FINANCIAL INFORMATION FORUM

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July 8, 2013

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

Re: Release No. 34-69077; File No. S7-01-13, Proposed Regulation System Compliance and Integrity

Dear Ms. Murphy,

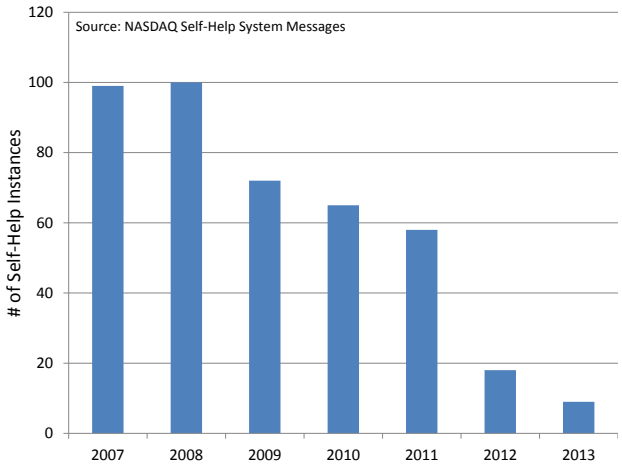
The Financial Information Forum (FIF)[1] would like to take this opportunity to offer feedback on Proposed Regulation SCI ("Reg SCI"). The FIF Market Stability Working Group ("the Working Group") consists of participants from exchanges, vendors and broker dealers including those who operate ATSs. The focus of our comments is on the implementation issues associated with meeting Reg SCI requirements. As such, the Working Group has identified the following recommendations for consideration:

- Incorporate a definition of "material SCI event" that focuses notification requirements on high impact events such that industry efforts in the event of a crisis are focused on containment, recovery and resumption.
- Eliminate the SCI security system concept and focus the definition of SCI system on entity-specific, core functionality.
- Amend the definition of "responsible SCI personnel" to include only those employees with full knowledge and authority over an SCI system. Require robust escalation procedures that allow "responsible SCI personnel to act on "actionable and accurate" information.
- Rather than relying on a set of generic industry standards, allow for flexibility in determining reasonably designed policies and procedures that take into the account the facts and circumstances associated with an SCI system. Leverage the annual SCI review process as a source for industry best practices.
- Define material system change as a significant system upgrade or non-compatible user interface change. Rather than initial and ongoing notifications, limit the reporting of material system changes to twice yearly reporting.
- Consolidate BCP/DR Plan testing into two industry-wide tests per year with broad participation in scenario-based testing.
- Assess the impact associated with ensuring next business day resumption and access.

As we examine the various components of Reg SCI, it is important to recognize that many aspects of our existing market structure serve to enhance the ability of market participants to react to issues in a way that minimizes or eliminates market disruptions. For instance, fragmentation and smart order routing technology allows market participants to seamlessly shift the distribution of order flow across market participants. Even when a single trading center does have an issue, mechanisms like self-help declarations allow that firm to be bypassed while the markets continue to operate in a relatively seamless fashion. FIF monitors self-help declarations based on

[1] FIF (www.fif.com) was formed in 1996 to provide a centralized source of information on the implementation issues that impact the financial technology industry across the order lifecycle. Our participants include trading and back office service bureaus, broker-dealers, market data vendors and exchanges. Through topic-oriented working groups, FIF participants focus on critical issues and productive solutions to technology developments, regulatory initiatives, and other industry changes.

Nasdaq system messages and observes that the number of self-help declarations against other exchanges has decreased from close to 100 per year in 2007 and 2008 to less than 20 instances in 2012, most of which were not market-impacting events. Similarly, we are not aware of any ATS outages that resulted in market-impacting events in 2012 or thus far in 2013.



Significant competitive pressure exists to establish and implement procedures that keep markets operational – in addition to the immediate revenue impact of being closed, firms are very sensitive to reputational risk and aware of the choices their customers have in the execution of trades. Across the industry, seamless failover, recovery capabilities and cybersecurity are embedded in current system/network configurations. While recent market events highlight the opportunity for improvement, it is important that we adopt market stability measures that are practical, achievable and that maximize our ability to ensure fair and orderly markets.

The following sections of this letter provide additional details regarding the Working Group's recommendations.

Proposed Rule 1000 (a) Definitions – Introduce the term "material SCI event"

The Working Group believes that it is important to introduce the term "material SCI event" such that consideration is given to the impact of an SCI event on customers and the market. Only "material SCI events" should be subject to notification requirements. SCI events that do not meet the definition of "material SCI events" would still be incorporated into the annual SCI review process. The key variables for consideration in defining the term "material SCI event" include:

- Number of market participants impacted
- Length of time of outage/event
- Trading/Order volume impacted
- Economic cost
- Impact on price discovery

Based on a review of these variables, the Working Group believes the following are some examples of scenarios that would not be "material SCI events."

- Seamless failover that does not result in any disruption to customer services. It should be noted that seamless failovers may be conducted during normal operations that are not the result of a system failure.
- Inability to trade a select group of symbols on a venue where customers can automatically redirect order flow to other trading centers (e.g., an outage at an ATS or an intra-day outage at an exchange when other venues are operational).

A precise definition of the term "material SCI event" would promote effective and targeted communications during such events and reduce the need for unnecessary overhead associated with communication of non-material SCI events. The Working Group believes that focusing notification on "material SCI events" while providing a more comprehensive review of all SCI events as part of the annual SCI review process would strike the appropriate balance of providing the Commission with valuable data without over-burdening market participants.

Proposed Rule 1000 (a) Definitions of SCI Security Systems and SCI Systems

The Working Group recommends eliminating the term "SCI security system" and limiting the scope of the proposed rule to SCI systems. In order to address the intent of the security system concept, the rule should clarify that policies and procedures be reasonably designed to ensure that SCI systems have adequate levels of security including an assessment of security vulnerabilities created by other systems that share network resources with SCI systems, and appropriate steps to address those vulnerabilities.

Only systems that impact core operational functionality should be included in the definition of SCI systems e.g., for a trading center the matching engine would be considered an SCI system but an adjacent order entry system would not be an SCI system. Narrowing the scope of SCI systems to core technology will be critical to minimizing the burden of the rule and ensuring the value of the notification and review process. Assessment of systems for inclusion and standards for disruption should be based on the ability of that system to cause a "material SCI event" that would impact the functioning of fair and orderly markets. Additionally, clarity is required as to how SCI entities should comply with oversight of vendor systems as part of Reg SCI.

Proposed Rule 1000 (a) Definition of Responsible SCI Personnel

The Working Group recommends amending the current definition of "responsible SCI personnel" to be limited to employees with full knowledge and authority over an SCI system. We believe a narrowing of the definition will reduce miscommunication and confusion. In lieu of the current definition, the Working Group recommends requiring robust escalation procedures to ensure that responsible SCI personnel are in a position to accurately and appropriately take actions required by Reg SCI. As discussed later, responsible SCI personnel should be in a position to provide accurate and actionable information when providing notification.

Proposed Rule 1000 (b) (1)(i)(E) Ensuring Next Business Day Resumption of Trading

Requiring firms to be sufficiently resilient and geographically diverse to ensure next business day resumption of trading comes with a tremendous economic cost. Costs go beyond the actual relocation of facilities, systems and people and extend to an ongoing impact on productivity and system performance during normal operations. We believe it is important to consider the economic consequences before this becomes a rule-based requirement. Particularly in light of our current market structure that allows for seamless re-routing of order flow from one trading center to another, it may not be necessary to require every market participant to resume trading within a business day in order to ensure that the markets stay open or re-open in a timely manner.

In order to promote fair and orderly markets when the markets may need to close, the Working Group recommends the development of policies and procedures to be used industry-wide in these circumstances.

Proposed Rule 1000 (b) (1)(ii) Reasonably Designed if Consistent with Current Industry Standards

The Working Group understands the need for reasonably designed policies and procedures in support of Reg SCI but questions the practical use of the current industry standards outlined in Table A. For instance, Table A

indicates that the current industry standard for capacity planning should be the FFIEC, Operations IT Examination Handbook (July 2004)[2], which states:

> "Capacity planning involves the use of baseline performance data to model and project future needs. Capacity planning should address internal factors (growth, mergers, acquisitions, new product lines, and the implementation of new technologies) and external factors (shift in customer preferences, competitor capability, or regulatory or market requirements). Management should monitor technology resources for capacity planning including platform processing speed, core storage for each platform's central processing unit, data storage, and voice and data communication bandwidth. Capacity planning should be closely integrated with the budgeting and strategic planning processes. It also should address personnel issues including staff size, appropriate training, and staff succession plans."

While these considerations apply generically to any sort of capacity planning, we question the ability for a firm to establish and demonstrate their compliance with such considerations. While we see the value of information security publications such as SANS 20 Critical Security Controls and CWE/SANS Top 25 Most Dangerous Software Errors, we do not believe compliance with the rule should be tied to a set of generic standards but rather flexibility be afforded to SCI entities to adhere to standards that have been developed based on experience, annual SCI reviews and other inputs.

Rather than include current industry standards at the outset of Reg SCI, we believe that the development of best practices should come out of the annual SCI review process as well as experience with the ARP program. Such best practices would be specific to the securities industry and be a reflection of actual practices at firms. A set of industry standards could be referenced by Reg SCI as possible standards for consideration as opposed to required standards that must be implemented in order to be in compliance with the rule.

If included, Reg SCI should make clear that reliance on "current industry standards" is not the only way to meet the safe harbor requirements. It is important to note that oftentimes best practices are system and business model specific. A firm should be given the flexibility to adapt best practices to the facts and circumstances associated with their SCI systems.

Proposed Rule 1000 (b)(2) System Compliance and Safe Harbor

The Working Group is concerned that the current approach to Reg SCI has the potential to create a significant compliance burden and increased enforcement action without corresponding benefits in terms of market resiliency and integrity. In order to address this issue, the Working Group recommends more discussion on Reg SCI activities and terminology including introducing the term "material SCI event" and narrowing the definition of "responsible SCI personnel." Establishing concrete definitions that incorporate customer/market impact will be essential to avoiding rule interpretation through enforcement.

Given the earlier discussion around current industry standards, compliance with Reg SCI should be measured against a firm's adherence to their own set of policies and procedures that are in keeping with SCI system objectives. These policies would be reviewed and updated as part of the annual SCI review process discussed below.

Proposed Rule 1000 (b)(4) Commission Notification

Rather than the focus on notification for any SCI event, the Working Group recommends the reporting of SCI events as part of the annual SCI review process while focusing Commission notification on "material SCI events" that have a significant customer/market impact. FIF is concerned that generating and updating status notifications will require significant resources without increasing the ability to maintain fair and orderly markets.

[2] http://ithandbook.ffiec.gov/ITBooklets/FFIEC_ITBooklet_Operations.pdf

The sheer volume of notifications required has the potential to detract from a firm's ability to dedicate resources to containment, recovery and resumption. Additionally, the information provided may increase the risk of liability by providing a roadmap for litigation discovery. The Working Group believes that it is imperative to introduce the term "material SCI events" and develop that definition based on customer/market impact. The impact of events should drive the level of response required under Reg SCI.

Proposed Rule 1000 (b)(4) and (5) "Becomes Aware" Standard

Proposed Rule 100 (b)(4) and (5) require commission notification and dissemination after any SCI personnel "becomes aware" of an event. This is not the best standard since the goal of notifications is to provide accurate and actionable information that may not be available right away. Notification of system issues to a broad audience prior to full understanding of the problem and solution will likely cause alarm rather than further understanding. The Working Group recommends a notification standard based on the availability of "accurate and actionable" information provided by "responsible SCI personnel." As stated earlier, requiring robust escalation procedures would allow for a more narrow definition of "responsible SCI personnel" that would still yield "accurate and actionable" information in an efficient and timely manner. It should be noted that systems compliance issues may require extensive investigation before "accurate and actionable" information is available.

Proposed Rule 1000 (b)(6) Material Systems Changes

Proposed Rule 1000 (a) defines the term "material system change" but does not include a definition of the term, "material" or "materially." The Working Group recommends defining the term "material systems change" based on one of the following types of changes:

(1) significant functional enhancements,
(2) major technology infrastructure changes, or
(3) changes requiring member/participant modifications.

The Working Group would like to understand what is being required by Proposed Rule 1000(b)(6) beyond what is required by Reg ATS and exchange rule filings. We preliminarily believe there may be an opportunity to leverage existing member communications (e.g., Trader Updates/Alerts) to fulfill this requirement.

We are concerned about the level of overhead Proposed Rule (1000)(b)(6) will introduce into the product development process and its impact on innovation. Many firms employ agile software development techniques which include frequent releases of small code changes. This methodology allows firms to deploy changes quickly and with reduced risk. In reviewing the notification requirements associated with Reg SCI, these firms have expressed concern regarding their ability to maintain an iterative release policy while simultaneously complying with the ongoing notification requirements of Reg SCI. In order to minimize their compliance burden, firms are concerned that they will need to modify their software development practices to bunch changes into larger, less frequent releases. This will increase the risk associated with changes and also slow the pace of enhancements.

Rather than require initial and ongoing notifications as development plans evolve, the Working Group recommends leveraging the reporting requirements outlined in Proposed Rule 1000 (b)(8)(ii)[3] which would provide the Commission with an understanding of "material system changes" without the introduction of significant overhead into the software development process.

[3] Proposed Rule 1000(b)(8)(ii) requires "a report, within 30 calendar days after the end of June and December of each year, containing a summary description of the progress of any material systems change during the six-month period ending on June 30 or December 31, as the case may be, and the date, or expected date, of completion of implementation of such changes;"

Proposed Rule 1000(b)(7 and 8) Annual SCI Reviews and Reports

Proposed Rule 1000(b)(7) discusses the requirement to perform SCI Reviews not less than once each calendar year with reporting as described in Proposed Rule 1000(b)(8). The Working Group agrees that annual reviews and reports relating to system compliance and integrity can have a meaningful impact on improving technology and business practices. Specifically, we recommend the following:

- **Only Core Systems Subject to SCI Review:** Reviews should be focused on only those systems capable of having a material impact on members/participants. Core systems would be those that directly support trading, clearance and settlement, order routing, market data, regulation, or surveillance depending on the function of the entity. Adjacent systems should not be subject to the review process.

- **Senior Management Review/Response to Annual SCI Review Reports:** The Working Group agrees with the requirement in Proposed Rule 1000(8)(i) to require senior management review of annual SCI reviews.

- **Leverage Annual SCI Reviews for Creation of Best Practices/Standards:** We believe that these reviews can form the basis of industry standards and best practices that will assist market participants in developing policies and procedures that effectively minimize both the impact and frequency of market disruptions. Given the confidential nature of the reports coming out of these reviews, we would encourage the Commission to aggregate findings from annual SCI reviews and publish best practices/standards for public comment. Rather than referring to the standards documented in Table A of the filing, we recommend taking an iterative approach to standards development based on the analysis of annual SCI reviews. This methodology would allow for the evolution of standards as technology and market structure change.

- **Coverage beyond Material Events:** In order to ensure comprehensiveness, the annual SCI reviews could cover both material and non-material events giving the Commission a complete picture of events related to SCI systems.

Proposed Rule 1000(b)(9) Mandatory BCP Testing

Proposed Rule 1000(b)(9) includes requirements for BCP/DR Plan testing for SCI entities and their members. The Working Group has discussed this requirement and believes that in order to maximize the benefits of testing against the cost of planning and executing the test, the Commission should consider the following:

- **Frequency of testing - Twice annually:** Consolidating testing to two industry-wide tests per year would eliminate the need to coordinate multiple point to point tests throughout the year. Additionally, it would leave time for other testing required to introduce new production functionality. Dates could be set with sufficient advance notice for the industry to work together on preparation.

- **Participation in testing:** Broad participation in BCP/DR Plan testing is critical for the success of these plans in the event of a crisis. Given our inability to predict the exact nature of a crisis or the specific firms impacted, having significant participation in testing exercises greatly increases the probability that BCP/DR Plans will work in practice. Expanding participation in testing would raise logistical issues that would need to be resolved as part of the planning process.

  Rather than indirectly broadening participation in testing by mandating that entities require certain members to participate in testing, the Working Group recommends that the Commission directly require participation by a broad range of industry participants considering those firms with market

access and/or acting in the capacity of trading center. As currently proposed, the BCP/DR plan testing requirement would put SCI entities at a competitive disadvantage, especially those ATSs that would be forcing buy-side customers to participate in testing. Buy-side customers of an ATS may choose to switch ATS providers rather than be compelled to incur the costs of participating in BCP/DR Plan testing.

- **Focus of testing - Scenario-based:** The expense of developing scenario-based testing that encompasses the entire order lifecycle is not trivial but may be warranted in order to increase market resiliency in the event of a crisis. Scenario-based testing would be significantly more involved than current industry BCP/DR Plan testing which currently focuses on connectivity testing. Testing methodologies including tabletop exercises should be considered acceptable forms of industry testing.

  Given the size and nature of a firm's business model, it should be noted that for any given scenario, the BCP/DR plan for an entity may be to remain closed. Allowing firms to test policies and procedures around closing and defining parameters for a successful resumption would be positive outcomes of scenario-based testing.

Proposed Rule 1000(f) Access

The Working Group is concerned with the implementation of the requirements of Proposed Rule 1000(f). Access to core systems is typically limited to highly trained staff with an in-depth understanding of the system. The Working Group is concerned that the proposed access requirements would not be consistent with firm security policies and may negatively impact systems availability.

Conclusion

It is important to focus on the objective of ensuring fair and orderly markets as we evaluate each aspect of Reg SCI. The Working Group believes there are several areas where Reg SCI could be modified to further its objectives as described above. We look forward to participating in a constructive dialogue with the Commission to ensure the successful and efficient implementation of systems compliance and integrity regulation.

Sincerely,

Manisha Kimmel
Executive Director
Financial Information Forum

cc: The Honorable Mary Jo White, Chairman
The Honorable Elisse B. Walter, Commissioner
The Honorable Luis A. Aguilar, Commissioner
The Honorable Troy A. Paredes, Commissioner
The Honorable Daniel J. Gallagher, Commissioner

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