



BOSTON  
STOCK EXCHANGE

June 30, 2004

Jonathan G. Katz  
Secretary  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549-0609

**RE: Proposed Rule: Regulation NMS (National Market System)**  
**(Release No. 34-49325, File No. S7-10-04)**

Dear Mr. Katz,

The Boston Stock Exchange, Inc. (“BSE” or “Exchange”), is responding to the request for comment on the Securities and Exchange Commission (“Commission” or “SEC”), Proposed Rule: Regulation NMS (“Proposal” or “Release”), which includes substantive proposals designed to enhance and modernize the regulatory structure of the U.S. equity markets. The BSE commends the Commission and its staff for undertaking such a task with complicated issues that will likely affect all participants that comprise the U.S. National Market System. We appreciate the opportunity to provide input on such an important document that affects SRO responsibilities and participation in joint industry plans supporting our national market.

The BSE recognizes the competitive challenges posed by innovative trading technologies and new market participants that have created different and unique trading systems requiring further regulatory attention. Many of the current rules do not adequately recognize these new trading practices and methods of access to the competing markets. We also recognize that these rule proposals,

significant to the current market structure, are only part of a process that will require continual re-evaluation in order to manage the subtle changes in trading conventions that will no doubt continue with further advances in technology. As these conventions change, the BSE is committed to remain an attractive and competitive market of choice for investors to receive quality executions with the highest possible attention to the elements comprising “best execution,” including speed and certainty of the best price.

## PREFACE

The BSE has addressed herein the four substantive rule proposals that comprise the new Regulation NMS<sup>1</sup> and believes that some of these proposals raise complex issues that will require further input once the markets are able to review and evaluate many of the critical issues that surface from the public comments received by the Commission. This was also the process recognized by the Commission as a result of the public hearing conducted on Regulation NMS that led to the current extension of the comment period and supplemental request for comment.

We hope that the SEC staff will seek further input on the most critical issues raised by these comments to ensure that the new regulatory framework will effectively balance competing market models with the most important goals, being investor protection and maintenance of fair and orderly markets.

## EXECUTIVE SUMMARY OF OUR COMMENTS

### **Proposed Trade-through Rule**

The Exchange believes that the proposed uniform Trade-through Rule should apply to both listed and NASDAQ securities. The Exchange also agrees with the adoption of an Automated Order Execution Exception which would enable identification, on a quote-by-quote basis, that a particular quote (or security) was not accessible through an automated means. If the automated execution exception is adopted, the proposed “Opt out” provision may become moot.

Further, that the ITS Linkage should be enhanced and the ITS Plan amended to remain as the most cost effective and efficient means to accommodate the Commission’s proposal.

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<sup>1</sup> The four substantive rule proposals are referred to as: (a) A Uniform Trade-through Rule for all Market Centers; (b) a Market Access Rule to modernize the terms of access to quotations and execution of orders in the NMS; (c) Sub-penny Quoting Proposal with certain restrictions on quoting; and (d) a Market Data Proposal including amendments to rules and joint industry plans for dissemination of market information.

## **Market Access**

We do not believe the SEC should establish new access fees when the problems necessitating this particular proposal could be resolved directly by regulating and requiring publication of ECN fees. We already have sufficient means of fair access to our markets that include both direct and indirect access.

## **Sub-penny Quoting**

The Exchange agrees with the Proposal to ban sub-penny quoting in stocks priced at \$1 and above but also permit trade reporting for certain mechanisms (average or midpoint pricing) that provide finer price improved increments on certain transactions.

## **Market Data**

The Exchange agrees with the goals of the Commission that improvements are needed to the current Plans. The Exchange has concerns however, that the proposed formula still provides opportunities for gaming the revenue distribution process. In addition, the inclusion of dollar value in the three sub-categories of the formula would favor market centers that execute large institutional sized orders while specifically and unfairly penalizing markets who service smaller retail sized orders. The Exchange has proposed a new formula that minimizes gaming potential and incents price improvement for all size orders.

## DISCUSSION

The BSE has separated its comments on the Release into the four principal rule proposals.

### Proposed Trade-through Rule

The BSE supports the SEC mandate for a uniform Trade-through rule for both listed and NASDAQ equity securities. The Trade-through rule has been at the heart of the ITS Plan that links the markets for listed equity trading. The Plan was intended to provide reasonable access standards to the national markets to ensure that all customer orders would be treated fairly by the market participants representing those orders.

The proposed Trade-through rule, subject to two significant exceptions, would require a market center to establish, maintain and enforce policies and procedures

reasonably designed to prevent “trade-throughs” -- the execution of an order in its market at a price that is inferior to a price displayed in another market. The BSE agrees with, and supports the fundamental principle of price priority as affirmed by the Trade-through rule. The Release supports this principal element of best execution in all four of the rules proposed in the Release.

### All NMS Securities

**The need for adherence to minimum investor protection principles in the national market should not be a function of whether a security trades in either a listed or a Nasdaq environment.** This is a principle requiring equal standards that a uniform Trade-through rule would accomplish only by its application to all NMS securities. An individual investor’s portfolio, either held directly or indirectly through a mutual fund, would likely include both listed and Nasdaq securities. There is no reason why the same standards of price protection should not be required.

The disparity in rules among the different markets has created inequalities in the application of price protection responsibilities. Execution of customer orders in one market, while better-priced quotes displayed in another market are ignored, is a common occurrence. This is a weakness in the national market that requires attention. Whether listed securities are traded in the “third market” or in an auction environment, there is need for a uniform standard of price protection. Equally important to the individual investor, with a portfolio comprised of both listed and Nasdaq securities, is the basic tenet for receiving the best price. **The proposal for a uniform Trade-through rule for both listed and Nasdaq securities is an appropriate solution.**

### Trade-through Exceptions

The Commission has proposed two new major exceptions to the Trade-through rule in order to recognize the distinctions between competing market structures, and to afford investors more control over how their orders would be executed.

The first exception to the Trade-through rule would allow customers (and brokers trading for their own accounts), to “opt-out” of the (price) protections of the rule by providing informed consent to the execution of their orders. This would occur on an order-by-order basis in one market without regard to the possibility of obtaining a better price in another market. The second exception to the Trade-through rule would create obligations based upon two categories of order execution facilities -- an

“automated order execution facility,” and a “non-automated order execution facility” (also characterized as “fast” vs. “manual” markets).

In addition, the proposal eliminates two current trade-through exceptions and retains the balance of the existing ITS Plan trade-through exceptions.

### “Opt-Out” Exception

The Exchange has serious concerns with the first exception, which provides an “opt-out” choice to an investor, presumably motivated by the need for speed and certainty over the possibility of a better price. The order handling rules enacted in January of 1997 were designed to enable investors’ orders to have a better chance for execution of their (displayed) trading interest at a better price. The rule required that limit orders be displayed if at the best price, and provided other markets and investors an opportunity to respond to that best quote for an execution. An “opt-out” provision designed for speed severely reduces the incentive to place limit orders on the book, and therefore undermines the display rule. **The Trade-through rule has been, and should continue to be an incentive for investors to place limit orders with a broker to increase the chance for a better-priced execution.**

Another aspect of the “opt-out” provision that could cause similar concerns, is the incentive for brokers to internalize such orders at inferior prices based upon their customers’ informed consent, thereby placing further reliance upon brokers to maintain their fiduciary obligations of “best execution.” The rule also requires further disclosure<sup>2</sup> that a broker-dealer be confident that the customer fully understands this disclosure and the nature of consent. The criteria relied upon to meet this fiduciary duty may derive solely from speed (trumping price) at the expense of the customer. Moreover, this same execution would preclude, indirectly, another customer’s better-priced order available on another market from being executed. We doubt that most investors understand the impact of the “opt-out” choice on the integrity of the very same quotes that he or she may be relying upon when making this decision.

Over the past few years, the markets have undergone dramatic changes. Since decimal pricing was instituted in 2001, quote spreads have narrowed

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<sup>2</sup> “a broker at a minimum should explain in clear and concise terms to any customer from whom it accepts consent, for such order, that: (1) the customer’s order would be executed in the market to which it is sent without regard to prices displayed in other markets, even if those prices are better; (2) the customer affirmatively would be agreeing to forego the possibility of obtaining a better price that may be available in another market at the time its order is executed; and (3) this could result in the customer’s order receiving an execution at the time his or her order is executed.”

considerably and the markets have become more sophisticated with more efficient technology. Yet the Commission is proposing what we consider a unique exception for investors to choose an inferior price, principally under the guise of “certainty” and/or speed. Our question now becomes, what is the second best price, or perhaps even the third or fourth best price that the “opt-out” order will receive? There is no guidance in the Release as to what price level the informed consent could be justified before it becomes questionable.<sup>3</sup>

**Finally, if the goal of the “opt-out” exception is speed (and certainty) and an exchange provides an automated order execution facility (“fast”), then the need for an “opt-out” exception becomes moot.** We intend to provide automated “fast” executions and do not believe a need exists for an opt-out exception.

#### Automated Order Execution Facility Exception

The second proposed exception to the Trade-through rule is based on whether a market facility provides an automated execution of an incoming order and the extent to which such automation meets the standards required of an immediate execution when received.

The Release proposes to permit an automated execution facility (“fast” or “automated market”), to execute orders within its market without regard to a better price displayed on a non-automated execution facility (“manual” or “non-automated market”), within certain parameters.<sup>4</sup> It further qualifies this proposal to restrict an automated market from trading-through another automated market. Finally, the Release proposes that a non-automated market would not be allowed to trade-through any other market, regardless of whether or not it is automated.

**The Exchange supports this second exception based on the distinction between automated and non-automated executions, whereby a manual market (or quote) could be traded-through based upon the proposed trade-through limit amounts of 1 to 5 cents. We also support the supplemental request that raised the prospect of enabling order routing technologies to identify, on a quote-by-quote basis, indications from a market center that a particular quote was not accessible through an automated**

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<sup>3</sup> The second significant exception regarding a “fast” market trading through a “manual” market includes trade-through limit amounts (1 to 5 cents), based on the price of the security (\$10, \$30, \$50, \$100, and above \$100). **No such parameters have been suggested for the “opt-out” provision.**

<sup>4</sup> The Commission proposed the following “trade-through limit amounts”: for a bid or offer up to \$10, an allowance of 1 cent; for a bid or offer between \$10.01 and \$30, an allowance of 2 cents; for a bid or offer between \$30.01 and \$50, an allowance of 3 cents; for a bid or offer between \$50.01 and \$100, an allowance of 4 cents; and for a bid or offer above \$100, an allowance of 5 cents.

**market.** We believe that the finer distinction being made between manual and automated quotes, rather than manual and automated markets, would better enable different market models to co-exist and compete more fairly with one another.

We are however, unclear as to what an “immediate automated response” means. In its original Release, the Commission defined an “automated order execution facility” as one that “provides for an immediate automated response to all incoming orders for up to the full size of its best bid and offer disseminated...without any restrictions on executions.” The restrictions discussed in the Release included the ability to turn off the automatic execution system or otherwise limit the ability to access quotes on an automated basis. The supplemental Release appears to eliminate this particular restriction where a market center would be able to refine the automatic execution feature to individual quotes. **In either case, whether immediate refers to a market or a quote, we believe the definition of “immediate” should be the same.**

An automated execution today should be defined as “immediate” if an order is received, executed in whole or in part, and reported back all within 1 second. If the Commission were to relax the timeframe to 2 or 3 seconds to recognize potential delays in communication among the linked markets, then the trade-through provision would need to identify the measuring price at the time of receipt versus the time of execution. This would avoid violations of the rule when system latency would be the only intervening cause of delay.

In addition, in order to facilitate the effective interaction with displayed quotes, auto-executable or manual, there must be an identifier in the displayed quote (or market center) to enable the order routing mechanism to properly identify the market of choice. It is also possible that a market may choose to identify by security rather than by individual quote as to whether it is auto-executable or manual. In either case, increased flexibility defined by quote or security rather than by market center would be the preferable choice.

### **ITS Overview**

The Exchange has recommended retention of the ITS System through revisions and enhancements to the ITS Plan in order to utilize a technologically sound network that already links all the markets. Multiple individual links to every market is not an economical or practical solution and it would enable gaming opportunities within the markets via technology.

The recommendations incorporate many of the proposals in the Release which for the most part provide greater recognition to technological enhancements. We believe that with additional identifiers based on a quote (or security) that distinguish automated from manual quotes, coupled with unique (order) commitment identifiers for sweep orders and the resulting print, that the ITS system would become a more level platform designed for efficient order routing and facilitation.

In addition to the savings that would accrue from retaining the existing linkage technology, there are the current (back office) clearing benefits that support the ITS linkage. Further, operational efficiencies would follow with some changes to the ITS Plan as discussed below.

#### ITS Plan – Current Status

The Trade-through rule has always been viewed as a vehicle to encourage the display of trading interest to increase order interaction among the markets that are linked through ITS, as well as a measure for providing price protection to the orders received by a market participant.

Unfortunately, the degrees of enforcement of this protection were, for the most part, based on a complaint process and exceptions that provided too many opportunities for abuse. The Proposed enhancements to the Trade-through rule will reduce the potential for such abuse.

We are in a competitive environment of increasingly sophisticated technology that has created more disparities in trading patterns and order handling among the competing market centers. The markets have always responded through their own enhanced market models to better address these inefficiencies, yet these competing markets are subject to rules that were not designed for a highly automated inter-market linkage. These inefficiencies include the trade-through complaint process with operational and resolution procedures, uneven levels of enforcement of trading practices, as well as expiration parameters of 30 seconds, 1 minute and 2 minutes. The result is that competing markets, linked through the existing ITS Plan, are often prevented from achieving timely executions of certain orders, or are handicapped as to the certainty of whether an order would be executed at all due to certain trading practices or exceptions within the ITS Plan. We believe the ITS system should be retained as a technologically sound network that already links together the markets.

## ITS Plan – Enhancements

We believe that the ITS linkage would continue to be able to accommodate order routing among the market participants, with additional identifiers where appropriate to recognize certain exceptions proposed in the Release and supported herein. An enhanced ITS linkage could support certain access requirements and trade-through responsibilities within each market.

The BSE would recommend that the current ITS Plan expiration parameters be eliminated so as to recognize commitments only for an automatic execution or manual handling by the receiving market. The cancellation feature should remain as a part of an automated response to a partial automated execution, an approved exception under the revised ITS Plan, or as a cancellation of a commitment that has not been executed by a manual market recipient.

We believe the remainder of the ITS exceptions<sup>5</sup> should remain in effect. In addition, we would recommend the proposed “sweep” mechanism<sup>6</sup>

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<sup>5</sup> Other ITS exceptions: (a) an order execution facility may send an order to execute against a better-priced order displayed on another market at the same time or prior to executing an order in its own market at an inferior price. (Specifically, this exception is intended to allow for the execution of an order at a price that trades through a better-priced bid or offer displayed on another order execution facility if the order execution facility (Market A) executing the order has sent an order to trade with that better-priced bid or offer on another market (Market B), in compliance with the requirements of the exception, only during the time period after the market trading through (Market A) has sent the order to the away market, but before it receives a response or the quote on the away market (Market B) is updated. It is not intended to permit a trade-through exception after it (Market A) receives a response from the away market (Market B) or that away market has changed its quote. If the better-priced bid or offer is still available when the incoming order (from Market A) reaches Market B, the incoming order should execute against the better-priced bid or offer on Market B. The exception would not alter a broker-dealers’ duty to provide best execution to that order, by providing that order the better price); (b) the order execution facility displaying the better price was experiencing a failure, material delay or malfunction of its systems or equipment when the trade-through occurred; (c) the order execution facility that initiated the trade-through made every reasonable effort to avoid the trade-through but was unable to do so because of a systems or equipment, material delay or malfunction in its own market; (d) the transaction that constituted the trade-through was not a “regular way” contract (the non-regular way order is likely taking into account factors not related to the current market price); (e) the bid or offer that is traded-through was displayed by an order execution facility that was, or whose members were, relieved of their obligations under paragraph (c)(2) of Rule 11Ac1-1 under the Exchange Act (firm quote responsibility relief from a quoted price and size displayed during unusual market conditions pursuant to a notification made by a national securities exchange to its members); (f) the transaction that constituted the trade-through was an opening or reopening transaction by the order execution facility; and (g) the transaction that constituted the trade-through was executed at a time when there was a crossed market (when the best bid is higher than the best offer).

<sup>6</sup> “Sweep” mechanism – as proposed in the supplemental (Release) request for comment is not covered by the other proposed exceptions to the trade-through rule. This new type of “inter-market sweep order” would enable a market participant to simultaneously route orders to interact with all best bids and offers displayed in the consolidated quote system at the same time as, or prior to, executing the remaining balance in its own market at an inferior price.

discussed in the SEC Supplemental Release, should be part of the (new) ITS Plan. This feature will help facilitate large orders and compliance with the trade-through provision, as opposed to an “opt-out” exception. An identifier however, must be appended to the “sweep order” so that the receiving market center would be able to execute this particular type of order, without regard to whether a better price were displayed on another market center, as well as the resulting print of the sweep order, in order to avoid further confusion.

The Proposal also specifically eliminates two current ITS exceptions from the Trade-through rule. The first exception relates to locked markets, and the second to the 100 share bid or offer exception. The Exchange believes that the current ITS locked market exception should remain in effect for several reasons, including certain issues discussed later under the market access proposal.

The Exchange believes that with the increased levels of automated execution of quotes likely to occur in every market center, and a requirement for every SRO to establish and enforce rules requiring its members to avoid locking (or crossing) quotations of other market centers and participants, that this particular exception is still an appropriate form of relief from the Trade-through rule.

We believe that locked (and crossed) markets between market centers may occur when two or more markets are changing quotes simultaneously, or that different quoting mechanisms may result in varying response times for quote changes, or that an automated market quote may lock a manual market quote. These incidents of justifiable, though we hope infrequent occurrences of locked markets, should also be permitted under the locked market exception for quotes of automated markets that lock quotes of a manual market (or quote).

The mandate for SRO rules prohibiting members from engaging in a pattern or practice of locking or crossing quotations in any securities, if adequately enforced, should be sufficient deterrence to minimize these incidents to the infrequent situations caused by the interaction of automated quotes and non-automated quotes.

The second exception from the Trade-through rule pertaining to 100 share bids or offers that is currently permitted by the ITS Plan may also be an exception worth keeping. The Exchange recognizes that the best price element of best execution responsibility cannot and should not be undermined or reduced by an exception to the trade-through rule in most cases. Certainly, an investor order deserves the best price even for a 100

share order. We believe the 100 share exception has been used primarily to meet the firm quote obligation to represent a market for a particular security as available and accessible, even if only quoting 100 shares. Each market remains obligated to comply with its own rules where price protection policies or minimum guarantees are enforced.

The 100 shares quote has, in its simplest form, existed as a convenience to system generation of two-sided quotes, when one or both sides of a quote do not have an existing order being displayed. If the concern for circumvention of other requirements of the proposed rule is the primary reason for its exclusion, we would suggest that such a practice would become readily apparent to a market center, which could take appropriate regulatory action.

We do, however, have some concerns with the de minimus trade-through exception provision currently permitted for certain ETFs (QQQs, SPDRs, and Diamonds). We believe that recognition of rapidly changing quotes, related to other derivative based products, does warrant special consideration. Secondly, we also believe that the activities in these three ETFs do reflect very liquid markets. Further review of this de minimus exception may be appropriate before a decision is made to eliminate this particular exception for these three ETFs. We would not however, support any expansion of the de minimus trade-through exception provision to other securities.

The changes we propose here for a revised ITS linkage are not intended to be all inclusive in view of certain other related issues in the Release pertaining to access and fees. **We do believe, however, that more focus on fixing the existing ITS linkage, rather than trying to re-invent a new linkage through minimum access standards, is by far the best approach.** We would support and participate in any special Commission mandate to redesign the ITS Linkage Plan to accomplish the goals expressed in the NMS Release.

### Market Access Proposal

The BSE supports the concept of uniform regulatory standards of access for competing markets to the extent that these standards enable SROs to recognize the benefits associated with becoming a member of that marketplace, or through an approved national “market linkage facility” such as ITS. To the extent that access is provided to a non-member of a particular exchange or market center, we also support improvements that would increase market participants’ access on a non-discriminatory basis.

Since the emergence of new market participants, which include ECNs, first through SEC no-action letters and subsequently codified under Regulation ATS, many of the access related problems still remain largely unregulated because of negotiated private agreements with subscribers.

We believe that particular attention should be given to ECN access fees that appear to be the principal motivating force in proposing new access standards. The Release notes that access fees can impede access between competing markets, create confusion about the true quoted prices, and of particular significance, provide incentives that have caused the dramatic increase in locked and crossed markets; a fact that supports the inclusion of locked and crossed market enforcement under the Market Access Proposal.<sup>7</sup>

The access fee proposal is also confusing because it appears to link ECN access fees to exchange transaction fees<sup>8</sup>. Exchange transaction fees are not the same as ECN access fees. The exchanges' transaction fees, as well as any other fees assessed on its' members are filed with, and approved by the SEC. The fees are publicly available and are factored into member business models when transacting through an exchange facility. Exchange transaction fees are known by all parties to the transaction before it occurs.

We want to ensure that because of some of the problems associated with ECN access fees charged to non-subscribers who access their quotes, that SROs are not penalized for charging fees associated with the various trade related support services provided to its members<sup>9</sup>. Further, if such fees are subject to a de minimus cap of \$.001 per share or \$.002 per share as an accumulated access fee, the result would cause inequities to members of an exchange and added costs to the SRO because of a subsidy to non-member access. The benefits of membership on an exchange would become diluted in value.

The Exchange has permitted access to its markets to members directly, to non-members indirectly as customers of members, and to other non-member market participants through ITS (including Nasdaq members through the Nasdaq CAES facility). The fees for such access are fair and reasonable, and pose no barriers to other market participants who are able to see the fee structures applicable to the type of access and order routing choices available.

Members of an exchange are able to incorporate exchange transaction fees into their own cost structure in determining commissions and related fees to their own

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<sup>7</sup> Much of the concern regarding artificial quotes and unintended consequences of ECN liquidity rebates causing excessive locked and crossed markets is discussed in this Release (See IV A 3 Access Fees and IV B 3 i Access Fees).

<sup>8</sup> See footnote 39 of the Regulation NMS Supplemental Request.

<sup>9</sup> Among these services that are linked either directly or indirectly are: regulatory and compliance, surveillance, systems support, operations, administration and finance, etc.

customers. We believe that the SEC should revisit its approach to the problems created by access fees, and the related caps that are designed to lower the barriers to access. **We believe the Commission should regulate ECN fees and require filings and publication of these fees in order to achieve parity among the market participants.** The Commission should not be in the rate setting business, rather, as with all SRO established fees, competition and different levels of service should be the determining factor of what is a reasonable fee. **We do not believe there should be any access fees as they are described and limited in the Release.** Where regulatory issues surface that frustrate market access, regulatory intervention by an SRO or the SEC should be the proper remedial action.

The Release also proposes to expand the definition of “access to quotations,” not only to the posted best bid and offer, but to the markets’ “depth of book.” We believe a further distinction is warranted here as to how this access is to be addressed when the best bid and offer may be automatically executable. We would prefer to first determine what the ultimate NMS proposed rules will look like, especially if ITS linkage is improved with automated execution capabilities, including “sweep” orders, where automated access would be limited to the best bid and offer at the time of receipt. Access beyond the best bid and offer, such as depth of book, would require further evaluation from a competitive view, as well as from a cost/benefit standpoint.

We also recognize that there will be occasions where locked or crossed markets can occur when two or more markets are changing quotes simultaneously, or competing market quoting mechanisms may be slower, or that an automated market may lock a slower manual market. We believe the problem is with an excessive incidence of such locking or crossing that warrants special attention.

The Release requires all SROs to establish and enforce rules requiring members to avoid locking or crossing quotes. We agree that intentional locking or crossing should be regulated and enforced. In addition, where patterns or practices become apparent, disciplinary action would be the appropriate response.

### Sub-penny Quoting Proposal

The Release indicates that since the conversion to decimals on January 1<sup>st</sup> of 2001, new concerns have surfaced regarding the quoting and trading of securities in sub-penny increments. The Commission issued a Concept Release in July of 2001, seeking further input on what the optimal minimum price increment should be for quoting and trading securities. Further study by the SEC’s Office of Economic Analysis in April of 2003, concluded that use of sub-penny pricing for most stocks was more likely related to traders’ attempts to gain precedence over competing orders.

As a result of these concerns, the Proposal would prohibit every national securities exchange, national securities association, ATS (including ECNs), vendor, broker or dealer from ranking, displaying, or accepting from any person a bid or offer, an order, or an indication of interest in any NMS stock with a share price of \$1 or above in an increment less than \$0.01.

The exchange agrees with the Proposal to ban sub-penny quoting in stocks priced at \$1 or above. We also recognize the potential for abuse, especially where such sub-penny increments are not visible in the quote, and priority could be gamed at less than a decimal increment.

The Exchange does, however, recognize the concept of average or midpoint pricing mechanisms where orders are received in decimal increments and then executed in finer price improved increments or average prices and printed in less than penny increments. Finally, we also support the Release in recognizing and permitting the trade reporting (“printing”) in sub-penny increments so long as such prints do not represent orders received or quoted in increments below a penny.

### Market Data Proposal

The Commission is proposing to amend the rules governing distribution and display of market information and the joint industry plan for disseminating market information to the public. Many of these proposals are, to a large extent, based on recommendations from the Advisory Committee on Market Information (“Advisory Committee”), that were issued in a report in September of 2001.

The Commission believes that the current Plan formulas<sup>10</sup> have generated economic and regulatory distortions in how they allocate network net income to SROs. Specifically, the current formulas do not directly reward the highest quality quotes that contribute most to price discovery. Further, exclusive focus on trade reporting has created incentives for “print facilities” solely to maximize market data revenues.

The Commission has indicated that its primary goals include: (1) maintaining the quality of information disseminated to the public; (2) ensuring the reasonableness of fees that would preserve the wide public availability of market information; and (3) improving the distribution of fee revenues to reward those SROs that contribute most to public price discovery. In its Proposal, the Commission offers a new formula that divides fee revenues between Quoting and Trading.

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<sup>10</sup> The CTA Plan bases its formula strictly on the number of trades (exchange-listed securities) and the Nasdaq/UTP Plan bases its formula on both trades and shares.

The Exchange agrees with the overall goals of the Commission and that improvements are needed to recognize, through a new formula, an “SRO’s contribution to a Network’s data stream.” We also believe, however, that the current proposed formula may create new unintended distortions because of the criteria used in each of the three basic distribution categories. We will discuss the consequences of these negative aspects of the formula and have proposed a new formula that may very well accomplish the goals stated by the Commission and minimize the chance of further gaming the revenue allocation process.

The proposed formula can be summarized as follows:

1. **SEC proposed formula** divides revenues between Quoting and Trading
  - a. Formula is complex
    - i. **Trading Share** (50%) includes dollar volume and excludes trades valued below \$5,000
    - ii. **Quoting Share** (35%) quote credits include a multiple of time (seconds) at the NBBO, size and dollar value (quotes stop earning credits if alone at the NBBO)
    - iii. **NBBO Improvement Share** (15%) – multiple of each 5 second (time block) creating or maintaining NBBO, size of the quote, and dollar value of quote.

The formula proposed in the Release is a very complex approach for allocating market data revenues to the SROs. The formula attempts to place greater emphasis on the quality of the quotes as part of its efforts to reduce the past distortions of trade reporting. The formula at first blush would appear to be divided equally between quoting and trading. The elements that comprise each category however, include a common factor of dollar volume that would distort the overall result of the revenue distribution. **Each of the three sub-categories of the formula would favor market centers that execute large institutional sized orders, while specifically and unfairly penalizing markets which service smaller retail sized orders.** We would like to point out those portions of the formula where there are opportunities for gaming and where there may be inequalities as noted above.

The first step before reaching the specific categories of the formula is the “Security Income Allocation,” that is based on the square root of each stock’s dollar volume. “The Commission preliminarily believes that it is appropriate to reward those SROs whose quoting and trading activity extends broadly throughout the thousands of stocks included in a Network.” Further, that “the dollar volume represents the importance of trading activity in each security.” We disagree with the relative weight given to this particular element, especially when it is factored into each of the three specific categories of the formula. More specifically, the formula is separated into three principal categories of Trading Share (50%), Quoting Share (35%) and NBBO Improvement Share (15%).

The first category, Trading Share, weighted the most at 50% of the formula, is sub-divided into two elements equally weighted between Security Income Allocation (dollar volume), and “qualified trade” volume which excludes trades with a dollar volume of less than \$5000.

The Exchange believes that the use of dollar volume creates an unfair allocation to higher-priced stocks, thereby creating a competitive advantage to an SRO with large institutional sized orders. This could lead to a migration from trading of lower priced stocks to higher priced stocks in order to achieve a higher percentage throughout this, and other categories under the formula. This particular response would also contravene one of the stated goals of the Commission, “to reward those SROs whose quoting and trading activity extends broadly throughout the thousands of stocks included in the Network.”

Secondly, the sub-category of Trading Share, entitled “qualified trade” volume, would specifically exclude trades valued below \$5000; principally based upon the premise that these smaller trades often have the least price discovery value and that small trades increase the potential for tape shredding to increase the number of trades.

The Exchange disagrees with the first premise, that an investor’s trade of 1000 shares of Lucent Technology (“LU”), currently trading between \$3-\$4, would have less price discovery value than another investor’s trade of 200 shares of Boston Scientific Corporation (“BSX”), currently trading at \$41-\$45. In addition, some SROs’ competitive market share may focus on providing best execution to smaller retail orders. The formula would penalize an SRO and create a disincentive to service smaller trades valued less than \$5000 in dollar volume.

The Exchange agrees with the second premise that tape shredding could occur if the value were based on the number of trades. The Exchange has proposed its own formula, discussed later herein, that would eliminate any incentive for tape shredding.

The second category, Quoting Share, weighted at 35% of the formula, is based on “quote credits” which are earned as a multiple of time (in seconds) that a quote is equal to the NBBO during regular trading hours, times the size of the quote and the dollar value. Quotes not accessible via automatic execution would stop earning credits only if they were alone at the inside, unless the quote is retransmitted.

We recognize the premise underlying the Commission’s effort to reward activity that leads to higher quality markets. Our concern here is that there still remains the potential for gaming the quote where time value and dollar value are

measuring elements of this part of the formula. Existing trading technology could be easily modified to mirror or track other quotes at the NBBO for a very short duration; possibly timed to respond to changes in size (ahead) to minimize the chance of an execution, yet earn quote credits. The potential for manipulation of quote duration and size could lead to another avenue for distortion of data revenue. **We believe (as proposed in the BSE formula), that the quote does not really earn its true value unless it is executed.**

The final comment regarding the quoting share provision is that the incentive of the size of the percentage of 35% attributable to this provision without linkage to an actual execution (as proposed by the BSE), will likely result in less effort to provide price improvement and more focus on speed. Further, if the competitive and best quote is truly attractive, it is also unlikely to have any time value in a world of auto-execution capabilities of less than 1 second.

The third category, NBBO Price Improvement, weighted at 15% of the formula, is again measured by the dollar value and is subdivided further into two categories. The first sub-category provides for “NBBO Improvement Credits” for each 5 seconds of time and dollar value of size that a quote establishes a new NBBO and remains the NBBO for the entire 5 second period (“a qualified quote”). The second subcategory provides credit for each dollar of transaction reports executed at that qualified quote, but only if executed less than 5 seconds after the qualified quote no longer equals the NBBO.

We agree that price improvement should be recognized. Historically, the Exchange has built its business model around this particular initiative and would continue to support this as an element of the data revenue formula. We do however believe that the 5 second time period (“a qualified quote”), should be separated from the evaluation of credits for price improvement. To the extent the formula does recognize the execution of that best price within 5 seconds of a subsequent quote change, we could support the argument that you might not have done better than that price. We have an alternative to this element of the formula that recognizes price improvement performance based upon executions rather than quotes.

The BSE agrees with the principles behind the proposed formula, specifically to reward SROs for their contributions to public price discovery. However, because of the potential gaming elements and what we believe to be an unfair or inequitable criterion of dollar value throughout the formula, we are proposing a new formula that bases much of the value on actual performance, including price improvement.

The BSE proposed formula can be summarized as follows:

1. **BSE Proposed Formula** addresses concern for tape shredding while recognizing execution performance more equitably with an incentive for quoting performance.
  - a. **Share Market Share** (50%)
    - i. Would consider exclusion of shares priced less than \$1 from calculation regardless of share size.
    - ii. SEC proposed formula would exclude a trade of 1,000 shares of LU at \$3 that could represent a new high or low for the day but would include a trade of 200 shares of BSX at \$42. We believe both trades should be counted in the formula.
  - b. **Quotes at the NBBO** (25%) that lead to an execution
    - i. Recognizes **incentive for quoting with the resulting execution**
    - ii. Time value of a quote at NBBO for credit is counter intuitive to the competitive price value incentive of aggressive quoting and providing the best price that in an automated environment could be executed at less than one second.
  - c. **Price Improvement** (Rule 5 criteria) (25%)
    - i. A formula with two comparative elements:
      1. 50% would be based on each market's own price improved share compared to all market center price improved shares and;
      2. 50% would be based on the percentage of (Rule 5) shares price improved as a percentage of the total share price improved by all market centers.

NOTE: The BSE Price Improvement Formula recognizes and gives weight to those market centers that may not execute large volumes of shares but, for those share that are executed, value is given to the best execution based on price

In sum, we believe the proposed formula in the Release is extremely complex and difficult to predict as to the impact it will have on existing SRO market models. We believe many elements of the formula are unfair to an SRO whose business is comprised of smaller retail trades. We have been unable to determine what the costs would be to administer this type of formula.

Lastly, we are not certain if we understand, from the Release, the text under C.2 which reads as follows: "The Formula Amendment provides that, notwithstanding any other provision of a Plan, its SRO participants are entitled to receive an annual payment for each calendar year that is equal to the sum of the SRO's Trading Shares, Quoting Shares, and NBBO Improvement Shares on each Network security for that year." Is the Commission suggesting that such payments would

be made to each SRO annually? Currently, all such plans make quarterly payments for their share and we would expect that these same quarterly payments would be made under any new plan.

### Plan Governance

The Commission has proposed a broadening of participation in the governance of each of the three Plans<sup>11</sup> to include a non-voting advisory committee. The Proposal includes a selection process by the plan operating committees to appoint at least one representative, each for a two-year term, from each of five categories to include: (1) a broker-dealer with a substantial retail investor customer base; (2) a broker-dealer with a substantial institutional investor customer base; (3) an ATS; (4) a data vendor; and (5) an investor. In addition, each SRO participant would have the right to select one committee member that is not employed by, or affiliated with, any participant.

We believe such a process would entail significant time and effort to manage with the potential for this Advisory Committee to become so large as to make the process even more difficult to coordinate. The frequency of meetings of the plan operating committees today, would complicate this process further. CTA has been meeting on a quarterly basis, and Nasdaq UTP about every other week because of the discussions concerning a new Securities Information Processor (“SIP”).

In principle, we do not disagree with the concept of an independent Advisory Committee to provide additional input on new products or services among other topics and issues that may arise. The Nasdaq UTP operating committee has approved an Advisory Committee, comprised of up to three representatives, designated by each participant. **We would recommend a smaller group of industry representatives that could meet periodically but separately from meetings of the plan operating committees.** This group could solicit input from industry groups or peers and present topics or recommendations in writing or in person to the plan committees on an annual basis, or more often if deemed appropriate.

We wish to thank the Commission and staff who have obviously devoted much time and thought to creating this important document. This Proposal is an excellent step towards recognizing the disparities between some of the rules and plans that support our equities markets and advances in automation. We hope the

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<sup>11</sup> The three Joint-Industry Plans are: (1) the CTA Plan, operated by the Consolidated Tape Association, which disseminates transaction information for exchange-listed securities; (2) the CQ Plan, which disseminates consolidated quote information for exchange-listed securities; and (3) the Nasdaq UTP Plan, which disseminates consolidated transaction and quotation information for Nasdaq-listed securities.

Commission will continue to seek input and that our views are helpful to the Commission and staff in evaluating these complex issues.

Respectfully submitted,

Kenneth R. Leibler  
Chairman