

(2) Ensure that a minimum clearance of 0.25-inches exists between the wire bundle from relay "KT" and the fuel cross-feed valve operating lever throughout its range of travel.

**Note 2:** For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(b) If the wire bundle is routed correctly and sufficient clearance exists, no further action is required by this AD.

(c) If the wire bundle is not routed correctly or if sufficient clearance does not exist, prior to further flight, perform a detailed visual inspection of the wire bundle to relay "KT" for chafing, in accordance with the Accomplishment Instructions of Raytheon Aircraft Service Bulletin SB 24-3212, dated August 1999 (for Model 800XP series airplanes) or SB 24-3213, Revision 1, dated February 2000 (for Model 800 (U-125A) series airplanes), as applicable.

(1) If no chafing is detected, prior to further flight, ensure that the wire bundle is routed correctly and ensure that a minimum clearance of 0.25-inches exists between the wire bundle and the fuel cross-feed valve operating valve throughout its range of travel, in accordance with the applicable service bulletin.

(2) If any chafing is detected, prior to further flight, repair the chafed wire, ensure that the wire bundle is routed correctly and ensure that a minimum clearance of 0.25-inches exists between the wire bundle and the fuel cross-feed valve operating valve throughout its range of travel, in accordance with the applicable service bulletin.

#### Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Wichita Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Wichita ACO.

#### Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on August 2, 2000.

**Donald L. Riggins,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 00-20002 Filed 8-7-00; 8:45 am]

**BILLING CODE 4910-13-P**

## SECURITIES AND EXCHANGE COMMISSION

### 17 CFR Part 240

[Release No. 34-43084; File No. S7-16-00]

RIN 3235-AH95

### Disclosure of Order Routing and Execution Practices

**AGENCY:** Securities and Exchange Commission.

**ACTION:** Proposed rules.

**SUMMARY:** The Securities and Exchange Commission is proposing two rules to improve public disclosure of order routing and execution practices. Under proposed Rule 11Ac1-5, market centers that trade national market system securities would be required to make available to the public monthly electronic reports that include uniform statistical measures of execution quality on a security-by-security basis. Under proposed Rule 11Ac1-6, broker-dealers that route orders in equity and option securities on behalf of customers would be required to make publicly available quarterly reports that describe their order routing practices and disclose the venues to which customer orders are routed for execution. In addition, broker-dealers would be required to disclose to customers, on request, where their individual orders were routed for execution. By enhancing disclosure of order routing and execution practices, the proposed rules are intended to promote fair and vigorous competition among broker-dealers and among market centers. Finally, this release discusses a number of measures that the Commission currently is considering to strengthen quote and price competition in the securities markets.

**DATES:** Comments are due on or before September 22, 2000.

**ADDRESSES:** Interested persons should submit three copies of their written data, views, and opinions to Jonathan G. Katz, Secretary, Securities and Exchange Commission, 450 Fifth Street, N.W., Washington D.C. 20549-0609. Comments also may be submitted electronically at the following E-mail address: [rule-comments@sec.gov](mailto:rule-comments@sec.gov). All comment letters should refer to File No. S7-16-00. Comments submitted by E-

mail should include this file number in the subject line. Comment letters received will be available for public inspection and copying in the Commission's Public Reference Room, 450 Fifth Street, NW., Washington DC 20549. Electronically submitted comment letters will be posted on the Commission's Internet web site (<http://www.sec.gov>).

**FOR FURTHER INFORMATION CONTACT:** Susie Cho, Attorney, at (202) 942-0748, Division of Market Regulation, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-1001.

#### SUPPLEMENTARY INFORMATION:

##### Table of Contents

- I. Introduction
- II. Summary of Fragmentation Release and Public Comments
- III. Disclosure of Order Routing and Execution Practices
  - A. Need for Improved Disclosure
  - B. Proposed Rule 11Ac1-5—Disclosure of Order Execution Information
    - 1. Scope of Rule
      - a. Market Center
      - b. Covered Order
      - c. National Market System Security
    - 2. Required Information
      - a. Information Required for All Types of Orders
      - b. Information Required for Market and Marketable Limit Orders
    - 3. Procedures for Making Reports Available to the Public
  - C. Proposed Rule 11Ac1-6—Disclosure of Order Routing Information
    - 1. Scope of Rule
    - 2. Quarterly Reports
    - 3. Customer Requests for Information
- IV. Further Action to Strengthen Competition in the Markets
  - A. Strengthening Price Competition in the Quote
    - 1. Limit Orders
    - 2. ECN Quotes
  - B. Strengthening Price Priority
  - C. Conclusion
- V. General Request for Comment
- VI. Paperwork Reduction Act
  - A. Summary of Collections of Information
  - B. Need for and Proposed Use of Information
  - C. Respondents
  - D. Total Annual Reporting and Recordkeeping Burdens
  - E. General Information about the Collections of Information
  - F. Request for Comment
- VII. Cost-Benefit Analysis
  - A. Costs and Benefits of Proposed Rule 11Ac1-5
    - 1. Benefits
    - 2. Costs
  - B. Costs and Benefits of Proposed Rule 11Ac1-6
    - 1. Benefits
    - 2. Costs
- VIII. Consideration of Burden on Competition and Promotion of Efficiency, Competition, and Capital Formation

- IX. Initial Regulatory Flexibility Analysis
  - A. Reasons for the Proposed Action
  - B. Objectives and Legal Basis
  - C. Small Entities Subject to the Rule
    - 1. Small Entities Affected by Proposed Rule 11Ac1-5
    - 2. Small Entities Affected by Proposed Rule 11Ac1-6
  - D. Reporting, Recordkeeping and other Compliance Requirements
    - 1. Reporting Requirements under Proposed Rule 11Ac1-5
    - 2. Reporting Requirements under Proposed Rule 11Ac1-6
  - E. Duplicative, Overlapping or Conflicting Federal Rules
  - F. Significant Alternatives
    - 1. Alternatives to Proposed Rule 11Ac1-5
    - 2. Alternatives to Proposed Rule 11Ac1-6
  - G. Solicitation of Comments
- X. Statutory Authority
- Text of Proposed Rules

## I. Introduction

On February 23, 2000, the Securities and Exchange Commission ("Commission") issued a release ("Fragmentation Release") requesting the public's views on a broad range of issues relating to market fragmentation—the trading of orders in multiple locations without interaction among those orders.<sup>1</sup> The Fragmentation Release was published along with the proposed rule change by the New York Stock Exchange, Inc. ("NYSE") to rescind Rule 390, its off-board trading rule. Because the elimination of off-board trading restrictions raised the potential for increased fragmentation of trading interest in exchange-listed equities, the rescission of Rule 390 presented an opportune time to consider the effects of fragmentation on the securities markets.<sup>2</sup>

In undertaking its review of fragmentation issues, the Commission sought to assure that this country's national market system for equities will continue to meet the needs of investors by: (1) Maintaining the benefits of vigorous quote competition and innovative competition among market centers; (2) promoting the price

discovery process by encouraging market participants (including investors and dealers) to display trading interest in the public quotes; (3) assuring the practicability of best execution of all investor orders, including limit orders, no matter where they originate in the national market system; and (4) providing the deepest, most liquid markets possible that facilitate fair and orderly trading and minimize short-term price volatility.

The Fragmentation Release requested the public's views on whether fragmentation is now, or may become in the future, a problem that significantly detracts from the fairness and efficiency of the U.S. equities markets. To assist commenters in formulating their views, the Commission briefly described six potential options to address fragmentation, ranging from increased disclosure of order routing and execution practices to the establishment of a national market linkage system that mandated price/time priority for all displayed trading interest. The Commission also noted that decimal pricing of securities would be introduced in the coming months and that a reduced quoting increment could significantly change current market dynamics. It requested commenters to consider the extent to which their views would be affected by the initiation of decimal pricing.

The comments submitted in response to the Fragmentation Release reflected a wide range of views on these issues. Many commenters, especially institutional investors, expressed serious concern about market fragmentation in general and internalization and payment for order flow practices in particular. Most of these commenters supported a nationwide system of price/time priority. Many other commenters, however, believed that such a system would have an overall negative impact because it would impair the ability of market centers to compete.

The Commission recognizes the potentially deleterious effects of mandating price/time priority across competing markets. Commenters presented compelling arguments that the operational and technological problems in imposing such a system under current conditions could be severe. In addition, the Commission recognizes that impending changes in the markets, particularly the move to decimal trading, could have a significant, and not wholly predictable, impact on market structure. It also recognizes that new technologies continually are being introduced to the markets that could change the current

patterns of order interaction in fundamental ways. For these reasons, the Commission is not taking action at this time on the price/time priority alternatives described in the Fragmentation Release, but is moving forward with the option to improve disclosure of order routing and execution practices.

Nonetheless, the Commission remains deeply concerned, particularly in light of the unanimous views expressed by investors responding to the Fragmentation Release, about the potential for internalization and payment for order flow arrangements to interfere with order interaction and discourage the display of aggressively-priced quotations. To more fully evaluate these concerns, the Commission's Office of Economic Analysis currently is conducting an in-depth study of trading in equities qualified for inclusion in The Nasdaq Stock Market, Inc. ("Nasdaq") and equities listed on the NYSE. The study is based on trading in a broad-based, random sample of 200 Nasdaq issues and a matched sample of 200 NYSE issues. Most importantly, the study is utilizing information on orders and order executions for Nasdaq trading that has not previously been available. Comparisons of order execution quality now can be made both for individual market centers trading the same Nasdaq or NYSE security and for trading in general in Nasdaq and NYSE securities. The Commission intends to use the results of this study, as well as its experience with changing market conditions, to determine whether further steps are needed to address internalization and payment for order flow. In addition, the Commission will continue in the coming months to monitor closely how the rescission of off-board trading restrictions affects order-routing practices in exchange-listed equities. As data become available and analyses are completed, the Commission intends to make them publicly available to enhance the opportunity for public debate of these vital issues concerning the structure of the national market system. Finally, in light of many comments on the Fragmentation Release, the Commission is considering further ways to strengthen price competition and price priority within the existing market structures. These options are discussed in section IV below.

## II. Summary of Fragmentation Release and Public Comments

The Fragmentation Release presented an overview of the current structure of the national market system. Section 11A

<sup>1</sup> Securities Exchange Act Release No. 42450 (February 23, 2000), 65 FR 10577 ("Fragmentation Release").

<sup>2</sup> Since publication of the Fragmentation Release, the Commission has approved the rescission of the off-board trading restrictions for the NYSE, American Stock Exchange LLC, Boston Stock Exchange, Incorporated, Chicago Stock Exchange, Incorporated, Pacific Exchange, Inc., and Philadelphia Stock Exchange, Inc. Securities Exchange Act Release No. 42758 (May 5, 2000), 65 FR 30175 (NYSE) ("NYSE Rescission Order"); Securities Exchange Act Release No. 42888 (June 1, 2000), 65 FR 36855 (Amex); Securities Exchange Act Release No. 42887 (June 1, 2000), 65 FR 36856 (BSE); Securities Exchange Act Release No. 42886 (June 1, 2000), 65 FR 36859 (CHX); Securities Exchange Act Release No. 42890 (June 1, 2000), 65 FR 36877 (PCX); Securities Exchange Act Release No. 42889 (June 1, 2000), 65 FR 36878 (Phlx).

of the Exchange Act creates a framework for fostering transparency and competition in the securities markets and sets forth findings and objectives that are to guide the Commission in its oversight of the national market system. As developed under this framework, our equity markets are characterized by competition between market centers, price transparency, intermarket linkages, and broker best execution obligations.

*Competition between market centers.*

One of the principal objectives of the national market system is assuring fair competition among market centers.<sup>3</sup> The Commission has sought to establish a market structure that gives the forces of competition room to flourish and develop according to the needs of market participants. Market centers, including exchange markets, over-the-counter ("OTC") market makers, and alternative trading systems, compete to provide a forum for the execution of securities transactions, particularly by attracting order flow from brokers seeking execution of their customer's orders. As a result, market centers have an incentive to offer improvements in execution quality and to reduce trading costs in order to attract order flow away from other market centers. This competition also encourages ongoing innovation and the use of new technology, all to the benefit of investors.

*Price transparency.* Price transparency is a minimum essential component of a unified national market system. All significant market centers are required to make available to the public their best prices and the size associated with the prices.<sup>4</sup> This information not only includes the best quotations of market makers, but also the price and size of customer limit orders that improve a market center's quotation. Central processors collect quote and trade information from individual market centers, consolidate the information of individual market centers, determine the national best bid and best offer for each security, and disseminate the information to broker-dealers and information vendors. Thus, the best displayed prices for a particular security are made available to the public, thereby helping to assure that investors are aware of such prices no matter where they arise in the national market system.

*Intermarket linkages.* Congress has found that the "linking of all markets for qualified securities through communication and data processing facilities" will further the objectives of a national market system.<sup>5</sup> Linkages among competing market centers help ensure that brokers can access the best quotes available in the market for their customers. The market centers that trade exchange-listed equities currently are linked through the Intermarket Trading System ("ITS"), which is linked to the National Association of Securities Dealer's ("NASD's") Computer Assisted Execution System ("CAES"). The market centers that trade Nasdaq equities are linked by the Nasdaq SelectNet System, by telephone, and through private links.

*Broker's duty of best execution.* In accepting orders and routing them to a market center for execution, brokers act as agents for their customers and owe them a duty of best execution.

The duty is derived from common law agency principles and fiduciary obligations. It is incorporated both in self-regulatory organization ("SRO") rules and, through judicial and Commission decisions, in the antifraud provisions of the federal securities laws. The duty requires a broker to seek the most favorable terms reasonably available under the circumstances for a customer's transaction.

Although each of the foregoing elements contribute to the fairness and efficiency of the national market system, the Fragmentation Release expressed concern about the possibly harmful effects of market fragmentation, particularly internalization and payment for order flow. The Commission noted that fragmented markets may isolate customer limit orders and dealer quotes from full interaction with other buying and selling interest in today's markets. For example, a customer may enter a limit order to buy at a price higher than the current quote, thus setting a new best price in the market. Even though the customer offers to pay more than any other market participant, market centers holding sell orders have no obligation to route a sell order to fill the price-setting buy order. To the extent that the customer's limit order remains unexecuted and subsequent buying interest is filled at the limit order price, the customer's order has been disadvantaged, and the incentive to improve prices potentially compromised.

Internalization and payment for order flow practices also have contributed to

an environment in which vigorous quote competition is not always rewarded. Under such practices, orders are routed to a particular market maker or specialist that can execute the orders as principal without facing significant competition from investors or other dealers to interact with the directed order flow. 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. One of the initial findings of the ongoing analysis by the Commission's Office of Economic Analysis indicates that approximately 85% of the executed market orders in Nasdaq securities are routed to market centers when they are *not* quoting at the best price.<sup>6</sup> Market makers typically provide a private guarantee to their customers and routing brokers, subject to various conditions, that market orders will be executed at prices that match the best prices displayed elsewhere. These passive, "price-matching" business strategies employed by dealers may weaken the incentive to display competitive quotes and blunt the forces that otherwise could lead to less fragmented markets.<sup>7</sup> The Commission is concerned that such practices may ultimately harm the process of public price discovery, increase price volatility, and detract from the depth and liquidity of the markets.

In response to the Fragmentation Release, the Commission received 87 comment letters.<sup>8</sup> Of those letters, 72

<sup>6</sup> This analysis is based on data from the NASD's Order Audit Trail System for a broad-based, random sample of 200 Nasdaq stocks during June 6-9, 2000. It excludes orders routed outside of the continuous trading period and orders with special handling conditions. The 85% figure in the text only includes executed market orders. Consequently, if an order was initially routed to a market center that was not quoting the best price and subsequently routed to a market center that was quoting the best price (for example, via SOES or SelectNet), the order is counted only once at the executing market center. The 85% figure is unchanged when the analysis is limited to only 100-499 share market orders.

<sup>7</sup> As Chairman Greenspan noted in his congressional testimony on market structure issues, "[i]n the long run, unfettered competitive pressures will foster consolidation as liquidity tends to centralize in the system providing the narrowest bid-offer spread at volume. Two or more venues trading the same security or commodity will naturally converge toward a single market. \* \* \* Of course, this process may not be fully realized if there are impediments to competition or if markets are able to establish and secure niches by competing on factors other than price." Statement of Allen Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, United States Senate (April 13, 2000), at 2-3.

<sup>8</sup> The comment letters and a comprehensive summary of comments have been placed in Public File SR-NYSE 99-48, which is available for

<sup>3</sup> Section 11A(a)(1)(C)(ii) of the Exchange Act, 15 U.S.C. 78k-1(a)(1)(C)(ii).

<sup>4</sup> See Exchange Act Rule 11Ac1-1, 17 CFR 240.11Ac1-1; Exchange Act Rule 11Ac1-4, 17 CFR 240.11Ac1-4.

<sup>5</sup> Exchange Act Section 11A(a)(1)(D).

comment letters specifically addressed market fragmentation issues, while most of the others limited their comments to the rescission of NYSE Rule 390. The comments received by the Commission reflected a wide range of views, as commenters did not reach a consensus on most issues. In particular, the commenters debated whether fragmentation posed a threat to the interests of investors and diminished the opportunity for investor order interaction.

Comments submitted by institutional investors and associations representing such investors consistently said that fragmentation results in a lack of transparency and creates an inefficient and unfair trading environment. They stated that fragmentation hampers the ability of large institutional investors to execute large trades at a favorable price. Comments by and on behalf of investors also frequently asserted that competitive practices associated with increased market fragmentation, such as internalization and payment for order flow, impede price discovery, hinder the best execution of limit orders, and increase stock price volatility. The Consumer Federation of America, for example, noted that "market centers naturally compete for brokers' low on terms other than just price. While some of these forms of competition may benefit investors, others are less benign. Two practices that have become common—internalization and payment for order flow—clearly contribute to market fragmentation." It recommended that improved linkages between market centers "should be accompanied by new rules to limit practices, such as internalization and payment for order flow, that inappropriately isolate order flow."<sup>9</sup>

In contrast, many broker-dealers and regional exchanges generally questioned whether fragmentation was a detriment to the markets. They asserted that the increased number of venues available for executing transactions has invigorated competition to the benefit of public investors and fostered greater innovation, resulting in narrower spreads and lower transaction costs.

Commenters likewise differed considerably on the alternative approaches to address fragmentation that were described in the Fragmentation Release. Commenters were particularly divided over the prospect of a national market linkage

system with price/time priority for all displayed trading interest. The commenters who supported the establishment of intermarket price/time priority, including most institutional investors, believed that it would enhance price competition and increase transparency. Numerous commenters, however, believed that intermarket price/time priority would be anti-competitive, hinder innovation, and increase market volatility. These commenters further noted that a single system linking the markets would create a single point of failure.

Several commenters, moreover, urged the Commission not to implement any market structure changes until decimal trading has been instituted. Commenters noted that the impact of decimalization has yet to be determined. It may lead to greater quote competition, or it may reduce the display of limit orders, and the utility of the best published quote. Commenters suggested that market structures dependent on sizeable quotation increments might be counterproductive in a decimal trading environment.

Although commenters did not agree on most of the alternative approaches described in the Fragmentation Release, many voiced their support for greater disclosure to investors of order routing and execution practices. Of the 44 commenters who discussed this option, 32 commenters supported some form of disclosure by market centers and broker-dealers of factors concerning their trade executions and arrangements for handling orders. Commenters supporting increased disclosure believed that it would allow investors to make informed judgments about where to route their orders, as well as enable brokers to evaluate the quality of executions among market centers and fulfill their duty of best execution. Most of those opposing the disclosure option did so because they did not believe it would effectively address fragmentation concerns.

Some of the broker-dealer and SRO commenters further suggested that the current ITS linkage be reformed. Several commenters recommended abolishing the requirement that ITS participants achieve unanimity to enact any proposed change. Others suggested that the time frames for processing ITS commitments be significantly reduced. A few commenters, however, urged the Commission to dismantle ITS entirely. The NYSE argued that "ITS was designed to address market structure issues" of floor-based auction markets and that a "different approach to deal with today's environment is

appropriate."<sup>10</sup> Other commenters advocated that the Commission oversee the development of new intermarket linkages. They believed that a new linkage would increase transparency and enhance competition among individual market centers. They suggested that a new linkage should employ state of the art technology, provide automatic execution capability, allow representation in the governance of the linkage by all qualified market centers, and provide access to all qualified market centers.<sup>11</sup>

Finally, several commenters recommended that a price priority rule be instituted with a new intermarket linkage. For example, the Market Structure Committee of the Securities Industry Association ("SIA") strongly endorsed adoption of a Commission rule under which a market center receiving an order would be required either to route the order to a market center displaying the best price or to match the best price.<sup>12</sup> Island ECN Inc. ("Island"), however, disagreed, believing that such a trade-through rule would restrict new automated markets from competing with slower market centers. Island also asserted that a trade-through rule is inconsistent with a customer's freedom of choice as well as a fiduciary's duty of best execution, because such a rule requires an order to be sent to a market solely on the basis of price.<sup>13</sup>

### III. Disclosure of Order Routing and Execution Practices

As noted above, a significant majority of the commenters that addressed the Fragmentation Release's alternative of increased disclosure of order routing

<sup>10</sup> Letter from James E. Buck, Senior Vice President and Secretary, NYSE, to Jonathan G. Katz, Secretary, Commission, dated May 31, 2000 ("NYSE Letter"), at 22–23.

<sup>11</sup> In section IV below, the Commission discusses and requests comment on improving linkages between markets.

<sup>12</sup> Letter from Mark B. Sutton, Chairman, SIA Market Structure Committee, to Jonathan G. Katz, Secretary, Commission, dated May 5, 2000 ("SIA–Market Structure Letter"), at 2, 12.

<sup>13</sup> Letter from Cameron Smith, General Counsel, Island ECN, to Jonathan Katz, Secretary, Commission, dated May 16, 2000 ("Island Letter"), at 5. In section IV below, the Commission discusses and requests comment on an alternative regulatory approach to promote price priority. Trade-throughs would not be prohibited, but would have to be disclosed to the customer, thereby creating an incentive for market participants to develop methods of access to avoid trade-throughs that are not in an investor's best interest. Fiduciaries, however, would continue to have the flexibility to consider factors other than price in meeting their best execution responsibilities. Moreover, the proposed public disclosure of measures of order execution quality may allow market forces to better align the interests of brokers and their customers in light of conflict-of-interest concerns raised by internalization and payment for order flow practices.

inspection in the Commission's Public Reference Room.

<sup>9</sup> Letter from Barbara L. N. Roper, Director of Investor Protection, Consumer Federation of America, to Jonathan G. Katz, Secretary, Commission, dated June 5, 2000, at 2, 5.

and execution practices expressed support for the option. The Commission agrees that there is a need for improved disclosure in this area. Particularly for a significantly fragmented market structure with many different market centers trading the same security, the decision of where to route orders to obtain best execution for investors is critically important. There must be a full and fair opportunity for market centers to compete for order flow based on price, as well as on other factors. Currently, brokerage customers, particularly retail investors, typically submit orders to their brokers and receive confirmations of their transactions, but have little ability to monitor what happens to their order between the time of submission and execution. They also currently possess few tools to evaluate the quality of order executions that might have been provided by other brokers and market centers. Given this lack of information, customers may conclude that the most rational strategy is simply to opt for a broker that offers the lowest commission and a fast execution. As a result, there currently may be limited opportunities for fair competition among brokers and market centers based on the quality of their order routing and execution services.

Section 11A(c)(1) of the Exchange Act grants the Commission authority to promulgate rules necessary or appropriate to assure, among other things, the fairness and usefulness of information on securities transactions (subparagraph B) and that broker-dealers transmit orders for securities in a manner consistent with the establishment and operation of a national market system (subparagraph E).<sup>14</sup> The Commission believes that improved disclosure of order routing and execution practices will further important national market system objectives and therefore has decided to propose two new Exchange Act rules—one for “market centers” (generally, exchange specialists, OTC market makers, and alternative trading systems (“ATs”) that hold themselves out as willing to receive and execute orders) and another for broker-dealers that route orders as agent on behalf of their customers.

<sup>14</sup> In addition, Section 17(a) of the Exchange Act, 15 U.S.C. 78q(a), provides that SROs and broker-dealers shall make and disseminate such reports as the Commission, by rule, prescribes as necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act.

#### A. Need for Improved Disclosure

The heart of the U.S. national market system is the consolidated stream of transaction reports and quotations that is made available to the public on a real-time basis. The best displayed quotations of each significant exchange, OTC market maker, and ATS that executes orders in listed equities and Nasdaq equities are collected by a single processor, which then calculates a consolidated best bid and offer (“consolidated BBO”) and disseminates the information to the public. This centralized source of information, however, may convey an inaccurate impression of the extent to which the quality of order executions can vary among different market centers trading the same security.

For example, the execution of investor market orders can vary widely in relation to the consolidated BBO at the time of order receipt and the price at which the order is executed. The consolidated BBO does not necessarily represent the best price at which a security can be bought or sold. Many market centers offer significant opportunities for execution of orders at prices better than the consolidated BBO. These price improvement opportunities are attributable to undisplayed trading interest that may take many forms. Large investors, for example, often are not willing to display their full trading interest to the general market and therefore seek other ways to interact with other trading interest. The floors of the primary exchanges provide a vehicle for this type of undisclosed trading interest to be represented. In addition, some OTC market makers have adopted algorithms under which price improvement is offered to selected types of orders.

Conversely, some market orders are executed at prices less favorable than the consolidated BBO at the time of order receipt.

One of the initial findings of the research being conducted by the Commission’s Office of Economic Analysis indicates, for example, that approximately 5.3% of small Nasdaq market orders (100–499 shares) are executed at prices outside the quotes at the time of order receipt. Similarly, an analysis performed by the NYSE staff indicated that approximately 7.5% of small NYSE market orders (100–499 shares) are executed outside the quotes at the time of order receipt.<sup>15</sup> This type

<sup>15</sup> The Nasdaq estimate is based on OATS data for a broad-based, random sample of 200 Nasdaq stocks for the week of June 5–9, 2000. It excludes orders routed outside of the continuous trading period and orders with special handling conditions. The NYSE

of price disimprovement can occur for several reasons. First, there may be “quote exhaustion”—multiple orders hit a quote at the same time with cumulative volume greater than the quoted size. Price disimprovement also can occur when order size exceeds the size at which a specialist or market maker is willing to guarantee executions at prices that match the consolidated BBO. Finally, some market orders are executed at prices less favorable than the consolidated BBO at the time the order was executed. This type of price disimprovement—or trade-throughs of the best quote—can occur simply because of mistakes, poor executions, or lack of easy access to the better quoted price. Currently, there is no requirement that price disimprovement for individual transactions be disclosed to customers or that the overall price disimprovement rate for a market center’s trading be disclosed to the public.

With both price improvement and price disimprovement, the amounts per share may seem small and therefore can be difficult for investors to detect, particularly when the consolidated BBO is changing rapidly. Nevertheless, they may result in appreciable benefits or costs for investors. A difference in execution price of  $\frac{1}{16}$ th for a 1000 share order equals \$62.50, dwarfing the differences between e-brokers’ commissions. As commission rates for retail investors have dropped in recent years, the relative significance of order execution costs has correspondingly increased and heightened the need for improved disclosure of execution quality.

From the standpoint of the many investors who use non-marketable limit orders to implement their investment decisions, assessing execution quality among different market centers is, if anything, more difficult. With non-marketable limit orders, the most significant risk is that they will not be executed and will miss the market. Consequently, an important order-routing consideration is the likelihood of execution at a particular market center, which can vary depending on how well the order is handled (for example, speed of public display),<sup>16</sup> the

estimate is based on system orders and is taken from data in Jeffrey Bacidore, Katharine Ross & George Sofianos, *Quantifying Best Execution at the New York Stock Exchange: Market Orders*, NYSE Working Paper No. 99–05, Tables 7 & 14 (Dec. 1999) (available at <http://www.nyse.com>). Approximate price improvement rates for these samples of market orders are 8.7% for Nasdaq market orders and 37.3% for NYSE market orders.

<sup>16</sup> The Commission’s Office of Compliance, Inspections, and Examinations and Office of Economic Analysis recently issued a report

extent of trading interest at the same price that has priority, and the flow of incoming market orders on the other side of the market. The likelihood of execution also can vary depending on the extent to which "local" traders (such as specialists, floor traders, and OTC market makers) are able to step in front of displayed limit orders by improving on the limit price as market orders arrive on the other side of the market.<sup>17</sup> This can lead to another type of trading cost for limit orders that is commonly referred to as "adverse selection"—the greater likelihood that limit orders will be executed when the market is moving significantly against them. The frequency and skill with which local traders step in front of limit orders can heighten the cost of adverse selection for limit order investors.

Thus, the routing decision for both market and limit orders can be complex. For each individual security, there are a variety of market centers to which orders can be routed. With listed equities, for example, orders can be routed to the primary exchange markets, which employ a single specialist per stock and historically have handled from 70–80% of the volume. Orders in listed equities also are routed to regional exchanges, often pursuant to "preferencing" programs under which orders are routed to particular dealers for execution, and to OTC market makers in the "third market." Finally, orders in listed equities can be routed to ATSs, which offer agency limit order books that provide a high degree of internal interaction among investor orders. Indeed, one of the primary reasons the Commission approved the rescission of off-board trading restrictions was to assure an opportunity for fair competition by ECNs in the market for listed equities.<sup>18</sup>

With Nasdaq equities, orders have been routed to an even greater number of distinct market centers. In May 2000, for example, there were an average of

53.5 market makers in the top 1% of Nasdaq issues by daily trading volume, 26.3 market makers in the next 9% of issues, and an overall average of 12.3 market makers per issue.<sup>19</sup> In addition, orders in Nasdaq equities can be routed to an ATS. Finally, several of the regional exchanges trade, or are planning to trade, Nasdaq equities.

Although each exchange specialist, OTC market maker, and ATS represents a distinct trading venue and order executions can vary widely among them, there currently is little publicly available information that allows broker-dealers, much less investors, to compare and evaluate execution quality among different venues. Some market centers make order execution information privately available to independent companies, which then prepare reports on execution quality that are sold to broker-dealers. Other market centers provide reports of execution quality directly to broker-dealers or to their members. The information in these reports generally has not been publicly disseminated. Moreover, some broker-dealers have reported difficulty in obtaining useful information on execution quality from market centers. For example, participants in a Commission roundtable on the on-line brokerage industry indicated that not all market centers were willing to make order execution information available and, even when such information was made available, not all of it was useful or in a form that allowed for cross-market comparisons.<sup>20</sup>

In contrast, the NYSE on occasion has made available to academics sample databases that contain sufficient order and trade information to provide the basis for a useful evaluation of execution quality for orders that are routed to the NYSE.<sup>21</sup> In addition, the

NYSE staff itself has published analyses of order executions on the NYSE.<sup>22</sup>

Although many other analyses of U.S. equity trading have been prepared and published, they are necessarily of somewhat limited utility for evaluating order executions because of the limited nature of their data sources. These sources typically include the trades and quotes in a security, but do not include information on the customer orders that resulted in trades. Using this limited data to assess order execution quality is quite difficult given the absence of even the most basic information on the nature of the orders themselves (e.g., buy/sell, market/limit) or the time that orders were received for execution by a market center.<sup>23</sup>

Moreover, even if individual market centers were to make more information on order executions publicly available, the ability to compare execution quality across markets requires uniformity in the underlying data and statistical measures. To enable a true "apples-to-apples" comparison of execution quality, the order execution statistics made available by different market centers must reflect uniform procedures, data formats, and calculations. Otherwise, the already complex issues inherent in evaluating order execution quality can become hopelessly confused.<sup>24</sup>

Finally, improved information concerning the quality of order executions available at different market centers will provide little benefit to investors if they do not know where their orders are routed for execution. Currently, there is no market-wide requirement that brokers disclose where they route orders on behalf of

*Order Submission Strategy*, 31 J. Financial and Quantitative Analysis 213 (June 1996).

<sup>22</sup> See, e.g., *Quantifying Best Execution at the New York Stock Exchange: Market Orders*, note 15 above.

<sup>23</sup> The study of trading in Nasdaq and NYSE securities currently being conducted by the Commission's Office of Economic Analysis incorporates the newly available, comprehensive order information collected through the NASD's Order Audit Trail System. This data source provides the basis for much more informative analysis of Nasdaq trading than has been possible in the past.

<sup>24</sup> One of the alternatives to requiring market centers themselves to prepare statistical measures of execution quality is to require them simply to make available raw data on an order-by-order basis. Comment is requested on this alternative in section III.B below. If this type of information were made available to the public, much of the need for required uniform statistics would be eliminated because everyone would have access to the data necessary to calculate whatever statistics they believed most appropriate, as well as evaluate the data supporting statistics generated by others. When the only information available is statistics prepared by market centers, however, the uniformity of such statistics is critically important.

concerning the display of customer limit orders. *Report Concerning Display of Customer Limit Orders* (May 4, 2000). The report cited significant weaknesses in market centers' display of limit orders. It concluded that many exchange specialists and OTC market makers should take steps to improve their systems for limit order display and that many SROs can take steps to ensure better compliance with display requirements. *Id.* at 2–4.

<sup>17</sup> As discussed in section IV.A.1 below, the opportunity for local traders to step ahead of displayed limit orders may increase substantially in a market with penny trading increments. The Commission notes that it intends to consider whether market makers and similarly-situated market participants should be able to step ahead of limit orders by as little as a penny without previously quoting at that price.

<sup>18</sup> See Rule 390 Rescission Order, note 2 above, text accompanying nn. 23–27.

<sup>19</sup> NASD Economic Research, <http://www.marketdata.nasdaq.com> (visited July 8, 2000).

<sup>20</sup> See Report by Commissioner Laura S. Unger, *On-Line Brokerage: Keeping Apace of Cyberspace* 40–41 (Nov. 1999) (available at <http://www.sec.gov>). One of the recommendations in Commissioner Unger's Report was that the Commission should consider requiring market centers to make publicly available certain uniform information on execution quality and requiring broker-dealers to provide their customers with plain English information about the execution quality available at different market centers, order handling practices, and the broker-dealer's receipt of inducements for order flow. *Id.* at 45. In addition, one of the largest broker-dealers noted in its comment letter on the Fragmentation Release that even it had been frustrated in its own attempts to obtain useful order execution data from certain markets. Letter from Lon Gorman, Vice Chairman and President, Capital Markets & Trading Group, Charles Schwab & Co., Inc., to Jonathan G. Katz, Secretary, Commission, dated July 5, 2000, at 7.

<sup>21</sup> See, e.g., Lawrence Harris and Joel Hasbrouck, *Market v. Limit Orders: The SuperDot Evidence on*

customers. Although NYSE Rule 409(f) requires NYSE members, when confirming transactions, to disclose "the name of the securities market on which the transaction was made," transactions executed at venues other than exchanges typically are classified as "OTC." Thus, the identity of the particular OTC market maker or ATS that executed an order is not required to be disclosed. Moreover, the NYSE's rule does not cover non-members or securities that are not listed on the NYSE.

Consequently, the Commission believes that market-wide rules setting forth uniform measures of execution quality and requiring disclosure of broker-dealer order routing practices will help further many of the vital national market system objectives set forth in Section 11A(a)(1)(C) of the Exchange Act.<sup>25</sup> In particular, greater information about execution quality should assist brokers and investors in finding the best market for orders to be executed, help promote competition among markets and brokers on the basis of execution quality, and ultimately thereby lead to more efficient securities transactions.

In recent years, the interest of individual investors in receiving market-related information has expanded exponentially as advancing technology has allowed such information to be provided efficiently and at reasonable cost. This trend particularly has been reflected in the demand by individual investors for real-time quotes and last sale information.<sup>26</sup> Against this backdrop of expanding market transparency, the scarcity of useful public information on the quality of order executions is striking.<sup>27</sup> As discussed further below, improved technology for processing and disseminating information now offers

new alternatives for making available to the public valuable information on order routing and execution practices. By putting this information in the hands of investors and others, the rules proposed today are intended to energize competitive forces that will produce a fairer and more efficient national market system.

#### *B. Proposed Rule 11Ac1-5—Disclosure of Order Execution Information*

Proposed Rule 11Ac1-5 would require market centers to prepare and make available to the public monthly reports in electronic form that categorize their order executions and set forth uniform statistical measures of execution quality. The rule as proposed is designed to avoid two serious pitfalls that can arise with such measures of execution quality. First, as noted above, varying and inconsistently calculated measures of execution quality can confuse the already complex task of comparing execution quality across different market centers. To address this problem, the proposed rule adopts certain basic measures of execution quality (such as effective spread, rate of price improvement and disimprovement, fill rates, and speed of execution) and sets forth specific instructions on how the measures are to be calculated.

Second, even uniform statistical measures can be unhelpful or even misleading if they are applied across a wide range of stocks, order types, and order sizes. Overly general statistics can be particularly problematic if a market center is sent many orders that are, for any number of reasons, difficult to fill. There may be a wide disparity in the average effective spreads for the execution of market orders by different market centers if calculated for all stocks and all sizes of orders. This disparity, however, may convey a misleading impression of the execution quality provided by the market centers. For example, if the orders executed by one market center primarily consisted of small orders in the most actively traded stocks, its average effective spread across all orders likely would be relatively small. Conversely, if the orders executed by a second market center primarily consisted of larger orders in less actively traded stocks, its average effective spread across all orders likely would be substantially higher than the first market center. Although the second market center may have offered higher quality executions than the first market center for both small orders in actively traded stocks and medium sized orders in less actively traded stocks, this fact would not be

evident if the two classes of orders were not analyzed separately. In sum, overly general statistics for even a high-quality market center can appear less favorable than those of other market centers, not because of poor executions, but because of good execution of tough orders.

Clearly, a mandatory disclosure requirement must not create a disincentive for market centers to accept and execute orders that are difficult to fill. In the past, the only possible solution to this intractable problem would have been for the Commission to attempt, as best it could, to mandate statistics that encompassed a broad range of securities and orders without being overly general. Today, however, advancing technology offers another alternative that would allow competitive forces, rather than regulatory mandate, to determine the most appropriate classes of stocks and orders to provide a basis for cross-market comparisons of execution quality. In particular, improved technologies for processing and disseminating information make it feasible to require disclosures in electronic form that are divided into fairly discrete categories. Under the proposed rule, statistical information would be categorized by individual security, by five types of order (e.g., market and inside-the-quote limit), and four order sizes (e.g., 100–499 shares and 500–1999 shares). As a result, users of the market center reports will have great flexibility in determining how to summarize and analyze statistical information. Order executions could be analyzed for a particular security or for any particular group of securities, as well as for any size or type of orders across those groups of securities.

Primarily because information will be categorized on a stock-by-stock basis, the market center reports generally will contain too much data to be handled in written form. Each market center will be required to generate 20 rows of information for each security that it trades. For example, the report of an OTC market maker that trades 500 securities would include 10,000 rows of information. Clearly, if reports of this size could only be prepared by hand and disseminated in written form, they would be impossibly burdensome to generate. With current data processing capacities, however, the task is vastly simplified. Once systems have been programmed to perform a task once, there is little additional cost or burden associated with performing substantially the same task over and over. In addition, the Internet and private communications networks allow large amounts of data to be transmitted to

<sup>25</sup> These include (1) the availability to broker-dealers and investors of information with respect to transactions in securities, (2) the practicability of brokers executing investors' orders in the best market, (3) fair competition among broker-dealers, exchange markets, and markets other than exchange markets, and (4) the economically efficient execution of securities transactions.

<sup>26</sup> See Securities Exchange Act Release No. 42208 (Dec. 9, 1999), 64 FR 70613 ("Market Information Concept Release"), text accompanying n. 3 (demand by retail investors for real-time market information expanded by more than 1000% between 1994 and 1998).

<sup>27</sup> Independent third parties currently prepare evaluations of the trade execution services offered by brokers, but must make do with limited sources of information. One such evaluation, for example, rated the order execution services of brokers based on a single market order and a single limit order. The Commission is particularly interested in receiving comment on the proposed rules from independent analysts of order routing and execution practices.



widely dispersed users with little cost or difficulty. Indeed, SROs, broker-dealers, and independent companies currently maintain and process a very large volume of order-by-order raw data to generate their own statistical measures of execution quality.<sup>28</sup> Consequently, the Commission preliminarily believes that requiring market centers to prepare disclosures on a stock-by-stock basis would not be significantly more burdensome than requiring shorter reports with disclosures that were summarized across many stocks. Comment is requested on this issue.

Given the volume of data to be included in the electronic reports by market centers, most individual investors likely would not be interested in receiving and digesting the reports themselves. Rather, the information will need to be summarized and analyzed before it is helpful to investors in general. The Commission anticipates that independent analysts, consultants, broker-dealers, the financial press, and other market centers will analyze this information and produce summaries that respond to the needs of investors. Once basic, uniform information regarding order execution quality is available, the Commission believes that market forces will produce analyses of order execution quality adapted for different types of investors.

Comment is requested on the approach of adopting uniform statistical measures of execution quality, divided into discrete subcategories of security/order type/order size. Is the approach feasible and implementable without undue burden on market centers? Will there be sufficient interest by third parties in collecting and summarizing the electronic reports so that the public and investors in general will have reasonable access to useful information on execution quality?

A potential alternative to the approach reflected in the proposed rule is simply to require all market centers to make available electronic files with raw data on an order-by-order basis. For each order, market centers would provide the necessary fields of information (e.g., time (to the second) of order receipt, type of order, limit price, size of order, time of order execution, price of execution, cancellation,

whether the order was routed to another venue and the identity of that venue) for analysts to calculate the statistical measures of execution quality that they consider appropriate. This approach may offer the advantage of avoiding the need to reassess the viability and usefulness of specific statistical measures and to update them periodically. Comment is requested on this alternative. Would it be feasible in light of the large volume of data that would be disclosed? In addition, comment is requested on whether the raw data alternative should be available only to small market centers that execute relatively few transactions in national market system securities. In particular, would small market centers find it easier and less burdensome to provide raw data rather than the statistical measures required by the proposed rule?

#### 1. Scope of Rule

Paragraph (b)(1) of proposed Rule 11Ac1-5 provides that every market center shall make available for each calendar month a report on covered orders in national market system securities that it received for execution from any person. Thus, the rule is limited in scope to market centers, covered orders, and national market system securities.

*a. Market Center.* Paragraph (a)(14) of the proposed rule defines the term "market center" as any exchange market maker, OTC market maker,<sup>29</sup> alternative trading system, national securities exchange,<sup>30</sup> and national securities association. This definition is intended to cover entities that hold themselves out as willing to accept and execute orders in national market system securities. In addition, the language in paragraph (b)(1) that a market center must report on orders that it "received for execution from any person" is intended to assign the disclosure obligation to the entity that is expected

to control whether and when an order will be executed.<sup>31</sup>

The Commission anticipates that the reporting entity for the vast majority of orders will be an exchange specialist, OTC market maker, or ATS. Although specialists and market makers frequently operate under the auspices of an SRO (and such an SRO likely would assist its members in meeting the disclosure requirements of the proposed rule), the responsibility for executing orders generally is handled by individual members. In some cases, however, orders may be executed through a facility operated by an SRO without a member significantly controlling the order executions. Examples may include the Small Order Execution System ("SOES") operated by Nasdaq, the OptiMark systems operated by Nasdaq and the PCX, and floor brokers who receive orders on the floor of an exchange and obtain an execution of the orders with little participation by a specialist. The definition of market center includes exchanges and associations to cover these situations. Comment, however, is requested on the manner in which such order executions should be disclosed by the SRO, as well as the feasibility and cost of such generating such disclosures. In addition, comment is requested in general on the definition of market center and on the language of paragraph (b)(1) that imposes the disclosure requirement on market centers that receive an order for execution. In particular, are these workable concepts that will clearly assign the responsibility to disclose order executions?

Interpretative questions would arise when a broker-dealer receives an order from a customer in a security for which the broker-dealer also is an OTC market maker or an exchange specialist. The Commission preliminarily believes that such a market center should be considered as having received an order for execution only when the order is transmitted to the department of the firm responsible for making a market in the security. Comment is requested on whether this is a fair and appropriate application of the disclosure requirement.

Finally, comment is requested on whether the rule should exclude market centers that execute relatively few orders in national market system securities in total, or eliminate the disclosure requirement for individual

<sup>28</sup> For example, all market centers trading Nasdaq securities are required to submit electronic data on individual order executions to the NASD pursuant to its Order Audit Trail System requirements. NASD Rules 6950-6957. This data includes the basic order information (such as the type and size of an order, and the time of order receipt, cancellation, and execution) that would be necessary to calculate the statistical measures of execution quality required by the proposed rule.

<sup>29</sup> The term "exchange market maker" is defined in paragraph (a)(9) of the proposed rule in substantially the same language as it is defined in Exchange Act Rule 11Ac1-1, the Commission's quote dissemination rule. The definition of "OTC market maker" in paragraph (a)(18) has been modified, however, to clarify that proposed Rule 11Ac1-5 would apply to any dealer that holds itself out as willing to buy from and sell to customers or others in the United States, regardless of whether the dealer is located outside the United States or trades on a foreign exchange.

<sup>30</sup> A national securities exchange is an exchange registered under Section 6 of the Exchange Act. An exchange exempted from registration pursuant to Section 5 of the Exchange Act therefore would not be included within the proposed rule's definition of market center. Comment is requested on the appropriateness of this exclusion.

<sup>31</sup> Under the rule as proposed, when a market center receives an order for execution, the order must be included in its statistical disclosures of execution quality even if the order is routed to another venue for execution. See note 35 below and accompanying text.



securities in which a market center executed relatively few orders. In particular, would the benefits of disclosure in these situations justify the costs of compliance?

*b. Covered Order.* The definition of "covered order" in paragraph (a)(8) of the proposed rule contains several conditions or exclusions that are intended to limit the scope of the rule to those orders that provide a basis for meaningful and comparable statistical measures of execution quality. First, the rule applies only to market orders or limit orders that are received by a market center during the time that a consolidated BBO is being disseminated. This restriction is necessary because nearly all of the statistical measures included in the proposed rule depend on there being available a consolidated BBO at the time of order receipt. The term "consolidated best bid and offer" is defined in paragraph (a)(7) as the highest firm bid and the lowest firm offer for a security that is calculated and disseminated on a current and continuous basis pursuant to a national market system plan. The two plans that currently provide for the calculation and dissemination of a consolidated best bid and offer are the Consolidated Quotation Plan for listed equities, and the Nasdaq/National Market System Plan for Nasdaq equities.<sup>32</sup> Comment is requested on the advisability and practicality of this condition. In addition, comment is requested on how the rule should apply to orders that are received when the consolidated BBO is locked or crossed.

The definition of covered order excludes any orders for which the customer requested special handling for execution and that, if not excluded, would skew general statistical measures of execution quality. These include, but are not limited to, orders to be executed at a market opening or closing price, stop orders, orders such as short sales that must be executed on a particular tick or bid, orders that are submitted on a "not held" basis, orders for other than regular settlement, and orders that are to be executed at prices unrelated to the market price at the time of execution. Comment is requested on the appropriateness of excluding these orders, particularly on the exclusion of market opening orders. The Commission recognizes, for example, that the quality of execution of market opening orders in

the Nasdaq market has been an issue of significant concern. Nearly all of the statistical measures in the proposed rule, however, require the use of a consolidated BBO at the time of order receipt, which would not be available for orders that are to be executed at the market opening. The Commission requests comment on whether statistics should be included in the rule to measure the quality of execution of market opening orders and whether such statistics could be generated without undue burden or cost for market centers. In addition, comment is requested on whether there are additional types of orders that should be excluded from the scope of the proposed rule.

*c. National Market System Security.* As proposed, Rule 11Ac1-5 would apply only to securities that are designated as a national market system security under Exchange Act Rule 11Aa2-1. Currently, this designation applies to exchange-listed equities and equities included in the National Market tier of Nasdaq.<sup>33</sup> It does not apply to Nasdaq SmallCap securities and exchange-listed options. SmallCap stocks tend to be inactively traded and, as a group, generate less than 5% of the dollar volume on Nasdaq while making up nearly 25% of Nasdaq companies.<sup>34</sup> Given the relatively light trading in these securities, the Commission preliminarily believes that the value of statistical measures of trading may not justify the costs to produce the information. Comment is requested on this issue.

With respect to listed options, the Commission is concerned about the need for improved disclosure of execution quality in the options markets, particularly now that there is widespread trading of options on multiple exchanges and expanding payment for options order flow. Nevertheless, listed options are not included within the proposed rule principally because a consolidated BBO is not, at this time, calculated and disseminated for options trading. A consolidated BBO is an essential element for nearly every statistical measure in the proposed rule, such as calculating price improvement and classifying types of limit orders (e.g.,

inside-the-quote and at-the-quote limit orders). Comment is requested on the exclusion of listed options from the scope of the proposed rule and on whether there are other means to improve disclosure of execution quality by the national securities exchanges that trade listed options. In addition, comment is requested on whether the Commission should require that a consolidated BBO be calculated and disseminated for the options markets, thereby facilitating the disclosure of order execution practices.

## 2. Required Information

Paragraph (b)(1) of the proposed rule requires that reports be categorized by order type, order size, and security. Each of these three categories is defined in paragraphs (a)(4)–(6) of the proposed rule. With this degree of categorization, a market center would, for example, produce statistical information for the subcategory of (1) market orders (2) of 100–499 shares (3) in an individual stock. Comment is requested on the appropriateness of these categories and whether they will generate useful information. Comment specifically is requested on the elimination from the rule's statistics of limit orders with limit prices that are more than \$0.10 outside the consolidated BBO at the time of order receipt. The Commission preliminarily believes that the rule's statistical measures (e.g., fill rates and speed of execution) for this type of order may be less meaningful because they would be more dependent on the extent to which the orders' limit prices were outside the consolidated BBO (and movements in market prices) than on their handling by a market center.

*a. Information Required for All Types of Orders.* For each subcategory of security/order type/order size, paragraph (b)(1)(i) of the proposed rule specifies eleven columns of information that must be provided. In addition, paragraph (b)(1)(ii) specifies nine additional columns of information for subcategories that include market orders and marketable limit orders. As a result, each market center's report would include 20 subcategories for each security, and up to 20 columns of information for a subcategory.

The first five columns of information specified in paragraph (b)(1)(i) provide general information on the orders received by a market center in a subcategory and the disposition of those orders. The first column is "the number of covered orders." The second, however, is "the cumulative number of shares of covered orders"; and thereafter all statistics required by the rule are expressed either in number of shares or

<sup>32</sup> Joint Self-Regulatory Plan Governing the Collection, Consolidation, and Dissemination of Quotation and Transaction Information for Exchange-Listed Nasdaq/National Market System Securities and for Nasdaq/National Market System Securities Traded on an Unlisted Trading Privilege Basis.

<sup>33</sup> Rule 11Aa2-1 incorporates the definition of "reported security" that is used in Exchange Act Rule 11Aa3-1—any security for which transaction reports are made available pursuant to a reporting plan approved under Rule 11Aa3-1. Only exchange-listed equities and Nasdaq National Market equities fall within this definition.

<sup>34</sup> See NASD Economic Research, <http://www.marketdata.nasdaq.com> (visited June 27, 2000).

in share-weighted amounts. The rule uses share-based statistics primarily to deal appropriately with those situations in which a single order receives less than a full execution or more than one partial execution.

The rule as proposed requests the number of shares executed at both the receiving market center and at any other venue (after being routed elsewhere by the receiving market center). Thereafter, all statistical measures of order execution for a market center will encompass *both* orders that were executed at the receiving market center and orders that were executed elsewhere. In calculating its statistics, a market center will use the time it received the order and the consolidated BBO at the time it received the order,<sup>35</sup> not the time and consolidated BBO when the venue to which an order was forwarded received the order. The Commission preliminarily believes that a market center should be held responsible for all orders that it receives and should not be given an opportunity to exclude difficult orders from its statistical measures of execution quality by routing them to other venues. In addition, from the perspective of the customer who submitted the order, the fact that a market center chooses to route the order elsewhere does not reduce the customer's interest in a fast execution that reflects the consolidated BBO as close to the time of order submission as possible. Consequently, in evaluating the quality of order routing and execution services, it is important for customers to know how a market center handles all orders that it receives and not just those it chooses to execute. Comment is requested on this issue. Would, for example, it be more appropriate to require market centers to provide separate statistics for orders that they executed and orders that were executed elsewhere, or would such a requirement unduly increase the volume of data required by the rule (presumably doubling the number of subcategories for each security)?

The next five columns of information required by the proposed rule ask for the percentage of shares that were executed within specified periods of time after order receipt (such as "from 0 to 9 seconds" and "from 10 to 29 seconds"). Although required for all

types of orders, the Commission anticipates that this information will be most useful for evaluating the execution of non-marketable limit orders. These statistics are intended to provide useful comparisons to the overall fill rates for non-marketable limit orders.<sup>36</sup> Particularly for inside-the-quote and at-the-quote limit orders, the submitter of the order reasonably may expect that the order should be executed relatively quickly, and information on the likelihood that such an order will be executed with 10 seconds, 30 seconds, and so on, at different market centers may be helpful in guiding the order routing decision. Comment is requested on the usefulness of these measures of execution quality for non-marketable limit orders, as well as any other measures that commenters believe the Commission should consider. For example, one conceivable alternative would be the length of time that an order remained on a market center's order book while the limit price was at the consolidated BBO or better. Another alternative would be the number of trades or share volume printed on the consolidated tape at prices that are equal to or worse than the limit order price. Comment is requested on whether these alternative statistical measures would provide useful information, as well as on the difficulty and cost for market centers to generate the information.

The final column of information required by the proposed rule for all types of orders is the average realized spread. The term "average realized spread" is defined in paragraph (a)(3) of the proposed rule and is calculated by comparing the execution price of an order with the midpoint of the consolidated BBO as it stands 30 minutes after the time of order execution.<sup>37</sup> By comparing execution

prices with the post-trade values, the average realized spread provides an important measure of execution quality that can be interpreted differently for non-marketable limit orders and for market orders. For non-marketable limit orders, the average realized spread is a measure of adverse selection costs—the extent to which limit orders on average tend to be executed when the market is moving significantly against them. As noted above,<sup>38</sup> this tendency can be exacerbated by the frequency and skill with which the local trading interest at a market center (whether those on the trading floor of an exchange or an OTC market maker) step in front of displayed limit orders by offering a better price as orders arrive for execution at the market center. This "last mover" advantage for local trading interest could be substantial, and the average realized spread can measure the extent to which it affects the execution costs of limit orders.

For market orders (as well as marketable limit orders), the average realized spread can measure the extent to which "informed" and "uninformed" orders are routed to different market centers. Informed orders are those submitted by persons with better information than is generally available in the market. They therefore represent a substantial risk to liquidity providers that take the other side of these informed trades. In contrast, orders submitted by those without an information advantage (often small orders) present less risk to liquidity providers and in theory should receive the most favorable prices available in the market. With a practice sometimes referred to as "cream-skimming," market centers can attempt to identify and secure a substantial flow of uninformed orders. If these uninformed orders are executed at prices established by markets with a substantial volume of informed order flow, they may generate increased trading profits for liquidity providers. The average realized spread for market and marketable limit orders can highlight the extent to which market centers receive uninformed orders (as indicated by higher realized spreads than other market centers), thereby potentially helping to spur more vigorous competition to provide the best prices to these orders to the benefit of many retail investors.

Comment is requested on the usefulness of the average realized

<sup>35</sup> The term "time of order receipt" is defined in paragraph (a)(20) of the proposed rule as the time (to the second) that an order was received by a market center for execution. The definition is intended to identify the time that an order reaches the control of the market center that is expected, at least initially, to execute the order. Comment is requested on whether this definition is both workable and sufficiently clear to facilitate cross-market comparisons of execution speed and quality.

<sup>36</sup> The overall fill rates for such orders can be calculated by comparing the number of shares executed with the total number of shares received. Such overall fill rates for non-marketable limit orders can be difficult to interpret because of the problem of cancelled orders. An aggressive user of non-marketable limit orders frequently will submit orders with limit prices at or inside the current consolidated BBO. If market prices move away from the order, the order submitter may cancel and resubmit the order at a new limit price that reflects the changing consolidated BBO. Consequently, the same person potentially may cancel and resubmit an order several times to maintain the aggressiveness of the limit price. These cancellations can make it difficult to evaluate overall fill rates and cancellation rates.

<sup>37</sup> The proposed rule uses the midpoint of the consolidated BBO 30 minutes after the time of execution as a proxy for the post-trade value of the security. This time period also has been used in analyses of execution quality. See, e.g., Hendrik Bessembinder, *Trade Execution Costs on NASDAQ and the NYSE: A Post-Reform Comparison*, 34 J.

Financial & Quantitative Analysis 387, 395 (1999). Comment is requested on whether 30 minutes is an appropriate period of time to measure the post-trade value of a security, or whether it should be shorter or longer.

<sup>38</sup> See note 17 above and accompanying text.

spread as a measure of execution quality for both non-marketable limit orders, and market and marketable limit orders. Comment also is requested on the difficulty and cost for market centers in generating statistics based on the consolidated BBO 30 minutes after the time of execution. As discussed below, the other measures of execution quality included in the proposed rule require comparisons with the consolidated BBO at the time of order receipt.

b. *Information Required for Market and Marketable Limit Orders.* Subparagraph (ii) of paragraph (b)(1) of the proposed rule specifies an additional nine columns of information for subcategories of market orders and marketable limit orders.

These columns are intended to help evaluate how well these orders are executed by comparing their execution prices with the consolidated BBO at the time of order receipt. The time of order receipt is used rather than the time of order execution primarily based on an understanding that customers, at least for purposes of evaluating execution quality, generally expect orders to be executed at prices that reflect, as closely as possible, the displayed quotes at the time they submit their orders. The earliest time at which a market center can be held responsible for executing an order is the time of receipt. The Commission also recognizes, however, that executions at prices outside the consolidated BBO at the time of order execution are troubling, both from the standpoint of the customer who received an inferior price and the displayed quote establishing the consolidated BBO that is passed over. Nevertheless, rather than require statistics for both the time of order receipt and order execution (and thereby increase the volume of data required by the rule), the rule as proposed adopts the time of order receipt for evaluating effective spreads, price improvement, and price disimprovement. Comment is requested on whether any statistics based on time of order execution also should be required.

The first of these columns is the average "effective" spread (in contrast to the average "realized" spread that was discussed above). Average effective spread is defined in paragraph (a)(2) of the proposed rule and is calculated by comparing the execution price of an order with the midpoint of the consolidated BBO at the time of order receipt. The average effective spread is a comprehensive statistic that summarizes the extent to which market and marketable limit orders are given price improvement, executed at the

quotes, and executed outside the quotes. As such, it is a useful single measure of the overall liquidity premium paid by those submitting market and marketable limit orders to a market center.

The final eight columns of information required for market and marketable limit orders essentially break out the major determinants of execution quality that are summarized in the average effective spread. They also are intended to provide a substantial basis to weigh any potential trade-offs between execution speed and execution price. Orders would be classified based on whether they were "executed with price improvement," "executed at the quote," or "executed outside the quote," as defined in paragraphs (a)(10)–12. For shares executed with price improvement and shares executed outside the quote, market centers would disclose the number of shares, the average amount per share of price improvement or price disimprovement, and the average speed of execution. For shares executed at the quote, market centers would disclose the number of shares and the average speed of execution. Not only will these statistics help broker-dealers and investors evaluate where to find the fastest executions at the best prices, they also will indicate the extent to which market centers are able to execute larger orders at prices equal to or better than the quotes and thereby provide an indication of the liquidity enhancement available at different market centers.

Comment is requested on each of the statistical measures included in the rule as proposed, particularly as to their usefulness, practicality, and cost. Commenters also are requested to suggest any additional measures that they believe the Commission should consider.

### 3. Procedures for Making Reports Available to the Public

In light of the large volume of data they necessarily will include, the monthly order execution reports must be made available by market centers in electronic form rather than in writing. Consequently, paragraph (b)(2) of the proposed rule directs the SROs to act jointly in establishing procedures for market centers to follow in making their monthly reports available to the public in a readily accessible, uniform, and usable electronic format.<sup>39</sup> In addition, paragraph (b)(3) requires market centers

to make their reports available within one month after the end of the month addressed in the report.

To comply with the proposed rule, the Commission anticipates that the SROs would prepare and submit a joint plan to the Commission for approval under Exchange Act Rule 11Aa3–2. At that point, public comment would be invited on the proposed plan prior to Commission approval. Many of the more detailed issues relating both to the format of the reports and to the means of access to the reports can perhaps more appropriately be addressed in the context of approval of a joint plan. As a preliminary matter, however, the Commission anticipates that, although the volume of data in each report would be large if evaluated in written form, the volume of data would not be large when compared with many electronic databases currently available to the public. Accordingly, the Commission preliminarily believes that the public should have access to the reports in electronic form at very little cost.

Comment is requested on the cost and logistics of making the monthly reports on order execution practices available in an electronic format. In particular, does it seem likely, as the Commission now believes, that the reports can be made available to the public in a reasonably efficient manner at low cost?

### C. Proposed Rule 11Ac1–6—Disclosure of Order Routing Information

Proposed Rule 11Ac1–6 would require disclosure of the order routing practices of broker-dealers that route orders as agent on behalf of their customers. Broker-dealers owe a duty of best execution to their customers in this context and must review their order routing practices periodically to assure they are meeting this responsibility. A primary purpose of proposed Rule 11Ac1–6 would be to bring this review process out into the open and afford customers a greater opportunity to monitor their broker-dealer's order routing decisions. The proposed rule would require broker-dealers to disclose, among other things, the venues to which they routed customer orders, the significant objectives that the broker-dealer considered in determining where to route orders, and the results actually achieved compared with the result available at other venues. On customer request, broker-dealers also would be required to disclose where an individual customer's orders were routed.

#### 1. Scope of Rule

The scope of proposed Rule 11Ac1–6 is not the same as the scope of proposed

<sup>39</sup> Section 11A(a)(3)(B) of the Exchange Act authorizes the Commission, by rule or order, to require SROs to act jointly with respect to matters as to which they share authority in planning, developing, operating, or regulating the national market system.

Rule 11Ac1-5. First, proposed Rule 11Ac1-6 covers a wider range of securities. The definition of "covered security" in paragraph (a)(1) includes not only reported securities (*i.e.*, exchange-listed equities and Nasdaq National Market equities), but also Nasdaq SmallCap equities and listed options.<sup>40</sup> Second, the rule as proposed applies to all broker-dealers that route orders on behalf of their customers. The term "customer order" is defined as any order to buy or sell a covered security that is not for the account of a broker-dealer, but excludes any order for a quantity of a security having a market value of at least \$50,000 for a covered security that is an option contract and a market value of at least \$200,000 for any other covered security.<sup>41</sup> Large orders are excluded in recognition of the fact that statistics for where orders are routed and general descriptions of order routing practices are more useful for smaller orders that tend to be homogenous.

Finally, the proposed rule applies to all types of orders (*e.g.*, pre-opening orders and short sale orders), but broker-dealers must discuss and analyze their routing practices only for "non-directed orders." Paragraph (a)(5) defines a non-directed order as any customer order other than a directed order. Paragraph (a)(3) defines a directed order as a customer order that the customer specifically instructs the broker-dealer to route to a particular venue for execution. Consequently, all customer orders are non-directed orders in the absence of specific customer instructions on where they are to be routed.

The Commission preliminarily believes that a broad scope is appropriate for disclosure of order routing practices in light of the fact that broker-dealers currently have an

obligation to obtain best execution of all orders represented on behalf of a customer, and this obligation entails a periodic review of the quality of markets. The proposed rule primarily requires a quantitative disclosure of where orders are routed and an explanation by the broker of the steps it took to obtain best execution of customer orders. The Commission requests comment in general on the scope of proposed Rule 11Ac1-6. Is it appropriate to include Nasdaq SmallCap equities and listed options? Should the rule also encompass orders for other types of securities, such as those quoted on the OTC Bulletin Board or otherwise in the over-the-counter market? Should the rule exclude broker-dealers that route a relatively small number of orders on behalf of customers? Are there any types of non-directed orders that should be excluded from the rule, or should any types of directed orders be included within the rule?

## 2. Quarterly Reports

Paragraph (b)(1) of the proposed rule requires broker-dealers to make publicly available a report for each calendar quarter that discusses and analyzes its routing of non-directed orders in covered securities. The term "make publicly available" is defined in paragraph (a)(3) as posting on a free Internet web site, furnishing a written copy on request, and notifying customers at least annually that a written copy will be furnished on request. Unlike the monthly electronic reports on order execution practices required by proposed Rule 11Ac1-5, the quarterly reports on order routing practices are intended to be disseminated directly to investors. The purpose of using a primarily Internet method of dissemination is to assure ready access to the reports by interested parties, but also to ease the burden of compliance on broker-dealers by reducing paperwork and costs. Paragraph (b)(2) requires that a quarterly report be made publicly available within two months after the end of the quarter addressed in the report. This somewhat lengthy time lag is intended to allow broker-dealers an opportunity to evaluate the monthly electronic reports by market centers under Rule 11Ac1-5 prior to preparing their order routing disclosures. Comment is requested on the method and timing of dissemination of the quarterly reports.

Paragraphs (b)(1) (i) and (ii) of proposed Rule 11Ac1-6 would require broker-dealers to disclose a quantitative analysis of the nature of their order flow. This would include the percentage of total customer orders that were non-

directed orders, and the percentages of non-directed orders that were market orders, limit orders, and other orders. The quantitative analysis also would include the identity of each venue to which non-directed orders were routed for execution, the percentage of non-directed orders routed to the venue, and the percentages of non-directed market orders, non-directed limit orders, and non-directed other orders that were routed to the venue.<sup>42</sup> The percentages, rather than numbers, of orders are used to facilitate customer understanding of the probability that particular types of orders will be routed to different venues without the need for calculations, as well as to protect potentially sensitive order flow information. Comment is requested on the quantitative analysis of where orders are routed in terms of percentages.

Under paragraph (b)(1)(iii), a broker-dealer also would be required to discuss the material aspects of its relationship with each venue to which non-directed orders were routed, including a description of any payment for order flow arrangement or profit-sharing relationship. The term "payment for order flow" is defined broadly in Exchange Act Rule 10b-10(d)(9) to include any payment or benefit that results in compensation to the broker-dealer for routing orders to a particular venue. The term "profit-sharing relationship" is defined in paragraph (a)(7) of the proposed rule to mean any ownership or other type of affiliation under which the broker-dealer, directly or indirectly, shares in any profits that may be derived from the execution of non-directed orders. It therefore specifically covers internalization of customer orders by a broker-dealer that executes customer orders as principal.

The purpose of requiring disclosure of any relationships between a broker-dealer and the venues to which it routes orders is to alert customers to potential conflicts of interest that may influence the broker-dealer's order-routing practices. Currently, Rule 10b-10(a)(2)(i)(C) requires a broker-dealer, when acting as agent for the customer, to disclose on the confirmation of a

<sup>40</sup> To include Nasdaq SmallCap equities, paragraph (a)(1)(i) of proposed Rule 11Ac1-6 incorporates the language of current Rule 11Ac1-1(a)(1)—"any other security for which a transaction report, last sale data or quotation information is disseminated through an automated quotation system as described in Section 3(a)(51)(A)(ii) of the Act." This language covers SmallCap equities, but excludes equities quoted on the OTC Bulletin Board operated by the NASD. To include option securities, paragraph (a)(1)(ii) of the proposed rule includes "any option contract traded on a national securities exchange for which last sale reports and quotation information are made available pursuant to a national market system plan." This language includes any option securities for which market information is disseminated on a real-time basis pursuant to the national market system plan administered by the Options Price Reporting Authority ("OPRA").

<sup>41</sup> Comment is requested on whether the amounts of \$50,000 for option contracts and \$200,000 for other securities are appropriate to exclude large orders for which general statistics are less useful.

<sup>42</sup> The term "venue" is intended to be interpreted broadly to cover market centers within the meaning of proposed Rule 11Ac1-5(a)(14), as well as any other person or entity to which a broker routes non-directed orders for execution. As with market centers, interpretative questions may arise in identifying the appropriate venue when a person or entity trades under the auspices of an exchange or association. If, however, a particular market maker or dealer receives orders pursuant to any arrangement that gives it a preference to trade with the order as principal, that market maker or dealer, rather than the exchange, would appropriately be identified as the venue to which the order was routed.

transaction whether payment for order flow was received and that the source and nature of the compensation for the transaction will be furnished on written request. In addition, Exchange Act Rule 11Ac1-3(a) requires broker-dealers to disclose in new and annual account statements its policies on the receipt of payment for order flow and its policies for routing orders that are subject to payment for order flow. The Commission preliminarily believes that disclosure of potential conflicts of interest *in conjunction with* a quantitative analysis of where all non-directed orders are routed may provide customers with a clearer understanding of a broker-dealer's order routing practices than is provided under current rules. Comment is requested on whether, if proposed Rule 11Ac1-6 were to be adopted, the disclosure requirements currently in effect should be modified to reflect the new disclosure requirements.

The Commission considered including in the proposed rule a requirement that broker-dealers provide a quantitative estimate of the aggregate dollar amount of payment for order flow received during a quarter from each order execution venue. It has not proposed such a requirement for two principal reasons.<sup>43</sup> First, there potentially are a multitude of varying arrangements for payment for order flow; estimating the amounts produced by such arrangements could be difficult, subjective, and costly. Second, the Commission is concerned that disclosure of the aggregate dollar amounts of payment for order flow, without requiring comparable disclosure of the dollar amount of trading profits that redound to the benefit of broker-dealers pursuant to profit-sharing relationships, potentially could paint an inaccurate picture of the relative financial incentives generated by the two types of relationships. Comment is requested on whether any disclosure of the aggregate amount of payment for order flow and shared trading profits should be required.

Finally, paragraph (b)(1)(iv) of the proposed rule requires broker-dealers to

discuss and analyze their order routing practices, including the significant objectives that affected order routing decisions, the results obtained for customers, a comparison of such results with the quality of order executions available at other venues, and whether the broker-dealer has made or intends to make any material changes in its order routing practices. This part of the report would essentially require a description of the basis of the broker-dealer's order routing decisions. The Commission repeatedly has stressed the importance of considering opportunities for price improvement to a broker's best execution analysis.<sup>44</sup> At a minimum, the information required by paragraph (b)(1)(iv) of the proposed rule would include a description of the basis of any decision to forgo price improvement opportunities available at other venues. The Commission believes that responsible broker-dealers generally consider these issues as a matter of good business practice. It preliminarily believes that requiring public disclosure will be helpful to customers and others in evaluating the quality of a broker-dealer's order routing practices and promoting fair competition among broker-dealers. Comment is requested on the usefulness and cost of preparing the quarterly report on order routing practices.

### 3. Customer Requests for Information

A broker-dealer's quarterly reports should provide a useful picture of its order routing practices as a whole, but will not inform individual customers where their own orders were routed. As noted above,<sup>45</sup> broker-dealers currently are not required to disclose where orders are routed for execution, with the limited exception of NYSE Rule 409(f). To assure that customers have ready access to this information, paragraph (c) of the proposed rule would require broker-dealers, on request of a customer, to disclose to the customer the identity of the venue to which the customer's orders were routed for execution in the six months prior to the request, whether the orders were directed orders or non-directed orders, and the time of the transactions, if any, that resulted from such orders.<sup>46</sup> To alert customers to the

availability of individual order routing information, paragraph (c)(2) of the proposed rule would require broker-dealers to notify their customers at least annually of their option to request such information.

Under the rule as proposed, those customers interested in monitoring the quality of their order executions would be entitled to learn important information about how their orders were handled. When combined with information that such customers may already maintain, such as the time they submitted an order to their broker-dealer, the consolidated BBO at the time they submitted the order, and the price at which an order was executed, the information to be provided on request potentially could give customers a substantial ability to monitor and evaluate their broker-dealer's order routing decisions and the quality of executions obtained at different venues. Broker-dealers would not, however, be required to bear the expense of providing individualized order routing information to those who had not asked to receive it. Comment is requested on the usefulness of this information and the costs to broker-dealers of responding to requests. In particular, do broker-dealers currently maintain information sufficient to respond to customer requests without undue additional burden or cost?

## IV. Further Action To Strengthen Competition in the Markets

The Commission is committed to maintaining vigorous competition between individual market centers. As the Commission discussed in the Fragmentation Release, competition in the securities markets can take two forms: competition among market centers, and competition among quotes and orders within and across market centers. Competition among market centers, in which each market center strives to attract order flow from intermediaries based on the overall quality of its market, has proven to be a primary force in improving the operation of the markets. It has encouraged innovation in trading systems, fostering the use of new technology and creative trading rules to offer an array of execution choices. Vigorous market center competition has driven markets to offer faster executions, charge lower fees, and provide greater liquidity at the best quoted price. These competition-driven market improvements have produced

time of execution, to the extent feasible, of the customer's order."

<sup>43</sup> Although the proposed rule would not require an estimate of the aggregate dollar amount of payment for order flow, a broker's description of a payment for order flow arrangement must include disclosure of the material aspects of the arrangement. These would include a description of the terms of the arrangement, such as any amounts per share or per order that the broker receives. Similarly, in describing a profit-sharing relationship, a broker would be expected to disclose the extent to which it could share in profits derived from the execution of non-directed orders. An example would be the extent of the ownership relation between the broker and execution venue.

<sup>44</sup> See, e.g., Securities Exchange Act Release No. 37619A (Sept. 6, 1996), 61 FR 48290 ("Order Handling Rules Release"), text accompanying nn. 356-357.

<sup>45</sup> See text following note 24 above.

<sup>46</sup> Currently, Rule 10b-10(a)(1) requires a broker-dealer to include the time of transaction on the confirmation of a transaction or a statement that the time of transaction will be furnished on written request. Paragraph (a)(9) of the proposed rule adopts the definition of the term "time of the transaction" set forth in Rule 10b-10(d)(3)—"the

enormous enhancements in service for both retail and institutional customers.

The key service provided by a market center, however, is its quality of trade executions. First and foremost, customers seek to obtain from market centers the best possible execution price for their orders, and they may view the market's speed, depth, and cost-efficiency as contributory factors to this key goal. For there to be meaningful competition between market centers, market participants need the ability to easily compare market centers on the basis of execution quality in addition to the other service factors that contribute to market quality. The execution quality disclosure rules proposed today are intended to empower market participants to evaluate, and hold accountable, market centers for the quality of execution they provide. These rules should encourage competition between market centers on the full range of factors important to customers.

Consistent with encouraging competition among market centers on execution quality, the Commission believes that it is important to encourage the second form of competition—competition among orders on the basis of price. This competition is central to the operation of the equities markets. Price competition among orders is the primary price discovery vehicle in the markets. The best bid and ask quotes set the prices for most smaller trades, and these quotes (validated by trade reports) are the main reference point for larger institutional trades. The best bid and ask are the measure of market quality used to evaluate trades by all market participants. The spread between the best bid and ask is set by disclosed, priced orders competing to be the best price. If this competition wanes, the quote spread may widen, raising transaction costs for most or all investors. In addition, the depth of displayed trading interest may be reduced, leading to increased price volatility.

Therefore, maintaining strong competition among published quotes is of fundamental importance to the price setting mechanism of the U.S. equity markets. Competition based on published quotes depends on the published quote's ability to interact with a flow of orders: better prices will not be quoted unless quoting is likely to produce an execution at the quote, and this likelihood depends on the availability of orders with which to trade.

For this reason, the Commission remains concerned about the potential for fragmentation, and in particular

widespread internalization of customer orders, to discourage quote competition in the markets. Without an incentive for competitive quotes, the best bid and offer may widen, resulting in worse prices for many investors. This issue was the core inquiry of the Fragmentation Release.

In light of the comments of investors on the impact of internalization, the Commission remains deeply concerned about the potential for internalization to interfere with order interaction and discourage the display of aggressively-priced quotations. Nonetheless, as discussed previously, many comments criticized the price/time alternatives of the Fragmentation Release as premature in light of changing market structures, and potentially preventing vigorous competition among market centers. For these reasons, the Commission is taking action at this time only on the execution quality disclosure approach discussed in the Fragmentation Release, while deferring action on the Release's price/time priority alternatives. As described previously, the Commission is studying the market impact of fragmentation and internalization. The Commission intends to use the results of this analysis, and its experience with changing conditions in the market, to determine whether further steps are needed to increase competition among quoted prices.

In addition to discussing proposals intended to address fragmentation issues directly, such as the proposed execution quality disclosures, a number of commenters on the Fragmentation Release argued that the Commission should do more to strengthen price competition and price priority within the existing market structure. The Commission believes that it is important now to consider further ways to improve the existing national market systems to better achieve these objectives.

#### *A. Strengthening Price Competition in the Quote*

Many commenters on the Fragmentation Release argued that, in place of broader fragmentation measures, the Commission should strengthen the existing national market system structures that tie together the competing markets. One important means of strengthening these structures is to encourage sources of price competition within the consolidated quote.

Today, the public consolidated quote plays a critical role in combating the fragmentation of isolated market centers by bringing together and making widely available the quotes of the market

centers trading the same security. The consolidated quote provides intermediaries with a reliable indicator of the best prices of the various market centers, which they depend on in routing and executing orders. Investors also rely on the consolidated quote in placing their orders and monitoring the quality of their executions.

Recently, questions have been raised about the fees charged for market information and the current methods of consolidating quotes from different markets.<sup>47</sup> The Commission agrees that these issues warrant further consideration. On December 9, 1999, the Commission published a concept release on the topic of market data fees, to discuss various approaches to the review of fees for market information and the oversight of the consolidated information systems.<sup>48</sup> Virtually all the commenters on the release agreed on the importance of consolidated information in the equities markets. They differed on many other issues in the release, including the proper approach to evaluating market data fees and the means of consolidating market data across markets. To further consider these issues, the Commission is establishing a formal advisory committee on market information to provide advice on the issues related to consolidated data in the equities and options markets, including alternative models for disseminating and consolidating information from multiple markets, and appropriate governance structures for joint market information plans.

The Commission and most observers view a consolidated quote as an essential element of a national market system composed of competing markets.<sup>49</sup> Strengthening price competition within the consolidated quote could improve prices for all participants in the competing markets. In recent years, two sources of prices have been critical in improving the consolidated quote: limit orders

<sup>47</sup> See, e.g., Letter from James E. Buck, Senior Vice President and Secretary, New York Stock Exchange, Inc., to Jonathan G. Katz, Secretary, Commission, dated April 10, 2000 (File No. S7-28-99); Letter from Marc E. Lackritz, President, SIA, to Jonathan G. Katz, Secretary, Commission, dated April 11, 2000 (File No. S7-28-99); Letter from David S. Pottruck, President & Co-Chief Executive Officer, The Charles Schwab Corporation, to Jonathan G. Katz, Secretary, Commission, dated March 14, 2000 (File No. S7-28-99) ("Schwab Market Data Letter").

<sup>48</sup> Market Information Concept Release, note 26 above.

<sup>49</sup> See, e.g., Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Commission, dated March 24, 2000 (File No. S7-28-99); Schwab Market Data Letter, note 47 above.

displayed by specialists and market makers, and ECN quotes.

## 1. Limit Orders

The Commission believes that, in order to maintain vigorous price competition in quotes, it is important to maintain incentives for the display of limit orders. The Commission's Order Handling Rules for equities required the display of limit orders in the quote, unless the investor chose not to display the limit order.<sup>50</sup> The display of limit orders in the quote is a dynamic stimulant of price competition in both listed and Nasdaq securities. For example, limit order display contributed to the substantial narrowing of Nasdaq spreads after the Order Handling Rules.<sup>51</sup> Thus, it is imperative that the competitive force of limit orders be protected as markets evolve.

The advent of decimal trading portends substantial benefits from narrower spreads in actively traded securities, resulting in lower trading costs for retail investors. Observers have raised concerns, however, that in a penny trading environment, displayed limit orders may be disadvantaged.<sup>52</sup> Currently, in order for specialists and other exchange participants to trade ahead of a limit order with priority, they must trade at a  $\frac{1}{16}$ th better price (or 6.25 cents), because they can only trade in  $\frac{1}{16}$ th increments. Under NASD rules, to step ahead of a customer limit order, OTC market makers must trade at a  $\frac{1}{16}$ th better price, or half the spread if the spread is a  $\frac{1}{16}$ th or less.<sup>53</sup> If in a penny trading environment market makers, and other market participants, can trade with market orders for only a penny better than displayed limit orders, these market participants will likely step ahead of limit orders much more frequently. Market makers holding customer limit orders will be able to use their knowledge of market conditions to trade with incoming market orders at a penny better price, with the option of liquidating their position against

customer limit orders at an insignificant loss.

If these trading patterns develop, limit orders will be filled less frequently and under more disadvantageous conditions. Fewer limit orders may be entered, reducing the benefits of limit orders for price competition. For these reasons, the Commission intends to carefully consider, and discuss with the SROs, whether market makers and similarly-situated market participants should be able to step ahead of limit orders by as little as a penny without previously quoting at that price.

## 2. ECN Quotes

Several commenters on the Fragmentation Release argued that the Commission should strengthen the consolidated quote in listed securities by including the quotes of ECNs, believing that these quotes could add a new source of aggressive price competition in the listed markets.<sup>54</sup> Since the implementation of the Order Handling Rules in 1997, ECN quotes have been displayed in the Nasdaq quotation montage, and they have been a major source of price discovery in the Nasdaq market. The inside quote for many Nasdaq securities, particularly actively-traded issues, includes an ECN a substantial majority of the time.<sup>55</sup> ECNs currently account for approximately 30% of the trading volume in Nasdaq securities.<sup>56</sup>

Although the Order Handling Rules and Regulation ATS<sup>57</sup> apply equally to ECNs trading both listed and Nasdaq securities, to date the ECNs have not accounted for a substantial volume of trading in listed securities. Moreover, the quotes of ECNs have not yet been included in the consolidated quote system for listed securities, largely because of significant issues regarding

the terms and means of access to these quotes.<sup>58</sup> The Commission believes that including ECN prices in the listed quote has the potential to increase quote competition in the listed markets. Consequently, the Commission is committed to resolving, with the ECNs, and the SROs that operate the consolidated quotation system for listed securities,<sup>59</sup> the remaining issues hindering inclusion of all ECN prices in the public quote for listed equities.

One of the most important issues to be resolved is the treatment of access fees charged by ECNs to their non-subscribers.<sup>60</sup> For Nasdaq securities, ECNs that display customer order prices currently charge non-subscribers separate fees of between \$.0025 and \$.015 per share to trade with those customer orders. To comply with the equivalent access requirements of the Order Handling Rules, these fees cannot exceed the fees charged internally to a substantial proportion of the ECN's active broker-dealer subscribers.<sup>61</sup>

<sup>58</sup> Nasdaq recently announced that it would include three ECNs in the consolidated quote through participation in its system linking Nasdaq market makers to the consolidated quote and ITS. See "Nasdaq InterMarket Forges Links with Major ECNs," Nasdaq Press Release, June 13, 2000 (available at <http://www.nasdaqnews.com/news/pr2000>) (visited July 13, 2000). Other major ECNs have refrained from participating in Nasdaq's system for listed securities because of differences over fees, and the ITS trade-through rule.

<sup>59</sup> In adopting Regulation ATS under the Exchange Act in 1998, the Commission comprehensively reconsidered the regulatory treatment of alternative trading systems such as ECNs. Securities Exchange Act Release No. 40760 (December 8, 1998), 63 FR 70844 ("ATS Release"). Reg ATS allowed alternative trading systems to choose whether to register as national securities exchanges, and thus take on the responsibilities of self-regulatory organizations, or to register as broker-dealers and be a member of a self-regulatory organization. (Since then, the International Securities Exchange has registered as an all-electronic securities exchange, two ECNs have applied for registration as exchanges, and another ECN has announced its intention to combine with an existing securities exchange.) ATSs that become exchanges are expected to participate directly in the national market systems; ATSs that remain broker-dealers would participate in these systems through an SRO. See ATS Release at text accompanying n. 396 & text following n. 596.

<sup>60</sup> An ECN subscriber is a person that has contracted for direct access to the ECN. Non-subscribers must obtain access to an ECN indirectly through a linkage, such as Nasdaq's SelectNet System.

<sup>61</sup> This policy has been communicated to the ECNs through no-action letters issued by the Commission's Division of Market Regulation ("Division"). See, e.g., Letter from Richard R. Lindsey, Director, Division, Commission, to Charles R. Hood, Senior Vice President and General Counsel, Instinet Corp., dated January 17, 1997 (Instinet Real-Time Trading Service); Letter from Richard R. Lindsey, Director, Division, Commission, to Joshua Levine and Jeffrey Citron, Smith Wall Associates, and Michael McCarthy, Datek Inc., dated January 17, 1997 (Island System). Charging a non-subscriber a larger fee than

<sup>50</sup> See Order Handling Rules Release, note 44 above.

<sup>51</sup> The narrowing of spreads after implementation of the Order Handling Rules is discussed in section IV.B of the Fragmentation Release, note 1 above.

<sup>52</sup> See Letter from Daniel J. Schaub, Senior Vice President and Director of Nasdaq/OTC Trading, A.G. Edwards & Sons, Inc., to Jonathan G. Katz, Secretary, Commission, dated May 26, 2000; Letter from Henry H. Hopkins, Managing Director and Chief Legal Counsel, and Andrew M. Brooks, Vice President and Head of Equity Trading, T. Rowe Price Associates, Inc., to Jonathan G. Katz, Secretary, Commission, dated June 19, 2000, at 3.

<sup>53</sup> NASD, Notice to Members No. 97-57, Question 7.

<sup>54</sup> See, e.g., Letter from Harold S. Bradley, et al., American Century Investments, dated May 21, 2000 ("American Century Letter"), at 6; Letter from Jonathan G. Breckenridge, Vice President, General Counsel, MarketXT, Inc., to Jonathan G. Katz, Secretary, Commission, dated April 25, 2000, at 2; Island Letter, note 13 above, at 7. ECNs are electronic agency markets representing the limit orders of their customers, sometimes including market makers.

<sup>55</sup> See, e.g., Michael J. Barclay, et al., *Effects of Market Reform on the Trading Costs and Depths of Nasdaq Stocks*, 54 J. Finance 1, 29-30 (Feb. 1999) (following implementation of Order Handling Rules in 1997, the quotes of Instinet, an ECN, were on at least one side of the inside market 77% of the time, and the quotes of other ECNs were on a least one side of the inside market 70% of the time); American Century Letter, note 54 above, at 7-8.

<sup>56</sup> NASD Economic Research, <http://www.marketdata.nasdaq.com> (visited July 17, 2000) (in May 2000, ECNs accounted for 31.0% of Nasdaq dollar volume, 24.7% of share volume, and 30.9% of trades).

<sup>57</sup> 17 CFR. 242.301.



Access fees are consistent with the purely agency business model of ECNs. They charge a separate commission to one or both sides of a trade within their system, but do not trade as principal with customer order flow and therefore do not profit from the spread between the bid and offer, or from position trading. In contrast to ECNs, OTC market makers do not charge fees to other broker-dealers in addition to their quoted prices, in either the Nasdaq or listed markets.<sup>62</sup> They primarily derive their profits from principal trading. Finally, most exchanges charge their members a transaction fee or communication fee to trade on their market. These fees generally have been de minimus in size.<sup>63</sup> Under the ITS Plan, however, participant markets are allowed to access each others' quotes for free through the ITS linkage, subject to various terms and conditions.

In today's Nasdaq market, ECN fees are small in relation to the existing quotation increment of  $\frac{1}{16}$ th. As a result, an ECN quote displayed at  $\frac{1}{16}$ th better than the next best quote ordinarily still offers a substantially better price than the next best quote, even with a separate fee charged. With the coming of trading in penny increments, however, the significance of ECN fees in comparison to the minimum quotation increment will become much greater, for both the Nasdaq and listed markets.

subscribers pay creates a discriminatory barrier to access.

<sup>62</sup> For this reason, the manner that ECNs currently charge fees in the Nasdaq market has been controversial with market makers. Some market makers have not paid the fees billed by particular ECNs, and the ECNs have denied these market makers further access to the ECN's quotes. The Securities Traders Association has petitioned the Commission to prohibit ECNs from charging a fee for executing an order through an ECN when the ECN is alone at the inside quotation. Letters from Andrew N. Grass, Jr., Vice President, General Counsel, Securities Traders Association ("STA"), to Jonathan G. Katz, Secretary, Commission, dated August 28, 1998 and April 8, 1999. The Commission believes that this release responds to the STA's petition. In connection with its proposal to allow market makers to separately publish agency quotes, see Securities Exchange Act Release No. 41128 (March 2, 1999), 64 FR 12198, the NASD proposed to allow market makers to charge fees to access these quotes, but would have required market makers or ECNs charging a fee exceeding \$.005 a share to include that fee in the quote. The Commission sought comment on ECN fee issues in the release publishing the latter proposal. See Securities Exchange Act Release No. 41343 (April 28, 1999), 64 FR 24430. No action has been taken on the NASD's proposals.

<sup>63</sup> Exchanges also charge their members fees that are less transaction-specific, such as facilities or equipment fees and membership fees. Finally, the exchanges derive a significant portion of their total revenues from market data fees. See Market Information Concept Release, note 26 above, Appendix Tables 9-17.

The Commission believes that it is essential to preserve the integrity of the consolidated quote as a standard for execution quality among competing market centers. To meet this objective, each market's quotes must be substantially comparable to the quotes of other market centers. In particular, they should reflect in as comparable manner as possible the net price at which transactions can be effected on a market. If a market charges fees to intermediaries for access to its quote that are substantially higher than the cost of access to the quotes of other markets, the usefulness of the public quote as a guide to attainable prices could be impaired.

The advent of decimal pricing offers one potential means to address the problem of disparate access fees—significant fees could be included in a market's public quote.<sup>64</sup> Including the access fee in the quote would reflect the economic fact that the net price available is not in fact the quoted price alone, but also includes a fee. This approach would improve the comparability of ECN quotes without preventing ECNs from continuing to charge fees to access their markets.

The Commission recognizes, however, that ECN quotes frequently reflect the best displayed prices, particularly in the Nasdaq market, and that including fees in ECN quotes would potentially widen spreads. These concerns would be ameliorated somewhat, however, in a penny quoting environment. Including access fees in the public quote generally would widen the spread between bid and offer by only a penny or two, rather than a full  $\frac{1}{16}$ th or  $\frac{1}{8}$ th as would result under current quoting increments. Thus, the impact on both quoted spreads and the willingness of others to access ECN quotes would be reduced.<sup>65</sup>

<sup>64</sup> The Commission sought comment on the issue of ECN fees in the Reg ATS release, and specifically focused on whether the fees should be included in the quote after moving to decimal quotation increments. See Reg ATS Release, note 59 above, text accompanying n. 236. In response to the comments, the Commission said that it would reconsider whether fees should be included in the ECNs' quotes when quotes are represented in decimals.

<sup>65</sup> In addition, this impact on spreads would be reduced by taking into account better prices at a smaller increment available within the ECN. Currently, ECN public quotes are rounded away to the next  $\frac{1}{16}$ th price when the ECN's best internal price is at a smaller fraction than  $\frac{1}{16}$ th (the current quote increment). Even if fees were included in the quote, if the ECN's better internal price, combined with its fee, were still better than the next public quotation increment, the ECN quote would not need to be rounded further because of the fee. For example, if an ECN had an internal buy order at \$.2075, which would be rounded down to \$.20 for public display, and the ECN charged a non-subscriber fee of \$.005, the order would still be

Another approach to improve the accuracy of quotes would be to include in the quote those access fees that are large relative to the quoting increment, but to allow access fees that are small in relation to the quoting increment to continue to be charged separately, instead of being reflected in the quote. For example, access fees of over half the quoting increment— $\frac{1}{2}$  cent—could be included in the quote, with the quote rounded to the next penny increment, while access fees of  $\frac{1}{2}$  cent or less could be charged separately in addition to the quote. This approach would avoid reducing the displayed quote a full cent due to a relatively small access fee. At the same time, it would reflect in the displayed quote larger access fees, which otherwise would make the net price only marginally better, or even worse, than the next best displayed price.

If access fees are not included in the displayed quote, competitive forces may reduce, but not eliminate, the comparability problems that could arise from access fees. First, such fees are of practical importance primarily when markets with significant fees are alone at the best price. If a quote without a fee is at the same price as a quote with a fee, the fee-less quote typically would be the most attractive to brokers seeking the best execution of customer orders. In addition, if more than one market with a fee were quoting at the best price, the quote with the lowest fee attached normally would be the most attractive. These factors could create some competitive pressure for lower fees. If these fees are publicized, customers or brokers who routed limit orders for display on markets with the highest fees would know that the quotes displaying their orders would be the least attractive at the price. In practice, however, these factors have not reduced the ECN charges to non-subscribers on Nasdaq to insignificant levels.

The Commission regards achieving comparability of ECN quotes with the quotes of other markets as an important pre-condition to including ECN quotes in the consolidated public quote for listed stocks. In the coming months, the Commission intends to work with the ECNs and interested SROs to find, prior to the full-scale implementation of decimal trading, the fairest and most efficient approach to achieve this goal. In addition to the comparability of quotes, the display of ECN quotes in listed stocks raises issues concerning the methods of access by other market

displayed at \$.20 despite the fee. ECN access fees that were de minimus in size would not raise significant comparability issues.

centers to displayed ECN quotes. These issues are discussed further below in the context of intermarket linkages to strengthen price priority.

#### *B. Strengthening Price Priority*

The Fragmentation Release's alternatives involving price/time priority requirements across markets were intended to address fragmentation concerns by encouraging order interaction and price competition across markets. Many of the investor comments advocated price/time priority as the best means of encouraging price competition. Further, even many of the dealers who opposed price/time priority as interfering with existing markets advocated further action to ensure *price* priority across the markets. For example, the comment letter submitted by the SIA Market Structure Committee asserted that "in order to promote quote competition, the Committee believes the Commission also must mandate price priority across market centers."<sup>66</sup>

Price priority provides assurance that other markets will not trade at inferior prices before a better-priced quote is satisfied, which is important to investor confidence. When most individual investors enter a market order, they expect to receive at a minimum the best quoted price available when the order is executed. When the markets trade at prices inferior to the best quotes published by other markets, investors may lose confidence that orders are treated fairly across markets and that they can be assured of obtaining the best possible prices for their orders. Therefore, the Commission believes that it is important to encourage price priority across markets, particularly as new sources of quotes emerge and order routing technology improves.

In response to the Fragmentation Release, a number of commenters advocated that the Commission should strengthen price priority by ensuring the development of improved electronic linkages between market centers, and mandating that market centers either match the best quoted price or route orders they receive to that better price.<sup>67</sup>

These commenters believed that these actions to strengthen price priority within the existing market structure would improve the price discovery process and combat the adverse affects of fragmentation.

The Commission agrees that fair and effective access to market centers displaying the best quote is essential. This access enables orders to be routed from other markets to a better quote, rewarding the quote for displaying the best price, and allowing orders in other market centers to interact with that price. This access also ensures that other market centers can trade with the quote if they view that quoted price as inconsistent with the true market price in the security.

Currently, access to quotes in the OTC equities markets is provided through Nasdaq's SelectNet system, which allows order routing between Nasdaq market makers, ECNs, and order entry firms, and Nasdaq's SOES system, which allows the automatic execution of small agency orders against market maker quotes.<sup>68</sup> Market makers and ECNs also can be accessed by telephone and through private connections. Market makers are required to be firm for their quote for all broker-dealers;<sup>69</sup> major ECNs are required to provide fair access to subscribers to their systems.<sup>70</sup> In the listed equities markets, exchanges are required to provide broker-dealers fair access to membership (subject to the number of seats available),<sup>71</sup> and the exchanges compete to provide members with efficient access to their markets. In addition, the ITS system allows orders to be routed among participating markets to access a better quote available on another participant market for listed equities. The recipient market is required to execute the ITS order within a minute if its better quote is still available when the order is received from another market. As discussed previously, the NASD has announced that it will link several participating ECNs with ITS as part of including the ECNs' quotes in the consolidated system, so that other ITS participants

can access these ECNs' quotes through ITS.

The Commission recognizes that fair and efficient linkages to market centers publishing quotes are important to encourage price competition and strengthening price priority. For example, fair access to ECN prices published in the consolidated quote is necessary to allow orders to interact with these prices, and to enable other market centers to access these prices to achieve price equilibrium across markets.<sup>72</sup> Because of the importance of interconnectivity, many markets are striving to build faster and more efficient links internally within their own market.<sup>73</sup> At the same time, the Commission believes that wherever possible, market-based incentives, not government imposed systems, should determine the connections between markets. Mandating a specific form of linkage across markets could interfere with the ability of independent market centers to compete by structuring their own manner of trading. For instance, while automatic execution of small orders is widely sought by order entry firms and is used internally within many markets, mandating automatic execution of orders through a linkage could be incompatible with the business model of other market centers that rely on manual interaction of orders with interest represented on their floors.

There may of course be situations where market centers create contractual or operational barriers to access from other market centers, or where internal resistance to access prevents markets from agreeing on mutually beneficial methods to provide effective access among themselves. Clearly, market centers should not be allowed to frustrate the ability of other markets to reach their quotes through unfair limitations on access,<sup>74</sup> and efficient

<sup>66</sup> SIA Market Structure Letter, note 12 above, at 12.

<sup>67</sup> See Letter from Dongwook Park and John Braniff, Executive Vice Presidents, Global Equity Division, PaineWebber Inc., to Jonathan G. Katz, Secretary, Commission, dated May 22, 2000, at 1; Letter from Thomas M. Joyce, Managing Director, Head of Equity Market Structures, Merrill Lynch, Pierce, Fenner & Smith Inc., to Jonathan G. Katz, Secretary, Commission, dated May 19, 2000, at 2; Letter from Joseph T. McLaughlin, Executive Vice President, Legal and Regulatory Affairs, Credit Suisse First Boston Corp., to Jonathan G. Katz, Secretary, Commission, dated May 12, 2000, at 2-3; SIA Market Structure Letter, note 12 above, at 10-12.

<sup>68</sup> The NASD has proposed to establish the Nasdaq Order Display Facility and the Order Collector Facility, collectively referred to as the SuperMontage. See Securities Exchange Act Release No. 42574 (March 23, 2000), 65 FR 16981 (Amendment No. 4 to the SuperMontage proposal); and Securities Exchange Act Release No. 42166 (Nov. 22, 1999), 64 FR 69125 (original SuperMontage proposal). The NASD has also proposed an order delivery and execution system, known as the Nasdaq National Market Execution System. See Securities Exchange Act Release No. 42344 (Jan. 18, 2000), 65 FR 3987.

<sup>69</sup> Exchange Act Rule 11Ac1-1(c)(2).

<sup>70</sup> 17 CFR 242.301(b)(5).

<sup>71</sup> 15 U.S.C. 78f(b)(2).

<sup>72</sup> Under Reg ATS, ATSs that display quotes through an SRO must provide broker-dealers with access to their quotes that is equivalent to those broker-dealers' access to other quotes displayed by the SRO. 17 CFR 242.301(b)(3)(iii). At a minimum, this requires ATSs to accept orders from order routing systems operated by the SRO for its members. The Order Handling Rules have a similar requirement for ECNs. Exchange Act Rule 11Ac1-1(c)(5).

<sup>73</sup> See, e.g., Securities Exchange Act Release No. 42913 (June 8, 2000), 65 FR 37587 (NYSE proposal for NYSE Direct+, a new NYSE facility to provide automatic execution of limit orders of a specified size); Securities Exchange Act Release No. 42574 (March 23, 2000), 65 FR 16981 (Amendment No. 4 to proposal to establish the Nasdaq Order Display Facility and the Order Collector Facility, collectively referred to as the SuperMontage); Securities Exchange Act Release No. 42166 (Nov. 22, 1999), 64 FR 69125 (original proposal to establish the SuperMontage).

<sup>74</sup> Subject to certain exceptions, Exchange Act Rule 11Ac1-1(c)(2) provides that a broker-dealer is

vehicles to reach these quotes are necessary. Regulatory action may be necessary to remove barriers to access. Given fair access, however, the Commission questions whether mandating a particular form of automated electronic linkage across markets is the best means of ensuring access. Rather, the Commission is considering whether market participants should now be expected to develop their own efficient linkages to other market centers sufficient to protect price priority for displayed quotes.

Multilateral linkage agreements among markets, such as the ITS Plan,<sup>75</sup> are one possible method. Bilateral linkages between specific market centers are another. Another method is for a market to open its internal linkage systems to other markets, such as Nasdaq's SelectNet link to the Chicago Stock Exchange, and the linkage between Nasdaq's CAES and ITS. Moreover, markets increasingly may be able to access each other through electronic linkages provided by broker-dealers. The NYSE has stated that it could provide electronic access to its floor to other market centers through arrangements with broker-dealers that participate in those other market centers.<sup>76</sup>

The Commission recognizes that developing individual or multilateral linkages to all the markets participating in the consolidated quote is no small task. In light of the effort necessary to establish this access, broker-dealers and market centers may in some cases fail to develop means to reach better quotes in other markets, instead choosing to simply ignore a better price displayed in an inconvenient market. The consequences of not developing efficient access could be a failure to honor the better quotes of other market centers, and worse executions for customer orders. To strengthen price priority across markets and protect customer orders, the Commission is considering whether to provide further incentives to broker-dealers and market centers to honor better quotes through a customer disclosure approach.

obligated to execute orders in listed and Nasdaq equities at a price at least as favorable as the broker-dealer's published quotations in any amount up to its published quotation size.

<sup>75</sup> In addition to establishing and governing a specific technical linkage between participating markets, the ITS Plan includes standards for interaction among the participating markets. These include trade-through satisfaction processes, autoquote restrictions, procedures for cross-market openings, and restrictions on quotations that lock or cross the quotation of another market. If the quoting markets in listed securities do not all participate in the ITS plan, these significant cross-market issues must be addressed in another fashion.

<sup>76</sup> NYSE Letter, note 10 above, at 24–25.

For a similar purpose, the Commission today proposed a rule for the options markets designed to encourage price priority, and to protect customer orders, without mandating a specific linkage.<sup>77</sup> This rule would require broker-dealers effecting transactions in listed options to disclose to their customer when the customer's order traded at a worse price than the best quote published in the options quote reporting system. In light of the limited number of exchanges trading listed options and the linkage plans that they have negotiated, pursuant to Commission order,<sup>78</sup> the rule would provide an exception for orders routed to an options market that participated in a linkage plan that has provisions reasonably designed to limit trading through the quotes of another market center, including market centers not participating in the plan.

The options trade-through disclosure rule is intended to encourage broker-dealers, and indirectly options market centers, to provide their customers with access to an execution at the best quote available. It does not prohibit trading through the superior quote, in recognition that there may be times when trading at an inferior price is in the customer's interest. In this case, however, it would require that customers be informed when their order traded at an inferior price. The rule would not require a linkage to other markets; rather, by requiring disclosure to customers, the rule would create an incentive for market participants to develop methods of access to avoid trade-throughs. The rule also would encourage participation in a linkage plan.

The Commission is considering whether a similar trade-through disclosure approach is workable in the equities markets, to strengthen the price priority provided to the best published quotes. A trade-through disclosure requirement in the equity markets could give a strong incentive to market centers to develop effective access to all market centers participating in the quote, without the Commission mandating a particular form of linkage. It could help ensure that the best quote interacts with orders across the markets by discouraging broker-dealers from routinely executing customer orders at inferior price levels. It also could help

protect customer orders from unintended executions at inferior prices.

Currently, trade-throughs of a superior quote on another equities market are discouraged by a combination of linkages between market centers, which facilitate access to the better price, and the broker-dealer duty of best execution. Broker-dealers routing small customer orders generally seek to ensure they are executed at prices no worse than the best consolidated quote at the time the order is executed,<sup>79</sup> reducing the incidence of trade-throughs. In addition, in the listed market, trade-throughs are discouraged by the ITS trade-through rule. The ITS trade-through rule, adopted by each ITS participant market, requires members of those markets to avoid trading-through superior quotes on another participant, and establishes procedures for obtaining redress from another market that trades through a superior quote. However, these provisions only cover participants in the ITS Plan. And their effectiveness in preventing trade-throughs depends in large part on market participants taking steps to seek redress for trade-throughs from another market, which does not always occur. For various reasons, executions of small customer orders at prices inferior to the best quote still appear to occur to a limited extent today.

The incidence of trades at a worse price than the best displayed quote may increase if ECN quotes are included in the consolidated quote for listed markets. If an ECN is not part of ITS, as discussed above, the ITS trade-through rule would not apply to its quotes. Even when ECN quotes improve the consolidated quote for listed equities (as they have in the Nasdaq market), there may be a risk that other market centers will ignore these quotes at times on the grounds that the quotes are not easily accessible through ITS. Some ECNs, however, have argued against being subject to the ITS trade-through rule, on the grounds that their customers would prefer an immediate execution at an inferior price to another market's quote rather than a delay while seeking to reach that better price through ITS.<sup>80</sup>

The response to these issues by a number of commenters on the Fragmentation Release was to advocate that the Commission promote quote competition by requiring each market center executing an order to either match the better price quoted by another

<sup>77</sup> Securities Exchange Act Release No. 43085 (July 28, 2000).

<sup>78</sup> See Securities Exchange Act Release No. 42029 (Oct. 19, 1999), 64 FR 57674 (order directing the options exchanges to create an intermarket options linkage plan); Securities Exchange Act Release No. 42456 (Feb. 24, 2000), 65 FR 11402 (notice of options linkage plans submitted by the exchanges).

<sup>79</sup> Broker-dealers also seek to ensure that small customer orders are executed at better than the best quote at the time the order is received.

<sup>80</sup> See Island Letter, note 13 above, at 5.

market center, or route the order to that better quote.<sup>81</sup> The Commission is concerned, however, that mandating a flat prohibition on trading at an inferior price would preclude investors from choosing to trade at an inferior price for reasons of better speed, size, or liquidity. The Commission is also concerned that it could be unfair to investors to require a fast, electronic market to route an order to a traditional exchange with a trading floor and wait up to a minute for the exchange to respond.

These concerns are not raised, however, by a trade-through disclosure requirement like that proposed for the options markets. This requirement would link execution quality more closely to the choices of the customer. It would not impede customers that are willing to trade at inferior prices in return for faster or more certain executions; these customers would presumably be unconcerned by disclosure that they traded at a worse price than the quote. Nor would it apply to broker-dealers trading as principal. Yet this requirement could promote price priority by encouraging broker-dealers and market centers to match or route to a better quote in executing the orders of most customers, for whom obtaining the best quoted price is important.

This requirement would supplement, but not replace, the broker-dealer's duty to obtain best execution for its customer orders. Under this duty, the broker-dealer is required to seek to obtain best execution for its orders by, at a minimum, regularly reviewing the quality of executions provided by its choice of markets, including the possibility of price improvement for its orders over the best quoted price.<sup>82</sup> By providing customer disclosure after the trade of the instances when a better quote was available at the time the trade occurred, a trade-through disclosure requirement would provide a better means for the investor to monitor whether its order received an inferior execution. In some cases, the investor may be satisfied with that execution. In situations where the customer would not be satisfied, the broker-dealer has an incentive to route the order to the best quote, or ensure that the market center that receives the order prevents trade-throughs through a linkage or other means.

A trade-through disclosure requirement also could complement proposed rules on disclosure of order

routing and execution practices. These rules would allow market observers to analyze market center execution quality on a collective basis, and to assess the quality of order routing decisions made by the order routing broker-dealers. Moreover, by requesting information about where their orders were routed, customers could analyze the execution quality of their destination market centers for their types of orders. A trade-through disclosure requirement would further inform customers if their *particular* orders received an inferior execution, allowing them to assess execution quality on both a collective and an individual basis.

The Commission recognizes that, in considering a trade-through disclosure requirement for the equities markets, a number of questions must be addressed. The first is whether a trade-through disclosure requirement is a cost-effective way to encourage price priority in the equities markets while avoiding prohibitions on trading strategies or mandatory linkages. This question may depend in part on the specific disclosure requirements for broker-dealers. For instance, a broker-dealer may need to rely on notification from the market centers receiving its orders of when a trade-through occurred, and at what price, in order for the broker-dealer to determine whether disclosure to its customer is required. In addition, the proposed options trade-through disclosure rule would except orders routed to markets participating in a joint industry linkage plan that contains provisions reasonably designed to limit trade-throughs of other markets' quotes. If a similar exception were to be given in the equities markets, the ITS Plan may need to be strengthened, or new joint industry plans may need to be developed, to take advantage of that exception.

Second, the trade-through requirement depends in part on the comparability of quotes that are used for determining trade-throughs. If significant fees are charged in addition to the displayed quote, a trade-through of this quote may in fact not be as significant as it appears.

In a decimal trading environment, where quotes may be for smaller size, and trade-throughs for smaller amounts, the Commission also must consider whether a trade-through disclosure requirement should apply to all trade-throughs, or only to trade-throughs of a material price or amount. This question is particularly acute with respect to large orders, where the quote size may be small in relation to the order. One possible response would be to allow broker-dealers to include the size of the

quote as part of the disclosure, so investors can better assess whether the size of the quote traded-through is meaningful compared to the size of their order. Another response would be to exempt large block orders from the disclosure requirement because of their size in relation to the quote, special handling, and general customer awareness of the quality of executions received.

For smaller customer orders, trade-through disclosure may be more useful if it includes more than just disclosure of the better quote at the time of execution. For instance, many order entry firms monitor whether orders receive at least as good a price as the best quote as of the time the market center *received* the order, in addition to the quote at the time the order was executed. Disclosure of the quote at the time of receipt would help customers monitor whether they received a worse price because the execution was delayed. To address this issue, a trade-through disclosure requirement could require disclosure if the trade received a worse price than the best quote either at time of receipt or execution.

The Commission also believes strongly that the preservation of investor confidence in the prices produced by our markets depends on a continuing commitment to the principle of price priority by both market centers and brokers routing customer orders. In some respects, current execution and order routing practices reflect a recognition of the basic expectation of the investing public that they will not trade at a price inferior to the quote. Specifically, a significant portion of the over-the-counter order flow in today's market is executed pursuant to arrangements where the market center undertakes to execute orders at the consolidated BBO at the time the order is received.

In the case of an integrated firm handling orders placed with its retail network, the firm's commitment to match the consolidated BBO is obviously a critical component of the firm's best execution analysis with respect to internalized orders. Where order routing firms send orders to market centers with which they are not affiliated, the routing firm typically receives representations from the market center about execution quality, statements on which they rely in fulfilling their best execution obligations. In either event, the Commission believes that firms responsible for the handling of customer orders, at a minimum, must assess the *ability* of a market center to perform upon a commitment to execute or

<sup>81</sup> See note 67 above.

<sup>82</sup> See Order Handling Rules Release, note 44 above, section III.C.2.

otherwise handle orders in a particular manner at the time an initial routing decision is made. In addition, as part of their regular and rigorous review, brokers must assess the *actual performance* of the market in light of those commitments.

The Commission wishes to stress the importance of the accuracy and completeness of representations made by market centers to order routing firms regarding execution quality, including, for example, promises to match the consolidated BBO, liquidity guarantees, opening guarantees, and assurance regarding the handling and display of customer limit orders. False or misleading statements made by market centers to routing firms regarding execution quality, if material and made with the requisite state of mind, may be actionable under antifraud provisions.<sup>83</sup> Given the significance of such commitments to fulfillment of best execution obligations, the Commission intends to carefully monitor them, and, where appropriate, take action if they were found to be false or misleading.

The Commission welcomes the views of market participants on whether a trade-through disclosure requirement, similar to that proposed for the options markets, would strengthen price priority in the equities markets. The Commission also invites comment on whether a trade-through disclosure requirement would give market centers sufficient incentives to develop access arrangements to other equity markets, including ECNs, whose quotes are displayed in the best consolidated quote; or whether there are impediments to access that should be addressed directly rather than by relying on market-based incentives.

### C. Conclusion

The market structure dialogue resulting from the Commission's Fragmentation Release reflected a deep

concern among many about the impact of fragmentation and internalization on the U.S. equities markets. At the same time, many others expressed a faith in competing markets' ability to use technology to create innovative solutions not yet envisioned. The dialogue also revealed a strong consensus in favor of greater standardized disclosure of the quality of executions provided by competing market centers, and disclosure of the order routing choices of broker-dealers handling customer orders. These rules could help brokers assess execution quality across markets. They could provide data to evaluate the order routing decisions of brokers. Once publicly known, this information could discipline markets and brokers that provided less than the best service for their customers. Building on this consensus, the Commission is proposing rules requiring market centers and broker-dealers to disclose publicly their order execution and order routing practices, so that customers, other market participants, analysts, and academics can evaluate their performance in this critical, but previously opaque, area of customer service. The Commission is continuing to consider the need for further market measures in response to fragmentation and internalization and is conducting an economic study of the impact of these forces on market quality.

In a world of competing market centers, quote competition and price priority are critical to maintaining the display of the best possible market prices. The Commission is committed to encouraging quote competition and protecting price priority within the existing market structure. The Commission is considering ways to preserve the incentives to publish limit orders, which contribute so significantly to the price setting process. The Commission also is committed to resolving the issues impeding including ECN prices in the consolidated quote for listed securities. The Commission is considering new approaches to encourage linkage and protection of these quotes across market centers without directly mandating the form of a linkage. In particular, the Commission is considering a disclosure rule, as that proposed for the options markets, requiring broker-dealers to inform their customers on their confirmations of the price of the best quote and their trade price when the customer did not receive the best quoted price in their trade.

### V. General Request for Comment

The Commission seeks comment on the proposals described in this release

and also on its discussion of further action to strengthen competition in the markets in section IV above. In addition to the specific requests for comment included throughout the release, the Commission asks commenters to address whether the proposed rules would further the national market system goals set out in Section 11A of the Exchange Act. The Commission also invites commenters to provide views and data as to the costs and benefits associated with the proposed rules. For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996,<sup>84</sup> the Commission also is requesting information regarding the potential impact of the proposed rules on the economy on an annual basis. If possible, commenters should provide empirical data to support their views. Comments should be submitted on or before September 22, 2000.

### VI. Paperwork Reduction Act

Certain provisions of the proposed rules contain "collection of information" requirements within the meaning of the Paperwork Reduction Act of 1995,<sup>85</sup> and the Commission has submitted them to the Office of Management and Budget for review in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11. The titles for the collection of information are: "Rule 11Ac1-5" and "Rule 11Ac1-6." An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### A. Summary of Collections of Information

Proposed Rule 11Ac1-5 would require a market center that trades national market system securities to prepare and make available to the public monthly electronic reports that include uniform statistical measures of order execution quality. For each national market system security traded by the market center, the report would include 20 subcategories (based on order type and size), and each subcategory could include up to 20 columns of statistical information.

Proposed Rule 11Ac1-6 would require broker-dealers that route customer orders in equity and options securities to prepare and make available to the public quarterly reports that describe and analyze their order routing practices. In the reports, broker-dealers would be required to quantify the nature of their order flow, identify each venue

<sup>83</sup> For example, Rule 15c1-2(b), 17 CFR 240.15c1-2(b), defines the manipulative, deceptive, or other fraudulent devices or contrivances proscribed in Section 15(c)(1) of the Exchange Act, 15 U.S.C. 78o(c)(1), "to include any untrue statement of a material fact and any omission to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they are made, not misleading, which statement or omission is made with knowledge or reasonable grounds to believe that it is untrue or misleading." See also Rule 10b-5(b), 17 CFR 240.10b-5(b). The obligation to refrain from such statements or omissions does not depend on the existence of any fiduciary or similar duty, since even absent such a duty there is an "ever-present duty not to mislead" persons who trade in securities. *Basic Inc. v. Levinson*, 485 U.S. 224, 240 n.18 (1988). See, e.g., *Kline v. Western Government Securities, Inc.*, 24 F.3d 480, 491 (3d Cir.), cert. denied, 513 U.S. 1032 (1994); *Ackerman v. Schwartz*, 947 F.2d 841, 847 (7th Cir. 1991).

<sup>84</sup> Pub. L. No. 104-121, 110 Stat. 857.

<sup>85</sup> 44 U.S.C. 3501 *et seq.*

to which they directed orders, state the percentage of orders sent to that venue, discuss the material aspects of their relationship with each venue, and discuss significant factors that affected their order routing decisions. In addition, proposed Rule 11Ac1-6 would require broker-dealers to disclose, upon the request of a customer, the venues to which that customer's orders were routed for execution in the six months prior to the request, whether the orders were directed or non-directed orders, and the time of the transactions, if any, that resulted from such orders.

#### *B. Need for and Proposed Use of Information*

The Commission believes that the order execution information required by proposed Rule 11Ac1-5 is needed to further the national market system objectives set forth in Exchange Act Section 11A(a)(1)(C). These objectives include the economically efficient execution of orders, fair competition among broker-dealers and among markets, the availability to broker-dealers and investors of information with respect to transactions in securities, and the practicability of brokers executing investors' orders in the best market. While the currently available consolidated quote provides some information on the prices available from market centers, this information may not accurately reflect the quality of order executions that may be obtained from individual market centers. Many market centers execute orders at prices better than, and in some cases inferior to, the consolidated quote at the time of order receipt. Although some market centers currently disseminate information on execution quality, that information generally is not made available to the public and may not permit comparative analysis across markets.

The information disclosed by market centers pursuant to proposed Rule 11Ac1-5 would be made available to the public, and the Commission expects that this information would be used by broker-dealers, investors, and market centers. The Commission believes that broker-dealers would use the information to make more informed choices in deciding where to route orders for execution. The Commission also expects that broker-dealers would use the information in connection with their regular evaluations of internal order handling practices, as required by the duty of best execution. Investors may use the information to evaluate the order handling practices of their brokers. They also may use the information to instruct their broker-

dealers to route orders to market centers that offer superior executions for their types of orders. Market centers may use the information to compete on the basis of execution quality.

Like the information required by proposed Rule 11Ac1-5, the Commission believes that the order routing information required by proposed Rule 11Ac1-6 is needed to further the national market system objectives set forth in Exchange Act Section 11A(a)(C). Improved order execution information from the market centers will be of little benefit to investors if they cannot determine where their orders are routed. In addition, order routing information will allow customers to monitor their broker-dealer's order routing decisions.

The Commission believes that investors may use the information submitted pursuant to proposed Rule 11Ac1-6 in selecting a broker-dealer and in determining whether the broker-dealers they have chosen are making sound order-routing decisions. Broker-dealers may use the information to compete on the basis of order routing services.

#### *C. Respondents*

The collection of information obligations of proposed Rule 11Ac1-5 would apply to all market centers that receive covered orders in national market system securities. Market centers are defined as exchange market makers, OTC market makers, alternative trading systems, national securities exchanges, and national securities associations. The Commission estimates that approximately 140 exchange market makers, 450 OTC market makers, 29 alternative trading systems, seven national securities exchanges, and one national securities association would be subject to the collection of information obligations of proposed Rule 11Ac1-5. Each of these respondents would be required to respond to the collection of information on a monthly basis.

The collection of information obligations of proposed Rule 11Ac1-6 would apply to all broker-dealers that route non-directed customer orders in covered securities. The Commission estimates that there are currently approximately 3800 broker-dealers that would be subject to the collection of information obligations of proposed Rule 11Ac1-6.<sup>86</sup> Each of these respondents would be required to

respond to the collection of information on a quarterly basis with respect to the rule's reporting obligations, and on an ongoing basis with respect to the rule's requirement to respond to customer requests for order routing information.

#### *D. Total Annual Reporting and Recordkeeping Burdens*

Proposed Rule 11Ac1-5 would require market centers to make available to the public monthly order execution reports in electronic form. To prepare the reports, market centers first would need to collect basic data on orders and executions (e.g., type and size of order, time of order receipt and execution). Second, this data would need to be processed to calculate the statistics required by the proposed rule and present those statistics in an electronic report.

The Commission believes that many market centers retain most, if not all, of the underlying raw data necessary to generate these reports in electronic format. Consequently, it does not appear that the proposed rule would require substantial additional data collection burdens. Based on this assumption, the Commission staff estimates that, on average, the proposed rule would cause respondents to spend 6 hours per month in additional time to collect the data necessary to generate the reports, or 72 hours per year.<sup>87</sup> With an estimated 627 market centers subject to the proposed rule, the total data collection cost to comply with the monthly reporting requirement is estimated to be 45,144 hours per year.

Once the necessary data is collected, market centers could either program their systems to generate the statistics and reports, or transfer the data to a service provider (such as an independent company in the business of preparing such reports or an SRO) that would generate the statistics and reports. Although the largest market centers and SROs may choose to generate the reports themselves, the Commission anticipates that the great majority of market centers will rely on service providers to prepare the reports for them. It is significantly more efficient to consolidate the processing and reporting function in a limited number of entities than for each market center to prepare its own reports. Once an entity has incurred the up-front costs of programming its systems to process data and generate a report for a single

<sup>86</sup> This estimate is based on FYE 1999 FOCUS Reports received by the Commission. While there are currently approximately 7500 broker-dealers registered with the Commission, only approximately 3800 broker-dealers potentially route non-directed orders in covered securities.

<sup>87</sup> This figure could vary substantially among market centers. In addition, some SROs may provide this data collection service for their members because such centralized data collection is more efficient than data collection by individual members.

market center, there is very little additional cost to performing the same function for many additional market centers. Based on discussions with industry sources, the Commission staff estimates that an individual market center could retain a service provider to prepare a monthly report for approximately \$2500 per month. This per-respondent estimate is based on the rate that a market center could expect to obtain if it negotiated on an individual basis. Based on discussions with industry sources, we believe it is likely that a group of market centers, particularly the smaller members of a particular SRO, could obtain a much lower per-respondent rate on a collective basis. Thus, particularly for the smaller members of an SRO, the monthly cost to retain a service provider could be substantially less than \$2500. Based on the \$2500 estimate, however, the monthly cost to the 627 market centers to retain service providers to prepare reports would be \$1,567,500, or an annual cost of approximately \$18.8 million.

Proposed Rule 11Ac1-6 would require broker-dealers to prepare and disseminate quarterly order routing reports. Much of the information needed to generate these reports already should be collected by broker-dealers in connection with their periodic evaluations of their order routing practices. To comply with the proposed rule, however, broker-dealers would incur additional burdens in preparing the reports and disseminating them on a free Internet web site (and responding to requests for written copies of the reports).

There are extreme differences in the nature of the securities business conducted by the approximately 3800 broker-dealers that would be subject to the proposed rule. They range from the very largest firms with nationwide operations, which are relatively few in number, to thousands of much smaller introducing firms. To handle their customer accounts, these small firms rely primarily on clearing brokers. There currently are approximately 330 clearing brokers. The Commission previously has noted that "from a functional perspective, introducing and clearing brokers act as a unit in handling a customer's account. In most respects, introducing brokers are dependent on clearing firms to clear and to execute customer trades, to handle customer funds and securities, and to handle many back-office functions, including issuing confirmations of customer trades and customer account

statements."<sup>88</sup> The Commission anticipates that clearing brokers primarily will bear the burden of complying with the reporting and recordkeeping requirements of the proposed rule on behalf of very small introducing firms. In addition, however, there are approximately 610 introducing brokers that receive funds or securities from their customers.<sup>89</sup> Because at least some of these firms also may have greater involvement in determining where customer orders are routed for execution, they have been included, along with clearing brokers, in estimating the total burden of the proposed rule.

Based on discussions with industry sources, the Commission staff estimates that each firm significantly involved in order routing practices will incur an average burden of 40 hours to prepare and disseminate a quarterly report required by Rule 11Ac1-6, or a burden of 160 hours per year. With an estimated 940 broker-dealers significantly involved in order routing practices, the total burden per year to comply with the quarterly reporting requirement in proposed Rule 11Ac1-6 is estimated to be 150,400 hours.

Proposed Rule 11Ac1-6 also would require broker-dealers to respond to individual customer requests for information on orders handled by the broker-dealer for that customer. Clearing brokers generally would bear the burden of responding to these requests. The Commission staff estimates that each clearing broker will incur an average burden of 0.2 hours to prepare, deliver, and retain a response to a customer required by Rule 11Ac1-6. The annual burden could vary significantly among clearing brokers based on the number of customers and number of inquiries by each customer. The Commission staff estimates that an average clearing broker will incur an annual burden of 400 hours (2000 responses × 0.2 hours/response) to prepare, disseminate and retain responses to customers required by Rule 11Ac1-6. With an estimated 330 clearing brokers subject to the proposed rule, the total burden per year to comply with the customer response requirement in proposed Rule 11Ac1-6 is estimated to be 132,000 hours.

#### *E. General Information About the Collections of Information*

Any collections of information pursuant to the proposed rules would be mandatory. The monthly order

execution reports prepared and disseminated by market centers pursuant to proposed Rule 11Ac1-5 would be available to the public and would not be kept confidential. Likewise, the quarterly order routing reports prepared and disseminated by broker-dealers pursuant to Rule 11Ac1-6 would be available to the public and would not be kept confidential. The individual responses by broker-dealers to customer requests for order routing information required by Rule 11Ac1-6 would be made available to the customer and not to the general public. The Commission, SROs, and other securities regulatory authorities would gain possession of the responses only upon request. Any responses received by the Commission, SROs, and other securities regulatory authorities would be kept confidential, subject to the provisions of the Freedom of Information Act, 5 U.S.C. 552.

Market centers that are national securities exchanges or national securities associations would be required to retain the collections of information required under proposed Rule 11Ac1-5 for a period of not less than five years, the first two years in an easily accessible place. All other market centers would be required to retain the collections of information required under proposed Rule 11Ac1-5 for a period of not less than three years, the first two in an easily accessible place.

Broker-dealers would be required to retain the collections of information required under proposed Rule 11Ac1-6 for a period of not less than three years, the first two in an easily accessible place.

#### *F. Request for Comment*

Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission solicits comments to: (1) Evaluate whether the proposed collections of information are necessary for the proposed performance of the functions of the agency, including whether the information shall have practical utility; (2) evaluate the accuracy of the Commission's estimate of the burden of the proposed collections of information; (3) enhance the quality, utility, and the clarity of the information to be collected; and (4) minimize the burden of collection on those who are to respond, including through the use of electronic or automated collection techniques or other forms of information technology.

Persons wishing to submit comments on the collection of information requirements should direct them to the following persons: (1) Desk Officer for the Securities and Exchange Commission, Office of Information and

<sup>88</sup> Securities Exchange Act Release No. 40122 (June 30, 1998), 63 FR 35508, n. 65.

<sup>89</sup> This estimate is based on FYE 1999 FOCUS Reports received by the Commission.



Regulatory Affairs, Office of Management and Budget, Washington, DC 20503; and (2) Jonathan G. Katz, Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-0609, with reference to File No. S7-16-00. The Commission has submitted the proposed collections of information to OMB for approval. Members of the public should direct any general comments to both the Commission and OMB within 30 days. OMB is required to make a decision concerning the collections of information between 30 and 60 days after publication in the **Federal Register**. A comment to OMB is best assured of receiving full consideration if it is received by OMB within 30 days of publication of this release. Requests for the materials submitted to OMB by the Commission with regard to these collections of information should be in writing, refer to File No. S7-16-00, and be submitted to the Securities and Exchange Commission, Records Management, Office of Filings and Information Services at the address set forth above.

## VII. Cost-Benefit Analysis

The Commission is proposing two rules to improve public disclosure of broker-dealer and market center practices in the routing and execution of customer orders. The rules are intended to increase access to information about how investors' securities transactions are executed, thereby enhancing an investor's ability to make choices on the basis of execution criteria important to the particular investor. The required disclosures also should aid broker-dealers in satisfying their duty of best execution. The disclosures and enhanced investor knowledge should promote vigorous and beneficial competition among broker-dealers to seek out, and among market centers to provide, superior execution of customer orders.

### A. Costs and Benefits of Proposed Rule 11Ac1-5

Under proposed Rule 11Ac1-5, each market center (defined as any national securities exchange, national securities association, exchange market maker, OTC market maker, or alternative trading system) would be required to make monthly disclosure of certain statistical measures of execution quality on a security-by-security basis.<sup>90</sup> The

<sup>90</sup> As set out more specifically in section III.B.2 above, the required disclosures will reflect statistical measures of such things as number of orders, number of shares, number of cancelled orders, size of spreads, frequency and size of price improvement, frequency of executions at the quote,

Commission anticipates that the proposed rule will generate the benefits and costs described below.

#### 1. Benefits

The Commission anticipates that the proposed rule will help broker-dealers fulfill their duty of best execution. That duty requires a broker-dealer to seek the most favorable terms reasonably available under the circumstances for a customer's order. Routing orders to a market center that merely guarantees an execution at the best published quote does not necessarily satisfy that duty. A broker-dealer must consider several other factors affecting the quality of execution, including, for example, the opportunity for price improvement, the likelihood of execution (which is particularly important for customer limit orders), the speed of execution, the trading characteristics of the security, and any guaranteed minimum size of execution. While broker-dealers currently may be able to obtain order execution information from some market centers, that information may be of limited use and may not allow broker-dealers to compare execution quality among the different market centers. The Commission expects that the monthly reporting of uniform statistical measures required by the rule will provide broker-dealers with a clearer sense of execution quality among market centers, and will facilitate a broker-dealer's ability to obtain best execution for its customers.

The Commission also believes that the reporting required by the rule will facilitate investors' ability to evaluate the quality of order executions provided by different market centers and to have meaningful input into how their broker-dealer obtains execution of their orders. Currently, investors possess few tools to compare order executions on different markets, and they typically leave routing decisions to their broker-dealer. Different investors, however, may have different concerns and priorities related to execution of their orders, such as an opportunity for price improvement and the speed of execution. The proposed rule will require disclosure of information that will enhance investors' evaluation of these matters.

The Commission believes that the proposed rule will have the additional benefit of stimulating competition between market centers to improve the quality of their executions. Market centers compete to attract order flow. An important way in which market

frequency of executions outside the quote, and speed of execution (both with and without price improvement).

centers seek to attract order flow is by providing—and developing a reputation for providing—superior executions. The proposed rule will give broker-dealers and investors meaningful information, which they have not previously had, bearing on execution quality. Access to that information will allow broker-dealers and investors to direct orders to market centers on the basis of their order execution performance. The Commission anticipates that this will benefit investors by putting competitive pressure on market centers to reduce inefficiencies, to increase opportunities for price improvement, to decrease instances of price “disimprovement,” and to improve the quality of execution in all other respects. Ultimately, the Commission anticipates that these improvements in execution also will benefit investors by leading to reduced trading costs, increased trading quality, and possibly increased trading volume.

For example, the competition that flows from the required disclosure will likely reduce differences in spreads between market centers. If this competition induces market centers whose effective spread is greater than the median effective spread to execute trades at the median effective spread, the rule could lead to substantial savings for investors. For example, the annual savings to investors who submit market orders in Nasdaq stocks under this assumption is estimated to be \$160 million.<sup>91</sup> Moreover, if all Nasdaq market centers executed trades at the lowest effective spread, the savings to investors would be even greater.<sup>92</sup> There also could be a similar type of benefit for investors in the listed markets, although to a lesser extent given the smaller number of market centers.

The Commission requests comment on the benefits of the proposed rule. Will the proposed rule have the benefits that are described above? Are there benefits to the proposed rule other than those described here? Are there ways in which to quantify any of the benefits of the rule? We specifically request any supporting data and analyses quantifying the benefits.

<sup>91</sup> These savings are based on a sample of Nasdaq securities from June 2000 and represent the benefits summed over all Nasdaq stocks for one year. The annual savings exclude changes in effective spread for marketable limit orders and for any trade greater than 4999 shares. The sample also excludes trades on ECNs because ECNs generally do not accept market orders.

<sup>92</sup> Under this assumption, annual savings to Nasdaq investors would be approximately \$385 million. These savings are calculated in the manner described in the preceding note.

## 2. Costs

For purposes of the Paperwork Reduction Act, the Commission staff has estimated that the proposed rule could, on an annual basis, impose 45,144 burden hours and \$18.8 million in other costs on all market centers. The staff estimates that 100% of the burden hours could be expended by market centers' internal staff. Assuming internal staff costs of \$53 per hour, a market center could expend a total of approximately \$2.4 million. Consequently, the estimated aggregate annual cost for compliance with the proposed rule could be approximately \$21.2 million (\$18.8 million + \$2.4 million). We request comment on the potential costs of the rule identified above. In addition, we request comment on whether the rule would impose any other costs not described here.

### *B. Costs and Benefits of Proposed Rule 11Ac1-6*

Under proposed Rule 11Ac1-6, broker-dealers that route orders in equity and options securities on behalf of customers would be required to prepare quarterly reports that describe their order routing practices. Proposed Rule 11Ac1-6 also would require broker-dealers to disclose to customers, on request, where that customer's individual orders were routed for execution.

## 1. Benefits

The Commission anticipates that improved disclosure of order routing practices will result in better-informed investors, will provide broker-dealers with more incentives to obtain superior executions for their customer orders, and will thereby increase competition between market centers to provide superior executions. Currently, the decision about where to route a customer order is frequently made by the broker-dealer, and broker-dealers may make that decision, at least in part, on the basis of factors that are unknown to their customers. The rule's disclosure requirements will provide investors with a clearer picture of how their broker-dealers are meeting their best execution obligation.<sup>93</sup> The Commission contemplates that this will result in greater investor involvement in order routing decisions and, ultimately,

will result in improved execution practices. Because of the disclosure requirements, broker-dealers may be more inclined (or investors may direct their broker-dealers) to route orders to market centers providing superior execution. Broker-dealers who fail to do so may lose customers to other broker-dealers who will do so. This increased investor knowledge and involvement could ultimately have the effect of increasing competition between market centers to provide superior execution.

We request comment on the benefits of the proposed rule. Will the proposed rule have the benefits that we have described? Are there ways in which to quantify any of those benefits? Are there benefits to the proposed rule other than those described here?

## 2. Costs

For purposes of the Paperwork Reduction Act, the Commission staff has estimated that the proposed rule could, on an annual basis, impose 150,400 burden hours on broker-dealers to comply with the quarterly reporting requirement of the proposed rule. The staff estimates that 100% of those burden hours will be expended by broker-dealers' internal staff. Assuming internal staff costs that average \$85 per hour,<sup>94</sup> the aggregate annual cost of compliance with the quarterly reporting requirement could be approximately \$12.8 million. In addition, compliance with the proposed rule will require staff time to respond to requests by customers for disclosure of the market centers to which their orders have been routed. For purposes of the Paperwork Reduction Act, the Commission staff has estimated that compliance with such requests could, on an annual basis, impose 132,000 burden hours. Assuming average internal staff costs of \$53 per hour, the annual cost of compliance with the customer response requirement could be approximately \$7 million.

The Commission requests comment on the potential costs of the rule identified above. In particular, comment is invited on how best to estimate the number of customer requests that broker-dealers will receive pursuant to the rule, if adopted. The Commission also requests comment whether the rule would impose any other costs not described here.

<sup>94</sup> A higher average rate of internal staff costs is used for the preparation of quarterly reports based on the assumption that they would be prepared, at least in part, by higher level staff than that involved with responding to customer requests.

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

Section 23(a)(2) of the Exchange Act requires the Commission, when making rules under the Exchange Act, to consider the impact of such rules on competition.<sup>95</sup> In addition, Section 3(f) of the Exchange Act requires the Commission, when engaging in rulemaking that requires it to consider or determine whether an action is necessary or appropriate in the public interest, to consider whether the action will promote efficiency, competition, and capital formation.<sup>96</sup>

The Commission has considered the proposed rules in light of these standards and preliminarily believes that the proposed rules will not impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act. To the contrary, by enhancing the disclosure of order execution and order routing practices, the proposed rules may promote fair and vigorous competition. Investors currently have little information to evaluate the order routing practices of their broker-dealers. As a result, there currently may be limited opportunities for fair competition among broker-dealers based on the quality of their order routing services. By requiring broker-dealers to disclose information on their order routing practices, the proposed rules may stimulate competition among broker-dealers based on the quality of their order routing services. Similarly, by requiring market centers to disclose order execution information in a manner that permits comparative analysis, the proposed rules may stimulate competition among market centers based on the quality of their order execution services. In addition, because the proposed rules would apply equally to market centers, with respect to order execution disclosure, and broker-dealers, with respect to order routing disclosure, the proposed rules would not result in disparate treatment of these entities that could hinder competition.

The Commission also believes that the proposed rules would allow investors and broker-dealers to make better-informed choices in finding the best market for orders to be executed. Accordingly, the proposed rules may promote market efficiency. In addition, the availability of information on order execution and order routing quality may

<sup>95</sup> 15 U.S.C. 78w(a).

<sup>96</sup> 15 U.S.C. 78c(f).

<sup>93</sup> As described more fully in section III.C.2 above, the rule would require that broker-dealers provide quarterly reports describing its order routing objectives, the extent to which order executions achieved those objectives, a comparison of the quality of executions actually obtained with those produced by other venues, and material facts concerning the broker-dealer's relationship with market centers to which it routes orders.

bolster investor confidence, thereby promoting capital formation. The Commission requests comment on the effects of the proposed rules on competition, efficiency, and capital formation.

## IX. Initial Regulatory Flexibility Analysis

This Initial Regulatory Flexibility Analysis ("IRFA") has been prepared in accordance with the Regulatory Flexibility Act.<sup>97</sup> It relates to proposed new Rules 11Ac1-5 and 11Ac1-6 under the Exchange Act. The proposed rules would require market centers to make disclosures of order execution information and broker-dealers to make disclosures of order routing information.

### A. Reasons for the Proposed Action

The Commission believes that there is a need for improved disclosure of order execution information by market centers. Investors today can obtain consolidated quote information that represents the best bid and offer from among the different market centers. However, this information may not accurately reflect the quality of order executions that may be obtained from the different market centers. Many market centers offer significant opportunities for execution of orders at prices better than the consolidated quote. Conversely, some market centers execute orders at prices less favorable than the consolidated quote at the time of order receipt. The amount of price improvement or disimprovement may result in significant savings or costs to investors. Although some market centers make order execution information available to private companies or their members, this information generally has not been publicly disseminated. Moreover, the lack of uniformity in the way this information is prepared has made it difficult for users of the information to compare execution quality across market centers.

The Commission also believes that there is a corresponding need for disclosure of order routing information by broker-dealers. If investors do not know where their broker-dealers route their orders for execution, then the order execution information provided by market centers will be of little benefit to investors. The unavailability of easily accessible order routing information also may make it difficult for investors

to monitor their broker-dealer's order-routing decisions.

### B. Objectives and Legal Basis

Proposed Rule 11Ac1-5 is designed to address the need for improved disclosure of order execution information by market centers. In particular, the rule is intended to provide investors and broker-dealers with uniform information on execution quality from the different market centers that can be used to compare execution quality across market centers. This information should assist investors and broker-dealers in finding the best market for orders to be executed, thereby promoting competition among market centers and broker-dealers on the basis of execution quality and leading to more efficient transactions in securities.

Proposed Rule 11Ac1-6 is designed to address the complementary need for broker-dealers to disclose to customers where their orders are routed for execution. The primary objective of the rule is to afford customers a greater opportunity to monitor their broker-dealer's order routing practices. Supplied with information on where their orders are routed, as well as information about the quality of execution from the market centers to which their orders are routed, investors will be able to make better informed decisions with respect to their orders. The information also may assist investors in selecting a broker-dealer.

Rules 11Ac1-5 and 11Ac1-6 are proposed under the Commission's authority set forth in Sections 3(b), 5, 6, 11A, 15, 17, 19 and 23(a) of the Exchange Act.

### C. Small Entities Subject to the Rules

Both proposed Rule 11Ac1-5 and proposed Rule 11Ac1-6 would affect entities that are considered small entities for purposes of the Regulatory Flexibility Act.

#### 1. Small Entities Affected by Proposed Rule 11Ac1-5

Proposed Rule 11Ac1-5 would impose disclosure requirements on every market center that receives covered orders in national market system securities. Market centers are defined as exchange market makers, OTC market makers, alternative trading systems, national securities exchanges, and national securities associations.

Exchange market makers, OTC market makers, and alternative trading systems that are not registered as exchanges are required to register as broker-dealers. Accordingly, these entities would be considered small entities if they fall within the standard for small entities

that applies to broker-dealers. Under Exchange Act Rule 0-10(b), a broker-dealer is considered a small entity for purposes of Regulatory Flexibility Act if (1) it had total capital of less than \$500,000 on the date in the prior fiscal year as of which its audited financial statements were prepared, of, if not required to prepare such statements, it had total capital of less than \$500,000 on the last business day of the preceding fiscal year, and (2) it is not affiliated with any person (other than a natural person) that is not a small entity.<sup>98</sup> Based on this standard, the Commission estimates that two exchange market makers, one OTC market maker, and no alternative trading systems that would be subject to proposed Rule 11Ac1-5 are small entities.<sup>99</sup>

None of the national securities exchanges or the national securities association subject to the proposed rule is a small entity. Paragraph (e) of the Exchange Act Rule 0-10<sup>100</sup> provides that the term "small business," when referring to an exchange, means any exchange that has been exempted from the reporting requirements of 17 CFR 240.11Aa3-1. Under this standard, none of the national securities exchanges affected by the proposed rule is a small entity. Similarly, the national securities association subject to the proposed rule is not a small entity as defined by 13 CFR 121.201.

#### 2. Small Entities Affected by Proposed Rule 11Ac1-6

Proposed Rule 11Ac1-6 would impose disclosure requirements on every broker-dealer that routes non-directed customer orders in covered securities. Under the standard for determining whether a broker-dealer is a small entity in Exchange Act Rule 0-10(b), the Commission estimates that approximately 41 broker-dealers subject to proposed Rule 11Ac1-6 are small entities.<sup>101</sup>

### D. Reporting, Recordkeeping and Other Compliance Requirements

#### 1. Reporting Requirements Under Proposed Rule 11Ac1-5

Proposed Rule 11Ac1-5 would impose new reporting requirements on market centers, including those

<sup>98</sup> Exchange Act Rule 0-10(b), 17 CFR 240.0-10(c).

<sup>99</sup> These estimates are based on the FYE 1999 FOCUS Reports received by the Commission from exchange market makers, OTC market makers, and ATSs that would be subject to proposed Rule 11Ac1-5. [100]: 17 CFR 240.0-10(e).

<sup>100</sup> 17 CFR 240.0-10(e).

<sup>101</sup> This estimate is based on the FYE 1999 FOCUS Reports received by the Commission from broker-dealers subject to proposed Rule 11Ac1-6.

<sup>97</sup> 5 U.S.C. 601 *et seq.* Pursuant to 5 U.S.C. 603, when an agency is engaged in a proposed rulemaking, "the agency shall prepare and make available for public comment an initial regulatory flexibility analysis."

considered small entities. Under the proposed rule, market centers would be required to prepare and make available to the public monthly reports that categorize and summarize their order executions. For purposes of the Paperwork Reduction Act, the Commission staff estimates that individual market centers would, on an annual basis, expend 72 burden hours and incur \$30,000 (\$2500 per month) in monetary costs to comply with the monthly reporting requirement. Assuming internal compliance staff costs of \$53 per hour, the total cost per small entity would be \$3816. The Commission estimates the total cost per year required to prepare and disseminate the monthly reports by the estimated three small entities subject to the proposed rule would be \$108,360 ( $3 \times (\$30,000 + \$3816)$ ). As discussed further above, small entities likely could obtain a much reduced rate through the auspices of an SRO or other organization.

## 2. Reporting Requirements Under Proposed Rule 11Ac1-6

Proposed Rule 11Ac1-6 would impose new reporting requirements on broker-dealers, including those considered small entities. Under the proposed rule, broker-dealers would be required to prepare and make available to the public quarterly reports that discuss and analyze their routing of non-directed orders in covered securities. In addition, broker-dealers, on request of a customer, would be required to disclose the identity of the venues to which the customer's orders were routed in the six months prior to the request, whether the orders were directed or non-directed orders, and the time of the transactions resulting from such orders.

As discussed in section VI.D above, it is unlikely that small entities in general will have significant involvement in order routing practices, primarily because they are affiliated with a clearing broker. With respect to the 41 small entities that are subject to the proposed rule and are not affiliated with a clearing broker, the Commission does not anticipate that they engage in significant order routing on behalf of customers. In section III.C.1 above, the Commission requested comment on whether the proposed rule should exclude broker-dealers that route a relatively small number of orders on behalf of customers. If any of the 41 small entities were required to comply with the proposed rule, the Commission staff estimates that they would expend, on average, 32 hours to prepare quarterly reports and 2 hours to respond

to eight customer requests.<sup>102</sup> Assuming internal compliance costs that average \$85 per hour, the aggregate cost for each small entity to comply with the proposed rule is estimated to be \$2890.

## E. Duplicative, Overlapping or Conflicting Federal Rules

Proposed Rule 11Ac1-6 would require a broker-dealer to disclose the material aspects of its relationship with each venue to which it routes orders, including a description of any payment for order flow arrangements. Currently, Exchange Act Rule 10b-10(a)(2)(i)(C) requires a broker-dealer to disclose on each customer transaction confirmation (1) whether the broker-dealer received payment for order flow in connection with the transaction, and (2) that the broker-dealer will furnish to the customer the source and nature of the compensation upon written request. In addition, Exchange Act Rule 11Ac1-3(a) requires a broker-dealer to disclose in new and annual account statements its policies on the receipt of payment for order flow.

The payment for order flow disclosure required under proposed Rule 11Ac1-6 would complement the conflict of interest disclosures required in Rules 10b-10(a)(2)(i)(C) and 11Ac1-3. However, the Commission is requesting comment on whether the existing disclosure requirements should be modified to reflect the proposed new disclosure requirement.

Proposed Rule 11Ac1-6 also would require broker-dealers, on request of a customer, to disclose (in addition to other information) the time of the transactions resulting from orders sent by the customer to the broker-dealer in the six months prior to the request. Currently, Rule 10b-10(a)(1) requires a broker-dealer to include on a transaction confirmation either the time of the transaction or a statement that the time of the transaction will be furnished on written request.

The Commission does not believe that any federal rules duplicate, overlap with, or conflict with proposed Rule 11Ac1-5.

## F. Significant Alternatives

The Regulatory Flexibility Act directs the Commission to consider significant alternatives that would accomplish the stated objectives, while minimizing any

significant adverse impact on small entities. In connection with the proposed rules, the Commission considered the following alternatives: (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rules, or any part thereof, for small entities.

## 1. Alternatives to Proposed Rule 11Ac1-5

Proposed Rule 11Ac1-5 is designed to provide uniform order execution information from the different market centers to allow investors and broker-dealers to compare execution quality across markets. Accordingly, the Commission believes that establishing differing reporting requirements for small entities may be inconsistent with the objectives of the proposed rule. Similarly, the Commission believes that the clarification, consolidation, or simplification of reporting requirements for small entities may be inconsistent with the objective of providing uniform order execution information from the different market centers. However, the Commission is considering whether it would be feasible to allow small market centers to provide raw data rather than the statistical measures required by the proposed rule.

Regarding the use of performance standards rather than design standards, the proposed rule specifies the statistical measures that must appear in the monthly order execution reports. The Commission is considering, however, whether the proposed rule could require market centers only to make available electronic files with raw data on an order-by-order basis. Under this alternative, market centers would provide the necessary fields of information, and analysts could calculate the statistical measures of execution quality that they consider appropriate. The proposed rule does not establish a particular technology for disseminating the required reports to the public, other than requiring the use of an electronic format. The proposed rule would direct the SROs to act jointly in establishing procedures for market centers to follow in making their reports available to the public in a readily accessible, uniform, and usable electronic format.

As to whether the rule should exempt small entities from the rule's coverage,

<sup>102</sup> These estimates are smaller than those used generally to estimate the burden costs for purposes of the Paperwork Reduction Act. Assuming any of the 41 small entities actually route non-directed orders on behalf of customers, it is likely that the number of orders would be very small. The burden of preparing quarterly reports and responding to customer requests would therefore be substantially less than the overall industry average.

the Commission is considering several alternatives that could minimize the impact of the rule on small entities. Specifically, the Commission is considering an exemption for market centers that execute relatively few orders in total. Also, the Commission is considering an exemption to eliminate the disclosure requirement for individual securities in which a market center executes relatively few orders. Finally, as discussed above, the Commission is considering whether it would be feasible to allow small market centers to provide raw data rather than the statistical measures required by the proposed rule. The Commission requests comment on these alternatives in this release.

## 2. Alternatives to Proposed Rule 11Ac1-6

Proposed Rule 11Ac1-6 is designed to provide investors with information on the order routing practices of their broker-dealers. The proposed rule requires broker-dealers to prepare quarterly order routing reports and respond to requests from individual investors for information on how their orders were routed. The Commission is requesting comment, however, on whether to exclude from the proposed rule broker-dealers that route a relatively small number of customer orders. As to the clarification, consolidation, or simplification of reporting requirement for small entities, the Commission does not believe that the proposal could be formulated differently for small entities and still achieve the stated objectives.

Regarding the use of performance standards rather than design standards, the proposed rule requires that the quarterly reports be disseminated through the Internet (or by written copy on request). The purpose of using the Internet is to assure ready access to the reports and to ease the burden of compliance on broker-dealers. However, the Commission is requesting comment on alternative methods of disseminating the reports.

An exemption from the rule for small entities might be inconsistent with the objectives of the rule. The primary objective of the rule is to afford customers a greater opportunity to monitor their broker-dealer's order routing practices. All broker-dealers currently have an obligation to periodically review their order routing practices to meet their duty of best execution to their customers. As noted above, however, the Commission is requesting comment on whether to exclude from the proposed rule broker-

dealers that route a relatively small number of customer orders.

## G. Solicitation of Comments

The Commission encourages the submission of comments with respect to any aspect of this IRFA. In particular, the Commission requests comment regarding: (1) the number of small entities that may be affected by the proposed rules; (2) the existence or nature of the potential impact of the proposed rules on small entities discussed in the analysis; and (3) how to quantify the impact of the proposed rules. Commentators are asked to describe the nature of any impact and provide empirical data supporting the extent of the impact. Such comments will be considered in the preparation of the Final Regulatory Flexibility Analysis, if the proposed rules are adopted, and will be placed in the same public file as comments on the proposed rules themselves.

## X. Statutory Authority

Pursuant to the Exchange Act and particularly Sections 3(b), 5, 6, 11A, 15, 17, 19 and 23(a) thereof, 15 U.S.C. 78c, 78e, 78f, 78k-1, 78o, 78q, 78s and 78w(a), the Commission proposes to adopt Sections 240.11Ac1-5 and 240.11Ac1-6 of Chapter II of Title 17 of the Code of Federal Regulations in the manner set forth below.

## List of Subjects in 17 CFR Part 240

Broker-dealers, Reporting and recordkeeping requirements, Securities.

## Text of Proposed Rules

For the reasons set forth in the preamble, the Commission proposes to amend Chapter II of Title 17 of the *Code of Federal Regulations* as follows:

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

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

**Authority:** 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z-2, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78d, 78f, 78i, 78j, 78j-1, 78k, 78k-1, 78l, 78m, 78n, 78o, 78p, 78q, 78s, 78u-5, 78w, 78x, 78ll(d), 78mm, 79q, 79t, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4 and 80b-11, unless otherwise noted.

2. Sections 240.11Ac1-5 and 240.11Ac1-6 are added before the undesignated center heading "Securities Exempted from Registration" to read as follows:

### § 240.11Ac1-5 Disclosure of order execution information.

(a) *Definitions.* For the purposes of this section:

(1) The term *alternative trading system* shall have the meaning provided in § 242.300(c) of this chapter.

(2) The term *average effective spread* shall mean the share-weighted average of effective spreads for order executions calculated, for buy orders, as double the amount of difference between the execution price and the midpoint of the consolidated best bid and offer at the time of order receipt and, for sell orders, as double the amount of difference between the midpoint of the consolidated best bid and offer at the time of order receipt and the execution price.

(3) The term *average realized spread* shall mean the share-weighted average of realized spreads for order executions calculated, for buy orders, as double the amount of difference between the execution price and the midpoint of the consolidated best bid and offer thirty minutes after the time of order execution and, for sell orders, as double the amount of difference between the midpoint of the consolidated best bid and offer thirty minutes after the time of order execution and the execution price; provided, however, that the midpoint of the final consolidated best bid and offer disseminated for a day shall be used to calculate a realized spread if it is disseminated less than thirty minutes after the time of order execution.

(4) The term *categorized by order size* shall mean dividing orders into separate categories for sizes from 100 to 499 shares, from 500 to 1999 shares, from 2000 to 4999 shares, and 5000 or greater shares.

(5) The term *categorized by order type* shall mean dividing orders into separate categories for market orders, marketable limit orders, inside-the-quote limit orders, at-the-quote limit orders, and near-the-quote limit orders.

(6) The term *categorized by security* shall mean dividing orders into separate categories for each national market system security that is included in a report.

(7) The term *consolidated best bid and offer* shall mean the highest firm bid and the lowest firm offer for a security that is calculated and disseminated on a current and continuous basis pursuant to a national market system plan.

(8) The term *covered order* shall mean any market order or any limit order received by a market center during the time that a consolidated best bid and offer is being disseminated, but shall exclude any order for which the customer requests special handling for execution, including, but not limited to, orders to be executed at a market opening price or a market closing price,

orders submitted with stop prices, orders that are to be executed on a particular type of tick or bid, orders that are submitted on a "not held" basis, orders for other than regular settlement, and orders that are to be executed at prices unrelated to the market price of the security at the time of execution.

(9) The term *exchange market maker* shall mean any member of a national securities exchange that is registered as a specialist or market maker pursuant to the rules of such exchange.

(10) The term *executed at the quote* shall mean, for buy orders, execution at a price equal to the consolidated best offer at the time of order receipt and, for sell orders, execution at a price equal to the consolidated best bid at the time of order receipt.

(11) The term *executed outside the quote* shall mean, for buy orders, execution at a price higher than the consolidated best offer at the time of order receipt and, for sell orders, execution at a price lower than the consolidated best bid at the time of order receipt.

(12) The term *executed with price improvement* shall mean, for buy orders, execution at a price lower than the consolidated best offer at the time of order receipt and, for sell orders, execution at a price higher than the consolidated best bid at the time of order receipt.

(13) The terms *inside-the-quote limit order*, *at-the-quote limit order*, and *near-the-quote limit order* shall mean buy orders with limit prices that are, respectively, higher than, equal to, and lower by \$0.10 or less than the consolidated best bid at the time of order receipt, and sell orders with limit prices that are, respectively, lower than, equal to, and higher by \$0.10 or more than the consolidated best offer at the time of order receipt.

(14) The term *market center* shall mean any exchange market maker, OTC market maker, alternative trading system, national securities exchange, and national securities association.

(15) The term *marketable limit order* shall mean any buy order with a limit price equal to or greater than the consolidated best offer at the time of order receipt, and any sell order with a limit price equal to or less than the consolidated best bid at the time of order receipt.

(16) The term *national market system plan* shall have the meaning provided in § 240.11Aa3-2(a)(1).

(17) The term *national market system security* shall have the meaning provided in § 240.11Aa2-1.

(18) The term *OTC market maker* shall mean any dealer that holds itself

out as being willing to buy from and sell to its customers, or others, in the United States, a national market system security for its own account on a regular or continuous basis otherwise than on a national securities exchange in amounts of less than block size.

(19) The term *time of order execution* shall mean the time (to the second) that an order was executed at any venue.

(20) The term *time of order receipt* shall mean the time (to the second) that an order was received by a market center for execution.

(b) *Monthly electronic reports by market centers.*

(1) Every market center shall make available for each calendar month, in accordance with the procedures established pursuant to paragraph (b)(2) of this section, a report on the covered orders in national market system securities that it received for execution from any person. Such report shall be in electronic form; shall be categorized by security, order type, and order size; and shall include the following columns of information:

(i) For market orders, marketable limit orders, inside-the-quote limit orders, at-the-quote limit orders, and near-the-quote limit orders:

(A) The number of covered orders;

(B) The cumulative number of shares of covered orders;

(C) The cumulative number of shares of covered orders cancelled prior to execution;

(D) The cumulative number of shares of covered orders executed at the receiving market center;

(E) The cumulative number of shares of covered orders executed at any other venue;

(F) The cumulative number of shares of covered orders executed from 0 to 9 seconds after the time of order receipt;

(G) The cumulative number of shares of covered orders executed from 10 to 29 seconds after the time of order receipt;

(H) The cumulative number of shares of covered orders executed from 30 seconds to 59 seconds after the time of order receipt;

(I) The cumulative number of shares of covered orders executed from 60 seconds to 299 seconds after the time of order receipt;

(J) The cumulative number of shares of covered orders executed from 5 minutes to 30 minutes after the time of order receipt; and

(K) The average realized spread for executions of covered orders; and

(ii) For market orders and marketable limit orders:

(A) The average effective spread for executions of covered orders;

(B) The cumulative number of shares of covered orders executed with price improvement;

(C) For shares executed with price improvement, the share-weighted average amount per share that prices were improved;

(D) For shares executed with price improvement, the share-weighted average period from the time of order receipt to the time of order execution;

(E) The cumulative number of shares of covered orders executed at the quote;

(F) For shares executed at the quote, the share-weighted average period from the time of order receipt to the time of order execution;

(G) The cumulative number of shares of covered orders executed outside the quote;

(H) For shares executed outside the quote, the share-weighted average amount per share that prices were outside the quote; and

(I) For shares executed outside the quote, the share-weighted average period from the time of order receipt to the time of order execution.

(2) Every national securities exchange and national securities association shall act jointly in establishing procedures for market centers to follow in making available to the public the reports required by paragraph (b)(1) of this section in a uniform, readily accessible, and usable electronic form.

(3) A market center shall make available the report required by paragraph (b)(1) of this section within one month after the end of the month addressed in the report.

#### **§ 240.11Ac1-6 Disclosure of order routing information.**

(a) *Definitions.* For the purposes of this section:

(1) The term *covered security* shall mean:

(i) Any reported security and any other security for which a transaction report, last sale data or quotation information is disseminated through an automated quotation system as defined in Section 3(a)(51)(A)(ii) of the Act (15 U.S.C. 78c(a)(51)(A)(ii)); and

(ii) Any option contract traded on a national securities exchange for which last sale reports and quotation information are made available pursuant to a national market system plan.

(2) The term *customer order* shall mean an order to buy or sell a covered security that is not for the account of a broker or dealer, but shall not include any order for a quantity of a security having a market value of at least \$50,000 for a covered security that is an option contract and a market value of at least \$200,000 for any other covered security.

(3) The term *directed order* shall mean a customer order that the customer specifically instructed the broker or dealer to route to a particular venue for execution.

(4) The term *make publicly available* shall mean posting on an Internet web site that is free to the public, furnishing a written copy to customers on request, and notifying customers at least annually in writing that a written copy will be furnished on request.

(5) The term *non-directed order* shall mean any customer order other than a directed order.

(6) The term *national market system plan* shall have the meaning provided in § 240.11Aa3-2(a)(1).

(7) The term *payment for order flow* shall have the meaning provided in § 240.10b-10(d)(9).

(8) The term *profit-sharing relationship* shall mean any ownership or other type of affiliation under which the broker or dealer, directly or indirectly, may share in any profits that may be derived from the execution of non-directed orders.

(9) The term *time of the transaction* shall have the meaning provided in § 240.10b-10(d)(3).

(b) *Quarterly report on order routing.*

(1) Every broker or dealer shall make publicly available for each calendar quarter a report that discusses and analyzes its routing of non-directed orders in covered securities in that quarter. Such report shall include the following information:

(i) The percentage of total customer orders that were non-directed orders, and the percentages of non-directed orders that were market orders, limit orders, and other orders;

(ii) The identity of each venue to which non-directed orders were routed for execution, the percentage of non-directed orders routed to the venue, and the percentages of non-directed market orders, non-directed limit orders, and non-directed other orders that were routed to the venue;

(iii) A discussion of the material aspects of the broker's or dealer's relationship with each venue to which non-directed orders were routed for execution, including a description of any arrangement for payment for order flow and any profit-sharing relationship; and

(iv) A discussion and analysis of the order routing practices of the broker or dealer, including the significant objectives that the broker or dealer considered in determining where to route non-directed orders, the extent to which order executions achieved those objectives, a comparison of the quality of executions actually obtained with

those produced by other venues for comparable orders during the relevant time period, and whether the broker or dealer has made or intends to make any material changes in its order routing practices in the succeeding quarter.

(2) A broker or dealer shall make the report required by paragraph (b)(1) of this section publicly available within two months after the end of the quarter addressed in the report.

(c) *Customer requests for information on order routing.*

(1) Every broker or dealer shall, on request of a customer, disclose to its customer the identity of the venue to which the customer's orders were routed for execution in the six months prior to the request, whether the orders were directed orders or non-directed orders, and the time of the transactions, if any, that resulted from such orders.

(2) A broker or dealer shall notify customers in writing at least annually of the availability on request of the information specified in paragraph (c)(1) of this section.

Dated: July 28, 2000.

By the Commission.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 00-19729 Filed 8-7-00; 8:45 am]

BILLING CODE 8010-01-P

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 261

[FRL-6847-5]

### Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Proposed Exclusion

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule; request for comment.

**SUMMARY:** The Environmental Protection Agency (EPA or Agency) today is proposing to grant a petition submitted by Tyco Printed Circuit Group, Melbourne Division, Melbourne, Florida, (Tyco), formerly Advanced Quick Circuits, L.P., to exclude (or "delist") a certain hazardous waste from the list of hazardous wastes in 40 CFR 261.31. Tyco generates the petitioned waste by treating liquid waste from Tyco's printed circuit board manufacturing processes. The waste so generated is a wastewater treatment sludge that meets the definition of F006 in § 261.31. Tyco petitioned EPA to grant a generator-specific delisting, because Tyco believes that its F006

waste does not meet the criteria for which this type of waste was listed. EPA reviewed all of the waste-specific information provided by Tyco, performed calculations, and determined that the waste could be disposed in a landfill without harming human health and the environment. Today's proposed rule proposes to grant Tyco's petition to delist its F006 waste, and requests public comment on the proposed decision. If the proposed delisting becomes a final delisting, Tyco's petitioned waste will no longer be classified as F006, and will not be subject to regulation as a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The waste will still be subject to local, State, and Federal regulations for nonhazardous solid wastes.

**DATES:** EPA is requesting public comments on this proposed decision. Comments will be accepted until September 22, 2000. Comments postmarked after the close of the comment period will be stamped "late."

Any person may request a hearing on this proposed decision by filing a request with Richard D. Green, Director of the Waste Management Division, EPA, Region 4, whose address appears below, by August 23, 2000. The request must contain the information prescribed in section 260.20(d).

**ADDRESSES:** Send two copies of your comments to Jewell Grubbs, Chief, RCRA Enforcement and Compliance Branch, U.S. Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street, Atlanta, Georgia 30303. Send one copy to Bob Snyder, Central District Office, Florida Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. Identify your comments at the top with this regulatory docket number: R4-99-01-TycoP. Comments may also be submitted by e-mail to [sophianopoulos.judy@epa.gov](mailto:sophianopoulos.judy@epa.gov). If files are attached, please identify the format.

Requests for a hearing should be addressed to Richard D. Green, Director, Waste Management Division, U.S. Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street, Atlanta, Georgia 30303.

The RCRA regulatory docket for this proposed rule is located at the EPA Library, U.S. Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street, Atlanta, Georgia 30303, and is available for viewing from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays. The docket contains