

and accounts pre-approved and authorized by the broker-dealer. Could the goal of this provision, the preservation of system and market integrity, be achieved in another way? If so, how?

The proposed rule would require broker-dealers with market access to implement risk management controls and supervisory procedures that are reasonably designed to assure that appropriate surveillance personnel receive immediate post-trade execution reports that result from market access. Should the Commission expand on or clarify the requirement that risk management controls and supervisory procedures be reasonably designed to assure that appropriate surveillance personnel receive immediate post-trade execution reports that result from market access? Is there a common understanding among market participants as to what constitutes immediate post-trade execution reports?

The Commission seeks comment on whether broker-dealers could effectively comply with the proposed rule – in particular, the requirement that the financial and regulatory risk management controls and supervisory procedures be under the direct and exclusive control of the broker-dealer with market access – by using risk management technology developed by third parties. Are there any circumstances where a broker or dealer would not be able to comply with the proposed rule using risk management technology developed by third parties? Are there additional considerations that the Commission should evaluate if a broker-dealer outsources the development of its risk management system and supervisory procedures?

The proposed rule would require the broker-dealer to periodically review its risk management controls and supervisory procedures. Among other things, the broker-dealer would be required to review in accordance with written procedures, and document that review, no less frequently than annually, its business activity in connection with market access to assure the overall effectiveness of such risk management controls and supervisory procedures. Should this

review be conducted more or less frequently? In addition, the Chief Executive Officer (or equivalent officer) of the broker-dealer would be required, on an annual basis, to certify that such risk management controls and supervisory procedures comply with paragraphs (b) and (c) and that the regular review was conducted. Should the certification be conducted more or less frequently? The proposed rule would require a broker or dealer to preserve a copy of its supervisory procedures, a written description of its risk management controls, and written supervisory procedures for its regular review as part of its books and records in a manner consistent with Rule 17a-4(e)(7). Is this proposed record retention requirement clear? The proposed rule would require documentation of each regular review and Chief Executive Officer certifications be preserved by the broker or dealer as part of its books and records in a manner consistent with Rule 17a-4(b). Is this proposed record retention requirement clear?

The Commission strongly encourages commenters to respond within the designated comment period. It intends to act quickly in reviewing the comments and assessing further action.

V. Paperwork Reduction Act

Certain provisions of Proposed Rule 15c3-5 contain “collection of information” requirements within the meaning of the Paperwork Reduction Act of 1995 (“PRA”).⁴² In accordance with 44 U.S.C. 3507 and 5 CFR 1320.11, the Commission has submitted the provisions to the Office of Management and Budget (“OMB”) for review. The title for the proposed new collection of information requirement is “Rule 15c3-5, Market Access.” An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

⁴² 44 U.S.C. 3501 et seq.

A. Summary of Collection of Information

Proposed Rule 15c3-5 would require a broker or dealer with market access, or that provides a customer or any other person with access to an exchange or ATS through use of its MPID or otherwise, to establish, document, and maintain a system of risk management controls and supervisory procedures to assist it in managing the financial, regulatory, and other risks, such as legal and operational risks, of this business activity. The system of risk management controls and supervisory procedures, among other things, shall be reasonably designed to (1) systematically limit the financial exposure of the broker or dealer that could arise as a result of market access, and (2) ensure compliance with all regulatory requirements that are applicable in connection with market access. The financial risk management controls and supervisory procedures must be reasonably designed to prevent the entry of orders that exceed appropriate pre-set credit or capital thresholds, or that appear to be erroneous. As a practical matter, the proposed rule would require a respondent to set appropriate credit thresholds for each customer for which it provides market access and appropriate capital thresholds for proprietary trading by the broker-dealer itself. The regulatory risk management controls and supervisory procedures must be reasonably designed to prevent the entry of orders that do not comply with regulatory requirements that must be satisfied on a pre-order entry basis, prevent the entry of orders that the broker-dealer or customer is restricted from trading, restrict market access technology and systems to authorized persons, and assure appropriate surveillance personnel receive immediate post-trade execution reports. Each such broker or dealer would be required to preserve a copy of its supervisory procedures and a written description of its risk management controls as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act.⁴³

⁴³ See supra note 29.

In addition, the proposed rule would require a broker or dealer with market access, or that provides a customer or any other person with access to an exchange or ATS through use of its MPID or otherwise, to establish, document, and maintain a system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required under the proposed rule and for promptly addressing any issues. Among other things, the broker or dealer would be required to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of such risk management controls and supervisory procedures and document that review. Such review would be required to be conducted in accordance with written procedures and would be required to be documented. The broker or dealer would be required to preserve a copy of such written procedures, and documentation of each such review, as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act,⁴⁴ and Rule 17a-4(b) under the Exchange Act, respectively.⁴⁵

In addition, the Chief Executive Officer (or equivalent officer) of the broker or dealer, on an annual basis, would be required to certify that such risk management controls and supervisory procedures comply with the proposed rule, that the broker or dealer conducted such review, and such certifications shall be preserved by the broker or dealer as part of its books and records in a manner consistent with Rule 17a-4(b) under the Exchange Act.⁴⁶

B. Proposed Use of Information

The proposed requirement that a broker or dealer with market access, or that provides a customer or any other person with access to an exchange or ATS through use of its MPID or

⁴⁴ Id.

⁴⁵ See supra note 31.

⁴⁶ Id.

otherwise, establish, document, and maintain a system of risk management controls and supervisory procedures that, among other things, shall be reasonably designed to (1) systematically limit the financial exposure of the broker or dealer that could arise as a result of market access, and (2) ensure compliance with all regulatory requirements that are applicable in connection with market access, would serve to ensure that such brokers or dealers have sufficiently effective controls and procedures in place to appropriately manage the risks associated with market access. The proposed requirement to preserve a copy of its supervisory procedures and a written description of its risk management controls as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act would help assure that appropriate written records were made, and would be used by the Commission staff and SRO staff during an examination of the broker or dealer for compliance with the proposed rule.

The proposed requirement to maintain a system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required under the proposed rule would serve to ensure that the risk management controls and supervisory procedures remain effective. A broker-dealer would use these risk management controls and supervisory procedures to fulfill its obligations under the proposed rule, as well as to evaluate and ensure its financial integrity more generally. The Commission and SROs would use this information in their exams of the broker or dealer, as well as for regulatory purposes. The proposed requirement that a broker or dealer preserve a copy of written procedures, and documentation of each such regular review, as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act, and Rule 17a-4(b) under the Exchange Act, respectively, would help assure that the regular review was in fact completed, and would be used by the Commission staff and SRO staff during an examination of the broker or dealer for compliance with the

proposed rule. The proposed requirement that the Chief Executive Officer (or equivalent officer) of the broker or dealer, on an annual basis, certify that such risk management controls and supervisory procedures comply with proposed Rule 15c3-5, that the annual review was conducted, and that such certifications be preserved by the broker or dealer as part of its books and records in a manner consistent with Rule 17a-4(b) under the Exchange Act would help ensure that senior management review the efficacy of its controls and procedures at regular intervals and that such review is documented. This certification would be used internally by the broker or dealer as evidence that it complied with the proposed rule and possibly for internal compliance audit purposes. The certification also would be used by Commission staff and SRO staff during an examination of the broker or dealer for compliance with the proposed rule or more generally with regard to evaluation of a broker or dealer's risk management control procedures and controls.

The proposed rule would require a broker or dealer with market access to assure that appropriate surveillance personnel receive immediate post-trade execution reports that result from market access. The broker or dealer would use these post-trade execution reports in reviewing for potential regulatory violations. In addition, these reports would better enable the broker or dealer to investigate, report, or halt suspicious or manipulative trading activity. In addition, the Commission and SROs may review these reports when examining the broker or dealer.

C. Respondents

The proposed "collection of information" contained in Proposed Rule 15c3-5 would apply to approximately 1,295 brokers and dealers that have market access or provide a customer or any other person with market access. Of these 1,295 brokers and dealers, the Commission

estimates that there are 1,095 brokers or dealers that are members of an exchange. This estimate is based on broker-dealer responses to FOCUS report filings with the Commission. The Commission estimates that the remaining 200 broker-dealers are subscribers to ATSs but are not exchange members. This estimate is based on a sampling of subscriber information contained in Exhibit A to Form ATS-R filed with the Commission. The Commission requests comment on the accuracy of these estimated figures.

D. Total Initial and Annual Reporting and Recordkeeping Burdens

As discussed above, brokers and dealers are currently subject to a variety of SRO guidance and rules related to market access. Currently, most brokers or dealers, when accessing an exchange or ATS in the ordinary course of their business, already have risk management controls and supervisory procedures in place, although these controls and procedures will differ based on each broker or dealer's unique business model.⁴⁷ For the purposes of the PRA, the Commission must consider the burden on respondents to bring their risk management controls and supervisory procedures into compliance with the proposed rule. The Commission notes that among brokers or dealers with market access, there is currently no uniform standard for risk management controls and supervisory procedures. The extent to which a respondent would be burdened by the proposed collection of information under the proposed rule would depend significantly on the financial and regulatory risk management controls that already exist in the respondent's system as well as the respondent's business model. In many cases, particularly with respect to proprietary trading, more traditional agency brokerage activities, and direct market access, the proposed rule may be substantially satisfied by a respondent's pre-existing financial and regulatory risk management controls and current supervisory procedures. These

⁴⁷ See supra note 23.

brokers or dealers likely would only require limited updates to their systems to meet the requisite risk management controls specified in the proposed rule.

The Commission believes that the majority of respondents has order management systems with pre-trade financial and regulatory controls, although the use and range of those controls may vary among firms. As noted above, certain pre-trade controls, such as pre-set trading limits or filters to prevent erroneous trades may already be in place within a respondent's risk management system. Similarly, the extent to which receipt of immediate post-trade execution reports creates a burden on respondents would depend on whether a respondent already receives such reports on an immediate, post-trade basis or on an end-of-day basis. For broker-dealers that rely largely on "unfiltered" or "naked" access, the proposed rule could require the development or significant upgrade of a new risk management system, which would be a significantly larger burden on a potential respondent. Therefore, the burden imposed by the proposed rule would differ vastly depending on a broker-dealer's current risk management system and business model.

Proposed Rule 15c3-5 would also require a respondent to update its review and compliance procedures to comply with the proposed rule's requirement to regularly review its risk management controls and supervisory procedures, including a certification annually by the Chief Executive Officer (or equivalent officer). The Commission notes that a respondent should currently have written compliance procedures reasonably designed to review its business activity.⁴⁸ Proposed Rule 15c3-5 would initially require a respondent to update its written compliance procedures to document the method in which the respondent plans to comply with the proposed rule.

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Id.

1. Technology Development and Maintenance

The Commission estimates that the initial burden for a potential respondent to comply with the proposed requirement to establish, document, and maintain a system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures, on average, would be 150 hours if performed in-house,⁴⁹ or approximately \$35,000 if outsourced.⁵⁰ This figure is based on the estimated number of hours for initial internal development and implementation by a respondent to program its system to add the controls needed to comply with the requirements of the proposed rule, expand system capacity, if necessary, and establish the ability to receive immediate post-trade execution reports. Based on discussion with various industry participants, the Commission expects that brokers or dealers with market access currently have the means to receive post-trade executions reports, at a minimum, on an end-of-day basis.

⁴⁹ This estimate is based on discussions with various industry participants. Specifically, the modification and upgrading of hardware and software for a pre-existing risk control management system, with few substantial changes required, would take approximately two weeks, while the development of a risk control management system from scratch would take approximately three months.

Based on discussions with industry participants, the Commission estimates that a dedicated team of 1.5 people would be required for the system development. The team may include one or more programmer analysts, senior programmers, or senior systems analysts. Each team member would work approximately 20 days per month, or $8 \text{ hours} \times 20 \text{ days} = 160 \text{ hours}$ per month. Therefore, the total number of hours per month for one system development team would be 240 hours.

A two-week project to modify and upgrade a pre-existing risk control management system would require $240 \text{ hours/month} \times 0.5 \text{ months} = 120 \text{ hours}$, while a three-month project to develop a risk control management system from scratch would require $240 \text{ hours/month} \times 3 \text{ months} = 720 \text{ hours}$. Based on discussions with industry participants, the Commission estimates that 95% of all respondents would require modifications and upgrades only, and 5% would require development of a system from scratch. Therefore, the total average number of burden hours for an initial internal development project would be approximately $(0.95 \times 120 \text{ hours}) + (0.05 \times 720 \text{ hours}) = 150 \text{ hours}$.

⁵⁰ See *infra* note 61.

If the broker-dealer decides to forego internal technology development and instead opts to purchase technology from a third-party technology provider or service bureau, the technology costs would also depend on the risk management controls that are already in place, as well as the business model of the broker or dealer. Based on discussions with various industry participants, the Commission understands that technology for risk management controls is generally purchased on a monthly basis. Based on discussions with various industry participants, the Commission's staff estimates that the cost to purchase technology from a third-party technology provider or service bureau would be approximately \$3,000 per month for a single connection to a trading venue, plus an additional \$1,000 per month for each additional connection to that exchange. For a conservative estimate of the annual outsourcing cost, the Commission notes that for two connections to each of two different trading venues, the annual cost would be \$96,000.⁵¹ The potential range of costs would vary considerably, depending upon the business model of the broker-dealer.

On an ongoing basis, a respondent would have to maintain its risk management system by monitoring its effectiveness and updating its systems to address any issues detected. In addition, a respondent would be required to preserve a copy of its written description of its risk management controls as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act. The Commission estimates that the ongoing annualized burden for a potential respondent to maintain its risk management system would be approximately 115

⁵¹ 12 months × \$4,000 (estimated monthly cost for two connections to a trading venue) × 2 trading venues = \$96,000. This estimate is based on discussions with various industry participants. For purposes of this estimate, "connection" is defined as up to 1000 messages per second inbound, regardless of the connection's actual capacity.

For the conservative estimate above, the Commission chose two connections to a trading venue, the number required to accommodate 1,500 to 2,000 messages per second. The estimated number of messages per second is based on discussions with various industry participants.

burden hours if performed in-house,⁵² or approximately \$26,800 if outsourced.⁵³ The Commission believes the ongoing burden of complying with the proposed rule's collection of information would include, among other things, updating systems to address any issues detected, updating risk management controls to reflect any change in its business model, and documenting and preserving its written description of its risk management controls.

For hardware and software expenses, the Commission estimates that the average initial cost would be approximately \$16,000 per broker-dealer,⁵⁴ while the average ongoing cost would be approximately \$20,500 per broker-dealer.⁵⁵

2. Legal and Compliance

The Commission provides a separate set of estimates for legal and compliance obligations. The Commission preliminarily believes that the majority of broker-dealers should

⁵² Based on discussions with industry participants, the Commission estimates that a dedicated team of 1.5 people would be used for the ongoing maintenance of all technology systems. The team may include one or more programmer analysts, senior programmers, or senior systems analysts. In-house system staff size varies depending on, among other things, the business model of the broker or dealer. Each staff member would work 160 hours per month, or $12 \text{ months} \times 160 \text{ hours} = 1,920 \text{ hours}$ per year. A team of 1.5 people therefore would work $1,920 \text{ hours} \times 1.5 \text{ people} = 2,880 \text{ hours}$ per year. Based on discussions with industry participants, the Commission estimates that 4% of the team's total work time would be used for ongoing risk management maintenance. Accordingly, the total number of burden hours for this task, per year, is $0.04 \times 2,880 \text{ hours} = 115.2 \text{ hours}$.

⁵³ See *infra* note 62.

⁵⁴ Industry sources estimate that to build a risk control management system from scratch, hardware would cost \$44,500 and software would cost \$58,000, while to upgrade a pre-existing risk control management system, hardware would cost \$5,000 and software would cost \$6,517. Based on discussions with industry participants, the Commission estimates that 95% of all respondents would require modifications and upgrades only, and 5% would require development of a system from scratch. Therefore, the total average hardware and software cost for an initial internal development project would be approximately $(0.95 \times \$11,517) + (0.05 \times \$102,500) = \$16,066$, or \$16,000.

⁵⁵ Industry sources estimate that for ongoing maintenance, hardware would cost \$8,900 on average and software would cost \$11,600 on average. The total average hardware and software cost for ongoing maintenance would be $\$8,900 + \$11,600 = \$20,500$.

already have compliance policies and supervisory procedures in place.⁵⁶ Accordingly, the Commission believes that the initial burden to comply with the proposed compliance requirements should not be substantial. Based on discussions with various industry participants and the Commission's prior experience with broker-dealers, the Commission estimates that the initial legal and compliance burden on average for a potential respondent to comply with the proposed requirement to establish, document, and maintain compliance policies and supervisory procedures would be approximately 35 hours. Specifically, the setting of credit and capital thresholds for each customer would require approximately 10 hours,⁵⁷ and the modification or establishment of applicable compliance policies and procedures would require approximately 25 hours,⁵⁸ which includes establishing written procedures for reviewing the overall effectiveness of the risk management controls and supervisory procedures.

On an ongoing basis, a respondent would have to maintain and review its risk management controls and supervisory procedures to assure their effectiveness as well as to address any deficiencies found. The broker or dealer would have to review, no less frequently than annually, its business activity in connection with market access to assure the overall effectiveness of the risk management controls and supervisory procedures and would be required to make changes to address any problems or deficiencies found through this review. Such review would be required to be conducted in accordance with written procedures and would be required to be documented. The broker or dealer would be required to preserve a copy of such

⁵⁶ See supra note 23.

⁵⁷ The Commission estimates that one compliance attorney and one compliance manager would each require 5 hours, for a total initial burden of 10 hours.

⁵⁸ The Commission estimates that one compliance attorney and one compliance manager would each require 10 hours, and one Chief Executive Officer would require 5 hours, for a total initial burden of 25 hours.

written procedures, and documentation of each such review, as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act, and Rule 17a-4(b) under the Exchange Act, respectively. On an annual basis, the Chief Executive Officer (or equivalent officer) of the broker or dealer would be required to certify that such risk management controls and supervisory procedures comply with the proposed rule, that the broker or dealer conducted such review, and that such certifications are preserved by the broker or dealer as part of its books and records in a manner consistent with Rule 17a-4(b) under the Exchange Act. The ongoing burden of complying with the proposed rule's collection of information would include documentation for compliance with its risk management controls and supervisory procedures, modification to procedures to address any deficiencies in such controls or procedures, and the required preservation of such records.

Based on discussions with industry participants and the Commission's prior experience with broker-dealers, the Commission estimates that a broker-dealer's implementation of an annual review, modification of its risk management controls and supervisory procedures to address any deficiencies, and preservation of such records would require 45 hours per year. Specifically, compliance attorneys who review, document, and update written compliance policies and procedures would require an estimated 20 hours per year; a compliance manager who reviews, documents, and updates written compliance policies and procedures is expected to require 20 hours per year; and the Chief Executive Officer, who certifies the policies and procedures, is expected to require another 5 hours per year.

Based on discussions with industry participants and the Commission's prior experience with broker-dealers, the Commission believes that the ongoing legal and compliance obligations under the proposed rule would be handled internally because compliance with these obligations

is consistent with the type of work that a broker-dealer typically handles internally. The Commission does not believe that a broker-dealer would have any recurring external costs associated with legal and compliance obligations.

3. Total Burden

Under the proposed rule, the total initial burden for all respondents would be approximately 239,575 hours ([150 hours (for technology) + 35 hours (for legal and compliance)] × 1,295 brokers and dealers = 239,575 hours) and the total ongoing annual burden would be approximately 207,200 hours ([115 hours (for technology) + 45 hours (for legal and compliance)] × 1,295 brokers and dealers = 207,200 hours). For hardware and software expenses, the total initial cost for all respondents would be \$20,720,000 (\$16,000 per broker-dealer × 1,295 brokers and dealers = \$20,720,000) and the total ongoing cost for all respondents would be \$26,547,500 (\$20,500 per broker-dealer × 1,295 brokers and dealers = \$26,547,500). The estimates of the initial and annual burdens are based on discussions with potential respondents.

The Commission seeks comment on the reporting and recordkeeping collection of information burdens associated with the proposed rule. In particular:

1. How many broker-dealers would incur collection of information burdens if the proposed rule were adopted by the Commission?
2. What are the burdens, both initial and annual, that a broker-dealer would incur for programming, expanding systems capacity, establishing compliance programs, and maintaining post-trade reporting if the Commission were to adopt the proposed rule? Would there be additional burdens associated with the collection of information under this proposed rule?

3. How much work would it take for brokers or dealers with existing risk management control systems and supervisory procedures to comply with the proposed rule? Would brokers or dealers generally perform the work internally or outsource the work? What would be the hardware and software costs for brokers or dealers that complete the work internally? What about those that outsource the work?

E. General Information About Collection of Information

The collection of information would be mandatory. The collection of information would not be required to be made public but would not be confidential.

F. Request for Comment

Pursuant to 44 U.S.C. 3505(c)(2)(B), the Commission solicits comment to:

1. Evaluate whether the proposed collection of information is necessary for the performance of the functions of the agency, including whether the information shall have practical utility;
2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.

Persons wishing to submit comments on the collection of information requirements should direct them to the Office of Management and Budget, Attention: Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Room 3208, New Executive Office Building, Washington, DC 20503; and should send a copy to

Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090 with reference to File No. S7-03-10. OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication, so a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication. The Commission has submitted the proposed collection of information to OMB for approval. Requests for the materials submitted to OMB by the Commission with regard to this collection of information should be in writing, refer to File No. S7-03-10, and be submitted to the Securities and Exchange Commission, Office of Investor Education and Advocacy, 100 F Street, NE, Washington, DC 20549-0213.

VI. Consideration of Costs and Benefits

The Commission is sensitive to the costs and benefits of the proposed rule and requests comment on the costs and benefits of the proposed Rule 15c3-5 discussed above. The Commission encourages commenters to identify, discuss, analyze, and supply relevant data regarding any such costs or benefits.

A. Benefits

Proposed Rule 15c3-5 should benefit investors, brokers-dealers, their counterparties, and the national market system as a whole by reducing the risks faced by broker-dealers and other market participants as a result of various market access arrangements by requiring financial and regulatory risk management controls to be implemented on a uniform, market-wide basis. The proposed financial and regulatory risk management controls should reduce risks to broker-dealers and markets, as well as systemic risk associated with market access and enhance market integrity and investor protection in the securities markets by effectively prohibiting the practice of “unfiltered” or “naked” access to an exchange or ATS. The proposed rule would establish a

uniform standard for a broker or dealer with market access with respect to risk management controls and procedures which should reduce the potential for regulatory arbitrage and lead to consistent interpretation and enforcement of applicable regulatory requirements across markets.

One of the benefits of the proposed rule should be the reduction of systemic risk associated with market access through the elimination of “unfiltered” or “naked” access. As discussed above, due in large part to technological advancements, the U.S. markets have experienced a rise in the use and reliance of “sponsored access” arrangements where customers place orders that are routed to markets with little or no substantive intermediation by a broker or dealer. The risk of unmonitored trading is heightened with the increased prominence of high-speed, high-volume, automated algorithmic trading, where orders can be routed for execution in milliseconds. If a broker-dealer does not implement strong systematic controls, the broker or dealer may be unaware of customer trading activity that is occurring under its MPID or otherwise. In the “unfiltered” or “naked” access context, as well as with all market access generally, the Commission is concerned that order entry errors could suddenly and significantly make a broker or dealer and other market participants financially vulnerable within mere minutes or seconds. Real examples of such potential catastrophic events have already occurred. For instance, as discussed earlier, on September 30, 2008, trading in Google became extremely volatile toward the end of the day trading, dropping 93% in value at one point, due to an influx of erroneous orders onto an exchange from a single market participant which resulted in the cancellation of numerous trades.⁵⁹

⁵⁹ See Google Trading Incident, *supra* note 14. See also SWS Trading Incident, *supra* note 15; Mizuho Trading Incident, *supra* note 16; and Rambus Trading Incident, *supra* note 17.

Without systematic risk protection, erroneous trades, whether resulting from manual errors or a faulty automated, high-speed algorithm, could potentially expose a broker or dealer to enormous financial burdens and disrupt the markets. Because the impact of such errors may be most profound in the “unfiltered” access context, but are not unique to it, it is clearly in a broker or dealer’s financial interest, and the interest of the U.S. markets as whole, to be shielded from such a scenario regardless of the form of market access. The mitigation of significant systemic risks should help ensure the integrity of the U.S. markets and provide the investing public with greater confidence that intentional, bona fide transactions are being executed across the national market system. Proposed Rule 15c3-5 should promote confidence as well as participation in the market by enhancing the fair and efficient operation of the U.S. securities markets.

The national market system is currently exposed to risk that can result from unmonitored order flow, as a recent report has estimated that “naked” access accounts for 38 percent of the daily volume for equities traded in the U.S. markets.⁶⁰ The Commission is aware that a certain segment of the broker-dealer community has declined to incorporate “naked” access arrangements into their business models because of the inherent risks of the practice. In the absence of a Commission rule that would prohibit such market access, these brokers or dealers could be compelled by competitive and economic pressures to offer “naked” access to their customers and thereby significantly increase a systemic vulnerability of the national market system.

Finally, the Commission believes that in many cases broker or dealers whose business activities include proprietary trading, traditional agency brokerage activities, and direct market access, would find that their current risk management controls and supervisory procedures may

⁶⁰ See supra note 10.

substantially satisfy the requirements of the proposed rule, and require minimal material modifications. Such broker or dealers would experience the market-wide benefits of the proposal with limited additional costs related to their own compliance.

The Commission seeks comment on the anticipated benefits of the proposed rule, including the following: Would the proposed rule provide market benefits that the Commission has not discussed? Would the proposed rule help level the playing field for broker-dealer competition? Would the proposed rule serve to reduce systemic risks to the US markets? Would the proposed rule serve to promote trading volumes? Would the proposed rule enhance market integrity, promote investor protection, and protect the public interest?

B. Costs

1. Technology Development and Maintenance

Broker-dealers with market access may comply with the proposed rule in several ways. Specifically, a broker-dealer may choose to internally develop risk management controls from scratch, or upgrade its existing systems; each of these approaches has potential costs that are divided into initial costs and annual ongoing costs. Alternatively, a broker-dealer may choose to purchase a risk management solution from an outside vendor. As stated above, it is likely many broker-dealers with market access would be able to substantially satisfy the proposed rule with their current risk management controls and supervisory procedures, requiring few material changes. However, for others, the costs of upgrading and introducing the required systems would vary considerably based on their current controls and procedures, as well as their particular business models. For instance, the needs of a broker-dealer would vary based on its current systems and controls in place, the comprehensiveness of its controls and procedures, the sophistication of its client base, the types of trading strategies that it utilizes, the number of

trading venues it connects to, the number of connections that it has to each trading market, and the volume and speed of its trading activity.

Commission staff's discussions with industry participants found that broker-dealers who must develop or substantially upgrade existing systems could face several months of work requiring considerable time and effort. For example, the Commission conservatively estimates that developing a system from scratch could take approximately three months, while upgrading a pre-existing risk control management system could take approximately two weeks. Overall, Commission staff estimates that the initial cost for an internal development team to develop or substantially upgrade an existing risk control system⁶¹ would be \$51,000 per broker-dealer,⁶¹ or

⁶¹ See supra note 49. The Commission estimates that the average initial cost of \$51,000 per broker-dealer consists of \$35,000 for technology personnel and \$16,000 for hardware and software. As stated in the PRA section, industry sources estimate that the average system development team consists of one or more programmer analysts, senior programmers, and senior systems analysts. The Commission estimates that the programmer analyst would work 40% of the total hours required for initial development, or 150 hours \times 0.40 = 60 hours; the senior programmer would work 20% of the total hours, or 150 hours \times 0.20 = 30 hours; and the senior systems analyst would work 40% of the total hours, or 150 hours \times 0.40 = 60 hours. The total initial development cost for staff is estimated to be 60 hours \times \$193 (hourly wage for a programmer analyst) + 30 hours \times \$292 (hourly wage for a senior programmer) + 60 hours \times \$244 (hourly wage for a senior systems analyst) = \$34,980, or \$35,000.

The \$193, \$292, and \$244 per hour estimates for a programmer analyst, senior programmer, and senior systems analyst, respectively is from SIFMA's Office Salaries in the Securities Industry 2008, modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead.

The Commission estimates that the average initial hardware and software cost is \$16,000 per broker-dealer. Industry sources estimate that to build a risk control management system from scratch, hardware would cost \$44,500 and software would cost \$58,000, while to upgrade a pre-existing risk control management system, hardware would cost \$5,000 and software would cost \$6,517. Based on discussions with industry participants, the Commission estimates that 95% of all respondents would require modifications and upgrades only, and 5% would require development of a system from scratch. Therefore, the total average hardware and software cost for an initial internal development project would be approximately $(0.95 \times \$11,517) + (0.05 \times \$102,500) = \$16,066$, or \$16,000.

\$66.0 million for 1,295 broker-dealers. The Commission further estimates that the total annual ongoing cost to maintain an in-house risk control management system is \$47,300 per broker-dealer, or \$61.3 million for 1,295 broker-dealers.⁶²

We note that the potential range of costs would vary considerably, depending upon the needs of the broker-dealer. For example, if 65 broker-dealers – *i.e.*, 5% of the 1,295 broker-dealers affected under the rule – were to build risk control management systems from scratch, the total initial technology cost would be approximately \$17.6 million. A team of 1.5 people, working full-time for 3 months, would work an estimated total of 720 burden hours on the project. The resulting personnel cost to build such a risk control management system would be approximately \$167,904 per broker-dealer, or \$10,913,760 for 65 broker-dealers. The hardware and software cost to build a risk control management system from scratch would be \$102,500 per

⁶² See *supra* note 52. The Commission estimates that the average annual ongoing cost of \$47,300 per broker-dealer consists of \$26,800 for technology personnel and \$20,500 for hardware and software. The Commission estimates that the programmer analyst would work 40% of the total hours required for ongoing maintenance, or 115 hours \times 0.40 = 46 hours; the senior programmer would work 20% of the total hours, or 115 hours \times 0.20 = 23 hours; and the senior systems analyst would work 40% of the total hours, or 115 hours \times 0.40 = 46 hours. The total ongoing maintenance cost for staff is estimated to be 46 hours \times \$193 (hourly wage for a programmer analyst) + 23 hours \times \$292 (hourly wage for a senior programmer) + 46 hours \times \$244 (hourly wage for a senior systems analyst) = \$26,818, or \$26,800.

The \$193, \$292, and \$244 per hour estimates for a programmer analyst, senior programmer, and senior systems analyst, respectively is from SIFMA's Office Salaries in the Securities Industry 2008, modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead.

The Commission estimates that the average annual ongoing hardware and software cost is \$20,500 per broker-dealer. Industry sources estimate that for ongoing maintenance, hardware would cost \$8,900 on average and software would cost \$11,600 on average. The total average hardware and software cost for ongoing maintenance would be \$8,900 + \$11,600 = \$20,500.

broker-dealer, or \$6,662,500 for 65 broker-dealers. The combined personnel, hardware, and software cost would be \$17.6 million.

By contrast, if the remaining 1,230 broker-dealers were to upgrade and modify their pre-existing risk control management systems, the total initial technology cost for those 1,230 broker-dealers would be approximately \$48.6 million. A team of 1.5 people, working full-time for 2 weeks, would work an estimated total of 120 burden hours on the project. The resulting staff cost to upgrade and modify a pre-existing risk control management system would be approximately \$27,984 per broker-dealer, or \$34.4 million for 1,230 broker-dealers. The hardware and software cost to upgrade and modify a risk control management system would be \$11,517 per broker-dealer, or \$14.2 million for 1,230 broker-dealers. The combined personnel, hardware, and software cost would be \$48.6 million. The Commission welcomes comments on these estimates.

Rather than developing or upgrading systems, broker-dealers may choose to purchase a risk management solution from a third-party vendor. Potential costs of contracting with such a vendor were obtained from industry participants. Here again, the potential range of costs would vary considerably, depending upon the needs of the broker-dealer. For instance, the needs of a broker-dealer would vary based on its current systems and controls in place, the comprehensiveness of its controls and procedures, the sophistication of its client base, the types of trading strategies that it utilizes, the number of trading venues it connects to, the number of connections that it has to each trading market, and the volume and speed of its trading activity. As discussed previously, a broker-dealer is estimated to pay as much as approximately \$4,000 per month per trading venue for a startup contract depending on its particular needs. The Commission conservatively estimates \$8,000 per month (i.e., connection to two trading venues),

or \$96,000 annually, for a startup contract.⁶³ For instance, the Commission estimates that if 65 broker-dealers choose to purchase systems from a third-party vendor as an alternative to building a risk control management system from scratch,⁶⁴ the cost to the industry for initial startup contracts could be approximately \$6,240,000.⁶⁵ The Commission preliminarily believes that the annual ongoing cost would be significantly less than the initial startup cost; however, to be conservative, we estimate that the annual ongoing cost for 65 broker-dealers would be the same as the startup estimate of \$6,240,000 per year. The Commission welcomes comments on the reasonableness of these estimates.

2. Legal and Compliance

Like today, a broker or dealer would be obligated to comply with all applicable regulatory requirements such as exchange trading rules relating to special order types, trading halts, odd-lot orders, SEC rules under Regulation SHO and Regulation NMS, and applicable margin requirements. Accordingly, the Commission believes that the overall cost increase associated with developing and maintaining compliance policies and procedures is not expected to be significant because the proposed rule may be substantially satisfied by existing risk management controls and supervisory procedures already implemented by brokers-dealer that conduct proprietary trading, traditional brokerage activities, direct market access, and sponsored access. Therefore, many of the financial and regulatory risk management controls specified in

⁶³ See supra Section V.D.1.

⁶⁴ As stated previously, the Commission estimates that 5% of all broker-dealers will require development of a system from scratch. See supra note 49. The Commission believes that a total of 65 broker-dealers is a reasonable estimate here.

⁶⁵ 65 broker-dealers × \$96,000 (annual cost for a startup contract with a third-party technology provider or service bureau) = \$6,240,000.

the proposed rule – such as prevention of trading restricted products, or setting of trade limits – should already be in place and should not require significant additional expenditure of resources.

The Commission estimates that the initial cost for a broker or dealer to comply with the proposed requirement to establish, document, and maintain compliance policies and supervisory procedures would be approximately \$28,200 per broker-dealer, or \$36.5 million for 1,295 broker-dealers. Specifically, the costs for setting credit and capital thresholds would be approximately \$2,640;⁶⁶ and the modification or establishment of applicable compliance policies and procedures would be approximately \$25,555 per broker-dealer.⁶⁷

The Commission further estimates that the costs of the annual review, modification of applicable compliance policies and supervisory procedures, and preservation of such records

⁶⁶ The Commission estimates that one compliance attorney and one compliance manager would each require 5 hours, for a total initial burden of 10 hours. See supra Section V.B.2. The total initial cost for staff is estimated to be 5 hours × \$270 (hourly wage for a compliance attorney) + 5 hours × \$258 (hourly wage for a compliance manager) = \$2,640.

The \$270 and \$258 per hour estimates for a compliance attorney and compliance manager, respectively, is from SIFMA's Office Salaries in the Securities Industry 2008, modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead.

⁶⁷ The Commission estimates that one compliance attorney and one compliance manager would each require 10 hours, while the Chief Executive Officer would require 5 hours, for a total initial burden of 25 hours. See supra Section V.B.2. The total initial cost for staff is estimated to be 10 hours × \$270 (hourly wage for a compliance attorney) + 10 hours × \$258 (hourly wage for a compliance manager) + 5 hours × \$4,055 (hourly wage for a Chief Executive Officer) = \$25,555.

The \$270 and \$258 per hour estimates for a compliance attorney and compliance manager, respectively, is from SIFMA's Office Salaries in the Securities Industry 2008, modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead. The \$4,055 per hour figure for a broker-dealer Chief Executive Officer comes from the median of June 2008 Large Bank Executive Compensation data from TheCorporateLibrary.com, divided by 1800 hours per work-year. We invite comments on whether large bank Chief Executive Officer total compensation is an appropriate proxy for broker-dealer Chief Executive Officer total compensation.

would be approximately \$30,800 per broker-dealer, or \$39.9 million for 1,295 broker-dealers. Specifically, compliance attorneys who review, document, and update written compliance policies and procedures would cost an estimated \$5,400 per year;⁶⁸ a compliance manager who reviews, documents, and updates written compliance policies and procedures is expected to cost \$5,160;⁶⁹ and the Chief Executive Officer, who certifies the policies and procedures, would cost \$20,275.⁷⁰

The Commission believes that the ongoing legal and compliance obligations under the proposed rule would be handled internally because compliance with these obligations is consistent with the type of work that a broker-dealer typically handles internally. The Commission does not believe that a broker-dealer would likely have any recurring external costs associated with legal and compliance obligations.

3. Total Cost

The Commission believes that this proposed rule would have its greatest impact on broker-dealers that provide “naked” access, and that the majority of broker-dealers with market

⁶⁸ 20 hours (total annual ongoing compliance hourly burden for a compliance attorney) × \$270 (hourly wage for a compliance attorney) = \$5,400. The \$270 per hour estimate for a compliance attorney is from SIFMA’s Office Salaries in the Securities Industry 2008, modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead.

⁶⁹ 20 hours (total annual ongoing compliance hourly burden for a compliance manager) × \$258 (hourly wage for a compliance manager) = \$5,160. The \$258 per hour estimate for a compliance manager is from SIFMA’s Office Salaries in the Securities Industry 2008, modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead.

⁷⁰ 5 hours (total annual ongoing compliance hourly burden for a Chief Executive Officer) × \$4,055 (hourly wage for a Chief Executive Officer) = \$20,275. The \$4,055 per hour figure for a broker-dealer Chief Executive Officer comes from the median of June 2008 Large Bank Executive Compensation data from TheCorporateLibrary.com, divided by 1800 hours per work-year. We invite comments on whether large bank Chief Executive Officer total compensation is an appropriate proxy for broker-dealer Chief Executive Officer total compensation.

access are likely to be able to substantially satisfy the requirements of the proposed rule change with much of their current existing risk management controls and supervisory procedures. However, for broker-dealers that would need to develop or substantially upgrade their systems the cost would vary considerably.

We note that the potential range of costs would vary considerably, depending upon the needs of the broker-dealer and its current risk management controls and supervisory procedures. For example, the Commission estimates that if 65 broker-dealers build risk management systems from scratch and modify their compliance procedures accordingly, the total initial cost could be approximately as much as \$19.4 million. The cost to build the risk control management systems would be \$17.6 million for 65 broker-dealers,⁷¹ while the cost to initially develop or modify compliance procedures for the same would be approximately \$28,200 per broker-dealer,⁷² or \$1,833,000 for 65 broker-dealers. The total initial cost to build systems from scratch is thus estimated to be approximately \$19.4 million.

By contrast, the Commission estimates that if the remaining 1,230 broker-dealers would upgrade their pre-existing risk control management systems and modify their compliance procedures accordingly, the total initial cost would be approximately as much as \$83.3 million. The cost to upgrade the risk control management systems would be \$48.6 million for 1,230 broker-dealers,⁷³ while the cost to initially develop or modify compliance procedures for the same would be approximately \$28,200 per broker-dealer,⁷⁴ or \$34.7 million for 1,230 broker-dealers. The total initial cost is thus estimated to be approximately \$83.3 million.

⁷¹ See supra Section VI.B.1.

⁷² See supra Section VI.B.2.

⁷³ See supra Section VI.B.1.

⁷⁴ See supra Section VI.B.2.

The total annual initial cost for 1,295 broker-dealers is estimated to be approximately \$102.6 million.⁷⁵

The total annual ongoing cost for 1,295 broker-dealers to maintain a risk management control system and annual review and modification of applicable compliance policies and procedures could be approximately as much as \$101.1 million. The annual technology cost to maintain a risk management control system would be approximately \$47,300 per broker-dealer,⁷⁶ or \$61.3 million for 1,295 broker-dealers, while the cost for annual review and modification of applicable compliance policies and procedures would be approximately \$30,800 per broker-dealer,⁷⁷ or \$39.9 million for 1,295 broker-dealers. The total annual ongoing cost is estimated to be approximately \$101.1 million.

The estimates of the initial and annual burdens are based on discussions with industry participants. The Commission welcomes comments on these estimates.

Based on discussions with industry participants, the Commission is aware that, if the Commission were to adopt the proposed rule, there is a potential for latency, ranging approximately from 200 to 500 microseconds, for orders that currently route to exchanges or ATSS via “naked” access arrangements. The Commission however preliminarily believes that the potential costs associated with the elimination of “unfiltered” access, including the potential for latency, are justified by the overall benefit to the U.S. markets. We solicit comment on the Commission’s view. Would the controls imposed by the rule substantially increase latency? To what extent would broker-dealers have greater incentives to reduce any such latency? Would

⁷⁵ \$19.4 million (initial cost for 65 broker-dealers building a system from scratch) + \$83.3 million (initial cost for 1,230 broker-dealers upgrading pre-existing systems) = approximately \$102.6 million.

⁷⁶ See supra note 62.

⁷⁷ See supra notes 68, 69, and 70.

broker-dealers incur additional costs in reducing any such latency? What would be the costs to market participants of any additional latency? Can these costs be quantified?

The Commission is also aware that some broker-dealers may benefit from offering sponsored access because they receive volume discounts offered by exchanges and other market centers due to the trades entered under the broker-dealer's MPID or otherwise. How much would the proposed rules affect the volume discounts enjoyed by broker-dealers? Would this effect differ across broker-dealers? What characteristics impact a broker-dealer's reliance on sponsored access for these volume discounts? How would any effect alter a broker-dealer's business? Can any such costs be quantified?

The Commission seeks comment on any other potential costs to brokers or dealers that may result from the proposed rule. While the Commission does not anticipate that there would be significant adverse consequences to a broker or dealer's business, activities, or financial condition as a result of the proposed rule, it seeks commenters' views regarding the possibility of any such impact. For instance, would the proposed rule impact a broker or dealer's ability to attract or retain its market access customers? Could a broker or dealer lose order flow, because its customer might seek other arrangements in order to access the securities markets, such as becoming a member of a particular exchange or becoming a broker or dealer? The Commission requests for commenters to quantify those costs, where possible.

The Commission preliminarily believes that any additional burden or costs on brokers and dealers who provide market access as a result of the proposed amendments would be justified by the improved market security to brokers, dealers, market participants, the self-regulatory organizations, and the public generally, all of which contribute to investor protection and market integrity. To assist the Commission in evaluating the costs that could result from the

proposed rule, the Commission requests comments on the potential costs identified in this proposal, as well as any other costs that could result from the proposed rule. In particular, comments are requested on whether there are costs to any entity not identified above.

Commenters should provide analysis and data to support their views on the costs. In particular, the Commission requests comment on the costs of the proposed rule on brokers, dealers, market participants, self-regulatory organizations, as well as any costs on others, including the investor public.

The Commission also requests comment on the following: Would the proposed rule impair the ability of market participants that currently rely on “unfiltered” access to compete? Would the proposed rule have any unintended, negative consequences for the U.S. markets? Would the proposed rule decrease the propensity of market participants that currently rely on “unfiltered” access to provide liquidity to the U.S. markets? Would the proposed rule stifle or impact certain trading strategies that may add value to the market? Would the proposed rule limit price discovery mechanisms?

VII. Consideration of Burden on Competition, and Promotion of Efficiency, Competition and Capital Formation

Section 3(f) of the Exchange Act⁷⁸ requires the Commission, whenever it engages in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action would promote efficiency, competition, and capital formation. In addition, Section 23(a)(2) of the Exchange Act⁷⁹ requires the Commission, when making rules under the Exchange Act, to consider the impact of such rules on competition. Section 23(a)(2) also prohibits the

⁷⁸ 15 U.S.C. 78c(f).

⁷⁹ 15 U.S.C. 78w(a)(2).

Commission from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.

A. Competition

We consider in turn the impacts of Proposed Rule 15c3-5 on the market center and broker-dealer industries. Information provided by market centers and broker-dealers in their registrations and filings with us and with FINRA informs our views on the structure of the markets in these industries. We begin our consideration of potential competitive impacts with observations of the current structure of these markets.

The broker-dealer industry, including market makers, is a highly competitive industry, with most trading activity concentrated among several dozen large participants and with thousands of small participants competing for niche or regional segments of the market.

There are approximately 5,178 registered broker-dealers, of which 890 are small broker-dealers.⁸⁰ The Commission estimates that 1,295 brokers or dealers would have market access as defined under the proposed rule.⁸¹ Of these 1,295 brokers or dealers, the Commission estimates that approximately 21 of those were small broker-dealers. To limit costs and make business more viable, small broker-dealers often contract with larger broker-dealers to handle certain functions, such as clearing and execution, or to update their technology. Larger broker-dealers typically enjoy economies of scale over small broker-dealers and compete with each other to service the small broker-dealers, who are both their competitors and their customers.

Proposed Rule 15c3-5 is intended to address a broker-dealer's obligations generally with respect to market access risk management controls across markets, to prohibit the practice of

⁸⁰ These numbers are based on the Commission's staff review of 2007 and 2008 FOCUS Report filings reflecting registered broker-dealers, and discussions with SRO staff. The number does not include broker-dealers that are delinquent on FOCUS Report filings.

⁸¹ See supra note 33.

“unfiltered” or “naked” access to an exchange or an ATS where customer order flow does not pass through the broker-dealer’s systems or filters prior or to entry on an exchange or ATS, and to provide uniform standards that would be interpreted and enforced in a consistent manner. Such proposed requirements may promote competition by establishing a level playing field for broker-dealers in market access, in that each broker or dealer would be subject to the same requirements in providing access.

The proposed rule would require brokers or dealers that offer market access, including those providing sponsored or direct market access to customers, to implement appropriate risk management controls and supervisory procedures to manage the financial and regulatory risks of this business activity. As noted above, we expect there to be costs of implementing and monitoring these systems. However, we do not believe that these costs will create or increase any burdens of entry into the broker-dealer industry.

The Commission seeks comment on whether or how the proposed rule would affect the competitive landscape in the broker-dealer industry and on whether or how the proposed rule might create new barriers to entry or increase existing barriers to entry in the broker-dealer industry.

The costs to implement appropriate risk management controls and supervisory procedures to manage the financial and regulatory risks may disproportionately impact small- or medium-sized broker-dealers. In particular, the costs of instituting such controls and procedures could be a larger portion of revenues for small- and medium-sized broker-dealers than for larger broker dealers. In addition, to the extent that the cost of obtaining sponsored access increases, the increases could be a larger portion of the revenues of small and medium-sized broker-dealers. This could impair the ability of small- and medium-sized broker-dealers to compete for order

routing business with larger firms, limiting choice and incentives for innovation in the broker dealers industry. However, the effect on smaller broker-dealers could be mitigated, to some extent, by purchasing a risk management solution from a third-party vendor.

We do not believe that the proposed rule will alter the competitive landscape in the competition between large broker-dealers and small and medium broker-dealers. However, we request comment on the following questions:

How common is it for smaller broker-dealers to offer sponsored access or direct market access? If smaller broker-dealers provide this service, would costs of implementing and complying with the proposed rule be particularly burdensome for them? Could the proposed rule impair the ability of small- and medium-sized broker-dealers to compete for order routing business with larger firms, limiting choice and incentives for innovation in the broker-dealer industry, because it would not be cost effective for them to implement the required risk management controls and supervisory procedures?

How common is it for smaller broker-dealers to be the sponsored participants for larger broker-dealers? If this is common, would the rule affect the ability of these smaller broker-dealers to access markets? If so, in what ways and to what extent? How would any such effects impact the securities markets more generally? If it is common for smaller broker-dealers to offer or purchase market access, would the rule adversely affect the ability of smaller broker-dealers to compete or the level of service that they can provide to their customers?

Would the Proposed Rule 15c3-5 create vertical integration in the industry, by inducing large customers (non-members) to acquire and integrate with broker-dealers? Would this potential outcome have an impact on competition in the industry?

What are the types of customers who use sponsored access or direct market access?

Would this rule affect the competitive landscape for any of these customer types? Would the rule affect the competitive landscape for any other market participants, including market makers?

In addition, the Commission is mindful of a potential race-to-the-bottom issue in which broker-dealers competing for sponsored access or direct market access clients with low prices will skimp on spending for risk controls. Will the proposed rule help to halt or encourage such a “race to the bottom”?

The trading industry is a highly competitive one, characterized by ease of entry. In fact, the intensity of competition across trading platforms in this industry has increased dramatically in the past decade as a result of market reforms and technological advances. This increase in competition has resulted in substantial decreases in market concentration, effective competition for the securities exchanges, a proliferation of trading platforms competing for order flow, and significant decreases in trading fees. The low barriers to entry for equity trading venues are shown by new entities, primarily ATSS, continuing to enter the market. Currently, there are approximately 50 registered ATSS that trade equity securities. In addition, the Commission within the past few years has approved applications by two entities – BATS and Nasdaq – to become registered as national securities exchanges for trading equities, and approved proposed rule changes by two existing exchanges – ISE and CBOE – to add equity trading facilities to their existing options business. We believe that competition among trading centers has been facilitated by Rule 611 of Regulation NMS,⁸² which encourages quote-based competition between trading centers; Rule 605 of Regulation NMS,⁸³ which empowers investors and broker-

⁸² 17 CFR 242.611.

⁸³ 17 CFR 242.605.

dealers to compare execution quality statistics across trading centers; and Rule 606 of Regulation NMS,⁸⁴ which enables customers to monitor order routing practices.

Market centers compete with each other in several ways. National exchanges compete to list securities; market centers compete to attract order flow to facilitate executions; and market centers compete to offer access to their markets to members or subscribers. In this last area of competition, one could argue that the ability to access a market through sponsored access or direct market access could substitute for becoming a member or subscriber. Of course, there are both benefits and responsibilities in being a member or subscriber that do not accrue directly to someone using sponsored access or direct market access. Nonetheless, to the extent that these forms of market access are substitutes for membership, an increase in the costs of sponsored access or direct market access may make a potential member more likely to decide to become a member or subscriber. At the same time, market centers may reduce the cost of access to members or subscribers in order to attract trading flow to their venue.

We request comment on the following questions: Would the Proposed Rule 15c3-5 modify the competition among market centers and broker-dealers to obtain members or offer sponsored access? What are the benefits of being a member or subscriber to a market center that would not be available to someone with sponsored access or direct market access? Would the proposed rule increase or decrease the propensity of broker-dealers and others to become members or subscribers? Would the proposed rule increase or decrease the propensity of non-broker-dealer market participants to register to become broker-dealers? How would the proposed rule affect overall access to markets? Would the proposed rule affect any other type of competition between market centers?

⁸⁴ 17 CFR 242.606.

B. Capital Formation

The Commission believes that the proposed rule would have a minimal impact on the promotion of capital formation. We request comment on the following questions:

By requiring financial and regulatory controls to be implemented on a market-wide basis to reduce the risks faced by broker-dealers, and by prohibiting “unfiltered” or “naked” access, would Proposed Rule 15c3-5 promote capital formation? If so, to what extent? Would the proposed rule promote investor protection, which could, in turn, make investors more willing to invest and promote capital formation? Are there any other impacts of the proposed rule on capital formation? To the extent that the proposed requirements impact trading strategies or other behavior, how might that impact capital formation?

C. Efficiency

By proposing to address broker-dealer obligations with respect to market access risk controls across markets, and by having the effect of prohibiting “unfiltered” or “naked” access, the proposed rule would provide uniform standards that would be interpreted and enforced in a consistent manner. Proposed Rule 15c3-5 would help to facilitate and maintain stability in the markets and help ensure that they function efficiently.

In recent years, the development and growth of automated electronic trading has allowed ever increasing volumes of securities transactions across the multitude of trading centers that constitute the U.S. national market system. The Commission believes that the risk management controls and procedures that brokers and dealers would be required to include as part of their compliance systems should prevent erroneous and unintended trades from occurring and thereby contribute to overall market efficiency.

While the Commission has consistently sought to encourage innovations that enhance the efficiency and quality of the markets, it also must assure that the regulatory framework keeps pace with market developments so that emerging risks are effectively addressed. The Commission believes that safer transactions – and the anticipated increased confidence in the markets – should promote greater efficiency in the long run. The Commission is aware of concerns that pre-trade controls potentially could slow down the speed of order routing and the incorporation of information into prices, but the Commission notes that such concerns should be balanced against the Commission’s goals, as mandated by the Exchange Act, including to promote the integrity of the markets and investor protection. We request comment on the following questions:

How would Proposed Rule 15c3-5 affect price efficiency? Would pre-trade reviews limit unlawful or erroneous trading? To what extent would limits on erroneous trading improve price efficiency? To what extent would the pre-trade reviews reveal other trading that could affect price efficiency? To what extent would the controls imposed by the rule create latency that can slow the incorporation of information into prices? To what extent would broker-dealers have greater incentives to reduce any such latency?

VIII. Consideration of Impact on the Economy

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996, or “SBREFA,”⁸⁵ the Commission must advise OMB as to whether the proposed regulation constitutes a “major” rule. Under SBREFA, a rule is considered “major” where, if adopted, it results or is likely to result in: (1) an annual effect on the economy of \$100 million or more (either in the form of an increase or a decrease); (2) a major increase in costs or prices for

⁸⁵ Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C., 15 U.S.C. and as a note to 5 U.S.C. 601).

consumers or individual industries; or (3) significant adverse effect on competition, investment or innovation. If a rule is “major,” its effectiveness will generally be delayed for 60 days pending Congressional review.

The Commission requests comment on the potential impact of the proposed rule on the economy on an annual basis, on the costs or prices for consumers or individual industries, and on competition, investment or innovation. Commenters are requested to provide empirical data and other factual support for their view to the extent possible.

IX. Initial Regulatory Flexibility Analysis

The Commission has prepared the following Initial Regulatory Flexibility Analysis (“IRFA”), in accordance with the provisions of the Regulatory Flexibility Act (“RFA”),⁸⁶ regarding proposed new Rule 15c3-5 under the Securities Exchange Act of 1934.

A. Reasons for the Proposed Action

Over the past decade, the proliferation of sophisticated, high-speed trading technology has changed the way broker-dealers trade for their accounts and as an agent for their customers. Current SRO rules and interpretations governing electronic access to markets have sought to address the risks of this activity. However, the Commission preliminarily believes that more comprehensive standards that apply consistently across the markets are needed to effectively manage the financial, regulatory, and other risks, such as legal and operational risks, associated with market access.

The Commission notes that these risks are present whenever a broker-dealer trades as a member of an exchange or subscriber to an ATS, whether for its own proprietary account or as agent for its customers, including traditional agency brokerage and through direct market access

⁸⁶ 5 U.S.C. 603(a).

or sponsored access arrangements. For this reason, proposed new Rule 15c3-5 is drafted broadly to cover all forms of access to trading on an exchange or ATS provided directly by a broker-dealer. The Commission believes a broker-dealer with market access should assure the same basic types of controls are in place whenever it uses its special position as a member of an exchange, or subscriber to an ATS, to access those markets. The Commission, however, is particularly concerned about the quality of broker-dealer risk controls in sponsored access arrangements, where the customer order flow does not pass through the broker-dealer's systems prior to entry on an exchange or ATS.

B. Objectives

Proposed Rule 15c3-5 would apply to any broker or dealer that has access to trading in securities on an exchange or ATS as a result of being a member or subscriber of the exchange or ATS, respectively. As noted above, the proposed rule would include not only direct market access or sponsored access services offered to customers of broker-dealers, but also access to trading for the proprietary account of the broker-dealer and for more traditional agency activities. The Commission believes that any broker-dealer with market access should establish effective risk management controls to protect against breaches of credit or capital limits, erroneous trades, violations of SEC or exchange trading rules, and the like.

Proposed Rule 15c3-5 would require a broker or dealer with market access, or that provides a customer or any other person with access to an exchange or ATS through use of its MPID or otherwise, to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks related to market access. The proposed rule would apply to trading in all securities on an exchange or ATS, including equities, options, exchange-traded funds, and debt securities.

Specifically, the proposed rule would require that brokers or dealers with access to trading securities on an exchange or ATS, as a result of being a member or subscriber thereof, establish, document, and maintain a system of risk management controls and supervisory procedures that, among other things, are reasonably designed to (1) systematically limit the financial exposure of the broker or dealer that could arise as a result of market access, and (2) ensure compliance with all regulatory requirements that are applicable in connection with market access.

The required financial risk management controls would be required to be reasonably designed to prevent the entry of orders that exceed appropriate pre-set credit or capital thresholds, or that appear to be erroneous. The required regulatory risk management controls and supervisory procedures would also be required to be reasonably designed to prevent the entry of orders that fail to comply with any regulatory requirements that must be satisfied on a pre-order entry basis, prevent the entry of orders that the broker-dealer or customer is restricted from trading, restrict market access technology and systems to authorized persons, and assure appropriate surveillance personnel receive immediate post-trade execution reports. For example, such systems would block orders that do not comply with exchange trading rules relating to special order types and odd-lot orders, among others.

The proposed requirement that a broker-dealer's financial and regulatory risk management controls and procedures be reasonably designed to prevent the entry of orders that fail to comply with the specified conditions would necessarily require the controls be applied on an automated, pre-trade basis before orders route to an exchange or ATS, thereby effectively prohibiting the practice of "unfiltered" or "naked" access to an exchange or ATS.

The risk management controls and supervisory procedures required by proposed Rule 15c3-5 must be under the direct and exclusive control of the broker or dealer with market access.

This provision is designed to eliminate the practice, which the Commission understands exists today under current SRO rules, whereby the broker-dealer providing market access relies on its customer, a third party service provider, or others, to establish and maintain the applicable risk controls. The Commission believes the risks presented by market access – and in particular “naked” access – are too great to permit a broker-dealer to delegate the power to control those risks to the customer or to a third party, either of whom may be an unregulated entity.

C. Legal Basis

Pursuant to the Exchange Act and particularly, Sections 2, 3(b), 11A, 15, 17(a) and (b), and 23(a) thereof, 15 U.S.C. 78b, 78c(b), 78k-1, 78o, 78q(a) and (b), and 78w(a), the Commission is proposing new Rule 15c3-5.

D. Small Entities Subject to the Rule

For purposes of Commission rulemaking in connection with the RFA, a broker-dealer is a small business if its total capital (net worth plus subordinated liabilities) on the last day of its most recent fiscal year was \$500,000 or less, and is not affiliated with any entity that is not a “small business.”⁸⁷ The Commission staff estimates that at year-end 2008 there were 1,095 broker or dealers which were members of an exchange, and 21 of those were classified as “small businesses.”⁸⁸ In addition, the Commission estimates that there were 200 brokers or dealers that were subscribers to ATSS but not members of an exchange.⁸⁹ The Commission estimates that, of those 200 brokers or dealers, only a small number would be classified as “small businesses.”

Currently, most small brokers or dealers, when accessing an exchange or ATS in the ordinary course of their business, should already have risk management controls and supervisory

⁸⁷ 17 CFR 240.0-10(c).

⁸⁸ See supra note 33.

⁸⁹ Id.

procedures in place. The extent to which such small brokers or dealers would be affected economically under the proposed rule would depend significantly on the financial and regulatory risk management controls that already exist in the broker or dealer's system, as well as the nature of the broker or dealer's business. In many cases, the proposed rule may be substantially satisfied by a small broker-dealer's pre-existing financial and regulatory risk management controls and current supervisory procedures. Further, staff discussions with various industry participants indicated that very few, if any, small broker-dealers with market access provide other persons with "unfiltered" access, which may require more significant systems upgrades to comply with the proposed rule. Therefore, these brokers or dealers should only require limited updates to their systems to meet the requisite risk management controls and other requirements in the proposed rule. The proposed rule also would impact small brokers or dealers that utilize risk management technology provided by a vendor or some other third party; however, the proposed requirement to directly monitor the operation of the financial and regulatory risk management controls should not impose a significant cost or burden because the Commission understands that such technology allows the broker or dealer to exclusively manage such controls.⁹⁰

E. Reporting, Recordkeeping, and Other Compliance Requirements

The proposed rule would require brokers or dealers to establish, document, and maintain certain risk management controls and supervisory procedures as well as regularly review such controls and procedures, and document the review, and remediate issues discovered to assure overall effectiveness of such controls and procedures. Each such broker or dealer would be required to preserve a copy of its supervisory procedures and a written description of its risk

⁹⁰ The Commission's understanding is based on discussions with various industry participants.

management controls as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act. Such regular review would be required to be conducted in accordance with written procedures and would be required to be documented. The broker or dealer would be required to preserve a copy of such written procedures, and documentation of each such review, as part of its books and records in a manner consistent with Rule 17a-4(e)(7) under the Exchange Act, and Rule 17a-4(b) under the Exchange Act, respectively.

In addition, the Chief Executive Officer (or equivalent officer) would be required to certify annually that the broker or dealer's risk management controls and supervisory procedures comply with the proposed rule, and that the broker-dealer conducted such review. Such certifications would be required to be preserved by the broker or dealer as part of its books and records in a manner consistent with Rule 17a-4(b) under the Exchange Act. Most small brokers or dealers currently should already have supervisory procedures and record retention systems in place. The proposed rule would require small brokers or dealers to update their procedures and perform additional internal compliance functions. Based on discussions with industry participants and the Commission's prior experience with broker-dealers, the Commission estimates that implementation of a regular review, modification of applicable compliance policies and procedures, and preservation of such records would require, on average, 45 hours of compliance staff time for brokers or dealers depending on their business model.⁹¹ The Commission believes that the business models of small brokers or dealers would necessitate less than the average of 45 hours. We request comments on these estimates.

F. Duplicative, Overlapping, or Conflicting Federal Rules

⁹¹ See supra Section V.D.2.

The Commission believes that there are no Federal rules that duplicate, overlap, or conflict with the proposed rule amendments and the proposed new rule.

G. Significant Alternatives

Pursuant to Section 3(a) of the Regulatory Flexibility Act,⁹² the Commission must consider certain types of alternatives, including: (1) the establishment of differing compliance or recording requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part of the rule, for small entities.

The Commission considered whether it would be necessary or appropriate to establish different compliance or reporting requirements or timetables; or to clarify, consolidate, or simplify compliance and reporting requirements under the rule for small entities. Because the proposed rule is designed to mitigate, as discussed in detail throughout this release, significant financial and regulatory risks, the Commission preliminarily believes that small entities should be covered by the rule. The proposed rule includes performance standards. The Commission also preliminarily believes that the proposed rule is flexible enough for small brokers and dealers to comply with the proposed rule without the need for the establishment of differing compliance or reporting requirements for small entities, or exempting them from the proposed rule's requirements.

H. Request for Comments

⁹² 5 U.S.C. 603(c).

The Commission encourages written comments on matters discussed in this IRFA. In particular, the Commission seeks comment on the number of small entities that would be affected by the proposed new rule, and whether the effect on small entities would be economically significant. Commenters are asked to describe the nature of any impact on small entities, including broker-dealers or other small businesses or small organizations, and provide empirical data to support their views.

X. Statutory Authority

Pursuant to the Exchange Act and particularly, Sections 2, 3(b), 11A, 15, 17(a) and (b), and 23(a) thereof, 15 U.S.C. 78b, 78c(b), 78k-1, 78o, 78q(a) and (b), and 78w(a), the Commission proposes a new Rule 15c3-5 under the Exchange Act that would require broker-dealers with market access, or that provide a customer or any other person with market access through use of its market participant identifier or otherwise, to establish appropriate risk management controls and supervisory systems.

XI. Text of Proposed Rule

List of Subjects in 17 CFR Part 240

Brokers, Reporting and recordkeeping requirements, Securities.

For the reasons set out in the preamble, 17 CFR Part 240 is proposed to be amended as follows.

PART 240—GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

1. The authority citation for Part 240 continues to read in part as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z-2, 77z-3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78d, 78e, 78f, 78g, 78i, 78j, 78j-1, 78k, 78k-1, 78l, 78m, 78n, 78o, 78p, 78q, 78s,

78u-5, 78w, 78x, 78ll, 78mm, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4, 80b-11, and 7201 et seq.; and 18 U.S.C. 1350, unless otherwise noted.

* * * * *

2. Section 240.15c3-5 is added to read as follows:

§240.15c3-5 Risk management controls for brokers or dealers with market access.

(a) For the purpose of this section:

(1) The term market access shall mean access to trading in securities on an exchange or alternative trading system as a result of being a member or subscriber of the exchange or alternative trading system, respectively.

(2) The term regulatory requirements shall mean all federal securities laws, rules and regulations, and rules of self-regulatory organizations, that are applicable in connection with market access.

(b) A broker or dealer with market access, or that provides a customer or any other person with access to an exchange or alternative trading system through use of its market participant identifier or otherwise, shall establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of this business activity. Such broker or dealer shall preserve a copy of its supervisory procedures and a written description of its risk management controls as part of its books and records in a manner consistent with §240.17a-4(e)(7).

(c) The risk management controls and supervisory procedures required by paragraph (b) of this section shall include the following elements:

(1) Financial risk management controls and supervisory procedures. The risk management controls and supervisory procedures shall be reasonably designed to systematically

limit the financial exposure of the broker or dealer that could arise as a result of market access, including being reasonably designed to:

(i) Prevent the entry of orders that exceed appropriate pre-set credit or capital thresholds in the aggregate for each customer and the broker or dealer and, where appropriate, more finely-tuned by sector, security, or otherwise by rejecting orders if such orders would exceed the applicable credit or capital thresholds; and

(ii) Prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.

(2) Regulatory risk management controls and supervisory procedures. The risk management controls and supervisory procedures shall be reasonably designed to ensure compliance with all regulatory requirements, including being reasonably designed to:

(i) Prevent the entry of orders unless there has been compliance with all regulatory requirements that must be satisfied on a pre-order entry basis;

(ii) Prevent the entry of orders for securities for a broker or dealer, customer, or other person if such person is restricted from trading those securities;

(iii) Restrict access to trading systems and technology that provide market access to permit access only to persons and accounts pre-approved and authorized by the broker or dealer; and

(iv) Assure that appropriate surveillance personnel receive immediate post-trade execution reports that result from market access.

(d) The financial and regulatory risk management controls and supervisory procedures described in paragraph (c) of this section shall be under the direct and exclusive control of the broker or dealer that is subject to paragraph (b) of this section.

(e) A broker or dealer that is subject to paragraph (b) of this section shall establish, document, and maintain a system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of this section and for promptly addressing any issues.

(1) Among other things, the broker or dealer shall review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of such risk management controls and supervisory procedures. Such review shall be conducted in accordance with written procedures and shall be documented. The broker or dealer shall preserve a copy of such written procedures, and documentation of each such review, as part of its books and records in a manner consistent with §240.17a-4(e)(7) and §240.17a-4(b), respectively.

(2) The Chief Executive Officer (or equivalent officer) of the broker or dealer shall, on an annual basis, certify that such risk management controls and supervisory procedures comply with paragraphs (b) and (c) of this section, and that the broker or dealer conducted such review, and such certifications shall be preserved by the broker or dealer as part of its books and records in a manner consistent with §240.17a-4(b).

By the Commission.

Florence E. Harmon
Deputy Secretary

Date: January 19, 2010

Note: This Appendix to the Preamble will not appear in the Code of Federal Regulation.

Appendix

A. Current SRO Guidance

The New York Stock Exchange (“NYSE”) and the Financial Industry Regulatory Authority (“FINRA”) (formerly known as the National Association of Securities Dealers, Inc. (“NASD”))¹ have issued several Information Memoranda (“IM”) and Notices to Members (“NTM”), respectively, that are designed to provide guidance to their members that provide market access to customers. The guidance provided by the NYSE and the NASD is primarily advisory, as opposed to compulsory, and is similar in many respects. As discussed in more detail below, both SROs emphasize the need for members to implement and maintain internal procedures and controls to manage the financial and regulatory risks associated with market access, and recommend certain best practices.²

1. NYSE Guidance

In 1989, the NYSE first issued an IM to provide guidance for its members that permitted customers to access the NYSE SuperDot System.³ NYSE IM-89-6 stated that it was permissible for members to receive electronic orders directly from their customers and re-transmit those

¹ In 2007, the NASD and the member-related functions of New York Stock Exchange Regulation, Inc., the NYSE’s regulatory subsidiary, were consolidated. As part of this regulatory consolidation, the NASD changed its name to FINRA. For clarity, this release uses the term “NASD” to refer to matters that occurred prior to the consolidation and the term “FINRA” to refer to matters that occurred after the consolidation.

² The Commission notes that the collective NASD and NYSE guidance described below now constitutes FINRA’s current guidance on market access.

³ See NYSE IM-89-6 (January 25, 1989).

orders to the NYSE's SuperDot system, but that members providing such access must satisfy all regulatory requirements relating to those orders.⁴

In 1992, the NYSE issued NYSE IM-92-15⁵ which stated that members should have written procedures and controls for the monitoring and supervision of electronic orders, including those that limit access to electronic order entry systems to authorized users, validate order accuracy, and check the order against established credit limits. The NYSE indicated that either the customer or the member could establish the necessary controls, but that the member would be ultimately responsible for maintaining and implementing them. Later that year, NYSE IM-92-43,⁶ was issued and stressed the importance of effective policies and procedures designed to minimize errors associated with electronic order entry.⁷

⁴ The NYSE specifically referenced NYSE Rule 405 pertaining to Diligence as to Accounts, and NYSE Rule 382, pertaining to Carrying Agreements. The NYSE also stated that a member's "know your customer" obligations had to be satisfied either through conventional methods or through automated system parameters. In NYSE IM-89-6, the NYSE required its members to provide a written statement acknowledging their responsibility for electronic customer orders retransmitted to the NYSE. *Id.*

⁵ NYSE IM-92-15 (May 28, 1992). In NYSE IM-92-15, the NYSE recognized that the "ongoing need to enhance efficiency and to facilitate the swift and orderly processing and execution of orders ... [had] led to the development and increased usage of electronic order routing systems by member organizations." However, the NYSE also warned that while technological developments facilitated the handling of a significantly higher order volume, it also increased the prospect of order errors and concerns regarding sufficient internal controls. Accordingly, the NYSE advised that internal control procedures were important elements of any electronic trading system and reaffirmed that members must adhere to certain regulatory requirements and business practices when permitting access to electronic order routing systems.

⁶ NYSE IM-92-43 (December 29, 1992).

⁷ NYSE IM-92-43 emphasized that the member was responsible for assuring that control procedures, whether established by the customer or the member, were reasonably expected to monitor and supervise the entry of orders and minimize the potential for errors. The NYSE also clarified that members should obtain and maintain, as part of their books and records, a copy of their customer's written control procedures pertaining to electronic order entry. If the control procedures were established by the member, the customer should sign an undertaking committing to adhere to them. The NYSE also

In 2002, NYSE IM-02-48 was issued to re-emphasize member obligations related to the submission of electronic orders.⁸ The NYSE noted that electronic order entry systems could lead to increased market volatility and significant exposure to financial risk for members, and thus members were required to have written internal control and supervisory procedures addressing those risks. The NYSE indicated that these should, at a minimum, incorporate controls to: (1) limit the use of the system to authorized persons; (2) validate order accuracy; (3) establish credit limits or systematically prevent the transmission of orders exceeding preset credit or order size parameters; and (4) monitor for duplicative orders. If a member used a vendor's order entry system, the NYSE stressed that it was the member's responsibility to ensure that the requisite controls were in place. If relying on the customer's controls, members were reminded that they had to obtain, for books and records purposes, the customer's written control procedures and a written undertaking to provide the member with written notification of any significant changes to such procedures.

2. NASD Guidance

The NASD offered its initial guidance on market access in 1998, when it issued NASD NTM-98-66⁹ to address a variety of issues for NASD members to consider if they chose to

noted that built-in system checks, such as pre-set size and dollar limits, were an alternative way to satisfy the control requirements. Id.

⁸ NYSE IM-02-48 (November 7, 2002). NYSE noted that there were a number of erroneous orders submitted via electronic order entry systems as a result of human error or defective commercial or proprietary software systems, and that the errors most commonly involved an incorrect quantity of shares being submitted, or the inadvertent release of files containing previously transmitted orders. Moreover, the NYSE emphasized the need for safeguards to prevent the disabling of the systemic controls or the system whether the system was provided by the member, a vendor, the customer or another third party. Id.

⁹ See Securities Exchange Act Release No. 40354 (August 24, 1998), 63 FR 46264 (August 31, 1998) (NASD NTM- 98-66).

allow customers to route orders to Nasdaq through member systems.¹⁰ Among other things, the NASD affirmed that members were responsible for honoring all executions that occurred as a result of market access,¹¹ and should perform appropriate due diligence of customers for which they offer this service.

The NASD also stated that members should have adequate written procedures and controls to effectively monitor and supervise order entry by customers. Specifically, the NASD indicated that members' controls should address: (1) the entry of unauthorized orders; (2) orders that exceed or attempt to exceed pre-set credit or other parameters, such as order size, established by the member; (3) potentially manipulative activity by electronic access customers; (4) potential violations of affirmative determination requirements¹² and short-sale rules. More generally, NASD stated that members should ensure compliance with SEC and NASD rules, and that "whenever possible ... controls should be automated and system driven."¹³ Finally, the NASD

¹⁰ NASD NTM-98-66 elaborated on the NASD's April 1998 Nasdaq interpretive letter regarding non-member access to SelectNet. In particular, NASD expanded the discussion to address non-member access to Nasdaq's Small Order Execution System ("SOES"). The systems were discussed separately because SOES was an automatic execution facility while SelectNet was an order-delivery facility. *Id.*

¹¹ The NASD required its members to provide a letter to Nasdaq acknowledging responsibility for non-member orders submitted through the member's system. *Id.*

¹² Formerly, NASD Rule 3370(b)(2)(A) stated, in part, that "[n]o member or person associated with a member shall accept a 'short' sale order for any customer ... in any security unless the member or person associated with a member makes an affirmative determination that the member will receive delivery of the security from the customer ... or that the member can borrow the security on behalf of the customer ... for delivery by settlement date." *See* former NASD Rule 3370(b)(2)(A). In 2004, NASD Rule 3370(b) was repealed because it was deemed to overlap with and be duplicative of Rule 203 of Regulation SHO. *See* Securities Exchange Act Release No. 50822 (December 8, 2004), 69 FR 74554 (December 14, 2004) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change by National Association of Securities Dealers, Inc. Relating to Repeal of Existing NASD Short Sale Rules in Light of SEC Regulation SHO).

¹³ The NASD also required that members provide a description of the system that permitted a non-member's access to Nasdaq execution facilities, including details on how orders

required a signed agreement setting forth the responsibilities of both the member and the non-member customer with respect to the access arrangement.¹⁴

In 2004, in response to an increase in order entry errors by non-member customers, NASD issued NTM-04-66¹⁵ to remind members of their responsibility for all orders entered under their MPID, and that reasonable steps should be taken to address order entry errors.¹⁶ The NASD advised that a member's supervisory system and written supervisory procedures should be consistent with the NASD's supervision rule, Rule 3010,¹⁷ and related guidance provided in a variety of NTMs.¹⁸ The NASD further noted that members should consider, when developing a supervisory system and written supervisory procedures, controls that: (1) limit the use of electronic order entry systems to authorized persons; (2) check for order accuracy; (3) prevent orders that exceed preset credit- and order-size parameters from being transmitted to a trading system; and (4) prevent the unwanted generation, cancellation, re-pricing, resizing, duplication,

were received and re-transmitted, the system's security and capacity, the manner that the system connected to Nasdaq, and any internal system protocols designed to fulfill the member's "know your customer" obligations and other regulatory obligations. See supra note 10.

¹⁴ Among other things, the agreement informed the customer of its potential liability under federal securities laws for any illegal trading activity, and of NASD surveillance to detect any illegal trading activity. Id.

¹⁵ NASD NTM-04-66 (September 2004).

¹⁶ The NASD noted that order entry errors typically resulted from mistakes in data entry or malfunctioning software. Id.

¹⁷ NASD Rule 3010 has not yet been consolidated as a FINRA rule; it is currently included in the FINRA Transitional Rulebook.

¹⁸ See NASD NTMs 88-84 (November 1988), 89-34 (April 1989), 98-96 (December 1998), and 99-45 (June 1999). A FINRA Information Notice, dated December 8, 2008, clarified that the NASD Rules generally apply to all FINRA member firms.

or re-transmission of orders.¹⁹ Finally, the NASD reminded members that it would closely examine the supervisory systems and written supervisory procedures of members with respect to the review and detection of potential order-entry errors and, where appropriate, initiate disciplinary action against firms and their supervisory personnel.

B. Exchange Rules

The exchanges each have adopted rules that, in general, permit non-member “sponsored participants” to obtain direct access to the exchange’s trading facilities, so long as a sponsoring broker-dealer that is a member of the exchange takes responsibility for the sponsored participant’s trading, and certain contractual commitments are made.²⁰ The required contractual commitments typically entail agreements by the sponsored participant to: (1) comply with exchange rules as if it were a member; (2) provide the sponsoring broker-dealer a current list of all “authorized traders” who may submit orders to the exchange, and restrict access to the order entry system to those persons; (3) take responsibility for all trading by its authorized traders (and anyone else using their passwords); (4) establish adequate procedures to effectively monitor and control its access to the exchange through its employees, agents, or customers; and (5) pay when due all amounts payable to the exchange, the sponsoring broker-dealer, or others that arise from its access to the exchange’s trading facilities.

C. New Nasdaq Rule

¹⁹ NASD further suggested members consider, among other things, safeguards that ensure that the testing or maintenance of a firm’s trading system does not result in inadvertent errors. See supra note 15.

²⁰ See, e.g., NYSE Rule 123B.30, NYSE Alternext Equities Rule 123B.30, NYSE Amex Rule 86, NYSE Arca Rules 7.29 and 7.30, NYSE Rule 86, CBOE Rule 6.20A, CHX Article 5, Rule 3, NSX Rule 11.9, BATS Rule 11.3(b), ISE Rule 706, NASDAQ Rule 4611(d), NASDAQ OMX BX Rule 4611(d), NASDAQ OMX PHLX Rule 1094(b)(ii).

As noted above, to address the increasing risks associated with market access, Commission staff has been urging the securities industry, the exchanges, FINRA and other market participants to enhance exchange and FINRA rules by requiring more robust broker-dealer financial and regulatory risk controls. In December 2008, Nasdaq filed a proposed rule change to require broker-dealers offering direct market access or sponsored access to Nasdaq to establish controls regarding the associated financial and regulatory risks, and to obtain a variety of contractual commitments from sponsored access customers.²¹ The Commission approved Nasdaq's improved market access rule on January 13, 2010.²²

²¹ See Securities Exchange Act Release No. 59275 (January 22, 2009), 74 FR 5193 (January 29, 2009) (File No. SR-NASDAQ-2008-104). After publication the Commission received thirteen comment letters on the proposal. The majority of commenters supported the proposal conceptually, but critiqued certain aspects of it. A few commenters wholly opposed Nasdaq's proposal because they believed Nasdaq's current rule was sufficient. One commenter opposed the current proposal because it lacked rigor. The various comments addressed: (1) the scope of the proposed Nasdaq rule and the definitions contained therein; (2) the required contracts; (3) compliance with financial and regulatory controls, and (4) confidentiality and regulatory propriety. Letters to Elizabeth M. Murphy, Secretary, Commission, from Harvey Cloyd, Chief Executive Officer, Electronic Transaction Clearing, Inc., dated February 5, 2009; John Jacobs, Director of Operations, Lime Brokerage LLC, dated February 17, 2009 ("Lime Letter"); Manisha Kimmel, Executive Director, Financial Information Forum, dated February 19, 2009 ("FIF Letter"); Ted Myerson, President, FTEN, Inc., dated February 19, 2009 ("FTEN Letter"); Michael A. Barth, Executive Vice President, OES Market Group, dated February 23, 2009; Jeff Bell, Executive Vice President, Clearing and Technology Group, Wedbush Morgan Securities, dated February 23, 2009; Stuart J. Kaswell, Executive Vice President & General Counsel, Managed Funds Association, dated February 24, 2009; Ann Vlcek, Managing Director and Associate General Counsel, Securities Industry and Financial Markets Association ("SIFMA"), dated February 26, 2009 ("SIFMA Letter"), Nicole Harner Williams, Vice President, Associate General Counsel, Penson Financial Services, Inc., dated February 27, 2009; Samuel F. Lek, Chief Executive Officer, Lek Securities Corporation, dated June 15, 2009; letter to David S. Shillman, Associate Director, Division of Trading and Markets ("Division") Commission, from Gary LaFever, Chief Corporate Development Officer, FTEN, Inc., dated April 29, 2009; letter to James Brigagliano, Co-Acting Director, Division, Commission, from John Jacobs, Chief Operations Officer, Lime Brokerage LLC, dated June 30, 2009; and letter to David S. Shillman, Associate Director, Division, from Ann Vlcek, Managing Director and Associate General Counsel, SIFMA, dated November 23, 2009. Nasdaq amended the

The Nasdaq rule requires a combination of contractual provisions, financial controls, and regulatory controls for Nasdaq members providing direct market access or sponsored access. Nasdaq's rule differs from its previous access rule, and other SRO access rules, by: (1) clearly defining "direct market access" and "sponsored access;" (2) requiring by rule that broker-dealers providing those services establish controls designed to address specified financial and regulatory risks; (3) requiring that appropriate supervisory personnel of the sponsoring member receive immediate post-trade execution reports for all direct market access and sponsored access customers.²³

With respect to controls for financial risk, Nasdaq's rule requires members offering direct market access or sponsored access to establish procedures and controls designed to systemically limit the sponsoring member's financial exposure.²⁴ At a minimum, these procedures and controls must be designed to prevent sponsored customers from: (1) entering orders that exceed appropriate preset credit thresholds; (2) trading products that the sponsored customer or

filing and responded to comments. See File No. SR-NASDAQ-2008-104, Amendments No. 2 and 3, received respectively on October 19 and 23, 2009. A more extensive summary of comments and NASDAQ's response to comments is contained in the Nasdaq Market Access Approval Order. See Securities Exchange Act Release No. 61345 (January 13, 2010) ("Nasdaq Market Access Approval Order").

²² See Nasdaq Market Access Approval Order, supra note 21.

²³ For sponsored access arrangements, the Nasdaq rule also requires sponsoring members to obtain certain contractual commitments from sponsored participants that echo those required by current exchange rules, and go further by requiring the sponsored participant (1) provide access to books and records, financial information and otherwise cooperate with the sponsoring member for regulatory purposes; (2) maintain its trading activity within the credit thresholds set by the sponsoring member; and (3) allow immediate termination of the access arrangement if it poses serious risk to the sponsoring member or the integrity of the market. See Nasdaq Rule 4611(d)(3)(A). In addition, if a service bureau or other third party provides the sponsored access system, the sponsoring member must obtain contractual commitments from the third party analogous to clauses (1) and (3) above, as well as to restrict access to authorized persons. See Nasdaq Rule 4611(d)(3)(B).

²⁴ See Nasdaq Rule 4611(d)(4).

sponsoring member is restricted from trading; and (3) submitting erroneous orders, by rejecting orders that exceed certain price or size parameters or that indicate duplicative orders.²⁵

With respect to controls for regulatory risk, Nasdaq’s rule requires members offering direct market access or sponsored access to establish systemic controls designed to ensure compliance with applicable regulatory requirements.²⁶ In addition, Nasdaq’s rule requires a sponsoring member to ensure that appropriate supervisory personnel receive and review timely reports of all trading activity by its sponsored customers, including immediate post-trade execution reports.²⁷

²⁵ See Nasdaq Rule 4611(d)(4)(A) – (C).

²⁶ The Nasdaq rule defines “regulatory requirements” to include all applicable federal securities laws and rules and Nasdaq rules, including but not limited to the Nasdaq Certificate of Incorporation, Bylaws, Rules and Nasdaq Market Center procedures. See Nasdaq Rule 4611(d)(3)(i).

²⁷ The immediate post-trade execution reports should include the identity of the applicable sponsored customer. In addition, appropriate supervisory personnel of the sponsoring member should receive all required audit trail information no later than the end of the trading day; and all information necessary to create and maintain the trading records required by regulatory requirements, no later than the end of the trading day. See Nasdaq Rule 4611(d)(5).