

January 30, 2015

Mr. Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Request for Exemptive Relief from Certain Provisions of SEC Rule 613 of Regulation NMS under the Securities Exchange Act of 1934

Dear Mr. Fields:

The eighteen registered national securities exchanges and FINRA (collectively, the “SROs”) respectfully request that the Securities and Exchange Commission (“Commission” or “SEC”) grant exemptions, pursuant to its authority under Section 36 of the Securities Exchange Act of 1934 (“Exchange Act”),¹ from the requirement to submit a national market system plan that meets certain reporting requirements specified in Rule 613(c) and (d) of Regulation NMS as described below.²

Section 36 of the Exchange Act grants the Commission the authority, with certain limitations, to “conditionally or unconditionally exempt any person, security, or transaction . . . from any provision or provisions of [the Act] or of any rule or regulation thereunder, to the extent that such exemption is necessary or appropriate in the public interest, and is consistent with the protection of investors.”³ The sections below outline the exemptive relief requests related to: (1) options market maker quotes; (2) Customer-IDs;⁴ (3) CAT-Reporter-IDs; (4) linking executions to specific subaccount allocations on Allocation Reports; and (5) time stamp granularity.

The SROs believe that the proposed alternative approaches outlined in this exemptive request satisfy the goals of Rule 613 in creating a consolidated audit trail that captures customer and order event information for orders in NMS securities,⁵ across all markets, from the time of order inception through routing, cancellation, modification, or execution. In addition, the SROs believe that the proposed alternative approaches would also ensure that the various considerations in Rule 613(a)(1) are met, including considerations related to the reliability and accuracy of the data reported to the Central Repository, the security and confidentiality of such data, the use of the data by regulators, cost-benefit analyses, and competition, efficiency, and capital formation. Moreover, the proposed alternative

¹ 15 U.S.C. § 78mm.

² See 17 C.F.R. § 242.613(c)(7), (c)(8), (d)(3).

³ 15 U.S.C. § 78mm(a)(1).

⁴ Unless otherwise noted, capitalized terms are used as defined in Rule 613, in the CAT NMS Plan, or in this letter.

⁵ The consolidated audit trail national market system plan, as filed by the SROs with the Commission on September 30, 2014, requires CAT Reporters to report information in both NMS securities and OTC equity securities. See CAT NMS Plan §§ 1.1, 6.4(c).

approaches appropriately take into consideration the views of the SROs' members and other market participants, which were solicited in accordance with the requirements in Rule 613(a)(1)(xi). The SROs intend to file an amendment to the consolidated audit trail ("CAT") national market system plan ("NMS Plan") that the SROs filed with the Commission on September 30, 2014 (as filed on September 30, 2014, the "CAT NMS Plan," unless the context indicates otherwise), that will reflect the exemptive relief requested in this letter.

A. Options Market Maker Quotes

1. Description of Proposed Approach

Rule 613(c)(7) sets forth data recording and reporting requirements for the CAT NMS Plan. Specifically, Rule 613(c)(7), in relevant part, requires every member of a national securities exchange or national securities association to record and electronically report to the Central Repository details for each order and each Reportable Event. Options market maker quotes are included within the meaning of an "order" under Rule 613(j)(8), which defines an "order" to include "any bid or offer." As a result, Rule 613(c)(7) states that the CAT NMS Plan must require every market maker on an options exchange to record and report all quotes and related Reportable Events to the Central Repository.

Rule 613(c)(7) also requires the options exchanges to record and report the details of options market maker quotes received by the options exchanges to the Central Repository. Given that the options exchanges and the options market makers will be submitting virtually identical details concerning the options market maker quotes to the Central Repository, the dual reporting of this information will at least double the size of the options quotation data reported to the CAT, which will create extensive overlap in the data elements reported. Based on their market data,⁶ the SROs estimate that having only the options exchanges report options market maker quotes to the CAT would reduce the size of data submitted to the CAT by approximately 18 billion records each day. Bidders indicated that requiring dual reporting of options market maker quotes would, over a five year period, lead to additional costs of between \$2 million and \$16 million for data storage and technical infrastructure. In addition to the costs incurred by the CAT Plan Processor in receiving, validating, and storing quotes reported by options market makers, the firms themselves will also incur costs to report this information. A cost survey conducted by three industry associations estimates that the cost to all options market makers to meet their quote reporting obligations ranges from \$307 million to \$382 million over a five year period.⁷

For the reasons set forth below, the SROs request that the Commission provide the SROs with an exemption from certain provisions in Rule 613(c)(7) such that the CAT NMS Plan could be amended so that only options exchanges would record and report details for each options market maker quote and related Reportable Event to the Central Repository, while options market makers would be relieved of their obligation to record and report their quotes and related Reportable Events to the Central Repository.

⁶ Per the estimate of market maker quotes submitted to the Exchanges and included in the RFP at 23.

⁷ Cost Survey Report on CAT Reporting of Options Quotes by Market Makers, conducted by the Financial Information Forum, Securities Industry and Financial Markets Association and Securities Traders Association (Nov. 5, 2013) ("FIF, SIFMA, and STA Cost Survey Report").

The SROs intend to file an amendment to the CAT NMS Plan that will require: (i) the SROs to require their members to report to the relevant options exchange the time an options market maker quote is routed to an options exchange (the “quote sent time”) along with any quotation being routed (and, as applicable, any subsequent quote modification and/or cancellation time when such modification or cancellation is originated by the options market maker); and (ii) options exchanges to submit the quotation data elements for Reportable Events received from options market makers, including the quote sent time (and, as applicable, quote modification and/or cancellation time), to the Central Repository without change. The exemption (and related requirements pertaining to quote sent times) would become effective when firms would otherwise be required to provide the data to the Central Repository.⁸

The SROs believe that the requested exemption for handling the quotes of options market makers is consistent with the goals of Rule 613. The Commission adopted Rule 613 with the goal of creating a comprehensive consolidated audit trail of all orders and quotes that will allow regulators to efficiently and accurately track all activity in NMS securities throughout the U.S. markets. In the Adopting Release for the CAT, the Commission stated that it believed it was “important for the consolidated audit trail to capture information for all principal orders and market maker quotations because principal orders and market maker quotations represent a significant amount of order and transaction activity in the US markets.”⁹ With respect to quoting activity specifically, the Commission stated that:

information on principal orders or market maker quotations could be useful in investigating illegal ‘spoofing.’ The availability to regulators of comprehensive information about principal orders and market maker quotations would allow them to more efficiently and effectively identify the source of the orders or quotations and, thus, better determine whether the quoted price was manipulated or simply a response to market forces.¹⁰

Capturing market maker quotation information is critical to the ability of options regulators to provide effective and efficient surveillance for market abuses; however, the requirement in Rule 613(c)(7) that both the options market makers and the options exchanges report virtually identical information is not necessary to achieve this important goal. As further discussed below, under the proposed exemption, options regulators will have the quote data necessary for the surveillance of options market makers with the quote data reported solely by the options exchanges under Rule 613(c)(7). Granting an exemption from the reporting of quotes and related Reportable Events by options market makers when the options exchanges provide such quote information in the manner proposed will not jeopardize the important goals of the CAT.

⁸ Generally, under Rule 613(a)(3)(v) and (vi), the CAT NMS Plan shall require each SRO: (i) within two years after effectiveness of the CAT NMS Plan, to require its members, except those members that qualify as small broker-dealers (as defined in the Rule), to provide to the Central Repository the data specified in paragraph (c) of the Rule; and (ii) within three years after effectiveness of the CAT NMS Plan, to require its members that qualify as small broker-dealers to provide to the Central Repository the data specified in paragraph (c) of the Rule. *See* 17 C.F.R. § 242.613(a)(3)(v), (vi).

⁹ Exchange Act Release No. 67457 (July 18, 2012), 77 Fed. Reg. 45722, 45746 (August 1, 2012) (“Adopting Release”).

¹⁰ Adopting Release, *supra* note 9, at 45746-47.

By way of background, as provided under Rule 613(c)(7), the options exchanges will report to the Central Repository all options market maker quotes received by the options exchanges as well as any cancellations, modifications, or executions related to those quotes. The identity of the options market maker associated with the quotes and Reportable Events will also be supplied to the Central Repository. Specifically, Rule 613(c)(7) requires the options exchanges to report the following data elements for orders (in this case, market maker quotes) routed to the exchange: (i) the CAT-Order-ID; (ii) the CAT-Reporter-ID of the options exchange receiving the quote; (iii) the CAT-Reporter-ID of the options market maker originating the quote; (iv) the date and time the quote was received by the options exchange; (v) the material terms of the quote; (vi) the date and time of any modification or cancellation of the quote; (vii) the price and remaining size of the quote, if modified; (viii) other changes in material terms of the quote, if modified; (ix) the CAT-Reporter-ID of the market maker submitting the modification or cancellation instruction to the options exchange; (x) the date and time of execution of any market maker quote; (xi) execution capacity; (xii) execution price and size; (xiii) the CAT-Reporter-ID of the options exchange where the execution occurred; (xiv) whether the execution was reported pursuant to an effective transaction reporting plan; (xv) the account number of any subaccounts for which the execution is allocated (in whole or in part); (xvi) the CAT-Reporter-ID of the clearing firm; (xvii) the CAT-Order-ID of any contra-side order(s); and (xviii) a cancel trade indicator, if cancelled.¹¹

The only reportable element that options market makers are required to submit under Rule 613 that options exchanges are not is the quote sent time (and, if applicable, any subsequent quote modification and/or cancellation time when such modification or cancellation is originated by the options market maker). The SROs believe that, if options exchanges include the quote sent time (and, as applicable, quote modification and/or cancellation time) received from options market makers along with the other quote data elements the options exchanges report to the Central Repository, this should alleviate the need for the reporting of quote data by options market makers while significantly reducing the amount of data that must be received, validated, processed, and retained by the Central Repository.

2. Requested Exemptive Relief for the Proposed Approach

The SROs believe that the proposed approach meets the Commission's goal of ensuring that each quote and its related Reportable Events are reported to the Central Repository, while minimizing the burden on market participants. To effectuate this approach, however, the SROs request that the Commission provide exemptive relief from the following provisions for options market makers with regard to their options quotes. In each case, all information subject to the exemptive request will be provided by the relevant options exchange to the Central Repository pursuant to Rule 613:

- Rule 613(c)(7)(ii), which requires a broker-dealer routing an order to provide the following information: (1) CAT-Order-ID; (2) date on which the order is routed; (3) time at which the order is routed; (4) CAT-Reporter-ID of the broker-dealer routing the order; (5) CAT-Reporter-ID of the national securities exchange to which the order

¹¹ See 17 C.F.R. § 242.613(c)(7)(iii)-(vii). Separately, below, the SROs request exemptive relief from some of the same provisions of Rule 613(c)(7) that are implicated in this request regarding options market maker quotes. The SROs view each exemptive request as a separate request regardless of such overlap given the different purposes of each request.

is being routed; (6) if routed internally at the broker-dealer, the identity and nature of the department or desk to which an order is routed;¹² and (7) Material Terms of the Order¹³

- Rule 613(c)(7)(iv), which requires a broker-dealer modifying or cancelling an order to provide the following information: (1) CAT-Order-ID; (2) date the modification or cancellation is received or originated; (3) time the modification or cancellation is received or originated; (4) price and remaining size of the order, if modified; (5) other changes in Material Terms of the Order, if modified; and (6) the CAT-Reporter-ID of the broker-dealer giving the modification or cancellation instruction.

3. Analysis of Proposed Approach

The SROs believe that the SEC should not require the CAT NMS Plan to include an obligation that options market makers record and report to the Central Repository quotes and related Reportable Events pursuant to Rule 613(c)(7), as set forth above. The SROs believe this exemption is necessary and appropriate in the public interest, and is consistent with the protection of investors. Discussed below is the process by which the SROs evaluated the proposed approach and alternatives to this approach, as well as the advantages and disadvantages of the various approaches.

a. Process

As required by Rule 613, the SROs developed and implemented a process for evaluating the various operational and technical issues related to the implementation of the provisions of Rule 613 related to options market maker quotes. The SROs first leveraged their own experience with quotes in evaluating these issues.¹⁴ Options market makers create quotes for thousands of strike prices based on the movement of underlying securities. Most of these quotes are produced algorithmically and represent theoretical valuations of the right to buy or sell the given security at hundreds of strike prices at various points in time. According

¹² As discussed further below, certain data elements required to be reported by members of a national securities exchange under Rule 613(c)(7) do not apply to options market maker quotes. *See infra* note 13. Based on discussions with various members of the Development Advisory Group, the SROs do not believe that options market makers route options quotations internally within their firms. Rather, such quotations are generated and routed to an options exchange in order to satisfy the regulatory obligations applicable to exchange market makers.

¹³ As discussed above, most of the Reportable Events for options market makers are identical to those reported by the options exchanges. We note as well that certain data elements required to be reported by members of a national securities exchange under Rule 613(c)(7) do not apply to options market maker quotes. For example, the reportable elements related to customer orders are not relevant to market maker quotes. In addition, market maker quotes are not routed from one broker-dealer to another, and therefore that type of routing information will not be generated by market maker quotes. *See* 17 C.F.R. § 242.613(c)(7)(iii). In addition, it is the SROs' understanding, based on discussions with the SEC Staff, that the origination of an options market maker quote is not a Reportable Event and the origination time is not a required data element under Rule 613(c)(7). *See* 17 C.F.R. § 242.613(c)(7)(i). Instead, the first Reportable Event with respect to an options market maker quote would be when the quote is routed to and processed by an options exchange.

¹⁴ Based on their experience with quotes, options exchanges submitted comments to the Commission on the CAT. *See, e.g.*, Letter from Edward J. Joyce, President and Chief Operating Officer, Chicago Board Options Exchange ("CBOE"), to Elizabeth M. Murphy, Secretary, SEC at 5 (Aug. 11, 2010) ("CBOE CAT Comment Letter") (recommending the removal of the requirements for options market makers to report quote information); Letter from Anthony D. McCormick, Chief Executive Officer, Boston Options Exchange Group, LLC, to Elizabeth M. Murphy, Secretary, SEC (Aug. 9, 2010) (noting concerns regarding the high volume of quoting activity on the options exchanges).

to data provided by the Options Price Reporting Authority (“OPRA”), the peak quote to trade ratio in April 2014 demonstrated that the combined options exchanges produced as many as 8,634 quote updates¹⁵ for every trade that occurred in the options marketplace. Each options exchange currently receives incoming data from options market makers, and uses the data to ensure compliance with exchange rules for fair and equitable markets. Given that the options exchanges already collect all requisite quote information (other than the time that a quote is routed, modified, or cancelled by the options market maker), which they will report to the Central Repository pursuant to Rule 613(c)(7), as discussed above, the utility of saving the voluminous and duplicative data from options market makers appears to be extremely limited in comparison to the cost.

In addition, as contemplated by Rule 613(a)(1)(xi), the SROs solicited the views of their members and other appropriate parties to ensure they considered a variety of informed views. A survey dated November 5, 2013 was conducted by the industry organizations Financial Information Forum (“FIF”), Securities Industry and Financial Markets Association (“SIFMA”) and the Security Traders Association (“STA”), to evaluate the costs of CAT reporting of quotes by market makers.¹⁶ This report was presented to the SROs by the Development Advisory Group (“DAG”) and discussed on several occasions at DAG meetings and within the SRO community. In addition, SIFMA has stated that it believes that options market makers should not be required to report their quotes to the Central Repository due to the large volume of such quotes and the ability to obtain such quote information from the options exchanges.¹⁷ The SROs that operate options exchanges carefully considered the issues and agree that the net benefits of having options market makers report their quotes to the Central Repository were negligible to the efficacy of their respective surveillance systems.

b. Cost-Benefit Analysis

After careful analysis, the SROs, in consultation with their members, Bidders and the DAG, believe that the proposed approach is the most efficient and cost-effective way to meet the Commission’s goals under Rule 613. Specifically, the SROs believe that the proposed approach will provide the SEC with options market maker quote data at a lower cost to market participants and at a lower cost to the CAT Plan Processor without compromising the Commission’s CAT goals.

First, by operation of Rule 613 and this exemptive request, the Central Repository would receive the same data as it would otherwise receive if options market makers were separately required to submit the same information concerning their quotations. The options exchanges will provide to the Central Repository all options market maker quotes received by the options exchange as well as any cancellations, modifications, or executions related to those quotes. In addition, the SROs propose that the options market makers will be required to provide the quote sent time to the options exchanges and that options exchanges will be required to provide the quote sent time to the Central Repository. Thus, the proposed

¹⁵ FIF Market Data Capacity Working Group Meeting, Financial Information Forum (Dec. 2014), available at <https://fif.com/tools/capacity>.

¹⁶ FIF, SIFMA, and STA Cost Survey Report, *supra* note 7, at 7.

¹⁷ See, e.g., Industry Recommendations for the Creation of a Consolidated Audit Trail (CAT), SIFMA at 15 (Mar. 28, 2013) (“SIFMA Industry Recommendations”); Letter from James T. McHale, Managing Director and Associate General Counsel, SIFMA, to Elizabeth M. Murphy, Secretary, SEC at 13 (Aug. 17, 2010) (“SIFMA CAT Comment Letter”).

exemption would not lessen the functionality or effectiveness of the CAT. The options exchanges will have all the data they reasonably need to conduct effective surveillance for potential misconduct, such as manipulation and trading ahead, and the Commission will have all of the data it would need to conduct its surveillance and research.

Second, by removing the requirement that both options market makers and options exchanges report nearly identical quotation data to the Central Repository, as Rule 613(c)(7) currently requires, the proposed approach has the potential effect of reducing the projected capacity requirements and other technology requirements for the Central Repository, thereby introducing significant cost savings. This, in turn, would mitigate potential issues or costs that might be incurred by the Central Repository if it were required to receive, validate, process, and retain approximately an additional 18 billion daily records of duplicative data that options market makers would otherwise need to report. Indeed, options market maker quotes are the single largest projected volume of all data elements that must be reported to the Central Repository.¹⁸ The enormous costs for the additional hardware and capacity requirements far outweigh the minimal informational value of the quotation data that could be collected directly from options market makers, particularly when the same data could be collected indirectly from the options exchanges in the manner proposed.

Absent the requested exemption, market makers will have the direct costs of additional hardware for the storage and processing of quotes as well as the development and maintenance costs of the new systems. A cost survey conducted by industry associations (FIF, SIFMA, and STA) confirms these conclusions. With respect to the costs to options market makers, the November 5, 2013 survey of firms projects that, over a five year period, the eighteen survey participants would collectively spend \$118 million to meet the current Rule 613 reporting requirements for reporting options market maker quotes.¹⁹ Furthermore, the survey estimated that it could cost between \$307.6 million and \$382 million for all options market makers to meet these obligations over the same period. A disproportionate amount of this burden would fall on smaller market maker firms, with smaller market makers reporting approximately 33% of the implementation costs as the primary market maker, while having an average volume of only 6%-7% of the primary market maker. While there are costs associated with reporting the quote sent time, this cost is less than the cost of requiring the market makers to report quote information to the CAT. As per the same cost survey, the aggregate costs for the primary market makers responding to the survey to add the quote sent time to an exchange message was approximately \$5 million, while that for the smaller market makers was approximately \$3.5 million, resulting in an overall cost of approximately \$8.5 million over a five-year period for the 16 firms that participated in this part of the survey. Additionally, the industry could be subject to further indirect costs arising in connection with the infrastructure scaling required for the extra capacity necessary across processors, storage, network bandwidth, system performance, operations management in production, disaster recovery, development, and testing CAT systems to maintain such duplicative data.

c. Other Rule 613 Considerations

The SROs also believe that the proposed approach would not adversely affect the various considerations set forth in Rule 613(a)(1). Specifically, the SROs do not believe that

¹⁸ The CAT Plan Processor must take into account the peak volumes of quote and order volume when assessing storage capacity and costs.

¹⁹ FIF, SIFMA, and STA Cost Survey Report, *supra* note 7, at 7.

the proposed approach would impact the reliability or accuracy of the CAT Data, or its security and confidentiality. Also, the SROs do not believe that the proposed approach would have an adverse effect on the various ways in which, and purposes for which, regulators would use, access, and analyze the CAT Data. From a surveillance standpoint, regulators will have access to the quote sent time. Moreover, by eliminating unnecessary duplication, the SROs believe that the proposed approach would have a positive effect on competition, efficiency, and capital formation.

d. Alternatives

In the course of considering the requirements of Rule 613 as they relate to options market maker quotes, the SROs considered three primary alternative approaches: complying with Rule 613 as written, requiring options market makers to submit their quote sent times directly to the Central Repository, and the proposed approach. For the reasons discussed above, the SROs have concluded that the proposed approach is the preferred approach.

B. Customer-ID

Under Rule 613(c)(7)(i)(A), the CAT NMS Plan must require each national securities exchange, national securities association, and any member of such exchange or association (“CAT Reporter”) to record and report “Customer-ID(s) for each customer” when reporting order receipt or origination information to the Central Repository.²⁰ Additionally, when reporting the modification or cancellation of an order, Rule 613(c)(7)(iv)(F) requires the reporting of “the Customer-ID of the person giving the modification or cancellation instruction.”²¹ Further, Rule 613(c)(7)(viii)(B) requires that, for original receipt or origination of an order, CAT Reporters report “Customer Account Information,” which is defined as including, but not limited to, “account number, account type, customer type, date account opened, and large trader identifier (if applicable).”²² Rule 613(c)(8) mandates that all CAT Reporters “use the same . . . Customer-ID . . . for each customer.”²³

The SEC, acknowledging the complexity and potential costs of requiring unique customer identifiers to be reported to the CAT, adopted the requirement after concluding that “[t]he inclusion of unique customer identifiers should greatly facilitate the identification of the orders and actions attributable to particular customers and thus substantially enhance the efficiency and effectiveness of the regulatory oversight provided by the SROs and the Commission.”²⁴ The Commission noted that including a unique customer identifier could enhance the efficiency of regulatory inquiries and aid regulators in reconstructing broad-based market events.²⁵ Recognizing the complexity of such a requirement however, the Commission expressed its belief that “the plan sponsors, by engaging in a detailed process that combines their own expertise with that of other market participants, are in the best position to devise a methodology for, and estimate the costs of, including customer identifiers in the consolidated audit trail” and that Rule 613 “contemplates that the plan sponsors have the flexibility to determine the precise way to assign or ‘code’ these identifiers.”²⁶

²⁰ 17 C.F.R. § 242.613(c)(7)(i)(A).

²¹ 17 C.F.R. § 242.613(c)(7)(iv)(F).

²² 17 C.F.R. § 242.613(j)(4).

²³ 17 C.F.R. § 242.613(c)(8).

²⁴ Adopting Release, *supra* note 9, at 45756.

²⁵ *Id.*

²⁶ *Id.* at 45757.

The SROs have considered the requirements of Rule 613 with respect to recording and reporting Customer-IDs, Customer Account Information and information of sufficient detail to identify the customer as well as the Commission's reasons for adopting these requirements. In addition, the SROs requested that broker-dealers and other industry members provide ideas on implementing the Customer-ID requirement. After careful consideration, including numerous discussions with the DAG, the SROs have determined that an efficient and effective way to achieve the Commission's goals is to use a reporting model that would require broker-dealers to provide detailed account and customer information to the CAT, including the specific identities of all customers (as defined in Rule 613) associated with each account, and have the CAT Plan Processor correlate the customer information across broker-dealers, assign a unique customer identifier to each customer (*i.e.*, the Customer-ID), and use that unique customer identifier consistently across all CAT Data; broker-dealers would then supply firm-designated identifiers on order information reported to the CAT rather than indicate Customer-IDs on those reports (hereinafter, the "Customer Information Approach"). In this way, the Commission and SROs will have the benefit of consistent Customer-IDs when they use the CAT Data, and the CAT Reporters and CAT Plan Processor will have several benefits including technical efficiency.

Some specific technical requirements in Rule 613(c), however, are at odds with the Customer Information Approach, and therefore the SROs are requesting that the Commission provide exemptive relief from certain provisions in Rule 613(c). The SROs intend to file an amendment to the CAT NMS Plan that will include the Customer Information Approach. Specifically, because the Customer Information Approach is not currently permitted by Rule 613(c), and to allow the SROs to include the Customer Information Approach in the CAT NMS Plan, the SROs respectfully request that, pursuant to Section 36 of the Act, the Commission grant the SROs an exemption from the following requirements of Rule 613, which require the Customer-ID to be recorded and reported to the CAT:

- The Customer-ID for each customer for the original receipt or origination of an order as specified in Rule 613(c)(7)(i)(A);
- The Customer-ID of the person giving the modification or cancellation instruction as specified in Rule 613(c)(7)(iv)(F);
- The account opening date as specified in Rule 613(c)(7)(viii)(B), under certain circumstances described below; and
- For SROs and their members to use the same Customer-ID for each customer as specified in Rule 613(c)(8).

1. Description of Customer Information Approach

Under the Customer Information Approach, the CAT NMS Plan will require each broker-dealer reporting to the Central Repository to assign a unique firm-designated identifier to each trading account. For the firm-designated identifier, broker-dealers 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). Broker-dealers must submit an initial set of customer information to the Central Repository, including, as applicable, the

firm-designated identifier for the trading account, account type, and account effective date.²⁷ Broker-dealers must also submit the information about customer(s) associated with each firm-designated identifier, including but not limited to: name, address, date of birth, tax ID (“TIN”)/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 Legal Entity Identifier (“LEI”),²⁸ and Large Trader ID, if applicable. Under the Customer Information Approach, broker-dealers would be required to submit to the Central Repository daily updates for reactivated accounts, newly established or revised firm-designated identifiers, or associated reportable customer information.²⁹ The CAT Plan Processor will use these unique identifiers to map orders to specific customers across all broker-dealers. Broker-dealers would then only be required to report firm-designated identifier information on each new Reportable Event representing receipt of an order submitted to the Central Repository rather than the “Customer-ID” as set forth in Rule 613(c)(7), and the CAT Plan Processor would associate specific customers and their Customer-IDs with individual order events based on the reported firm-designated identifier.³⁰

The specific formats in which information is provided to the Central Repository that must be submitted for the required customer information will be developed by the CAT Plan Processor and approved by the SROs; however, because the CAT NMS Plan is required to be approved before the CAT Plan Processor is selected, the SROs believe exemptive relief is appropriate. The SROs intend to file an amendment to the CAT NMS Plan that will reflect the Customer Information Approach. Because the CAT Plan Processor will create, assign, and maintain Customer-IDs and associations with firm-designated identifiers within the CAT architecture, and will not pass the Customer-ID back to broker-dealers, under the Customer Information Approach, broker-dealers would not report on each order “Customer-IDs for each customer” or “Customer Account Information” to the CAT as required by Rule 613(c). Rather, they would report firm-designated identifiers (and, initially for each customer, customer information, as described above), which the CAT Plan Processor could then use to determine the customer(s) associated with each order and Reportable Event. Because firm-designated identifiers would also differ across firms, CAT Reporters would also not use the same Customer-ID for each customer as required by Rule 613(c)(8). After the CAT Plan Processor has linked these events with specific Customer-IDs, it will be able to provide SROs

²⁷ The SROs anticipate that customer information that is initially reported to the Central Repository could be limited to only customer accounts that have CAT-reportable activity. For example, accounts that are considered open, but have not traded eligible securities in a given timeframe may not need to be pre-established in the Central Repository, but rather could be reported as part of daily updates after they have CAT-reportable activity.

²⁸ Where a validated LEI is available for a customer or entity, it may obviate the need to report other identifier information (*e.g.*, customer name, address, TIN).

²⁹ Because reporting to the Central Repository is on an end-of-day basis, intra-day changes to information could be captured as part of the daily updates to the information. *See* 17 C.F.R. § 242.613(c)(3). To ensure the completeness and accuracy of customer information and associations, in addition to daily updates, broker-dealers will be required to submit periodic, full refreshes of customer information to the Central Repository. The scope of the “full” customer information refresh will need to be defined to determine the extent to which inactive or otherwise terminated accounts would need to be reported. Daily updates will consist of new account information and changes to existing account data, such as changes to name or address information. Periodic full refreshes would require CAT Reporters to submit a complete dataset of all Customer Account Information, and would be used as a consistency check to help ensure completeness, consistency, and accuracy of information previously submitted to the account database.

³⁰ Appendix B contains illustrative examples of the Customer Information Approach.

and the Commission with a complete order lifecycle that includes specific, unique customer identification.

In addition, under the Customer Information Approach, the SROs propose that the “effective date” of the firm-designated identifier be used in lieu of the account opening date when there is no account opening date available or the reporting of effective date would be more appropriate or less burdensome. For example, a circumstance in which an account opening date is not available is a situation where an entity ID is used as the firm-designated identifier for institutional brokerage firms’ clients. Entity IDs do not generally include an explicit account opening date, and in such cases, the effective date of the entity ID would be used instead. A further example would include cases where there is a single customer which may have the ability to trade in multiple accounts. Each account may have a different opening date, and the SROs feel that it would be more appropriate to report the date at which the particular customer’s relationship with these accounts was established (i.e. the effective date). Circumstances where reporting an account opening date may be burdensome would include when there is new trading on long dormant³¹ accounts. In such cases, obtaining the original account opening date may be challenging due to the legacy nature of such accounts, and allowing reporting of effective date in lieu of account opening date would minimize manual efforts associated with such reporting.

The SROs also understand that it is a common business practice to reuse firm-designated identifiers after a relationship with a particular client has ended.³² As such, it is intended to require firms to submit an account effective date in addition to an account opening date (where an account opening date is available as above), allowing the effective date to be used as an “as-of” date. This would ensure that a combination of the firm-designated identifier and an effective date can be used to identify a unique customer.

2. Requested Exemptive Relief for Customer Information Approach

The SROs believe that the Customer Information Approach meets the goals of Rule 613 to ensure that information of specific detail to identify the customer(s) associated with each order is captured in the CAT. Nevertheless, implementation of the Customer Information Approach would require the following exemptive relief.

³¹ Identification of dormant accounts is currently addressed by existing policies and procedures at broker-dealers.

³² The DAG has indicated that, while not widespread, some firms recycle firm-designated identifiers, and that it is considered good practice to not assume that such identifiers would remain indefinitely unique. The SROs note that the Commission discussed an approach in the Adopting Release that would have been based on reporting account numbers. In rejecting such an approach, the Commission stated that “account numbers are assigned by broker-dealers for their own customers only, and account numbers vary between broker-dealers.” Adopting Release, *supra* note 9, at 45757. The SROs believe that the Customer Information Approach described above addresses this concern by including a requirement that all broker-dealers send to the Central Repository, the account numbers and associated customer information initially (along with daily updates) so that the CAT Plan Processor can create a unique Customer-ID for each individual to be used across all broker-dealers. Consequently, the SROs and the SEC will have the benefit of consistent unique Customer-IDs when they access the CAT Data.

a. Rule 613(c)(7)(i)(A): Customer-ID for Original Receipt or Origination of Order

Rule 613(c)(7)(i)(A) requires a broker-dealer to provide “For original receipt or origination of an order . . . Customer-ID(s) for each customer.” Under the Customer Information Approach, however, broker-dealers would report firm-designated identifiers (and, initially, information about customers), rather than the Customer-ID itself. Therefore, the SROs request that the SEC provide exemptive relief from Rule 613(c)(7)(i)(A) to allow the SROs to require broker-dealers to report firm-designated identifiers rather than Customer-IDs in the CAT NMS Plan.

b. Rule 613(c)(7)(iv)(F): Customer-ID for Modification/Cancellation Instruction

In addition to the requirement to report a Customer-ID in Rule 613(c)(7)(i), Rule 613(c)(7)(iv)(F) requires the reporting of the “Customer-ID of the person giving the modification or cancellation instruction,” whenever an order is modified or cancelled. The SROs believe that this requirement raises two separate issues. First, a requirement to report a single, specific Customer-ID for modifications and cancellations cannot be met under the Customer Information Approach because, as noted, broker-dealers will not maintain Customer-IDs. Rather, to meet such a requirement, broker-dealers would be required to transmit either the TIN or SSN of the person giving the cancel or modification instruction on each such Reportable Event.

Second, the SROs interpret this provision to require that broker-dealers report to the Central Repository the Customer-ID of the specific individual giving such instruction. The SROs note that if the CAT Plan Processor were to receive the identity of the specific customer initiating a cancellation or modification, the CAT Data would have an inconsistent level of granularity in customer information between order origination and order modifications/cancellations because Rule 613(c)(7)(i) does not require the reporting of the specific individual originating an order (*i.e.*, all customers associated with an account would be reported for new orders, but not the specific customer that placed the order, while the specific customer that initiated the cancellation or modification would be reported for cancellations and modifications).

The SROs believe that, for regulatory purposes, it is most critical to ascertain whether a modification or cancellation instruction was given by the customer or was initiated by the broker-dealer or exchange holding the order,³³ rather than capturing the specific individual who gave the instruction in those instances where there are multiple customers for a particular account. This information could be captured without a specific Customer-ID being transmitted. Since the CAT Data does not have the identity of the specific customer who placed an order for an account with multiple owners, but rather the identity of all account holders and persons authorized to give trading instructions for that account, having an indicator of whether the customer or firm initiated the cancellation or modification would result in a consistent level of granularity for customer identification between order receipt and order modification or cancellation. SRO staff and the SEC would, if needed, still be able

³³ In certain circumstances, Exchanges can modify or cancel orders. *See, e.g.*, Exchange Act Release No. 62259, 75 Fed. Reg. 34192 (June 19, 2010), available at <http://www.sec.gov/rules/sro/nysearca/2010/34-62259.pdf>.

to ascertain the specific individual who submitted a modification or cancellation instruction in an account with multiple authorized account holders by requesting this information from the firm in the same manner they will be able to for order origination.

The SROs therefore request that the Commission grant exemptive relief from the requirement in Rule 613(c)(7)(iv)(F) that requires the reporting of the “Customer-ID of the person giving the modification or cancellation instruction.” In lieu of reporting the Customer-ID of the person giving a modification or cancellation instruction, the CAT NMS Plan would require that, when reporting a modification to or cancellation of an order, the reporting entity report whether the modification or cancellation originated from a customer, broker-dealer, or exchange.

c. Rule 613(c)(7)(viii)(B): Customer Account Information for Original Receipt or Origination of an Order

Rule 613(c)(7)(viii)(B) requires broker-dealers to report Customer Account Information for the original receipt or origination of an order. Rule 613(j)(4) defines “Customer Account Information” to include, among other things, “date account opened.” Under the Customer Information Approach, the SROs propose that a firm-designated identifier “effective date” should be used in lieu of the account opening date when the account opening date is not available or it is more appropriate to do so, as described above. Therefore, the SROs request an exemption from the requirement in Rule 613(c)(7)(viii)(B) to include the “date account opened” under these circumstances.

d. Rule 613(c)(8): Use of Same Customer-ID for Each Customer and Broker-Dealer

Finally, the SROs request exemptive relief from the provision in Rule 613(c)(8) that requires all CAT Reporters to use the same Customer-ID for each customer. As set forth above, the Customer Information Approach would permit each CAT Reporter to report firm-specific identifiers to the Central Repository rather than use the same Customer-ID as every other CAT Reporter. For the reasons set forth above, the SROs believe that achieving the Commission’s goal of identifying the customer(s) associated with each order reported to the Central Repository is achievable without all CAT Reporters utilizing the same Customer-IDs.

3. Analysis of Customer Information Approach

The SROs believe that the use of the Customer Information Approach described above is necessary and appropriate in the public interest and is consistent with the protection of investors. The SROs believe that the Customer Information Approach meets the Commission’s objectives while significantly reducing the burden on SROs and broker-dealers to effectuate these reporting provisions. Importantly, the Customer Information Approach would not compromise the effectiveness of the CAT with respect to recording and identifying the activities of specific customers. Discussed below is the process by which the SROs evaluated the Customer Information Approach and alternatives to that approach, as well as the advantages and disadvantages of the various approaches.

a. Process

As required by Rule 613, the SROs developed and implemented a thorough process for evaluating the various operational and technical issues related to the implementation of the provisions of Rule 613 related to Customer-IDs.³⁴ Leveraging their own extensive experience, the SROs considered the issue of Customer-IDs in a variety of contexts.³⁵ For example, the SROs held technical committee discussions on implementation challenges of the requirement for (a) use of the account number and account opening date for each CAT Reportable Event, and (b) the differences related to and reasons for using an account effective date in lieu of an account opening date. In addition, the SROs discussed and drafted a summary of their position on leveraging the Customer Information Approach.

In addition, as contemplated by Rule 613(a)(1)(xi), the SROs solicited the views of their members and other appropriate parties to ensure that the varied perspectives of market participants were considered. For example, the SROs sought the input of the Bidders on the use of Customer-IDs. The Request for Proposal (“RFP”) and supporting RFP concepts document³⁶ included a description of the Customer Information Approach. The RFP requested details from the Bidders on specific functionality to meet requirements to capture and store customer information in a unique format. Each of the Bidders provided proposed system functionality consistent with the Customer Information Approach. Additionally, no Bidders offered alternatives to the Customer Information Approach.

The SROs also had numerous discussions with the DAG regarding the Customer-ID requirements under Rule 613. The DAG is a strong advocate for the Customer Information Approach.³⁷ It believes that the Customer Information Approach satisfies the SEC’s goal of associating order information reported to the CAT with individual customers, while minimizing the technological burden on broker-dealers and associated costs by permitting the broker-dealers to leverage existing methods of identifying customers. Specifically, with the CAT Plan Processor taking on the processing responsibility for linking customers within the Central Repository, the Customer Information Approach would be less disruptive and less costly to the broker-dealers as it will not require them to modify existing customer onboarding procedures or systems. Additionally, the CAT Plan Processor would not need to develop the technical infrastructure required to send Customer-IDs and personally identifying information (“PII”) back to the broker-dealer CAT Reporters. Similarly, the broker-dealers would not be required to establish the infrastructure necessary to receive, store, and manage CAT generated Customer-IDs.

Another issue to consider related to the requirement to provide a unique Customer-ID for each customer is that there are many instances in which multiple customers may be stakeholders in an order. For example, if an investment club has twenty members with each member being an owner of a single account and where each member is authorized to provide the broker-dealer with trading instructions for the club account, and the club places an order

³⁴ See 17 C.F.R. § 242.613(a)(1)(xi).

³⁵ See, e.g., CBOE CAT Comment Letter, *supra* note 14, at 7 (recommending an alternative to using a unique customer identifier).

³⁶ See SEC Rule 613 – Consolidated Audit Trail (CAT) Proposed RFP Concepts, available at <http://catnmsplan.com/web/groups/catnms/@catnms/documents/appsupportdocs/p197699.pdf>.

³⁷ See, e.g., FIF CAT Working Group: FIF Response to CAT NMS Plan, November 2014 Letter at 3; SIFMA Industry Recommendations, *supra* note 17, at 11.

for that account with a broker-dealer, under the Rule the broker-dealer would have an obligation to provide a unique Customer-ID on the related order report for each member of the investment club. The multiple Customer-IDs would significantly increase the data footprint and, in turn, the data storage costs. However, under the Customer Information approach, the broker-dealer would simply provide on its order report a firm-designated identifier for the account held by the investment club which the CAT Plan Processor would use to identify each Customer with an ownership interest in that account.

In addition, the Customer Information Approach is in keeping with the views expressed by industry associations such as FIF and SIFMA.³⁸ Both associations objected to the use of unique customer identifier and recommended the consideration of alternatives to this requirement, including the use of existing identifiers.

b. Reliability and Accuracy of CAT Data

The SROs believe that the reliability and accuracy of the CAT Data throughout an orders' lifecycle under the Customer Information Approach is the same as under the approach outlined in Rule 613 with regard to Customer-IDs because the existing identifiers used under the proposed Customer Information Approach are also unique identifiers. In some cases, the SROs believe that the Customer Information Approach may result in more accurate data due to minimization of errors as broker-dealers will not have to adjust their systems to capture and maintain additional data elements and only a single entity will have to be mapped from firm-designated account information to Customer-ID.³⁹ Thus, the reliability and accuracy of the CAT Data would not be compromised during: (1) its transmission and receipt from market participants; (2) data extraction, transformation, and loading at the Central Repository; (3) data maintenance and management at the Central Repository; or (4) use by the regulators.

c. Effect on Use of Data by Regulators

The SROs do not believe that the Customer Information Approach would have an adverse effect on the various ways in which, and purposes for which, regulators would use, access, and analyze the CAT Data. In particular, the SROs do not believe that the Customer Information Approach will compromise the linking of order events, alter the time and method by which regulators may access the data, or limit the use of the data as described in the use cases set forth in the Adopting Release because the unique nature of the existing identifiers to be used under the Customer Information Approach would allow the CAT Plan Processor to create customer linkages with the same level of accuracy as the Customer-ID.

The Bidders, each of whom incorporated the Customer Information Approach in its Bid, asserted that the Customer Information Approach would allow all events pertaining to an order to be reliably and accurately linked together in a manner that allows regulators efficient access to complete order information. Similarly, according to the Bidders, the use of the Customer Information Approach would not impact the time and method by which linked data

³⁸ See, e.g., SIFMA CAT Comment Letter, *supra* note 17, at 9-10; FIF Consolidated Audit Trail (CAT) Working Group Response to Proposed RFP Concepts Document at 4 (Jan. 18, 2013) ("FIF Response to RFP"); Letter from Manisha Kimmel, Executive Director, FIF, to Elizabeth M. Murphy, Secretary, SEC at 2-3 (Aug. 12, 2010) ("FIF CAT Comment Letter").

³⁹ See 17 C.F.R. § 242.613(a)(1)(iii).

in the Central Repository would be made available to regulators. Further, since the CAT Plan Processor will create and maintain unique Customer-IDs upon ingestion of data from CAT Reporters, regulators would still be able to access CAT Data through unique Customer-IDs.

d. Security and Confidentiality

The SROs also believe that the Customer Information Approach would strengthen the security and confidentiality of the information reported to the Central Repository, thereby maintaining the efficacy of the Central Repository and the confidence of the market participants.⁴⁰ As raised by DAG members,⁴¹ there is substantial potential for data breaches caused by the use of a single universal Customer-ID that is maintained across all CAT Reporters and all order events. A universal identifier that is tied to PII could create a substantial risk of misuse and possible identity theft as it is passed between the CAT Plan Processor and each CAT Reporter. Individual firms making use of the Customer-IDs may not have consistent levels of data security, and the widespread use of the Customer-ID across multiple firms would mean that if a Customer-ID were to be compromised by one firm, it would be compromised at all firms, increasing the associated risk of data privacy or identity theft issues. This contrasts with the Customer Information Approach where the Customer-ID would be private data in the Central Repository, known only to the CAT Plan Processor and regulators, and where CAT Reporters would make use of existing identifiers not shared between firms. Having the Customer-ID being stored, managed, and linked to PII data in each CAT Reporter's data repository increases the likelihood of it being disclosed or maliciously obtained. Additionally, for CAT Reporters who chose to report events in real-time, the risk and impact of a universal Customer-ID being stolen or misused would be magnified when compared to firm-designated identifiers. Essentially, the responsibility to secure Customer Account Information using the Customer Information Approach lies with a single entity (the CAT Plan Processor) instead of reliance on several CAT Reporters, who may have varying degrees of technical sophistication and resources to maintain security and confidentiality of CAT Data.

e. Competition, Efficiency and Capital Formation

The SROs also believe that the Customer Information Approach would have a positive impact on competition, efficiency, and capital formation. Creating, maintaining, and reporting a Customer-ID would require significant infrastructure changes to existing business processes and workflows used by broker-dealers. This additional capital burden could inhibit smaller broker-dealers, making it more difficult for them to enter or compete in the market. Additionally, as discussed with the DAG,⁴² the customer onboarding process is often time-critical as new customers want to initiate business transactions immediately. Under the Rule requirements, new customers would have a longer wait time for a new account as broker-dealers would be required to submit new customer information to the CAT Plan Processor in order to receive a unique Customer-ID. The Rule 613 approach would add time and system dependencies to the new account opening process at each broker-dealer. As described above, under the Customer Information Approach, a new account's order information could be

⁴⁰ See 17 C.F.R. § 242.613(a)(1)(iv), (e)(4)(i) (regarding security and confidentiality).

⁴¹ See, e.g., SIFMA CAT Comment Letter, *supra* note 17, at 9-10 ; FIF CAT Comment Letter, *supra* note 38, at 2-3; Letter from Ronald C. Long, Director, Regulatory Affairs, Wells Fargo Advisors, to Elizabeth M. Murphy, Secretary, SEC at 3 (Aug. 9, 2010).

⁴² FIF Response to RFP, *supra* note 38.

reported to the Central Repository and the customer information concerning that new account would be provided by the CAT Reporter as part of its daily customer update. Consequently, broker-dealers would not have to wait to receive a Customer-ID for a new customer under the Customer Information Approach before permitting CAT-reportable activity for that account.

As noted above, the Customer Information Approach would satisfy the SEC's regulatory goals for the CAT and do so in a manner that minimizes cost, technology, and other burdens on the broker-dealers.

f. Cost-Benefit Analysis

After careful consideration, the SROs, in consultation with industry members and Bidders, believe the Customer Information Approach is an efficient and cost-effective way to meet the Commission's goal of ensuring that order and Reportable Event details reported to the Central Repository can be associated with individual customers. In particular, the SROs believe that the Customer Information Approach will impose less of a cost burden on market participants and on the CAT Plan Processor, while providing other qualitative advantages over the approach outlined in Rule 613, as discussed above and below.

During discussions with the Bidders, none of the Bidders indicated that the Customer Information Approach would be more costly or burdensome to their development or maintenance of the CAT than the approach outlined in the Rule. In fact, under any approach to identifying customers, the CAT Plan Processor must receive customer identifying information from multiple broker-dealers and assign a unique Customer-ID to each individual customer (as defined in Rule 613) for use across multiple broker-dealers. The effect of the exemptive relief would be to eliminate a further requirement that the CAT Plan Processor then distribute Customer-IDs back to broker-dealers who would then include those Customer-IDs in future reports to the Central Repository. There are further efficiencies in the Customer Information Approach in that a single entity (the CAT Plan Processor) is responsible for mapping (from firm-identifiers to CAT Customer-ID), monitoring, and verifying the accuracy of the Customer-ID and/or effecting corrections, rather than the CAT Plan Processor and all CAT Reporters. In addition, the DAG emphasized that the Customer Information Approach would significantly reduce the costs to broker-dealers for reasons including that it would permit the broker-dealers to continue using their current technology to report to the Central Repository, rather than having to purchase new technology and/or reprogram existing technology to accommodate the Customer-ID approach. Specifically, the Customer Information Approach would allow firms to leverage existing identifiers or information to report to the Central Repository rather than require new identifiers to be obtained, used, and managed by the firm. The approach outlined in Rule 613 would require significant change to the current account opening process at both a technical and operational level: broker-dealers would need to request, receive, and apply the CAT Customer-ID prior to commencing trading in that account. Further, medium- to large-size broker-dealers often have multiple, independent systems supporting the customer onboarding processes and associated systems, and each would require significant updates.

Given the number of affected broker-dealers and the extent of the operational and technology changes needed for the Customer-ID approach, the cost savings of the Customer Information Approach are significant. Industry members informed the SROs that the cost for the top 250 broker-dealers that are reporting to the CAT ("Top 3 Tiers of CAT Reporters") to implement the Customer-ID as required in Rule 613 would be at least \$195 million. To

establish this cost estimate, the industry members considered the costs associated with various activities required to implement the Customer-ID, as required in Rule 613, including: (i) the analysis of the impact of implementation on broker-dealer systems; (ii) the cost of capturing and storing the additional customer data; (iii) the implementation of workflow and system changes; (iv) the maintenance and management of Customer-IDs; and (v) the education of staff. Industry members estimated that these activities would require on average 10 person months⁴³ of business analysis, and a total implementation time of 30 person months at a staff cost of \$1,200 per day, accounting for a per firm cost of \$780,120.⁴⁴ The SROs believe that this cost estimate is conservative given that it only includes the costs for 11% of the total broker-dealers that are expected to report to the Central Repository. Therefore, the SROs believe that the overall cost for the Customer Information Approach would be less than the Customer-ID approach.

The Customer Information Approach would provide additional benefits over the Customer-ID approach. For example, the Customer Information Approach would allow the Customer-ID to be private data to the Central Repository, which has several advantages. The CAT Plan Processor, Commission, and SROs would have freedom both in choosing a naming scheme and updating the value of the Customer-ID at any time. Further, it allows the CAT Plan Processor more freedom and latitude in technical upgrades around managing the Customer-ID: none of these changes require coordination or even notification to the CAT Reporters. It would also remove the necessity of educating CAT Reporter staff and customers about the CAT Customer-ID.

Finally, as discussed above, the Customer Information Approach would not have an adverse effect on the reliability and accuracy of the CAT Data, the use of the data by regulators, the security and confidentiality of the data, or competition, efficiency, and capital formation.

f. Alternatives

In the course of considering the requirements of Rule 613 as they relate to Customer-IDs and Customer Account Information, the SROs considered a variety of possible alternative approaches to complying with Rule 613, in addition to the Customer Information Approach. For example, the SROs considered an approach that would have solely utilized account numbers, rather than account numbers and other unique identifying information. The SROs concluded that relying solely on account numbers may raise issues regarding duplicate numbers under certain circumstances. In addition, the RFP specifically “welcome[d] responses that reflect ideas and innovations that may not be raised in [the RFP] or that deviate from suggested approaches, as long as they adhere to the requirements of Rule 613.”⁴⁵ The Bidders, however, each provided responses consistent with the Customer Information Approach. After weighing the merits of these various approaches, the SROs concluded that the Customer Information Approach was the best option considered for the reasons discussed above.

⁴³ Person month is the amount of effort expended by one person working one month.

⁴⁴ Industry members assumed 21.67 person days per person month (52 weeks * 5 work days per week, divided by 12 months): 30 person months * 21.67 person days/person month * \$1200 daily rate.

⁴⁵ RFP at 7.

C. CAT-Reporter-ID

Rule 613(c)(7) requires that a CAT-Reporter-ID be reported to the Central Repository for each order and Reportable Event.⁴⁶ In addition, Rule 613(c)(8) mandates that all CAT Reporters “use the same . . . CAT-Reporter-ID . . . for each . . . broker-dealer.”⁴⁷ The Commission noted that “the requirement to report CAT-Reporter-IDs in this manner will help ensure that regulators can determine which market participant took action with respect to an order at each reportable event.”⁴⁸ Moreover, the Commission stated that it believed “the details of how these data are reported to the central repository, and the specific methodologies used by the central repository to assemble time-sequenced records of the full life-cycle of an order, is best left to the expertise of the SROs as they develop the NMS plan to be submitted to the Commission.”⁴⁹

The SROs recognize the need for each CAT Reporter to be uniquely and individually identified; however, the SROs also believe that the implementation of the CAT-Reporter-ID should, to the extent possible, minimize the effect on current real-time business processes, practices, and data flows. CAT reporting requirements that reflect current practices will not only reduce the costs to broker-dealers to report data to the CAT but also facilitate the implementation of the CAT by reducing the systems changes necessary for broker-dealers to begin reporting information to the Central Repository. The SROs believe that leveraging existing business practices and identifiers (“Existing Identifier Approach”), rather than requiring new identifiers be established, is a more efficient and cost-effective way to implement the CAT-Reporter-ID. In addition, the Existing Identifier Approach will still achieve the Commission’s goal that each CAT Reporter be identified on relevant order information and, in fact, may provide more information to the CAT because current identifiers, in many cases, would result in more granular details being reported. However, because the approach is not currently permitted by Rule 613(c), the SROs respectfully request that, pursuant to Section 36 of the Act, the Commission grant the SROs an exemption from Rule 613(c)(7)(i)(C), (c)(7)(ii)(D), (c)(7)(ii)(E), (c)(7)(iii)(D), (c)(7)(iii)(E), (c)(7)(iv)(F), (c)(7)(v)(F), (c)(7)(vi)(B), and (c)(8), as described in more detail below, in order to include the Existing Identifier Approach in the CAT NMS Plan.

1. Description of Existing Identifier Approach

The SROs intend to file an amendment to the CAT NMS Plan that will reflect the Existing Identifier Approach by permitting each broker-dealer reporting details for orders and Reportable Events to the Central Repository to provide existing SRO-assigned market participant identifiers (*e.g.*, FINRA MPID, Nasdaq MPID, NYSE Mnemonic, CBOE User Acronym, CHX Acronym) for orders and Reportable Events along with information to identify the CAT Reporter itself (*e.g.*, CRD number, Legal Entity Identifier), which would be reported separately.⁵⁰ The Central Repository would then generate a unique CAT-Reporter-

⁴⁶ See generally 17 C.F.R. § 242.613(c)(7). Rule 613 defines “CAT-Reporter-ID” to mean “with respect to each national securities exchange, national securities association, and member of a national securities exchange or national securities association, a code that uniquely and consistently identifies such person for purposes of providing data to the Central Repository.” 17 C.F.R. § 242.613(j)(2).

⁴⁷ 17 C.F.R. § 242.613(c)(8).

⁴⁸ Adopting Release, *supra* note 9, at 45754.

⁴⁹ *Id.*

⁵⁰ The SROs anticipate that only those identifiers assigned by an SRO could be used in the described approach.

ID for each CAT Reporter and link the SRO-assigned identifiers reported on specific orders and Reportable Events to this CAT-Reporter-ID, which would enable regulators to access information based on either the CAT-Reporter-ID (at the parent level) or by a more specific identifier (e.g., a separate MPID used only by a particular ATS operated by that CAT Reporter). To accomplish the linkage, each SRO would, on a daily basis, submit all existing market participant identifiers used by its members to the Central Repository so that the CAT Plan Processor can create and maintain a database tracking all market participant identifiers to the appropriate CAT-Reporter-ID and, consequently, the individual broker-dealer.⁵¹ This process would be used to help ensure that the reference data (i.e., mapping of market-specific participant identifiers to their respective firms) being captured in the database is accurate and up-to-date. Through this method, all existing market participant identifiers used by a particular broker-dealer would roll-up into a single broker-dealer that would be assigned a CAT-Reporter-ID for internal Central Repository purposes. Although each broker-dealer would have a CAT-Reporter-ID within the CAT, when reporting details for orders and Reportable Events, the broker-dealer would report the relevant market participant identifiers (rather than the CAT-Reporter-ID itself) to the Central Repository with the order and Reportable Event information. Thus, for orders and Reportable Events on an exchange, the CAT Reporter would be identified with the SRO identifier used by the relevant exchange. Over-the-counter (“OTC”) orders and Reportable Events would be reported with the party’s FINRA MPIDs.⁵² Similarly, exchanges reporting CAT Reporter information to the Central Repository to identify broker-dealers would report data using the participant identifiers used on their markets or systems.⁵³ The CAT Plan Processor would then relate the reported identifiers to the associated CAT-Reporter-IDs.

For example, Broker-Dealer A (CRD Number 100) has a FINRA MPID of ABCD that it uses to route and report orders as well as to access Nasdaq; however, it also has a NYSE Mnemonic of Z123. Broker-Dealer B (CRD Number 500) has a FINRA MPID of WXYZ. Under the Existing Identifier Approach, if Broker-Dealer A routes an order to Broker-Dealer B using MPID ABCD, both Broker-Dealer A and Broker-Dealer B would be permitted to report “ABCD” to identify Broker-Dealer A on the order reports submitted to the Central Repository (rather than a single, unique CAT-Reporter-ID). In addition, FINRA, Nasdaq, and NYSE must separately report to the Central Repository that the broker-dealer with a CRD Number of 100 uses ABCD and Z123, respectively, to identify itself in the marketplace. Thus, the Central Repository will be able to link the MPID of ABCD (as well as any trades executed on the NYSE using NYSE Mnemonic Z123) to Broker-Dealer A’s CRD Number so as to identify the specific CAT Reporter.

2. Requested Exemptive Relief for Existing Identifier Approach

The SROs believe that the Existing Identifier Approach meets the Commission’s goal of ensuring that each reported event is linked to the individual CAT Reporter associated with the event while minimizing the impact on existing market practices and reducing the burden on both SROs and broker-dealers. Nevertheless, because the Existing Identifier Approach

⁵¹ The exact format in which this data would be submitted would be specified in the Technical Specifications published by the CAT Plan Processor.

⁵² This approach reflects how broker-dealers currently report order information to FINRA’s Order Audit Trail System (“OATS”) and report OTC trades to a FINRA trade reporting facility.

⁵³ SROs would identify themselves using the CAT-Reporter-ID assigned to the SRO by the CAT Plan Processor.

would permit the reporting of a broker-dealer's market participant identifiers, rather than its CAT-Reporter-ID, the SROs request that the Commission provide the following exemptive relief to permit the use of the Existing Identifier Approach:

- Rule 613(c)(7)(i)(C) regarding the reporting of “[t]he CAT-Reporter-ID of the broker-dealer receiving or originating the order”;
- Rule 613(c)(7)(ii)(D) regarding the reporting of “[t]he CAT-Reporter-ID of the broker-dealer . . . routing the order”;
- Rule 613(c)(7)(ii)(E) regarding the reporting of “[t]he CAT-Reporter-ID of the broker-dealer . . . to which the order is being routed”;
- Rule 613(c)(7)(iii)(D) regarding the reporting of “[t]he CAT-Reporter-ID of the broker-dealer . . . receiving the order”;
- Rule 613(c)(7)(iii)(E) regarding the reporting of “[t]he CAT-Reporter-ID of the broker-dealer . . . routing the order”;
- Rule 613(c)(7)(iv)(F) regarding the reporting of “[t]he CAT-Reporter-ID of the broker-dealer . . . giving the modification or cancellation instruction”;
- Rule 613(c)(7)(v)(F) regarding the reporting of “[t]he CAT-Reporter-ID of the . . . broker-dealer executing the order”;
- Rule 613(c)(7)(vi)(B) regarding the reporting of “[t]he CAT-Reporter-ID of the clearing broker or prime broker, if applicable”; and
- Rule 613(c)(8) which requires “[a]ll plan sponsors and their members [to] use the same . . . CAT-Reporter-ID for each . . . broker-dealer.”

3. Analysis of Proposed Alternative Approach

The SROs believe that the use of the Existing Identifier Approach described above is necessary and appropriate in the public interest and is consistent with the protection of investors. The SROs believe that the Existing Identifier Approach meets the Commission's objectives while significantly reducing the burden on SROs and broker-dealers to effectuate these reporting provisions. Notably, the proposed approach would not compromise the goal of Rule 613 to record and link Reportable Events to the CAT Reporter associated with the event. In many instances, allowing broker-dealers to use existing identifiers will enhance the information in the Central Repository by not only identifying order events with a particular CAT-Reporter-ID, but also including more specific identifiers used by broker-dealers to identify departments, business lines, or trading desks within a particular firm. Discussed below is the process by which the SROs evaluated the Existing Identifier Approach and alternatives to that approach, as well as the advantages and disadvantages of the various approaches.

a. Process

As required by Rule 613, the SROs developed and implemented a careful process for evaluating the various operational and technical issues related to the implementation of the provisions of Rule 613 related to CAT-Reporter-IDs. For example, as with Customer-IDs, discussed above, the SROs evaluated the use of CAT-Reporter-IDs using their own significant experience. The SROs noted that this approach would limit the modifications that the SROs and other CAT Reporters would need to make to their own technology and business processes.

In addition, as contemplated by Rule 613(a)(1)(xi), the SROs solicited the views of their members and other appropriate parties to ensure they considered a variety of informed views. For example, the SROs sought the input of the Bidders regarding the use of CAT-Reporter-IDs. Specifically, the RFP requested details from the Bidders regarding the specific functionality to meet the Existing Identifier Approach. Each of the Bidders provided proposed system functionality consistent with this approach, and during discussions, none of the Bidders indicated that this approach would be more costly or burdensome to the development or maintenance of the Central Repository than the approach outlined in the Rule.

The SROs also discussed the issues raised by the CAT-Reporter-ID requirements with the DAG. Members of the DAG agreed with the SRO assessment that the Existing Identifier approach would minimize the costs and other burdens of broker-dealers and others (*e.g.*, service providers) by permitting the broker-dealers to leverage existing methods of identifying themselves and others (*e.g.*, service providers) in the market.⁵⁴ DAG members provided a recommendation that existing market participant IDs be used for the CAT-Reporter-ID. The DAG members recommended leveraging existing identifiers rather than the creation of a new attribute (CAT-Reporter-ID) for reporting.⁵⁵

Certain industry associations provided their views regarding compliance with the CAT-Reporter-ID requirements to the SROs. For example, SIFMA recommended that LEIs be used for the CAT-Reporter-ID so as to place the Central Repository in compliance with the Dodd-Frank Wall Street Reform and Consumer Protection Act⁵⁶ and other existing regulatory reporting regimes. SIFMA believed the Existing Identifier Approach should only be used when a CAT Reporter does not have an LEI. However, since not all industry members use an LEI, firms would need to obtain an LEI before they begin reporting to the CAT.

b. Reliability and Accuracy

The SROs believe that the reliability and accuracy of the CAT Data throughout an orders' lifecycle under the Existing Identifier Approach is the same as under the approach outlined in Rule 613 with regard to CAT-Reporter-IDs. In proposing approaches relying on

⁵⁴ See, *e.g.*, FIF November 2014 Letter at 3.

⁵⁵ Comments to SROs and the Exchanges on Selected Consolidated Audit Trail (CAT) NMS Plan, SIFMA (Apr. 2013).

⁵⁶ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, H.R. 4173, 124 Stat. 1376 (July 21, 2010).

the Existing Identifier Approach, the Bidders did not indicate that the reliability and accuracy of the CAT Data would be compromised during: (1) its transmission and receipt from market participants; (2) data extraction, transformation, and loading at the Central Repository; (3) data maintenance and management at the Central Repository; or (4) use by the regulators. In addition, because the Existing Identifier Approach would generate a unique combination of identifiers for each CAT Reporter based upon existing identifiers, it would not have any negative impact on the accuracy with which the CAT Plan Processor would be able to link transactions. Further, by leveraging existing identifiers and business practices, the Existing Identifier Approach could reduce potential errors as broker-dealers would not be required to change their existing systems to accommodate a new identifier.

c. Effect on Use of Data by Regulators

The SROs do not believe that the Existing Identifier Approach would have an adverse effect on the various ways in which, and purposes for which, regulators would use, access, and analyze the CAT Data. In particular, the SROs do not believe that the Existing Identifier Approach would compromise the linking of order events, alter the time and method by which regulators may access the data, or limit the use of the data as described in the use cases.

For example, the Bidders, each of whom incorporated the Existing Identifier Approach in its Bid, asserted that this Approach would allow all events pertaining to an order to be reliably and accurately linked together in a manner that allows regulators efficient access to complete order information. Specifically, with the Existing Identifier Approach, the SROs and the SEC would have the ability to submit queries and run surveillance analyses using a single unique identifier used internally by the Central Repository (the CAT-Reporter-ID).

Additionally, the SROs believe that the use of the Existing Identifier Approach may allow for additional levels of granularity compared to the CAT-Reporter-ID approach, as existing identifiers may contain additional information such as the specific desk or department responsible for trades. Many of the SROs' surveillances run off of these existing identifiers, in particular the MPID, and inclusion of these identifiers will help facilitate retirement of the OATS system because regulators would have access to such identifiers through the CAT. By requiring CAT Reporters to report these existing identifiers instead of a newly created ID, regulators would be able to take advantage of this additional level of granularity without imposing additional reporting requirements and associated costs on both CAT Reporters and the CAT Plan Processor.

d. Security and Confidentiality

The SROs also believe that the Existing Identifier Approach would not negatively impact the security and confidentiality of the information reported to the Central Repository, thereby maintaining the efficacy of the Central Repository and the confidence of the market participants. Each of the Bidders proposed system functionality consistent with the Existing Identifier Approach. During discussions with the Bidders, none indicated that this approach would raise new or different security or confidentiality concerns that could not or would not be addressed in the same manner as the approach outlined in the Rule.

e. Competition, Efficiency and Capital Formation

The SROs also believe that the Existing Identifier Approach would have a positive effect on competition, efficiency, and capital formation. As noted above, the Existing Identifier Approach would satisfy the SEC's regulatory goals for the CAT and would do so in a manner that minimizes cost, technology, and other burdens on the broker-dealers and SROs.

f. Cost-Benefit Analysis

After careful analysis, the SROs, in consultation with industry members and Bidders, believe that the Existing Identifier Approach is an efficient and cost-effective way to meet the Commission's goal of ensuring that order and Reportable Event details reported to the CAT can be associated with the relevant broker-dealer. In particular, the SROs believe that the Existing Identifier Approach would impose a reduced cost burden on broker-dealers and SROs, as compared to the approach outlined in Rule 613, mainly due to its requiring fewer changes to broker-dealer systems, as well as its lower level of complexity when compared with designing, implementing, and maintaining new industry infrastructure to distribute and maintain Reporter IDs.

Moreover, the SROs and the DAG emphasized that the Existing Identifier Approach would reduce their costs for complying with Rule 613. Specifically, it would allow SROs and broker-dealers, which use a variety of different identifiers, to leverage existing business practices, processes, and data flows, thereby minimizing the effect on current real-time business processes, practices, and data flows. In addition, the Existing Identifier Approach may facilitate the ability of the CAT Reporters to report information to the Central Repository by reducing the number of systems changes necessary to report to the Central Repository by adopting a new identifier. For example, some broker-dealers currently use multiple Participant IDs issued to them by the exchanges, which would all be represented by a single CAT-Reporter-ID. Should the CAT-Reporter-ID be required, both broker-dealers and the SROs would be required to make substantial system and process updates in order to aggregate these identifiers into the single "parent" CAT-Reporter-ID. Further, some broker-dealers have challenges generating consistent, unique order identifiers across all of their various systems, desks, and departments at the time of order initiation. In such cases, broker-dealers instead seek to keep order identifiers unique across desks, systems, or asset classes, and generate an order ID that is unique for that particular desk's existing Participant ID. By requiring a single Reporter ID, which would consist of what are currently multiple Participant IDs, such broker-dealers would no longer be able to use this approach and would face considerable costs to update their systems to make sure that Order IDs are consistent and unique at the time of generation across all systems. Given the number of affected broker-dealers and the extent of the technology and business process changes needed for the approach outlined in Rule 613, the cost savings of the Existing Identifier Approach are significant.

Industry members informed the SROs that the cost for the Top 3 Tiers of CAT Reporters to implement the CAT-Reporter-ID as required by Rule 613 would be \$78 million.⁵⁷ To establish this cost estimate, industry members considered the costs associated with various activities required to implement the CAT-Reporter-ID including: (i) the analysis

⁵⁷ \$78 million = \$312,048 per-firm cost * 250. \$312,048 per firm cost = 12 person months * 21.67 person days per person month * \$1,200 per day.

of the impact of implementation on broker-dealer processes if broker-dealers maintained the current identification mechanisms; (ii) the required changes to FIX messaging and matching engines; (iii) the required changes to trading center order entry specifications; (iv) the cost of capturing and storing the additional CAT-Reporter-IDs; and (v) the increase in CAT error processing costs as a result of this change. Industry members estimated that these activities would require on average 4 person months of business analysis, and a total implementation time of 12 person months at a staff cost of \$1,200 per day accounting for a per firm cost of \$312,048. The SROs believe that this cost estimate is conservative given that it only includes the costs for 11% of the total broker-dealers that will be reporting to the CAT.

Industry members informed the SROs that the cost for the Top 3 Tiers of CAT Reporters to implement the CAT-Reporter-ID, if it is required to be supplied on every route and destination interface used by the broker-dealers, would be \$244 million.⁵⁸ To establish this cost estimate, industry members considered the costs associated with various activities required to implement the CAT-Reporter-ID including: (i) the analysis of the impact of implementation on the routing and trading infrastructure for each execution; (ii) the required changes to FIX messaging and matching engines; (iii) the required changes to trading center order entry specifications; (iv) the cost of capturing and storing the CAT-Reporter-IDs; and (v) the increase in Central Repository error processing costs as a result of this change. Industry members estimated that these activities would require on average 12.5 person months of business analysis, and a total implementation time of 37.5 person months at a staff cost of \$1,200 per day, resulting in a per firm cost of \$975,150. The SROs believe that this cost estimate is conservative given that it only includes the costs for 11% of the total broker-dealers that will be reporting to the Central Repository. Therefore, the SROs believe that the overall cost for the Existing Identifier Approach would be less than the approach outlined in Rule 613.

In addition to the cost savings, the Existing Identifier Approach would provide additional benefits over the Rule 613 approach. As noted above, by allowing broker-dealers to use existing identifiers, the information in the Central Repository will be enhanced by not only identifying orders and Reportable Events with a particular CAT-Reporter-ID, but also including more specific identifiers used by broker-dealers to identify departments, business lines, or trading desks within a particular firm. Additionally, the ability of firms to use existing identifiers to report data to the Central Repository may increase linkage capabilities as firms have a greater ability to uniquely identify firms within a single Existing Identifier than across an entire large firm with multiple desks and departments.

Finally, as discussed above, the Existing Identifier Approach would not have an adverse effect on the reliability and accuracy of the CAT Data, the use of the data by regulators, the security and confidentiality of the data, or competition, efficiency, and capital formation.

g. Alternatives

In the course of considering the requirements of Rule 613, as they relate to CAT-Reporter-IDs, the SROs primarily focused on evaluating the approach outlined in Rule 613 and the Existing Identifier Approach, although SIFMA's LEI proposal was also considered.

⁵⁸ Total industry cost = \$975,150*250= \$244 million (approx.).

However, the Existing Identifier Approach provides CAT Reporters the flexibility to use any existing identifier, thus not constraining CAT Reporters to using only an LEI. Since not all industry participants currently use LEI, firms would need to obtain an LEI prior to CAT Reporting if the LEI approach is mandated.

During the evaluation process, SROs recognized that the approach set forth in Rule 613 raised several potential technical implementation difficulties for the CAT Reporters and CAT Plan Processor. First, large-scale business processes and application changes would be required by CAT Reporters to register, maintain, send, and receive CAT-Reporter-IDs. In addition, this approach would require CAT Reporters and the CAT Plan Processor to develop and maintain additional infrastructure to gather and maintain CAT-Reporter-IDs. There is also a potential risk that this approach could decrease the granularity of information provided as current identifiers may be more precise than the CAT-Reporter-ID (*e.g.*, a single firm may have different MPIDs for different businesses rather than one identifier for the entire firm)

In addition, as discussed above, the RFP specifically “welcome[d] responses that reflect ideas and innovations that may not be raised in [the RFP] or that deviate from suggested approaches, as long as they adhere to the requirements of Rule 613.”⁵⁹ The Bidders, however, each provided responses consistent with the Existing Identifier Approach. After analyzing the merits of the alternative approaches, the SROs concluded that the Existing Identifier Approach was the best among the options considered, for the reasons discussed above.

D. Linking Allocations to Executions

Under Rule 613(c)(7)(vi)(A), the CAT NMS Plan must require each CAT Reporter to record and report the “the account number for any subaccounts to which the execution is allocated (in whole or part)” if an order is executed. For the reasons discussed below, the SROs request an exemption from this requirement to permit the CAT NMS Plan to provide an alternative approach to allocations.

The SROs recognize the need for allocation information and understand that it can be used by regulators to “understand how an allocation of the securities was made among customers of a broker-dealer to, for example, determine if the broker-dealer was favoring a particular customer, to better understand the economic interests of the customer, or as it related to possible enforcement actions.”⁶⁰ However, the SROs also understand that existing allocation practices are entrenched in the industry, and meeting the obligations of the Rule would be unduly burdensome and costly to achieve given these practices. Based upon these considerations, the SROs propose that allocations will be reported by CAT Reporters via a tool described as an Allocation Report. Allocation Reports will be created and submitted by CAT Reporters in order to track each allocation of shares to an account held by the CAT Reporter.⁶¹ The Allocation Report will contain, at a minimum, the number of shares allocated, the firm-designated identifier of the entity to which shares are allocated, the Firm Designated

⁵⁹ RFP at 7.

⁶⁰ Adopting Release, *supra* note 9, at 45771.

⁶¹ The Adopting Release makes clear the SEC’s intent that Rule 613 requires that a broker-dealer “report only the account number of any subaccounts to which an execution is allocated that is contained in its own books and records for accounts and subaccounts it holds; there is no obligation for the broker-dealer to obtain any additional information about accounts or subaccounts from other broker-dealers or non-broker-dealers who submitted the original order.” Adopting Release, *supra* note 9, at 45771.

ID of any subaccounts to which the shares are allocated, and the time of allocation. These reports will be processed and validated in the same manner as any other order lifecycle report. As described more fully below, however, the SROs do not believe that these Allocation Reports should be linked with particular executions, as required by Rule 613.

In order to provide the account number for any subaccounts to which the execution is allocated (in whole or part) as required under Rule 613(c)(7)(vi)(A), CAT Reporters would need to create a linkage between the execution(s) and allocation. Creating such a linkage could allow regulators to see more specifically how allocations were performed for each execution. However, the requirement in Rule 613(c)(7), which requires the recording and reporting of the account number for any subaccounts to which the execution is allocated, raises at least two significant issues: (1) the need for major re-engineering of broker-dealer middle and back office systems and processes which would impose substantial burdens on broker-dealers; and (2) the inherent practical problems introduced by linking multiple executions to multiple allocations.

There are significant practical problems with implementing the requirement that the account number for any subaccounts to which an execution is allocated be reported. Based on industry feedback the SROs have received, we understand that broker-dealers generally handle order and execution processes via front office systems and handle allocation processes by middle or back office systems with each of these systems operating independently.⁶² Thus, the middle and back office systems handling allocations are generally only provided with final execution information on an aggregate, average price basis. Therefore, in order for broker-dealers to create linkages from the order execution to the allocation process by means of an order identifier, the broker-dealers would be required to perform extensive re-engineering of their front, middle, and back office systems.⁶³ This would not only increase the costs to broker-dealers to comply with the CAT requirements, but could also require a significant time commitment. “Given the widespread use of average price processing accounts, it is unclear to the clearing broker, prime broker or even the self-clearing firm which order(s) or execution(s) resulted in which allocations.”⁶⁴ The SROs believe that, in order to address the new data and linkage requirements, new workflows would need to be created across and within buy-side firms, executing broker-dealers and clearing broker-dealers, and the SROs understand that these steps would be very costly to the industry as explained more fully in the Cost-Benefit Analysis.⁶⁵

In case of a one-to-one relationship (*i.e.*, transactions not executed on an average price basis) between a particular execution and an allocation to a particular subaccount, the proposed approach will utilize the Firm Designated ID (as described below) to link the allocation to the execution. In these circumstances, the initial order and the allocation will contain the same Firm Designated ID. As such, although the order lifecycle and Allocation Report will not be linked by an order identifier, regulators will be able to associate orders and allocations with a particular Firm Designated ID. However, as a practical matter, in many instances there is not a one-for-one connection between a particular execution and an

⁶² See Optional Use of Order ID on CAT Allocation Report – Exemptive Relief Request Discussion Document, FIF CAT Working Group, (Aug. 5, 2014) (“FIF CAT Working Group Allocation Report Document”) (“In many cases, multiple vendor and proprietary systems and potentially different broker-dealers are used to facilitate middle and back office processes.”).

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

allocation to a particular subaccount. Orders that result in subaccount allocations post-execution are generally handled on an aggregated, average-price basis. Thus, multiple orders (or a single order for multiple subaccounts) will be aggregated into a single, larger order and be filled based on multiple executions. For example, an investment manager may submit an order for 10,000 shares to a broker-dealer to be allocated among 200 different subaccounts. That order may be filled as a result of 50 100-share executions, 20 200-share executions, and 1 1,000-share execution. After all of these executions are aggregated and an average price is calculated, they are then allocated among the 200 subaccounts.

Using the above example, under Rule 613(c)(7)(vi)(A), the CAT NMS Plan must require CAT Reporters to link each of the 200 subaccount allocations to the 71 executions; however, this approach suggests that each allocation is proportional to each execution and introduces an artificial relationship between any one execution and one allocation, particularly if the allocation decisions are made after the executions are obtained or are adjusted as a result of the executions (*e.g.*, if the entire aggregated order is only partially filled). Thus, in this case, even if a linkage is established, it may be inaccurate as there is no certain way to determine if a certain execution relates to a certain allocation. Although, as the SROs noted, the ultimate allocation of the shares executed that result from the aggregated order may be useful for regulatory surveillance purposes, tying these allocations to multiple different executions is of little regulatory benefit. Consequently, the SROs are proposing to require broker-dealers to submit Allocation Reports to the Central Repository that identify subaccounts to which executed shares are allocated; however, these reports would not be linked to particular orders or executions.⁶⁶ Moreover, in accordance with the exemptive relief requested in Section B above, broker-dealers would be permitted to report the identity of these accounts through a Firm Designated ID rather than an “account number,” as required by the Rule.

For the reasons discussed above, the SROs believe that the SEC should not require the CAT NMS Plan to include an obligation to record and report the account number for any subaccounts to which an execution is allocated. Granting an exemption for the reporting of subaccount numbers will not jeopardize the important goals of Rule 613 as customer identification will be provided to the Central Repository by means of the firm-designated identifier pursuant to the proposed Firm Designated ID Model, and ultimate allocations will be reported to the Central Repository and will contain the firm-designated identifiers of the subaccounts. However, because this approach is not currently permitted by Rule 613(c), the SROs respectfully request that, pursuant to Section 36 of the Act, the Commission grant the SROs an exemption from Rule 613(c)(7)(vi)(A) in order to include the described approach in the CAT NMS Plan.

1. Description of Proposed Approach

The SROs do not believe that it is necessary to establish a linkage between particular executions and particular allocations within the CAT. Rather, each allocation must be reported to the Central Repository on a separate Allocation Report, and those Allocation Reports must include the Firm Designated ID of the relevant subaccount per the Firm Designated ID Model. With the Firm Designated ID Model, all customer-identifying information, including account number, would be associated with the Firm Designated ID. Knowing the Firm Designated ID on an Allocation Report would allow the Central

⁶⁶ Appendix C contains an example of the proposed approach.

Repository to link the subaccount holder to those with authority to trade on behalf of the account. The Firm Designated ID, and associated customer identification process, allows each firm to provide to the Central Repository multiple unique identifiers for one customer (*i.e.*, multiple identifiers all relate to the same customer). This will allow the firms to use a “master account” identifier for order reporting, but provide subaccounts for allocation reporting.

The SROs believe that the use of the Firm Designated ID Model would allow the Central Repository to link subaccount holders to the customer. Because the Central Repository includes customer identification on the order (by identifying the Customer-IDs associated with both orders and allocations), the surveillance goals of the SROs and other regulators can be addressed. The industry supports this use of the Firm Designated ID Model and believes that it will “mimic the data available within” firms’ various systems at the current points of entry and allocations, and reduce the impact to implement SEC Rule 613.⁶⁷

2. Requested Exemptive Relief

The SROs believe that the submission of Allocation Reports in conjunction with the Firm Designated ID meets the Commission’s objectives while significantly reducing the burden on SROs and broker-dealers to effectuate the Rule 613 reporting provisions. Nevertheless, because under this approach, subaccount numbers would not be reported as required under Rule 613, the SROs request that the Commission provide exemptive relief from Rule 613(c)(7)(vi)(A) to permit the use of this approach.

3. Analysis of Proposed Allocation Reports and Firm Designated ID Model

The SROs believe the use of the proposed Allocation Reports along with the Firm Designated ID Model is necessary and appropriate in the public interest, and is consistent with the protection of investors. The SROs believe that this approach meets the Commission’s objectives while significantly reducing the burden on SROs and broker-dealers to effectuate these reporting provisions. Discussed below is the process by which the SROs evaluated this approach and alternatives to this approach, as well as the advantages and disadvantages of the various approaches.

a. Process

As required by Rule 613, the SROs developed and implemented a careful process for evaluating the various operational and technical issues related to the implementation of the provisions of Rule 613 related to the linking of allocations to executions. For example, the SROs evaluated the use of CAT-Order-IDs using their own significant experience and by soliciting the views of their members and other appropriate parties to ensure they considered a variety of informed views.

The SROs also discussed the Allocation Report and Firm Designated ID Model with the DAG. The DAG agreed with the SRO assessment that this approach would minimize the costs and other burdens of broker-dealers by permitting the broker-dealers to leverage existing business processes and practices. It is the consensus opinion of FIF and its members that the Central Repository should mirror the current business processes, and the Central

⁶⁷ FIF CAT Working Group Allocation Report Document, *supra* note 62 **Error! Bookmark not defined.**, at 2.

Repository should not create a relationship where one does not exist today.⁶⁸ In examining intra-firm linkage issues as they relate to average price processing, FIF stated its belief that de-coupling allocations from order linkage and tying allocations to the Firm Designated ID mirrors the actual allocation process. Since subaccount information will be supplied on CAT Allocation Reports and Firm Designated IDs will be supplied on CAT order reports, and because subaccounts and Firm Designated IDs can be linked back to the Customer-ID, the Central Repository will have linkages among all of a customer's orders, executions, and allocations for a single day, although there may not always be sufficient linkage information to relate a specific order, execution, and allocation for a customer within that day. Thus, the Customer-ID will be available on both execution and Allocation Reports, but a hard linkage between these cannot be established due to average price processing.

b. Reliability and Accuracy of CAT Data

The SROs believe that creating new workflows would require additional system and process changes which could potentially impact the reliability and accuracy of CAT Data. As the proposed approach leverages existing business processes instead of creating new workflows, it can help improve the reliability and accuracy of CAT Data as well as reduce the time CAT Reporters need to comply with the CAT reporting requirements. Further, as discussed above, the CAT Data throughout an order's lifecycle would be more reliable and accurate under the Firm Designated ID Model than under the approach outlined in Rule 613. Indeed, as discussed above, the SROs do not believe that the approach outlined in Rule 613 would provide an accurate description of the allocation process because it would create artificial relationships between executions and allocations. In proposing approaches relying on this Model, the Bidders did not indicate that the reliability and accuracy of the CAT Data would be compromised during: (1) its transmission and receipt from market participants; (2) data extraction, transformation, and loading at the Central Repository; (3) data maintenance and management at the Central Repository; or (4) use by the regulators.

c. Effect on Use of Data by Regulators

While there is a degree of specificity that is associated with linking allocations to specific executions, the SROs and industry believe that this linkage would be artificial and any perceived benefits would not be of value to regulators. Furthermore, the proposed approach would not affect the various ways in which, and purposes for which, regulators would use, access, and analyze the CAT Data. Regulators will still be able to associate allocations with the customers that received allocations. The SROs believe that the proposed approach would provide regulators with the information they require without imposing undue burden on the industry. The SROs also do not believe that this approach would compromise the linking of order events, alter the time and method by which regulators may access the data, or limit the use of the data as described in the use cases.

d. Competition, Efficiency and Capital Formation

The SROs believe that the proposed approach would have a positive effect on competition, efficiency, and capital formation. As noted above, this approach would minimize the cost, technology, and other burdens on the broker-dealers and SROs. Not using

⁶⁸ See, e.g., FIF CAT Working Group Allocation Report Document, *supra* note 62; FIF November 2014 Letter at 3; FIF Response to RFP, *supra* note 38, at 5.

the Firm Designated ID Model could potentially increase the barriers to entry due to high infrastructure setup costs, which will be required in order to establish linkages between the front, middle, and back offices necessary to comply with the requirements of Rule 613.

e. Cost-Benefit Analysis

After careful analysis, the SROs, in consultation with industry members, believe that the approach proposed by the Rule imposes significant costs on the industry, while the benefits to regulators are minimal as any linkage between executions and allocations would be artificial. The proposed approach is an efficient and cost-effective way to report allocations. In particular, the SROs believe that this approach would impose less of a cost burden on broker-dealers than the approach required by Rule 613. The DAG emphasized that this approach would reduce their costs for complying with Rule 613 by allowing broker-dealers to leverage existing business practices, processes, and data flows, thereby minimizing the effect on current business processes, practices, and data flows.⁶⁹ Given the number of affected broker-dealers and the extent of the technology and business process changes needed for the approach outlined in Rule 613, the cost savings of this approach are significant.

Industry members informed the SROs that the cost for the Top 3 Tiers of CAT Reporters to link allocations to executions would be \$525 million.⁷⁰ To establish this cost estimate, industry members considered the costs associated with various activities required to link allocations to executions including: (i) the analysis of the impact of implementation on the broker-dealers processes and systems; (ii) the potential changes to buy-side allocation messages to include related executions; (iii) the workflow changes to accommodate order bunching at order entry and post-trade bunched order processing; and (iv) the integration of the front and back office systems that are used to disseminate execution information with the allocation systems. Industry members indicated that these activities would cost 3.5 times the median cost of \$600,000 that was paid by the top 250 CAT Reporters when implementing the first phase of the Large Trader Reporting requirements. Industry members used the multiplier to account for the significant changes that must be made to the front and back systems as part of this implementation as well as to address the fact that the first phase of Large Trader Reporting focused on just proprietary trading and direct access, and many issues were not addressed during this implementation, including average price processing issues. Therefore, the SROs believe that the overall cost for the proposed approach would be less than the approach outlined in Rule 613.

Finally, as discussed above, this approach would not have an adverse effect on the reliability and accuracy of the CAT Data, the use of the data by regulators, the security and confidentiality of the data, or competition, efficiency, and capital formation.

f. Alternatives

In the course of considering the requirements of Rule 613 as they relate to the linking of allocations to executions, the SROs evaluated two primary approaches: (1) compliance with Rule 613 as written; and (2) use of the approach as described above. After analyzing the merits of these approaches, the SROs concluded that the proposed approach was the best among the options considered, for the reasons discussed above.

⁶⁹ See, e.g., FIF CAT Working Group Allocation Report Document, *supra* note 62, at 2.

⁷⁰ \$525 million = \$600,000*3.5*250; 3.5.

E. Time Stamp Granularity

1. Description of Time Stamp Granularity for Manual Order Events

Rule 613(c)(7) requires the recording and reporting of the time of certain Reportable Events to the Central Repository. Specifically, the CAT NMS Plan must require each CAT Reporter to record and report the “[t]ime of order receipt or origination” when reporting to the Central Repository order receipt or origination information.⁷¹ When reporting the routing of an order, the Rule requires CAT Reporters to record and report the “[t]ime at which the order is routed.”⁷² When reporting the receipt of an order that has been routed, the Rule requires CAT Reporters to record and report the “[t]ime at which the order is received.”⁷³ When reporting the modification or cancellation of an order, Rule 613 further requires CAT Reporters to record and report the “[t]ime the modification or cancellation is received or originated.”⁷⁴ The granularity of the required time stamps for these order lifecycle events is governed by Rule 613(d)(3), which requires that time stamps “reflect current industry standards and be at least to the millisecond.”⁷⁵

The SROs have considered the requirements of Rule 613 with respect to recording and reporting time stamps as well as the Commission’s reasons for adopting these requirements. In addition, the SROs requested that broker-dealers and other industry members provide feedback on the time stamp granularity requirement. The SROs believe that time stamp granularity to the millisecond reflects current industry standards with respect to electronically-processed events in the order lifecycle, and Section 6.8 of the CAT NMS Plan reflects this determination and requires that time stamps be to the millisecond. However, the industry feedback that the SROs received through the DAG suggests that the established industry practice with respect to manual orders is to capture manual time stamps with granularity at the level of one second, because finer increments cannot be captured with precision for manual processes which, by their nature, take longer to perform than a time increment of less than one second.⁷⁶

The following examples illustrate Reportable Events involving the non-electronic communication of order-related information for which CAT Reporters must record and report the time of the event under Rule 613 (“Manual Order Events”).⁷⁷ An investment adviser or

⁷¹ 17 C.F.R. § 242.613(c)(7)(i)(E).

⁷² 17 C.F.R. § 242.613(c)(7)(ii)(C).

⁷³ 17 C.F.R. § 242.613(c)(7)(iii)(C).

⁷⁴ 17 C.F.R. § 242.613(c)(7)(iv)(C).

⁷⁵ 17 C.F.R. § 242.613(d)(3). The SEC, after considering the complexity and potential costs of requiring millisecond time stamp increments, adopted the requirement after concluding that “given the speed with which the industry currently handles orders and executes trades, it is important that the consolidated audit trail utilize a time stamp that will enable regulators to better determine the order in which reportable events occur.” Adopting Release, *supra* note 9, at 45762. Under Rule 613(d)(3), the CAT NMS Plan must also require the SROs to evaluate annually whether industry standards have evolved such that the required time stamp standard should be in finer increments. *See* 17 C.F.R. § 242.613(d)(3).

⁷⁶ This industry practice is also reflected in FINRA’s OATS rules, which require that each required record of the time of an event be expressed in seconds, except where members’ systems capture time in milliseconds. *See* FINRA Rule 7440(a)(2).

⁷⁷ Appendix A contains an additional in-depth review of select examples of manual order processing workflows. These examples illustrate certain circumstances where Manual Order Events are recorded. This list, however, is not intended to be an exhaustive list of such circumstances. As shown in the examples, the SROs expect that in all circumstances in which Manual Order Events will be recorded, such events will be recorded

broker may receive a phone call from a customer whereby the customer instructs the adviser or broker to place one or more orders on the customer's behalf. In such a circumstance, the full relay of customer instructions typically takes a number of seconds and requires the broker to either manually generate an order ticket with a time stamping device⁷⁸ or manually input an order into an electronic system, including all order details and the time of order receipt, which may be generated through a time stamping mechanism on the order entry screen.⁷⁹ Additionally, a floor broker at an exchange that represents an order on the floor of the exchange may have to capture the time stamp of oral order events manually.

Upon investigation, the SROs did not find any company that currently produces a manual time stamping device that records time to the millisecond.⁸⁰ With no known company producing such a device, the precise calculation of the cost of adopting such technology is difficult to predict. Nevertheless, given the need for broker-dealers to upgrade their existing time stamping processes and technology to comply with Rule 613 with regard to Manual Order Events, the SROs believe that compliance with the time stamp requirements of Rule 613 for Manual Order Events would result in added costs to the industry as there may be a need to upgrade databases, internal messaging applications/ protocols, data warehouses, and reporting applications to enable the reporting of such time stamps to the Central Repository. To comply with a singular time stamp requirement for all CAT reporting, firms will face significant costs, with regards to both time and resources to implement the consistent time stamp policy across multiple systems. Although many systems currently have granularity to milliseconds, some front office systems only have granularity to the second.⁸¹ Moreover, the SROs believe that such costs would be incurred only to adopt a time stamp process that would be inherently imprecise, due to the nature of the manual recording process. Thus, the SROs believe that such an approach would result in little additional benefit, and, in fact, could result in adverse consequences such as creating false reliance on data the SROs know is likely imprecise in the reconstruction of order event sequences, while imposing additional costs on CAT Reporters.

After careful consideration, the SROs have concluded that the time stamp granularity requirements in Rule 613(d)(3) are not practical or precise in the case of Manual Order Events subject to recording and reporting under Rule 613(c)(7). Therefore, the SROs believe that under the CAT NMS Plan these time stamps should be recorded and reported with a granularity of one second. Further, the SROs believe that capturing these time stamps in one-second increments would be a reasonable manner of preserving the sequential recording of

with time stamp granularity at least to the second. Also as illustrated in the examples, and as described more fully below, the SROs expect that, for any given order, events processed electronically subsequent to a Manual Order Event would be captured in milliseconds.

⁷⁸ See Appendix A, Example 1. Commission staff has previously endorsed the use of manual time-stamping machines, noting, for example, that they reliably document the execution time of a manual trade for the purposes of Regulation NMS. See Responses to Frequently Asked Questions Concerning Rule 611 and Rule 610 of Regulation NMS, SEC, at Question 3.02 (updated Apr. 4, 2008), available at <http://www.sec.gov/divisions/marketreg/nmsfaq610-11.htm> (noting use of machine-stamping as a form of reliable documentation of the time of trade execution generated simultaneously with the time of the execution and not subject to retrospective alteration).

⁷⁹ See Appendix A, Example 2.

⁸⁰ In this regard, one SRO contacted three companies that manufacture time stamp devices, and each company confirmed that it did not currently produce any products that would be able to record a time stamp to the millisecond.

⁸¹ Response to Selected Topics of NMS Plan Document, FIF (June 2013).

Manual Order Events, thereby fostering the ability of regulators to determine the sequence of Manual Order Events.

2. Requested Exemptive Relief for Time Stamp Granularity for Manual Order Events

Because reporting time stamps with granularity to the second is not currently permitted under Rule 613(c)(7) and (d)(3), the SROs respectfully request that, pursuant to Section 36 of the Act, the Commission grant the SROs an exemption from the millisecond time stamp granularity requirement in Rule 613(d)(3) for Manual Order Events subject to time stamp reporting under Rules 613(c)(7)(i)(E), 613(c)(7)(ii)(C), 613(c)(7)(iii)(C), and 613(c)(7)(iv)(C). The SROs intend to file an amendment to the CAT NMS Plan that will reflect one second time stamp granularity considerations for Manual Order Events.

Specifically, to reflect the requested relief with respect to Manual Order Events recorded and reported pursuant to Rule 613(c)(7)(i)(E), (c)(7)(ii)(C), (c)(7)(iii)(C), and (c)(7)(iv)(C), the amendment will require each national securities exchange, national securities association, and member of such exchange or association to record and report the event time stamp with granularity to the second. Additionally, in situations where there is a system outage preventing a floor broker from systematizing an order, the requirement for recording of the manual time of execution will be made within a reasonable time frame basis after the fact.

This exemptive request is limited to relief from the SROs' obligation to have all time stamp requirements in the CAT NMS Plan for Manual Order Events be at least to the millisecond. Pursuant to Rule 613(d)(3), the SROs' amendment to the CAT NMS Plan will require the SROs to evaluate in the future whether industry standards have evolved such that the required time stamp standard for Manual Order Events should be in finer increments.

The SROs' amendment to the CAT NMS Plan will also require reporting the time stamp of when the Manual Order Event was captured electronically in the relevant order handling and execution system of the CAT Reporter ("Electronic Capture"). Granularity of the Electronic Capture time stamp would be consistent with the Rule 613(d)(3) requirement that time stamps be at least to the millisecond. Thus, although the SROs are seeking exemptive relief from the millisecond time stamp requirements for the Manual Order Events, the SROs have determined that adding the Electronic Capture time stamp would be beneficial for successful reconstruction of the order handling process and would add important information about how the Manual Order Events are processed once they are entered into an electronic system. The amendment to the CAT NMS Plan will also require that Manual Order Events, when reported, be clearly identified as such.

The specific data elements and formats in which the required time stamp information is provided to the Central Repository would be developed by the CAT Plan Processor and approved by the SROs. However, because the CAT NMS Plan must be filed before the CAT Plan Processor is selected, the SROs believe exemptive relief is appropriate. As previously noted, the SROs intend to file an amendment to the CAT NMS Plan that will reflect the requested specific requirements for recording and reporting of the Manual Order Events as set forth herein.

3. Analysis of Proposed Time Stamp Granularity for Manual Order Events

The SROs believe that recording and reporting the Manual Order Event time stamp with granularity to the second, in combination with the Electronic Capture time stamp, is consistent with current industry practice, is necessary and appropriate in the public interest, and is consistent with the protection of investors. The SROs believe that the proposed Manual Order Event time stamp (to the second) combined with the Electronic Capture time stamp (to the millisecond) meet the Commission's objectives while significantly reducing the burden on SROs and broker-dealers to effectuate these reporting provisions. The SROs are requesting that the Commission provide exemptive relief from the Rule 613(d)(3) millisecond time stamp granularity requirement as applied to certain provisions in Rule 613(c)(7). The SROs' amendment to the CAT NMS Plan will include the Manual Order Event time stamp approach described above. In combination with the millisecond Electronic Capture time stamps that would accompany Reportable Events, the SROs believe that Manual Order Event time stamp granularity of one second would be a cost-effective, practical, and sufficiently precise way to meet the Commission's goal of ensuring that time stamp information reported to the Central Repository is accurate, correctly sequenced, and suitable for the reconstruction of market activity. Discussed below is the process by which the SROs evaluated the proposed alternative time stamp granularity for Manual Order Events.

a. Process

As required by Rule 613, the SROs developed and implemented a thorough process for evaluating the various operational and technical issues related to the implementation of the time stamp granularity provisions of Rule 613 with regard to Manual Order Events. The SROs evaluated the applicability of the time stamp requirements to Manual Order Events based on their own experience. In addition, as contemplated by Rule 613(a)(1)(xi), the SROs solicited the views of their members and other appropriate parties to ensure they considered a variety of informed views. In particular, the SROs consulted with the DAG, which strongly supports requiring a time stamp granularity of one second for Manual Order Events, for the reasons described above. In addition, as discussed above, the SROs investigated the availability of technology that would allow for sub-second time stamps for Manual Order Events, and did not find such technology to be commercially available to market participants.

b. Reliability and Accuracy

The SROs believe that employing a time stamp granularity of one second rather than of one millisecond for Manual Order Events would not negatively impact the reliability and accuracy of the CAT Data throughout the lifecycle of manual orders. Manual order events are inherently imprecise, and requiring a time stamp to be reported to a level of granularity greater than the inherent precision of the action is not likely to contribute any data that will be useful to regulators. Further, once the manual order is systematized, all time stamps would still be required to be reported in millisecond granularity. Only the inherently imprecise manual actions would be impacted by this approach. The SROs believe that capturing these time stamps in one-second increments would be a reasonable manner of preserving the sequential recording of Manual Order Events, and also would not hinder the ability of regulators to determine the sequence of Manual Order Events, while allowing for the inherent imprecision of Manual Order Events. Moreover, the SROs believe that attempting to capture Manual Order Events at time increments finer than one second would be inherently imprecise and would result in incorrect time stamps being used for Manual Order Events. The SROs do not believe that the one-second granularity would affect the reliability and accuracy of CAT Data during: (1) its transmission and receipt from market participants; (2) extraction,

transformation, and loading at the Central Repository; (3) maintenance and management at the Central Repository; or (4) use by regulators.

c. Effect on Use of Data by Regulators

The SROs do not believe that the one-second time stamp granularity for Manual Order Events would have an adverse effect on the various ways in which, and purposes for which, regulators would use, access, and analyze the CAT Data. In particular, the SROs do not believe that the one-second time stamp granularity for Manual Order Events will compromise the linking of order events, alter the time and method by which regulators may access the data, or limit the use of the data described in the use cases. As noted above, the CAT NMS Plan would require that Manual Order Events be identified as such when reported to the CAT thus allowing regulators to account for potential discrepancies in time stamps when dealing with Manual Order Events.

d. Security and Confidentiality

The SROs do not believe that the one-second time stamp granularity for Manual Order Events would affect the security and confidentiality of the information reported to the Central Repository, thereby maintaining the efficacy of the CAT and the confidence of market participants.

e. Competition, Efficiency and Capital Formation

The SROs believe that the time stamp granularity of one second for Manual Order Events would have a positive effect on competition, efficiency, and capital formation. As noted above, this time stamp granularity would satisfy the SEC's regulatory goals for the CAT and would do so in a manner that minimizes cost, technology, and other burdens on CAT Reporters.

f. Cost-Benefit Analysis

After careful consideration, the SROs, in consultation with industry members, believe that a one-second time stamp granularity for Manual Order Events is an efficient and cost-effective way to meet the Commission's goal of ensuring that CAT Data allows regulators to determine the sequence in which order events occur. As described above, this approach is consistent with current industry practice, and would impose a much smaller cost burden, if any, on market participants, than the potentially costly transition to technology that has the capability to record time stamp and synchronize Manual Order Events to the millisecond. The inherent imprecision in time stamping a Manual Order Event to the millisecond leads the SROs to believe that there would be no regulatory benefit to such a requirement.

As per the information provided by two clock-manufacturing firms,⁸² the retail cost of an advanced OATS compliance clock with granularity to the second and NTP time synchronization is approximately \$1,050. With the number of clocks in the finance industry being in the tens of thousands, the minimum total cost to the industry would be approximately \$10,500,000. This is a conservative estimate as the development of a clock

⁸² See *supra* note 80.

that captures time stamps in milliseconds would be more expensive. The clock drift of the stamping mechanism will likely be more pronounced at the millisecond level of granularity. Further, the manufacturing firms indicated that manual time stamping at the millisecond level of granularity would be inherently imprecise, as it takes approximately 400-500 milliseconds for a human being to recognize visual stimuli and initiate a response, and due to the time required for a person to actually record a time stamp. Thus, the cost for reporting time stamp for manual order events in milliseconds outweighs the benefits.

g. Alternatives

In the course of considering the requirements of Rule 613 with respect to time stamp granularity for Manual Order Events, the SROs considered the following approaches: the approach outlined in Rule 613, requiring a manual time stamp granularity of one second, and requiring a manual time stamp of greater than one second. After weighing the merits of these various approaches, the SROs concluded that a time stamp granularity of one second for Manual Order Events was the best among the options considered, as a time stamp granularity to one second for manual events is generally seen as the established standard and would allow for sequencing without compromising the integrity of the data.

If there are any questions concerning these requests, please contact Mr. Robert Colby at 202 728 8484 or any other SRO representative as part of the consortium working to implement Rule 613.

Sincerely,

[Executed signature pages are located at the end of this letter and related appendices.]

BATS EXCHANGE, INC.

BY: _____

BATS Y-EXCHANGE, INC.

BY: _____

BOX OPTIONS EXCHANGE LLC

BY: _____

C2 OPTIONS EXCHANGE, INCORPORATED

BY: _____

CHICAGO BOARD OPTIONS
EXCHANGE, INCORPORATED

BY: _____

CHICAGO STOCK EXCHANGE,
INC.

BY: _____

EDGA EXCHANGE, INC.

BY: _____

EDGX EXCHANGE, INC.

BY: _____

FINANCIAL INDUSTRY
REGULATORY AUTHORITY, INC.

BY: _____

INTERNATIONAL SECURITIES
EXCHANGE, LLC

BY: _____

ISE GEMINI LLC

BY: _____

MIAMI INTERNATIONAL
SECURITIES EXCHANGE LLC

BY: _____

NASDAQ OMX BX, INC.

BY: _____

NASDAQ OMX PHLX LLC

BY: _____

THE NASDAQ STOCK MARKET LLC

BY: _____

NATIONAL STOCK EXCHANGE, INC.

BY: _____

NEW YORK STOCK EXCHANGE LLC NYSE ARCA, INC.

BY: _____

BY: _____

NYSE MKT LLC

BY: _____

Enclosure

cc: The Hon. Mary Jo White, Chair
 The Hon. Luis A. Aguilar, Commissioner
 The Hon. Daniel M. Gallagher, Commissioner
 The Hon. Kara M. Stein, Commissioner
 The Hon. Michael Piwowar, Commissioner
 Mr. Stephen Luparello, Director of Trading and Markets
 Mr. Gary Goldsholle, Deputy Director of Trading and Markets
 Mr. David S. Shillman, Associate Director of Trading and Markets
 Mr. David Hsu, Assistant Director of Trading and Markets

Appendix A Time Stamp Granularity Example

Example 1: Investment Adviser receives a customer order by phone

At 9:55AM on December 13, 2013, a customer calls his broker-dealer registered investment adviser wishing to place an order to buy shares. The customer relays the details of his order to the adviser including the issue symbol, number of shares and limit price. The adviser writes down the instructions on a paper ticket and uses an office time-stamping machine to time stamp the ticket with current date and time, 12/13/2013 9:55:45AM. She informs the customer that the order is accepted, and hangs up the phone.

The adviser opens the order entry screen of her firm's electronic order management system and enters the order details into the order entry form including the issue symbol, number of shares, limit price, time-in-force instruction and the manual order receipt time, as set forth on the paper ticket (*i.e.*, 12/13/2013 9:55:45AM). After keying in all the details, she clicks the "Submit" button to send the order for execution. At that moment, the order management system makes a record of the creation of a new order that was typed in manually, and time stamps the order creation event with the current system time of 12/13/2013 9:56:05.764. Unlike the office time stamping machine, the electronic order management system records and time stamp all events with millisecond precision.

In summary, this example illustrates how the system will record the following details of the order receipt: a Manual Order Event time stamp of 12/13/2013 9:55:45AM, an Electronic Capture time stamp of 12/13/2013 9:56:05.764, and details of the order such as issue symbol, number of shares to buy, limit price and other attributes.

The SROs expect that the broker-dealer will report two time stamp values to the CAT for this event: a Manual Order Event time stamp of 12/13/2013 9:55:45AM and an Electronic Capture time stamp 12/13/2013 9:56:05.764. The SROs also expect the broker-dealer to report orders in the sequence that they were received, to the extent practicable.

Example 2: Broker receives an institutional order by phone

At 10:45AM on December 13, 2013, a hedge fund manager calls his broker on the phone wishing to place an order to buy a large amount of shares of one company during the day, while at the same time limiting the market impact.

The broker opens the order entry screen of her firm's electronic order management system on her computer and types in the order details, such as issue symbol and number of shares to buy, as the fund manager relays the information over the phone. The broker uses a time stamping button on the order entry screen to populate the Manual Order Receipt field with current date/time being 12/13/2013 10:45:34AM (this field contains hours, minutes and seconds and can be typed over).

After the broker hangs up the phone, she continues filling the rest of the order entry screen in her system by setting the parameters for algorithmic order execution that is necessary to minimize market impact. Upon finishing the entry of algorithmic parameters, the broker clicks the "Submit" button to send the order for execution into the firm's algorithmic trading

engine. At that moment, the order management system will record the order creation event and time stamp that event with the current system time of 12/13/2013 10:45:54.678.

In summary, this example illustrates how the system will record the following details of the order receipt: a Manual Order Event time stamp of 12/13/2013 10:45:34AM, an Electronic Capture time stamp of 12/13/2013 10:45:54.678, and details of the order such as issue symbol, number of shares to buy, and other attributes.

The SROs expect that the broker-dealer will report two time stamp values to the CAT for this event: a Manual Order Event time stamp of 12/13/2013 10:45:34AM; and an Electronic Capture time stamp of 12/13/2013 10:45:54.678. The SROs also expect the broker-dealer to report orders in the sequence that they were received, to the extent practicable.

Appendix B

Customer Information Approach – Illustrative Examples

This document provides examples to illustrate the Customer Information Approach described in Section B above regarding Customer-IDs.

Example 1: Retail Customer Identification – New Customer Scenario

This example explains the creation of a new customer entry in the Central Repository for a retail firm using the Customer Information Approach.

In this example, Firm A is a retail broker-dealer which opens an account for a new customer, InvAdv, Inc., an investment advisory firm. To set up a new customer in its system, Firm A will collect all relevant customer information and assign that customer a firm-designated identifier. The customer information, along with the firm-designated identifier and the “effective date,” the date when the relationship between Firm A and the customer is established, will be stored in the firm’s customer information repository. The firm-designated-identifier along with the effective date will uniquely identify the customer within Firm A.

CAT Reporter: Firm A will provide the relevant information about its new customer, InvAdv Inc., to the Central Repository which includes the following:

- Reporter-ID: *Firm A*
- Firm-designated ID: *IA111111*
- Firm-designated ID Type: *Account Number*
- Account opening date: *April 1, 2010*
- Effective date: *April 1, 2010*
- Name: *InvAdv. Inc.*
- Address: *2 Main St. Acton, OH*
- SSN/Tax-ID: *2233-4466*
- Role: *Account Holder*
- Large Trader ID: *N/A*
- LEI: *N/A*

CAT Plan Processor: After the CAT Plan Processor receives customer information about InvAdv Inc. from Firm A, it will perform the following process:

1. Conduct syntactic and semantic checks on the submitted data.
2. Check whether the customer already exists in the Central Repository. It may use the unique identifier, such as LEI or Tax-ID for a firm or SSN for an individual, to search for an existing customer in the Central Repository. Since the customer is new, no match will be found. In this scenario the CAT Plan Processor will create a new record in the Central Repository and will create a new unique Customer-ID, *CAT999999*, for the customer InvAdv, Inc.
3. The new Customer-ID, *CAT999999*, will be linked to the customer’s unique identifier, which is InvAdv, Inc.’s Tax-ID, *2233-4466*.
4. The CAT Plan Processor will also map the new Customer-ID, *CAT999999*, to the following information provided by Firm A for the customer, InvAdv, Inc.
 - Firm-designated ID: *IA111111*
 - Firm-designated ID Type: *Account Number*

- Effective date: *April 1, 2010*
 - SSN/Tax ID: *2233-4466*
 - Other customer information (Name, Address, Role, etc.)
5. The customer information, Customer-ID and the mapping between these two data elements will be stored in the Central Repository.
 6. Once a new Customer-ID has been created in the Central Repository, Firm A will submit the firm-designated ID and effective date to the Central Repository and the CAT Plan Processor will use this information to retrieve the unique Customer-ID of the customer.

Example 2: Retail Customer Identification – New Account for an Existing Customer

This example explains the process when a retail firm creates a new account for a customer and links the new account to an existing customer in the Central Repository using the Customer Information Approach.

In this example, Firm A, defines a new account for the account holder, Jane Doe. InvAdv, Inc. is the investment adviser for Jane Doe. Firm A uses the relevant account number as the unique key to associate the investment adviser and customer information. The CAT Plan Processor links InvAdv, Inc.'s and Jane Doe's Customer-IDs to the account number.

To set up a new customer in its system, Firm A will collect all relevant customer information from Jane Doe such as

- Name: *Jane Doe*
- Address: *35 5th Ave, New York, NY 10020*
- SSN/Tax-ID: *111-22-1234*
- Date of Birth: *01/01/1980*
- LEI: *N/A*
- Role: *Account Holder*

Since InvAdv, Inc. is the investment adviser for Jane Doe and is also an existing customer of Firm A, the firm will create a firm-designated identifier for this new account and will link both customers Jane Doe and InvAdv, Inc. to the firm-designated identifier of the new account.

- Firm-designated ID: *C111111 (New account)*
- Firm-designated ID Type: *Account Number*
- Effective date: *April 2, 2010*

In this scenario, Jane Doe's account, which has firm-designated identifier, *C111111*, will be linked to Jane Doe as well as to her investment adviser, InAdv, Inc., an existing client of the firm with firm-designated ID, *IA111111* and effective date, April 1, 2010. For the new account, *C111111*, Jane Doe will be an account holder and InAdv, Inc., will be the investment adviser associated with the account.

The new customer information which includes the firm-designated identifier and the effective date, and links to an existing customer, will be stored in the firm's customer information repository.

CAT Reporter: Firm A may provide to the Central Repository the new account information and the information for the two customers, Jane Doe and InvAdv Inc. that are linked to the same account:

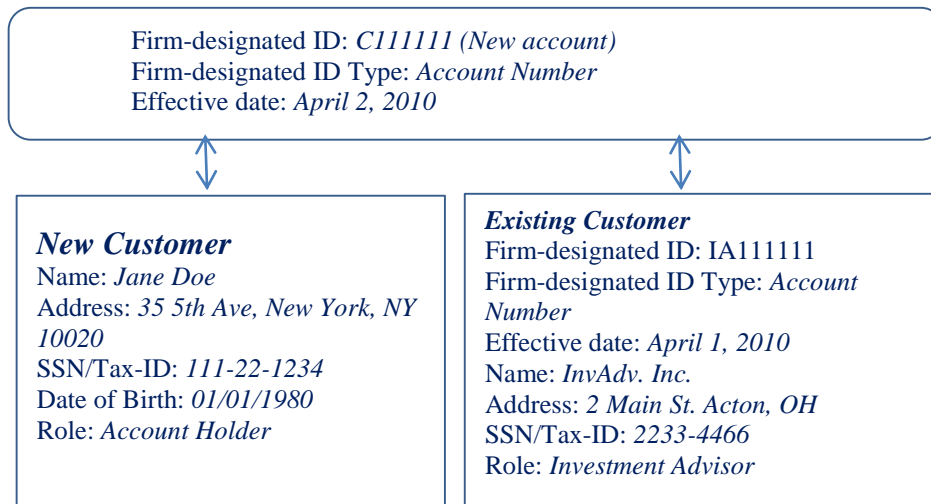


Figure 1: New Account Information submitted to the CAT by a CAT Reporter. The new account number (firm-designated identifier C111111) is linked to a new customer, an account holder, and an existing customer who is the investment adviser of the new customer.

CAT Plan Processor: After the CAT Plan Processor receives from Firm A new account information that is linked with two customers, Jane Doe and InvAdv Inc., it will perform the following process:

1. Conduct syntactic and semantic checks on the submitted data.
2. Check whether the customers Jane Doe and InvAdv, Inc. already exist in the Central Repository.
 - a. For Jane Doe, the CAT process may use the unique identifier, SSN, to search for a customer in the Central Repository. Since, Jane Doe is a new customer no match will be found in the Central Repository. As such, the CAT Plan Processor will:
 - i. Create a new record for Jane Doe in the Central Repository and assign a new unique Customer-ID, CAT888888, to Jane Doe.
 - ii. Link the new Customer-ID, CAT888888, to the following information provided by Firm A:

- Firm-designated ID: *C111111 (New account)*
- Firm-designated ID Type: *Account Number*
- Effective date: *April 2, 2010*
- Name: *Jane Doe*
- Address: *35 5th Ave, New York, NY 10020*
- SSN/Tax-ID: *111-22-1234*
- Date of Birth: *01/01/1980*
- Role: *Account Holder*

- b. For InvAdv, Inc., which is an existing client, the CAT Plan Processor may use the unique identifier InvAdv. Inc.'s Tax-ID, 2233-4466, to find InvAdv. Inc.'s Customer-ID. The search may return Customer-ID, C999999.
3. Since the new account, *C111111*, is linked to both Jane Doe and InvAdv, Inc., the CAT Plan Processor will link the new account, *C111111*, to both Jane Doe's and InvAdv, Inc.'s Customer-IDs, *CAT888888* and *CAT999999*, and other customer information provided by the firm to uniquely identify the customers. The mapping among customer information, new account information and Customer-IDs will be stored in the Central Repository.
4. Since the Customer-ID is stored in the Central Repository, when Firm A submits the firm-designated ID and effective date to the Central Repository, the CAT Plan Processor will use this information to retrieve the Customer-ID of the customer.

Example 3: Institutional Customer Identification – New Customer Scenario

This example explains the creation of a new customer entry in the Central Repository for an institutional firm using the Customer Information Approach.

In this example, Firm B is an institutional broker-dealer which opens an account for a new customer, D-Fund, a hedge fund. To set up a new customer in its system, Firm B will collect all relevant customer information and assign that customer a firm-designated identifier. The customer information along with the firm-designated identifier and the "effective date," the date when the relationship between the firm and customer is established, will be stored in the firm's customer information database. The firm-designated identifier along with the effective date will uniquely identify the customer within Firm B.

CAT Reporter: Firm B will provide the relevant information about its new customer, D-Fund, to the Central Repository which includes the following:

- Reporter-ID: *Firm B*
- Firm-designated ID: *DF*
- Firm-designated ID Type: *Entity ID*
- Effective date: *May 23, 2012*
- Name: *D-Fund*
- Address: *Boston, MA*
- Role: *Fiduciary*
- SSN/Tax-ID: *N/A*
- Larger Trader ID: *11843253-0000*
- Legal Entity Identifier (LEI): *AB3333GH555556677KRT*

CAT Plan Processor: After the CAT Plan Processor receives customer, and D-Fund information from Firm B, it may perform the following process:

1. Conduct syntactic and semantic checks on the submitted data.
2. Check whether the customer already exists in the Central Repository. It may use the unique identifier, such as LEI, to search for a customer in the Central Repository.
3. In this scenario the customer is new; therefore, no match will be found. The CAT Plan Processor will create a new record for that customer in the Central Repository and will create a new unique Customer-ID, *CAT555555*, for the customer D-Fund
4. The new Customer-ID, *CAT555555*, may be linked to the customer's unique identifier, which is D-Fund's LEI, *AB3333GH555556677KRT*.
5. The CAT Plan Processor will also map the new Customer-ID, *CAT555555*, to the other information provided by Firm B for the customer, D-Fund. This mapping may link the Customer-ID, *CAT555555*, to the following information provided by Firm B.
 - Firm-designated ID: *DF*
 - Firm-designated ID Type: *Entity ID*
 - Effective date: *May 23, 2012*
 - Name: *D-Fund*
 - Larger Trader ID: *11843253-0000*
 - Legal Entity Identifier (LEI): *AB3333GH555556677KRT*
 - Other customer information (Name, Address, Role, etc.)
7. The customer information, Customer-ID and the mapping between these two data elements will be stored in the Central Repository. When Firm B submits the firm-designated ID and effective date, the CAT Plan Processor will be able to retrieve the Customer-ID.

Example 4: Institutional Customer Identification – New Account for an Existing Customer

This example explains the creation of sub-accounts for a client of an existing institutional customer and linkage of the new sub-accounts to existing customer information in the Central Repository using the Customer Information Approach.

In this example, Firm B defines customer sub-accounts representing D-Fund's client, ABC, Inc., the beneficial owners of the orders being placed through Firm B by D-Fund. The CAT Plan Processor will set up new sub-accounts as an amendment to existing institutional Customer Account Information.

To set up new customer sub-accounts in its system, Firm B will collect all relevant information from D-Fund such as:

- Name: *ABC, Inc. (client of D-Fund)*
- Address: *Cape Cod, MA*
- LEI: *GHIJ33333LPM444Q7896*
- Larger Trader ID: *N/A*
- Role: *Account Holder*

Since D-Fund is an existing customer of Firm B, the firm will create new sub-accounts for D-Fund's client, ABC, Inc., and assign them firm-designated identifiers and link both D-Fund and ABC, Inc. to the firm-designated identifiers of the new sub-accounts.

In this scenario, Firm B will create two sub-accounts for ABC, Inc., and assign them firm-designated IDs, *SA555555* and *SA777777*. These sub-accounts will also be linked to D-Fund, which has the trading authority on behalf of its client, ABC, Inc., and is an existing client of Firm B (firm-designated ID, *DF* and effective date, *May 23, 2012*).

Sub-account 1:

- Reporter-ID: *Firm B*
- Firm-designated ID: *SA555555 (New sub-account)*
- Firm-designated ID Type: *Account Number*
- Effective date: *Feb. 6, 2013*

Sub-account 2:

- Reporter-ID: *Firm B*
- Firm-designated ID: *SA777777 (New sub-account)*
- Firm-designated ID Type: *Account Number*
- Effective date: *Feb. 6, 2013*

The above mentioned information will be stored by Firm B in the firm's customer information repository.

CAT Reporter: Firm B may provide to the Central Repository the new account information and the information for the two customers: D-Fund and ABC, Inc. that are linked to the same account:

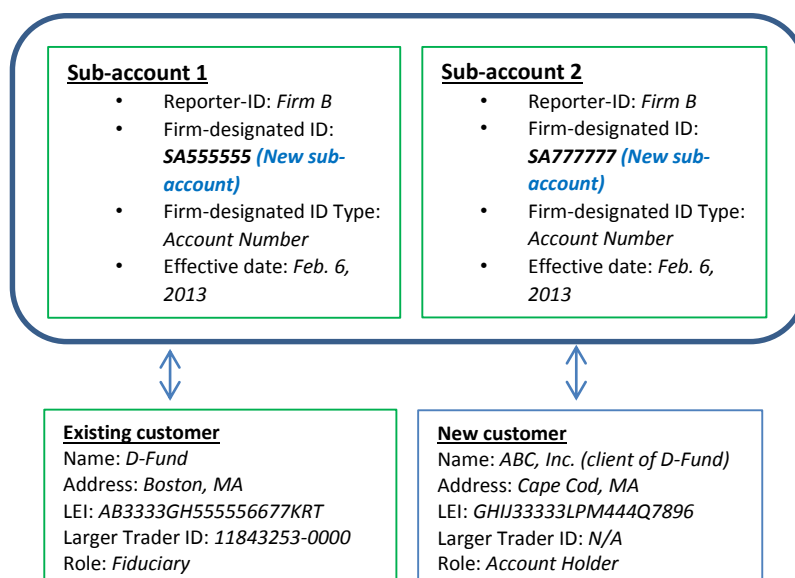


Figure 2: New Account Information submitted to the Central Repository by CAT Reporter. The new account numbers (firm-designated identifier SA555555 and SA777777), for a new client, are linked to an existing customer.

CAT Plan Processor: After the CAT Plan Processor receives new account information from Firm B that is linked with two customers, D-Fund and ABC, Inc., it may perform the following process:

1. Conduct syntactic and semantic checks on the submitted data.
2. Check whether the customers D-Fund and ABC, Inc. already exist in the Central Repository.
 - a. For ABC, Inc., the Plan Processor may use the unique identifier, LEI, to search for a customer in the CAT customer repository. Since, ABC, Inc. is a new customer no match may be found in the CAT customer repository. The CAT Plan Processor may
 - i. Create a new record for ABC, Inc. in the Central Repository and assign a new unique Customer-ID, CAT777777.
 - ii. Link the new Customer-ID, CAT777777, to the following information provided by Firm B:
 - Reporter-ID: Firm B
 - Firm-designated ID Sub- Account 1: SA555555
 - Firm-designated ID Sub- Account 2: SA777777
 - Effective date: Feb. 6, 2013
 - LEI: GHIJ33333LPM444Q7896
 - Other customer information (Name, Address, Role, etc.)
 - b. For D-Fund, which exists in the Central Repository, the CAT Plan Processor will use the firm-designated ID and effective date to find D-Fund's Customer-ID. The search will return Customer-ID, CAT555555.
3. Since the new sub-accounts, SA555555 and SA777777, are linked to both D-Fund and ABC, Inc., the CAT Plan Processor will link these two sub-accounts to both D-Fund and ABC, Inc.'s Customer-IDs, CAT555555 and CAT777777, respectively and other customer information provided by the firm to uniquely identify the customers.

4. The mapping among customer information, new sub-account information and Customer-IDs will be stored in the Central Repository. When Firm B submits the firm-designated IDs and effective dates for these customers, the CAT Plan Processor may retrieve the respective Customer-IDs.

Appendix C **Linking Allocations to Executions – Illustrative Example**

Example:

Firm A has an investment adviser with Firm Designated ID “IA11111” and Customer-ID “CAT1111”. The adviser enters the following 3 orders for 1,000 shares each and receives executions for a total of 2,400 shares at 10.018.

CAT Order ID 123: Firm Designated ID “IA11111” Buys 1,000 at 10.01 in which 1,000 are shares traded at 10.01

CAT Order ID 456: Firm Designated ID “IA11111” Buys 1,000 at 10.02 of which 800 shares are traded at 10.02

CAT Order ID 789: Firm Designated ID “IA11111” Buys 1,000 at 10.03 of which 600 shares are traded at 10.03

When entering the orders, the investment adviser will be identified through the Firm Designated ID “IA11111”. The execution is allocated to four accounts. Instead of showing the allocation by Order ID (which would require member firms to make significant system changes), CAT will display the allocated quantity by Firm Designated ID which will be tied to the Customer-ID:

Allocation

Firm Designated ID A1111 is allocated 600 shares by Firm Designated ID IA11111, at an average price of 10.018

Firm Designated ID A2222 is allocated 600 shares by Firm Designated ID IA11111, at an average price of 10.018

Firm Designated ID A3333 is allocated 600 shares by Firm Designated ID IA11111, at an average price of 10.018

Firm Designated ID A4444 is allocated 600 shares by Firm Designated ID IA11111, at an average price of 10.018

Each of the allocated accounts will be tied to their respective Customer-ID which will be tied to the investment adviser’s Customer-ID.