trade NMS Securities and OTC Equity Securities. In addition, all national securities exchanges and FINRA are proposing similar rules to apply the requirements of the CAT NMS Plan to their members. Therefore, this is not a competitive rule filing, and, therefore, it does not impose a burden on competition.

(C) Self-Regulatory Organization’s Statement on Comments on the Proposed

³³ Approval Order at 84697.

Rule Change Received from Members, Participants or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission will: (a) by order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposal is consistent with the Act.

Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to rule-comments@sec.gov. Please include File No. SR-BatsBYX-2017-02 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. SR-BatsBYX-2017-02. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission

will post all comments on the Commission's Internet website

(<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 am and 3:00 pm. Copies of such filing will also be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File No. SR-BatsBYX-2017-02 and should be submitted on or before [_____21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³⁴

Robert W. Errett
Deputy Secretary

³⁴ 17 CFR 200.30-3(a)(12).

EXHIBIT 5

Note: Proposed new language is underlined. Proposed deletions are enclosed in [brackets].

Rules of Bats BYX Exchange, Inc.

* * * * *

CHAPTER IV. BOOKS AND RECORDS

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Rule 4.5. Consolidated Audit Trail – Definitions

For purposes of Rules 4.5 through 4.16:

(a) “Account Effective Date” means:

(1) with regard to those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution:

(A) when the trading relationship was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, either:

(i) the date the relationship identifier was established within the Industry Member;

(ii) the date when trading began (i.e., the date the first order was received) using the relevant relationship identifier; or

(iii) if both dates are available, the earlier date will be used to the extent that the dates differ; or

(B) when the trading relationship was established on or after November 15, 2018 for Industry Members other than Small Industry Members, or on or after November 15, 2019 for Small Industry Members, the date the Industry Member established the relationship identifier, which would be no later than the date the first order was received;

(2) where an Industry Member changes back office providers or clearing firms prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer;

(3) where an Industry Member acquires another Industry Member prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the date an account was established at the relevant Industry Member, either directly or via transfer;

(4) where there are multiple dates associated with an account established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, the earliest available date;

(5) with regard to Industry Member proprietary accounts established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members:

(A) the date established for the account in the Industry Member or in a system of the Industry Member or

(B) the date when proprietary trading began in the account (i.e., the date on which the first orders were submitted from the account).

With regard to paragraphs (2) – (5), the Account Effective Date will be no later than the date trading occurs at the Industry Member or in the Industry Member’s system.

(b) “Active Accounts” means an account that has had activity in Eligible Securities within the last six months.

(c) “Allocation Report” means a report made to the Central Repository by an Industry Member that identifies the Firm Designated ID for any account(s), including subaccount(s), to which executed shares are allocated and provides the security that has been allocated, the identifier of the firm reporting the allocation, the price per share of shares allocated, the side of shares allocated, the number of shares allocated to each account, and the time of the allocation; provided, for the avoidance of doubt, any such Allocation Report shall not be required to be linked to particular orders or executions.

(d) “Business Clock” means a clock used to record the date and time of any Reportable Event required to be reported under Rules 4.5 through 4.16.

(e) “CAT” means the consolidated audit trail contemplated by SEC Rule 613.

(f) “CAT NMS Plan” means the National Market System Plan Governing the Consolidated Audit Trail, as amended from time to time.

(g) “CAT-Order-ID” means a unique order identifier or series of unique order identifiers that allows the Central Repository to efficiently and accurately link all Reportable Events for an order, and all orders that result from the aggregation or disaggregation of such order.

(h) “CAT Reporting Agent” means a Data Submitter that is a third party that enters into an agreement with an Industry Member pursuant to which the CAT Reporting Agent agrees to fulfill such Industry Member’s reporting obligations under Rules 4.5 through 4.16.

(i) “Central Repository” means the repository responsible for the receipt, consolidation, and retention of all information reported to the CAT pursuant to SEC Rule 613 and the CAT NMS Plan.

(j) “Compliance Threshold” has the meaning set forth in Rule 4.15(d).

(k) “Customer” means:

(1) the account holder(s) of the account at an Industry Member originating the order; and

(2) any person from whom the Industry Member is authorized to accept trading instructions for such account, if different from the account holder(s).

(l) “Customer Account Information” shall include, but not be limited to, account number, account type, customer type, date account opened, and large trader identifier (if applicable); except, however, that:

(1) in those circumstances in which an Industry Member has established a trading relationship with an institution but has not established an account with that institution, the Industry Member will:

(A) provide the Account Effective Date in lieu of the “date account opened”;

(B) provide the relationship identifier in lieu of the “account number”;
and

(C) identify the “account type” as a “relationship”;

(2) in those circumstances in which the relevant account was established prior to November 15, 2018 for Industry Members other than Small Industry Members, or prior to November 15, 2019 for Small Industry Members, and no “date account opened” is available for the account, the Industry Member will provide the Account Effective Date in the following circumstances:

(A) where an Industry Member changes back office providers or clearing firms and the date account opened is changed to the date the account was opened on the new back office/clearing firm system;

(B) where an Industry Member acquires another Industry Member and the date account opened is changed to the date the account was opened on the post-merger back office/clearing firm system;

(C) where there are multiple dates associated with an account in an Industry Member's system, and the parameters of each date are determined by the individual Industry Member; and

(D) where the relevant account is an Industry Member proprietary account.

(m) "Customer Identifying Information" means information of sufficient detail to identify a Customer, including, but not limited to:

(1) with respect to individuals: name, address, date of birth, individual tax payer identification number ("ITIN")/social security number ("SSN"), individual's role in the account (e.g., primary holder, joint holder, guardian, trustee, person with the power of attorney); and

(2) with respect to legal entities: name, address, Employer Identification Number ("EIN")/Legal Entity Identifier ("LEI") or other comparable common entity identifier, if applicable; provided, however, that an Industry Member that has an LEI for a Customer must submit the Customer's LEI in addition to other information of sufficient detail to identify a Customer.

(n) "Data Submitter" means any person that reports data to the Central Repository, including national securities exchanges, national securities associations, broker-dealers, the SIPs for the CQS, CTA, UTP and Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information ("OPRA") Plans, and certain other vendors or third parties that may submit data to the Central Repository on behalf of Industry Members.

(o) "Eligible Security" includes:

(1) all NMS Securities; and

(2) all OTC Equity Securities.

(p) "Error Rate" means 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.

(q) "Firm Designated ID" means 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.

(r) "Industry Member" means a member of a national securities exchange or a member of a national securities association.

(s) "Industry Member Data" has the meaning set forth in Rule 4.7(a)(2).

(t) “Initial Plan Processor” means the first Plan Processor selected by the Operating Committee in accordance with SEC Rule 613, Section 6.1 of the CAT NMS Plan and the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail.

(u) “Listed Option” or “Option” have the meaning set forth in Rule 600(b)(35) of Regulation NMS.

(v) “Manual Order Event” means a non-electronic communication of order-related information for which Industry Members must record and report the time of the event.

(w) “Material Terms of the Order” includes: the NMS Security or OTC Equity Security symbol; security type; price (if applicable); size (displayed and non-displayed); side (buy/sell); order type; if a sell order, whether the order is long, short, short exempt; open/close indicator (except on transactions in equities); time in force (if applicable); if the order is for a Listed Option, option type (put/call), option symbol or root symbol, underlying symbol, strike price, expiration date, and open/close (except on market maker quotations); and any special handling instructions.

(x) “NMS Security” means any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options.

(y) “NMS Stock” means any NMS Security other than an option.

(z) “Operating Committee” means the governing body of the CAT NMS, LLC designated as such and described in Article IV of the CAT NMS Plan.

(aa) “Options Market Maker” means a broker-dealer registered with an exchange for the purpose of making markets in options contracts traded on the exchange.

(bb) “Order” or “order”, with respect to Eligible Securities, shall include:

(1) Any order received by an Industry Member from any person;

(2) Any order originated by an Industry Member; or

(3) Any bid or offer.

(cc) “OTC Equity Security” means any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association’s equity trade reporting facilities.

(dd) “Participant” means each Person identified as such in Exhibit A of the CAT NMS Plan, as amended, in such Person’s capacity as a Participant in CAT NMS, LLC.

(ee) “Person” means any individual, partnership, limited liability company, corporation, joint venture, trust, business trust, cooperative or association and any heirs,

executors, administrators, legal representatives, successors and assigns of such Person where the context so permits.

(ff) “Plan Processor” means the Initial Plan Processor or any other Person selected by the Operating Committee pursuant to SEC Rule 613 and Sections 4.3(b)(i) and 6.1 of the CAT NMS Plan, and with regard to the Initial Plan Processor, the National Market System Plan Governing the Process for Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail, to perform the CAT processing functions required by SEC Rule 613 and set forth in the CAT NMS Plan.

(gg) “Received Industry Member Data” has the meaning set forth in Rule 4.7(a)(2).

(hh) “Recorded Industry Member Data” has the meaning set forth in Rule 4.7(a)(1).

(ii) “Reportable Event” includes, but is not limited to, the original receipt or origination, modification, cancellation, routing, execution (in whole or in part) and allocation of an order, and receipt of a routed order.

(jj) “SRO” means any self-regulatory organization within the meaning of Section 3(a)(26) of the Exchange Act.

(kk) “SRO-Assigned Market Participant Identifier” means an identifier assigned to an Industry Member by an SRO or an identifier used by a Participant.

(ll) “Small Industry Member” means an Industry Member that qualifies as a small broker-dealer as defined in Rule 0-10(c) under the Securities Exchange Act of 1934, as amended.

(mm) “Trading Day” shall have the meaning as is determined by the Operating Committee. For the avoidance of doubt, the Operating Committee may establish different Trading Days for NMS Stocks (as defined in SEC Rule 600(b)(47)), Listed Options, OTC Equity Securities, and any other securities that are included as Eligible Securities from time to time.

Rule 4.6. Consolidated Audit Trail - Clock Synchronization

(a) Clock Synchronization

(1) Each Industry Member shall synchronize its Business Clocks, other than such Business Clocks used solely for Manual Order Events or used solely for the time of allocation on Allocation Reports, at a minimum to within a fifty (50) millisecond tolerance of the time maintained by the atomic clock of the National Institute of Standards and Technology (“NIST”), and maintain such synchronization.

(2) Each Industry Member shall synchronize:

(A) its Business Clocks used solely for Manual Order Events; and

(B) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum to within a one second tolerance of the time maintained by the NIST atomic clock, and maintain such synchronization.

(3) The tolerance for paragraphs (a)(1) and (a)(2) of this Rule includes all of the following:

(A) The difference between the NIST atomic clock and the Industry Member's Business Clock;

(B) The transmission delay from the source; and

(C) The amount of drift of the Industry Member's Business Clock.

(4) Business Clocks must be synchronized every business day before market open to ensure that timestamps for Reportable Events are accurate. To maintain clock synchronization, Business Clocks must be checked against the NIST atomic clock and re-synchronized, as necessary, throughout the day.

(b) Documentation

Industry Members must document and maintain their synchronization procedures for Business Clocks. Industry Members must keep a log of the times when they synchronize their Business Clocks and the results of the synchronization process. This log should include notice of any time a Business Clock drifts more than the applicable tolerance specified in paragraph (a) of this Rule. Such log must include results for a period of not less than five years ending on the then current date, or for the entire period for which the Industry Member has been required to comply with this Rule if less than five years.

(c) Certification

Each Industry Member shall certify to the Exchange that its Business Clocks satisfy the synchronization requirements set forth in paragraph (a) of this Rule periodically in accordance with the certification schedule established by the Operating Committee pursuant to the CAT NMS Plan.

(d) Violation Reporting

Each Industry Member with Business Clocks must report to the Plan Processor and the Exchange violations of paragraph (a) of this Rule pursuant to the thresholds set by the Operating Committee pursuant to the CAT NMS Plan.

Rule 4.7. Consolidated Audit Trail – Industry Member Data Reporting

(a) Recording and Reporting Industry Member Data

(1) Subject to paragraph (3) below, each Industry Member shall record and electronically report to the Central Repository the following details for each order and

each Reportable Event, as applicable (“Recorded Industry Member Data”) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:

(A) for original receipt or origination of an order:

(i) Firm Designated ID(s) for each Customer;

(ii) CAT-Order-ID;

(iii) SRO-Assigned Market Participant Identifier of the Industry Member receiving or originating the order;

(iv) date of order receipt or origination;

(v) time of order receipt or origination (using timestamps pursuant to Rule 4.10); and

(vi) Material Terms of the Order;

(B) for the routing of an order:

(i) CAT-Order-ID;

(ii) date on which the order is routed;

(iii) time at which the order is routed (using timestamps pursuant to Rule 4.10);

(iv) SRO-Assigned Market Participant Identifier of the Industry Member routing the order;

(v) SRO-Assigned Market Participant Identifier of the Industry Member or Participant to which the order is being routed;

(vi) if routed internally at the Industry Member, the identity and nature of the department or desk to which the order is routed; and

(vii) Material Terms of the Order;

(C) for the receipt of an order that has been routed, the following information:

(i) CAT-Order-ID;

(ii) date on which the order is received;

(iii) time at which the order is received (using timestamps pursuant to Rule 4.10);

(iv) SRO-Assigned Market Participant Identifier of the Industry Member receiving the order;

(v) SRO-Assigned Market Participant Identifier of the Industry Member or Participant routing the order; and

(vi) Material Terms of the Order;

(D) if the order is modified or cancelled:

(i) CAT-Order-ID;

(ii) date the modification or cancellation is received or originated;

(iii) time at which the modification or cancellation is received or originated (using timestamps pursuant to Rule 4.10);

(iv) price and remaining size of the order, if modified;

(v) other changes in the Material Terms of the Order, if modified; and

(vi) whether the modification or cancellation instruction was given by the Customer or was initiated by the Industry Member;

(E) if the order is executed, in whole or in part:

(i) CAT-Order-ID;

(ii) date of execution;

(iii) time of execution (using timestamps pursuant to Rule 4.10);

(iv) execution capacity (principal, agency or riskless principal);

(v) execution price and size;

(vi) SRO-Assigned Market Participant Identifier of the Industry Member executing the order;

(vii) whether the execution was reported pursuant to an effective transaction reporting plan or the Plan for Reporting of Consolidated Options Last Sale Reports and Quotation Information; and

(F) other information or additional events as may be prescribed pursuant to the CAT NMS Plan.

(2) Subject to paragraph (3) below, each Industry Member shall record and report to the Central Repository the following, as applicable (“Received Industry Member Data” and collectively with the information referred to in Rule 4.7(a)(1) “Industry Member Data”)) in the manner prescribed by the Operating Committee pursuant to the CAT NMS Plan:

(A) if the order is executed, in whole or in part:

(i) An Allocation Report;

(ii) SRO-Assigned Market Participant Identifier of the clearing broker or prime broker, if applicable; and

(iii) CAT-Order-ID of any contra-side order(s);

(B) if the trade is cancelled, a cancelled trade indicator; and

(C) for original receipt or origination of an order, the Firm Designated ID for the relevant Customer, and in accordance with Rule 4.8, Customer Account Information and Customer Identifying Information for the relevant Customer.

(3) Each Industry Member that is an Options Market Maker is not required to report to the Central Repository the Industry Member Data regarding the routing, modification or cancellation of its quotes in Listed Options. Each Industry Member that is an Options Market Maker shall report to the Exchange the time at which its quote in a Listed Option is sent to the Exchange (and, if applicable, any subsequent quote modification time and/or cancellation time when such modification or cancellation is originated by the Options Market Maker).

(b) Timing of Recording and Reporting

(1) Each Industry Member shall record Recorded Industry Member Data contemporaneously with the applicable Reportable Event.

(2) Each Industry Member shall report:

(A) Recorded Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member records such Recorded Industry Member Data; and

(B) Received Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on the Trading Day following the day the Industry Member receives such Received Industry Member Data.

(3) Industry Members may, but are not required to, voluntarily report Industry Member Data prior to the applicable 8:00 a.m. Eastern Time deadline.

(c) Applicable Securities

(1) Each Industry Member shall record and report to the Central Repository the Industry Member Data as set forth in paragraph (a) of this Rule for each NMS Security registered or listed for trading on such exchange or admitted to unlisted trading privileges on such exchange.

(2) Each Industry Member shall record and report to the Central Repository the Industry Member Data as set forth in this paragraph (a) of this Rule for each Eligible Security for which transaction reports are required to be submitted to FINRA.

(d) Security Symbolology

(1) For each exchange-listed Eligible Security, each Industry Member shall report Industry Member Data to the Central Repository using the symbolology format of the exchange listing the security.

(2) For each Eligible Security that is not exchange-listed, each Industry Member shall report Industry Member Data to the Central Repository using such symbolology format as approved by the Operating Committee pursuant to the CAT NMS Plan.

(e) Error Correction

For each Industry Member for which errors in Industry Member Data submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Industry Member shall submit corrected Industry Member Data to the Central Repository by 8:00 a.m. Eastern Time on T+3.

Rule 4.8. Consolidated Audit Trail – Customer Information Reporting

(a) Initial Set of Customer Information

Each Industry Member shall submit to the Central Repository the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 4.13.

(b) Daily Updates to Customer Information

Each Industry Member shall submit to the Central Repository any updates, additions or other changes to the Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account on a daily basis.

(c) Periodic Updates to Complete Set of Customer Information

On a periodic basis as designated by the Plan Processor and approved by the Operating Committee, each Industry Member shall submit to the Central Repository a complete set of Firm Designated IDs, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account.

(d) Error Correction

For each Industry Member for which errors in Firm Designated ID, Customer Account Information and Customer Identifying Information for each of its Customers with an Active Account submitted to the Central Repository have been identified by the Plan Processor or otherwise, such Industry Member shall submit corrected data to the Central Repository by 5:00 p.m. on T+3.

Rule 4.9. Consolidated Audit Trail – Industry Member Information Reporting

Each Industry Member shall submit to the Central Repository information sufficient to identify such Industry Member, including CRD number and LEI, if such LEI has been obtained, prior to such Industry Member's commencement of reporting to the Central Repository and in accordance with the deadlines set forth in Rule 4.13, and keep such information up to date as necessary.

Rule 4.10. Consolidated Audit Trail - Time Stamps

(a) Millisecond Time Stamps

(1) Subject to paragraphs (a)(2) and (b), each Industry Member shall record and report Industry Member Data to the Central Repository with time stamps in milliseconds.

(2) Subject to paragraph (b), to the extent that any Industry Member's order handling or execution systems utilize time stamps in increments finer than milliseconds, such Industry Member shall record and report Industry Member Data to the Central Repository with time stamps in such finer increment.

(b) One Second Time Stamps/Electronic Order Capture

(1) Each Industry Member may record and report Manual Order Events to the Central Repository in increments up to and including one second, provided that each Industry Member shall record and report the time when a Manual Order Event has been captured electronically in an order handling and execution system of such Industry Member ("Electronic Capture Time") in milliseconds; and

(2) Each Industry Member may record and report the time of Allocation Reports in increments up to and including one second.

Rule 4.11. Consolidated Audit Trail – Clock Synchronization Rule Violation

An Industry Member that engages in a pattern or practice of reporting Reportable Events outside of the required clock synchronization time period as set forth in Rules 4.5 through 4.16 without reasonable justification or exceptional circumstances may be considered in violation of this Rule.

Rule 4.12. Consolidated Audit Trail – Connectivity and Data Transmission

(a) Data Transmission

Each Industry Member shall transmit data as required under the CAT NMS Plan to the Central Repository utilizing such format(s) as may be provided by the Plan Processor and approved by the Operating Committee.

(b) Connectivity

Each Industry Member shall connect to the Central Repository using a secure method(s), including but not limited to private line(s) and virtual private network connection(s).

(c) CAT Reporting Agents

(1) Any Industry Member may enter into an agreement with a CAT Reporting Agent pursuant to which the CAT Reporting Agent agrees to fulfill the obligations of such Industry Member under Rules 4.5 through 4.16. Any such agreement shall be evidenced in writing, which shall specify the respective functions and responsibilities of each party to the agreement that are required to effect full compliance with the requirements of Rules 4.5 through 4.16.

(2) All written documents evidencing an agreement described in subparagraph (1) shall be maintained by each party to the agreement.

(3) Each Industry Member remains primarily responsible for compliance with the requirements of Rules 4.5 through 4.16, notwithstanding the existence of an agreement described in this paragraph.

Rule 4.13. Consolidated Audit Trail – Development and Testing

(a) Development

(1) Connectivity and Acceptance Testing

(i) Industry Members (other than Small Industry Members) shall begin connectivity and acceptance testing with the Central Repository no later than August 15, 2018.

(ii) Small Industry Members shall begin connectivity and acceptance testing with the Central Repository no later than August 15, 2019.

(2) Reporting Customer and Industry Member Information

(i) Industry Members (other than Small Industry Members) shall begin reporting Customer and Industry Member information, as required by Rules 4.8(a) and 4.9, respectively, to the Central Repository for processing no later than October 15, 2018.

(ii) Small Industry Members shall begin reporting Customer and Industry Member information, as required by Rules 4.8(a) and 4.9, respectively, to the Central Repository for processing no later than October 15, 2019.

(3) Submission of Order Data

(i) Industry Members (other than Small Industry Members)

(A) Industry Members (other than Small Industry Members) are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2018.

(B) Industry Members (other than Small Industry Members) shall participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2018.

(ii) Small Industry Members

(A) Small Industry Members are permitted, but not required, to submit order data for testing purposes beginning no later than May 15, 2019.

(B) Small Industry Members shall participate in the coordinated and structured testing of order submission, which will begin no later than August 15, 2019.

(4) Submission of Options Market Maker Quote. Industry Members are permitted, but not required to, submit Quote Sent Time on Options Market Maker quotes, beginning no later than October 15, 2018.

(b) Testing

Each Industry Member shall participate in testing related to the Central Repository, including any industry-wide disaster recovery testing, pursuant to the schedule established pursuant to the CAT NMS Plan.

Rule 4.14. Consolidated Audit Trail - Recordkeeping

Each Industry Member shall maintain and preserve records of the information required to be recorded under Rules 4.5 through 4.16 for the period of time and accessibility specified in SEC Rule 17a-4(b). The records required to be maintained and preserved under this Rule may be immediately produced or reproduced on “micrographic media” as defined in SEC Rule 17a-4(f)(1)(i) or by means of “electronic storage media” as defined in SEA Rule 17a-4(f)(1)(ii) that meet the conditions set forth in SEC Rule 17a-4(f) and be maintained and preserved for the required time in that form.

Rule 4.15. Consolidated Audit Trail – Timely, Accurate and Complete Data

(a) General

Industry Members are required to record and report data to the Central Repository as required by Rules 4.5 through 4.16 in a manner that ensures the timeliness, accuracy, integrity and completeness of such data.

(b) LEIs

Without limiting the requirement set forth in paragraph (a), Industry Members are required to accurately provide the LEIs in their records as required by Rules 4.5 through 4.16 and may not knowingly submit inaccurate LEIs to the Central Repository; provided, however, that this requirement does not impose any additional due diligence obligations on Industry Members with regard to LEIs for CAT purposes.

(c) Compliance with Error Rate

If an Industry Member reports data to the Central Repository with errors such that the error percentage exceeds the maximum Error Rate established by the Operating Committee pursuant to the CAT NMS Plan, then such Industry Member would not be in compliance with Rules 4.5 through 4.16.

(d) Compliance Thresholds

Each Industry Member shall be required to meet a separate compliance threshold which will be an Industry Member-specific rate that may be used as the basis for further review or investigation into the Industry Member's performance with regard to the CAT (the "Compliance Thresholds"). Compliance Thresholds will compare an Industry Member's error rate to the aggregate Error Rate over a period of time to be defined by the Operating Committee. An Industry Member's performance with respect to its Compliance Threshold will not signify, as a matter of law, that such Industry Member has violated Rules 4.5 through 4.16.

Rule 4.16. Consolidated Audit Trail – Compliance Dates

(a) General

Paragraphs (b) and (c) of this Rule set forth the additional details with respect to the compliance date of Rules 4.5 through 4.16. Unless otherwise noted, Rules 4.5 through 4.16 are fully effective and Members must comply with their terms.

(b) Clock Synchronization

(1) Each Industry Member shall comply with Rule 4.6 with regard to Business Clocks that capture time in milliseconds commencing on or before March 15, 2017.

(2) Each Industry Member shall comply with Rule 4.2 with regard to Business Clocks that do not capture time in milliseconds commencing on or before February 19, 2018.¹

(c) CAT Data Reporting

(1) Each Industry Member (other than a Small Industry Member) shall record and report the Industry Member Data to the Central Repository by November 15, 2018.

(2) Each Industry Member that is a Small Industry Member shall record and report the Industry Member Data to the Central Repository by November 15, 2019.

¹ Pending approval of exemptive relief regarding the compliance date for Business Clocks that do not capture time in milliseconds.