August 17, 2010

VIA ELECTRONIC MAIL (rule-comments@sec.gov)

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

Re: Consolidated Audit Trail; Release No. 34-62174; File No. S7-11-10

Dear Ms. Murphy:

The Securities Industry and Financial Markets Association (“SIFMA”)\(^1\) welcomes the opportunity to comment on the recent proposal of the Securities and Exchange Commission (the “SEC”) to establish a consolidated audit trail (the “Proposal”).\(^2\) We appreciate the SEC’s efforts and agree that a consolidated audit trail is long overdue. Although SIFMA fully supports the concept of a consolidated audit trail, we believe the Proposal is overly ambitious and that there are other approaches that would be just as effective in reaching the SEC’s goals with a significantly lesser burden and cost and that could be implemented much more quickly.

As detailed below, SIFMA supports the SEC’s objective of providing regulators with timely access to a more robust and effective cross-market order and execution audit trail for NMS securities\(^3\) and ultimately other securities. SIFMA believes that a centralized and

\(^1\) The Securities Industry and Financial Markets Association (“SIFMA”) brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA’s mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (“GFMA”). For more information, visit www.sifma.org.


\(^3\) “NMS security” is defined as “any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national (…continued)
comprehensive audit trail would enable the SEC and the securities self-regulatory
governments (“SROs”) to perform their monitoring, enforcement and regulatory activities
more effectively. In the current era of electronic trading, regulators need efficient access
to order and execution data from both broker-dealers and exchanges. Indeed, a
consolidated audit trail is a much-needed improvement over today’s fragmented audit trail
platforms.

In addition, over the long-term, the costs of developing a carefully designed and
appropriately scaled consolidated audit trail could be offset in part by eliminating the
individual SRO reporting requirements imposed under existing audit trail systems.4
SIFMA encourages the SEC to phase-out these existing reporting systems as the
consolidated audit trail is implemented across markets. SIFMA also urges the SEC and
SROs to rely to the fullest extent possible on the consolidated audit trail data for market
reconstructions, investigations and analyses rather than requesting data from broker-
dealers. This would be more efficient for both firms and regulators and would help
maximize the utility of the consolidated audit trail.

Although SIFMA supports this initiative in principle, SIFMA strongly believes that the
consolidated audit trail proposed by the SEC is more expansive and expensive than
necessary to achieve its intended purposes. The scope of the proposed consolidated audit
trail is overly ambitious, particularly in requiring real-time reporting of a wide range of
data elements. As a result, the proposed consolidated audit trail would take many years to
implement and would impose enormous costs on broker-dealers and SROs to produce too
much information far more quickly than is necessary for the regulatory purposes identified
in the Proposal. It is difficult to justify such a complex, time-consuming, and costly
project without a clear understanding of how the SEC and the SROs would use real-time
data.

SIFMA, therefore, respectfully requests that the SEC more specifically define its
regulatory objectives for a consolidated audit trail. Doing so would assist firms as they
collaborate with SROs, data management experts and the industry to create a useful
consolidated audit trail system.

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market system plan for reporting transactions in listed options.” 17 C.F.R. § 240.600(b)(46) (2010). The
term refers to all exchange-listed securities, including equities and options.

4 These systems include the Financial Industry Regulatory Authority, Inc.’s (“FINRA”) order audit trail
system (“OATS”), the New York Stock Exchange’s Order Tracking System and Front End Systemic Capture,
the Consolidated Options Audit Trail System, Large Option Position Reporting systems, electronic blue
sheets and other SRO reporting and audit trail systems.
Moreover, as detailed below, SIFMA urges the SEC to modify the Proposal to: (i) lengthen reporting time frames where doing so would not thwart the key regulatory objectives of the SEC; (ii) eliminate nonessential data elements; (iii) build upon an existing audit trail, such as OATS, rather than create an entirely new system; (iv) coordinate the creation of a consolidated audit trail with the SEC’s large trader reporting system proposal;\(^5\) (v) provide further guidance on governance of the consolidated audit trail, particularly as it relates to safeguarding confidentiality of audit trail data; and (vi) address issues raised by the consolidated audit trail concerning foreign traders, funding, and the new Office of Financial Research.

I. **Lengthen Reporting Time Frames**

The Proposal would require each national securities exchange and national securities association, and their members, to provide the vast majority of audit trail data to the central repository on a real-time basis and provide post-execution information by midnight. SIFMA believes that the SEC should modify the proposed reporting time frames to be consistent with current protocols for trade execution and transaction processing. In particular, the SEC should lengthen these time frames for broker-dealers to a next-day, settlement date, or later deadline. Doing so would reduce the cost and time to market of the consolidated audit trail without compromising its effectiveness.

A. **Eliminate the Real-Time Reporting Requirement**

SIFMA believes that the SEC has underestimated the costs and risks associated with real-time reporting and has not clearly articulated why real-time reporting, rather than a reporting scheme that is more closely aligned with the current trading or settlement cycles or existing reporting regimes like OATS, is essential from a regulatory perspective. Real-time reporting would impose substantial costs on broker-dealers while producing few apparent benefits. In light of this, SIFMA believes that the SEC should replace the real-time reporting requirement for broker-dealers with a next-day or later reporting requirement. Exchanges and FINRA, on the other hand, could leverage their existing real-time monitoring tools and provide real-time trading information to the consolidated audit trail. Requiring real-time reporting only by exchanges and FINRA may sufficiently advance the SEC’s goal of enabling cross-market monitoring and surveillance. Reports submitted by broker-dealers in the days following a transaction could be linked and integrated in the consolidated audit trail with the real-time reports from exchanges to allow full market reconstructions, while greatly minimizing overall implementation costs.

An intermediate option would be for the SEC to require real-time reporting for only certain data elements. If the SEC were to adopt this approach, SIFMA strongly recommends that the SEC first consult with the industry to determine individual delivery schedules for specific data elements. Cost and privacy risks should be key factors in determining whether the burdens of real-time reporting outweigh its benefits. Competitive issues and availability of data should also be significant factors in deciding whether to require real-time reporting for a particular data element. Only data that is critical to the regulatory objectives of the consolidated audit trail and capable of being reported on a real-time basis should be subject to real-time reporting requirements, while all other data should be reported on a next-day or later reporting schedule. Moreover, information should be subject to real-time reporting only if all other data needed to use that information by putting it into context are also reported in real-time. Finally, any real-time reporting requirements should be phased in over time and on an extended implementation schedule. The costs, risks and limited benefits of real-time reporting are discussed in further detail below.

1. **Costs and Risks of Real-Time Reporting**

SIFMA has serious concerns about the costs and risks of real-time reporting. These costs and risks arise from a wide range of areas, including the difficulties of updating internal architecture at broker-dealers; the costs of operating and maintaining a vast real-time reporting system; problems with data quality; the exposure to market risk while gathering data to satisfy reporting requirements; the unavailability and disparate sources of information required to be submitted on a real-time basis; risks of peak capacity outages; inevitable flaws in clock synchronization; and challenges of data protection.

Broker-dealers would need to perform substantial work to implement real-time reporting. It is difficult to accurately estimate the incremental dollar cost of a real-time reporting system without first conducting extensive information gathering and sizing discussions. For example, updating internal systems for real-time reporting would require the participation of hundreds of project management, operations and information technology personnel. SIFMA members surmise that the cost per firm to implement real-time reporting could easily be in the many millions of dollars. The real-time capture of options quotes alone could cost more than the $2.1 billion that the SEC estimates to be the annualized cost of the entire system.\(^6\) This is especially significant because firms’ resources will be increasingly strained over the coming years as they implement numerous new regulatory initiatives, as well as the requirements of the Dodd-Frank Act. While it may be difficult to calculate these incremental costs, as a general matter it is intuitive that as the reporting requirement moves from post-event reporting to real-time, several types of

\(^6\) Consolidated Audit Trail, 75 Fed. Reg. at 32,601.
costs would be expected to rise exponentially. These costs include not only the expenses to establish and maintain a real-time infrastructure, but also the greater risk of regulatory exposure for firms that cannot achieve a 100 percent compliance rate due to mere technical violations. There also would be data integrity costs in the form of less reliable data, or data that would have to be revised or resubmitted where it otherwise may not have been required if firms had a short window of time to more thoroughly “scrub” or validate their submissions.

To implement real-time reporting, the internal architecture of broker-dealers would need to be significantly redesigned, especially because, at present, broker-dealers are generally not subject to real-time reporting requirements. Many existing broker-dealer processes for order handling and reporting involve linking data from the front office to the back office. A typical process involves using downstream systems that feed audit trails, linking trading events from various separate systems and then assigning a unique order identification number after the fact through batch processing. At the time that the downstream system links the data together, various data normalization and enrichment processes take place that are essential to ensuring high quality data are produced. To allow for real-time reporting, all of these steps would need to be pushed upstream, which would be a monumental task in itself, and one that could also interrupt trading flows and negatively impact data quality.

In addition to implementation costs, real-time systems would result in higher operations and maintenance costs. Remediation of reporting anomalies in a real-time environment would be particularly challenging, from both a technical and operational standpoint. Data quality therefore could be more likely to suffer in a real-time reporting system to the extent that firms are unable to repair reports for many common issues such as symbol changes, corporate actions and system outages or “downtime.” In existing audit trail regimes, firms have longer reporting time frames and therefore can make needed changes and control the quality of reported data. Even so, many technical violations occur and result in fines despite the best efforts and internal verifications of FINRA members. Real-time reporting would also require firms to design enhanced data storage protection systems. Elaborate data protection schemes would be necessary to mitigate security risks arising from having information about both open and executed orders available centrally on an intra-day basis.

SIFMA is also concerned that real-time reporting would increase market risk. The consolidated audit trail would create new dependencies on non-trading systems, such as customer information databases and other reference data. Any weaknesses in such systems could delay the routing of client orders to trading centers for execution. Order handling and reporting would also be delayed in cases where internal identifiers must be replaced with standard identifiers required by the Proposal. For example, sales systems often maintain branch and registered representative information based on an internal identification number, but the consolidated audit trail would require that orders be enriched with standard registered representative identifiers. Although SIFMA welcomes
the standardization of registered representative identifiers, the process of translating internal identifiers into standard identifiers in real-time would be difficult and require the introduction of new processes at firms.

Real-time reporting would also increase the risk of peak capacity outages. For a single order, there may be hundreds of messages that must be transmitted to the central repository. The bandwidth that such messages would require, in combination with the bandwidth needed for processing the orders and trades themselves, could pose significant risks of system outages, particularly at peak trading times, at order handling firms, trading centers and the central repository. These risks would be most pronounced for systems handling options because options generate many more messages than equities, as evidenced by the number of messages generated through the Options Price Reporting Authority as compared to the number of messages generated through the Consolidated Tape System.

The most significant challenge associated with the proposed real-time reporting system is that certain data elements required to be reported on a real-time basis are simply unavailable on a real-time basis. These elements may not be available until the close of the market or, in some cases, the next trading day. As a result, a real-time reporting requirement would mean that partial records would be passed through the consolidated audit trail in real-time, thereby necessitating new systems and operations for complicated record and data matching and reconciliation processing in the consolidated audit trail. Customer information is one type of data that could not feasibly be provided on a real-time basis. Providing such information would require time-intensive data look-ups given that most institutional orders are sent to firms in blocks and often from multiple accounts. In addition, a requirement to provide detailed customer information on a real-time basis would in many cases be at odds with current market practice. In large clearing firms, this information may not be available until the end of the trading day or late in the evening at best. Once allocation information is available, the process of tagging the uploaded allocation to the original trade would require more time. Reporting broker-dealers would have to rely on the uploaded allocation information for a trade initiated by a different broker-dealer to have sufficient information to tie the trade back to the beneficial owner.

2. Limited Benefits of Real-Time Reporting

SIFMA believes that the benefits of real-time reporting are far from apparent in the Proposal, and, in fact, any benefits would be limited. While the SEC describes in the Proposal how real-time reporting hypothetically could be valuable for certain surveillance purposes, the SEC does not describe how in practice it would utilize the vast amounts of consolidated audit trail data it would receive in real-time. Presumably, entirely new electronic systems, procedures and reports would need to be developed and implemented at the SEC to process this information. Without the demonstrated ability to utilize the information on a real-time basis for surveillance purposes, any incremental benefits of
real-time reporting, rather than next-day or later reporting, do not warrant the costs of implementing a real-time reporting system.

Also, trading centers already have access to real-time data for market surveillance that is likely to allow intraday intervention regarding apparent trading patterns. Therefore, any new information that broker-dealers would have to report under the Proposal should be information that is used by the SEC for cross-market oversight, investigations and event reconstruction, rather than to duplicate existing monitoring by SROs, exchanges and markets. This existing monitoring is designed to detect and prevent errors and potential market manipulation and is best performed at the marketplace level.

Furthermore, real-time information cannot prove intent, which is a necessary element for fraud and manipulation actions. The SEC states in the Proposal that “knowing when in time the customer opened the account in relation to the suspicious trading activity, or whether the customer changed account authorization to permit options trading just before suspicious options trading, could be evidence of intent.”7 Although SIFMA appreciates the regulatory value of such information, much of the information required to be reported to the consolidated audit trail would be largely irrelevant for real-time surveillance and can still be obtained on a next-day basis (or later) through channels already available to the SEC. Even where certain information would be useful on a real-time basis, broker-dealers should not have to comply with a real-time reporting requirement if the SEC does not have mechanisms in place for using the data in real-time.

SIFMA also recognizes the SEC’s desire to conduct prompt market reconstructions, highlighted by the recent May 6, 2010 “flash crash.” SIFMA members worked closely with the SEC to provide key data to explore that event. However, the proposed consolidated audit trail will not fulfill the SEC’s desire for immediate market reconstruction, because it lacks futures and swaps information. The SEC is dependent on the CFTC for this information, and will not receive it in real-time. Without this data, it is impossible to reconstruct any modern market event, and, therefore, the SEC will continue to be unable to reconstruct market trading on a real-time basis, even with a real-time reporting system for securities. SIFMA also would like to point out that, even in the absence of a consolidated audit trail today, regulators have nonetheless been able to conduct market reconstructions in much shorter time frames than they have in the past. For example, the SEC staff issued its study, “The October 1987 Market Break,”8 in February 1988, approximately four months after the market events of October 19, 1987. More recently, a joint SEC-CFTC staff report detailing the preliminary findings of the

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7 Consolidated Audit Trail, 75 Fed. Reg. at 32,573.
May 6, 2010 “flash crash” was published just 12 days after the event. SIFMA recognizes that more analyses of that event may be reported in the future, but simply notes that regulators have the means to obtain and compile important information promptly, even in the current trading environment.

B. Extend the Post-Execution Reporting Deadline

SIFMA also believes that the data required to be reported by midnight under the Proposal should be reported on a more extended timeline. Requiring broker-dealers to comply with a midnight reporting standard for certain data elements could disrupt the operational life cycle of trading various products. Much of the information required to be reported by midnight is currently unavailable to broker-dealers within that time period or may be modified on the next day. For instance, short-sale borrow information and certain sub-account allocations are typically not available by midnight of the trade date. The SEC states in the Proposal that the midnight deadline was selected for certain information because real-time reporting “may not be practical or feasible for all information because the information may not be known at the time of the reportable event.” SIFMA believes that the SEC has underestimated the amount of time that execution allocation can take. More time is needed for broker-dealers to allocate late executions from international accounts, to establish post-trade linkages to executions for non-straight through processed trades and incorporate as-of-trade adjustments based on trade and clearing breaks. Implementing a next-day, settlement date, or later reporting requirement would increase the likelihood that this information will be obtained, while still providing regulators with timely access to such information.

II. Better Focus in the Scope of the Consolidated Audit Trail

A workable and tailored consolidated audit trail would enhance the SEC’s ability to maintain fair and orderly markets. However, as proposed, the consolidated audit trail is an overly ambitious and costly means to obtain the data that are realistically needed to enhance the SEC’s and the SROs’ market surveillance activities. SIFMA recommends

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10 Consolidated Audit Trail, 75 Fed. Reg. at 32,573. The information that must be reported on this timeline includes: the account number for any subaccounts to which the execution is allocated (in whole or in part); the unique identifier of the clearing broker or prime broker, if applicable; the unique order identifier of any contra-side order(s); special settlement terms, if applicable; short sale borrow information and identifier; the amount of a commission, if any, paid by the customer, and the unique identifier of the broker-dealer(s) to whom the commission is paid; and, if the execution is cancelled, a cancelled trade indicator.

11 Id.
that the SEC better focus the scope of the proposed consolidated audit trail to enable the
capture of the most pertinent information to ensure its workability and reduce its cost and
time to market. The Proposal would require a vastly expanded number of new data
elements to be reported to the consolidated audit trail. Some of this information is not
currently collected or stored by broker-dealers because it is not required by other audit
trails. Therefore, mandating the reporting of these data elements would impose
considerable operational, technological and economic burdens on broker-dealers. SIFMA
recognizes that many of these data elements are critical to the success of the consolidated
audit trail. A unique identifier for broker-dealers and national securities exchanges, for
example, would simplify market surveillance. At the same time, SIFMA believes that the
number of data elements in the consolidated audit trail should be reduced to achieve the
appropriate balance between furthering the regulatory objectives of the consolidated audit
trail and mitigating costs for broker-dealers and the market overall.

A. Customer Account Information

SIFMA believes that the amount of customer account information that is required to be
included on every order is excessive for the purpose of identifying customers. The
proposed amount of customer account information far exceeds the amount in existing audit
trails. Collecting, storing and reporting all of this customer information for the audit trail
would require the development of new internal systems or linkages between existing
internal databases and thus could slow down the order handling or reporting process. To
the extent a unique customer identifier is required to be submitted to the consolidated audit
trail, reporting all of the additional proposed customer information would be redundant.
Furthermore, the large trader identification number should be sufficient to ensure that the
SEC is able to identify large traders, who use omnibus accounts, trade through multiple
accounts and are the main targets of regulatory surveillance. The SEC should therefore
revise the proposed rule to remove some of the customer account data elements.

B. Unique Customer Identifier

The Proposal calls for the creation of a unique customer identifier that would attach to
each order at the time the order is received or originated by a member and remain with the
order through the process of routing, modification, cancellation and execution. SIFMA
believes the consolidated audit trail should not include a unique customer identifier for
every customer. First, creating and assigning unique customer identifiers for all customers
would be expensive, raise serious concerns about privacy and be prone to errors. Given
these drawbacks, the SEC should not require unique customer identifiers and should

12 The Proposal would require that the following customer account information be reported for every receipt
or origination of an order: account number, account type, customer type, date the account was opened and
the large trader identification number (if applicable).
instead rely on the large trader identifiers. By doing so, the SEC would focus its efforts on the transactions that present the greatest risk of moving markets, ease the financial burden on firms, reduce investor privacy concerns and clear the path to inaugurating the consolidated audit trail.

While the SEC does not specify who would create or input the unique customer identifiers, it suggests that the central repository could assign the identifiers on the basis of a customer’s social security number or taxpayer identification number. This raises serious privacy concerns. In recent years, increased concerns about identity theft and client confidentiality have led the securities industry to move away from using social security identification numbers or taxpayer identification numbers as a way to monitor clients and customers. The SEC has affirmed that it would guard access to customer social security and taxpayer identification numbers with even more safeguards than it does other information in the central repository of the consolidated audit trail. Although the SEC has a strong record of protecting investor privacy, the very presence of potentially billions of unique customer identifiers tied to personal information in a central repository would create a substantial risk of misuse and identity theft. The risk of unique customer identifiers being stolen or misused would be magnified in a real-time reporting system.

The work required to update internal architecture to report customer identifiers to the consolidated audit trail would be substantial. The implementation of a centralized process for assigning, storing and utilizing standardized unique customer identifiers would be made difficult by the fact that handling systems and processes may access and maintain customer (and proprietary) identification information in different ways and at different levels of specificity. New operational processes would need to be established to request or validate unique customer identification numbers, and system changes would need to be made to store these identification numbers in internal reference data systems. Furthermore, all sales and trading systems would need to be modified to maintain the unique order identification numbers because of the requirement that the identifiers must be included on all orders reported to the consolidated audit trail. The requirement for real-time reporting would make this process all the more challenging because it would require order handling systems to be revised to use and store unique customer identifiers. Firms and SROs would also incur significant costs in maintaining and safeguarding the unique customer identifiers.

The sheer scale of the process of inputting customer identifiers is likely to result in a significant number of errors. The number of errors would be multiplied in a real-time system because numerous broker-dealers, traders and other market participants would have to input a unique customer identifier in an order at every step until its ultimate execution. A unique customer identification system that contains a significant number of mismatches and input errors would preclude quick and accurate identification of market participants and therefore would be of limited value to regulators.
The SEC could alleviate many of these burdens, and increase the effectiveness of an identification system, if it required only large trader identification numbers to be reported instead of requiring a unique customer identifier for every customer. As a practical matter, the SEC and SROs are unlikely to be interested in routine transactions by small investors. On the other hand, the regulators are much more likely to need accurate information about the orders of large traders because they are most likely to engage in transactions large enough to impact prices. Thus, requiring large trader identification numbers in the consolidated audit trail instead of unique customer identifiers for all customers would better tailor the consolidated audit trail to the regulatory needs of the SEC and SROs.

For similar reasons, the SEC should not affix unique customer identifiers to computer algorithms. The SEC states in the Proposal that it is considering whether unique customer identifiers should be used to identify algorithms so regulators could better detect a pattern of suspicious trading activity from a specific trading desk or algorithm. However, firms would face significant logistical and operational burdens in creating unique customer identifiers for algorithms. Algorithms often change daily, raising questions of whether a new number is needed. Firms would also need to develop safeguards to ensure proprietary algorithms and trading strategies are not co-opted by competitors. To the extent the SEC desires information about algorithms, a simple flag to denote orders generated by algorithms could be included in the consolidated audit trail. This modification, which would be much less expensive to implement than generating unique customer identifiers for all algorithms, would also satisfy the SEC’s regulatory objective of quickly distinguishing orders generated by different algorithms.

Alternatively, if the SEC determines that unique customer identifiers are necessary, SIFMA recommends certain modifications. First, the SEC should provide clearly defined rules for the unique customer identifier to ensure a level playing field. In particular, the SEC should specify whether the unique customer identifier is required to be submitted at the time of the order and provide a procedure for what should be done if an identifier is not available. The SEC should also provide a definition for the terms “beneficial owner” and “customer” to eliminate any doubts as to whom these labels apply. For example, is the “customer” the entity directing the trade or the beneficial owner of the account? Third, the SEC should mandate that the unique customer identifiers may never be used by firms for any other purpose, such as account access or authentication. If firms were to use the unique customer identifiers for purposes other than the consolidated audit trail, it would heighten the threat of identity theft and fraud. Finally, for registered investment advisers, the unique customer identifier should be associated with the investment adviser rather than the underlying beneficial owner. Frequently, investment advisers aggregate orders for multiple beneficial owners in “bulk” orders that are routed together and allocated on an average-priced basis to ensure best execution.
C. Unique Broker-Dealer and Exchange Identifiers and Standard Symbols

The Proposal would require that every exchange and member have a unique identifier that is reported each time an order is initiated, routed, received or executed. SIFMA believes that this standardization of naming conventions is important because currently members have different identifiers on different exchanges and trading venues. Each broker should have one, single identifier that is used by every exchange and trading venue. One consistent identifier should be used by a broker-dealer regardless of where its order is routed or executed. In addition, SIFMA urges the SEC to mandate the use of standard security symbols across all markets.\textsuperscript{13}

D. Unique Order Identifiers

The Proposal envisions that members would “tag” each order received or originated by the member with a unique order identifier that would be reported to the central repository and stay with that order throughout its life, including routing, modification, execution and cancellation. SIFMA believes that the unique order identification number poses a number of challenges. First, creating and reporting a unique order identification number through the entire order life cycle and across “handoffs” between market participants would very likely require members to include the originating firm’s or customer’s name as part of the identifier. Passing it from system to system through the whole order life cycle would create potential privacy information risks as every new destination (both internally across information barriers within a firm and externally across broker-dealers) would see where an order originated. SIFMA believes that the OATS requirement of only maintaining unique order identifiers on transactions reported within each broker-dealer is more appropriate. The OATS requirement to report a routed order identifier across each link in the transaction chain when an order is sent from member to member would suffice for linking orders within the consolidated audit trail reporting system and would not compromise private customer information across broker-dealers. SIFMA believes that when orders are merged, a new merged order identifier should be assigned and used for subsequent order handling events to avoid having to pass multiple unique order identification numbers on to every subsequent “child” order related to the original “parent” orders. Finally, the SEC should standardize, with specificity, how the order identifier should be structured to ensure consistent reporting among firms. For example, the SEC should clearly state whether firms should provide explicit guidance on the use of spaces, dashes and leading zeros in unique order identifiers.

\textsuperscript{13} See also Section VI, C, “Office of Financial Research,” infra.
E. Quotations

SIFMA strongly opposes the proposed requirement for broker-dealers to report quotations for new and routed orders in NMS securities to the consolidated audit trail. The volume of quotation information in today’s markets dwarfs the volume of order and trade information. The submission of quote data therefore would result in a need for increased capacity and performance of internal systems that feed information to the consolidated audit trail. The central repository likewise would need to be capable of handling greater volume and complexity of data.

In the first instance, SIFMA believes that rather than requiring quote reporting by broker-dealers, only the exchanges and FINRA (through its Alternative Display Facility and proposed Quotation Consolidation Facility\(^{14}\)) should be required to report quotations. The exchanges and FINRA, which currently receive quotation information, could report this information at a lower cost and with more accuracy. The exchanges and FINRA are in a position to provide quotation information with greater precision because all quotation information would be based off of a single time clock for each exchange and for FINRA rather than the time clocks of each submitting firm, which, even with clock synchronization efforts, would likely vary. This approach to quotation reporting would also benefit the system overall because the consolidated audit trail would only have to process high-volume quotation data once per quote instead of through two independent reports by broker-dealers and exchanges.

In the alternative, if the SEC instead determines that broker-dealer reporting of quotations is necessary, then certain adjustments to the Proposal should be made to mitigate the burden of this requirement. First, quotation reporting should be implemented as a separate step from the overall implementation of the consolidated audit trail. Initial implementation of the consolidated audit trail should focus on non-quote transactions. This is the area that will provide the greatest value to the SEC and the SROs in their market monitoring and surveillance efforts. Second, the amount of quotation information that must be reported to the consolidated audit trail should be reduced. The SEC should only require reporting of quotations that change an exchange’s best bid or offer. Finally, options market maker quotes should be exempted. Options market makers in the aggregate quote billions of times each day, and like equity quotes, these quotations can be obtained from the exchanges.

F. Clock Synchronization and Millisecond Reporting

The SEC proposes that clocks be synchronized to the “time maintained by the National Institute of Standards and Technology (the “NIST”), consistent with industry standards,” but does not specify a standard within which clocks must be synchronized to the NIST. A standard that is shorter than the current three second standard may be impossible to achieve across the disparate entities that would be subject to the consolidated audit trail. Variations in clocks due to clock drift and correction could yield false results. The SEC should also reevaluate the need for millisecond reporting. Although firm systems tend to capture timestamps in milliseconds, reporting in milliseconds would require changes to internal systems given that existing audit trails such as OATS require reporting of timestamps accurate only to the second.

G. Post-Execution Transaction Attributes

There are a number of post-execution transaction attributes that should not be added to the consolidated audit trail unless the surveillance benefits of doing so are proven to outweigh the costs. Broker-dealers collect most of the post-execution transaction attributes that would be required to be reported, but the information is located in systems that are separate and distinct from order handling and trading systems. Updating internal architecture to enrich orders with each one of these data elements would entail a technically and operationally complex process. The challenges of doing so would be multiplied, perhaps insurmountably so, if real-time reporting were required. For example, short sale borrow information, commissions and sub-account allocations are located in systems distinct from trading systems. Commissions would also be difficult to determine on a trade-by-trade basis. Sub-account allocations, which would be required on every executed order, are similarly complicated by the fact that orders and allocations are handled in completely separate systems. Although some firms have straight-through processing with linkages between the front-office execution and middle-office allocation systems, the extraction and linkage of this information for reporting purposes would require substantial changes. Any manual changes in the allocation process would break front to back office linkages and would be difficult to reestablish for subsequent consolidated audit trail reporting. In addition, establishing post-trade linkages between executions and allocations may be impossible in some cases, such as average price transactions.

SIFMA is also concerned about other data elements that broker-dealers do not currently collect. For example, broker-dealers do not typically collect information on the identity of the customer representative who gives a modification or cancellation instruction. Likewise, no existing equity trading systems currently maintain information on open and close indicators and prior positions on the order level. It would be very challenging for member firms to maintain current position information for the firm and clients during the day
across different desks and aggregation units. Furthermore, where clients trade through different brokers or accounts, this information is not feasible to determine and maintain.

H. Data Element Phase-In

To the extent the SEC ultimately requires new data elements to be reported as “material terms” of an order that are different from those required by other audit trails such as OATS, SIFMA urges the SEC to phase-in the introduction of these new data elements. This would allow broker-dealers to manage more effectively the costs and resources required to build out existing systems to accommodate reporting of this new information.

I. Proprietary Orders

SIFMA agrees with the SEC that proprietary orders should be included in the consolidated audit trail in order to achieve the SEC’s stated goals of improving cross-market monitoring and surveillance. SIFMA believes, however, that the SEC should take a more tailored approach to proprietary orders and narrow the requirements that would apply. First, non-trading transfers of securities within a legal entity, such as internal journals of securities within a desk or aggregation unit, should be exempt from the reporting requirements; at the same time, however, firms should be permitted to include such internal transfers in the consolidated audit trail with a special indicator. OATS provides a useful model for this as it enables the reporting of an execution resulting from an intra-entity trade with an appropriate indicator to denote that it should not attempt to be matched to an associated Trade Reporting Facility trade report. Second, certain consolidated audit trail order attributes, such as special handling codes, may be less relevant for proprietary orders and could be excluded. The proposed inclusion of a prior position in a security for proprietary orders and stock open and close indicators would be complicated by the usage of aggregation units within many firms because proprietary order handling systems reference aggregation unit positions for order marking rather than individual account positions.

III. Expand an Existing Audit Trail Rather than Start from Scratch

SIFMA believes that building out an existing audit trail to accomplish the goals of a consolidated audit trail would be preferable to creating an entirely new system. Using an existing system to create the consolidated audit trail would save time, reduce costs and leverage existing privacy controls.

In the Proposal, the SEC preliminarily dismisses the option of using existing audit trails to achieve the objectives of the consolidated audit trail because of “the lack of uniformity as to the type of audit trail information gathered by the different exchanges and FINRA, and
the lack of compatibility in the format of each SRO’s audit trail data.”15 The SEC also states its concern that “certain information about orders and executions that would be useful to efficient and effective regulation of inter-market trading activity and prevention of manipulative practices is not captured by existing audit trails.”16 It appears, therefore, that the SEC has considered pooling the data collected by existing audit trails but has not considered, or at least not offered reasons why it does not support, the option of building out a single existing audit trail to provide additional information, in a uniform format across markets, to a central repository. SIFMA urges the SEC to explore this latter option and, in particular, consider using OATS as the foundation for the consolidated audit trail.

A. OATS as the Foundation for the Consolidated Audit Trail

SIFMA believes that using a system like OATS would be an efficient and effective route towards achieving a consolidated audit trail. First, there is significant overlap between the information required to be reported to OATS and the information that the SEC would require to be included in the consolidated audit trail. Firms that report to OATS, for example, are required to submit with their orders, a unique order identifier, customer account type, the date and time the order was originated, transmitted or received (in seconds), the size and type of an order and any special handling instructions. Because of the existing infrastructure that OATS offers, we understand that FINRA has estimated that the cost of expanding OATS would be in the tens of millions of dollars, rather than in the billions of dollars, assuming the system is not real-time and that options reporting is not included at the outset.

Using OATS, or a system like it, would also mitigate confidentiality concerns because instead of requiring unique order identifiers, the system could use routed order identifiers across each handoff. While the task of joining multiple submissions to form a complete picture would require more processing on the back end than the proposed consolidated audit trail, it would help ensure that information is secure and that privacy in the marketplace is protected.

B. A Phased Approach to Building Out OATS

If OATS were used as the foundation for the consolidated audit trail, SIFMA recommends that the SEC mandate a phased approach for implementation. To meet the SEC’s objectives, OATS would need to be expanded to include the following categories: non-

16 Id.
Nasdaq-listed securities, listed options, quotes, street side and exchange-to-exchange routes and market making. A targeted, core audit trail system should be developed initially for NMS stocks and enhanced over time to create a complete audit trail, phasing in any new required attributes and subsequently adding listed options and then non-NMS securities.

Focusing on listed options before all other non-NMS securities are included would be preferable because options are generally characterized by more electronic and standardized handling systems and straight-through trade processing. OTC derivatives and fixed income securities, on the other hand, are characterized by more manual and negotiated trading flows and systems and are significantly less automated from a straight-through processing perspective. Therefore, implementing the consolidated audit trail for this latter set of products would require more work to standardize front office order audit trail information and establish post-trade linkages and enrichments. As OATS is expanded to include new products, existing audit trail systems for such products (e.g., COATS) should be retired. Furthermore, once market makers begin reporting to the consolidated audit trail, non-tape, regulatory reports to the Trade Reporting Facility should be eliminated (while tape reporting should remain intact).

SIFMA believes that a number of governance and infrastructure changes would also need to be made to OATS. A NMS plan would be necessary to address creation, administration and governance of the consolidated audit trail and the central repository. The central repository should be designed to support and allow the reporting of consolidated audit trail data by third-party order handlers on behalf of broker-dealers, as is the case with OATS today. It would also be necessary to specify who would be responsible for governing the consolidated audit trail and how it would be operated, who would have access to central repository data and how costs would be allocated, among other things. Furthermore, reform of the existing fee system for OATS violations would be necessary to ensure a more workable approach in an expanded audit trail context. A new plan for dealing with minor rule violations could be devised that would provide support for corrections of deficiencies within reasonable time frames in lieu of punitive fines.

SIFMA notes that OATS is far from a perfect system and that it would take considerable improvements to make OATS more workable and flexible if the SEC selected it as the foundation for a consolidated audit trail. The use of a legacy system would require redesigning the system to expand its capacity and efficiency, which in turn would require the cooperation and dedication of FINRA. One way of improving OATS would be to

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17 SIFMA notes that FINRA recently proposed to expand OATS to include all NMS stocks. See SR-FINRA-2010-044 (filed with the SEC on Aug. 6, 2010). Rule 600(b)(47) of Regulation NMS defines “NMS stock” as “any NMS security other than an option.” 17 CFR 242.600(b)(47). FINRA notes in the rule filing its understanding that the NYSE will propose to retire OTS upon the expansion of OATS to all NMS stocks.
introduce FIX Protocol to replace the current data entry system in OATS. Second, OATS should be simplified by eliminating obscure labels and definitions and cutting out redundant reports for orders, including intra-firm routes or “desk” reports. Third, the window for firms to repair OATS rejections should be extended beyond the current five-day period. In addition, mismatch reports should be provided more quickly to firms; currently it takes several days after data is submitted for a firm to receive a mismatch report. SIFMA notes that these examples are provided only for illustration and are not intended to be an exhaustive list; extensive consideration would need to be given to this area should OATS be used.

IV. Coordinate the Consolidated Audit Trail with the Large Trader Reporting System

SIFMA urges the SEC to coordinate the design and implementation of the consolidated audit trail with the proposed large trader system, both of which are intended to enhance the SEC’s and the SROs’ capabilities to reconstruct market trading activity in NMS securities. As described in our comment letter that was submitted to the SEC on June 24, 2010 (the “SIFMA LTRS Letter”), SIFMA supports the objectives of the large trader reporting system but urges the SEC to modify it to operate in tandem with the Proposal. The SEC states that “[t]he large trader proposal is designed to address in the near term the Commission’s current need for access to more information about large traders and their activities.” SIFMA believes that properly designing the large trader reporting system to be an interim step would address the near term needs of the SEC while laying the foundation and making progress towards the consolidated audit trail. There is a high degree of overlap between the large trader reporting system and the consolidated audit trail. Some of this overlap is complementary, but there also appears to be considerable redundancy. SIFMA respectfully requests that the SEC work to identify and then mandate at this time only those elements of the large trader system that would continue to operate as part of the consolidated audit trail. By only implementing those parts of the large trader reporting system that can be leveraged towards building the consolidated audit trail, the SEC would facilitate the creation of a consolidated audit trail in a more efficient and timely manner by minimizing costs and avoiding redundant systems and duplication of efforts.

In particular, SIFMA believes that the SEC should implement only the large trader identification portion of the proposal. Specifically, a large trader could be required to

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register with the SEC and disclose its large trader identification number to the broker-dealers effecting transactions on its behalf and to all others with whom it collectively exercises investment discretion. Because the consolidated audit trail would include large trader identification numbers, the SEC, rather than broker-dealers, would be able to monitor for unidentified large traders by joining order and trade information with customer data sets obtained through the large trader identification numbers and certain account beneficial ownership and trade authority information that are reported to the consolidated audit trail. This would obviate the need for each broker-dealer to design, implement and maintain its own costly monitoring systems for large traders.

The SIFMA LTRS Letter also recommends that the SEC consider an incremental expansion of OATS for the large trader reporting system. Using the OATS framework for the consolidated audit trail and the large trader reporting system would be an efficient and cost-effective means to achieve the SEC’s goal of a consolidated audit trail.

V. Protect the Confidentiality of Consolidated Audit Trail Data

The SEC should take additional steps to safeguard the privacy of data in the consolidated audit trail. Under the Proposal, the SEC, the national securities exchanges and FINRA would be able to examine all of the information in the central repository at any time for any regulatory purpose. Granting that type of sweeping access to a massive database filled with confidential information would increase the risk that consolidated audit trail data would inadvertently be made public or misused. The SEC should restrict access to the consolidated audit trail repository even further and specify the security measures and information barriers it would have in place to prevent the leakage or improper use of confidential data.

The central repository arguably could be one of the largest, most commercially sensitive databases in existence. As proposed, the repository would include private information such as the names of all customers, their account numbers, the types of accounts they opened and the times at which they opened accounts. It would also include the unique customer identification number for each customer that the SEC currently proposes to assign on the basis of social security or taxpayer identification numbers.20 Moreover, each member of an exchange receiving an order from a customer, as well as every exchange and securities association that goes on to handle the order, must add its own unique identifier to each report it sends to the central repository.21 These data submissions would undoubtedly help the SEC create a blueprint for reconstructing significant market events,

20 Id. at 32,556.
21 Id. at 32,573.
as well as aid efforts to track down broker-dealers and other parties who aided wrongdoing.\textsuperscript{22} However, these reports, if used by the wrong parties or with the wrong intentions, could harm investors and traders by giving predatory market participants intimate and proprietary information about such investors’ strategies. For example, a customer who is attempting to unwind a large position may be unable to do so as planned if knowledge about his plans is disseminated to other broker-dealers.

SROs should not be able to access data in the central repository about potential competitors, or at least should not be able to do so without proper certifications and safeguards to ensure the appropriate use of any requested information. The increased competition among the securities markets amplifies such concerns. Broker-dealers increasingly compete directly with exchanges for customers’ order flow. Exchanges also compete with one another. Security protections are necessary to provide comfort that access is for legitimate regulatory purposes rather than competitive reasons.

To ensure that data in the central repository is not misused, SIFMA believes the SEC should restrict the scope of data that SROs can access. SROs should only be able to access order information and other data about their members for regulatory purposes, and exchanges should only be able to view information about transactions conducted on their exchanges. Only the SEC should be able to access all of the data in the consolidated audit trail, and only for critical regulatory purposes. By restricting the type and amount of data in the consolidated audit trail repository that organizations can access, the SEC would reduce the possibility of data being exploited or mined for a competitive advantage rather than used for genuine regulatory purposes.

As previously discussed in this letter, real-time reporting raises numerous concerns, particularly concerns related to confidentiality. First, if the information in the consolidated audit trail is required to be reported on a real-time basis, then security concerns about improper use of submitted data are magnified at every stage of the processing of an order. Each member of an exchange who originates an order or receives one from a customer has to include a unique identifier in each report it sends to the central repository for a reportable event.\textsuperscript{23} When customer order information is passed along in real time to other broker-dealers and members on various exchanges, it can be viewed at numerous points on a real-time basis, multiplying the opportunities to mine and exploit that information. Second, real-time data can be analyzed in many ways to divine an investor’s objectives through real-time analysis programs. These types of handoffs are even more common in the options markets, where orders are frequently routed through consolidators and third parties. Thus, it would be extraordinarily expensive for exchanges and SROs, let alone

\textsuperscript{22} Id.
\textsuperscript{23} Id.
broker-dealers, to create adequate information security measures to protect client information if real-time reporting is required. Eliminating the real-time reporting requirement would mitigate client confidentiality concerns.

Finally, the SEC should specify the front-end system it would use to access the consolidated audit trail data in the central repository and for what purposes it would use the data. So far, the SEC has not specified how the central repository for the consolidated audit trail data would be operated or how the data stored in the central repository would be used to aid regulation. The SEC should clearly enumerate specific regulatory uses for the consolidated audit trail as well as the system that would serve as the central repository. If the SEC explained how the consolidated audit trail data would be used and stored, it would reassure investors and broker-dealers that the consolidated audit trail system would provide for a more fair and orderly market and assuage concerns about compromised confidentiality.

VI. Provide Guidance on Certain Items Left Unaddressed in the Proposal

While the Proposal provides significant explanation and direction, SIFMA believes that certain key issues related to the consolidated audit trail that merit consideration were left unaddressed. These issues concern foreign traders, funding for the consolidated audit trail, the newly created Office of Financial Research and the standardization of security symbols.

A. Foreign Traders

The SEC should clarify how the consolidated audit trail system would deal with foreign traders. Foreign entities, such as foreign broker-dealers, may refuse to identify their customers to domestic broker-dealers due to stricter privacy laws in their countries. The proposed consolidated audit trail rule does not explain what domestic broker-dealers should do in such cases in order to comply with their reporting requirements. If domestic broker-dealers are forced to refuse such orders from customers, that would be an unfair penalty to broker-dealers and may push trading activities offshore. This not only would be harmful to the U.S. markets, but would also hinder the SEC’s goal for the consolidated audit trail to provide a comprehensive view of trading. The SEC should consider providing some type of limited exemption that would allow broker-dealers to process such trades given that many foreign broker-dealers are already regulated in their home countries. This approach would be consistent with the recent financial regulatory reforms that provide limited exemptions for foreign companies from new reporting requirements.

B. Funding

SIFMA believes that the SEC needs to specify the new sources of funding for the consolidated audit trail system. The SEC has estimated that the consolidated audit trail
would cost $4 billion to implement and $1.7 billion in annual ongoing costs.\textsuperscript{24} SIFMA believes that the SEC’s estimate of the costs required to create and operate a consolidated audit trail system are too low. However, it would be difficult for SROs to fund the consolidated audit trail system even if the costs are in line with SEC estimates. SROs have uneven sources of revenue and limited abilities to impose fees on members. If the SEC maintains that SROs must pay to construct and maintain the consolidated audit trail system, it may be forced to raise or eliminate the caps it has on transaction fees on exchanges. That move would give SROs more flexibility in obtaining money to pay for the new system. It would, however, resurrect the distortions caused by high transaction fees, potentially increase the use of flash orders, if allowed, and discourage trading activity.

C. Office of Financial Research

The SEC should also consider how the new Office of Financial Research would impact the reporting methods imposed by the consolidated audit trail. The Dodd-Frank Wall Street Reform and Consumer Protection Act establishes a new Office of Financial Research (“OFR”)\textsuperscript{25} that will have broad authority to collect and share data from companies and agencies.\textsuperscript{26} The OFR can collect information from “member agencies, commercial data providers, publicly available data sources, and financial entities.”\textsuperscript{27} The OFR introduces further data security concerns. Although it is required to maintain the confidentiality of information submitted to it, such information is subject to Freedom of Information Act (“FOIA”) requests.\textsuperscript{28} This differs from the protection that the law affords to information provided by investment advisers to the SEC, which is excluded from FOIA requests in all cases.\textsuperscript{29} SIFMA therefore urges the SEC to clarify how the broad data collection powers given to the OFR, as well as its power to require standardized reporting of data by agencies,\textsuperscript{30} would affect the submission and security of consolidated audit trail data. Any information provided to the central repository should not have to be provided to the OFR again or in a different format.

The OFR also is required to prepare and publish a publicly accessible financial company reference database and a financial instrument reference database.\textsuperscript{31} While neither database

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\textsuperscript{24} Consolidated Audit Trail, 75 Fed. Reg. at 32,601-602.
\textsuperscript{25} Dodd-Frank Wall Street Consumer Protection Act, Title I § 152.
\textsuperscript{26} Id. §§ 153-4.
\textsuperscript{27} Id. § 154(a)(1)(A).
\textsuperscript{28} Id. § 112(d)(5)(C).
\textsuperscript{29} Id. § 404(b)(7)(B).
\textsuperscript{30} Id. § 153(a)(2).
\textsuperscript{31} Id. § 154(b)(2)(A).
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is set out in detail in the Dodd-Frank Act, a predecessor bill would have required that the financial company database include a comprehensive list of financial entities that may be counterparties to financial transactions or referenced in the contractual structure of a financial instrument. For each financial entity, the database would have included “but not be limited to a unique identifier, and sufficient information to differentiate the entity from every other entity, including an exact legal name and an address for each company, and an exact legal name and a social security number for each American citizen.”32 The larger financial instrument reference database was to include a comprehensive list of unique financial instruments. For each financial instrument, the database would have “include[d] a unique identifier and a comprehensive description of the contractual structure of the instrument as well as all express terms governing the interpretation and implementation of the contract, including jurisdiction, force majeure, and dispute resolution.”33 By “contractual structure,” the bill contemplated the inclusion of the financial and economic obligations and rights, “both express and implied,” established among all of the counterparties having identified roles in the contract, including advisors, principals, trustees, custodians, guarantors, prime brokers, executing brokers, clearing brokers, and issuers of securities.34

SIFMA believes that the OFR may play an important role in standardizing data throughout the financial industry, with major repercussions for the consolidated audit trail. Such standardization is an important prerequisite of the consolidated audit trail. For example, we believe there should be a single security symbol for an NMS security, regardless of where it trades. The recent options symbol standardization completed earlier this year would provide a useful guide for this initiative. It would be extraordinarily unproductive to engage in naming conventions for securities and members, so that they have a single member identifier across different trading venues, only to have these displaced by the reference databases of the OFR. SIFMA believes that the SEC needs to carefully coordinate the data standardization issues necessary for the consolidated audit trail with the OFR.

Finally, we respectfully request that the SEC provide specific criteria on how certain real-world transactions would be treated for purposes of the consolidated audit trail. For instance, the SEC should specify how data would be reported on a covered security’s owner, point of origin and other data. The SEC should also detail what type of information various parties to an order, such as introducing brokers, registered investment advisers with discretion, brokers with discretion and prime brokers, would have to supply.

33 Id. at § 3(8)
34 Id.
Finally, the SEC should specify how the information on omnibus and DVP accounts would be handled in the consolidated audit trail.

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SIFMA appreciates the opportunity to comment on the Proposal and commends the SEC for taking steps to enable effective cross-market monitoring and surveillance.

SIFMA supports the goals of a consolidated audit trail. The May 6th market events highlighted the need for a comprehensive mechanism for market surveillance to provide the SEC and the SROs with more timely and complete information. SIFMA believes, however, that the consolidated audit trail, as proposed, is too ambitious in scope and should be more finely tailored in a risk-based manner to the surveillance needs of the SEC and the capabilities of broker-dealers, SROs and exchanges. In addition, the consolidated audit trail should leverage an existing audit trail, such as OATS, for its platform to minimize costs and implementation time.

We would be pleased to discuss the proposed rule and our comments in greater detail with the SEC and its staff. If you have any comments or questions, please do not hesitate to contact me at (202) 962-7386 or at jmchale@sifma.org.

Sincerely,

James T. McHale  
Managing Director and Associate General Counsel  
SIFMA

cc: Mary Schapiro, Chairman  
Luis Aguilar, Commissioner  
Kathleen Casey, Commissioner  
Troy Paredes, Commissioner  
Elisse Walter, Commissioner  
Robert Cook, Director, Division of Trading and Markets  
James Brigagliano, Deputy Director, Division of Trading and Markets  
David Shillman, Associate Director, Division of Trading and Markets  
Rebekah Liu, Special Counsel, Division of Trading and Markets  
Jennifer Colihan, Special Counsel, Division of Trading and Markets  
Leigh Duffy, Attorney-Adviser, Division of Trading and Markets