

Divided SEC Adopts Regulation NMS New Requirements for "Trading Centers"

Introduction

On April 6, 2005, the Securities and Exchange Commission ("SEC" or the "Commission") adopted new rules regulating the National Market System ("NMS"), which establish requirements for "trading centers" to reduce the likelihood of "trade throughs" and realign relationships among markets.¹ The SEC adopted the new rules after years of consideration, notwithstanding the dissent of two Commissioners. The SEC issued its adopting release on June 9, 2005, more than two months after the open meeting at which it approved the rules.²

By adopting Regulation NMS, the SEC intends to strengthen and modernize the regulatory structure of the U.S. equity markets. The Commission hopes that Regulation NMS will address this goal by establishing baseline rules to regulate how individual trading centers interact with the rest of the market when routing orders or displaying quotations. As described in detail below, the four main features of Regulation NMS are:

- The Order Protection Rule
- The Access Rule
- The Sub-Penny Rule
- The Market Data Rules

¹ SEC Adopts Regulation NMS and Provisions Regarding Investment Advisers Act of 1940, April 7, 2005, Press Release 2005-48, <http://www.sec.gov/news/press/2005-48.htm>. The new rules have different effective dates, starting on August 29, 2005. See *infra* at 26-27. See n. 71 for definition of "trading center."

² The release explains that the Commission has designated a new regulation, entitled "Regulation NMS," to include both the newly adopted rules and the pre-existing NMS rules, which it has amended and redesignated in light of the new regulation. The release also announces changes to the joint industry plans for dissemination of market data (the "Plans"). The following SEC releases are relevant, in reverse chronological order:

- **Adopting Release** – Regulation NMS, Exchange Act Release No. 51808 (June 9, 2005) (final rules), at 70 Fed. Reg. 37496 (June 29, 2005).
- **Re-Proposing Release** – Exchange Act Release No. 50870 (Dec. 16, 2004) (re-proposal of rules), at 69 Fed. Reg. 77424, (Dec. 27, 2004).

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- **Supplemental Release** – Exchange Act Release No. 49749 (May 20, 2004) (proposed rule; extension of comment period and supplemental request for comment), at 69 Fed. Reg. 30142 (May 26, 2004); see also *Dechert OnPoint: SEC Proposes Reg NMS*, [Financial Services, Number 15, June 2004](#) available at www.dechert.com.
 - **Proposing Release** – Exchange Act Release No. 49325 (Feb. 26, 2004), at 69 Fed. Reg. 11126 (March 9, 2004).

Page references to these releases in this issue of *Dechert OnPoint* are from the *Federal Register*.

Background

When Congress enacted the Securities Acts Amendments of 1975, it added Section 11A to the Securities Exchange Act of 1934 (the “Exchange Act”).³ That section, in part, states:

The Commission is directed, therefore, having due regard for the public interest, the protection of investors, and the maintenance of fair and orderly markets, to use its authority under this title to facilitate the establishment of a national market system for securities (which may include subsystems for particular types of securities with unique trading characteristics) in accordance with the findings and to carry out the objectives set forth in paragraph (1) of this subsection.⁴

Thus Section 11A provided the SEC with a mandate to facilitate a national market system in which the multiple individual markets that trade securities are linked by technology⁵ to achieve fair and orderly markets. In particular, Section 11A directs the Commission to promote fair competition among the individual markets and to link the markets together to promote fair competition among investor orders across the NMS.⁶

Pursuant to this mandate, the Commission has taken many significant actions.⁷ For example, the Commission has sought over the years to enhance intermarket price protection. In 1978, the SEC approved the Intermarket Trading System Plan (“ITS”) to establish an integrated

system for trading exchange-listed stocks.⁸ The ITS coordinates the execution of orders among the national exchanges by requiring ITS participants to display their best quotations and to route their orders through a centralized electronic system to execute against superior quotations displayed by other ITS participants.⁹ In subsequent years, “the NASD became an ITS Plan participant and instituted its own trade-through rule that appl[ied] to each of its members that is a registered market maker in exchange-listed securities...”¹⁰ In general, the ITS trade through rules applied to exchange-listed stocks, but not to Nasdaq securities.¹¹

³ Pub. L. 94-29. See discussion of findings *infra*.

⁴ Section 11A(a)(2) of the Exchange Act. It is important to note that Congress directed the SEC to *facilitate* the establishment of the NMS, not to *design* it.

⁵ Section 11A(a)(1)(D) of the Exchange Act (finding that the linking of all markets through communication and data processing facilities will foster competition and contribute to the best execution of orders).

⁶ Section 11A(a)(1)(C)(i)-(ii) of the Exchange Act (finding it in the public interest to promote efficient execution of securities transactions and fair competition among broker-dealers and among exchange markets and other markets); see also Section 11A(a)(1)(C)(iv) (finding it in the public interest to promote the practicability of brokers executing investors’ orders in the best market). For a full list of objectives under the Section 11A mandate see *infra* at n. 105 and accompanying text.

⁷ See e.g., Proposing Release at 69 Fed. Reg. at 11130.

⁸ See In the Matter of American Stock Exchange, Inc., Boston Stock Exchange, Inc., New York Stock Exchange, Inc., Pacific Stock Exchange, Inc., Philadelphia Stock Exchange, Inc., Exchange Act Release No. 14661, 43 Fed. Reg. 17419 (Apr. 14, 1978); see also the Proposing Release at 11131. The Proposing Release at n. 17 states:

All national securities exchanges and the NASD are now members of the ITS Plan except the International Securities Exchange, which trades solely securities not covered by the ITS Plan. The ITS Plan requires each Plan participant to provide electronic access to its displayed best bid or offer to other Plan participant and provides an automated mechanism for routing orders, called commitments, to reach those displayed prices.

⁹ See 70 Fed. Reg. 37496 at n. 30. The Proposing Release at 11131 states:

All national securities exchanges and registered OTC market makers that trade “ITS eligible” securities, including any ECN registered as an Intermarket Trading System/Computer Assisted Execution System (“ITS/CAES”) market maker, are able to access each ITS participant’s top-of-book through the ITS linkage, and are subject to existing trade-through provisions that require ITS participants’ members to seek to avoid trading at a price in one market that is inferior to the price displayed in another market.

On August 8, 2005, Nasdaq announced its intention to withdraw from its participation in the ITS Plan upon implementation of Regulation NMS. Nasdaq stated that it can provide its customers greater flexibility by using other private linkages. Nasdaq will use its Brut facility to interact with other exchanges. Nasdaq will seek SEC approval for the change. See Nasdaq Trader Alert # 2005—093, Frequently Asked Questions 05-430, and *The Wall Street Journal*, August 8, 2005 at c3.

¹⁰ The Proposing Release at 69 Fed. Reg. 11132. The Commission states that the NASD’s trade-through rule is similar to the exchange trade-through rules. *Id* at n. 36.

¹¹ See discussion at n. 25 below.

The Commission took many other steps to facilitate the development of the NMS. For example, in the late 1970s it approved three joint-industry plans (the “Plans”) through which the various trading centers report quotation and transaction data to provide investors with a single source for consolidated market information.¹²

Congress later enacted the National Securities Markets Improvements Act of 1996, in which it granted the SEC exemptive authority under each of the federal securities laws.¹³ The SEC used this authority, in part, to encourage greater competition among market participants for customers’ orders.¹⁴ This change in the legal framework, combined with significant technological innovation, resulted in a proliferation of trading competing for investor orders.¹⁵

Although the Commission has continued to revise and refine its market structure regulation to keep pace with changing market conditions,¹⁶ the large-scale changes in

¹² See n. 54 below.

¹³ Pub. L. No: 104-290. See e.g. Section 36 of the Exchange Act.

¹⁴ E.g., Regulation ATS.

¹⁵ In the words of the Commission, these include:

- Traditional exchanges with active trading floors, which even now are evolving to expand the range of choices that they offer investors for both automated and manual trading
- Purely electronic markets, which offer both standard limit orders and conditional orders that are designed to facilitate complex trading strategies
- Market-making securities dealers, which offer both automated execution of smaller orders and the commitment of capital to facilitate the execution of larger, institutional orders
- Regional exchanges, many of which have adopted automated systems for executing smaller orders
- Automated matching systems that permit investors, particularly large institutions, to seek counterparties to their trades anonymously and with minimal price impact

70 Fed. Reg. at 37499.

¹⁶ For example, in 1996, the SEC amended Rule 11Ac1-1 (the “Quote Rule”):

technology and trading methods in recent years and the lack of uniformity in regulation between the auction and dealer markets convinced the SEC to engage in a broad and systematic review of existing market structure rules. William Donaldson, SEC Chairman at the time, noted:

Prior to Regulation NMS, the lack of consistent intermarket trading rules for all NMS stocks had divided the equity markets into halves: a market for exchange-listed stocks and a market for Nasdaq stocks. For historical reasons, including the history of NYSE as an auction market and

[T]o require a specialist or OTC marketmaker to make publicly available the price of any order it places in an electronic communications network (ECN) if the ECN price is better than the specialist’s or OTC marketmaker’s public quotation. OTC marketmakers and specialists could comply with this ENC (*sic*) amendment by changing their public quote to reflect an ECN order or by using an ECN that facilitates their compliance with the amended Rule 11Ac1-1.

Simultaneously, the Commission adopted Rule 11Ac1-4, the Display Rule, to require OTC marketmakers and specialists to display any customer limit order when the order was placed at a price superior to the marketmaker’s or specialist’s quotation.

Joel Seligman, *The Transformation of Wall* (“Seligman”) at 703. See Order Execution Obligations, Exchange Act Release No. 37619A (Sept. 6, 1996), 61 Fed. Reg. 48289 (Sept. 12, 1996) (“Order Execution Release”).

See also comments of Kim Bang, President of Bloomberg Tradebook, before the Senate Banking Committee on May 18, 2005:

The Nasdaq price-fixing scandal of the mid-1990s resulted in the SEC’s 1996 issuance of the order handling rules. Those rules enhanced transparency and competition in the Nasdaq market and permitted Electronic Communications Networks—ECNs—to level the playing field between investors and intermediaries by granting investors the ability to drive the quote and access liquidity directly. This improved our National Market System.

Indeed, the increased transparency promoted by the SEC’s Order-Handling Rules and the subsequent integration of ECNs into the national quotation montage narrowed Nasdaq spreads by nearly 30%.

Regulation NMS and Recent Market Developments: Hearing Before the Senate Comm. on Banking, Housing, and Urban Affairs (May 18, 2005) (testimony of Kim Bang, President and Chief Executive Officer, Bloomberg Tradebook LLC).

Nasdaq as a dealer market, these stocks traded in quite different regulatory structures.¹⁷

The objective of the Commission's review was to establish a comprehensive regulatory scheme that will uniformly address problems across all markets in the NMS.¹⁸

Following a lengthy review, the SEC proposed Regulation NMS on February 26, 2004.¹⁹ The SEC held a hearing on the proposed regulation on April 21, 2004 and issued a supplemental request for comment on May 26, 2004.²⁰ Comments on the releases reflected a wide range of perspectives and differences of opinion on how an optimal market system should be structured. Many of the comments focused on whether uniformity of regulation would be better achieved through deregulation rather than implementation of new and more complex restrictions. After considering the comments, the SEC revised its proposal and repropounded Regulation NMS in December of 2004.²¹ The Commission adopted the final Regulation on June 9, 2005 over the dissent of Commissioners Cynthia A. Glassman and Paul S. Atkins.

Despite the contentious debate surrounding Regulation NMS, industry leaders testifying on May 18, 2005 before the Senate Committee on Banking, Housing, and Urban Affairs expressed a willingness to accept Regulation NMS as final and to proceed with implementation of its provisions.²²

The SEC's View: What is Broken?

The SEC stated that it recognized that vigorous competition among markets has promoted efficiency and innovative services, and that many of the recent innovations in trading have made the U.S. equity markets

¹⁷ Regulation NMS and Recent Market Developments: Hearing Before the Senate Comm. on Banking, Housing, and Urban Affairs (May 19, 2005) (testimony of William H. Donaldson, Chairman, Securities and Exchange Commission).

¹⁸ See 70 Fed. Reg. at 37497.

¹⁹ See n. 2, *supra*.

²⁰ See n. 2, *supra*.

²¹ See n. 2, *supra*.

²² See *Exchange Chiefs Bury Hatchet on Reg NMS*, BD Week, May 23, 2005, at 1,5.

among the most liquid and deep in the world. The SEC is concerned, however, that the growth in diverse trading centers has caused fragmentation in the national market that has detracted from order competition at the national level. In particular, the Commission is concerned that, given the sweeping changes in the markets, existing regulation does not adequately protect investors from the following problems.

Trade-Throughs

A trade-through occurs when an order placed in one trading center is executed without regard for immediately available and superior-priced quotations in other trading centers.²³ In the SEC's view, the practice of trading through superior quotations not only undermines investor confidence in the best execution of market orders, but, more importantly, discourages investors from displaying limit orders by increasing the risk that the investor's limit order will not be executed, even when constituting the best displayed quotation.²⁴ Although existing regulations generally prohibited trade-throughs in exchange listed securities,²⁵ in the

²³ 70 Fed. Reg. at 37501.

²⁴ See 70 Fed. Reg. at 37506.

²⁵ The Proposing Release at 11132-3 states:

The NYSE and Amex markets, and the Nasdaq market, have adopted different approaches to intermarket price protection. With regard to NYSE- and Amex-listed securities, the ITS trade-through rule requires members of an exchange, when purchasing or selling, either as principal or agent, a security traded through ITS on the exchange or by issuing a commitment to trade-through ITS, to avoid initiating a trade-through (unless an exception applies). The ITS rule defines a trade-through to occur when a member initiates a purchase (sale) on the exchange of a security traded through ITS at a price that is higher (lower) than the price at which the security is offered (bid for) at the time of the purchase (or sale) in another ITS participant market as reflected in the offer (bid) then being displayed on the exchange from the other participant market. Each SRO requires its members, when purchasing or selling any ITS security, either as principal or agent, on its market or when sending a commitment through ITS, to avoid initiating a trade-through unless an exception applies. The SRO trade-through rules also include extensive procedures for "satisfying" an order that is traded through.

The existing trade-through rules apply to exchange members and registered OTC market makers that trade NYSE or Amex-listed securities, but not to block positioners that operate in the OTC market without registration as OTC market makers. Thus, OTC block

SEC's view, the existing regulations did not address the concern comprehensively or effectively.²⁶

positioners generally are not restricted by the existing trade-through rule from trading outside the best bid and offer. Nor do the trade-through rules apply to alternative trading systems ("ATSS") that trade NYSE or Amex-listed securities in the OTC market unless they are required to (or choose to) post quotes in the consolidated quotation system through an SRO. When an ATS displays its best bid or offer in the consolidated quotation system through an SRO, it becomes subject to that SRO's trade-through restrictions (and thus the ITS Plan trade-through restrictions). For example, the NASD requires any ATS that intends to display its quotes in NYSE or Amex securities in the OTC market to register as an ITS/CAES market maker and thus become subject to the NASD's (and ITS Plan's) trade-through restrictions.

In contrast, the Nasdaq UTP Plan as approved by the Commission does not contain any trade-through provisions, and no intermarket trade-through rules currently exist with regard to the trading of Nasdaq securities (footnotes omitted).

²⁶ In the Proposing Release at 11133-4, the SEC states:

While the Commission continues to believe that a trade-through rule can encourage the use of limit orders, facilitate best execution, and reduce the effects of fragmentation, the Commission is concerned that developments in the markets over the last few years have called into question the continued viability of the existing system for achieving intermarket price protection in NYSE and Amex stocks. The structure of the U.S. securities market is quite different now than when the ITS trade-through provisions were adopted. At the time when the existing rules were put in place, order routing and execution facilities were slower, there was less vigorous intermarket competition in NYSE, Amex, and Nasdaq securities, and the minimum trading increment was 1/8th of a dollar. By contrast, in today's market, rapid advances in technology have provided a variety of means to efficiently route orders to multiple markets. "Alternative" markets that provide almost instantaneous executions by automatically matching buy and sell orders have emerged, as has the use of "smart" order routing and execution systems by broker-dealers and other market participants. Stocks are quoted in pennies instead of 1/8ths, which has led (in many instances) to narrower spreads, less depth at the top-of-book and rapidly changing quotes. It also may reduce the cost of a trade-through to the investor.

Because competing market centers currently offer different speeds and levels of certainty of execution, the challenge of providing price protection across these diverse markets has grown. In recent years some market participants have argued that the restrictions imposed by existing trade-through rules for NYSE and Amex securities impede the efficient operation of "nontraditional" automated markets that operate by automatically, and nearly instantaneously, matching

The Commission's studies of public quotation and trade data found significant overall trade-through rates in both Nasdaq and the New York Stock Exchange ("NYSE"); 7.9% in Nasdaq and 7.2% in NYSE.²⁷ Additionally, the Commission found the cost of trade-throughs to be significant; the Nasdaq stocks averaged 2.3 cents per share and the NYSE stocks averaged 2.2 cents per share.²⁸

The SEC finds that trade-throughs exist under the current regulatory scheme for a number of reasons. First, there are no trade-through prohibitions governing Nasdaq-listed stocks, which are not covered under the ITS Plan.²⁹

buying and selling interest resident in their systems. These market participants say that if an electronic market is subject to existing trade-through rules, the market must slow down or forego an execution in its system in order to send an order to another market displaying a better price to attempt to access that better priced order, or risk having to satisfy the better-priced order if it is traded-through. Although the trade would occur at an inferior price, these customers prefer the speed and/or certainty of execution over price.

Many automated markets argue that requiring them to provide this outbound access to a non-automated market to reach the better price displayed on that other market, no matter how marginal that better price is and how long it takes the other market to execute the order (if at all), not only compromises the basic structure of their markets but also effectively grants an option to that slower market during the time period before the order is executed. This option has value, as there is a risk that the market for the stock may move before the order is executed, especially if a significant amount of time passes before the order is executed. In addition, market participants argue that there is no guarantee that the order will even be executed at the price that was showing at the time that the order was sent, given the rapid quote changes that exist for some securities today.

²⁷ 70 Fed. Reg. at 37507. The Dissent notes that "between 98% and 99% of all trades on both markets (*i.e.*, Nasdaq and NYSE) did *not* trade-through better-priced bids or offers. Given that the hypothetical cost of trade-throughs is less than 1/100th of 1%, the evidence does not indicate that investors' orders are treated unfairly [emphasis in original]." 70 Fed. Reg. 37636. Moreover, as discussed below, the Dissent states that "there is no evidence of a lack of depth on Nasdaq" and that many market participants do not believe that there is a need to extend the trade-through rule to Nasdaq. *Id.* See also discussion regarding "pinging" at n. 149 below and accompanying text.

²⁸ 70 Fed. Reg. at 37507.

²⁹ 70 Fed. Reg. at 37501.

Although a broker-dealer's duty of best execution would require a broker-dealer to execute an order at the best available price, even without a trade-through rule, in the absence of a trade-through rule, this duty is difficult to enforce on an order-by-order basis.³⁰ Additionally, it is often practically difficult for order-routers to access quotations displayed in other trading centers because of

³⁰ The Adopting Release describes the duty of best execution as follows:

A broker-dealer's duty of best execution derives from common law agency principles and fiduciary obligations, and is incorporated in SRO rules and, through judicial and Commission decisions, the antifraud provisions of the federal securities laws.

The duty of best execution requires broker-dealers to execute customers' trades at the most favorable terms reasonably available under the circumstances, *i.e.*, at the best reasonably available price.

70 Fed. Reg. at 37538. Part of the duty of best execution is the broker-dealer's obligation to regularly and rigorously review the quality of their trades and to identify new opportunities for improving execution quality in light of technological or other market changes. *Id.* at n. 342, citing Order Execution Release (cited at n. 16, *supra.*) at 61 FR at 48322-48333. See discussion at n. 94 below. See also remarks of Mary Ann Gadziala, Associate Director, Office of Compliance Inspections and Examinations, SEC, 2003 Fiduciary and Investment Risk Management Association, Fiduciary and Risk Management Seminar (February 26, 2003) available at <http://www.sec.gov/news/speech/spch022603mag.htm>. (Firms are required to perform a "regular and rigorous analysis of execution quality" to provide best execution for customer trades)("Gadziala Remarks"). See also *Newton v. Merrill Lynch, Pierce, Fenner & Smith Inc.* 135 F.3d 266, 271 (3d Cir. 1997), cert. denied 525 U.S. 811 (1998) (broker-dealers must periodically examine their practices in light of market and technology changes).

However, the duty of best execution does not always prevent trade-throughs because the duty is not regularly enforced on an order-by-order basis. As stated in the Adopting Release: "The Commission has *not* viewed the duty of best execution as inconsistent with the automated routing of orders *or requiring automated routing on an order-by-order basis to the market with the best quoted price at the time.* 70 Fed. Reg. at 37538 (footnotes omitted/emphasis added); see also *Newton*, 135 F.3d at 271 (broker dealers need not engage in an order-by-order analysis of competing markets); Disclosure of Order Routing and Execution Practices, Exchange Act Release No.43084 (July 28, 2000), 65 Fed. Reg. 48406, 48408 (Aug. 8, 2000) (proposing release) (noting that "even where linkages between market centers exist, there is no requirement that orders be routed to the market center that is displaying the best prices, even if that price represents a customer limit order").

discriminatory use of access fees and other barriers to access erected by the various trading centers.³¹ Even within the ITS, trade-throughs are significantly common because trade-through violations are not enforced by the Commission but only by plan participants in an after-the-fact complaint procedure. The ITS provisions also have significant gaps in coverage, particularly in regard to small 100-share transactions and large block transactions of 10,000 shares or more.³²

Reduced Display of Limit Orders

The SEC is most concerned about the effect of trade-throughs on an investor's incentive to display limit orders.³³ A limit order is an order to buy or sell a stock at a particular price or better. Although a limit order protects an investor by setting a limit on the price at which the investor will engage in the trade, limit orders may go unexecuted if there is no matching interest to execute against the order. Additionally, limit orders expose the investor's trading interest, which causes free-riding problems and other transaction costs.³⁴ Thus, investors who prefer immediacy and certainty of execution or who are concerned about exposing their trading interest will not display a limit order, but submit a marketable order instead.

The Commission finds that investors are even further discouraged from displaying limit orders when there is inadequate protection against trade-throughs. In such a system, an investor has no guarantee that the investor's displayed limit order will have priority of execution over other quotations, even when the investor's order is

³¹ 70 Fed. Reg. at 37543.

³² See 70 Fed. Reg. at 37501.

³³ The Commission uses the term "limit order" to refer to "non-marketable limit orders," which are orders that have a limit price that prevents the order's immediate execution at current market prices. The term "limit order" as used in the Adopting Release does not include "marketable limit orders" which are orders that have a limit price within current market prices and may be executed immediately. These marketable limit orders are referred to in the release under the term "marketable orders," which also covers market orders. The reason for distinguishing the two types of limit orders is that, the SEC believes that non-marketable limit orders contribute to liquidity by offering trades at new price levels, whereas marketable limit orders take away liquidity by executing against available liquidity. See 70 Fed. Reg. 37496 at n. 53.

³⁴ 70 Fed. Reg. at 37511.

displayed at the best available price. This not only increases the uncertainty of execution but creates an impression of unfairness when a suitable counter-order is not matched with the limit order but executed against an inferior-priced quotation.³⁵ Thus, both the uncertainty and apparent unfairness caused by trade-throughs create disincentives for investors to display limit orders.

Diminished Price Discovery

Although the public display of limit orders is important for several reasons, the SEC is particularly concerned about the impact of limit orders on price discovery. Because limit orders expose trading interest in the market and thereby set the benchmark for submission and execution of marketable orders, limit orders ensure that market prices better reflect fundamental stock values. This ultimately prevents resources from being misallocated within the economy.³⁶ Thus, one of the Commission's principal aims in Regulation NMS is to improve price discovery by eliminating trade-throughs as a disincentive to the display of limit orders.

Reduced Market Depth and Liquidity

The SEC is also concerned about depth and liquidity in the market³⁷ which has been adversely impacted in recent years by the fragmentation of the NMS into multiple trading centers, the transition in April 2001 from fractional to decimalized trading,³⁸ and the increasingly frequent practice of using sub-penny pricing, all of which have significantly reduced the trading interest available at any one price. Because limit orders add depth and liquidity to the market, the Commission also seeks to promote the display of limit orders for depth and liquidity reasons.³⁹

³⁵ 70 Fed. Reg. at 37506.

³⁶ 70 Fed. Reg. at 37499.

³⁷ The SEC is primarily concerned with the ability of the markets to absorb order imbalances with minimized price impact. Therefore, the Commission defines "depth" in terms of the volume of stock that can be readily traded at a particular price point, and "liquidity" as the amount of price movement experienced by investors when attempting to trade in large size. 70 Fed. Reg. at 37496 at n. 14.

³⁸ See also Government Accountability Office, *Securities Markets – Decimal Pricing Has Contributed to Lower Trading Costs and a More Challenging Trading Environment*, GAO-05-535 (May 2005).

³⁹ Limit orders add liquidity to the market by providing an opportunity for investors to trade at a price at which no

Short-Term Volatility

One of the problems caused by shallow and illiquid markets is increased short-term volatility. The SEC explains that short-term volatility is detrimental to long-term investors who tend to invest based on their assessment of the fundamental value of the stock, and, therefore, prefer to establish and unwind positions as close as possible to the prevailing price of the stock.⁴⁰ The Commission states that short-term volatility also is detrimental to the companies issuing securities because "the cost of capital of listed companies is influenced by the transaction costs of those who are willing to accept the risk of holding corporate equity for an extended period of time."⁴¹

High Transaction Costs for Investors Engaging in Large-Volume Transactions

The SEC is likewise concerned that reduced depth and liquidity in the NMS creates significant transaction costs for large-volume investors who cannot enter or exit a position in a shallow market without impacting price.⁴² The inability of the market to absorb order imbalances creates significant transaction costs for large-volume investors, which the SEC estimates at more than \$30 billion a year.⁴³ Additionally, these costs are not only borne by institutional investors but by the many retail investors who place their retirement and education savings in mutual funds or other collective investment vehicles.

execution was previously available. See 70 Fed. Reg. at 37499.

⁴⁰ 70 Fed. Reg. at 37500.

⁴¹ 70 Fed. Reg. at 37499.

⁴² Market depth and liquidity is critical to large-volume traders who require deep and liquid markets to completely execute their large orders before exposing their trading interest, which in a shallow or illiquid market would create significant transaction costs by driving up the price of purchase when entering a position and drive down the price of sale when entering a position. Even when executing trades off-market in large block transactions, these investors must pay a premium or offer a discount for the available off-market liquidity. See 70 Fed. Reg. at 37501.

⁴³ See 70 Fed. Reg. at 37501.

Locked and Crossed Quotations

Another concern of the Commission is the frequency of locked or crossed quotations.⁴⁴ For example, Nasdaq estimated that during a one-week period in March 2004, markets for Nasdaq stock were locked or crossed an average of 509,000 times per day.⁴⁵ The confusion caused by locked or crossed quotations adversely impacts price discovery in the market because market participants are not sure which of the locked or crossed quotations is stale and which one is genuine. As a result of this confusion, trading centers often switch from automated quotations to manual quotations when markets are locked or crossed. This slows down trading and thereby reduces market depth and liquidity.⁴⁶

The SEC finds that locked and crossed markets occur under current regulation for several reasons. First, the fragmentation of the NMS into numerous trading centers has increased the incidence of accidentally locked or crossed quotations. Such accidents are all the more likely when there is no trade-through rule requiring order-routers to execute incoming orders against better-priced quotations in other trading centers. Second, Nasdaq stocks are not subject to any provision discouraging the practice of locking or crossing quotations such as those

⁴⁴ A locked quotation occurs when a market participant deliberately or accidentally ignores a displayed quotation while posting a counter quotation at the same price. Because, in such a circumstance, the bid price is identical to the ask price, there is no spread with which to execute the trade. This locks the market and causes confusion for other market participants who are unsure if the trading interest is stale or genuine. Similarly, a crossed quotation occurs when an market participant ignores a displayed quotation while displaying a counter quotation that results in a higher bid price than ask price. The fact that the market participant has not executed against the superior price already displayed but instead has displayed a counter offer at a price which is inferior to her interests causes confusion in the market as to which quotation is stale and which is genuine. See Adopting Release at 70 Fed. Reg. 37547; see also Ivy Schmerken, *Nasdaq's Battle Over Locked Crossed Markets*, Finance Tech, Apr. 15, 2003, available at <http://www.financetech.com/featured/showArticle.jhtml?articleID=14702074>.

⁴⁵ 70 Fed. Reg. at 37547.

⁴⁶ See 70 Fed. Reg. at 37547 (citing comments that locked and crossed markets "can be a sign of an inefficient market structure and may create confusion for investors")(internal quotations omitted); see also Ivy Schmerken, *Nasdaq's Battle Over Locked Crossed Markets*, Finance Tech, Apr. 15, 2003, available at <http://www.financetech.com/featured/showArticle.jhtml?articleID=14702074>.

provisions contained in the ITS Plan.⁴⁷ Finally, the use of non-uniform and discriminatory access fees across the various trading centers increases the frequency of deliberately locked or crossed quotations because a market participant may choose to post a locking quotation to avoid paying a fee to access the quotation of another market and to receive a liquidity rebate for an execution against its own displayed quotation.⁴⁸

Lack of Uniform Quotation Pricing/Access Fees

Another problem identified by the SEC is the proliferation of substantial and non-uniform access fees in the NMS. Because of the diversity of practices from one trading center to the next in charging access fees, order-routers cannot be sure that a quotation displayed in another trading center reflects the real price of the transaction.

Additionally, the practice of passing access fees through to trading center customers as rebates for supplying liquidity further dilutes the fundamental accuracy of quoted prices because market participants will price quotations differently when expecting a rebate.⁴⁹

Problems Associated with Sub-Penny Pricing

The SEC has concluded that the April 2001 conversion of the U.S. securities markets from fractional to decimalized trading has been more beneficial than costly but that the costs of any lower minimum price variation would exceed its benefits.⁵⁰

⁴⁷ 70 Fed. Reg. at 37547.

⁴⁸ The Adopting Release notes that "some commenters asserted that locked markets occur when a market participant deliberately posts a locking quotation to avoid paying a fee to access the quotation of another market and to receive a liquidity rebate for an execution against its own displayed quotation." 70 Fed. Reg. at 37547 (referring to comments made in letters to the Commission submitted by AMEX, Nasdaq, ATD, and ICI); see also Ivy Schmerken, *Nasdaq's Battle Over Locked Crossed Markets*, Finance Tech, Apr. 15, 2003, available at <http://www.financetech.com/featured/showArticle.jhtml?articleID=14702074>.

⁴⁹ 70 Fed. Reg. at 37543.

⁵⁰ 70 Fed. Reg. at 37551.

In particular, the Commission finds that sub-penny pricing:

- Reduces price clarity by increasing the frequency of flickering quotations⁵¹
- Decreases market depth by reducing the number of shares available at any given price
- Discourages the use of limit orders due to loss of execution priority by a nominal amount
- Disturbs the exchange priority rules and NASD's Manning rule,⁵² which are required for customer protection
- Raises market data and infrastructure costs
- Encourages large volume traders to rely on execution alternatives outside of the markets by decreasing depth inside the spread⁵³

Perverse Incentives and Lack of Transparency in the Reporting of Consolidated Market Data

The SEC finds that the Networks that disseminate consolidated market information pursuant to the joint industry plans (the "Plans") provide a reliable and comprehensive single source of market information for retail investors.⁵⁴ The Commission also finds that these

⁵¹ For a discussion of flickering quotations, *see infra* at page 13.

⁵² The Manning rule prohibits broker-dealers from trading ahead of customer limit orders. *See* NASD IM-2110-2.

⁵³ 70 Fed. Reg. at 37551-52.

⁵⁴ The SROs generate consolidated market data by participating in three plans. These joint industry plans are the: (1) CTA Plan, which is operated by the Consolidated Tape Association and which reports information on transactions of exchange-listed securities; (2) the CQ Plan, which disseminates consolidated quotation information for exchange-listed securities; and (3) the Nasdaq UTP Plan, which disseminates consolidated transaction and quotation information for Nasdaq-listed securities. The consolidated information provided by each plan is disseminated over three networks: Network A, for securities listed on the NYSE; Network B, for securities listed on Amex and other national securities exchanges; and Network C, for securities traded on Nasdaq. The data includes for each security: (i) the national best bid and offer ("NBBO") with information on price, size, and market center; (ii) the BBOs from each of the SROs with price, size, and market center; and (iii) a consolidated set of trade reports in each security. *See* 70 Fed. Reg. 37496 at n. 40.

Networks encourage healthy competition among markets by enabling small and newer markets to widely distribute their displayed quotations in the consolidated quotation stream.⁵⁵

On the other hand, the Commission is concerned that the consolidated reporting system lacks sufficient market incentives that would otherwise encourage innovative services, efficient pricing of Network fees and efficient allocation of Plan revenues among the participating Self Regulatory Organizations ("SROs").⁵⁶ In particular, the SEC finds that the Plans lack adequate transparency and governance, especially in regard to the setting of Network fees, and that the revenue allocation formulas, which are currently based solely on the number of trades reported in the consolidated data stream, do not properly compensate SROs for the number of shares traded or quotations reported. In the SEC's view, the current formulas also disproportionately compensate SROs that trade stocks with the highest trading volume and encourage practices that artificially increase trading volume, such as trade shredding, wash sales, and print facilities.⁵⁷

ITS Is Outdated

The SEC and nearly all industry commenters agree that the ITS Plan, first implemented in 1978, is now seriously outdated. As mentioned earlier, the SEC believes that one problem with the ITS is that it does not cover Nasdaq-listed stocks. This has resulted in a bifurcated application of NMS regulation, especially in regard to trade-throughs. Moreover, the ITS is ineffective even in preventing trade-throughs for exchange-listed stocks because of weak enforcement provisions and large gaps in the Plan's coverage.

Additionally, the ITS Plan's centrally-managed order-routing mechanism has proved to be relatively slow and anachronistic when compared to the level of connectivity

⁵⁵ 70 Fed. Reg. at 37558.

⁵⁶ 70 Fed. Reg. at 37558.

⁵⁷ "Trade shredding" occurs when an SRO breaks up larger transactions solely for the purpose of creating smaller transactions to increase Plan revenues. "Wash sales" are transactions in which a position is sold only to be replaced by an identical position within a short period of time. "Printing facilities" occur when a larger market offers market data rebates to smaller markets that post their transactions through the larger market. *See* Proposing Release at 69 Fed. Reg. 11126.

now featured in the private linkages of most trading centers. As the SEC explains, execution of orders over the ITS is further delayed due to the requirement that any trading center dealing in exchange-listed stocks must first wait for manual quotations from the floor-based exchanges to update before executing orders, which can take up to 30 seconds.⁵⁸

Because these manual quotations are not immediately accessible for execution, a limit order placed in an automated market for an exchange-listed stock may miss execution at any price when waiting for an update from the floor-based exchanges. The Commission states that this uncertainty of execution encourages investors to place orders directly in the floor-based exchange instead of the automated trading centers, thereby unfairly impeding competition.⁵⁹

The SEC's View: The Solution

In addressing these problems through Regulation NMS, the SEC hopes to achieve the appropriate regulatory balance by linking the markets together for better order competition without detracting from the competition among markets which has contributed much to innovation and efficiency in the NMS in recent years. Specifically, the Commission notes that:

The NMS is premised on promoting fair competition among individual markets, while at the same time assuring that all of these markets are linked together, through facilities and rules, in a unified system that promotes interaction among the orders of buyers and sellers in a particular NMS stock. *** Vigorous competition among markets promotes more efficient and innovative trading services, while integrated competition among orders promotes more efficient pricing of individual stocks for all types of orders, large and small. Together, they produce markets that offer the greatest benefits for investors and listed companies.

Accordingly, the Commission's primary challenge in facilitating the establishment of the NMS has been to maintain an appropriate

⁵⁸ 70 Fed. Reg. at 37538.

⁵⁹ See 70 Fed. Reg. at 37501.

balance between these two vital forms of competition.⁶⁰

While a single fully-consolidated national market that protects orders based on price and time priority (also known as a central limit order book or CLOB) would best encourage the display of limit orders and maximize market depth and liquidity, the SEC suggests that such a market would lack the necessary competitive incentives to increase efficiency and develop innovation.⁶¹ The SEC notes that problems inherent in a centralized system have already been witnessed to a lesser degree in the ITS which, over time, proved to be anti-competitive, inefficient, and ineffective.⁶²

With respect to competition among markets, for example, the record of the last thirty years *should give pause to those who believe that any market structure regulation is inherently inconsistent with vigorous market competition*. Other countries with significant equity trading typically have a single, overwhelmingly dominant public market. The U.S., in contrast, is fortunate to have equity markets that are characterized by extremely vigorous competition among a variety of different types of markets. ***

In sum, while NMS regulation may channel specific types of market competition (e.g., by mandating the display to investors of consolidated prices and including the prices displayed internally by significant electronic markets), it has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies (emphasis added).⁶³

Thus, the SEC has instead designed Regulation NMS to establish extensive baseline rules to govern how trading centers and broker-dealers interact with the rest of the

⁶⁰ 70 Fed. Reg. at 37499.

⁶¹ The SEC states that it has sought to avoid the extreme remedy of "a totally centralized system that loses the benefits of vigorous competition and innovation among individual markets." 70 Fed. Reg. at 37499.

⁶² Dean Seligman notes that the Commission approved ITS after it rejected a Composite or Central Limit Order Book with time/price priority, *i.e.*, a "hard CLOB" in 1978. Seligman, *supra* at n. 16, at 528.

⁶³ 70 Fed. Reg. at 37499.

NMS when routing orders for execution, displaying quotations, and disseminating market data to the public. The SEC believes that such an approach will increase order competition without adversely affecting competition among markets.

But because the Commission must balance competing goals, many market participants and two Commissioners objected to the approach approved by the majority of the Commissioners.⁶⁴ The dissenting Commissioners' position is that Regulation NMS will stifle competition and that competitive forces, rather than extensive regulation, would better solve the problems noted by the Commission.⁶⁵ The dissenting Commissioners further argue that the proper role of the SEC would be only to better define a broker's duty of best execution and to improve access to quotations, enhance connectivity, and remove barriers among trading centers. Thus, in the dissent's view, the SEC should take steps to facilitate competitive forces and let those forces guide the markets, not superimpose its own notions about ideal market structure over the NMS.⁶⁶

In response, the Commission notes that regulation does not necessary stifle competition, stating:

Additionally, the Commission's response to the dissent states that, despite differences of opinion about the optimal structure of the markets that may never achieve consensus, the Commission has reached its solution through a long open process and has chosen to proceed with the difficult decisions it has made.⁶⁷

As mentioned above, most market participants have now accepted ITS as final and are moving ahead in implementing its rules. These rules are described in the sections below.⁶⁸

⁶⁴ See 70 Fed. Reg. at 37633.

⁶⁵ 70 Fed. Reg. at 37633.

⁶⁶ 70 Fed. Reg. at 37633.

⁶⁷ 70 Fed. Reg. at 37602. See discussion at page 26 and note 161 and accompanying text.

⁶⁸ In addition to the four main rules, Regulation NMS redesignates several other rules previously promulgated under Section 11A of the Exchange Act and redefines terms for consistent use under across all Rules the consolidated Regulation NMS. Most notably Rule 600(a) replaces Exchange Act Rule 11Aa2-1, which designates reported securities as NMS securities, and Rule 600(b) provides a

Order Protection Rule – Rule 611

Purpose

The Order Protection Rule attempts to encourage limit orders and increase market depth and liquidity by requiring trading centers to establish procedures for preventing trade-throughs. However, the Rule offers a limited number of exceptions that apply in situations in which price protection does not serve the best interests of the investors placing the order that trades through.

Requirements

Rule 611⁶⁹ requires trading centers to establish, maintain and enforce written policies that are reasonably designed to prevent trade-throughs of "protected quotations." In addition, the trading center must perform regular surveillance to ascertain the effectiveness of the required policies and procedures and must take prompt action to remedy any deficiencies.⁷⁰

Trading centers covered by the rule include the national securities exchanges, national securities associations that operate SRO trading facilities, Alternative Trading Systems ("ATs"), OTC market makers, and block positioners.⁷¹

Definition of a "Protected Quotation"

Regulation NMS only protects quotations that are:

- The best bid or offer ("BBO") of an SRO
- Automated and immediately accessible
- Displayed by an automated trading center

single set of definitions for all terms used in Regulation NMS, updating or deleting repetitive or obsolete terms in the existing NMS rules.

⁶⁹ 17 C.F.R. § 242.611.

⁷⁰ 17 C.F.R. § 242.611(a)(1).

⁷¹ 70 Fed. Reg. at 37504. NMS Rule 600(b)(78) defines a "trading center" as "a national securities exchange or national securities association that operates an SRO trading facility, an alternative trading system, an exchange market maker, an OTC market maker, or any other broker or dealer that executes orders internally by trading as principal or crossing orders as agent."

- Disseminated pursuant to an effective national market system plan⁷²

Market BBO Requirement

First, to be protected, the quotation must be the BBO of a national securities exchange, Nasdaq, or national securities association, such as the National Association of Securities Dealers' ("NASD") Alternative Display Facility ("ADF"). Because of the implications on cost and reduced competition among markets, the SEC chose to protect only the BBOs of each market and not to protect Depth of Book ("DOB") quotations that trading centers voluntarily disseminate in the consolidated quotations stream.⁷³

Automated Quotation Requirement

Second, Regulation NMS protects only those quotations that are automated and immediately accessible. Manual quotations, which are defined as any quotation which is not automated,⁷⁴ are purposefully excluded from protection under Regulation NMS due to problems of undue delay and unfair competition, as experienced in the ITS.⁷⁵ While there is no quantified time standard for responding to an incoming order, the SEC suggests that the standard should be immediate.⁷⁶ Additionally, a

⁷² 17 C.F.R. § 242.600(b)(57).

⁷³ The SEC agreed with commenters that protecting the DOB quotations would be unfair to the exchanges which could protect only one BBO on the exchange, whereas Nasdaq and the ADF would be able to protect the BBOs of individual market markets and ATSS. Additionally, protecting DOB quotations would be significantly more difficult and costly than protecting the BBO of each market. See 70 Fed. Reg. at 37529.

The SEC also decided against adopting the suggestion of some commenters to protect only the National Best Bid or Offer (the "NBBO") because the SEC believed that the benefits of such protection are not justified by the costs of implementation and because such an approach would be a step backwards from the ITS trade-through rules which protected the best bids and offers of each exchange and the NASD. Moreover, the SEC noted that a rule protecting only the NBBO would be vulnerable to gaming because a market participant could post a small 100-share order to improve on the NBBO in order to execute a large transaction at an inferior price to other market BBOs. 70 Fed. Reg. at 37531.

⁷⁴ 17 C.F.R. § 242.600(b)(37).

⁷⁵ See 70 Fed. Reg. at 37517.

⁷⁶ See 70 Fed. Reg. at 37519.

quotation will be considered "automated" only when the quotation immediately and without human intervention updates the displayed quotation to reflect any change to its material terms and when incoming orders receive immediate and automated execution up to the full size of the quotation.⁷⁷

An automated quotation must also provide an "immediate-or-cancel" ("IOC") function to allow an incoming order to execute immediately and automatically against the quotation up to its full size, and for any unexecuted portion of the incoming order to be cancelled immediately and automatically without being routed elsewhere.⁷⁸ However, while this IOC functionality must be available, the market participant has a choice between submitting an IOC order, or instructing the trading center to take further action on the order by routing it elsewhere, seeking additional liquidity, or displaying the order instead of canceling it.⁷⁹

Automated Trading Center Requirement

Finally, hybrid trading centers, which employ both manual and automated quotations, may receive protection for their automatic orders, but only if the trading center qualifies as an "automated trading center." To qualify under the definition of an automated trading center, the trading center must implement such systems, procedures and rules as are necessary to render it capable of displaying quotations that meet the action, response and updating requirements set forth in the definition of automated quotation discussed above.⁸⁰

Exceptions to the Rule

To make the Order Protection Rule as efficient and practical as possible, there are several exceptions to the rule which apply when it would be detrimental to the investor to wait for better-priced quotations from other markets. These exceptions are listed under Rule 611(b) and feature, among others,⁸¹ the intermarket sweep

⁷⁷ See 70 Fed. Reg. at 37519.

⁷⁸ See 70 Fed. Reg. at 37519.

⁷⁹ See 70 Fed. Reg. at 37519.

⁸⁰ 70 Fed. Reg. at 37520.

⁸¹ For a full list of exceptions, see 17 C.F.R. § 242.611(b)-(c). The SEC has also reserved discretionary exemptive authority. See § 242.611(d).

exception, the flickering quotation exception and the self-help exception.⁸²

The SEC has not, however, adopted a general opt-out exception as earlier proposed. Therefore, a trading center must rely on one of the enumerated exceptions under Rule 611(b) and must establish, maintain, and enforce written policies that are reasonably designed to assure compliance with the terms of the exception.⁸³

Intermarket Sweep Exception

An intermarket sweep order is defined under Rule 600(b)(30) as a limit order that is identified as an intermarket sweep order when routed to a trading center; and simultaneously with the routing of the limit order, is accompanied by one or more additional limit orders that are routed to execute against all better-priced protected quotations displayed by other trading centers up to their displayed size.⁸⁴ The exception for intermarket sweep orders provided under Rule 611(b)(5)-(6)⁸⁵ allows market participants to simultaneously access multiple price levels at different trading centers and allows trading centers to execute those orders immediately without regard for better-priced quotations displayed in other trading centers or without waiting for better-priced quotations in other markets to be updated. However, this exception maintains order protection because it is premised on the condition that the trading center or broker-dealer responsible for routing the order will route the order to execute against the full displayed size of all better-priced protected quotations.⁸⁶

This allows large block transactions to be executed immediately at the best prices available for each batch of available stock. Without this exception, the block transaction would end up in an indefinite loop in which the order would be executed up to the displayed size of the best quotation but left unexecuted as to the remainder. The subsequent waves of orders then would have to be executed in small batches over increasingly inferior price levels which would cause the same

⁸² 17 C.F.R. § 242.611(b).

⁸³ 17 C.F.R. § 242.611(a)(1).

⁸⁴ 17 C.F.R. § 242.600(b)(30).

⁸⁵ 17 C.F.R. § 242.611(b)(5)-(6).

⁸⁶ 70 Fed. Reg. at 37523.

transaction costs that the Order Protection Rule was meant to avoid.⁸⁷

Flickering Quotation Exception

Flickering quotations occur when a trading center's best priced quotation displays multiple prices within one second. These quotations cause practical problems for trading centers in determining whether the protected quotations displayed in the flickering quotations are superior or inferior to other protected quotations. Thus, the SEC has decided that there is no trade-through if the trade is executed at a price equal to or superior to any of the prices displayed in the flickering quotation during the one-second window prior to execution.⁸⁸ Thus, as long as there was a price displayed that was equal or inferior to the execution price, it does not matter that there was also a superior price displayed during the same second. The SEC finds that this added flexibility is required for practical reasons and that it does not significantly detract from the benefits of the Order Protection Rule.⁸⁹

Self-Help Exception

Even where a quotation is automated, order-routers may experience undue delay accessing the quotation or executing the order when the trading center displaying the automated quotation experiences failures, material delays, or malfunctions of its systems or equipment. To avoid these undue delays, Rule 611(b)(1) provides a "self-help" remedy which allows the order-router to bypass such quotations which would otherwise be protected.⁹⁰

However, a trading center must adopt policies and procedures reasonably designed to comply with the purpose of the self-help remedy when bypassing quotations. For example, the SEC suggests that the bypassing trading center notify the non-responding trading center immediately after the bypass, and that the bypassing trading center take adequate precautions to ensure that the problem does not lie with its own systems.⁹¹ Additionally, the non-responding trading

⁸⁷ 70 Fed. Reg. at 37523.

⁸⁸ 17 C.F.R. § 242.611(b)(8).

⁸⁹ 70 Fed. Reg. at 37523.

⁹⁰ 17 C.F.R. § 242.611(b)(1).

⁹¹ See 70 Fed. Reg. at 37522.

center, when discovering that it cannot meet the response requirements of automated quotations, must immediately identify its quotations as manual instead of automated.⁹²

Analysis

One of the significant impacts of the Order Protection Rule is to create uniform regulation of trade-throughs across the NMS, whereas the regulation had previously been bifurcated between exchange-listed stocks governed by the ITS and Nasdaq-listed stocks which were not subject to any trade-through rule. Another significant change is that Regulation NMS's trade-through rules are enforced by the SEC itself, whereas enforcement had previously been conducted only by ITS plan members. Additionally, the trade-through provisions under Regulation NMS cover small 100-share quotations as well as large 10,000 share or block transactions which were not covered under ITS.

Also significant is the imposition of liability for best execution on an order-by-order basis. The duty of best execution, as previously enforced, required broker-dealers to "regularly and rigorously" analyze execution quality. This required broker-dealers to periodically examine and update their practices in light of new opportunities for better execution but did not require, the broker-dealer to "engage in an order-by-order analysis of competing markets."⁹³ On this basis, the SEC enforced the duty of best execution through examinations of broker-dealer execution practices and by requiring broker-dealers to report information on execution quality to the public so that competitive forces would help encourage better execution.⁹⁴

⁹² See 70 Fed. Reg. at 37522.

⁹³ *Newton*, 135 F.3d at 271.

⁹⁴ The Re-Proposing Release states:

The Commission emphasizes that adoption of re-proposed Rule 611 would in no way lessen a broker-dealer's duty of best execution. Broker-dealers still must seek the most advantageous terms reasonably available under the circumstances for their customer orders. They must carry out a regular and rigorous review of the quality of markets to evaluate their order execution policies, including their decisions concerning the markets to which to route customer order flow. The protection against trade-throughs that would be provided by Rule 611 would not diminish the broker-dealer's responsibility for evaluating the execution quality of markets, regardless of the exceptions set forth in the Rule.

Under Regulation NMS, however, the trading centers will additionally enforce the duty of best execution because the trading centers are charged with the duty to establishing, maintaining, and enforcing written policies reasonably designed to prevent trade-throughs.⁹⁵

Presumably, such policies will involve surveillance of execution quality on an order-by-order basis to identify trade-throughs and to determine appropriate disciplinary measures as a remedial step.⁹⁶ Therefore, in addition to the broker-dealers' duty to regularly and rigorously review execution quality, the broker-dealers must also avoid executing trade-through on an order-by-order basis to avoid the imposition of remedial action by the trading centers.

The SEC's decision to adopt a trade-through rule and to protect automated quotations (as distinguished from manual quotations) probably had a significant effect on the New York Stock Exchange.⁹⁷ The original Proposing

Moreover, Rule 611 could not be used to justify the internal execution of retail orders by a market maker at prices inferior to the best available quotations.

69 Fed. Reg. at 77447. The Commission referenced the Order Execution Release cited at n. 16 *supra.*, 48322-48333.

See Gadziala Remarks, *supra* at n. 30 "firms should be using the new market quality data required to be provided by market centers under Rule 11Ac1-5."

See also Disclosure of Order Routing and Execution Practices, Exchange Act Release No. 43590 (Nov. 17, 2000), 65 Fed. Reg. 75414 (Dec. 1, 2000) in which the Commission adopted Rules 11Ac1-5 and 11Ac1-6 (the "Dash 5 and Dash 6 rules") to improve information available to broker-dealers and customers about the quality of executions. The SEC stated that because of the lack of available data, "there has been very little opportunity for the public to evaluate the routing practices of a broker-dealer as a whole." *Id.* at 75415. Thus, the SEC adopted these rules to provide information to allow broker-dealers and investors to assess execution quality. Notwithstanding the SEC's adopting of NMS Rules 610 and 611 which require access to quotations and trade-through protection, the SEC did not repeal the Dash 5 and Dash 6 rules, but merely reformatted them as Rule 605 and 606, respectively.

⁹⁵ 70 Fed. Reg. at 37534.

⁹⁶ While Regulation NMS does not implement "a complete prohibition on trade-throughs," the Order Protection Rule does require trading centers to "regularly surveil to ascertain the effectiveness of their procedures and take prompt remedial steps ... to achieve the objective of eliminating all trade-throughs." 70 Fed. Reg. at 37543.

⁹⁷ On April 20, 2005, the New York Stock Exchange (NYSE) and the Archipelago Exchange (ArcaEx), announced that they had entered a definitive merger agreement that will lead to the combined entity, NYSE Group, Inc., becoming a publicly-held company.
<http://www.nyse.com/about/newsevents/1114079977834.html> On July 21, 2005, the NYSE made public its draft registration statement on Form S-4.
<http://www.nyse.com/pdfs/drafts4filing.pdf>.

In the Proposing Release, the SEC would have created an exception to the trade-through rule to “allow an automated market to trade-through a non-automated market in limited circumstances.” Proposing Release at 69 Fed. Reg. 11137. In the Supplemental Release, the SEC stated:

The Proposing Release recognized that there are differences between the speed and certainty of response in electronic (i.e. automated) versus manual (i.e. non-automated) markets. To provide flexibility to market centers with different market structures, the Commission proposed an exception to the trade-through rule to allow an automated market to trade-through a non-automated market up to a certain amount. Many panelists at the NMS Hearing [that the SEC held on April 21, 2004 in New York City] agreed that the distinction between an automated and non-automated market—a market that provides immediate access to its quotes through automatic execution and one that does not—is important, and that market participants should be able to trade-through a manual market. Panelists at the NMS Hearing, however, expressed the view that the distinction could, and perhaps should, be made between manual and automated quotes, rather than manual and automated markets.

The Commission therefore requests further comment on the operation of the proposed exception for manual markets. Specifically, the Commission requests comment as to whether the exception from the proposed trade-through rule should apply to quotes that are not immediately accessible through an Auto-Ex Facility (a manual or non-automated quote), rather than providing an overall exception for a manual market. Would narrowing the scope of the proposed exception to manual quotes allow market centers and broker-dealers to more efficiently execute orders across markets, while at the same time preserving the protections of a trade-through rule? By not forcing a market center into a rigid classification—automated or manual, would providing an exception for manual quotes, on a quote-by-quote basis, provide more flexibility for market centers with different market structures to compete more fairly with each other? For instance, would narrowing the exception to manual quotes, which would allow a market center with an Auto-Ex Facility to display a manual quote in particular limited circumstances, provide more flexibility for a market center with a floor-based structure to effectively integrate its trading floor with an Auto-

Release was problematic for the NYSE; by distinguishing automated and non-automated markets, the SEC might have classified the NYSE as a non-automated market. The SEC then issued the Supplemental Release which altered the SEC’s focus from automated *markets* to automated *bids*. The NYSE responded by proposing its hybrid system, and then its merger with ArcaEx. The interplay of these events, combined with the change in leadership at the NYSE, has precipitated some of the most significant changes to the NYSE in its history. The NYSE Group will become a for-profit publicly held entity with an automated execution system that ultimately may eclipse the floor.⁹⁸ The Nasdaq Stock Market also proposed to acquire Instinet⁹⁹—a significant development

Ex Facility, if it so desired? Would a quote-by-quote exception allow markets more flexibility to provide investors a choice as to a manual or automatic execution? Comment also is requested on whether a quote-by-quote exception would create difficulties for routing systems that could not be easily managed.

69 Fed. Reg. at 30143 (footnotes omitted).

The Adopting Release essentially takes the quote-based approach, rather than the market-based approach.

In response to the Supplemental Release, on August 2, 2004, the NYSE proposed a hybrid model to combine both the automated and specialist systems. See *Dechert OnPoint: NYSE Proposes Hybrid Market to Increase Speed and Automation While Preserving Auction Market*, August 2004, Issue 25, available at www.dechert.com. The NYSE continues to refine its hybrid proposal and has amended its filings with the SEC five times (<http://www.nyse.com/about/nyseviewpoint/1094784439404.html>). The NYSE’s proposed merger with ArcaEx is a further effort to combine the specialist system with an automated execution platform.

⁹⁸ Despite predictions that these changes spell the end of the NYSE floor and specialist system, seats on the NYSE sell for prices that at all-time highs. In 2005, prices for a NYSE seat ranged from a low of \$975,000 to a high of \$3,000,000.
<http://www.nyse.com/Frameset.html?displayPage=/press/1123065685366.html>. Seat prices rose significantly after the NYSE announced its intention to merge with Archipelago
<http://www.nyse.com/Frameset.html?displayPage=/press/1022834145706.html>).

⁹⁹ On April 22, 2005, the Nasdaq Stock Market, Inc. announced that it had entered into a definitive agreement to acquire Instinet Group Incorporated and that it had concurrently entered into a definitive agreement to sell Instinet’s Institutional Broker division to Silver Lake Partners. As a result of these transactions, NASDAQ will own INET ECN. Instinet has also entered into a definitive

to be sure—but less profound than the NYSE’s move to a more automated trading platform.¹⁰⁰

Another significant impact of Regulation NMS is to establish a precedent that the Commission will protect the interests of long-term investors over short-term investors when the interests of the two merge. In the adopting release, the SEC states this position and defends it on the grounds that short-term investors are much better than long-term investors in exploiting short-term price swings because they can take both long and short positions and can easily enter and exit positions, whereas long-term investors take only long positions and have difficulty entering and exiting positions without large transaction costs.¹⁰¹ The Adopting Release at 37500 notes that:

The Commission recognizes that it is important to avoid false dichotomies between the interests of short-term traders and long-term investors, and that many difficult line-drawing issues potentially can arise in precisely defining the difference between the two terms. For present purposes, however, these issues can be handled by simply noting that it makes little sense to refer to someone as “investing” in a company for a few seconds, minutes, or hours.

agreement to sell its Lynch, Jones & Ryan (LJR) subsidiary to Bank of New York prior to consummation of the Nasdaq transaction
http://www.nasdaq.com/newsroom/news/pr2005/ne_section05_044.stm.

¹⁰⁰ At least one industry commenter has expressed concerns that these mergers have caused the markets to move too far towards consolidation and that the SEC must take additional steps to improve competition from smaller markets in order to achieve the appropriate balance that Regulation NMS was designed to attain. See Regulation NMS and Recent Market Developments: Hearing Before the Senate Comm. on Banking, Housing, and Urban Affairs (May 18, 2005) (testimony of Meyer S. Frucher, Chairman and Chief Executive Officer, Philadelphia Stock Exchange, Inc.) (suggesting that “one of the main points of these mergers is to eliminate competition through consolidation” and asking the Commission to remove “regulatory roadblocks” to allow the smaller exchanges “to offer innovative and competitive alternatives that will be attractive to the marketplace” in order to increase competition with the newly merged entities).

¹⁰¹ *Id.* at 37500. See also “Regional Exchanges Draw Suitors,” *The Wall Street Journal*, Aug. 17, 2005 at c3 (Morgan Stanley, UBS AG, Credit Suisse First Boston, and Citigroup make minority investments in the Philadelphia Stock Exchange. The Boston Stock Exchange is opening an electronic stock-trading entity that will include Fidelity Investment, CSFB, Citigroup, and Lehman Brothers).

Footnote 15 of the Adopting Release explains that “investors are more willing to own a stock if it can be reasonably traded in the secondary market with low transaction costs. The greater the willingness of investors to own a stock, the higher its price will be, thereby reducing the issuer’s cost of capital.” While the SEC acknowledges the role of short-term investors in providing liquidity for just such purposes, it nonetheless takes the position that where divergent, it is the clear responsibility of the SEC to uphold the interests of the long term investors.¹⁰²

The dissent takes issue with this view, and notes in part:

The majority characterizes short-term investors, or traders, as holding securities for a matter of seconds, minutes or hours. It concedes that short-term investors provide valuable liquidity to long-term investors, yet acknowledges that the rule may harm short-term investors and market intermediaries. What the majority fails to recognize is that, by harming short term investors, the rule may also negatively affect long-term investors who may face increased spreads and decreased liquidity. Liquidity provided by short-term investors narrows spreads and gives long-term investors better executions. Because short-term investors are willing to take risks that strengthen the marketplace and benefit long-term investors, Congress clearly could not have intended for short-term investors to be harmed through the Commission’s facilitation of the national market system. In fact, Congress prioritized the removal of barriers to competition to increase the participation of market makers and increase the competitive trading of securities. The majority also fails to take into account that long-term and short-term investors are not mutually exclusive groups. Investors can be long-term and short-term investors at the same time or they may be a long-term investor one moment and, for a variety of reasons, become a short-term investor the next. The overlapping nature of these undefined categories highlights the arbitrary nature of the majority’s distinction. The length of time an individual owns a stock or intends to own a stock at any particular moment is not a relevant factor in distinguishing among groups of investors (footnotes omitted).¹⁰³

The Adopting Release cites to legislative history of the Exchange Act in support of its assertion that the

¹⁰² 70 Fed. Reg. at 37500.

¹⁰³ 70 Fed. Reg. 37639.

Commission should favor long-term over short-term investors.¹⁰⁴ But the citations state only that Congress was concerned about the effects of stock market on the economy as a whole, and do not seem to favor one class of investors over another.¹⁰⁵

¹⁰⁴ 70 Fed. Reg. at 37500 and notes 22-24.

¹⁰⁵ Section 11A of the Exchange Act does not explicitly direct the SEC to favor long-term over short-term investors. For example, the findings in Section 11A(a)(1)(C) state that:

It is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure:

- economically efficient execution of securities transactions;
- fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets;
- the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities;
- the practicability of brokers executing investors' orders in the best market; and
- an opportunity, consistent with the provisions of clauses (i) and (iv) of this subparagraph, for investors' orders to be executed without the participation of a dealer.

Indeed the findings favor efficiency and executions in the best market. See *also* Section 3(f) of the Exchange Act which provides that:

Whenever pursuant to this title the Commission is engaged in rulemaking, or in the review of a rule of a self-regulatory organization, and is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation.

The Order Protection Rule will also impact how large-volume traders conduct transactions. Before Regulation NMS, large-volume traders could conduct a large block transaction off the market because such transactions were not covered under the ITS rules. In the process, limit orders that were displayed on the market would be traded through, which the SEC found to be an unacceptable deterrent to the display of limit orders. Under Regulation NMS, however, large block transactions cannot ignore displayed limit orders at superior prices but must trade with those quotations before executing against any other quotations. However, to enable the traders to execute quickly, Regulation NMS allows these large-volume traders to employ the new intermarket sweep order.

Some industry participants have commented that the priority given under Regulation NMS to small batches of stock on the public limit order books will discourage the market participants that had previously provided liquidity to large-volume traders in off-market transactions from maintaining the same levels of liquidity. This, the commenters argue, will ultimately cause more transaction costs for large-volume traders despite Regulation NMS's stated purpose to lower these costs.¹⁰⁶

It also remains to be seen how the SEC's decision to protect only the market BBOs will actually impact the display of limit orders. The dissent argued that "the final rule claims to protect a market's best bid or offer ("BBO"), but since market participants can match a trading center's BBO, rather than route orders to it, the rule does not actually protect limit orders at each market's BBO."¹⁰⁷ In other words, the dissent points out that the market BBO of each trading center is protected from executions made at *inferior* prices in other trading centers (*i.e.*, trade-throughs), but is not protected from executions made at the *same* price in other trading centers. Thus, in the dissent's view, there will be no significant increase in certainty of execution under the Order Protection Rule because trading centers will not route orders to pre-existing market BBOs in other markets but fill the orders internally at the same prices, causing the market BBOs in other markets to miss execution despite all of Regulation NMS's anti-trade-through provisions.

¹⁰⁶ See Regulation NMS and Recent Market Developments: Hearings Before the Senate Comm. on Banking, Housing, and Urban Affairs (May 18, 2005) (testimony of Scott Evans, Chief Investment Officer, TIAA-CREF).

¹⁰⁷ *Id.*

Additionally, the dissent finds that Regulation NMS's impact on limit order display will also be minor because it protects only the top of book orders in each market, and not all depth of book quotations. According to the dissent, this small improvement in order protection will not be sufficient to overcome the stronger disincentives against displaying limit orders, such as of free-riding or market impact costs.¹⁰⁸

Finally, as raised by the dissent, the uncertainties left by the SEC in regard to appropriate procedures, monitoring systems, and disciplinary actions; appropriate response times and other requirements for automation; and compliance requirements for relying on each of the enumerated exceptions is likely to create new regulation in the future.¹⁰⁹

Compliance

The Order Protection Rule will be implemented in two phases. In Phase I, effective June 29, 2006, each trading center must begin trading in 100 NMS stocks of Networks A and C and 50 stocks of Network B pursuant to the rule. This phase will give the trading centers time to evaluate the functionality of their procedures and systems in complying with the rules. Phase II will commence on August 31, 2006, after which time the trading centers must comply with the rule for all NMS stocks.

Items for Implementation

- Establish policies, monitoring systems, and disciplinary procedures to:
 - Prevent trade-throughs
 - Ensure appropriate compliance in relying on any of the Rule 611(b) exceptions
- Employ technology to:
 - Monitor compliance with policies
 - Meet execution requirements for "automated quotations"
 - Access other trading centers to route orders to better-priced quotations

¹⁰⁸ 70 Fed. Reg. at 37638.

¹⁰⁹ 70 Fed. Reg. at 37642.

- Recognize flickering quotations
- Label and recognize inter-market sweep orders
- Label and recognized IOC orders, provide IOC functionality
- Warn non-responsive trading centers that self-help exception has been implemented

Display quotations as manual quotations when the trading center temporarily cannot meet requirements for automated quotations.

Access Rule – Rule 610

Purpose

The SEC states that the Order Protection Rule would be futile if market participants and order-routers could not access other trading centers to execute against protected quotations in those trading centers. Thus, the Access Rule is designed to eliminate the intentional and inadvertent barriers to access among trading centers.

One of the barriers to access is the lack of an effective centralized linkage system among the markets. Moreover, the SEC notes that:

[T]here is no collective intermarket linkage system for Nasdaq stocks. Instead, access is achieved primarily through private linkages among individual trading centers. This approach has demonstrated its benefits among electronic markets; it is flexible and can readily incorporate technological advances as they occur. There is no intermarket system, however, that offers free access to quotations in Nasdaq stocks. Nor are the trading centers for Nasdaq stocks subject to uniform intermarket standards governing their quoting and trading practices. The fees for access to ECN quotations in Nasdaq stocks, as well as the absence of standards for quotations that lock and cross markets, have been the source of disputes among participants in the market for Nasdaq stocks for many years. Moreover, access problems have arisen with respect to small market centers operating outside of an SRO trading facility and markets like the Amex that engage in manual trading of Nasdaq stocks. Access problems also have

arisen with respect to intentional barriers to access, 5% of trading volume in a security.¹¹⁰

In part because of the problems experienced with the ITS, the SEC has chosen not to create another centralized linkage system but to allow trading centers to access other trading centers by “piggybacking”¹¹¹ on the subscriptions or memberships of the subscribers and members of other trading centers without paying discriminatory access fees.

The Access Rule also addresses the lack of uniformity in access fees across trading centers, connectivity requirements for trading centers that display quotations on SRO display-only facilities, and problems related to locked and crossed quotations.

Requirement of Non-Discriminatory Access to Private Linkages

Rule 610(a)-(b)¹¹² allows order-routers to “piggyback” on the direct access of trading center members by prohibiting trading centers from unfairly discriminating against non-members or non-subscribers that attempt to access the trading center’s quotations through a member or subscriber of the trading center.¹¹³

Requirement of Fair Access under Regulation ATS

Rule 301(b)(5) of Regulation ATS¹¹⁴ requires a covered ATS to establish written standards for granting access on its system and shall not unreasonably prohibit or limit any person in respect to services offered by the ATS by applying access standards in an unfair or discriminatory manner.

¹¹⁰ 70 Fed. Reg. at 37539.

¹¹¹ The Access Rule allows non-members and non-subscribers to access the private linkages of trading centers by paying a fee to members and subscribers of those trading centers for using their membership or subscription. The SEC refers to this practice as “piggy-backing.” See 70 Fed. Reg. at 37539.

¹¹² 17 C.F.R. § 242.610(a)-(b).

¹¹³ Discriminatory and unfair fees are those that are based solely on the membership status of person obtaining access to quotes. Volume based-discounts and fees that are otherwise based on the type of service provided are not considered discriminatory. See 70 Fed. Reg. at 37539, 37540.

¹¹⁴ 17 C.F.R. § 242.301(b)(5).

The SEC has lowered the threshold for ATSs covered under these fair access requirements from those that trade in 20% of the average daily volume in a security to those that trade in 5% of the average daily volume. This change harmonizes regulation of ATSs, which must post their quotations in the consolidated data stream if trading in 5% of the average daily volume of a stock.¹¹⁵ By lowering the fair access threshold to 5%, ATSs cannot both post in the consolidated quotation stream and simultaneously employ discriminatory access standards.¹¹⁶

Special Rules for Quotations Displayed on an SRO Display-Only Facility

Some SRO facilities, such as the NASD ADF, allow trading centers to display quotations on the facility without providing the capacity for orders to execute against those quotations. As a result, the order-routers must access the trading center directly to execute against the order whenever one of those trading centers posts a protected quotation. The costs of building and maintaining linkages to every trading center displaying in the ADF would be cost-prohibitive for most other trading centers. Therefore, to ensure that the additional linkage is worth the cost, Rule 610(b)(1) requires any trading center that displays on a SRO display-only facility to provide a level and cost of access to its quotations that is substantially equivalent to the level and cost of access to quotations displayed by the SRO facility which lists the quoted stock.¹¹⁷ The term “substantially equivalent” in relation to cost of access is determined on a relative basis rather than an absolute basis. Consequently, the cost of access to an ADF participant must be substantially equivalent to the cost of access to SRO trading facilities on a per transaction basis.¹¹⁸

¹¹⁵ See 17 C.F.R. § 301(b)(3).

¹¹⁶ See 70 Fed. Reg. at 37550.

¹¹⁷ 17 C.F.R. § 242.610(b)(1).

¹¹⁸ See 70 Fed. Reg. at 37543. The Adopting Release notes:

“For example, a \$1000 port fee charged by an ECN participating in the ADF that trades one million shares a day would *not* be substantially equivalent to a \$1000 port fee charged by an SRO trading facility trading 100 million shares a day.” *Id.* (emphasis in original).

Limitation on Access Fees

Rule 610(c) limits the fees that a trading center may impose for execution on that trading center against a protected quotation, or any other quotation, whether manual or automated, which constitutes a BBO of a national securities exchange, Nasdaq, or national securities association. The fees are capped at \$0.003 per share for a quotation of \$1.00 or more per share and at 0.3% of the quotation price per share of a quotation priced at under \$1.00 per share.¹¹⁹ However, this fee cap applies only to Market BBOs and not to depth of book quotations.¹²⁰ The rule also distinguishes certain fees to which the cap does not apply.¹²¹

¹¹⁹ See 17 C.F.R. § 242.610(c).

¹²⁰ 70 Fed. Reg. at 37546.

¹²¹ The Adopting Release notes:

Rule 610(c) limits the fees that can be charged for access to protected quotations and manual quotations at the best bid and offer. It provides that a trading center shall not impose, nor permit to be imposed, any fee or fees for the execution of an order against a protected quotation of the trading center or against any other quotation of the Rule 610(c) encompasses a wide variety of fees currently charged by trading centers, including both the fees commonly known as access fees charged by ECNs and the transaction fees charged by SROs. So long as the fees are based on the execution of an order against a protected quotation or a BBO quotation, the restriction of Rule 610(c) will apply. Conversely, fees not triggered by the execution of orders against protected quotations or BBO quotations (e.g., certain periodic fees such as monthly or annual fees) generally will not be included. In addition, Rule 610(c) encompasses any fee charged directly by a trading center, as well as any fee charged by market participants that display quotations through the trading center's facilities. Nothing in Rule 610(c) will preclude an SRO or other trading center from taking action to limit fees beyond what is required by the Rule, and trading centers will have flexibility in establishing their fee schedules to comply with Rule 610(c). In particular, trading centers could impose a limit on the fees that market participants are permitted to charge for quotations that are accessed through a trading center's facilities.

Adopting Release at 70 Fed. Reg. 37549.

Requirements to Prevent Locked or Crossed Quotations

Under Rule 610(d) each national securities exchange and national securities association must establish, maintain, and enforce written rules that require its members to reasonably avoid displaying quotations that lock or cross any protected quotation in an NMS stock, or any quotation, protected or not, in an NMS stock that is disseminated pursuant to an effective national market system plan.¹²² Additionally, the rules must be reasonably designed to assure reconciliation of locked or crossed quotations and must prohibit members from engaging in a pattern or practice of displaying quotations that lock or cross any protected quotation.¹²³

The SEC notes that Rule 610(d) distinguishes between protected (and therefore automated) quotations and manual quotations:

Protected quotations can not be intentionally crossed or locked by any other quotations. Manual quotations, in contrast, can be locked or crossed by automated quotations, but can not themselves intentionally lock or cross any other

¹²² See 17 C.F.R. § 242.610(d)(1).

¹²³ See 17 C.F.R. § 242.610(d)(1). The Adopting Release explains that:

Rule 610(d) restricts locking or crossing quotations, but recognizes that locked and crossed markets can occur accidentally, especially given the differing speeds with which trading centers update their quotations. It requires that each national securities exchange and national securities association establish, maintain, and enforce written rules that: (1) Require its members to reasonably avoid displaying quotations that lock or cross any protected quotation in an NMS stock, or of displaying manual quotations that lock or cross any quotation in an NMS stock disseminated pursuant to an effective national market system plan; (2) are reasonably designed to assure the reconciliation of locked or crossed quotations in an NMS stock; and (3) prohibit its members from engaging in a pattern or practice of displaying quotations that lock or cross any protected quotation in an NMS stock, or of displaying manual quotations that lock or cross any quotation in an NMS stock disseminated pursuant to an effective national market system plan, other than displaying quotations that lock or cross any protected or other quotation as permitted by an exception contained in the SRO's rules established pursuant to (1).

70 Fed. Reg. at 37549-50.

quotations included in the consolidated data stream, whether automated or manual.

Recognizing that quotations may on occasion accidentally lock or cross other quotations, Rule 610(d) requires members to “reasonably avoid” locking and crossing and prohibits a “pattern or practice” of locking or crossing quotations where this can reasonably be avoided.¹²⁴

The Commission further states that the SRO plans to prevent locked or crossed quotations may include exceptions similar to those addressed in the Order Protection Rule, but that SRO plans must be filed with the Commission for approval and that there will be an opportunity for public comment.¹²⁵

Analysis

The Access Rule makes several significant changes to existing regulation. First, it creates uniform restrictions on locking and crossing quotations which previously only existed under ITS. Second, the capping of access fees and the prohibition on discriminatory fees should significantly affect how trading centers compete with each other. These provisions of the Rule also eliminate incentives deliberately to lock quotations and assure investors that quotations represent real prices. Neither of these problems related to access fees had been addressed under previous regulation. Another significant change to existing regulation is the Commission’s decision to allow market makers to charge access fees for executions against their quotations.

Given the above benefits of the rule, the dissent and most commenters welcomed the Access Rule as necessary. However, there were still a few concerns.

One potentially adverse impact of the Access Rule might be to disrupt the business model of trading centers and SROs that rely on preferential access rights to sell subscriptions and memberships. The SEC, however, does not believe that this is a significant concern, because members and subscribers may charge the piggybacking order-routers a non-discriminatory fee for using their membership or subscription to access the market, and because the unfair and discriminatory prohibitions

¹²⁴ See 70 Fed. Reg. at 37550; 17 C.F.R. § 242.610(d)(2)-(3).

¹²⁵ See 70 Fed. Reg. at 37547.

against access to quotations do not apply to the many other services provided by the trading center or SRO.¹²⁶

Another concern is that the connectivity requirements of Rule 601(b)(1) will deter new market entrants from competing with larger trading centers. The SEC, however, believes that these connectivity requirements do not discriminate against smaller firms, because such small ATSS are not required to publish in the consolidated quotation system under Regulation ATS until the trading center’s trading volume in a security reaches 5% of the total trading volume for that security.¹²⁷

Moreover, the SEC argues that even where a trading center voluntarily publishes in the consolidated quotation system, it has a choice of making its quotations accessible through the national exchanges, or the Nasdaq Market Center, in which case the other trading centers would not be required to create additional linkages. Additionally, the trading center has a choice of publishing its quotations and executing orders entirely in the Over the Counter (“OTC”) market instead of using the SRO display-only facility to display their quotation in the consolidated quotation stream.¹²⁸

Compliance

Like the Order Protection Rule, the Access Rule will be implemented in two phases. In Phase I, effective June 29, 2006, each trading center must begin trading in 100 NMS stocks of Networks A and C and 50 stocks of Network B pursuant to the rule. This phase will give the trading centers time to evaluate the functionality of their procedures and systems in complying with the rules. Phase II will commence on August 31, 2006, after which time the trading centers must comply with the rule for all NMS stocks.

However, the amendment to Rule 301(b)(5) (*i.e.*, the 5% rule) of Regulation ATS will be effective August 29, 2005.

Items for Implementation

- Review access policies and fees and create internal systems to prevent discrimination against non-member and non-subscriber access to quotations

¹²⁶ See 70 Fed. Reg. at 37540; *see also* discussion above at note. 121.

¹²⁷ See 17 C.F.R. § 301(b)(3) (2005).

¹²⁸ See 70 Fed. Reg. at 37542.

- Redesign services to compete for members in ways other than preferential access
- Create written standards for ATSs for granting access on system and preventing discrimination
- Employ systems to identify when an ATS triggers display of quotation and non-discriminatory access duties due to trading in more than 5% of average daily volume of NMS stock
- Employ technology to provide sufficient connectivity and execution quality if displaying on a SRO display-only facility
- Establishing policies, monitoring systems, and disciplinary procedures to prevent locking or crossing quotations
- Establish systems to reconcile locked and crossed quotations

Sub-Penny Rule – Rule 612

Purpose

The sub-penny rule addresses a number of problems related to using sub-penny increments in the pricing of quotations and orders. As mentioned earlier, these problems include: reduced price clarity caused by increasing the frequency of flickering quotations; decreased market depth caused by reducing the number of shares available at any given price; reduced use of limit orders due to loss of execution priority by a nominal amount; disruption of the exchange priority rules and NASD's Manning rule; higher market data and infrastructure costs; and incentives for large volume traders to rely on execution alternatives outside of the markets caused by decreased depth inside the spread.¹²⁹

Prohibitions on Use of Sub-Penny Increments

Under Rule 612(a)-(b), no national securities exchange, national securities association, ATS, vender, broker or dealer can display, rank or accept a bid, offer, order or indication of interest in any NMS stock priced in an increment less than \$0.01 unless the price of the quote,

¹²⁹ 70 Fed. Reg. at 37551-52.

order or interest¹³⁰ is less than \$1.00 per share, in which case the increment can be no less than \$0.0001.¹³¹ However, recognizing that the benefits of sub-penny pricing may occasionally exceed the costs, the SEC has reserved the right under Rule 612(c) to create, by order, an exemption from the rule if necessary or appropriate in the public interest and consistent with the protection of investors.¹³²

The Adopting Release explains several aspects of the rule. First, the prohibition on accepting a sub-penny order or quotation applies, even if the trading center or broker-dealer rounds off the price, because the market participant supplying the order may not understand why they lost execution priority in the rounding.¹³³ Second, the rule does not lower the MPV for option pricing, which is currently set by the SROs at \$0.05 or \$0.10, depending on the market. Finally, the rule does not apply to sub-penny *trading* if the execution results from a midpoint or volume-weighted algorithm or from price movement and the execution did not also result from an impermissible sub-penny order or quotation.¹³⁴

Analysis

The obvious impact of the sub-penny rule is to set the minimum price variation at a penny whereas lower increments had been proposed following the switch in 2001 from fractional to decimalized trading. Most commenters welcomed the sub-penny rule with a few commentators suggesting an even higher minimum price variation. The few commenters who opposed the rule mostly based their objections on the rationale that market forces should determine the ideal increment and that locking in a spread of at least one penny benefits market-makers to the detriment of investors.¹³⁵

¹³⁰ Given the practical difficulties in a dynamic market of determining when a stock's price is at or below \$1.00, the Final Rule amends the Reproposed Rule to condition the application of the rule on whether the bid, offer, order or indication of interest is at or below \$1.00. See 70 Fed. Reg. at 37544.

¹³¹ 17 C.F.R. § 242.612(a)-(b).

¹³² 17 C.F.R. § 242.612(c).

¹³³ See 70 Fed. Reg. at 37566.

¹³⁴ See 70 Fed. Reg. at 37566.

¹³⁵ See 70 Fed. Reg. at 37552-53.

Compliance

The sub-penny rule is effective August 29, 2005 but the SEC extended the compliance date from August 29, 2005 to January 31, 2006.¹³⁶

Items for Implementation

- Procedures to prevent acceptance of bids, offers or expression of interest at the prohibited price increments

Market Data Rules

Purpose

The Market Data Rules address the SEC's concern that the governance of the Plans for dissemination of market data are not sufficiently transparent, especially in regard to the setting of Network fees. The Rules also address concerns that the Plan revenue allocation formulas do not adequately compensate the SROs for the most useful information and instead create perverse incentives to game the system through wash sales, print facilities, and trade-shredding.¹³⁷

While a competitive system for reporting market data might create market incentives for efficiency, the SEC finds that a competitive system is not practical because of the requirement of consolidating the data from each SRO.¹³⁸ Thus, Regulation NMS addresses problems with the Plans by amending the existing Plans to create better regulatory incentives for efficiency.¹³⁹

¹³⁶ Regulation NMS, Extension of Compliance Date, Exchange Act Release No. 52196 (Aug. 2, 2005) available at <http://www.sec.gov/rules/final/34-52196.pdf>.

¹³⁷ See *supra* at n. 57

¹³⁸ The Commission rejected a competing consolidators model because it would require each SRO to purchase information from every other SRO to assure that the data stream was adequately comprehensive to meet investor needs and to facilitate the Order Protection Rule. The mandatory purchase of information from other SROs would effectively neutralize the benefits of any competitive structure. See 70 Fed. Reg. at 37559.

¹³⁹ See 70 Fed. Reg. at 37561-62.

Allocation Amendment to Joint Industry Plans for Dissemination of Market Data

Each of the joint industry plans is amended to incorporate a new revenue allocation formula that constitutes a broad based measure of an individual SRO's contribution of quotation and trade data to the consolidated data stream. This broad based formula is meant to create appropriate incentives to reward SROs for contributing the type of information most useful to investors and to prevent SROs from gaming the system through artificially created trade volume.

The adopted formula first divides Network revenues among all the securities in the Network. The Commission refers to this preliminary allocation as the "Security Income Allocation."

Once allocated to each individual security, the revenues are further allocated among SROs that contributed information on that security to the consolidated data stream. This secondary allocation is based on the usefulness of the contributed data as measured by the SRO's Trading Share and Quoting Share, which are equally weighted at 50%. Therefore, the adopted allocation formula allocates annual payments to the SROs based on the Security Income Allocation of each security multiplied by the sum of the individual SRO's Trading Share and Quoting Share in that security.

Security Income Allocation

The Security Income Allocation divides the Network's distributable revenues among all the individual securities in the Network's data stream based on the square root of the dollar volume of trading in each security. By using square roots instead of absolute values, this formula proportionately shifts revenues away from the very top tier of active stocks to increase allocation across all other stocks. This progressive allocation formula reflects the importance to investors of price discovery for all Network stocks, and not only those most commonly traded.¹⁴⁰ However, to avoid disproportionately high allocations for stocks that report only a few transactions a year, the allocation is capped at \$4 per qualified transaction report, such that a stock that posts 10 transaction reports will only be allocated \$40 even if the formula would allocate more.

¹⁴⁰ See 70 Fed. Reg. at 37568.

Trading Share

The Trading share is determined by multiplying 50% of the Security Income Allocation for an individual security by the SRO's Trade Rating in the security. The Trade Rating represents the SRO's proportion of total dollar volume and total number of qualified transaction reports in the Network security for the year.¹⁴¹

Quoting Share

The Quoting Share is determined by multiplying 50% of the Security Income Allocation for an individual security by SRO's Quote Rating in the security. The Quote Rating represents the number of Quote Credits the SRO was awarded during the year as a proportion of all SRO Quote Credits for the security. Quote Credits reward an SRO for displaying an automated quotation that equals the price of the national best bid and offer ("NBBO") and further rewards the SRO for the total dollar volume of that quotation.¹⁴²

Governance Amendment to Joint Industry Plans for Dissemination of Market Data

Under the Governance Amendment, each Plan must form an advisory committee, which will have the right to submit views to the Plan operating committee on Plan products, fees, contracts, or pilot programs. Advisory committee members will have the right to attend all operating committee meetings and receive any

¹⁴¹ The Trade Rating is calculated by taking the average of the SRO's percentage of total dollar volume reported in the Network security during the year and the SRO's percentage of the total number of qualified transaction reports in the Network security for the year. A transaction with a dollar volume of \$5,000 or more will constitute one qualified report, whereas a transaction with a dollar volume less than \$5,000 will constitute a proportional fraction of a qualified report. See 70 Fed. Reg. at 37568.

¹⁴² Quote Credits are rewarded when the SRO displays for at least one full second an automated quotation that equals the price of the NBBO and does not lock or cross a previously displayed automated quotation. The amount of Quote Credits are calculated by the minimum number of shares displayed during the time the quotation is displayed, multiplied by the price of the quotation, multiplied by the number of seconds the quotation constitutes the NBBO. Thus, a NBBO quotation displayed for 3 seconds at a minimum size of 200 shares and a price of \$20 will be entitled to 12,000 Quote Credits. Note, however, that manual quotations are not entitled to earn any Quote Credits. An SRO that quotes at both the national best bid and national best offer would earn Quote Credits for each quote. See 70 Fed. Reg. at 37568.

information distributed to the operating committee relating to Plan matters, except when the operating committee, by majority vote, decides that an item of Plan business requires confidential treatment.¹⁴³

Members of the committee will be selected by majority vote of the Plan operating committee, will serve two-year terms, and must include one representative from the following five categories:

- A broker-dealer with a substantial retail investor customer base
- A broker-dealer with a substantial institutional investor customer base
- An ATS
- A data vendor
- An investor

Each Plan participant will also have the right to select one additional member to the advisory committee who is not employed by or affiliated with the Plan or its affiliates or facilities.¹⁴⁴

Rescission and Amendment of Prohibitions Against Independent Reporting

Rule 11Aa3-1 has been amended and redesignated under Regulation NMS as Rule 601. Rule 601 rescinds the prohibition on SROs and their members from independently disseminating their trade reports while new Rule 603 requires SROs to continue to report that information to the Networks pursuant to the Plans.¹⁴⁵

While the SROs may charge a fee for this information, Rule 603(a) requires the SRO to establish uniform standards for distribution of quotations and trades to securities information processors on terms that are fair, reasonable and non-discriminatory. The SEC further explains that core data, which must be provided to the

¹⁴³ See 70 Fed. Reg. at 37568.

¹⁴⁴ See 70 Fed. Reg. at 37568.

¹⁴⁵ Rule 603(b) has been adopted to clarify that existing and new SROs will be required to continue to participate in one or more joint industry plans for the dissemination of consolidated market information. See 17 C.F.R. § 242.603(b).

Networks, must be available to the Networks no later than it is provided to vendors, but that SROs have more leeway to disseminate non-core data.¹⁴⁶

Streamlined Requirements for Display of Consolidated Information

Display of Consolidated Information

Rule 603(c), as adopted, revises the consolidated display requirement to require that consolidated information on quotations and trades be displayed in an equivalent manner to any other information on quotations and trades provided by a securities information processor or broker-dealer. This standard will ensure that the consolidated data stream keeps up to date with innovations elsewhere in the market on the reporting of market information. At the least, however, the information must contain prices, sizes and market center information on the NBBO.¹⁴⁷

The consolidated display requirements of Rule 603(c) apply when a trading or order-routing decision could be implemented but do not apply when market information is provided on a purely informational website that does not offer any trading or order-routing capabilities.

NBBO Reporting Requirement

The definition of “national best bid and offer” adopted under Rule 600(b)(42) requires Plans to report a NBBO in the consolidated data stream.

Consolidated Reporting of Best Quotations

Rule 11Ac1-1 has been amended and redesignated under Regulation NMS as Rule 602. Rule 602(a)(1) requires an SRO to establish and maintain procedures for making its best quotes available to vendors.

¹⁴⁶ The SEC explains that because investors rely on the consolidated data stream provided by the Networks, the SROs cannot discriminate against the Network in favor of a data vendor in regards to core-data that the SRO is required to provide to the Networks. However, because the Networks also include competitors of the SROs, the SRO has more leeway in regards to providing non-core data. 70 Fed. Reg. at 37569.

¹⁴⁷ 70 Fed. Reg. at 37569.

Analysis

The Market Data Rules make several significant changes to existing regulation. First, the revenue allocation formulas have been drastically changed. The main impact of these changes should be the elimination of incentives to engage in trade-shredding, print facilities and wash sales, such that investors will be assured that the displayed market data reveals actual market activity and not artificial transactions. Second, the governance amendments allow for the first time the consumers of market data to participate in Plan governance. Finally, the streamlined display requirements and the rescission of the prohibition against independent reporting of market data are significant steps towards allowing market forces to dictate the display of trading center quotation and transaction information.

Although most commenters supported the Market Data Rules, some preferred a more competitive approach and the dissenting Commissioners objected that the rules do not go far enough to address the real problem with the Plans, which in their view is the reasonableness of Network fees, which do not only pay for the cost of the disseminated data but also subsidize the operations of the SROs.

Compliance

All of the Market Data Rules are effective August 29, 2005.

Items for Implementation

- Plans
 - Select and establish Advisory Committees
 - Establish system to ensure appropriate display of market information under Rule 603(c)
- Trading Centers/SROs
 - Establish uniform standards for distribution of quotations and trade information to securities information processors to ensure fair, reasonable and non-discriminatory terms
 - Establish policies to ensure that core data is not provided to Networks on a discriminatory basis
 - Establish system to ensure appropriate display of market information under Rule 603(c)

- Establishing system to ensure that best quotes are available to vendors under Rule 602(a)(1)

Dissenting Opinion

Commissioners Cynthia A. Glassman and Paul S. Atkins dissented to the adoption of Regulation NMS on the basis that the Order Protection Rule is unnecessary, will not achieve its objectives and will have a detrimental impact on competition and innovation.

In particular, the dissenting Commissioners found that the majority overstated the significance of trade-through rates in Nasdaq and the NYSE by calculating trade-through rates on the full size of an order regardless of whether the number of shares ordered were available on the market. The dissenting Commissioners argue that the rates would be significantly lower when the executions are measured against the number of shares available; 1.9% for Nasdaq and 1.2% for NYSE.¹⁴⁸ Commissioners Glassman and Atkins also disagreed with the majority's assertion that the Nasdaq lacks sufficient depth, explaining Nasdaq's low fill rates as a result of healthy "pinging" for reserve liquidity.¹⁴⁹

In addition to being unnecessary, the dissenting Commissioners argued that Regulation NMS will not achieve its objectives. First, the dissent finds that investors' concerns about the market impact of exposing their interest will prevent them from displaying limit orders even with a trade-through rule, and that the requirement that an order router must execute an order at a particular price before moving to the next level will encourage market participants to maintain more liquidity in reserve rather than to display it.¹⁵⁰ Second, the dissent argues that trading centers will match each other's BBOs instead of routing orders to previously displayed

¹⁴⁸ See Dissent of Commissioners Cynthia A. Glassman and Paul S. Atkins, Regulation NMS, Exchange Act Release No. 51808, 70 Fed. Reg. at 37632 (June 9, 2005).

¹⁴⁹ "Pinging" occurs when an institutional investor places an order for larger than the market's displayed size in order to discover if the order will be executed through reserve liquidity or not. This helps large-volume investors to maintain anonymity when searching for extra liquidity. The majority and dissent disagree as to whether this practice indicates a market depth problem or represents a healthy trading practice. See 70 Fed. Reg. at 37637.

¹⁵⁰ See 70 Fed. Reg. at 37638.

quotations on other trading centers, thereby taking away the certainty of execution for the best quotations.¹⁵¹

Additionally, the dissenting Commissioners stated their concerns that the distinction between protecting long-term investor interests over those of short-term investors would create a dangerous and unfounded precedent,¹⁵² and that the Order Protection Rule will stifle innovation and competition from new trading centers by forcing order flow through the SRO markets.¹⁵³

Finally, the dissent also finds fault with the Market Data Rules because the rules fail to address the reasonableness of rates charged by the participating SROs and entrench the single consolidator model, which inhibits competition and innovation.¹⁵⁴

Timeline for Compliance

Effective Date

Rules 610, 611, 612, the amendments to Rule 301 of Regulation ATS, and the amendments to the Market Data Rules and Plans will all become effective on August 29, 2005.¹⁵⁵

Compliance Dates

The compliance date for Rule 301 of Regulation ATS, the Amendments to the Market Data Rules and the Governance Amendment to the Plans is August 29, 2005. The compliance date for the Allocation Amendment to the Plans is September 1, 2006.¹⁵⁶ The compliance date for Rule 612, the Sub-Penny Rule, has been delayed from August 29, 2005 to January 31, 2006.¹⁵⁷

¹⁵¹ See 70 Fed. Reg. at 37638.

¹⁵² See 70 Fed. Reg. at 37639; see also discussion above at notes 102-104.

¹⁵³ See 70 Fed. Reg. at 37640.

¹⁵⁴ See 70 Fed. Reg. at 37643.

¹⁵⁵ See 70 Fed. Reg. at 37576.

¹⁵⁶ 70 Fed. Reg. at 37576.

¹⁵⁷ Regulation NMS, Extension of Compliance Date, Exchange Act Release No. 52196 (Aug. 2, 2005) available at <http://www.sec.gov/rules/final/34-52196.pdf>.

Compliance with Rule 610, the Access Rule, and Rule 611, the Order Protection Rule, will be phased in. Phase I will begin on June 29, 2006 and continue until the beginning of Phase II which will commence August 31, 2006.

During Phase I, all trading centers must begin trading 100 NMS stocks of each of Networks A and C and 50 NMS stocks of Network B pursuant to the requirements of Rules 610 and 611. The primary listing market will choose the stocks to be covered in Phase I in consultation with Commission staff to ensure a reasonable representation of the Network's securities. This period is designed to give the trading centers a chance to verify the functionality of their procedures and systems in complying with the rules.¹⁵⁸

After the commencement of Phase II the trading centers must begin trading all NMS stocks in compliance with Rules 610 and 611.¹⁵⁹

Conclusions

Regulation NMS constitutes another bump in the rocky road of the debate over market structure. Market structure issues force the SEC to choose between competing public goods. Most notably, the SEC is forced to try to balance competition among markets with competition among orders. It is impossible to maximize both and the Commission must struggle to find a compromise. Although all participants in the debate favor protecting investors, they may take very different approaches to that goal. Inevitably, when the Commission decides, it chooses a compromise that pleases some and frustrates others. Competitors may prosper or fail, depending on the outcome.

From a process standpoint, the SEC could not have been more deliberative—multiple requests for comment and a hearing, in addition to congressional hearing, created an extensive record upon which to make a decision. This is not to say that everyone should have been satisfied with the outcome—only that the Commission deliberated with care and after significant public input.

The SEC was badly divided on whether to adopt the Order Protection Rule. Although the debate over

¹⁵⁸ 70 Fed. Reg. at 37576.

¹⁵⁹ 70 Fed. Reg. at 37576.

Regulation NMS has not been as bitter as the debate over the independent chairman requirement for registered investment companies,¹⁶⁰ it was a divisive debate for an agency that historically has preferred to reach a consensus on its decisions. There was consensus on some items, presumably such as sub-penny quoting. The dissent stated:

We believe the wiser and more practical approach to improving the efficiency of U.S. markets for all investors would have been to improve access to quotations, enhance connectivity among markets and market participants, clarify the broker's duty of best execution, and reduce barriers to competition. In our view, these steps would improve market efficiency without exposing our markets to unforeseen consequences, redundant regulatory oversight and the concomitant compliance costs that will ultimately be borne by investors.¹⁶¹

Accordingly, there might have been common ground, but only if the majority had been willing to drop the centerpiece of its proposal—the Order Protection Rule.

Only time will tell whether the Order Protection Rule will have the salutary effect that the majority desires and whether it will be worth the cost. It also remains to be seen whether the SEC, under the leadership of Chairman Christopher Cox, will pursue the Donaldson Commission's newly-articulated distinction between long and short-term investors.

■ ■ ■

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¹⁶⁰ *Chamber of Commerce of the U.S. v. SEC*, U.S. Ct. of Appeals, No. 04-1300, June 21, 2005, Order No.05-1240 (grant of motion for stay pending court review); *Investment Co. Rel. 26989* (July 15, 2005) (divided SEC does not grant Chamber of Commerce's request for stay pending court review).

¹⁶¹ 70 Fed. Reg. 37633.

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