June 9, 2023

Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549–1090

VIA ELECTRONIC MAIL: rule-comments@sec.gov

Re.: File Number S7–07–23 — Regulation Systems Compliance and Integrity

Dear Sir or Madam:

The Committee on Capital Markets Regulation (the “Committee”) is grateful for the opportunity to provide comments to the U.S. Securities and Exchange Commission (the “SEC”) on its proposed amendments to Regulation Systems Compliance and Integrity (“Reg SCI”) under the Securities Exchange Act of 1934 (the “Proposal”).

Founded in 2006, the Committee is dedicated to enhancing the competitiveness of U.S. capital markets and ensuring the stability of the U.S. financial system. Our membership includes thirty-seven leaders drawn from the finance, investment, business, law, accounting, and academic communities. The Committee is chaired jointly by R. Glenn Hubbard (Emeritus Dean, Columbia Business School) and John L. Thornton (Former Chairman, The Brookings Institution) and is led by Hal S. Scott (Emeritus Nomura Professor of International Financial Systems at Harvard Law School and President of the Program on International Financial Systems). The Committee is an independent and nonpartisan 501(c)(3) research organization, financed by contributions from individuals, foundations, and corporations.

Our letter proceeds in two parts. Part I summarizes Reg SCI in its current form and how the Proposal would change it, focusing on the proposed expansion of Reg SCI to broker-dealers. Part II then analyzes the effect of and policy rationale for this proposed expansion. We find that the SEC fails to substantiate any policy rationale for expanding Reg SCI to broker-dealers to enhance their resiliency. Instead, the SEC ignores basic distinctions between the trading venues and clearing agencies that are currently subject to Reg SCI and broker-dealers. As a result, the proposed expansion would not enhance market resiliency but would instead impose burdensome and unnecessary regulations on broker-dealers. Moreover, the SEC fails to consider significant costs for broker-dealers and other market participants that would stem from the proposed expansion. To the extent the SEC acknowledges certain costs, it significantly underestimates them. The Committee therefore calls on the SEC to rescind the Proposal’s expansion of Reg SCI to broker-dealers. If the SEC subsequently identifies sufficient evidence that discrete enhancements to broker-dealers’ systems are necessary, then the SEC should address those issues by proposing amendments to the extensive resiliency regulations that apply to all broker-dealers.

1 17 CFR Ch. II Part 242.
I. Overview of the Proposal

Subpart (1) below briefly summarizes Reg SCI in its current form. Subpart (2) then reviews how the Proposal would change Reg SCI, focusing on its expansion of Reg SCI to broker-dealers.

1. The current Reg SCI

Reg SCI was adopted in 2014 with the goal of “strengthen[ing] the technology infrastructure of the U.S. securities markets.” The impetus for the adoption of Reg SCI was largely attributable to Superstorm Sandy, which caused damage and disruption to personnel and physical infrastructure sufficient to result in the closure of trading on national securities exchanges for two business days. The SEC explained that the disruption created concerns that despite annual testing under existing regulations “of how trading firms, market operators, and their utilities could operate through an emergency using backup sites, backup communications and disaster recovery facilities,” vulnerabilities to natural disasters and other threats to operational security such as cyberattacks still created an unacceptably high risk of disruptions to U.S. securities markets.

To mitigate the risk of a recurrence of such a disruption, Reg SCI requires national securities exchanges, alternative trading systems (“ATSs”) that meet certain trading volume thresholds, and clearing agencies (each, an “SCI entity”), to develop policies and procedures to ensure its “computer, network, electronic, technical, automated, or similar systems” that directly support “trading, clearance and settlement, order routing, market data, market regulation, or market surveillance” (“SCI systems”) have “levels of capacity, integrity, resiliency, availability, and security adequate to maintain their operational capability and promote the maintenance of fair and orderly markets.”

The required policies and procedures must include “business continuity and disaster recovery [“BC/DR”] plans” that include maintaining backup and recovery capabilities that are “sufficiently resilient and geographically diverse” and that are “reasonably designed” to ensure that its SCI systems can resume operations on the next business day following a wide-scale disruption and that “critical SCI systems” can resume operations not more than two hours after such a disruption.

“Critical SCI systems” includes any SCI system that “(1) directly support functionality relating to: (i) clearance and settlement systems of clearing agencies; (ii) openings, reopenings, and closings on the primary listing market; (iii) trading halts; (iv) initial public offerings; (v) the provision of consolidated market data; or (vi) exclusively-listed securities; or (2) provide[s] functionality to the securities markets for which the availability of alternatives is significantly limited or nonexistent and without which there would be a material impact on fair and orderly markets.”

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3 SEC, Fact Sheet: Regulation SCI: Proposed Expansion and Updates, https://www.sec.gov/files/34-97143-fact-sheet.pdf. The current definition of SCI entity also includes consolidated market data disseminators that meet certain volume thresholds, but none currently meet the required thresholds.


5 Proposing Release at 23,147.


7 Id. at 72,277.
SCI entities must also take corrective action in the case of disruption, compliance issue, or intrusion with respect to an SCI system, which action must include notification of the SEC, and submit periodic compliance reports to the SEC.\(^8\)

2. **How the Proposal would change Reg SCI**

The Proposal would add further requirements to Reg SCI. More specifically, the Proposal would require that SCI entities’ policies and procedures address additional issues, including by maintaining a written inventory of all SCI systems and their classification as critical SCI systems,\(^9\) and addressing risks posed by reliance on third-party service providers.\(^10\) It would also, among other things, require that SCI entities conduct more frequent and rigorous testing of their SCI systems’ vulnerabilities to cyberattack.\(^11\)

Most importantly, the Proposal would expand the application of Reg SCI to include certain clearing agencies that are not currently covered, registered security-based swap data repositories, and broker-dealers that meet either a total asset threshold or a transaction activity threshold. The SEC estimates that the Proposal would require 17 broker-dealers to comply with Reg SCI.\(^12\)

The SEC explained that it did not subject broker-dealers to Reg SCI in 2014 because their role in the markets at the time did not pose as significant of a risk to markets as exchanges or ATSs, in part due to the requirements already imposed on broker-dealers by FINRA rules.\(^13\) The SEC now asserts that circumstances have changed such that the operational security of broker-dealers pose risks to the overall function of U.S. securities markets that existing broker-dealer regulations do not address. In this vein the SEC cites “the growth of electronic trading” which “allows ever-increasing volumes of securities transactions in a broader range of asset classes to take place at increasing speed by competing trading platforms, including those offered by broker-dealers that play multiple roles in the markets,”\(^14\) the “interconnected” nature of broker-dealers’ “sophisticated . . . automated systems” and, the size of certain broker-dealers with “five firms account[ing] for roughly half of broker-dealer aggregate total assets.”\(^15\)

The Proposal would thus require broker-dealers to comply with Reg SCI if they meet or exceed a total asset threshold or a transaction activity threshold with respect to one or more securities.\(^16\) More specifically, a broker-dealer would be subject to Reg SCI if: (1) In two or more of the four preceding calendar quarters the broker-dealer reported to the SEC (on Form X-17A-5) total assets of five percent or more of the total assets of all security brokers and dealers, or (2) during four or more of the preceding six calendar months, the broker-dealer had purchases and sales of ten percent or more of the average daily dollar volume in one or more NMS stocks, exchange-listed options, exchange-traded options, and/or other exchange-traded derivatives.

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\(^8\) Proposing Release at 23,151.

\(^9\) Id. at 23,175-76.

\(^10\) Id. at 23,178-80.

\(^11\) Id. at 23,183.

\(^12\) Id. at 23,205.

\(^13\) Reg SCI Adopting Release at 72,265-66 (citing Rule 15c3-5, the Market Access Rule).

\(^14\) Proposing Release at 23,147.

\(^15\) Id. at 23,239.

\(^16\) Id. at 23,157.
U.S Treasury securities, and/or agency securities.\textsuperscript{17} In the case of the transaction activity threshold, the broker-dealer would only be subject to Reg SCI with respect to systems that relate to trading in the securities for which the threshold is met.

The proposed thresholds would effectively exclude retail brokers (as distinct from wholesale broker-dealers and broker-dealers that serve institutional clients), since orders that a broker-dealer routes to another broker-dealer for execution would not be counted toward the activities threshold, and retail broker-dealers typically send customer orders to a wholesale broker-dealer rather than executing the order themselves. Nor do any retail brokers currently possess a sufficient share of all broker-dealer assets to meet the assets threshold, whereas various wholesale broker-dealers and broker-dealers that serve institutional clients may meet one or more of the thresholds. The SEC explains that the thresholds are designed to identify firms that “play a significant role in the orderly functioning of U.S. securities markets” and “that, if adversely affected by a technology event, could disrupt or impede orderly and efficient market operations more broadly.”\textsuperscript{18}

II. Analysis of the Proposal’s Expansion of Reg SCI to Broker-Dealers

In Part II we identify five significant issues with the expansion of Reg SCI to broker-dealers.

1. The SEC presents no evidence of the benefits of expanding Reg SCI to broker-dealers.

The SEC claims that, unlike in 2014, broker-dealers now “play a significant role in the orderly functioning of U.S. securities markets,” such that, if a broker-dealer were to be “adversely affected by a technology event,” it could “disrupt or impede orderly and efficient market operations more broadly.”\textsuperscript{19} As a result, the SEC concludes that subjecting broker-dealers to Reg SCI is critical to the stability of U.S. securities markets.

However, the SEC utterly fails to substantiate this conclusion. Most notably, the SEC cites no actual example of an adverse technological event or other operational disruption to one or more broker-dealers disrupting or even threatening to disrupt overall market operations. Moreover, the SEC provides no other evidence that there is a risk of such an occurrence in the future. The only sources the SEC cites to support its assertion are a SIFMA primer on electronic trading market structure and an SEC staff report on algorithmic trading. Although these documents evidence the important role of broker-dealers in securities markets generally, neither asserts that the operational failure of an individual broker-dealer threatens overall market functions.\textsuperscript{20} Instead, the SIFMA report highlights other potential issues with electronic trading, such as market fragmentation.\textsuperscript{21} The SEC staff report notes that “pauses or halts in . . . automated trading systems” can “in turn lead to a reduction in general market liquidity,” but it does not tie this risk to broker-dealers.\textsuperscript{22}

Indeed, the only instance cited in the report of an operational issue at a broker-dealer (Knight

\begin{thebibliography}{9}

\bibitem{17} Id. at 23,161.
\bibitem{18} Id. at 23,158.
\bibitem{19} Id.
\bibitem{20} Proposing Release at 23,147, n.3.
\end{thebibliography}
Capital, in 2012) did not cause any wider market impact, and resulted only in losses specific to that broker-dealer.\textsuperscript{23} As such, neither report supports the SEC’s rationale, and the SEC staff report in fact undermines it, by providing evidence that operational issues at individual broker-dealers do not threaten to disrupt overall market functions.

To the contrary, there is considerable evidence that the systems of both broker-dealers are already highly resilient to potential operational threats and disruptions. For broker-dealers, FINRA has several rules to ensure broker-dealer business continuity.\textsuperscript{24} Moreover, if a broker-dealer experiences an operational disruption, as in the case cited in the SEC staff report described above, exchanges and ATSs can cut off that broker-dealer’s access to broader systems, thus isolating the issue and preventing spillover effects. Furthermore, existing SEC regulations and fiduciary obligations of investment advisers provide an extra layer of protection for the investor-customers of broker-dealers by requiring that investment advisers also guard against operational disruptions that might arise from their reliance on broker-dealers. More specifically existing SEC regulations require asset managers to have redundant connectivity in place for their systems to minimize operational risks.\textsuperscript{25} And as the SEC itself recently noted, an adviser’s fiduciary obligation to its clients includes the obligation to take steps to “minimize operational and other risks that could lead to significant business disruptions,” which can encompass risks arising from third parties such as broker-dealers.\textsuperscript{26} Indeed, the SEC’s Fixed Income Market Structure Committee was at their October 2020 meeting emphatic that the business continuity protections in place for broker-dealers and the advisers of their investor customers are strong.\textsuperscript{27} They were unanimous in their praise of the resiliency of the electronic and fixed income infrastructure under the highly strenuous conditions of the COVID-19 pandemic, including the day after the tri-states issued immediate work from home orders.\textsuperscript{28}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{23} Id. at 43.
\item \textsuperscript{24} See, e.g., FINRA Rules 4370, 3120 and Notice to Members 05-48 and Regulatory Notice 21-29.
\item \textsuperscript{25} See, e.g., SEC Rule 206(4)-7.
\item \textsuperscript{27} Id. at 185 (“And what we saw in this moment of most stress was the technology was up for it. We really had no systemic issues. And the whole infrastructure worked incredibly well. So, from a connectivity and workflow solution perspective, today's marketplace has much more at their disposal than they've had previously. And I think market participants are leveraging it. Connectivity, business continuity really are quite robust. The proof is in the pudding here. Market participants availed themselves of data that they didn't have access to before, a number of tech solutions, innovative solutions, all-to-all trading, portfolio trading, spotting trading, and in some areas, the muni market in particular, I was a bit surprised at the amount of algo trading for purposes of liquidity that actually occurred. So, you know, this is the first time you saw algo trading really providing a tremendous amount of liquidity to the market right to retail, which I thought was very interesting. So, work from home was challenging but, so far, it's gone well. I think that the marketplace responded quite well to the crisis.”).
\item \textsuperscript{28} SEC, Transcript of the Fixed Income Market Structure Advisory Committee Meeting 59 (Oct. 5, 2020), https://www.sec.gov/spotlight/fixed-income-advisory-committee/fimsac-100520-transcript.pdf ("[T]he electronic and really the infrastructure held up incredibly well, allowing for price discovery, allowing for execution under incredibly extreme conditions."); id. at 61 (“A lot of firms had their own infrastructure that functioned incredibly well. I think this is one of the key factors in lowering the stress in the market.”); id. at 75 (“But I do think a few things that have proven to be incredibly helpful and will continue to be more and more helpful is the interconnectivity and the strength of our infrastructure. I think that that is just an absolute - we're in good shape now, as was proven by tens of thousands of people going remote or working from home instantly.”); id. at 125 (“I think the infrastructure and the platforms and the getting to work from home functioned incredibly well... Because we have so many more folks connected with each other, it's allowed for new forms of liquidity to reach the end user.”).
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2. Expanding Reg SCI to broker-dealers ignores basic distinctions between the functions of trading venues and broker-dealers.

In addition to its failure to cite any evidence that expanding Reg SCI to broker-dealers would enhance the stability of U.S. securities markets, the SEC fails to consider basic aspects of the U.S. securities market structure that should make obvious that such an expansion would produce no benefits for market stability.

Expanding Reg SCI to cover broker-dealers ignores how the basic function of trading venues and clearing agencies differ from that of broker-dealers. To the extent the trading of a security is confined to or takes place predominantly on a particular trading venue, a disruption to the operation of that venue threatens the ability of all market participants to transact in that security. In particular, opening and closing auctions only take place at the exchange that lists the security. These auctions generate opening and closing prices for listed securities that provide important price references for market participants that limit volatility and represent crucial reference points for other market functions, such as calculating the net asset value of investment fund shares. If an exchange is non-operational at the opening or closing of the market, then the auction cannot occur and trading in the security will be subject to extreme volatility, trading halts and executions at erroneous prices, as exemplified by the occurrence of the technical fault that caused NYSE to fail to conduct opening auctions in January 2023. Other processes that rely on opening and closing prices as reference points will also be disrupted. For example, if there is no closing auction then mutual funds will be unable to determine the value of their shares at the end of the trading day. Clearing agencies are similarly important because they play a critical role in the operation of trading venues, such that an operational failure of a clearing agency could effectively result in the operational failure of the venue or market that relies on it. Since they constitute the most basic infrastructure of U.S. securities markets without which market participants could not trade, there is a rational link between measures designed to guard the operation of trading venues and clearing agencies and market stability.

By contrast, the broker-dealers that the Proposal would subject to Reg SCI perform a fundamentally different function. Broker-dealers often use exchanges and ATSs to transact on behalf of their customers and themselves. They also fulfill customer orders from their own inventory. Whereas the unavailability of a trading venue can and has severely restricted or entirely prevented market participants from transacting in broad swaths of securities, the operational failure of a broker-dealer does not present a comparable risk.

In the case of investor access to equities and options markets, retail brokers will typically have order routing capabilities in place with multiple wholesale broker-dealers, as well as the ability to route directly to exchanges and ATSs, should a specific wholesale broker-dealer be unavailable. In addition, as the Committee demonstrated in a recent comment letter, the market for such

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wholesale broker-dealers is unconcentrated,\textsuperscript{31} which evidences the availability of ample alternatives for market participants should a wholesale broker-dealer experience an operational disruption. The market shares of securities exchanges are more concentrated by comparison.\textsuperscript{32} In the case of the broker-dealers that serve institutional investors, the investor clients will also typically have relationships with multiple broker-dealers such that in the event of a disruption to one broker-dealer, the client will not be prevented from trading. The Proposal cites in particular the increased prevalence of electronic and automated trading as a risk, but Bloomberg Intelligence found that U.S. institutional investors have on average relationships with 8.1 different brokers that provide electronic equity execution algorithms.\textsuperscript{33}

Thus, if a broker-dealer that the Proposal would subject to Reg SCI experiences an operational disruption, market participants would simply use another broker-dealer or route the order directly to an exchange or ATS. Subjecting broker-dealers to the same regulatory regime that is designed to guard the operational security of a fundamentally different class of entity would thus be irrational and fail to produce any benefit for market stability.

3. The SEC either ignores or significantly underestimates the costs of expanding Reg SCI to broker-dealers.

The SEC’s estimate of the costs associated with its proposed expansion of Reg SCI to broker-dealers is inadequate in multiple respects and fails to appreciate the magnitude of the costs that the Proposal would impose on broker-dealers directly and U.S. markets generally.

First, the SEC fails to identify various significant costs that would stem from the Proposal’s expansion of Reg SCI to broker-dealers. As one example, Reg SCI requires that SCI entities’ back-up systems be physically located to maintain sufficient “geographic diversity.” But broker-dealers commonly rely on maintaining geographic proximity to trading venues to optimize execution quality for their customers. As such, when a broker-dealer’s trading strategy relies on physical proximity to a trading venue, the use of a back-up system located at a geographic distance from the trading venue could significantly impact the broker-dealer’s execution quality if the broker-dealer were required to use it, which would result in significant costs for the broker-dealer and its customers. However, the SEC does not consider the possibility that the required back-up systems for such broker-dealers may be so costly and impracticable that they fail to serve any practical function.

The SEC also fails to consider how the proposed thresholds would reduce market liquidity and the costs flowing therefrom. More specifically, the significant regulatory burden that broker-dealers would incur under Reg SCI if they exceed the size or activity thresholds would create an incentive for broker-dealers to curtail their activities to remain below the thresholds. If broker-dealers reduce their activities in this manner, it will reduce liquidity in U.S. securities markets. The SEC fails to consider or quantify the potential for these costs.


\textsuperscript{32} Id.


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To the extent the SEC does attempt to quantify certain costs of its proposed expansion, the estimates are absurdly low on their face and based on plainly inadequate methodologies. The SEC estimates that newly covered SCI entities, including broker-dealers, would incur approximately $5.7 million in initial compliance costs and approximately $3.7 million in annual compliance costs. The SEC bases these estimates on its cost estimates for trading venues from the original Reg SCI proposal, adjusted for inflation, rather than attempting to quantify the actual costs incurred by trading venues since Reg SCI was enacted. Moreover, the SEC does not make specific cost estimates with respect to broker-dealers, even though broker-dealers may well incur additional costs because of having to implement entirely new operational systems under a regulatory regime to which it has never before been subject.

4. **The Proposal’s assets and transaction activities thresholds are arbitrary and anti-competitive.**

The Proposal would subject broker-dealers to Reg SCI if they exceed one or more of the asset or transaction activities thresholds described in Part I above. However, the Proposal does not explain how these thresholds are rationally related to the Proposal’s stated aim of identifying broker-dealers that could “impede orderly and efficient markets” if they experience an operational disruption. For example, the Proposal offers no evidence that its proposed threshold of five percent or more of the total assets of all broker-dealers has any greater relevance to the risk a broker-dealer purportedly creates for overall markets than any other percentage of total assets or any other metric, or indeed any relevance at all. The same is true for the transaction activities thresholds. The Proposal offers no evidence to substantiate the relevance of participating in ten percent of trading volume to the purported risks the Proposal is intended to address.

We note as well that the proposed transaction activities threshold would consider all trades for “U.S. Treasury Securities and Agency Securities in which a broker-dealer may participate” (emphasis added). The Proposal does not explain what "may participate" means. It also does not address how the transaction activities threshold would interact with the five percent threshold proposed in the SEC’s outstanding and recently reopened proposal to amend the definition of an exchange.

The proposed thresholds are also anti-competitive. They will subject a small and select group of broker-dealers to the costly and onerous requirements of Reg SCI while leaving their competitors unburdened.

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34 Proposing Release at 23,164.
5. Broker-dealers are already subject to extensive regulations that provide for operational safeguards.

Broker-dealers are already subject to multiple sets of extensive regulations, including the Market Access Rule,\textsuperscript{36} SEC data protection and recordkeeping rules,\textsuperscript{37} and FINRA rules.\textsuperscript{38} Each of these rules already require broker-dealers to adopt operational safeguards. For example, FINRA rule 4370 requires broker-dealers to identify “mission critical systems,” and to create and maintain a written business continuity plan identifying procedures relating to an emergency or significant business disruption that are reasonably designed to enable them to meet their existing obligations to customers with explicit requirements for data back-up and recovery with respect to mission critical systems as well as an alternate physical location of employees. The SEC, however, does not explain why these requirements have suddenly become inadequate and it has become necessary to apply another regulatory regime to broker-dealers wholesale.

Working within these existing regulatory frameworks to address legitimate concerns surrounding broker-dealers’ operational security would lessen compliance costs and reduce disruptions to markets. It would also allow for any proposed changes to apply more broadly to all broker-dealers. This would in turn avoid the volume and activity thresholds that might incent broker-dealers to limit their activities, as the Proposal would.

III. Conclusion

In expanding Reg SCI to broker-dealers, the Proposal would subject broker-dealers to a set of rules that produces overlapping and needless compliance burdens. The Proposal would do so in the name of enhancing the stability of U.S. securities markets, on the premise that the disruption to the operation of a single broker-dealer could threaten overall market function. However, the SEC has provided no evidence that such a risk is present. It has moreover failed to recognize basic elements of market structure that should make obvious that the proposed expansion is needless and would produce no benefits for market stability. The SEC has moreover likely significantly underestimated the substantial compliance costs the expansion would impose, and the resulting costs for broker-dealers customers and the consequences for price competition. The SEC ignores the possibility that shortcomings, if any, in the safeguards of broker-dealers’ operational security could be more efficiently addressed by proposing amendments to these pre-existing regulatory schemes. The Committee therefore calls on the SEC to rescind the Proposal’s expansion of Reg SCI to broker-dealers. If the SEC subsequently identifies sufficient evidence that discrete enhancements to broker-dealers’ systems are necessary, the SEC should address those issues by proposing amendments to the extensive regulations that presently apply to broker-dealers.

\textsuperscript{36} 17 CFR 240.15c3–5.
\textsuperscript{37} 17 CFR 240.17a–3; 17 CFR 248.30.
\textsuperscript{38} See, e.g., FINRA Rules 3110(b)(1), 4370, 4530.
Thank you very much for your consideration of the Committee’s position. Should you have any questions or concerns, please do not hesitate to contact the Committee’s President, Professor Hal S. Scott (hscott@law.harvard.edu), or its Executive Director, John Gulliver (jgulliver@capmktsreg.org), at your convenience.

Respectfully submitted,

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