

Client Alert: Dark Pools and the New Frontier of Regulation

I. INTRODUCTION

On November 19, 2014, the Securities and Exchange Commission ("SEC") enacted new rules sparked by a series of major blunders over the past several years from Nasdaq OMX's (NDAQ.O) botched handling of Facebook's initial public offering to the shutdown of the stock market during Hurricane Sandy.¹ The new rules, collectively known as Regulation Systems Compliance and Integrity or "Reg SCI" apply to certain self-regulatory organizations ("SROs") such as registered clearing agencies, alternative trading systems ("ATS" or "dark pools"), plan processors, and exempt clearing agencies.² These "SCI entities" are now required to establish and enforce policies and procedures to ensure that their systems are resilient and secure. Reg SCI also impacts other SEC regulations such as Regulation of Exchanges and Alternative Trading Systems ("Reg ATS") and Regulation National Market System ("Reg NMS").³ It is anticipated that Reg SCI will affect about a dozen large equities trading platforms.

The enactment of Reg SCI, first proposed for comment in early 2013, is the latest in a series of efforts to educate firms and investors on alternative trading platforms / dark pools and the significant investor and regulatory risk these platforms represent. The release of Michael Lewis's book *Flash Boys: A Wall Street Revolt* ignited a national conversation about both high-frequency trading and the dark pools in which this trading is common. Recent enforcement actions and investigations related to dark pool non-compliance have served to further instruct Risk and Compliance Departments on how to assess and mitigate risk.

What this Means to You

- » ATS / dark pools will be subject to Reg SCI and increased scrutiny.
- » Operators of ATS / dark pools should reevaluate the risk of operation and ensure that policies and procedures and internal controls adequately address the risks ATS / dark pools represent in their business.
- » Firms operating and/or trading with ATS / dark pools must take steps to protect their investors by monitoring for liquidity risks and the unknown identities of counter-parties.

1. U.S. SEC enacts rules to protect exchanges, dark pools from glitches, Sarah N. Lynch, Reuters (Nov. 19, 2014), <http://www.reuters.com/article/2014/11/19/sec-rulemaking-exchanges-idUSL2N0T91A120141119>

2. See SEC's Reg SCI at 17 CFR Parts 240, 242, and 249, Release No. 34-73639: <http://www.sec.gov/rules/final/2014/34-73639.pdf>

3. See SEC's Reg NMS at 17 CFR Parts 200, 201, 230, 240, 249, and 270, Release No. 34-51808: <http://www.sec.gov/rules/final/34-51808.pdf>

CONTACTS »

Alma Angotti

Managing Director
202.481.8398
alma.angotti@navigant.com

Tracy Angulo

Associate Director
202.973.3193
tracy.angulo@navigant.com

navigant.com



NAVIGANT

II. THE HISTORY AND ORIGIN OF DARK POOLS

A. Alternative Trading Systems

Before assessing whether Reg SCI applies to activity in a financial institution, one must first understand alternative trading systems and dark pools. An ATS is a trading system that is not regulated as an exchange, but is a venue for matching the buy and sell orders of its subscribers. Typically, ATS are specifically designed to match buyers and sellers who trade in very large quantities (primarily professional traders and investors). Financial institutions may use ATS to find counterparties for transactions, instead of trading large blocks of shares on the normal exchange, a practice that can skew the market price in a particular direction, depending on a particular share's market capitalization and trading volume.

B. Dark Pools

Dark pools operate similarly to ATS, but offer an anonymous trading platform in addition to the other advantages of ATS. In a public exchange, equities and derivatives can be traded by any properly registered party. Dark pools are privately run exchanges that offer restricted access. The size, price, and identities of parties placing the orders are all hidden.⁴ However, these orders are anonymous only before and during execution, but not after. Once executed, these are generally considered to be over-the-counter ("OTC") transactions.

C. The Increase of Dark Pools and Industry Trends

It is estimated that about half of all dark pool activity occurs through dark pools operated by five major financial institutions. Though dark pools have

existed for decades, their recent growth is linked to several trends in the financial world.

One trend is the transition to electronic trading. As machines have started to replace human traders, the proprietary algorithms which dictate trade orders have increased in value. There is a constant risk that the data from both placed and executed orders can be used by outside parties to reverse-engineer the algorithms. Dark pools solve this issue by the nature of the secrecy surrounding transactions.

Another trend is the consolidation of institutional investors. This has had a corresponding impact by increasing the potential size of individual orders that are placed. For example, if a market-leading institutional investor wants to sell a million shares of a security at \$8 a share, there would be an enormous market impact as soon as the order is placed due to the fact that the information is made public on an exchange. Since it is unlikely that there will be an immediate matched buyer for all of the shares at once, the institution will need to sell the shares in smaller blocks before the transaction is complete. Each time the shares need to be split into smaller blocks for sale creates an opportunity for the price of the shares to change, ultimately driving the price down. By the time all of the shares are sold, a large portion of the million shares might actually be selling closer to \$7 a share for no other reason than the order was made public. It is important to remember that market impact can often extend beyond the security to the industry sector, affecting the prices of other securities for reasons unrelated to financial performance. Dark pools solve this issue by keeping the size of the orders and the identities of the parties placing the orders undisclosed.⁵

4. Dark Pools Confront More Transparent Future Amid Threats, Doni Bloomfield and Sam Mamudi, Bloomberg. <http://www.bloomberg.com/news/2014-09-17/dark-pools-confront-more-transparent-future-amid-threats.html>

5. Barclays Allegations and Inside the Murky World of Dark Pools, Phillip Inman, The Guardian. <http://www.theguardian.com/business/2014/jun/26/barclays-allegations-dark-pool-trading-system-private>



III. UNIQUE RISKS OF DARK POOLS

A. Market Risk

This same secrecy can potentially increase market risk by other means. Consider the hypothetical scenario of the institutional investor described above: at what point is the public entitled to learn about institutional investors selling enormous blocks of a security? There is potential for a rapid market correction as public exchanges catch up to market movement within the dark pools. So instead of mitigating the overall market impact, transactions within dark pools may actually swap an immediate market impact for an even greater market impact later as the public exchange suddenly catches up to the activity in the dark pools.

B. Spoofing / Layering

The most serious issues are related to potential disruptive trading practices, manipulation, and fraud. One example is the prohibited practice of “spoofing” (also referred to as “layering”). Spoofing is the act of artificially placing a large order outside the bid-ask spread and then cancelling it to create a false fluctuation.⁶ Subsequent smaller orders can then be placed outside the order based on the new price. This practice has taken advantage of high frequency trading (“HFT”) which prices order information almost instantaneously. If a trader owns a large block of securities, a large purchase order could be placed in order to exploit other HFT algorithms to increase the price slightly. The order would be immediately cancelled, and then the trader could sell smaller portions of the security to take advantage of the price fluctuation. Because of the lack of transparency within the dark pools, it is unclear what monitoring is conducted for this type of illegal activity.

C. Quote Stuffing

“Quote-stuffing” is another disruptive trading practice designed to exploit the nature and practices of dark pools through the use of HFT. As mentioned previously, the HFT algorithms quote prices almost instantaneously based on orders within the market. Quote-stuffing is the attempt to slow down other HFT algorithms by initiating and subsequently cancelling a massive volume of orders.⁷ As the algorithms attempt to price the orders, a small window of time opens creating an advantage for the quote-stuffer. Furthermore, the lack of public information about liquidity within a dark pool benefits those who engage in this disruptive trading practice.

IV. REGULATORY REQUIREMENTS AND ENFORCEMENT ACTIONS

In order to catch up with the growth of dark pools / ATs, the SEC has passed a series of rules concerning these trading platforms, the most recent of which is Reg SCI.

- A. Regulation ATS was introduced by the SEC in 1998 and is designed to protect investors and resolve any concerns arising from this type of trading system.⁸ Primarily, Reg ATS was enacted to allow alternative trading systems to choose whether to register as national securities exchanges, or to register as broker-dealers and comply with additional requirements under Reg ATS, depending on their activities and trading volumes. The purpose of the rule was to:
 - 1. More effectively integrate the growing number of ATS into the national market system;

6. SEC Charges N.Y. -Based Brokerage Firm with Layering, Securities and Exchange Commission. http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171484972#:U9qSU_IdVid

7. SEC probes 'quote stuffing' practices: Shapiro, Jonathan Spicer and Herbert Lash, Reuters. <http://www.reuters.com/article/2010/09/07/us-sec-trades-idUJSTRE6863QL20100907>

8. See SEC's Reg ATS at 17 CFR Parts 202, 240, 242, and 249, Release No. 34-40760: <https://www.sec.gov/rules/final/34-40760.txt>



2. Accommodate the registration of proprietary ATS as exchanges;⁹ and
3. Provide an opportunity for registered exchanges to better compete with ATS.

Notably, Reg ATS required that any ATS registered as a broker-dealer and subject to the regulation establish standards for access to its system and apply those standards fairly to all prospective subscribers, if the ATS meets the 20 percent volume threshold ("the fair access requirement").¹⁰ If the ATS accounted for 20 percent or more of the share volume in any equity security, it must comply with the fair access requirements in granting access to trading in that security.

Reg ATS further requires that ATS trading five percent (5%) or more of the volume in national market system securities must be linked with a registered market in order to disseminate the best-priced orders in those national market system securities displayed in their systems (including institutional orders) into the public quote stream. Any ATS meeting this trading threshold must also comply with the same market rules governing execution priorities and obligations that apply to members of the registered exchange or national securities association to which the ATS is linked.¹¹

B. Reg NMS

In 2005, the SEC enacted Reg NMS, a collection of rules intended to enhance investor protection from potential market manipulation occurring in dark pools or as a result of HFT.¹² These rules include:

1. The "Order Protection Rule" which gives preference to automated quotations that are immediately available;¹³
2. The "Access Rule" which promotes fair access to market data such as quotations by requiring greater linking and lower access fees;
3. The "Sub-Penny Rule" which prohibits quotations in increments less than one penny for all securities at least \$1.00 per share; and
4. Amendments to the "Market Data Rules" which largely deal with governance and allocation of revenues for oversight.

The Order Protection Rule includes the creation of the National Best Bid and Offer ("NBBO"), which requires brokers to execute transactions at the lowest buy price available and the highest sell price available. This prohibits "trading-through" – a practice where orders are executed outside the bid-ask spread where the better price exists. Reg NMS in its totality was intended to curb some of the worst abuses within dark pools and to standardize their requirements with those of public exchanges without completely erasing its purpose.

C. Reg SCI

On February 3, 2015, the SEC's newest regulation will become effective: Reg SCI.¹⁴ Primarily, Reg SCI will require SCI entities (e.g. SROs, ATS and dark pools) to establish written policies and procedures reasonably designed to ensure that their systems have levels of capacity, integrity, resiliency, availability and security adequate to maintain their

9. The SEC defines an "exchange" as a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange. See 15 U.S.C. 78c(a)(1).

10. The 20 percent volume threshold is applied on a security-by-security basis for equity securities. The threshold is met if an ATS, during four (4) of the six (6) preceding months, accounts for 20 percent or more of the overall trading volume. Excluded are ATS that match orders for securities with other customer orders at prices for those same securities established outside the system. See SEC's Reg ATS at 17 CFR Parts 202, 240, 242, and 249, Release No. 34-40760: <https://www.sec.gov/rules/final/34-40760.txt>

11. Reg ATS also requires ATS under the five percent (5%) trading threshold to file with the SEC a notice of operation and quarterly reports, maintain records and an audit trail of transactions and refrain from using the words "exchange" or "stock market" in its name. *Id.*

12. See SEC's Reg NMS at 17 CFR Parts 200, 201, 230, 240, 249, and 270, Release No. 34-51808: <http://www.sec.gov/rules/final/34-51808.pdf>

13. The Order Protection Rule, also known as Rule 611 or the "trade-through" rule, ensures that investors receive an execution price that is equivalent to what is being quoted on any other exchanges where the security is being traded. The Order Protection Rule requires that each exchange establish and enforce policies to ensure consistent price quotation for all NMS stocks.

14. *Id.*



operational capacity; promote the maintenance of fair and orderly markets; and to ensure that they operate in a manner that complies with the Exchange Act.

At a minimum, Reg SCI requires the policies and procedures include:

1. The establishment of reasonable current and future technological infrastructure capacity planning estimates;
2. Periodic capacity stress tests of such systems to determine their ability to process transactions in an accurate, timely and efficient manner;
3. A program to review and keep current systems development and testing methodology for such systems;
4. As applicable, regular reviews and testing of such systems, including backup systems, to identify vulnerabilities pertaining to internal and external threats, physical hazards and nature or manmade disasters;
5. Business continuity and disaster recovery plans that are reasonably designed to achieve next business day resumption of trading and two-hour resumption of critical SCI systems¹⁵ following a wide-scale disruption;
6. Standards that result in such systems being designed, developed, tested, maintained, operated and monitored in a manner that facilitates the successful collection, processing and dissemination of market data; and
7. Monitoring of such systems to identify potential SCI events.

Reg SCI also requires SCI entities to take corrective action with respect to "SCI events" and to notify the SEC of such events, as well as to disseminate information about certain SCI events to affected members or participants.¹⁶ An "SCI event" is an event at an SCI entity that constitutes:

1. A systems disruption;
2. A systems compliance issue; or
3. A systems intrusion.

In addition, Reg SCI will require SCI entities to conduct a review of their systems by objective, qualified personnel at least annually, submit quarterly reports regard completed, ongoing and planned material changes to their SCI systems to the SEC, and maintain certain books and records.

Finally, Reg SCI will supersede and replace aspects of policy statements codified in Rule 301(b)(6) under the Exchange Act applicable to significant-volume ATS that trade in NMS and non-NMS stocks.¹⁷ Specifically, the significant-volume ATS thresholds have been modified as follows:

1. Average daily dollar thresholds will be used, instead of an average daily share volume threshold, for ATS that trade NMS stock or equity securities that are not NMS stock ("non-NMS stock");
2. Alternative daily dollar and transaction volume-based tests will be applied to ATS that trade municipal securities or corporate debt securities, except for ATS that trade only municipal securities or corporate debt securities; and
3. Volume thresholds applicable to ATS will be lowered for each category of asset class.

15. Critical SCI systems means any SCI systems of, or operated by or on behalf of, an SCI entity that: (1) directly support functionality relating to clearance and settlement systems of clearing agencies; openings, reopenings and closings on the primary listing market; trading halts; initial public offerings; the provision of consolidated market data; or exclusively-listed securities; or (2) provide 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.

16. For certain major SCI events, the SCI entity is required to disseminate information to all members or participants of the SCI entity. A major SCI event is defined as an SCI event that has had, or the SCI entity reasonably estimates would have: (1) any impact on a critical SCI system; or (2) a significant impact on the SCI entity's operations or on market participants.

17. NMS stocks include those on the major stock exchanges as well as many over-the-counter ("OTC") stocks.



In particular, with respect to NMS stocks, these new thresholds include a change in the volume threshold from 20 percent of average daily volume in any NMS stock, such that an ATS that traded NMS stocks that met either of the following two alternative threshold tests would be subject to the requirements of Reg SCI:

1. Five percent (5%) or more in any NMS stock, and 0.25 percent or more in all NMS stocks, of the average daily dollar volume reported by an effective transaction reporting plan; or
2. One percent (1%) or more, in all NMS stocks, of the average daily dollar volume reported by an effective transaction reporting plan.

With respect to non-NMS stocks, municipal securities and corporate debt securities (except for ATS trading exclusively in municipal securities or corporate debt securities), the standard was reduced from 20 percent to five percent (5%) for these types of securities, the same percentage threshold for such types of securities that triggers the fair access provisions of Rule 301(b)(5) of Reg ATS.¹⁸

D. MiFID

Internationally, the Markets in Financial Instruments Directive ("MiFID") and corresponding amendments ("MiFID II") have been implemented across the European Economic Area since May 2014. The MiFID is a European Union law that provides harmonized regulation for investments across the 31 member states of the European Economic Area. The directive's main objectives are to increase competition and consumer protection in investment services. These regulations complete

harmonization of both Organized Trading Facility rules and oversight over the dark pools in Europe.¹⁹

E. Recent Enforcement Cases

1. UBS Securities

On January 15, 2015, UBS Securities LLC ("UBS") agreed to settle charges with the SEC for disclosure failures and other securities law violations related to the operation and marketing of its dark pools. UBS paid a \$14.4 million dollar penalty for these violations, \$12 million of which was against UBS's ATS; the largest penalty to date against an alternative trading system. The SEC determined that UBS failed to properly disclose to all subscribers the existence of an order type that it pitched almost exclusively to market makers and HFT firms. The order type, called PrimaryPegPlus ("PPP"), enabled certain subscribers to buy and sell securities by placing orders priced in increments of less than one cent.²⁰ By doing so the firm enabled users of the PPP order type to place sub-penny-priced orders that jumped ahead of other orders submitted at legal, whole-penny prices.

The SEC outlined several other violations of the federal securities laws by UBS in its order instituting a settled administrative proceeding:

- a. The Form ATS and amendments that UBS filed with the SEC included inconsistent and incomplete statements about the dark pool's acceptance of sub-penny orders and the natural-only crossing restriction. The filing also failed to attach certain required documents;

18. The SEC included an exception for SCI entities that reach the new thresholds for the first time under the regulation. Specifically, SCI ATS will not be required to comply with the requirements of Reg SCI until six (6) months after satisfying any of the applicable thresholds in the definition of SCI ATS for the first time. See SEC's Reg NMS at 17 CFR Parts 200, 201, 230, 240, 249, and 270, Release No. 34-51808: <http://www.sec.gov/rules/final/34-51808.pdf>

19. Markets in Financial Instruments Directive, European Commission. http://ec.europa.eu/finance/securities/isd/mifid/index_en.htm

20. See SEC Press Release "SEC Charges UBS Subsidiary with Disclosure Violations and Other Regulatory Failures in Operating Dark Pool" dated Jan. 15, 2015: <http://www.sec.gov/news/pressrelease/2015-7.html>. In the Matter of UBS Securities LLC, SEC Order Instituting Administrative and Cease-and-Desist Proceedings, Release No. 74060 / Administrative Proceeding File No. 3-16338 (Jan. 15, 2015).



- b. UBS violated requirements under Reg ATS by unreasonably prohibiting subscribers from using the natural-only crossing restriction²¹ and failing to establish written standards for granting access to subscribers;
 - c. UBS failed to preserve certain order data for the dark pool from at least August 2008 to March 2009 and August 2010 to November 2010; and
 - d. UBS violated confidentiality requirements under Reg ATS by giving full access to subscribers' confidential trading information to 103 employees who should not have had it (primarily information technology personnel).
2. Goldman Sachs Execution & Clearing, L.P
- Goldman Sachs agreed to a consent order with FINRA for failing to "establish, maintain, and enforce written policies and procedures" to ensure that clients received the NBBO in their dark pool "SIGMA X."²² The Financial Industry Regulatory Authority ("FINRA") determined that Goldman's procedures were not reasonably designed to prevent the trade-through of protected quotations in NMS stocks that do not fall within any applicable exception and was fined \$800,000. Though Goldman had created a Market Data Accuracy Report to flag transactions that were traded-through, the sample only reviewed 20 orders per week out of millions that were processed. According to the enforcement action, Goldman did not review the effectiveness of this report, despite its use for several years.

3. Barclays

In a complaint filed by the New York State Attorney General, accusations were also leveled against Barclays for the operation of their dark pool.²³ Barclays allegedly used market materials to advertise unique controls and monitoring in their dark pool. Specifically, Barclays's marketing materials claimed that the bank would protect clients trading in the dark pool from "aggressive," "predatory," or "toxic" high-frequency traders. The complaint alleges that Barclays falsified data about the proportion of clients who participated in the dark pool. Barclays allegedly excluded their largest client (a HFT) in the data and neglected to inform clients that their own HFT desks participated in the dark pool. Barclays was also accused of committing a direct violation of the "Order Protection Rule" by routing trades to their own dark pool for further profit instead of choosing the venue solely on the NBBO. The complaint further included a claim that Barclays secretly forwarded detailed information about its dark pool to HFT firms as it continued to advertise that it would protect institutional investors from these firms. Barclays filed a Motion to Dismiss the complaint on July 24, 2014.

On January 21, 2015, New York's Attorney General amended the initial complaint and moved to expand this lawsuit accusing Barclays of fraud for having deceived clients and investors about how it operated its dark pool.²⁴ The Amended Complaint alleges that there is new evidence showing that several top executives knew how the bank falsely led

21. UBS developed a "natural-only crossing restriction" to ensure that select orders would not execute against orders placed by market makers and HFT trading firms. This shield was only available to benefit orders using UBS algorithms which are automated trading strategies. See *id.*

22. Letter of Acceptance, Waiver, and Consent No. 20110307615-01: Goldman Sachs Execution & Clearing, L.P., Financial Industry Regulatory Authority: <https://www.finra.org/web/groups/industry/@ip/@enfi/@ad/documents/industry/p542071.pdf>

23. *State of New York v. Barclays Capital, INC., and Barclays PLC*, Complaint before the Supreme Court of the State of New York, County of New York, Index No. 451391 /2014 (filed Jun. 25, 2014). <http://www.newsroom.barclays.com/imagelibrary/downloadMedia.ashx?MediaDetailsID=6022>

24. See New York seeks to expand Barclays 'dark pool' lawsuit dated Jan. 21, 2015: <http://uk.reuters.com/article/2015/01/21/uk-barclays-newyork-darkpool-lawsuit-idUKKBN0KU2KE20150121>



people to believe that its electronic trading services offered protection from predatory trading. A hearing is scheduled for February 11, 2015 in the New York State Supreme Court in Manhattan.

V. CONCLUSION

Financial institutions that operate ATS / dark pools and/or fall within the definition of a Reg SCI entity must ensure that the risks associated with the operation of their dark pools have been reasonably assessed and mitigated, and full compliance with the new regulations is achieved. It may be necessary to implement revised policies and procedures along with internal controls to mitigate risks and cover gaps, where applicable, in order to adequately respond to Reg SCI and other current regulatory trends. Additional measures, such as larger sampling of dark pool transactions as part of internal monitoring, may need to be taken, which could be challenging given the volume of high-frequency transactions.

The authors would like to acknowledge Navigant's Christopher Daubert for his contributions to this article.



© 2015 Navigant Consulting, Inc. All rights reserved. 00004148

Navigant Consulting is not a certified public accounting firm and does not provide audit, attest, or public accounting services. See navigant.com/licensing for a complete listing of private investigator licenses. The opinions expressed in this article are those of the author and do not necessarily represent the views of Navigant Consulting, Inc. Neither Navigant nor the author assume responsibility for legal advice nor make any representations concerning interpretations of either the law or contracts.

