

July 2, 2004

Jonathan G. Katz  
Secretary  
U.S. Securities and Exchange Commission  
450 Fifth St., N.W.  
Washington, DC 20549

**Re: Proposed Regulation NMS; File No. S7-10-04**

Dear Mr. Katz:

The Nasdaq Stock Market, Inc. ("Nasdaq") welcomes the opportunity to submit its comments on proposed Regulation NMS.

Although the idea of having a simple, market-wide rule to ensure that investors always have access to the "best price" is an attractive one, in practice the trade-through rule has operated to force investor orders down to the floor of the New York Stock Exchange, irrespective of investor wishes. The rule therefore operates to discourage free and open competition among marketplaces and market structures; the type of free and open competition which has in Europe produced a new global standard for best practice both in trading technology and exchange governance. The trade-through rule should therefore be eliminated, as it serves neither to protect investors nor to encourage vital innovation in our marketplace.

*Statement of Dr. Ben Steil, Andre Meyer Senior Fellow in International Economics, Council on Foreign Relations, before the Committee of Financial Services Subcommittee on Capital Markets, U.S. House of Representatives, May 18, 2004*

**I. Introduction and Summary**

Nasdaq congratulates the Securities and Exchange Commission (the "SEC" or the "Commission") for proposing Regulation NMS.<sup>1</sup> The record clearly demonstrates the Commission's desire to move the markets forward. Yet, the question remains whether the Commission's actions will result in marginal change or in the substantial reform that is necessary if we are to meet the needs of investors and maintain U.S. leadership in the global equity markets.

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<sup>1</sup> Securities Exchange Act Release No. 49325 (February 26, 2004), 69 FR 11126 (March 9, 2004).

The complexity of the current rules and the nature of trading securities where practices have grown up over many decades mask a fundamental truth: today, electronic trading is best for investors. Importantly, this truth is implicit in the SEC's proposal, which essentially forces floor-based auction markets to automate and migrate to a Nasdaq model.

One might ask why does the government have to do this? The reason is that the business of running a floor-based auction market is currently protected from competition by a set of SEC-mandated rules. These rules, which are relics of our past, have provided an extraordinary dividend to the intermediaries participating in these floor-based markets. The industry is eager for change.

In fact, in a recent survey completed by the Tabb Group in April 2004, 71% of all institutional traders interviewed named the "Specialist & NYSE Market Structure" as one of the greatest trading challenges facing them today. They also point to "Fragmentation" as a significant trading challenge, but they are not referring to the OTC market and competing ECNs, but instead to the NYSE trading environment that creates that sense of fragmentation. Specifically the study states: "Firms believed that the trade-through rule coupled with the Intermarket Trading System (ITS) - the system that connects the regional equity exchanges with the NYSE, made it difficult for liquidity to flow between the NYSE and regional exchanges."<sup>2</sup>

Despite the strong views of the informed investment community that meaningful change is long overdue, a powerful constituency with substantial resources to resist change has grown around these rules. Just as the candle making industry surely opposed Edison by citing job loss and safety risks to consumers, so the securities industry representatives that benefit from the status quo have lobbied in the name of the individual investor to prevent change. We must see through these tired arguments and have the courage to modernize our markets and rely more on market forces to reach public policy goals. Surely, if we do not take this opportunity, as Dr. Steil indicates above, European markets are fully prepared to take the lead from the U.S. in providing investors with modern electronic markets.

We are at a critical point. And, as so often at such times, we are faced with hard choices -- choices where consensus decision-making by the securities industry will not always produce the best outcome. In fact, watered-down half measures often do more harm than good by facilitating the "gaming" of the rules. It is just this gaming that, in our view, has generated so much of the frustration with the current state of affairs and that was the underlying message of many of the witnesses at the Commission

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<sup>2</sup> The Tabb Group, April 2004, *Institutional Equity Trading in America: A Buy Side Perspective*, Larry Tabb at page 43.

hearing in New York City on Regulation NMS. The public is ready for and, in fact, invites real change.

As Dr. Steil explains, the trade-through rule does not protect investors. Competition protects investors. Investors who can opt out of the trade-through rule have a choice. The existence of that choice creates competition, whether or not it is used. Without it, all investors are trapped in a closed system. With it, all investors, institutional and retail alike, are empowered to make right investment choices.

Therefore, Nasdaq respectfully recommends that the Commission adopt Regulation NMS based upon the following principles that we develop further in the comments that follow:

1. **Trade-Through.** Today the competitive Nasdaq market delivers superior performance to investors. There is no need to apply the trade-through rule to the Nasdaq market. Open the trading of New York Stock Exchange ("NYSE") securities to competition by eliminating the trade-through rule. During the floor exchanges' transition to a modern market, a trade-through rule may exist, but only if accompanied by a truly usable opt-out exception. An effective opt-out exception eliminates the need to define what constitutes a fast or slow market or quote because it promotes choice and competition. Investors will define "fast" by their actions – opting out of markets that do not provide timely executions. This competition provides the enforcement mechanism, thus eliminating the SEC's need to mediate disputes over whether a market is actually fast. However, if fast and slow must be defined, the SEC should make the distinction on a quote-by-quote basis and eliminate the permissible trade-through amount restriction.
2. **Market Access.** Open, efficient, low-cost, and equal access to all markets centers is vital to the Commission's proposed reforms. The Commission should facilitate access through clarification of the rules governing self-regulatory organizations ("SROs") and their relationship to broker-dealers. It should also eliminate market distortions caused by access fees in a comprehensive manner while making the ability to charge access fees more equitable, and should restrict locked and crossed markets.
3. **Market Data.** Wide availability of core market information at a reasonable cost is central to the efficiency of our equity markets. The current system of government-mandated national market system plans ("Plans") has thwarted competition and innovation raising the price of that core market information. To reform the Plan system, the Commission must reduce to the greatest extent possible the amount of information that the Plans control and unleash market forces in the remainder of the market data sector. To ensure that core data is

available to investors at low cost, the Commission should require that data fees are designed to recover no more than the costs of operating securities information processors ("SIPs") that generate the data. These measures would allow the Commission to retain the benefits of the current Plan system and still address the regulatory distortions that that system has created.

4. **Subpennies.** The Commission should eliminate the hidden markets created by subpenny quoting activity. This can and should be done immediately.<sup>3</sup>

## II. Trade-Through

### A. *Background*

The SEC has proposed a rule that would require exchanges and national securities associations, as well as all broker-dealers that execute orders, to have policies and procedures reasonably designed to prevent the purchase or sale of Nasdaq and exchange-listed securities at prices inferior to better prices displayed on other markets. Nasdaq securities currently are not subject to such a rule; exchange-listed securities are subject to a rule that is similar to the proposed rule. In this context, the term market means the best bid and offer displayed by each exchange trading a security, and the best bid and offer of each over-the-counter ("OTC") broker-dealer whose quotes in a security are displayed pursuant to a national market system plan. The SEC has proposed several exceptions to the rule, including providing market participants the ability to opt out of the rule, and allowing automated markets to trade through non-automated markets, up to a certain amount.<sup>4</sup>

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<sup>3</sup> Nasdaq submitted its views on the sub-penny quoting proposal by a separate letter. See Attachment I (Letter from Edward S. Knight, Executive Vice President and General Counsel, Nasdaq, to Jonathan G. Katz, Secretary, Commission (June 28, 2004)). Nasdaq believes that the sub-penny quoting proposal raises different and distinct issues from the other proposals and, as such, would benefit from a separate review and approval process.

<sup>4</sup> The opt-out exception would be available for customer orders and orders for a broker-dealer's proprietary account. The exception requires informed consent on an order-by-order basis. In addition, when a customer chooses the opt-out exception, the customer must be provided the best bid (for orders to sell) or best offer (for orders to buy) that existed at the time of order execution. This information must be provided no later than 30 days from the date the order was executed.

The automated/non-automated market exception would allow automated markets to trade through the quotes of non-automated markets, within certain specified amounts. These amounts range from one cent for a security

In a Supplemental Request for Comment,<sup>5</sup> the SEC solicited comment on an alternative approach to addressing the differences between automated and non-automated markets and inquired whether the opt-out exception would still be necessary in light of the alternative proposal. The supplemental proposal shifts the characterization of a market as automated or non-automated to a quote-by-quote analysis, as opposed to a label that would apply in all circumstances for all stocks traded by a particular market. In the original proposal, the SEC distinguished between automated and manual markets by, in effect, classifying a market as fast or slow, based on whether or not a market provided an automated response to orders.

The SEC believes its proposed trade-through rule could improve the price discovery process and contribute to depth and increase liquidity by encouraging market participants to quote aggressively and use limit orders. The SEC also believes that the rule, when coupled with adequate access among markets, could help reduce the effects of fragmentation and promote order interaction among competing markets.

One significant aspect of the SEC's proposal is that it would for the first time apply a trade-through rule to the trading of Nasdaq securities. This feature is based on the perception that "it may no longer be possible to identify a distinction between Nasdaq stocks and other NMS Stocks for purposes of imposing trade-through protections...."<sup>6</sup> The SEC recognizes, however, that "even without a trade-through rule, the Nasdaq market does not appear to lack competitive quoting in the most actively traded securities."<sup>7</sup>

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whose bid or offer is up to \$10, to five cents for a security whose bid or offer is above \$100. Under the exception, automated markets would not be permitted to trade through the quotes of other automated markets, and non-automated markets would not be permitted to trade through any other market, regardless of price or whether the other market is non-automated or automated.

<sup>5</sup> Securities Exchange Act Release No. 49794 (May 20, 2004), 69 FR 30142 (May 26, 2004).

<sup>6</sup> See supra note 1.

<sup>7</sup> Id.

***B. A Trade-Through Rule Can Harm the Quality Executions and Competition That Exist in the Nasdaq Market; A Trade-Through Rule Must Not be Imposed on the Trading of Nasdaq-Listed Securities***

In general, Nasdaq supports the goals of modernizing the markets and making them more competitive, which lie at the heart the SEC's trade-through proposal. Nevertheless, Nasdaq believes the rule is unnecessary for Nasdaq securities because the proposed rule's objectives have already been achieved in this market. Statistics derived from Rule 11Ac1-5 data clearly evidence the results of the competitiveness in the Nasdaq market. When compared to the NYSE, Nasdaq offers investors tighter quoted and effective spreads with, greater speed and certainty of execution.<sup>8</sup> Our belief is that, in fact, there is substantial likelihood that applying the trade-through rule to the Nasdaq market will harm investors.

The harm to investors may take many forms, including increasing the cost of trading due to the additional costs of complying with the rule. Whether the SEC adopts an automated market or automated quote approach for the trade-through rule, market participants will be required to make complex and expensive system changes to recognize when a market or quote is "non-automated." The markets and market participants trading Nasdaq securities will bear a disproportionate amount of these costs because there is no trade-through rule today for Nasdaq securities. Finally, evidence indicates that these costs are unnecessary because the trade-through rate for Nasdaq listed securities, without a trade-through rule, is lower than for listed securities, which trade under such a rule.<sup>9</sup>

In a larger sense, however, the current proposal has a fundamental flaw because it will nullify the improvements the SEC has implemented in the Nasdaq market over the past ten years. During this period, the SEC has adopted a series of "best execution" rules that use market forces to produce a structure that provides quality executions, freedom of choice, and cost savings to investors.<sup>10</sup> These initiatives include the limit order display rule, Rules 11Ac1-5 and 11Ac1-6, and formally recognizing that price is not the sole factor in obtaining best execution. Other factors include, speed of

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<sup>8</sup> See Attachment II comparing Nasdaq-100 stocks with NYSE-listed S&P 100 stocks, and comparing Nasdaq-listed S&P 500 stocks with NYSE-listed S&P 500 stocks.

<sup>9</sup> See Attachment III

<sup>10</sup> See, e.g., SEC Rules 11Ac1-1 and 11Ac1-4 (the "Order Handling Rules"); SEC Regulation ATS; SEC Rules 11Ac1-5 and 11Ac1-6. See also NASD IM-2110-2 (the "Manning Rule").

execution, the size of the order, the trading characteristics of the security, the availability of technological aids to process information, and the cost and difficulty of associated with achieving an execution in a particular market (i.e., fill rates).<sup>11</sup> Many of these elements are included in Rule 11Ac1-5.

In adopting the limit order display rule, the SEC went beyond ensuring that limit orders are treated fairly and contribute to quote competition; the SEC created an environment where market forces and competition would flourish to the benefit of investors. Specifically, the SEC allowed market makers to continue to send limit orders to broker-dealer matching systems, otherwise known as electronic communications networks, or ECNs, at a time when Nasdaq did not have its own limit order book. The result was that many ECNs entered the market and became the de facto limit order books for Nasdaq. Nasdaq responded to this competition by creating its own electronic limit order book. Currently, over 65% of Nasdaq trading occurs on these limit order books. While the number of limit order book providers has decreased, the intense competition among those remaining continues and has led to a dramatic reduction in execution fees, combined with a tremendous amount of innovation. Faster execution times and sophisticated execution algorithms are other results of this competition, as these market participants innovate and improve services to distinguish themselves from their competitors.

With competition firmly established, the SEC then adopted Rules 11Ac1-5 and 11Ac1-6 to assist investors and their broker-dealer agents in making informed decisions. Giving consumers accurate information upon which to evaluate competitors has enhanced competition. Today, market participants can and are required to "comparison shop" when deciding where to send their orders. Nasdaq understands that customers are using the execution quality statistics as benchmarks that their brokers must not only meet, but also exceed.

Importantly, none of the SEC's initiatives constrained customer choice as to how their orders could be executed or how they should measure execution quality. For example, the SEC did not choose to mandate a central limit order book that would have limited choices and decreased competition. A trade-through rule has many of the same drawbacks as a central limit order book because of its exclusive focus on displayed price as the benchmark for defining execution quality. The SEC risks undoing a decade's worth of progress by adopting a trade-through rule for Nasdaq securities.

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<sup>11</sup> Supra note 1 at n. 5.

***C. Eliminating Trade-Through Restrictions For Listed Securities Maximizes Benefits for Investors, But A Modified Trade-Through Rule and Opt-Out Exception Can Still Improve Execution Quality and Competition in the Listed Market***

So that investors can realize the full benefits of a truly competitive market, the SEC must eventually eliminate any trade-through restrictions for listed securities. While the market for trading Nasdaq securities is better because of the SEC initiatives discussed above, the market for trading listed securities has been stuck in a time warp and has not seen the same benefits of competition. Nasdaq believes the different results can be traced to one major difference between the markets: the ITS trade-through rule. The ITS trade-through rule is a vestige of an antiquated, manual, floor-based, single specialist market that has stifled competition in the trading of listed securities and that does not reward or recognize speed of execution or other factors investors may consider when measuring best price. The ITS trade-through rule creates a monopoly at the best posted price, a monopoly that favors slow, manual markets whose posted price may not reflect the price available on the floor. In this regard, electronic markets' participation in the listed market has been hobbled. At the same time, electronic markets have contributed significantly to the competition in the Nasdaq market.

A trade-through rule may exist for a limited time while the listed markets modernize, but only if accompanied by a truly usable opt-out exception. If the Commission adopts a trade through rule without an opt-out provision, basic trading choices that exist today will be eliminated, which could increase costs to investors. For example, investors seek to execute orders with minimal price impact. In fact, analyses of trading costs include measurements of market impact – how much did the market move in reaction to existence of a large order. Today, investors use many different means to lessen market impact, including by utilizing the block-order exemption from the trade-through rule for NYSE securities. Of course, in the Nasdaq market these investors have the greatest degree of flexibility because there is no trade-through restriction. As a result, investors can execute sizable trades immediately with dealers or other investors through crossing mechanisms, without “tipping” the market about the pending large order by being forced to trade with the displayed price. Investors are willing to accept prices that are “away” from the prevailing “best” price because of the certainty and speed they obtain.

An effective opt-out exception also eliminates the difficult task of defining “fast” in a manner that will not be susceptible to innumerable interpretations and thus gaming. To illustrate the difficulty, Nasdaq has

attached sample language.<sup>12</sup> An opt-out exception provides the necessary discipline and even eliminates the need to define what is fast because investors will be able to decide for themselves which markets are meeting their needs. The public will be best served by the SEC focusing its resources on matters other than mediating disputes over whether markets are responding to orders within the requisite number of milliseconds.

However, if the SEC believes it is necessary to define "fast" in order to ensure some minimum level of automation, Nasdaq supports a quote-by-quote distinction that requires markets to identify quotes that are slow. This approach provides each market the flexibility to design a structure it believes will best serve investors. Importantly, as discussed below, the SEC also must require automated quote updates and automated processing of order cancellation requests. Further, the SEC must eliminate the permissible trade-through amount restriction.

Supporters of the trade-through rule in the securities industry disingenuously describe it as a "best price" rule that protects investors, rather than a rule to protect floor-based markets against competition. It has also been suggested that institutional investors or brokers may trade through to the detriment of those for whom they serve as fiduciaries. These arguments are specious. Irrespective of the trade-through rule, both investors and intermediaries in the securities markets have fiduciary duties and economic incentives to seek the best price when the best price is a real price (i.e., immediately accessible and tradable). The fundamental problem with the trade-through rule is that it forces market participants to seek a "best" price that may have substantial uncertainty associated with it.<sup>13</sup>

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<sup>12</sup> See Attachment IV.

<sup>13</sup> Officials responsible for investing state pension funds and other public monies clearly understand the importance of trade-through reform. As Steve Westly, California's Chief Financial Officer and a board member of the state's pension funds CalPERS and CalSTRS, has noted, "[R]eforming trade through ... allows [investors] ... to consider factors that may be as important or even more important than the 'best advertised price' proviso of the trade-through rule, including quality and speed of execution." (January 30, 2004) In a similar vein, Patricia Anderson, the State Auditor of Minnesota, has stated, "The concept of 'best price' is an attractive one in principle. Unfortunately, in practice, it has too often become a justification for delayed trades and reduced flexibility. In fact, preliminary information suggests that the rule's mandate to seek the best price has instead often resulted in noticeably higher prices for investors." (February 20, 2004) More pointedly, Charlie Crist, the Attorney General of the State of Florida, has averred that "The trade through rule effectively grants floor specialists monopoly power over trading in NYSE listed stocks. As a result, Florida investors (truly all investors) suffer from

Market participants pursuing the “best” price often receive an inferior execution because the price proves to be unavailable and the market price moves while they attempt to execute against advertised liquidity that is simply not available.<sup>14</sup> Eliminating the trade-through rule, or at least providing a viable opt-out provision, will impose competitive discipline by allowing market participants to avoid a market center that routinely fails to provide timely executions at the price reflected in its quote. However, market participants will still have every regulatory and competitive incentive to seek the best certain price, and brokers that routinely fail to do so will be subject to disciplinary action and will lose business to competitors.

The opt-out exception as currently proposed will frustrate the SEC’s attempt to preserve freedom of choice and promote automated executions. In an unprecedented manner, the opt-out exception imposes burdens on both the investor seeking to opt-out and the broker-dealer handling opt-out orders. Some aspects of the proposal impose the burden on both parties, while other aspects only affect the broker-dealer handling the opt-out order. For example, the need for informed consent on an order-by-order basis imposes a burden on both parties. The broker-dealer handling the order must provide disclosure each time an order is received, and the entity opting out (e.g., a customer or another broker-dealer) must affirmatively opt out each time it places an order. For some market participants, this exchange of information would be necessary hundreds or thousands of times per day. These exchanges will most certainly delay the execution of orders, while contributing little, if any, investor protection.

The opt-out exception requirement to provide customers the best bid or offer that existed at the time their order was executed is a burden that will be imposed on broker-dealers directly, and possibly on customers indirectly if the costs of complying with this aspect of the rule are passed along to customers. Trading does not occur in a manner that allows each order to be matched easily with a particular execution or quote. In particular, large orders often are placed for multiple accounts, and the executing broker-dealer may not know to which account the trade should be allocated until after the order is fully executed.<sup>15</sup> Broker-dealers will have to recreate the

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slower trade executions, increased transaction costs and decreased competition.” (February 12, 2004)

<sup>14</sup> Advocates of an unreformed trade-through rule also ignore the recent \$241 million settlement between the SEC and NYSE specialists for activities such as trading ahead of orders on the NYSE floor. The trade-through rule is complicit in forcing investors to send orders to those specialists.

<sup>15</sup> For example, an institution places an order to sell 100,000 shares; these securities belong to several different pension funds or mutual funds that the institution advises. The executing broker-dealer may not know for which

execution history of orders so that they can provide the best quote that existed at the time each portion of an order was executed. To provide this information for each of the thousands of orders executed each day, whether or not the customer wants the information, will impose a significant burden because firms will have no choice but to find some manner of automating the process.

Nasdaq proposes two modifications that will make the opt-out exception less burdensome, while not diminishing its investor protection elements. First, Nasdaq proposes that broker-dealers be required to provide the best bid or offer to customers only upon request. This is the same approach the SEC adopted with respect to payment for order flow and other types of disclosure. Specifically, Rule 10b-10 permits broker-dealers to include a general statement concerning whether payment for order flow was accepted, and to disclose the source and nature of the compensation separately, upon receiving a written request from the customer. Similarly, a broker-dealer must provide its customer the identity of the contra party only after receiving a written request. Adopting this approach for the opt-out exception will require broker-dealers to provide the information to those investors most interested, but not force them to undertake costly system modifications that would be necessary to provide the information to all customers – regardless of whether they want the information.

Second, to satisfy the informed consent obligation, Nasdaq proposes that broker-dealers be permitted to provide an annual statement disclosing the implications of opting out of the trade-through rule. The proposed order-by-order requirement will require the disclosure to be repeated hundreds or perhaps thousands of times per day. Therefore, broker-dealers are likely to provide summary statements about the rule. In contrast, an annual statement could result in a more fulsome disclosure, because it is not being delivered in the midst of a trading day. Requiring an annual statement is consistent with the disclosure obligations concerning margin trading, and is more conservative than the disclosure obligations concerning day trading and trading in penny stocks, which only require one disclosure.<sup>16</sup>

As discussed above, Nasdaq believes optimally the SEC should not define fast, but instead allow investors define it through use of the opt-out

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accounts the order is being executed until after all 100,000 shares have been sold. Furthermore, once a broker-dealer receives a large order it may break the order into smaller pieces in order to achieve a more favorable price for the customer. Continuing with the example, it may take 10 or more trades to sell all 100,000 shares.

<sup>16</sup> See NASD Rules 2341 and 2361; SEC Rule 15g-2.

exception. However, Nasdaq supports a fast/slow distinction on a quote-by-quote basis, with a requirement that slow quotes be publicly identified, if the SEC believes it must establish some standard. "Slow" quotes must be identified by a market on all of its published data feeds, and when its best bid-and-offer quotation is sent to the Securities Information Processor (SIP) for calculation and dissemination of the NBBO. In addition, the SIP should be required to enhance its distribution of NBBO data by adding a flag to identify a national best bid or offer as "fast" or "slow", in addition to the market center associated with the bid and/or offer, so that investors will know whether the quote is subject to a trade-through restriction. Without this critical transparency, investors will become confused as to the trade-through treatment of each published quote/order. If investors see the NBBO being traded through, the flag will serve as a visible explanation for this occurrence.

Markets should be required to respond to a party submitting an order within 250 milliseconds from the time the market received the order.<sup>17</sup> This

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<sup>17</sup> Nasdaq proposes that the turnaround time requirement be 500 milliseconds during the first five and last five minutes of the trading day to take into consideration the large volume of activity during the open and close.

Nasdaq believes that the SEC should clarify how response time is calculated. The method of measurement should be consistent across all markets and should be represented as an end-to-end time from point of first receipt of an order to the point of actual response back as measured by the order sender. The response time (e.g. 250 milliseconds) should be an average response time based on an observation of all response time measurements over an extended period of time, thus allowing for the occasional outlier of a longer response time due to temporary technology problems.

As well, specific standards for measurement should be developed, documented and adopted by all markets. The standards should be of appropriate detail to avoid misinterpretations due to inconsistent measurement methods and tools. Nasdaq recommends using a five second time period for the average response time calculation. Specifically, an automated market would be that which consistently maintains an average order response time of less than one-quarter second for each and all five minute periods through out the trading day with the exception of the first and last five minute periods when a one-half second average is to be maintained

Nasdaq also proposes that orders routed from one market to another be exempt from the turnaround time requirement because neither the sending nor receiving market can control the response time of the other market. For example, a market participant sends an order to Market A, which is not at the best bid or offer at the time the order is received. Therefore, Market A immediately routes the order to Market B, which then executes the order and transmits back to Market A a notice of execution. Market A then must provide

automated response must indicate that the order was either executed (in full or partially) or rejected.

The automated response requirement also must apply to requests to cancel orders. This requirement will be particularly necessary if markets can alternate between automated and non-automated. For example, a market participant sends its order to a market providing automated access; however, while the order is waiting to execute the market switches to manual execution in order to conduct an auction. Some market participants may not want to participate in a manual auction, but prefer instead to cancel the order and send it to a market that can provide a fast, automatic execution. If markets are not subject to a maximum response time requirement for cancellations, they can hold orders hostage. The maximum response time to process cancellation requests should not exceed 250 milliseconds.

Markets also should be required to update their quotes within 250 milliseconds of an execution.<sup>18</sup> The benefits of automated access to quotes are defeated if markets are not required to automatically update their quotes. Market participants will be attempting to trade with quotes that are no longer available, which is a problem that exists today, and will receive an increased number of rejected orders.

Markets that do not provide automated responses to incoming orders at all times clearly define how they intend to comply with the access provisions of the proposed Regulation NMS. Allowing markets to adopt a

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its own notice of order execution to the market participant that submitted the order. If, for example, the SEC requires a 250 millisecond turnaround time, Market B could take the full 250 milliseconds to execute the incoming order and be in compliance with the rule. However, it will appear to the party submitting the order that Market A has not complied with the rule because it has taken more than a quarter second from the time it submitted the order to obtain a response.

<sup>18</sup> Nasdaq supports the SEC proposal related to the need for an automated market to responsively update its quote following an order execution. In order for this to be measured all markets and participants would be required to associate quotes with executions, an effort that would likely require an industry convention for how to handle it and subsequently, an investment to implement it. Nasdaq recommends that time requirement be the same as that of the order response, and also be computed as an average of all responses measured in five second intervals throughout the trading day. Specifically, an automated market would need to consistently maintain an average quote update time of 250 milliseconds or less (500 milliseconds for the first and last five minute periods of the trading day) following executions for each and all five minute periods throughout the trading day.

slow market mode at their own discretion effectively grants the market the ability to discriminate against non-members to the advantage of some or all members. A slow market period can be used to give members superior access to incoming liquidity. A slow market also may delay the display and/or execution of incoming orders to the detriment of investors.

Nasdaq supports the requirement that markets make publicly available statistics showing how often they comply with the turnaround time requirement, and proposes that markets make other similar information available. Specifically, if the SEC adopts such requirements, markets must be required to disclose how often they comply with the maximum response times for quote updates and order cancellation requests. Similarly, if the SEC adopts a rule that distinguishes between automated and non-automated on a quote-by-quote basis, markets that do not provide automated access to their quotes at all times must disclose how often their quotes are not accessible on an automated basis.

Requiring disclosure of the information discussed above will impose competitive pressures on markets to remain in compliance with the requirements. However, the competitive pressure will result only if market participants are able to opt out. The opt-out exception will allow market participants to use the disclosure statistics to avoid markets that are unlikely to provide fast, automated executions. For example, suppose a market's quotes are accessible on an automated basis only thirty percent of the time and it has a low compliance rate for the turnaround time requirement when it is automated. Market participants may decide to use the opt-out exception when that market is at the best price because they know there is a small likelihood of receiving a fast, automated execution. In this regard, the response time statistics can supplement the Rule 11Ac1-5 information market participants use today to make routing and execution decisions.

Nasdaq also believes the SEC should eliminate the permissible trade-through amount limit and allow market participants to trade through non-automated quotes as long as it is consistent with a broker-dealer's duty of best execution. If some markets remain non-automated, even on a quote-by-quote basis, the problems of slow or uncertain executions that exist today will remain. For example, if a non-automated quote price is superior by two cents (for a \$10 dollar stock), all other markets must cease trading. To resume trading, these other markets must either improve their price to within a penny of the non-automated market, or route their incoming orders to the non-automated quote, which eliminates a broker's trading discretion and delays the execution of the orders. The *de facto* routing requirement also reintroduces the uncertainty of execution that exists today when sending orders to slow markets – Can I really obtain an execution at the price displayed? In addition, once a quote is determined to be “non-automated,” there is no limitation as to how long that market can take to process orders.

***D. Need for Revised Guidance on Best Execution Obligations***

In the proposing release, the SEC stated that the trade-through rule does not modify the duty of best execution. While the basic duty may not be changing, Nasdaq believes the new rules will fundamentally change trading and the types of information available about markets, especially if the rules include the disclosure obligations discussed above. In this regard, the SEC must provide market participants updated guidance on how to analyze their duty of best execution. For example, should turnaround, quote update, and cancellation response time compliance rates and, if adopted, the statistics measuring how often a market's quotes are accessible on an automated basis be included in broker-dealers' regular and rigorous reviews? In addition, if an opt-out exception is not adopted, is it consistent with the duty of best execution not to send an order to a market that has a low turnaround time compliance rate or is not frequently accessible by automated means? Further, what is a broker-dealer's duty when it sends a limit order to a market whose quotes are accessible on an automated basis, but then the quotes become non-automated before the order is executed? Can the broker-dealer leave the order on the market's book or must the order be cancelled and sent to another market?

**III. Market Access**

Nasdaq believes that the provisions of proposed Regulation NMS regulating market access reflect a reasonable response to many of the challenges posed by market fragmentation while preserving the benefits of competition among market centers. Proposed Regulation NMS will enhance intermarket linkages through a flexible, market-based approach. The proposed regulation also recognizes and seeks to address the market structure distortions created by ECN quote access fees and liquidity provider rebates by imposing caps on the fees that SROs and broker-dealers can impose on transactions in certain circumstances. The proposals aim to diminish locked and crossed markets, both through a rule-based approach and through limits on access fees, and to enhance the ability of market participants to compare various quotes without uncertainty as to the level of fees that may be assessed. Overall, Nasdaq applauds the Commission's proposal with regard to Market Access. There are, however, several respects in which the access proposal can be improved.

***A. If the Commission Imposes a Limitation on Access Fees, It Must Be Applied Consistently***

In general, the proposal provides that the fee charged by an SRO that provides order execution facilities (defined as a "quoting market center") for

a transaction against its displayed price may not exceed \$0.001 per share;<sup>19</sup> the fee charged by a broker-dealer that displays quotes in the NASD's Alternative Display Facility (defined as a "quoting market participant") for a transaction against its displayed price may not exceed \$0.001 per share;<sup>20</sup> the fee charged by a broker-dealer that displays quotes through an SRO execution facility for access to its attributable quote through the SRO's facility may not exceed \$0.001 per share;<sup>21</sup> and the total fees charged by quoting market centers, quoting market participants, and broker-dealers for access to a quote may not exceed \$0.002 per share in any single transaction.<sup>22</sup>

In its Supplemental Request for Comment, the Commission clarified that the limits of the proposal apply only to the quotes that are required to be disseminated under effective national market system plans: the best bid/best offer of each national securities exchange, and the best bid/best offer of each broker-dealer displaying an attributable quote through Nasdaq or the Alternative Display Facility. Transactions occurring at other prices would be subject to the same restrictions that currently apply to access fees: in general, ECNs could charge up to \$0.009 per share;<sup>23</sup> SROs could charge any amount that had been approved by the Commission or validly filed on an immediately effective basis under Section 19(b) of the Act and Rule 19b-4 thereunder; and other broker-dealers would not be permitted to charge at all.<sup>24</sup> The \$0.002 overall limit, rather than the \$0.001 limit on broker-dealer charges, would apply to transactions in which an ECN's best price is accessed directly by a subscriber rather than indirectly through an SRO.

Government-imposed limits on the fees that private entities – even ones that are subject to substantial regulation – may charge in a competitive marketplace must inevitably be viewed with some skepticism. The possible

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<sup>19</sup> Or 0.1% of price in the case of a security with a share price of less than \$1.00.

<sup>20</sup> Id.

<sup>21</sup> Id.

<sup>22</sup> Or 0.2% of price in the case of a security with a share price of less than \$1.00.

<sup>23</sup> See No-Action Letters at [www.sec.gov/divisions/marketreg/mr-noaction.htm#ecns](http://www.sec.gov/divisions/marketreg/mr-noaction.htm#ecns) (current Commission limits on ECN access fees). But see Regulation ATS Rule 301(b)(4) (allowing SROs to impose lower limits on ECN access fees).

<sup>24</sup> SEC Rule 11Ac1-1(c)(2).

unintended consequences of such limits, their short-term inflexibility, and the opportunities for "gaming" that they may create should all be weighed carefully by the Commission as it considers adoption of the proposal. Nasdaq well appreciates, however, the market failures – pervasive locked and crossed markets and the inability of market participants to determine or control the true cost of order execution – that the Commission seeks to address through these limits. By lowering the fee that can be charged for access to a published quote, the proposed rule would diminish the incentive for market participants to post locking and crossing quotes. For executions at a market center's or broker-dealer's best price, the cost difference between providing liquidity and accessing liquidity would shrink from \$0.005 or more in today's market to something under \$0.004. Because the incentive would not be eliminated, however, Nasdaq strongly believes that the access fee proposal must be coupled with the regulatory prohibition on locking and crossing markets that the Commission has also proposed.

Moreover, Nasdaq is concerned that some aspects of the proposal that were only made clear in the Commission's Supplemental Request for Comment undermine the Commission's goal of transparent pricing and are unfairly discriminatory in their impact. First, Nasdaq questions the decision to limit the applicability of the proposal to the best prices offered by an exchange or broker-dealer. Since Nasdaq's market structure features many competing market makers and ECNs, the fee limitation could apply at many more price points for transactions occurring through Nasdaq than on an exchange with comparable prices. For example, if an exchange had an ask quote of \$10 and also had market participants offering liquidity at \$10.01 and \$10.02 in a particular stock, and Nasdaq had three market makers in the same stock posting offers of \$10, \$10.01 and \$10.02 respectively, fees for executions on the exchange at \$10.01 and \$10.02 would not be limited but fees for executions on Nasdaq at these prices would be. Likewise, fees for direct access to an ECN's best quote would be subject to a \$0.002 limit, but fees for executions at inferior prices that occur when the ECN is accessed directly would not be limited.

The extent to which fee limits may apply disparately at different price levels is at odds with the Commission's goal of comparability of intermarket pricing. Although the fees to access published quotes would be generally comparable under the Commission proposal, the fees to execute particular orders in different market centers, and the rebates associated with those executions, may still vary widely. Moreover, although the adoption of the Commission's proposed trade-through rule would place some limits on executions of orders at prices other than a market center's best price – by forcing the market center to route some orders away when another market center is offering a better price – there would continue to be numerous circumstances in which executions would occur at prices where the fee limits would not apply. For example, a market participant could opt out of the

trade-through rule, or it could send an order that interacts with the national best bid or offer (“NBBO”) in one market, while simultaneously routing an order to a market with an inferior price that could then sweep through multiple price levels at that market.

The exact effect of this disparate applicability of the fee limits at various price points is difficult to predict. On the one hand, an exchange’s or ECN’s ability to charge unrestricted fees at prices other than its best prices may enhance its ability to offer liquidity provider rebates or otherwise to garner revenues that bolster its competitive position. On the other hand, the broader limits on Nasdaq’s fees may tend to make it a more attractive order routing destination in circumstances where executions at prices below the current NBBO are likely to occur, and may thereby constrain the ability of a competing exchange to charge significantly higher fees. The Commission and market participants should not have to speculate, however, about the extent to which the proposal may favor one market model over another. Accordingly, Nasdaq recommends that the Commission apply the fee limits of the proposal to transactions at all price levels, by all market centers, market participants, and broker-dealers. In addition, it would be desirable to define “access fee” broadly enough to encompass all transaction-specific fees (*i.e.*, any fee that a market participant incurs an obligation to pay at the time of the execution of a particular order).<sup>25</sup>

The inapplicability of the restrictions to transactions at prices other than displayed quotes also perpetuates the unequal treatment of non-ECN broker-dealers that the Commission discusses in its proposing release. With the drastic narrowing of spreads brought about by decimalization and intensified competition, the traditional rationale for allowing high ECN access fees while barring market maker access fees has disappeared. Nevertheless, adoption of the Commission’s proposal in its current form would result in a two-tier pricing structure that would favor ECNs without articulating any policy rationale for doing so. For transactions at a broker-dealer’s best price, ECNs and market makers could both charge a de minimis fee. For transactions at other prices, ECNs could charge a relatively unrestricted fee, but market makers could not charge at all. This inequity should be addressed by permitting all market centers and broker-dealers to charge fees at all price levels, but capping the level of those fees. Capping fees at all levels would also serve to minimize the risk that caps applicable only to best prices might serve to discourage display of quotes with significant size reflected in them.

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<sup>25</sup> Contrary to the suggestion in the Supplemental Request for Comment, it would seem to be unwarranted to include cancellation fees in the definition, however, since such fees would not be paid for access that results in order execution. Similarly, more generalized fees, such as fees for telecommunications connectivity to a market, should not be included.

Nasdaq also questions the fairness of the Commission's proposal to allow up to a \$0.002 per share fee in transactions where an ECN subscriber accesses an ECN's best price directly, but allow only a \$0.001 fee in transactions where a Nasdaq market participant accesses a non-attributable order that is posted in Nasdaq's SIZE feature. As the Commission is aware, SIZE replicates many of the features of an ECN, by permitting market participants to post anonymous limit orders that are executable, in price/time priority, by new orders entered into the Nasdaq Market Center. Unless Nasdaq is permitted to charge the same fee for executions against SIZE that ECNs are permitted to charge when accessed directly, Nasdaq will be at a significant competitive disadvantage vis-à-vis ECNs in terms of its ability to offer rebates to liquidity providers.

Indeed, as suggested by the Commission in its Supplemental Request for Comment, there does not appear to be a compelling rationale for barring broker-dealers from charging fees for access to non-attributable quotes, as long as the level of such fees is regulated by either the Commission or the SRO through which they are accessible in a manner that makes them transparent. Under the proposal in its current form, a market participant opting to use an ECN could retain anonymity for its order and receive some portion (possibly more than \$0.001) of a \$0.002 fee charged by the ECN, but would be forced to sacrifice anonymity in order to collect a \$0.001 access fee when using Nasdaq. The inequity of this result could be addressed simply by providing that ECNs and Nasdaq/SIZE may each charge \$0.001, and ECN subscribers and Nasdaq members providing liquidity through the ECN or SIZE may also charge \$0.001, even though the liquidity offered is not attributable to the ultimate provider of the liquidity. In each case, the fees paid by contra parties would be equal and knowable in advance, thereby achieving the Commission's goal of pricing comparability.

In sum, although Nasdaq believes that the Commission's access fee proposal is aimed at achieving goals that Nasdaq supports, it does not go far enough to ensure comparable execution costs across all market centers and market participants. If up to \$0.002 per share is an appropriate fee to pay when accessing a quote at the NBBO, it should also be an appropriate fee to pay when accessing liquidity at other prices. Moreover, the Commission must ensure that SROs and broker-dealers providing comparable execution services (*i.e.*, an anonymous limit order book facility such as SIZE) are always permitted to charge the same fee.<sup>26</sup>

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<sup>26</sup> If the Commission decides not to adopt an appropriately broad restriction on access fees, then Nasdaq would support the Commission's alternative proposal to identify quotes with excessive fees and allow market participants to ignore them for purposes of market data revenue calculation and restrictions on trade-throughs and locking quotes. Market participants should

***B. The Commission's Market Linkage Proposal Endorses a Viable Market-Based Solution That Will Enhance Inter-Market Access***

Nasdaq endorses the Commission's proposal for mandating indirect linkages among market centers through their members and subscribers. A proposal of this nature would be necessary to allow market participants to comply with the trade-through and locked/crossed markets provisions of proposed Regulation NMS, but even in isolation from these provisions, a rule to facilitate flexible intermarket linkages reflects a sound public policy of allowing market participants to seek out the best market quickly and with minimal transaction costs. Accordingly, Nasdaq would support immediate adoption of the proposal on market linkages, even if other portions of Regulation NMS are deferred or rejected by the Commission. Nasdaq can readily attest to the value and feasibility of indirect linkages, since Nasdaq complies with the proposed rule on a daily basis: other market centers, and members of other markets, that seek to place orders into the Nasdaq Market Center can do so through any Nasdaq market participant, and their orders receive the same treatment in terms of fees, execution priority, and availability of functionality as the orders of members. The experience of the market for Nasdaq securities demonstrates that there is no need for "hard" ITS-style linkages. Rather, order-routing services offered both by broker-dealers and by unregulated service bureaus have the ability to survey advertised liquidity and direct customer orders to their market destination of choice.

The Commission must recognize, however, that full compliance by all market centers and market participants with the access provisions of the Commission's proposal is key to the successful implementation of any form of Regulation NMS's proposed trade-through rule and restrictions on locked and crossed markets. Accordingly, the Commission will have to be vigilant in overseeing SROs and others that are subject to the rule to ensure that the orders of non-members or non-subscribers always receive the non-discriminatory treatment that the rule mandates. Commission oversight will be especially important for markets where orders are executed through human intervention rather than automation, since the potential for discriminatory treatment may be much higher in such markets.

Moreover, in circumstances where an SRO chooses to contract with an independent broker-dealer to provide linkage, the Commission will be required to oversee the relationship to ensure that specific broker-dealers do not receive unduly favorable treatment, do not exercise undue influence over

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not be compelled to diminish the quality of execution that they receive by pursuing quotes with high fees attached to them.

the market centers to whom they provide services, are subject to appropriate levels of unbiased SRO oversight, and offer cost-effective, reliable service. As a result, adoption of Regulation NMS is likely to create a powerful incentive for SROs to operate registered broker-dealers for the purpose of routing orders to other markets. A recognition of the benefits of routing through a wholly owned broker-dealer (with or without adoption of Regulation NMS) was one of the factors motivating Nasdaq's recent announced plan to acquire Brut LLC. The use of wholly owned broker-dealers for routing will provide SROs with greater assurance that the routing function will be performed in accordance with the broader interests of the SRO and its membership rather than the narrow interests of a single broker-dealer.

The precedent for SRO ownership of broker-dealers was established by the Commission in its approval of the operation of The Archipelago Exchange LLC ("ArcaEx") as a facility of the Pacific Exchange, Inc. ("PCX") in conjunction with Wave Securities LLC ("Wave"), with both ArcaEx and Wave owned by Archipelago Holdings LLC.<sup>27</sup> As described in the SEC Order approving this affiliation, Wave, a registered broker-dealer, has acted in the capacity of a router of orders from ArcaEx to other market centers and an introducing broker to ArcaEx.<sup>28</sup> When acting as an order router, Wave has been regulated as a facility of the PCX, but when acting as an introducing broker, Wave has been regulated solely as a broker-dealer. The Commission stipulated that PCX and its affiliates could not provide benefits to an affiliated broker-dealer that might give it an advantage over other members, such as greater access to information, improved speed of execution, or enhanced operational capabilities. However, the Commission's discussion of the actual limits imposed upon affiliated broker-dealers implied a focus upon the aspects of operation that were not regulated as a facility of the PCX.

Nasdaq assumes that the Commission intends the Wave/PCX relationship to serve as a template for similar relationships following the adoption of Regulation NMS, and therefore requests that the Commission, in the context of a final approval of Regulation NMS, amplify its views with respect to SRO ownership of broker-dealers. Specifically, Nasdaq requests that the Commission confirm that in circumstances where a broker-dealer is regulated as a facility of an SRO, the need for information barriers or restrictions on the operational capabilities of the broker-dealer would not exist, because the broker-dealer would merely be an extension of the SRO and would be subject to the same degree and form of Commission oversight as the SRO itself. Nasdaq also requests that the Commission provide

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<sup>27</sup> Securities Exchange Act Release No. 44983 (October 25, 2001), 66 FR 55225 (November 1, 2001) (SR-PCX-00-25).

<sup>28</sup> For a time, Wave also operated an ECN that traded stocks not yet traded on ArcaEx, but has since terminated this aspect of its operations.

additional guidance with respect to the factors that the Commission would use in analyzing whether specific functions performed by a broker-dealer affiliated with an SRO would be deemed facilities of the SRO, and the safeguards that would be required by the Commission if an affiliated broker-dealer acts in several capacities, only some of which are deemed to be facilities of the SRO.

Nasdaq supports the Commission's proposal to enhance the fair access requirement applicable to ECNs and other alternative trading systems, and would even support applying fair access standards to all ATSs that provide their quotes to an SRO for inclusion in the public quote stream, regardless of volume, since there does not appear to be any valid reason to allow an ATS with less than 5% of the volume in a security to discriminate against potential subscribers. However, a valid concern with regard to linkages to ATSs was raised by several witnesses at the Commission's hearing on Regulation NMS. It was noted that full compliance with the trade-through provisions of the proposed regulation would require a web of linkages to quoting market participants (*i.e.*, ATSs that are not accessible through an SRO) even if the volume of the quoting market participant was negligible. Nasdaq believes that the cost of such linkages would not justify the benefits of accessing the minimal amounts of liquidity made available. Accordingly, Nasdaq believes that an ATS with less than 5% volume should be required to make its quotes accessible through a quoting market center.

Finally, Nasdaq notes that the Commission has enquired whether intermarket access would be enhanced by a requirement that all quoting market centers and quoting market participants offer automated executions in at least some circumstances. It is at least arguable that the persistence of slow, auction-based markets is at odds with the fair access standards that the Commission seeks to establish, since a firm's access to real time information about the auction market varies in proportion to its degree of participation on the floor of the exchange. Moreover, once an auction is underway, market participants without a direct presence on the floor do not have access to the auction, and it is therefore questionable whether the market can provide non-members with fair access to its "slow" quotes. Nevertheless, Nasdaq does not believe that it is necessary for the Commission to mandate automation, provided that the Commission also does not mandate that market participants must seek out slow markets in circumstances where it would not be beneficial to do so. Accordingly, as discussed more fully in Nasdaq's analysis of the Commission's trade-through proposal, the rule's slow market exception must be supplemented by a workable opt-out exception. In addition, the prohibition on locking and crossing markets that the Commission has proposed must be supplemented by an exception that allows a "fast" market to lock or cross the quote of a slow market. By ensuring that market participants are not required to route orders to slow markets, the Commission will allow market forces to achieve

an appropriate equilibrium between fast and slow markets. Non-automated markets that truly add value to the order execution process will continue to receive order flow, while slow markets that have merely failed to modernize will quickly be forced to offer an efficient level of automation.

***C. The Restrictions on Locked and Crossed Markets Proposed by the Commission Are Needed to Enhance Market Quality***

Nasdaq also endorses the Commission's proposal to require SROs to establish and enforce rules that require members to avoid locking and crossing the quotes of other quoting market centers and quoting market participants, that are designed to enable market participants to reconcile locked or crossed quotations, and that prohibit members from engaging in a pattern or practice of locking or crossing quotations. The problem of locked and crossed markets has become especially acute in the market for Nasdaq-listed stocks. Despite Nasdaq's efforts to amend it, the Plan for Nasdaq-Listed Securities Trading on Exchanges on an Unlisted Trading Privileges Basis (the "Nasdaq UTP Plan") does not contain any provisions like those in the ITS Plan that discourage locks and crosses or facilitate their resolution. During the week of March 29, 2004, for example, markets for the 3,497 Nasdaq-listed securities that traded that week were locked or crossed an average of 509,018 times each day, with an average of 194,638 of the locks and crosses lasting more than 1 second and an average duration of all locks and crosses of 3.1 seconds.

Nasdaq agrees with the Commission's conclusion that locked and crossed markets engender investor confusion as to the true price of a security and reflect inefficiencies that make market participants unwilling or unable to access available liquidity. These inefficiencies include the inconsistency of intermarket linkages, the lack of automation at certain market centers, and the trade-off between paying access fees and receiving liquidity provider rebates. Although the Commission's proposal addresses each of these inefficiencies to some degree, the continued existence of a "spread" between access fees and rebates will ensure that an economic incentive to lock and cross will persist. As a result, a rule-based prohibition of this undesirable practice is needed.

In accordance with the Commission's suggested alternative to its current proposal, however, Nasdaq does believe that an exception to the general prohibition on locking and crossing quotes should be recognized for some of the situations in which trade-throughs would be permitted under proposed Regulation NMS. Specifically, in circumstances where an automated order execution facility would be permitted to trade through the quote of a non-automated order execution facility, the automated facility should also be permitted to lock or cross the non-automated facility. For

example, if a market participant is permitted to buy a stock at \$10 a share on a fast market in lieu of attempting to execute against an ask price of \$9.99 on a slow market, the participant should also be permitted to post a bid quotation of \$10 on the fast market immediately, rather than being forced to attempt to access the slow market's quote before posting its own quote. In the absence of such an exception, market participants will be forced to seek out slow, uncertain order executions before being permitted to offer liquidity at prices they find acceptable, and the market discipline that the exceptions to the trade-through rule impose upon slow markets will be undermined. A similar exception should also be recognized for locking or crossing the quotes of a market that is experiencing a failure, material delay, or malfunction of its system or equipment.

It will be important for the Commission to consult extensively with all SROs during the implementation of Regulation NMS, to ensure that the resulting rules are consistent. For example, it would not be desirable for one SRO to adopt a rule similar to the ITS Plan's current rule – allowing one market to enter a locking or crossing quote as long as it responds to complaints from other markets – while other SROs adopt “ship and post” rules that require efforts to trade with existing quotes before posting quotes that would lock or cross. Moreover, once rules are in effect, it will be imperative for the Commission to oversee enforcement of the rules closely, to ensure that a regulatory arbitrage does not develop between markets that enforce a strict prohibition on locks and crosses and those that continue to tolerate the practice to a greater extent. Commission guidance as to fact patterns that would be deemed to constitute a “pattern or practice” of locking or crossing will be especially helpful in allowing SROs and market participants to develop a common understanding of the rule's contours. In recognition of the need for consistency, Commission input, and the development of oversight mechanisms by SROs and market participants, Nasdaq believes that implementation of the provisions of Regulation NMS relating to locked and crossed markets should be phased in over a period of 180 days after adoption of the proposed rule.

#### **IV. Market Data**

The Commission and staff have devoted significant time and energy to studying market information and its associated fees, and the proposal demonstrates a firm commitment to true reform in this area. The Commission has properly identified a number of drawbacks of the current Plan system and offered insightful options for addressing them. Many aspects of the proposal, if adopted, will certainly benefit investors.

Nevertheless, Nasdaq is disappointed that the proposal goes no further towards promoting competition in the market data sphere. As stated earlier, Nasdaq firmly believes that maximizing competition and choice is the best

way to serve public investors because competition enables and encourages markets, members, and vendors to innovate, lower prices, and improve products and services. The Commission, by focusing on a few symptoms of regulatory distortion, such as print shops and wash sales, fails to address the underlying problem: government-mandated Plans that set fees and collect revenues unfettered by natural competitive forces.

The Plan system stifles competition and choice. The costs of these Plans, like monopolies in other industries, are price and product stagnation and economically irrational behavior among participants. A quarter century ago, the Plans' consolidated products represented a significant advance for investors, who welcomed the advent of truly consolidated data. Today, private vendors use superior technology and innovation to offer products that far surpass the Plans' products. Because the Plan operating committees - comprised of competitors that "cooperate" by government fiat - are dysfunctional, the Plan products have not adapted and evolved to better serve investors. Yet, the historic Plan products, unchallenged by true competition, have commanded the same fees for years even though technology has dramatically reduced the cost of producing them.

The existence and use of the Plans' revenues creates the regulatory distortions that the Commission seeks to eliminate. The Plans distribute these revenues to Plan participants which, in turn, distribute them to market participants via market data revenue sharing programs. Several markets use these revenue sharing programs simply to buy trade reports, providing the carrot that has led to regulatory distortions such as wash sales and trade shredding. The Commission has repeatedly expressed concern that member revenue sharing programs have a negative impact on the quality of SRO regulation.<sup>29</sup> The current Plan model has created a perverse world where the SRO with the slimmest regulatory function (and lowest regulatory cost) can use regulatory-cost savings to gain market share and data revenue. Member revenue sharing programs, if allowed to continue, may erode the regulatory fabric of the US capital markets to the detriment of investors.

To "address the serious economic and regulatory distortions caused by the current Plan formulas for allocating Network net income to the SROs,"<sup>30</sup>

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<sup>29</sup> Order of Summary Abrogation, Securities Exchange Act Release No. 46159 (July 2, 2002), 67 FR 45775 (July 10, 2002). See also Securities Exchange Act Release No. 46232 (July 19, 2002), 67 FR 48691 (July 25, 2002) (SR-NASD-2002-94); Securities Exchange Act Release No. 46293 (August 1, 2002), 67 FR 51314 (August 7, 2002) (SR-PCX-2002-41); Securities Exchange Act Release No. 46662 (October 15, 2002), 67 FR 64948 (October 22, 2002) (SR-PCX-2002-61).

<sup>30</sup> See supra note 1.

Nasdaq proposes to minimize the data under the Plans' jurisdiction, and tie the revenue garnered from the remaining Plan data to the cost of operating the Plans' associated SIPs. Minimizing Plan data and lowering its cost to investors will limit the excess revenue available to fund the data revenue programs that lead to regulatory arbitrage. Unfortunately, the Commission's proposal simply retains, in all important respects, the 1975 framework of Plans and their associated revenues, thus perpetuating the destructive distortions.

The best way to eliminate those regulatory distortions is not to tinker with the revenue allocation formulas but rather to reduce the importance of the Plans by reducing to the greatest extent possible the amount and the cost of data disseminated pursuant to those Plans. Reducing the amount of data the Plans control would, in turn, reduce the data revenue the Plans collect, and thereby reduce the regulatory distortions caused by the current allocation formulas. Reducing the data controlled by the Plans would, conversely, increase the data that SROs could make available individually, subject to true competitive forces.

Unleashing true competition in market data requires the Commission to move beyond the old Plan system. The ideal system - that which promotes maximum competition and choice - would be the Competing Consolidator Model under which all market data is de-consolidated from the Plans and subjected to true competition. For reasons Nasdaq does not fully understand, the Commission assumes, incorrectly in our view, that full competition under the Competing Consolidators Model is inconsistent with investor protection. Nasdaq disagrees, and echoes the recommendation of the Advisory Committee on Market Information<sup>31</sup> that the Commission adopt the Competing Consolidator Model and retain the Display Rule requirements that give investors whatever data the Commission deems necessary. In that manner, the Commission can ensure that investors get the most vital data without mandating that Plans provide it.

***A. The Hybrid Model Is Superior To The Commission's Proposal***

If the Commission remains committed to the existing Plan system, the best alternative after the Competing Consolidators Model is the Hybrid Model. At the April 21 hearing on proposed Regulation NMS, Nasdaq predicted that market data fees could be dramatically reduced from their current level if the Commission adopted the Hybrid Model. That prediction was based on the following conception of the Hybrid Model.

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<sup>31</sup> Report of the Advisory Committee on Market Information: A Blueprint for Responsible Change (September 14, 2001).

***The Plans should only collect, process, and disseminate the consolidated best bid and best offer (i.e., NBBO) and aggregate size.*** In turn, the SIP, on behalf of Plan participants, would make this information available to all market data vendors, broker-dealers, and subscribers on a non-discriminatory basis to ensure that such information can reach all investors. In other words, the SIP would act, in essence, as a public utility in disseminating NBBO information. If this market data is essential to investors and one assumes that it would not exist but for a government mandate, then a utility-like Plan is a logical consequence. But the government should only be involved where the government must be involved.

While the NBBO is among the most vital pieces of market information available to market participants, the same cannot be said for individual SROs' best bid and best offer information ("BBO").<sup>32</sup> Provided that the NBBO continues to identify the market center quoting the best prices, buyers and sellers of securities can make informed decisions and not pay more or less than the price at which someone is willing to sell or buy. A reliable and widely disseminated NBBO ensures that customers are informed of the best prices and sizes available in the constituent markets. At most, only the NBBO should be subject to the Plans.

***Consolidated last sale data should not be included in the Plans.*** In Nasdaq's view, the consolidated last sale is not essential to investors and should not be included in the Plans. In its current form, consolidated last sale data is far less useful to investors than the NBBO and there are too few incentives to improve it. There are numerous data quality problems with the trade data that the Plan networks disseminate today. First, due to the 90-second trade reporting window, trades are not reported or displayed in strict sequence, and therefore do not represent the actual last sale price. The Commission acknowledged this drawback in the proposing release for Regulation SHO, where it proposed to abandon the tick test in favor of the bid test currently used by Nasdaq.<sup>33</sup> In addition, inaccurate trade data is periodically reported to the networks and disseminated to investors.<sup>34</sup> Such

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<sup>32</sup> For example, today Nasdaq, through the SIP, offers additional data beyond the NBBO via the Nasdaq Quotation Dissemination Service or NQDS. Yet, only 12 percent of professional subscribers that purchase SIP data also purchase NQDS.

<sup>33</sup> See Securities Exchange Act Release No. 48709 (October 29, 2003), 68 FR 62972 (November 6, 2003).

<sup>34</sup> For example, on Friday, June 25, 2004, the Archipelago Exchange reported inaccurate trade data in approximately 400 securities. As of the date of this comment, Archipelago has not provided the market data vendor community complete information to correct all of the inaccuracies. As a result, market

inaccurate data is not removed from the data feeds until much later. Finally, the lack of uniform trade reporting rules across markets, particularly in the riskless principal area, undermines the reliability and meaningfulness of the trade data.

De-consolidating last sale data and subjecting individual SROs' last sale data to competition would increase the quality of that output and its value to investors. In many ways, a market's last sale represents, much more than does its BBO, the product of vigorous competition between markets. It is the final demonstration that a market has accomplished its primary function of bringing together buyers and sellers. The natural incentives that competition provides would encourage markets to produce more accurate and timely data that would have more value to investors. Permitting SROs to recognize the value of improving non-Plan data, such as last sale, would benefit investors by increasing competition and reducing fees.

***Plan data fees should be designed to recover the operating cost of the SIPs that generate the NBBO, using a formula that applies equally to all three networks.*** The Commission has struggled to articulate a formula or standard of review by which to fulfill its statutory obligation to ensure that market data fees are fair, reasonable, and non-discriminatory. In its 1999 Concept Release on the Regulation of Market Information Fees and Revenues,<sup>35</sup> the Commission proposed a flexible cost-based formula for assessing Plan data fees. Comments on that proposal were overwhelmingly negative; market participants were reluctant to have the Commission engage in government rate-making for Plan data fees. The Commission also has been reluctant to engage in government rate-making, but while the Commission's reluctance to attempt affirmative rate-making is understandable, its unwillingness to set a standard is tantamount to passive rate-making in that the existing fees remain in effect, unexamined.

The Hybrid Model, by minimizing the amount of Plan data, also minimizes the need for Commission rate-making and maximizes the amount of data that is priced by competitive forces. The need for rate-making would be further reduced by limiting the Plan fees to the recovery of identifiable processor costs for collecting BBOs and calculating and disseminating the NBBO. Critics of the flexible cost-based approach believed that it required rate-making where the Commission would be forced to calculate the SROs' so-called "common costs" of generating market data, allocate those costs

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data vendors are unable to disseminate correct information to their subscribers.

<sup>35</sup> See Securities Exchange Act Release No. 42208 (December 9, 1999), 64 FR 70613 (December 17, 2003).

across each SRO's multiple functions, and further allocate them across the multiple networks in which a single SRO may participate. There was, however, general agreement that Plan data fees should include all of the so-called "Direct Costs" of the processor. Determining the SIPs' Direct Costs does not require an inquiry into the expenditures of individual SROs, thereby avoiding the potential drawbacks of Commission rate-making.

Attachment V offers a practical illustration of Nasdaq's proposal for calculating gross Plan expenses and revenues, and for allocating those expenses and revenues to Plan Participants. Nasdaq proposes that the gross revenue collected mirror as closely as possible the costs of administering the Plan and operating the SIP. Plan Administrator costs of billing, collection, and administration of Plan revenue would be reimbursed directly from gross revenue. SIP costs would be reimbursed in proportion to the capacity each Plan Participant requests and purchases, as a percentage of the total capacity of the SIP. SIP revenues, however, would be allocated to Plan Participants based on the "market share" of each Participant, defined as each Participant's share of total share volume (as reported to the Administrator on a quarterly basis). Therefore, as shown in the exhibit, an inefficient user of SIP capacity resources might owe more money than it collects (*e.g.*, SRO A); an efficient user of SIP capacity might make more money than it owes (*e.g.*, SROs B, C, and D). That allocation encourages Plan Participants to use SIP capacity efficiently.

Nasdaq strongly urges the Commission to announce the fee calculation and revenue allocation formula in a regulation rather than relying on the participants in each Plan to set them. A rule-based approach would be transparent to the public, create uniformity across all networks, and be predictable over time. The Commission can implement Nasdaq's proposal by adopting a concise rule in the newly-numbered 600 Series setting the fees for Plan data at the amount required to recover processor costs, adjusted periodically (Nasdaq suggests every year or two) based upon audited financial statements that are limited to specific, uniform line items. Nasdaq would also support allowing a minimal markup over actual processor costs to provide a reserve in case of errors in forecasting future processor expenses and subscription rates.

Nasdaq is aware of the Commission's concern about the need to review increased numbers of rule changes setting fees for non-Plan data, particularly where the data provider is the exclusive source of that data. Nevertheless, Congress delegated to the Commission broad authority to ensure that SRO fees are fair, reasonable, and not unreasonably discriminatory and the Commission is entitled to substantial deference when

applying these statutory standards.<sup>36</sup> This is particularly applicable here because the Commission has gained substantial technical expertise in applying the same statutory standards for over a quarter of a century.

In reviewing non-core data products, the Commission must note, as would any judicial panel reviewing Commission action, that the market for non-core data products in the United States is highly competitive. Today, a vast network of data vendors provide market information far exceeding that provided by the plans or required by the Quote and Display Rules. ILX, Bloomberg, Reuters, Bridge, Hyperfeed, BRASS, Lava, Thomson Financial, OM, and many others, provide increasingly sophisticated market data consolidation and order routing services that enable market participants of all types to serve a wide range of data needs. Because such data is, by definition, discretionary to investors and not vital, the Commission can and should presume that the competitive marketplace has set a fair price through supply and demand unless it can be demonstrated that the marketplace is unable to do so.

***Under the Hybrid Model, Regulatory Arbitrage from Revenue Sharing Program Would be Eliminated.*** Nasdaq believes that the concerns the Commission expressed in its July 2002 abrogation order were well founded, and that the Commission is wise to focus on the need for SROs to fund robust regulatory oversight. Historically, SROs have used market data revenue to support their regulatory function. Today, some of that revenue is instead used simply to buy market share and gain additional market data revenue. Nasdaq's proposed Hybrid Model naturally eliminates that distortion by eliminating the revenue that funds the revenue sharing programs.

However, none of the proposals for market data, including Nasdaq's Hybrid Model, addresses the need for fair funding of efficient market regulation. For the Commission to eliminate regulatory distortions and achieve regulatory excellence in the national market system, it must act directly by setting high standards of regulation and ensuring that each SRO commits its share of the resources needed to meet those standards. The Commission should eliminate regulatory arbitrage where markets compete on the basis of differences in their rules or the cost of complying with them. The costs of regulating inter-market activity should be transparent and fairly allocated across markets.

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<sup>36</sup> See Chevron U.S.A. Inc. v. Natural Resources Defense Council, 467 U.S. 837 (1984).

***If the Commission does not adopt Nasdaq's proposed Hybrid Model, and permits the continued collection of excess Plan data fees, the proposed allocation formula is reasonably designed to reward activity across all securities.*** Nasdaq believes that a simpler, more practical formula would be superior. As the Commission concedes, the proposed formula is so complex that few outside the SROs would even attempt to understand it. The complexity of the formula will provoke disputes among Plan participants that disagree about its application.

Nasdaq has attempted to apply the formula to the existing revenue in Network C (Nasdaq securities), and while it is not possible to apply the formula with complete accuracy, given the data that is collected today, it has derived the following revenue allocation across current Plan Participants.

**Distribution of SIP net income by SRO, Feb 2004 trading and quoting**

<b>SRO</b>	<b>Proposed Formula</b>	<b>Existing Formula</b>	<b>Difference</b>
<b>Nasdaq</b>	<b>\$4,657,942</b>	<b>\$4,564,628</b>	<b>\$93,314</b>
ADFN	\$576,884	\$152,341	\$424,543
AMEX	\$72,266	\$2,091	\$70,175
ARCX	\$2,930,703	\$2,492,505	\$438,198
BOSX	\$445,819	\$994,634	-\$548,815
CINN	\$2,142,489	\$2,634,557	-\$492,068
MWSE	\$73,897	\$59,243	\$14,653
<b>Total</b>	<b>\$10,900,000</b>	<b>\$10,900,000</b>	

Note: SIP net income of \$10,900,000 is the expected average monthly distributable SIP revenue for 2004. Market share estimates are from February 2004.

Nasdaq could benefit financially under the new formula, assuming no changes in quoting and trading behavior by the Plan Participants or their members.

Yet, Nasdaq has serious concerns that the formula will simply substitute a new set of distortions for the existing ones. Reducing the weighting of trading activity by 50 percent and disqualifying trades valued below \$5,000 should reduce the incentives to "wash" and "shred" trades, but may encourage firms to delay trade reports in order to bunch smaller trades into larger, qualifying trades, thereby reducing the integrity of the consolidated last sale.

Adding the quote component also creates a new incentive to "flicker" quotes and generate phantom quoting activity to gain additional revenue. Whereas the trades reflect real money passing between a buyer and seller, quotes are only indications, and therefore can serve as a "free option" for SROs to gain new data revenue, at a potentially very high capacity cost to the network processors. Additionally, rewarding time at the inside disadvantages faster markets by enabling slower markets to quote in greater size without reporting any trades. In that regard, Nasdaq supports the Commission's supplemental proposal to eliminate manual quotes from the

Quoting Share component of the proposed allocation formula, as well as eliminating the NBBO Improvement Share completely.

Nasdaq agrees that the Security Income Allocation ("SIA") methodology will reduce the disparity between the value of data of the most active and least active securities. In keeping with Nasdaq's proposed uniform formula for Plan data fees, Nasdaq suggests that the Commission consider applying the SIA square root methodology across all three networks in aggregate rather than applying it separately within each network. This would reduce the differences that exist today between the values of trades reported to the different networks: Network A currently accounts for 48 percent of total square root dollar volume of trading and receives 40 percent of total market data revenue, Network C accounts for 41 percent of total square root dollar volume but receives 37 percent of total revenue, and Network B accounts for only 12 percent of total square root dollar volume but receives a disproportionate 23 percent of total revenue.

Nasdaq then suggests allocating the individual security pools to each Plan Participant based on that Participants' relative share volume in the security. Share volume, while not impervious to distortion, is straight-forward, and mitigates tape shredding and the potential for quote flickering and other quote gaming that could increase SIP and data feed network costs.

### ***B. Consolidation and Display Requirements***

Nasdaq applauds the Commission's proposal to loosen the Display Rule restrictions that today prevent firms from displaying individual SROs' data. Specifically, the Commission is proposing to offer private firms more flexibility in the data they provide to professional and non-professional investors. The proposal requires only that core data that is necessary for an investor to make an informed investment decision at the point of sale – the NBBO. As stated earlier, Nasdaq strongly believes that last sale data does not provide information that is required for an investor to understand the state of the market at the point of sale, and thus should be removed from the core data definition. Allowing SROs, broker/dealers, and other private parties to sell all other data in a competitive environment, using value-based pricing models, is a critical element of competition.

However, the Commission must apply this principle equally to establish the scope of mandatory Plan data. In other words, Plans should control no more data than the Display Rule requires to be displayed. Nasdaq suggests, in fact, that the Commission prohibit network processors from accepting any non-core data, data beyond what is required to be displayed under the Display Rule. There are significant policy reasons to exclude enhanced information from the domain of the national market system plans, while allowing market data vendors to negotiate with each market for enhanced

information. In particular, this model establishes a framework in which: (1) markets would be encouraged to innovate and create greater value for their respective markets' services; (2) market data vendors would be encouraged to develop innovative means of consolidating and disseminating such market information; and (3) clear lines would be drawn allowing exchanges to serve their roles as markets by managing the full depth of their books, and allowing the processor to serve its role as a quasi-public utility responsible for calculating and disseminating the NBBO.

Allowing the processor to collect more than the BBO from each market will likely lead to investor confusion and ultimately result in unnecessary Commission rulemaking. If plan participants provided depth of their respective books to the processor, while others only provided their BBO, the processor would have incomplete information that may mislead or confuse investors. For example, if the stream of information provided by the processor provides an incomplete depiction of quotation interest at three minimum increments away from the best market, then such information will not provide any utility to market participants and investors. The Commission may be compelled to propose rulemaking that requires exchanges to make available *all* quotation information to the processor, or a specified amount of quotation information below the BBO.

***C. Independent Distribution of Additional Data Is Critical***

Nasdaq enthusiastically supports the Commission's proposal to allow the independent distribution of data. This is a necessary corollary to minimizing the data collected pursuant to national market system plans, and a critical ingredient to spurring maximum competition for data distribution.

***D. Plan Governance***

Nasdaq has long believed that non-SRO entities – such as ECNs, ATSS, market makers, specialists, other broker-dealers, investors, and market data vendors – should have a voice in the operation of any NMS plan. In fact, as the Commission is aware, the Nasdaq UTP Plan has approved the creation of an Advisory Committee and Nasdaq has urged the creation of such a committee by the Consolidated Tape Association, which administers Network A and Network B.

Nasdaq suggests that the Commission require competitive bidding for all plan processors. Congress was particularly concerned about entities that would be exclusive processors of market information for the SROs. Section 11A of the Act imposes on the Commission broad responsibility to assure exclusive processors' neutrality and the reasonableness of its charges. The Commission exercised that authority by ordering that the Plan governing Nasdaq-listed securities engage in competitive bidding for a processor that is

Jonathan G. Katz

July 2, 2004

Page 34

independent of the participants. The Commission has stated no compelling or even rational basis for applying that requirement to Nasdaq securities while simultaneously exempting the processor for NYSE and Amex securities from the same statutory requirement.

\* \* \*

Again, we congratulate the Commission on its effort to address a wide range of market structure issues through Regulation NMS. We welcome the opportunity to discuss our comments with members of the Commission and its staff, and otherwise to assist the Commission in moving forward with market structure reform. If you have any questions concerning our comments, please call me at 202/912-3030.

Sincerely,

Edward S. Knight

Attachments

June 28, 2004

Mr. Jonathan G. Katz  
Secretary  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549

Re: File Number S-7-10-04; Regulation NMS  
Sub-Penny Quoting Proposal

Dear Mr. Katz:

The Nasdaq Stock Market, Inc. (“Nasdaq”) respectfully submits this letter to comment on the sub-penny quoting proposal, as described in the Commission’s proposed Regulation NMS. Nasdaq intends to submit under separate cover its comments on the other proposals contained in Regulation NMS. However, Nasdaq believes that the sub-penny quoting proposal raises different and distinct issues from the other proposals and would benefit from a separate review and approval process. Consequently, to avoid possible unnecessary delays, Nasdaq asks that the sub-penny quoting proposal be considered and approved on a separate timetable that is not linked to the timetable for considering the other aspects of Regulation NMS. Nasdaq does not believe that any person would be materially disadvantaged by such separation, and, in fact, if it helps achieve an earlier approval date for the proposal, investors would benefit accordingly.

Nasdaq welcomes the sub-penny quoting proposal. Nasdaq is pleased that this proposal fully addresses the issues raised in Nasdaq’s August 2003 petition on this subject and is gratified that the information presented in that petition was of help to the Commission. Nasdaq believes that a uniform approach to quoting in sub-pennies across all market centers continues to be an important objective and expects that the Commission’s current proposal will help achieve it.

Nasdaq is of the view that sub-penny quoting can make prices not fully transparent to many investors, thus creating “hidden markets” and opportunities for improper and undesirable conduct by those market participants that are able and willing to take advantage of such hidden markets. Nasdaq is pleased that the Commission’s proposal recognizes and addresses this problem.

Nasdaq notes that, under the Commission’s proposal, sub-penny quoting for stocks priced below one dollar would still be permitted. Nasdaq’s own rules prohibit all sub-penny quoting in Nasdaq securities, and Nasdaq currently is not planning to carve out

Jonathan G. Katz

June 28, 2004

Page 2 of 2

an exception in these rules just for the under-one-dollar stocks. Among multiple other factors, the cost of making the needed system changes to accommodate such an exception may not be justified by the level of investor interest in sub-penny quoting in the under-one-dollar stocks. Nasdaq will continue to review and assess the situation in this regard and will, of course, submit any possible proposed Nasdaq rule changes for the Commission review.

Nasdaq also notes that the Commission's proposal applies only to sub-penny quoting, and does not cover certain types of sub-penny trading. Nasdaq agrees with the Commission's rationale for drawing this distinction, and supports the Commission's position in this regard.

Please do not hesitate to contact me if you have any questions with regard to this comment letter.

Sincerely,

## ***Market Quality Analysis***

***NASDAQ has superior execution quality in actively traded stocks.***

- **The table below compares NASDAQ-100 stocks with NYSE-listed S&P 100 stocks.**
- **NASDAQ offers investors tighter quoted and effective spreads, with greater speed and certainty of execution.**

All Marketable Orders, All Order Sizes			
Market Center	Nasdaq	NYSE	Comparison
Stock Group	Nasdaq-100	S&P 100	NASDAQ is...
Exec. Speed (secs)	5.0	16.8	3.4x faster
Quoted Spread (¢)	1.1	1.4	19.3% less
Effective Spread (¢)	1.4	1.6	17.7% less
Improved (%)	8.3	18.9	56.1% less often
At Quote (%)	82.8	61.4	34.9% more often
Outside Quote (%)	8.9	19.7	54.8% less often

Source: MSI. Based on January 2004 11ac1-5 data.

## ***Market Quality Analysis***

***NASDAQ has superior execution quality in actively traded stocks.***

- **The table below compares NASDAQ-listed S&P-500 stocks with NYSE-listed S&P 500 stocks.**
- **Again, NASDAQ offers investors tighter quoted and effective spreads, with greater speed and certainty of execution.**

All Marketable Orders, All Order Sizes			
Market Center	Nasdaq	NYSE	Comparison
Stock Group	S&P 500	S&P 500	NASDAQ is...
Exec. Speed (secs)	5.5	14.0	2.5x faster
Quoted Spread (¢)	1.1	1.8	40.3% less
Effective Spread (¢)	1.4	2.7	48.9% less
Improved (%)	13.6	23.1	41.1% less often
At Quote (%)	73.6	46.3	59.0% more often
Outside Quote (%)	12.7	30.6	58.5% less often

Source: MSI. Based on January 2004 11ac1-5 data.



## Market Order Shares Traded Outside the Quote February 2004: 11Ac1-5 Statistics

Market Order Size Category	NYSE-listed Securities		Nasdaq-listed Securities	
	All Market Centers	NYSE Specialist	All Market Centers	Market Makers
100-499 shares	16.8%	20.2%	7.8%	5.1%
500-1999 shares	21.7%	25.5%	13.0%	11.1%
2000-4999 shares	31.4%	34.6%	22.5%	22.1%
5000-9999 shares	38.7%	41.7%	27.0%	27.3%

## Observed Trade-Through Rates using Last Sale Data

Apr 1 – 12, 2004

Detection Rule <i>Before/After</i> <i>(seconds)</i>	NYSE-Listed <i>(Avg 1.95 MM Trades/day)</i>		Nasdaq-Listed <i>(Avg 3.49 MM Trades/day)</i>	
	Trades	Shares	Trades	Shares
0/0	4.2%	10.2%	7.7%	11.5%
5/2	2.0%	6.9%	1.6%	5.1%
10/5	1.5%	5.3%	0.9%	3.5%
25/10	1.0%	3.6%	0.5%	2.0%

Note: NYSE-listed statistics do not include “satisfying commitments” done to satisfy trade-through complaints.

**Proposed Language/Service Level Agreement (SLA)  
for Defining Whether an Order Execution Facility  
Has Fast Quotes**

Order Execution Facilities providing “Fast Quotes” must fully meet the **Automated Response Requirement** defined in this Rule/SLA.

**Automated Response Requirement**

1. Order Execution Facilities must provide a **Required Response for Submitted Transaction** to all **Submitted Transactions** within the **Minimum Required Response Time**.
2. Order Execution Facilities must provide a quote update within the **Minimum Required Response Time** following executions that affect the price or size of their displayed quote.
  - a. Measurement of a quote update response to an execution requires that Order Execution Facilities explicitly associate quotes with executions using the **Industry Standard for Associating Quotes with Executions**.

**Submitted Transactions**

1. Market Order attempting to access a fast Order Execution Facility’s quote.
2. Limit Order GTC attempting to access a fast Order Execution Facility’s quote.
3. Cancellation of a previously submitted Limit Order GTC.

**Required Response for Submitted Transaction**

1. Order Execution Facilities must provide an automated response indicating that the **Market or Limit Order GTC** was either executed (in full or partially) or rejected.
2. Order Execution Facilities must provide an automated confirmation response to a limit order cancellation request (UROut).

**Minimum Required Response Time**

1. **Minimum Required Response Time**
  - a. One-quarter second (250 milliseconds) during the **Normal Time Period**.
  - b. One-half second (500 milliseconds) during the **Busy Time Period**.
2. The **Minimum Required Response Time** is computed as an average response time based on a measurement of all response times over a five-second time interval. The average computation must be less than **Minimum Required Response Time** for each and all five minute periods throughout the **Required Time Period**.
3. The **Minimum Required Response Time** will be reevaluated on a periodic basis (e.g. every six months) due to the progressively increasing transaction response time requirements and capabilities of automated markets.

**Required Time Period**

1. **Normal Time Period**
  - a. 9:35 AM EST to 3:55 PM EST
2. **Busy Time Period**
  - a. 9:30 AM EST to 9:35 AM EST
  - b. 3:55 PM EST to 4:00 PM EST.
3. The **Required Time Period** will be reevaluated and adjusted on a periodic and as-needed basis. For example, on days of Expiration Fridays and Index Reconstitutions, the industry may desire to extend the **Busy Time Period**.

**Industry Standard for Associating Quotes with Executions**

1. TBD.

### **Exemptions**

1. Industry-defined Circuit Breaker conditions.
2. Orders deemed routable by order submitter.
3. Orders of size greater than the Market's displayed quote (BBO). However, the Market is expected to meet fully the **Automated Response Requirement** up to the displayed quote size.

### **Disclosure Requirements**

1. Markets must identify quotes not designated as "Fast" on all of published data feeds. This is required for both proprietary and Securities Information Processor (SIP) data feeds.
2. Markets must provide publicly available statistics demonstrating their level of compliance with the Minimum Required Response Time for all Submitted Transactions and Quote Updates.
3. Markets that do not provide automated access to their quotes (i.e. "Fast Quotes") at all times must disclose how often their quotes are not designated as "Fast."

## Existing Model for Plan Revenue/Expense Allocation

### 2002 Audited Financial Statement Results - Network A

Revenues	\$179,632,000
SIAC Expenses - SIP	\$6,579,000
<u>NYSE Expenses - Plan Administrator</u>	<u>\$10,965,000</u>
<u>Net Income Available for Distribution</u>	<u>\$162,088,000</u>

### Allocation of Net Income to Plan Participants

<u>Plan Participants</u>	<sup>1</sup> <u>Market Share</u>	<u>Net Income</u>
SRO A	60%	\$97,252,800
SRO B	10%	\$16,208,800
SRO C	15%	\$24,313,200
SRO D	10%	\$16,208,800
SRO E	5%	\$8,104,400

<sup>1</sup> Market share percentages for illustrative purposes only - do not match 2002 audited financial statement

## Proposed Revised Financial Statement (using 2002 Network A expenses)

<sup>1</sup> Revenues	\$20,000,000
SIAC Expenses - SIP	\$6,579,000
NYSE Expenses - Plan Administrator	\$10,965,000
<sup>2</sup> Income Available for Allocation (revenue minus Administrator Expenses)	<u>\$9,035,000</u>

## Allocation of Available Revenues to Plan Participants

<u>Plan Participants</u>	<sup>3</sup> <u>Market Share</u>	<u>Revenue</u>
SRO A	50%	\$4,517,500
SRO B	20%	\$1,807,000
SRO C	15%	\$1,355,250
SRO D	10%	\$903,500
SRO E	5%	\$451,750

## <sup>4</sup> Proposed Allocation of SIP Costs to Plan Participants

<u>Plan Participants</u>	<u>Requested Capacity as % of Total</u>	<u>Cost</u>	<u>Net Income</u>
SRO A	70%	\$4,605,300	(\$87,800)
SRO B	10%	\$657,900	\$1,149,100
SRO C	10%	\$657,900	\$697,350
SRO D	5%	\$328,950	\$574,550
SRO E	5%	\$328,950	\$122,800

## Notes

- <sup>1</sup> Revenues would be based on an estimate of SIP and Administrator costs; thus, they could slightly exceed the costs to avoid underfunding the Plan due to potential revenue fluctuations or higher than expected costs
- <sup>2</sup> Administrator costs would be reimbursed directly from gross revenues; those costs tie directly to the billing, collections, administering Plan revenue; remaining revenue would be allocated based on Participant market share
- <sup>3</sup> Market share percentages for illustrative purposes only - do not match 2002 audited financial statement
- <sup>4</sup> SIP expenses would be reimbursed based on each Plan Participant's requested capacity utilization of SIP computer resources