Marcia E. Asquith
Senior Vice President and
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August 9, 2010

Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Via Email to rule-comments@sec.gov

Proposed Rule Regarding a Consolidated Audit Trail (File No. S7-11-10)

Dear Ms. Murphy:

The Financial Industry Regulatory Authority, Inc. (“FINRA”)\(^1\) appreciates this opportunity to comment on the Securities and Exchange Commission (“Commission” or “SEC”) rule proposal on the creation and implementation of a consolidated audit trail, as published in the Federal Register on June 8, 2010 (the “Proposal”).\(^2\) In general, FINRA agrees with the issues raised by the SEC regarding the regulatory audit trails available today and strongly supports the creation of a consolidated audit trail.\(^3\) However, as described below, FINRA has concerns with certain aspects of the Proposal and believes that an alternative approach of building on existing audit trails will allow for the creation of a consolidated audit trail in the most efficient, effective, and expeditious manner.

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\(^1\) The comments provided in this letter are solely those of the staff of FINRA; they have not been reviewed or endorsed by the FINRA Boards of Governors. For ease of reference, this letter may use “we” and “FINRA” interchangeably, but these terms refer only to FINRA staff.


\(^3\) FINRA has consistently advocated for the establishment of a consolidated audit trail as a way to enhance surveillance of trading activity across multiple markets. See, e.g., Comment Letter from Marcia Asquith, Secretary, FINRA, to Elizabeth Murphy, Secretary, Commission, dated April 23, 2010; Comment Letter from Robert Glauber, Chairman and CEO, NASD, to Jonathan G. Katz, Secretary, Commission, dated March 15, 2005; Comment Letter from Barbara Sweeney, Secretary, NASD, to Jonathan G. Katz, Secretary, Commission, dated June 20, 2003.
As FINRA and other self-regulatory organizations ("SROs") set out in our joint comment letter submitted in response to the Proposal ("Joint Letter"), effective surveillance in today's fragmented marketplace is severely hampered by the disjointed audit trails that exist among SROs that make it difficult to surveil trading activity across markets and to create cross-market reconstructions in a timely manner. As a result of the increase in market fragmentation, the changes that have taken place in trading strategies, and the disparities that exist in audit trail requirements from market to market, there is not an easily attainable, comprehensive picture of all trading activity in the U.S. equity markets. With the proliferation of market linkages and cross-market trading activity, SROs and the SEC must be able to more readily and easily obtain a complete view of trading activity across markets. As explained fully in the Joint Letter, the current systems in place that were designed to enhance cross-market surveillance, such as the Intermarket Surveillance Group audit trail, are inadequate. Comprehensive intermarket surveillance is essential to ensuring the overall integrity of the U.S. securities markets, and this can only be achieved by having a single audit trail that includes both order and transaction information.

Although each market currently requires that certain transaction-related information be reported, the content, format, and level of detail of the information are subject to wide variation across markets. The disparities that exist in pre-trade data are even more pronounced, with some SROs not requiring regular reporting of order information. This lack of uniformity in regulatory data creates regulatory gaps between markets and may also provide incentives for market participants to conduct trading activities on markets through which less regulatory data is collected on an automated basis. In fact, as noted in the Joint Letter, it is plausible that certain market participants, knowing the extent of current regulatory fragmentation, now consciously spread their trading activity across several markets in an effort to exploit this lack of uniformity in audit trail requirements. A consolidated audit trail, one that includes both order information and transaction information, is needed to ensure that audit trail requirements are uniform across market participants and markets and that costs are equitably allocated. It must also provide for direct and timely access by the SROs and the SEC to audit trail data.

A consolidated audit trail would also be a critical step toward consolidated market surveillance, which is needed to ensure that consistent surveillance patterns and standards are applied to the audit trail data. From a cost standpoint, a consolidated audit trail and consolidated market surveillance should achieve economies of scale that ultimately lower costs for both the markets themselves and market participants. Rather than each SRO separately maintaining its own surveillance staff and surveillance programs that are searching for the same behavior, and thus creating redundancies, technology and staff
resources can be consolidated into a single enterprise with costs equitably allocated across all SROs.

As set out in the Joint Letter, the necessary components to an effective, comprehensive, and efficient consolidated audit trail are: (1) uniform data (both data content and data format); (2) reliable data; and (3) timely access to the data by SROs and the SEC. FINRA believes this can be achieved most effectively, efficiently, and expeditiously by expanding FINRA’s existing OATS requirements to additional securities and non-FINRA member broker-dealers and by consolidating exchange data in a central repository to be used with OATS data. FINRA’s views on these issues are set forth below. First, we provide our views on the content needed for an effective consolidated audit trail and our experiences in addressing increasingly complex order handling scenarios. Second, we discuss the utility and reliability of data, particularly in the context of the SEC’s focus on real-time reporting of order information. Finally, we discuss the benefits of moving forward with a consolidated audit trail that is built off of existing systems that have proven effective over time and our views on establishing and implementing a consolidated audit trail.

Consolidated Audit Trail: Data Content and Format

As the Commission is aware, FINRA has been collecting, reviewing, and analyzing order audit trail data for over a decade and is uniquely positioned to provide a first-hand view of the challenges of creating and implementing an audit trail of a magnitude comparable to that described in the Proposal. When first implemented in March 1999, OATS received and processed on average three million order events a day from approximately 600 reporting firms. Over the years, OATS volume has grown tremendously, with current volumes exceeding an average of 300 million order events per day from approximately 1,200 reporting members. In addition to the growth in volume, the OATS rules have been amended numerous times to, among other things, expand the scope of securities and data elements subject to OATS reporting. Further, FINRA has amended the OATS rules as necessary over the years to accommodate changing market structures and trading strategies. Currently, OATS captures 73 separate data elements that are used to create a complete lifecycle of each order from receipt through execution. The OATS data has been instrumental in allowing FINRA to surveil for compliance with customer protection rules, such as Limit Order Display and Limit Order Protection, and has been incorporated into various automated surveillance patterns designed to detect manipulative trading activity. FINRA strongly believes OATS has directly contributed to improving its members’ compliance with respect to customer protection rules, enhancing

Moreover, the natural corollary to consolidation of market surveillance is more standardized and uniform order handling rules (e.g., harmonizing rules such as limit order protection and best execution). This would not only improve surveillance but would also benefit investors, by providing them with the highest level of protection applied on a consistent basis, and firms, through a reduction in compliance costs.
the effectiveness of FINRA’s automated surveillance, and allowing FINRA to recreate
market activity.

FINRA’s experience has shown that there are certain critical elements necessary
to conduct effective surveillance across multiple markets. As an initial matter, it is
essential that each market participant is required to report the same data elements to the
consolidated audit trail in a uniform way. Moreover, consolidated data is only useful if
each reporting member utilizes the same timekeeping system.\(^5\) FINRA’s experience in
conducting surveillance of audit trail data has shown that requiring clock synchronization
to a specific time standard (NIST) and event timestamps down to the millisecond is an
essential component of any consolidated audit trail. Creating accurate market
reconstructions and surveilling trading on an automated basis is possible only if the time
stamp on each report is based on the same timekeeping system.

FINRA also believes that each broker-dealer must have a unique identifier that
remains the same regardless of the market on which the participant is trading. Cross-
market surveillance efforts are unduly complicated if a single market participant has a
different identifier for each market on which the participant trades. In addition, FINRA
believes that identifiers should be more granular than at the firm level, such that the
consolidated audit trail requirement should include not only a firm-level identifier, but
also sub-identifiers to distinguish individual desks or trading units within a firm. The
current market participant identifier (“MPID”) system is antiquated and must be
reformed. In fact, multiple firms can currently be represented by a single MPID that is
used for market access arrangements and is assigned to another firm that has no direct
relationship to the trading activity being reported under that MPID.\(^6\)

One of the most significant challenges for FINRA in developing and operating
OATS is ensuring that its reporting structure and framework adapts and is able to keep
pace with evolving order handling processes. A significant number of orders in today’s
marketplace are handled in a manner other than on a one-for-one basis (i.e., where a
single order is handled with a single route and/or execution, as was often the case when
OATS was first implemented). Firms may use separate order management systems to
receive orders and obtain executions for such orders, and it is FINRA’s understanding
that often there is no real-time linking of order data in trading systems today. In addition,
batch processing and order splitting occur in both pre-trade and post-trade processes.

\(^5\) See, e.g., FINRA Rule 7430, which requires that members reporting information to OATS
synchronize their clocks. See OATS Reporting Technical Specifications, at 2-1 (July 12, 2010), available at

\(^6\) FINRA provided its view on the use of MPIDs in a comment letter on the SEC’s proposal on
market access arrangements. See Comment Letter from Marcia Asquith, Secretary, FINRA, to Elizabeth
Murphy, Secretary, Commission, dated March 25, 2010.
Firms may receive multiple orders and combine them for order handling purposes or may take large orders, split them into multiple orders, and send them out to multiple market centers. In fact, a single order can be both split and batched during its lifecycle.

For example, a firm may receive three separate and distinct customer orders that are consolidated to be worked as one larger order. In obtaining best execution for the larger consolidated order, a firm may send pieces of the consolidated order to multiple market centers. Upon receiving execution reports from the various market centers, the firm places the acquired shares in a firm-owned or controlled account until a determination is made as to the allocation of such shares among the three original customer orders, each of which was received with instructions from the customer to receive one average price execution. This batching of multiple orders, and then the subsequent splitting of the consolidated order, presents significant challenges when attempting to create a fully linked lifecycle for each customer order, including all related street-side executions.\footnote{Following is an illustration of orders that are batched and processed.}

The Proposal acknowledges some of these complexities, including parent-child orders and riskless principal transactions. The firm receives the following orders for the same security:

- 10:00:00  Receive Order to Buy 10,000 from Customer A
- 10:00:15  Receive Order to Buy 10,000 from Customer B
- 10:00:30  Receive Order to Buy 10,000 from Customer C

All of the orders are sent to the firm’s trading desk, where a decision is made to enter these orders into a trading application that will work them as one 30,000 share order to buy. The single order is then split and routed as follows:

- 10:00:45  Route 2,000 Shares to Market Center A
- 10:00:45  Route 5,000 Shares to Market Center B
- 10:00:46  Route 7,500 Shares to Market Center C
- 10:00:47  Route 15,500 Shares to Market Center D

The firm receives fills totaling 27,500 shares back from the four market centers and determines to allocate 10,000 shares each to Customer A and Customer B at the average price obtained for the 27,500 shares. The remaining 7,500 shares are allocated to Customer C at the same average price. The firm sells 2,500 shares to Customer C from its own account at the same average price to complete the balance of the order.

\footnote{75 FR 32575, 32577.}
imposed, and the firms have successfully implemented, very technical OATS requirements to capture these trading scenarios to the greatest extent possible, given the jurisdictional limitations of OATS. FINRA strongly believes that building on this foundation of OATS reporting to achieve a consolidated audit trail will be far simpler than attempting to institute a new structure as envisioned by the Proposal. Moving to a wholly new system would require firms and SROs to engage in substantial reprogramming to replace a system that has been refined over the years.

For example, to address the jurisdictional limitation of OATS with respect to riskless principal trading in a manner consistent with the Commission’s objectives for a consolidated audit trail, when a firm routes a representative proprietary order(s) in place of a customer order, OATS could be adapted to include the representative order in the lifecycle of the customer order. If a firm were unable to relate the route of a representative order to a specific customer order (such as the scenario in which multiple customer orders are aggregated and worked as one larger order), the firm could be required to report information reflecting that the customer order was part of an order aggregation process. The aggregated representative order would be reported with linkages back to each individual order included in the aggregated order. Further, each route generated as a result of working the representative order would be linked to the representative order. The end result would be that the customer order would link to the firm-originated representative order, which would link to the route to the other market centers and, finally, to actions taken on those orders by the receiving market centers.

Using the example set forth in footnote 8, the reporting requirements envisioned by FINRA would result in the following. The example assumes the firm is acting in a riskless principal capacity, but could also be applied in an agency scenario by replacing the proprietary account with a firm-owned or controlled agency allocation account.

Firm A

10:00:00  New Order Report 1234 Buy 10,000 from Customer A
10:00:15  New Order Report 7896 Buy 10,000 from Customer B
10:00:30  New Order Report 3927 Buy 10,000 from Customer C

10:00:01  Internal Transfer Buy 10,000 IT #1234
10:00:16  Internal Transfer Buy 10,000 IT #7896
10:00:31  Internal Transfer Buy 10,000 IT #3927

10:00:01  New Order 9Y7C3 Prop Acct Buy 10,000 IT #1234
10:00:16  Modification 8U5T2 Prop Acct Buy 20,000 IT #7896
10:00:31  Modification 6G4Q9 Prop Acct Buy 30,000 IT #3927
10:00:45  6G4Q9 Route 2,000 Shares to Market Center A Routed Order ID (ROID) 9654
10:00:45  6G4Q9 Route 5,000 Shares to Market Center B ROID 7765
10:00:46  6G4Q9 Route 7,500 Shares to Market Center C ROID 4637
10:00:47  6G4Q9 Route 15,500 Shares to Market Center D ROID 5599

Market Centers A, B, C, and D would each report the receipt of an order from Firm A and the corresponding ROID from Firm A. Further, these Market Centers would report all subsequent actions, including executions, taken on the order from Firm A. The RT from Firm A’s proprietary account could then be linked to all subsequent events related to the orders at each Market Center via the link created by the ROID passed from Firm A to the respective Market Center.

Firm A would then report the execution of each customer order as follows:

10:00:50  Fill Report 1234, Buy 10,000 $10.1145, Riskless Principal
10:00:50  Fill Report 7896, Buy 10,000 $10.1145, Riskless Principal
10:00:50  Fill Report 3927, Buy 7,500 $10.1145, Riskless Principal
10:00:50  Execution Report, Buy 2,500 $10.1145, Principal, Branch Sequence #99999

Firm A would have to submit a trade report to a FINRA transaction reporting system for the 2,500 share principal sale to the customer at $10.1145. The OATS EX report would be required to link to the TRF report based on the Branch Sequence #99999. For many, this is a mind-numbing example, but it is a commonplace occurrence in today’s market. FINRA’s proposal to deal more comprehensively with riskless principal reporting using OATS illustrates that OATS, a system that is functioning today with high compliance rates, can be adapted to satisfy the Commission’s objectives in an efficient and timely manner, and that it would be exceedingly complex and difficult to replicate this functionality across the industry.

Based on our experience with OATS, FINRA believes that the proposed requirement for a single order identifier to stay with an order as it is routed from one market center to another is unworkable, particularly in more active securities. Rather, FINRA believes a better approach (and the one FINRA uses today with OATS) is to require market participants to assign a separate routing identifier as orders, or pieces of orders, are sent to other market centers. With this reporting structure, each individual route contains both the parent order identifier and the unique routing identifier, thereby allowing for each route to be linked to the parent order, while at the same time having the ability to distinguish between routes with similar attributes.
For example, if a single order is broken into smaller pieces for execution, under the Proposal, the same order identifier would be sent with each piece of the order routed away. If two pieces of the same order are sent to the same market center, timestamps and other attributes, such as share quantity and price, will have to be used to attempt to create an accurate linkage for each individual piece of the larger order. If unique routing identifiers were assigned to each individual route (in addition to capturing the original order identifier), no “fuzzy” matching criteria, such as a timestamp, would be necessary to create an accurate link to related order events. Further, FINRA strongly recommends a requirement that routing identifiers be unique within a firm within a market day, again, to ensure accurate linkages.

For example, under the Proposal, if Firm A received a not held order to buy 1,000 shares of ABC security at $10 or better and, in an effort to obtain best execution for that order, routed it in ten separate 100 share pieces to various market centers, each 100 share route would be sent with Firm A’s original order identifier. Specifically:

Firm A

10:00:00.00 Order 1234 Buy 1,000 Shares at $10 Not Held
10:00:01.01 Route 1234 Buy 100 Shares at $9.98 to Market Center B
10:00:05.00 Route 1234 Buy 100 Shares at $9.99 to Market Center B

Market Center B

10:00:01.05 Order 1234 Buy 100 Shares at $9.98 from Firm A
10:00:05.02 Order 1234 Buy 100 Shares at $9.99 from Firm A

In this scenario, to accurately create the lifecycle of the original 1,000 share order, including subsequent routes or executions related to the 100 share order sent to Market Center B at 10:00:01.01 and received at 10:00:01.05, and the second 100 share order sent at 10:00:05.00 and received at 10:00:05.02, the timestamp (with an allowance for the milliseconds difference in the time it took to transmit the order), and the price must be used to obtain an exact match. If individual pieces of the same order are sent at the same price, then timestamp alone must be relied on for a match. If individual pieces of the same order are sent at the same time and at the same price, then an exact match cannot be made.

FINRA’s experience is that this scenario is not uncommon and, consequently, FINRA’s OATS rules provide for the use of a routed order identifier, which is separate and distinct from the firm’s order identifier. See FINRA Rule 7440(c). With a separate unique routed order identifier for each route, other data elements such as timestamp and price are not necessary to ensure an exact match. The same scenario presented above using a separate unique routed order identifier would be reported as follows under OATS:
Firm A

10:00:00.00 Order 1234 Buy 1,000 Shares at $10 Not Held
10:00:01.01 Order 1234 Route 100 Shares to Market Center B; Routed Order ID: AB45
10:00:05.00 Order 1234 Route 100 Shares to Market Center B; Routed Order ID: CV98

Market Center B

10:00:01.05 Order 92TY Buy 100 Shares at $9.98 from Firm A; Routed Order ID: AB45
10:00:05.02 Order 71NM Buy 100 Shares at $9.99 from Firm A; Routed Order ID: CV98

In addition to order identifiers, the Proposal also contemplates the use of unique customer identifiers, in part due to the length of time it takes regulators under current reporting regimes to uncover the ultimate customer behind trading activity. FINRA fully supports more granularity in an order audit trail, such as obtaining high-level customer identity information (e.g., large trader identification), so that patterns of trading across multiple market centers can be quickly and readily identified, and FINRA agrees that the timeframe needed to identify customers should be greatly reduced; however, we question the utility of receiving the identity of both the beneficial owner and the person exercising the investment discretion, if different, for each and every order reported to the consolidated audit trail. We also question the benefit of requiring that such detailed information as account opening dates, position opening and closing, and registered representative/branch office information be reported on each and every order. Millions of orders are received and originated every day, with only a very small percentage ever coming under scrutiny. Capturing this information will vastly increase the amount of data reported to the consolidated audit trail but will be useful in only some circumstances. Once trades of interest have been identified, a more streamlined and faster request method could be developed to obtain other more detailed information, such as branch office locations, account opening dates, and customer positions. Broker-dealers could be required to have this information stored in an automated manner, such that it can be provided to regulators promptly (e.g., within 24 hours) upon request.

The move to a consolidated audit trail will present numerous technological challenges to regulators and firms. Consequently, FINRA generally agrees that the

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9 For example, if an investment advisor places an order to later be allocated among 20 clients, it will be very difficult to facilitate in any practical way the reporting of account opening date, type, number, etc., for 20 clients on one order record. More importantly, if the trade comes into question, the person exercising the investment discretion, not the beneficial owner, will likely be the first person of interest in any type of review or investigation of such trading activity.
consolidated audit trail should be phased in with respect to the scope of securities and information that is reportable and then expanded gradually over time. Gradually expanding the scope of information will give the Commission, SROs, and firms an opportunity to adjust to new systems and requirements with a more limited data set.

FINRA also supports the Commission’s proposal to require that all proprietary orders, including proprietary orders originated in the normal course of market making, be reported to the consolidated audit trail by including proprietary orders within the definition of “order.” Many existing trading restrictions, such as front running and limit order protection, focus on the timing of proprietary trading, and this information is essential to any effective audit trail. However, FINRA believes that the Commission should carefully consider the scope of such requirements to ensure that redundant reports are not made to the consolidated audit trail by having broker-dealers report information related to a proprietary order that is already captured in exchange data. For example, bids and offers can reflect proprietary orders that have been routed to a market center, such as an exchange, for display. To the extent that the origination of that proprietary order and its display on an exchange as a bid or offer are simultaneous, it may be redundant to have both the firm and the exchange include that data in the consolidated audit trail. Similarly, the exchange data may include any changes to that bid or offer, once on the exchange.

Consolidated Audit Trail: Real-Time Data and Data Reliability

As detailed at length in the Joint Letter, FINRA has serious concerns regarding the Commission’s proposed significant expansion of real-time reporting, both from data management and cost-benefit perspectives and because of reliability issues. The Commission states in the Proposal that it has preliminarily concluded that “end-of-day reporting, coupled with the current laborious process of identifying the ultimate customer responsible for a particular securities transaction that may take several days, weeks or even months, can impact effective oversight by hindering the ability of SRO regulatory staff to identify manipulative activity close in time to when it is occurring, and respond to instances of potential manipulation quickly.” Consequently, the Commission concludes that “requiring the submission of consolidated audit trail information on a real time basis would help enable more timely cross-market monitoring or surveillance and investigations of, or other responses to, market anomalies.”

In reaching this conclusion, FINRA believes that the SEC has significantly overvalued the regulatory benefits to be achieved by expanded real-time reporting as opposed to a T+1, or even later, basis while underestimating some of the problems with relying on real-time data. This is true not only because certain information is difficult, if

10 75 FR 32556, 32567.
11 Id. at 32572.
not impossible, to provide on a real-time basis, but also because real-time data is less reliable. Although there is value to receiving certain information on a real-time basis, receiving most of the data the Commission proposes to require on a real-time basis – particularly order data – provides very little incremental real-time benefit to regulators. The costs associated with the breadth of real-time reporting proposed by the Commission would be significant and far outweigh the limited regulatory benefit gained by such a real-time reporting system.

The realities of order handling in today’s marketplace make accurate real-time order reporting problematic, and automated surveillance is only useful if the underlying data is accurate and complete. For example, to ensure the integrity of OATS data submitted, FINRA performs over 152 separate OATS data validations on each order event, each of which can result in OATS data submissions being rejected and generating an error message. As a result, FINRA performs over 40 billion separate checks each day to ensure OATS data conforms to all applicable specifications. Members are then required by rule to repair and resubmit rejected OATS data. Although members’ OATS compliance rates are very high on average, almost 425,000 reports per day, on average, are rejected and must be corrected. Accordingly, to use audit trail data before such validations have been performed may result in a severely distorted picture of trading and interfere with effective oversight.

FINRA also has dedicated a staff of 18 employees to OATS compliance to ensure the accuracy, completeness, and timeliness of the OATS data. In addition to the dedicated OATS staff, FINRA operates both a Business Help Desk and a Technical Help Desk that provide support to members with respect to, among other things, OATS-related questions. During the past twelve months, these two Help Desks have received over 16,000 OATS-related calls. These resources, and the cases and inquiries they handle,

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12 FINRA notes that compliance rates for OATS steadily improved over time as members gained experience with the system. For example, when the OATS rules were first implemented, the match rate between executed orders and the related trade report submitted to an NASD transaction reporting system was only 76%. Currently, this match rate is consistently over 99%, which reflects the significant time and effort that has been expended by the industry to make their systems OATS compliant. FINRA believes that creation of a new system, rather than building off of an existing reporting infrastructure, will necessarily create a learning curve and lead to reduced compliance rates over the short-term.

13 In addition to the current resources dedicated to OATS, during the initial stages of OATS and in response to subsequent significant changes to OATS, FINRA staff conducted national educational outreach campaigns to inform firms’ efforts to comply with OATS requirements. These campaigns included presentations to various industry groups (e.g., Financial Information Forum, SIA Clearing Firm Committee, Midtown Regulatory Group), FINRA conferences and compliance events, firm-sponsored events, multiple road shows, industry-wide conference calls and webinars. In addition, special efforts have been made to assist smaller firms with their OATS reporting obligations, including publication of a Small Firm User Guide, enhancements to FINRA’s OATS Web Interface, small firm open houses, and road shows. FINRA also has an entire website dedicated to OATS, on which FINRA publishes a list of over 250 frequently
illustrate that even when order information is received on a T+1 basis, there are still data integrity issues. If this information were to be received real-time, FINRA believes the data integrity issues would be significantly compounded.

In addition to the undue expense and significant difficulty of producing real-time order data, much of the information the Commission has proposed to be reported real-time has limited real-time regulatory benefit. The utility of real-time data lies in gathering preliminary investigative information about “what happened” (i.e., conducting preliminary market reconstructions) and can be used for some limited regulatory functions, such as surveillance for compliance with Regulation M and the trade through and locked-crossed provisions of Regulation NMS; high-level identification of issues experiencing rapid price movements; gathering preliminary information for clearly erroneous instances (e.g., determining which firm may be responsible for a “fat finger” error); conducting quick, but preliminary, reconstructions of intra-day market events; and identifying, on a preliminary basis, fraudulent and manipulative schemes like pump and dump schemes and abusive short sales. However, the utility of real-time data is necessarily limited, both because non-data elements are generally essential for forming a complete picture of market activity and because real-time data is less reliable than data that has undergone validation and been supplemented with late and/or corrected data. Even assuming the SEC and SROs received order audit trail data on a real-time basis, given the volume of data, the number of market participants, and the general complexity of trading strategies in today’s ever-evolving market structure, analyzing such data to evince intent, motive, or even to reconstruct a sequence of events is a substantial undertaking. Moreover, as noted above, substantial data validation, analysis, mapping, and normalization must be conducted before data can be run through surveillance patterns, which steps are only further complicated when data is received from multiple markets for integration into cross-market surveillance patterns.

As noted above, FINRA fully recognizes and supports more granularity in an order audit trail, such as obtaining high-level customer identity information (e.g., large trader identification). However, notwithstanding the usefulness of this data, FINRA’s experience over decades of conducting its surveillance activities has not shown that having this level of information in real-time provides any measurable benefit and would not outweigh the costs and burdens of gathering and reporting this information real-time for every order received or originated in the U.S. equity markets on a daily basis.

Although an effective audit trail must provide data in a timely manner so that regulators can respond as quickly as possible to questionable trading activity, market surveillance is most effective once regulators have an accurate and complete picture of trading activity. Ironically, having real-time data would be most useful on days and for asked questions and answers, OATS Reports, and other interpretive guidance, all of which are updated on a regular basis.
instances when the quality of that data is the least reliable. For example, the tremendous volumes and volatility resulting from the events of May 6, 2010, put an enormous amount of stress on market participants’ trading systems and on the trading and regulatory reporting systems operated by the SROs and securities information processors alike. Such stresses inevitably would apply to any real-time consolidated audit trail, thereby decreasing the quality, accuracy, and utility of such data in the specific instances in which they would be most critical. Moreover, the mere act of consolidating disparate SRO audit trail information, without recourse to real-time requirements, would go a long way to remedying even this situation.

As noted in the Joint Letter, FINRA is also concerned that the proposed real-time data reporting scope and framework, including collection, linking, processing, and reporting of order data, could strain resources and ultimately have a deleterious effect on order handling and trading systems, particularly at those times when their proper functioning is most critical. The scope of information the Commission proposes to be reported real-time could place an enormous and unnecessary strain on the resources and systems of both SROs and firms intra-day, leading to potential inefficiencies and delays in the processing of live customer orders and quotes and inferior executions of orders during critical time periods. As such, the Commission should carefully consider the potential negative impact to investors and the market as a whole of mandating the real-time collection and processing of data of the scope proposed by the SEC.

Although, for the reasons described above and in the Joint Letter, FINRA does not support the broad real-time reporting requirements set forth in the Proposal, FINRA shares the Commission’s concern about enhancing certain aspects of real-time data and supports the use of such requirements where possible and where beneficial. An alternative to an all-encompassing real-time order audit trail may be to standardize and consolidate existing real-time reporting systems (i.e., trade reporting and quotation systems with standardized identification conventions for market participants) and add some additional level of granularity to existing order audit trails. Consequently, we believe the consolidated audit trail could enhance certain elements of information reported real-time while also collecting and reporting more specific order information on a T+1 basis or later. For example, certain types of market participants, such as large traders, may be of particular regulatory interest. Thus, the SEC could require that some information, such as identifiers for certain traders, be reported on a real-time basis to enable the SEC and SROs to do quicker preliminary market reconstructions. FINRA believes that an

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14 FINRA alone received and processed over 5.1 billion pieces of market data for trade date May 6, 2010. This data included OATS order events, Nasdaq Stock Market order and market events, Nasdaq OMX BX order and market events, NBBO quotes, market participant quotes, and TRF trade reports. FINRA notes that approximately 50 million order events, or 6% of the OATS data for May 6, 2010, were submitted after the reporting deadline, and approximately 390,000 trade reports (representing .03% of trade reports) were submitted late, including trades and reversals submitted to FINRA subsequent to May 6, 2010.
approach that is narrowly focused – such as the one taken by the SEC in its large trader proposal – can be implemented on a real-time basis to achieve the critical goals of the Proposal.

Creation of a Consolidated Audit Trail

FINRA believes that existing audit trails should be used as the basis for establishing a consolidated audit trail, and that building off of OATS, in particular, is the best way to achieve the Commission’s goals. Using existing systems could achieve the goals of a consolidated audit trail within a much shorter time and at significantly less expense to the industry, and ultimately, to investors. OATS, which has been in use for years and operates efficiently and effectively, can be expanded in a way that significantly reduces both the costs associated with establishing a consolidated audit trail and the time needed to move toward a fully consolidated audit trail. Using OATS as the basis of a consolidated audit trail would substantially reduce the amount of time necessary to establish a consolidated audit trail, likely by a factor of years, and would minimize, if not eliminate, the regulatory data gaps that exist today.  

Many market participants already have systems in place to comply with OATS. Building off of OATS greatly reduces the cost and time necessary to create and implement a new system because the programming changes needed to comply with an entirely new system are substantially greater than expanding existing protocols. In fact, FINRA recently filed a proposed rule change to expand OATS to all NMS stocks and believes this expansion can be achieved quickly and efficiently because firms already have the technological infrastructure and reporting protocols in place.

In the Proposal, the Commission expressed concerns with “retrofitting” existing audit trail requirements to create the consolidated audit trail; however, these concerns can be addressed without recourse to developing an entirely new central repository. For example, the Commission states that “[w]ithout centralization of the trading data in a uniform electronic format, . . . the Commission’s goals of cross-market comparability and ready access could not be achieved.” There is no reason that the centralization sought by the Commission is not achievable through expanding OATS and providing all SROs, and the Commission, with access to OATS data.

Moreover, if the SEC moves forward with mandating the creation of an entirely new system, rather than enhancing existing audit trail requirements, there likely will be negative unintended consequences during this interim development period, which may last several years. It will be difficult to justify any changes or enhancements to existing systems, given the technological challenges and significant resource allocation that will be necessary to develop and implement a brand new system.

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15 Moreover, if the SEC moves forward with mandating the creation of an entirely new system, rather than enhancing existing audit trail requirements, there likely will be negative unintended consequences during this interim development period, which may last several years. It will be difficult to justify any changes or enhancements to existing systems, given the technological challenges and significant resource allocation that will be necessary to develop and implement a brand new system.

16 See SR-FINRA-2010-044.

17 See 75 FR 32556, 32564.
It is FINRA’s view that, although portions of any consolidated audit trail may necessitate the development and implementation of an NMS plan—such as the integration of exchange data, the allocation of costs, the creation of reporting requirements that reach all broker-dealers, the terms of access to the consolidated audit trail by all SROs, and limitations on the use of data only for regulatory purposes—any such plan should be limited in scope to those types of broad-based issues. For a consolidated audit trail to function effectively, it must be able to respond and adapt quickly to new ways of trading and handling orders. FINRA’s experience with OATS has demonstrated that technology changes and changes to technical specifications must be made regularly and promptly with respect to firm-specific reporting requirements, interpretations, and codes to keep up with complex and evolving trading and routing strategies. It would be difficult and inefficient to attempt to make these types of ongoing changes in a joint Plan environment. Accordingly, given FINRA’s experience with OATS and FINRA’s broad-based membership, FINRA believes it is best positioned to be responsible for and make such decisions.

The urgency of establishing a consolidated audit trail was acknowledged during the open meeting at which the Commission approved publishing the Proposal. There is no doubt that there are real and substantial regulatory gaps plaguing surveillance of the U.S. securities markets today and that the exploitation of these gaps is likely to get progressively worse as more time passes without a consolidated audit trail. FINRA believes, based on its significant experience in both the creation and implementation of an order audit trail and in the area of market surveillance and attendant systems, that the timeframes set forth in the Proposal for the implementation of a consolidated audit trail, if created and implemented in the way preliminarily suggested by the Commission, are unrealistic; the Proposal significantly underestimates the time necessary to create and integrate an entirely new system, and achieve high levels of data reliability and integrity, with the capabilities to achieve what the SEC envisions. Building off of existing systems would significantly reduce the amount of time necessary to establish a consolidated audit trail and integrate that audit trail into surveillance systems, likely by a factor of years, and would substantially reduce, if not eliminate, the regulatory data gaps that exist today.

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18 For example, the Commission suggests in the Proposal that SROs would have two months after information has begun to be reported to the central repository to update their surveillance systems to allow for testing of new surveillance patterns. This amount of time is woefully insufficient to develop systems and test them; indeed, for some time after the new surveillance systems are in place, they would need to be validated by parallel testing with existing systems until the data integrity was confirmed and the new system and new surveillance protocols were validated. FINRA believes the necessary changes to multiple, highly complex patterns to accommodate a completely new consolidated audit trail will take at least a year to make.
FINRA appreciates the opportunity to provide comments on the Proposal. As set out above, and in the Joint Letter, FINRA has concerns about the overall approach proposed by the Commission, particularly the expansion of real-time reporting requirements. Given FINRA’s experience in developing and operating OATS, we believe we are uniquely positioned to provide the Commission our perspective on many of the more specific questions posed by the Commission. However, those views will necessarily be informed by how the Commission resolves the larger issues surrounding the consolidated audit trail. Consequently, FINRA would welcome the opportunity to discuss the issues in this letter, or more specific issues, with the Commission and its staff as it moves forward with this effort. FINRA stands committed to working with the Commission, other SROs, and the industry to help bring about a more robust audit trail that will facilitate enhanced surveillance for the protection of investors and market integrity.

Sincerely,

Marcia E. Asquith

cc: Mary L. Schapiro, Chairman
Luis A. Aguilar, Commissioner
Kathleen L. Casey, Commissioner
Troy A. Paredes, Commissioner
Elisse B. Walter, Commissioner
Robert W. Cook, Director, Division of Trading and Markets
James Brigagliano, Deputy Director, Division of Trading and Markets