NASDAQ OMX[SM]

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April 30, 2010

Ms. Elizabeth M. Murphy
Secretary
US Securities and Exchange Commission
100 F Street NE
Washington, DC 20549

Re: Concept Release on Equity Market Structure (Release No. 34-61358; File No. S7-02-10)

Dear Ms. Murphy:

The NASDAQ OMX Group, Inc. ("NASDAQ") supports the Securities and Exchange Commission's solicitation of public and industry input on the broad range of topics raised in the Concept Release on Equity Market Structure (the "Release").[1] NASDAQ applauds the Commission for working to optimize market structure and to achieve Congress' directive to facilitate a national market system, promote investor protection, and maintain fair and orderly markets. NASDAQ's analysis of the Release and of market structure issues generally is guided by broad principles.

Reliable and liquid public reference prices have been and should remain the touchstone of the national market system. The strength of our public reference prices – comprised exclusively of trading interest displayed on public markets such as NASDAQ -- has made U.S. capital markets the economic engine of the world. The public reference price broadly underpins the U.S. financial system by providing a mechanism for pricing primary and secondary trading of cash equities, as well as for pricing options, futures, and other equity derivatives.[2] While un-displayed liquidity is valuable to some investors at some junctures,

[1] NASDAQ OMX Group, Inc. files this comment on behalf of the three equities markets it operates in the U.S., The NASDAQ Stock Market LLC, NASDAQ OMX PHLX, Inc., and NASDAQ OMX BX, Inc.

[2] NASDAQ intends to comment on the impact of "maker/taker" pricing on the public reference price in response to the Commission's proposal to limit access fees in the options markets. *See* Proposed Amendments to Rule 610 of Regulation NMS (File No. S7-09-10), Exchange Act Release No. 61902) (Apr. 14, 2010).

market centers that contribute displayed quotes to the public reference price provide unsurpassed economic value to all investors and to the market as a whole.

All investors are entitled to a "fair deal" and to consistently transparent markets. Average investors must not be placed at a disadvantage to professional traders by rules that permit selective disclosure of information, preferential access to trading interest, or the appearance of a two-tiered market. All markets that trade the same securities should be equally transparent about their operations, including the rules governing their trading systems, the criteria for admission and the prices of comparable services. The Commission must re-examine the policy basis for existing differences between the transparency of exchange markets and of other markets, and determine whether such differences are justified or whether they contribute to regulatory arbitrage.

Regulation must evolve with market structure and technology. No matter how the broader transparency debate is resolved, there should be no doubt that transparency to regulators underpins fair markets. NASDAQ has made and continues to make significant investments in regulatory technology and the training of regulatory staff to maintain the fairness of its rapidly evolving and highly automated markets. In this evolving market environment we should consider having better coordinated regulation across markets through a consolidated audit trail that provides full transparency into the conduct of market participants. In addition, better coordination by regulators is essential to ensure effective cross-market surveillance.

Fair and open access to trading systems and trading interest must be preserved. Open access fosters order interaction, price discovery and market efficiency; restricted access creates order isolation, price opacity and inefficiency. Technological advances in routing, linkages, and data may help mitigate the harmful effects of fragmentation, but they cannot overcome operating rules that promote market segregation. Segregated markets reduce order interaction and do not contribute to price discovery.

Regulation is no substitute for competition on a level playing field. Markets and investors have benefited from the Commission's policy to let "a thousand flowers bloom." Over 200 market centers now report execution and routing quality statistical reports, and a dozen exchanges contribute to the public reference prices. Market structure will serve investors best by ensuring the broadest possible mix of participants rather than attempting to rank or otherwise elevate some investors over others. The open interaction of diverse trading interests and strategies – whether long term, short term, retail, institutional, or proprietary -- promotes continued innovation, and efficiency. Vilifying or excluding entire sets of market participants, such as high speed automated traders, undermines historical Commission policies favoring competition.

NASDAQ's Global Experience. NASDAQ developed and honed these core principles over its 40-year transformation from an opaque segment of the over-the-counter market to global prominence as the largest exchange operator on the planet. Launched in 1971 to provide transparency to the over-the-counter market, NASDAQ became the first electronic market and

the first market to use technology to organize dispersed quotations. NASDAQ pioneered the competing-dealer market model when no meaningful challenge existed to the specialist model. NASDAQ introduced widespread public display of price and size information communicated via electronic data feeds when exchange trading floors were still the world's largest dark pools.

Throughout the 1980s and 1990s, NASDAQ focused on increasing transparency and developing new execution functionality. During that period, NASDAQ added real-time trade reporting for both domestic and foreign stocks, real-time dissemination of trade reports, and real-time dissemination of regulatory information. NASDAQ continued to leverage technology, developing new order routing and negotiation systems that led to later automated execution systems. NASDAQ continually provided open access to a diverse set of market makers and order entry firms, and it became the first market to welcome Electronic Communications Networks as participants. During that period, NASDAQ provided a unique and welcoming listing venue, enabling innovative issuers to raise trillions of dollars in capital and spur new industries.

In the 2000s, NASDAQ continued transforming itself and the industry by focusing on technology, transparency, display and competition. In 2004 and 2005, NASDAQ acquired state-of-the-art trading systems developed by leading innovators, and it deployed those technologies in a single platform in 2006. Also in 2006, NASDAQ became the first new equities exchange in over 60 years to receive Commission approval to register. NASDAQ's innovations and state-of-the-art technology made it a market leader during a period of the fastest growth in trading volumes and velocity the industry has ever recorded. In 2008, NASDAQ capped a transformative decade by acquiring Sweden's OMX Group to become the world's largest exchange company.

NASDAQ has continually harnessed the power of technology, transparency and competition to become the leading exchange operator, delivering exchange technology and public company services across six continents, with approximately 3,700 listed companies. NASDAQ OMX has multi-asset, multi-service capabilities across the globe including operating twenty-two markets and ten clearinghouses world-wide, providing technology to over 70 exchanges, clearing organizations and central securities depositories in over 50 countries, and regulating, listing, trading and clearing equities, options, commodities, and derivatives across the globe. NASDAQ-owned or operated systems touch one in ten securities transactions on the planet.

U.S. Equity Markets Are Strong and Dynamic. As NASDAQ has evolved and transformed so have the other participants in the market and the character of the markets themselves. NASDAQ demonstrated that computers could carry out many of the regulatory and operational functions previously carried out by exchanges' floor personnel. Other observant innovators realized that trading related functions also could be carried out more quickly, more accurately, more efficiently, and more openly though automation. Through its actions, the Commission has encouraged the adoption of information technology systems in all aspects of securities trading in order to spur competition among markets and market participants. While

market automation has created winners and losers within the industry, the undisputable beneficiary is rightly and without question the U.S. investor.

The metrics for evaluating the performance of the equity markets reflect significant improvements over the recent past. The average relative quoted spread for NASDAQ-listed stocks as fallen from 119 basis points in 1996 to 7 basis points in early 2010. Reflecting the lower costs provided by both reductions in the spread and reductions in trading fees, executed volume in the U.S. equity markets has increased 19.5% per annum between 1996 and 2009, well above the overall growth rate of the economy. More recently, the value of displayed liquidity at the inside in NASDAQ-listed securities has increased 23% January, 2008 to January, 2010 in spite of a 22% decline in securities prices due to the recent market downturn.

Proactive management and continual refinement of market structure has contributed to these positive trends for investors. Based on NASDAQ's core principles – display, transparency, fair access, and competition – and its history and global perspective, NASDAQ believes that the following policies should be priorities as the Commission plans the next incremental improvements to the U.S. equities markets.

> ***Strengthen Regulation*** by modernizing systems and increasing transparency to regulators**.** NASDAQ supports the development of a consolidated audit trail and new regulatory tools to help regulators keep pace with technology and other changes in the markets. The Commission should take steps to reduce regulatory arbitrage.
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> ***Encourage Public Price Discovery.*** Internalization should be permitted *provided* the internalizing firm simultaneously displays a protected quote at the NBBO or provides meaningful price improvement over the NBBO.
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> ***Enhance Transparency*** by restoring dark pools to their original function of facilitating block transactions. NASDAQ supports the Commission's proposals to include actionable indications of interest within the definition of bids and offers; to reduce the threshold for display of dark liquidity; and to establish post-trade transparency for dark pool executions. Modifications to the market data revenue allocation formula could also emphasize the value of public quotations.
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> ***Promote Technology, Fair Access and Regulation***. Rather than vilify or limit technological advances, the Commission should ensure that all investors are treated fairly and not disadvantaged by them. Co-location of servers, automated trading, and proprietary data feeds can be deployed in a manner that ensures fair access.
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> ***Create Equivalent and Effective Regulation***. The Commission should explain whether, and if so why, the "light-touch" regulatory framework of Regulation ATS remains sound policy. Investors would be better served by a unified model that regulates markets and trading systems according to their function rather than their status.

Adopt Intelligent Tick Sizes. The current quotation regime creates artificially wide public reference prices for some low-priced and liquid securities, driving some price discovery into dark markets. Simultaneously it contributes to excessive, inefficient quoting in some higher-priced securities. Investors would benefit from a more intelligent tick size regime.

Accurately Measure Market Performance. Investors need modernized execution and routing performance metrics to account for changed market conditions. Changes would include finer speed measurements, consistent definitions of market centers and covered orders, and coverage of the life of each order.

NASDAQ appreciates the Commission's thoughtful consideration of these issues, and it will actively participate in the dialogue regarding specific proposals that emanate from this process.

I. Modern, Comprehensive, and Effective Regulation

Regulation is an integral component of market structure. NASDAQ, as the operator of three well-regulated public markets in the U.S. (and eight in Europe), undertakes an important obligation to (i) protect investors and issuers energetically; (ii) effectively to surveil for, detect, and prosecute fraud and manipulation; and (iii) to operate open and fair markets. NASDAQ believes that modern, comprehensive, and effective regulation should be a goal of market structure. The importance of achieving that goal should inform the debate of individual market structure issues.

Like market structure itself, regulation must keep pace with technology and change. NASDAQ believes that the Commission's development of a consolidated audit trail covering trading in *all* equities by *all* market participants across *all* markets is critical to concentrate surveillance of our widely dispersed market. A comprehensive audit system with well-designed surveillance tools will enable regulators to better understand the operation and impact of a market characterized by fragmentation, direct market access, high volumes of quotations, un-displayed liquidity, and remarkable speed. Regulators in each market have rules in place and routinely examine for abusive or manipulative trading, but they lack a comprehensive view of trading across markets. A consolidated audit trail is an essential element of the obligation to provide comprehensive regulation and to protect investors.

NASDAQ also sees merit in some commentors' suggestion that regulation may be enhanced and made more efficient by consolidating regulatory responsibilities or activities within a single entity.[3] Liquidnet, for example, made important observations about spreading

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[3] *See, e.g.,* letter from Janet M. Kissane, Corporate Secretary, NYSE Euronext, dated April 23, 2010 at p. 6 - 7, http://sec.gov/comments/s7-02-10/s70210-154.pdf; letter of the Financial Industry Regulatory Authority, dated April 23, 2010, Marcia E. Asquith, Corporate Secretary, FINRA, dated April 23, 2010, at p. http://sec.gov/comments/s7-02-10/s70210-153.pdf.

regulatory costs across the industry.[4] Such consolidation, or at least cooperation, could increase efficiency and decrease regulatory arbitrage, whereby market participants avoid effective regulation at one market center by trading instead at less well-regulated market centers that offer similar trading services. Commission rule-making should be done with an eye towards reducing the opportunity for regulatory arbitrage wherever possible.[5]

Regulators need a completely transparent view of the market and market participants. There is a critical difference between transparency to investors and transparency to regulators; there may be room to debate appropriate levels of transparency to investors, but there can be no doubt about regulators' need for complete transparency. In this regard, NASDAQ has been a leader in attempting to rationalize the surveillance and regulation of sponsored access.[6] In its comment letter supporting the Commission's proposal to adopt new Rule 15c3-5 governing market access, NASDAQ argued that each sponsored participant must have a separate market participant identifier ("MPID"). NASDAQ and other regulators use MPIDs in multiple surveillance tools and procedures, and NASDAQ believes that the added clarity provided by separate MPIDs is unquestionable.

NASDAQ describes in more detail below other measures that might improve transparency. For example, NASDAQ supports increased transparency concerning the operation of ATSs that increasingly are utilized to execute retail customer's orders. We also propose numerous ways the Commission can update market performance metrics that could increase transparency into the way market centers handle customer orders, particularly those designated as "special handling" orders. As described below, NASDAQ also supports additional transparency regarding actionable indications of interest and dark pool transactions that will help reassure investors that the U.S. markets are fair and safe.

II. Augment Transparency and Price Discovery

A reliable public reference price is the culmination of the entire effort of securities markets, from listing, to trading, to data dissemination, to regulation. It is so critical that, in 1975, Congress directed the Commission to facilitate the development of a national market system for the expressed purpose of creating a strong public reference price and disseminating it widely to investors.[7] Transparent consolidated data was then and is now viewed as critical to

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4 *See* letter from Seth Merrin, Chief Executive Officer, Liquidnet dated March 26, 2010, at Annex F, http://sec.gov/comments/s7-02-10/s70210-62.pdf.

5 For example, NASDAQ applauds the Commission's recent efforts to address the potential for regulatory arbitrage created by disparate membership and registration standards at various market centers.

6 *See Risk Management Controls for Brokers or Dealers with Market Access* (File No. S7-03-10), Securities Exchange Act Release No. 61379 (Jan. 19, 2010). NASDAQ also filed and had approved a new sponsored access rule, NASDAQ Rule 4611(d), which contains many provisions of proposed SEC Rule 15c3-5. *See* Securities Exchange Act Release No. 61345 (Jan. 13, 2010) (approving SR-NASDAQ-2008-104).

7 Pub. L. No. 94-29, 89 Stat. 97 (1975) ("1975 Amendments").

investors for myriad reasons: to inform investors of the best available prices, to enable investors to achieve the best execution of their orders, to encourage the display of trading interest, to facilitate order interaction and avoid private markets, and to increase overall market efficiency. The value of public reference prices to investors and U.S. capital markets cannot be overstated.

The Commission (and its staff) has since 1975 worked diligently to increase transparency, preserve the public reference price, and avoid the development of private markets. The Commission has led the markets to increased transparency incrementally from the origination and growth of the national market system plans, to the Market 2000 Study,[8] the Order Handling Rules,[9] Regulation ATS,[10] the Fragmentation Release,[11] the Advisory Commission on Market Data,[12] and Regulation NMS.[13]

The Commission has been concerned particularly with avoiding the development of a two-tiered or private market. In adopting the Order Handling Rules, for example, the Commission stated:

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[8] *See Markets 2000: An Examination of Current Equity Market Developments*, Division of Market Regulation, Jan. 27, 1994, at 2 ("Information on quotations, trading volume, and trading prices is essential to the effective operation of the markets. Selective or partial disclosure of information impairs the secondary market pricing mechanism, weakens the ability of markets to compete, and prevents customers from monitoring the quality of their executions. Although U.S. markets are the most transparent in the world, the markets should redouble their efforts to ensure that full market information is being comprehensively disclosed in a cost-effective manner.").

[9] *See Order Execution Obligations*, Exchange Act Release No. 37619A; 61 FR 48289 (Sept. 12, 1996) ("… brokers today may quote one price publicly to retail customers, while showing a better price privately to other investors and dealers on an ECN. In addition, the quotes displayed to public investors may not accurately reflect the best price for a security because limit orders, which specify the price at which customers will buy or sell a security, are not uniformly required to be included in the quote").

[10] *See Securities Exchange Act Release No*. 39884 (April 21, 1998), 63 FR 23504, 23514 (April 29, 1998) ("Regulation ATS Proposing Release") ("Recent evidence suggests that the failure of the current regulatory approach to fully integrate trading on alternative trading systems into [the national market system] mechanisms has impaired the quality and pricing efficiency of secondary equity markets, particularly in light of the explosive growth in trading volume on such alternative trading systems").

[11] *See Concept Release on Market Fragmentation*, Securities Exchange Act Release No. 42450 (February 23, 2000), 65 FR 10577, 10581 (February 28, 2000) ("the Commission is concerned that the fragmentation of trading interest among competing market centers not inappropriately isolate orders, interfering with vigorous price competition, public price discovery, the best execution of investor orders, and market liquidity").

[12] *See Report of the Advisory Committee On Market Information: A Blueprint For Responsible Change,* Sept. 14, 2001, at fn. 210 and accompanying text ("Price transparency is essential for efficient price discovery and the best execution of customer orders. Investors need ready access to real-time prices from the various markets in which a security is trading in order to make informed decisions and obtain the best price.").

[13] *See* Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37632, 70866 (June. 29, 2005) ("Regulation NMS Adopting Release").

> In light of the stated fundamental purposes of the 1975 Amendments and clear evidence of a two-tiered market, the Commission believes it is imperative to amend the Quote Rule to ensure the public dissemination of accurate quotes that represent the best prices that market makers and specialists widely disseminate. Thus, the ECN amendment is intended to integrate into the public quote the prices of market makers and specialists that are now widely disseminated to ECN subscribers but are not available to the rest of the market.[14]

The Commission also believed that Regulation ATS could reduce the problem of private markets: "in light of the significant trading volume on some alternative trading systems, integration of institutional and non-market maker broker-dealer orders into the national market system is essential to prevent the development of a two-tiered market."[15]

Despite the Commission's efforts to prevent the development of two-tiered, private markets, that is precisely what has occurred recently in ATSs. NASDAQ estimates that over 30% of U.S. equity volume is executed without full pre-trade transparency. The majority of this activity is concentrated in lower price stocks most often bought and sold by small individual investors. In addition, over the last 14 months average daily share volume on displayed markets has fallen 40% compared with only a 10% reduction in their dark counterparts. In short, if these trends continue, the public market will increasingly represent a smaller and smaller portion of overall equity trading, placing in peril the public market's ability to serve an accurate and open price discovery mechanism for the nation. The Commission must take steps to ensure that the appropriate amount of trading interest interact in the public market.

First, the Commission should consider adopting rules that permit internalization but require internalizing dealers to either (a) simultaneously display a protected quote at the NBBO or (b) provide meaningful price improvement over the NBBO. NASDAQ recognizes that the practice of "trading at" the NBBO can, when considered on an order-by-order basis, enable internalizing firms efficiently to allocate capital to investors' orders, often at high speed and with nominal price improvement. Taken in aggregate, however, the practice of trading at the best price rather than with the order setting the best price leads to order isolation and opacity. Imposing a small cost on a practice that isolates orders by requiring either a public quote or meaningful price improvement is a modest step to increase order interaction and promote price discovery.

Second, the Commission should adopt many proposals it made in the Regulation of Non-Public Trading Interest, including treating actionable indications of interest identically to quotations, reducing the display threshold for ATSs that are dark pools, and requiring some level of post-trade transparency for executions that occur in dark pools.[16] NASDAQ recognizes that

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[14] *See Order Execution Obligation*, *supra* fn. 6, at 42309, fn. 226 and accompanying text.

[15] *See* Securities Exchange Act Release No. 40760 (December 8, 1998), 63 FR 70844, 70866 (Dec. 22, 1998) ("Regulation ATS Adopting Release").

[16] *See* Securities Exchange Act Release No. 60997 (Nov. 13, 2009) (File S7-27-09).

the availability of dark trading venues is important for larger institutional orders, and it believes that the Commission's proposals appropriately balance those needs with the dual goals of promoting market efficiency and protecting investors.

That Release proposes changes that NASDAQ believes will increase public display of accessible trading interest and thereby strengthen the public quote. The Commission's proposal to treat actionable IOIs as bids or offers recognizes the way such IOIs are viewed by their recipients, namely as an accessible firm offer to buy or sell a specific number of shares at a specified price. Today, actionable IOIs leak information to sophisticated investors while keeping other investors literally in the dark, thereby creating the two-tiered market that Regulation NMS and Regulation ATS were intended to eliminate. Under the proposal, these IOIs would be displayed and protected.[17]

Similarly, investors will benefit from the Commission's proposal to lower, from five percent to 0.25 percent, the volume threshold after which an ATS would be required to publicly display its best-priced orders. Owing to increased fragmentation, a single ATS that executes less than five percent of total volume can, nonetheless, have a material negative impact on price discovery, and multiple ATSs executing smaller volumes even more so. Adding even a fraction of liquidity from ATSs back into the consolidated quote stream will improve the public reference price that ATSs use for their own trading.

In proposing new rules, the Commission will need to be explicit regarding the obligations of market participants, to limit creative interpretations that seek to avoid transparency mandates. For example, the new rules will need to address how the 0.25 percent threshold applies to multiple ATSs operating under common ownership or control where no single ATS meets the volume threshold but may in aggregate they do. In addition, the Commission should consider whether dark pools that are not under common control could become so numerous that in aggregate they execute a meaningful percentage of total volume although no single venue does.

The Commission's proposal to mandate post-trade disclosure of the identity of ATSs that execute trades may also provide meaningful transparency provided that such disclosure does not negatively impact the ability of market participants to execute large share orders. Therefore, NASDAQ does not feel it is necessary to require real time display of the identity of the specific dark pool submitting a transaction report. Rather, NASDAQ suggests that the Commission consider alternatives, such as end-of-day disclosure.

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[17] NASDAQ urges the Commission to monitor vigilantly how this new rule operates in the markets and to update regularly its guidance on the proper application of this rule to market practices. When today's actionable IOIs become subject to new regulation, it is conveivable that market participants will seek new methods of communicating information in a selective, un-displayed manner. For example, market participants could send messages inviting other participants to send IOIs, thereby initiating a communications process that is as destined to end in an execution as an IOI is today.

In light of the legitimate need to minimize price impacts associated with the execution of large orders, NASDAQ supports the proposed exemption for IOIs having a market value of at least $200,000 that are communicated only to those who are reasonably believed to have contra-party interest of at least that same $200,000 amount. These proposed "size-discovery IOIs" would be excused from the display obligations applicable to smaller IOIs and thus retain the ability to execute large blocks away from the public market. Of particular importance is the requirement that size-discovery IOI only be communicated to potential contra-parties that are reasonably expected to have a sufficient interest that may result in a response. This requirement will ensure that larger orders are not simply sprayed to numerous qualified and unqualified contra-parties and IOIs will only be exempted from a display requirement if they are truly institutional in nature.[18]

Finally, in order to create incentives for firms to display trading interest, the Commission could modify the allocation of market data revenue pursuant to the formula set forth in Allocation Amendment under Regulation NMS. The rationale supporting the Allocation Amendment are equally applicable today and perhaps more so; dark executions still add limited value to pre-trade transparency and incentives towards public display are still needed to counteract increasing market fragmentation. Increased fragmentation, speed, and competition such as markets are currently experiencing today only heighten these concerns.

I*II*. *Promote Technology and Fair Access*.

NASDAQ does not share the skepticism expressed by some in the media towards the automation and acceleration of trading practices. Healthy markets have always harnessed the power of rapid communication to drive trading efficiency – from the pony express in the U.S. frontier to today's computers and telecommunications. Viewed through a longer lens, the practice of co-locating servers nearest to exchange facilities resembles traders' historical efforts to locate nearest the trading post. Likewise, proprietary data directly from exchanges resembles trading on information directly from the crowd. In contrast to the historical exclusivity of proximity to the post and to the crowd, today's technological analogies are inclusive, offering all market participants the opportunity to use these tools. Seen in the full light of history, a decision artificially to dampen speed and limit technology would be a true departure and a mistake.

On a superficial level, speed does offer trading advantages to those that possess it. The important policy question, though, is whether the availability of those advantages is fair and beneficial or not. In NASDAQ's view, speed *in and of itself* is neither inherently fair nor unfair. Speed is simply one among many elements of competition, including price, services, research and development, branding, performance and others. The market must be populated by a mix of participants that compete by using diverse but equally valid strategies. Each participant, whether trading for long term or short term investors, must freely determine the competitive elements upon which to focus. Some emphasize speed by purchasing supercomputers and developing

[18] NASDAQ recommends that the Commission consider adopting a more flexible definition of block orders that take into account the relevant price of individual securities.

algorithms; others focus on service and branding by opening storefronts and running televised advertisements. Competition, not regulation, should determine where competitors focus their efforts and upon which battlefield competition occurs.

A more appropriate goal of regulation is to ensure equality of availability and fair access. If every market participant has equal opportunity to co-locate its servers, those that choose not to co-locate cannot cry foul.[19] If every market participant has equal opportunity to receive and utilize proprietary data feeds, those that choose not to are not unfairly deprived. Some traders will invest in algorithms; others invest elsewhere for their own legitimate reasons. NASDAQ fully supports regulators' efforts to eliminate artificial barriers that favor one participant or set of participants over another by, for example, making co-location or proprietary data available only to select members.[20]

Another manifestation of speed about which some are skeptical is so-called "High Frequency Trading." It is important to understand that the term high frequency trading is not clearly defined and is used to describe numerous different strategies and practices. To NASDAQ, high frequency trading is best understood as the use of high speed automated trading technology to generate and route orders according to computer algorithms. As a practice, high frequency trading is employed by both specialized boutiques and within larger financial services firms, as well as by proprietary traders and on behalf of institutions.

NASDAQ believes that high frequency trading, as described above, benefits the market by adding liquidity and contributing to narrower spreads. The Commission has identified various strategies that it has associated with high frequency trading and has requested comment on those. NASDAQ will not comment on them except to say that speed is not inherently unfair or harmful, it is the misuse or misapplication of speed that may harm investors or markets. As stated above, regulation and surveillance must keep pace with technology. Working with FINRA and the SEC, NASDAQ believes that it and other regulators can continue to evolve to meet any challenge posed by high frequency trading. Presumably, the Commission will, as always, require evidence of harmful intent or impact before modifying existing rules or adopting

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[19] Co-location of participant trading systems at regulated exchange data centers is not only appropriate, but the fairest and most equitable option when available. NASDAQ's co-location offering is becoming part of its published rule set and as such it is made available under the same premise as general access to its markets; transparent and non-discriminatory. *See* Exchange Act Release No. 61488 (Feb. 10, 2010) (SR-NASDAQ-2010-019. Co-location outside regulated exchanges would be beyond the Commission's jurisdiction and could take other, less desirable forms.

[20] The Commission determined preliminarily in the Fall of 2009 that investors did not have equal access to "flash" orders and it proposed to ban them. *See Elimination of Flash Order Exception from Rule 602 of Regulation NMS*, Exchange Act Release No. 60684 (Sept. 18, 2009). NASDAQ voluntarily withdrew its Flash functionality rather than create even the appearance of unfairness in its market. The Commission has not acted on that proposal and, in fact, it recently approved the registration of a new exchange despite its continued practice of flashing orders, indicating that flashing orders may be consistent with the statute and, thus, available for use by other markets.

new rules targeting specific behaviors.

IV. Create Equivalent and Effective Regulation

As the Commission examines regulations governing market structure, it should examine whether ATSs and their exchange competitors operate on a "level playing field," and if not, whether there are policy bases for disparities in regulation. The concept of ATSs as a distinct category from the national securities exchange has become so ingrained in market structure parlance that some forget the findings the Commission made when it adopted Regulation ATS:

> Until now, the Commission's interpretation of the exchange definition reflected relatively rigid regulatory requirements and classifications for "exchange" and "broker-dealers." Advancing technology has increasingly blurred these distinctions, and alternative trading systems today are used by market participants as functional equivalents of exchanges. Accordingly, the Commission's new interpretation of exchange contained in Rule 3b-16 encompasses these equivalent markets and the Commission's new general exemptive authority enables it to craft a new regulatory framework.[21]

The definition of "exchange" the Commission adopted includes "any organization, association, or group of persons" that "brings together the orders of multiple buyers and sellers" and that "uses established, non-discretionary methods … under which such orders interact with each other, and the buyers and sellers … agree to the terms of a trade."[22] Thus, the definition is focused exclusively on order matching and execution: other activities traditionally undertaken by national securities exchanges, such as enforcing compliance with issuer listing standards or member conduct rules are irrelevant to the question of what is an exchange. Rather, the mere fact of operating a trading system whose core business is order matching and execution brings an entity within the Commission's definition of an exchange. The Commission chose to exempt ATSs from the requirements of exchange registration, provided they do not broadly regulate subscriber conduct and comply with the requirements of Regulation ATS.

Overall, this alternative regulatory structure has benefited markets and investors. Regulation ATS provided legal certainty for new entrants into the exchange space by offering a clear and comprehensive exemption. This exemption facilitated easy competitive entry, which has promoted active competition among all exchanges and ATSs. Competition has dramatically lowered trading costs, spurred the pervasive use of fast and efficient electronic trading systems, and fostered market structure innovations such as smart order routing, new order types, and new pricing paradigms.

The choice between registering as an exchange and registering as an ATS is complex. Exchanges are subject to higher regulatory requirements, including requirements to file rules

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21 Regulation ATS Adopting Release, *supra* at n. 13, at 40771.

22 SEC Rule 3b-16.

governing the operation of their trading systems and their fees with the Commission for review and/or approval; undertaking operational and financial burdens and risks associated with regulating members; and subjecting their capital structure and governance processes to Commission review and regulation. Exchanges are, however, able to conduct a listings business, receive maximum tape revenues under national market system plans, and do not incur clearing costs. ATSs operate in a far more flexible regulatory structure, but are subject to broker-dealer net capital rules, pay for clearing, and receive tape revenue only through trade reporting facility revenue sharing programs.

Based on recent experience, it appears that the ratio of burdens and benefits favors ATS registration for new market entrants, but that equation tips in favor of exchange registration once an ATS achieves a certain size. To launch, an ATS needs only funding, equipment, competent personnel, and a 20-day notice filing with the SEC. As ATSs grow, however, Regulation ATS imposes greater obligations, and the opportunity costs associated with lower tape revenue become a powerful inducement to achieve exchange status. Examples of this phenomenon include Archipelago ECN, which became a facility of the Pacific Exchange before being acquired by the New York Stock Exchange, and Island ECN, which closely allied itself with the National Stock Exchange to maximize tape revenue while still remaining an ATS. More recently, BATS and Direct Edge filed successful exchange registration applications after capturing significant market share.

Regulation ATS provides useful perspective on the Commission's ability to administer principles-based as opposed to rules-based regulation. It is often said that the rigid structure of the Securities Exchange Act of 1934 requires the Commission to administer a system of rules-based regulation, while the Commodity Futures Trading Commission and the financial services authorities of Europe are permitted to use more flexible principles-based regulation. Regulation ATS demonstrates, however, that the Commission has flexibility to adopt a more principles-based regulatory structure, and experience in administering such a structure. The Commission could use that authority to level the competitive playing field between ATSs and exchanges.[23]

The disparate regulation of exchanges and ATSs stems from the premises underlying Regulation ATS at the time of adoption. The Commission viewed exchange rule-making as inextricably linked with the self-regulatory function.[24] At that time, exchanges were primarily

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[23] This would also allow the Commission to redirect resources away from detailed rule review and toward market surveillance, compliance and inspections oversight, and enforcement.

[24] "One of the central functions performed by exchanges under the current regulatory structure is the self-regulatory function, which includes the implementation and enforcement of rules for trading on the exchange, and surveillance of members' trading and sales activities. The self-regulatory role of exchanges is vital to the effective management of the securities industry. Therefore, as a prerequisite for the Commission's approval of an exchange's application for registration, an exchange would have to organize and have the capacity to carry out the purposes of the Exchange Act. Specifically, an exchange would have to be able to enforce compliance by its members and persons associated with its members with the federal securities laws and the rules of the exchange." Regulation ATS Proposing Release, *supra* n. 10.

trading floors, and exchange rules were focused on regulating the conduct of those individuals both on and off the floor. Although the NASDAQ Stock Market was not yet an exchange, its rules were similarly focused on regulating the interaction of members via electronic systems that allowed brokers to negotiate and report the terms of their trades. In that environment, there was a clear rationale to exempt from the requirement to file and enforce rules that regulate member conduct an ATS that chooses not to regulate member conduct. In effect, an ATS had no rules to file if it was not regulating its subscribers.

It is far less clear, however, why exchange trading systems and alternative trading systems are subject to such widely divergent requirements. Registered exchanges and ATSs both operate trading systems, and are, for this very reason, included within the definition of "exchange" under Rule 3b-16. In many cases, exchanges and ATSs compete for the same orders, offer similar trading services, and adopt similar pricing structures. Moreover, innovation moves freely between ATS and exchange trading systems; any development that is seen to give an advantage to one competitor is quickly copied by other trading venues. Nor can it be said that the relative sizes of trading venues justifies different regulatory approaches. Some alternative trading systems are quite large in terms of their percentage share of consolidated transaction volume, while some exchanges execute less than one percent of the consolidated volume each day. Regulation of common activities – the operation of trading systems – should be subject to more consistent regulatory standards.

In determining how best to resolve this disparity, by lowering regulatory burdens for exchanges, raising them for ATSs, or a combination of both, the Commission alone has experience administrating a bifurcated regulatory structure – rules-based for exchange and principles-based for ATSs. The following factors may be pertinent as the Commission evaluates this question:

- Do Form ATS filings provide the Commission with complete and timely information about the operation of ATSs? Are ATS filings frequent enough and detailed enough to allow the Commission to understand planned system changes by ATSs that may have a broader impact on market structure? Does the Commission have means to assess whether ATSs are operating in accordance with their filings?

- Does public comment on the system changes filed by exchanges provide the Commission and others with valuable insights? If so, would public comment on ATS filings provide similar benefits? Do comments received reflect diverse viewpoints, or are comments generally filed by competitors seeking to delay changes they view as threatening?

- Are there classes of trading system rules for which public comment and prior Commission approval are not needed? For example, when the Commission adopted Regulation ATS in 1998, it also adopted Rule 19b-5 and Form PILOT, stating that it intend to place exchanges on a more level playing field with ATSs by allowing them to launch new, ATS-like trading systems on a pilot basis without the need for prior public

comment or Commission approval. The rule has been rarely used, however.[25] Is it possible to apply experience with the administration of Regulation ATS to develop a consistent framework for regulatory review?

- Does the Commission have adequate tools to respond to concerns about the operations of ATSs? In recent months, the Commission has proposed major rulemakings addressing practices that originated in ATSs - flash orders and actionable indications of interest. Has the Commission validated that executions within an ATS are automatic and non-discretionary, as opposed to discretionary and flash-like? Would it be preferable to institute a system of review of ATS system changes that would better allow the Commission to act prior to their introduction? Can the Commission make greater use of its authority under Section 19(c) of the Act to modify exchange rules, and can it modify Regulation ATS to create a similar tool for ATSs?

- Does the Commission have adequate information about the relationships between ATSs and their subscribers? Does the Commission know how "toxicity" ratings are assigned to subscribers, how they change, and how those ratings impact individual subscriber's access and fees? Is it acceptable that ATS subscribers can assign ratings to counter-parties within and outside the ATS without disclosing objective criteria?

- Does the Commission have adequate information about ATS pricing? The Act requires fees charged by exchanges to be fair and not unreasonably discriminatory. The same standard would apply to ATSs, but for their exemption from the requirement to register as exchanges. Is there a valid economic basis for applying a different standard to entities performing the same order matching function? If that standard exists to protect the interests of investors accessing liquidity through exchanges, is there a reason to offer a different level of protection when they access liquidity from ATSs?

- Is there a clear regulatory basis for subjecting exchanges, including exchanges with extremely low trading volumes, to a fair access requirement, while exempting ATSs from similar requirements?[26] Does that disparity place unnecessary burdens on competition?

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[25] NASDAQ's recent experience with the rule is instructive. In response to inquiries about the possibility of relying on the rule to launch a new cash equities market at NASDAQ OMX PHLX, Commission staff concluded the rule was not intended to facilitate the launch of a new system to trade a class of securities that was not then traded by the exchange. In other words, an options exchange could not use Form PILOT to launch a cash equities market. Separately, however, staff has articulated the view that an exchange cannot run two or more systems for trading the same securities, except on a temporary basis following an acquisition. Accordingly, it is unlikely that an exchange can use the rule to launch either a first or a second trading system or asset class.

[26] In adopting Regulation ATS, the Commission stated only that access to alternative trading systems "may not be critical when market participants are able to substitute the services of one alternative trading system with those of another. However, when an alternative trading system has a significantly large percentage of the volume of trading, unfairly discriminatory actions hurt investors lacking access to the system." 63 FR at 23518.

Can an ATS that provides favored access to certain market participants draw their order flow away from competitors that cannot respond in kind due to fair access restrictions? Does the Commission receive enough information from ATSs about their access policies to make comprehensive assessments about competitive dynamics at work in the market? Could the information available to the Commission be meaningfully enhanced through a requirement for all ATSs to articulate and file their access standards?

NASDAQ believes it is entirely appropriate to respond to the Commission's questions on Regulation ATS with responsive questions because the analysis depends primarily on the Commission's assessment of the adequacy of its oversight of ATSs. The public cannot comment on the adequacy of Form ATS filings because they are not public documents. Therefore, the Commission and its staff are uniquely qualified to assess whether the requirements of the Form and the content of actual submitted filings provides adequate and timely information.

In areas where ATS and exchange activities overlap, differences in approach should persist only if there is a clear policy basis for those differences. If transparency and consistency are beneficial to the market, then they should be a universal benefit, not a benefit merely to the customers of certain systems.

V. Intelligent Tick Size

The Commission requested comment on whether to reduce the minimum pricing increment set forth in Rule 612 under Regulation NMS for low-priced stocks.[27] NASDAQ believes that changes in market conditions since the Commission adopted Rule 612, particularly changes in the trading of low-priced stocks, warrant re-evaluating minimum pricing increments.[28] Average daily volume in sub-$1 securities as a percent of consolidated volume more than doubled, from one and one-half percent in March 2005 to a monthly peak of four percent March 2009. Average daily volume of securities priced above $1 with average quoted spreads of less than two cents rose from 71 to 91 percent of consolidated volume between March 2005 and March 2010.[29] Based on these and other changes since 2005, NASDAQ believes that a more intelligent tick size regime that includes smaller minimum increment for some securities ***and*** larger minimum increments for others will improve price discovery and increase transparent and reduce costs for investors.

Minimum quotation increments matter. Setting minimum quotation increments too large, even at one penny, can harm price discovery. If the minimum increment is too wide, investors

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[27] Rule 612 under Regulation NMS Rule 612 of Regulation sets the minimum increment at one penny ($.01) for quotations equal to or greater than $1.00 per share and to 1/100 of a penny ($.0001) for quotations less than $1.00 per share.

[28] Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

[29] The number of stocks with an average quoted spread of less than 2 cents has similarly increased from 1,202 to 2,530.

may be willing to buy and sell securities at prices between a one-penny spread but lack the ability to display that willingness to the market. Today, investors can only express a willingness to trade between one-penny spreads by using non-displayed orders priced at the half-penny midpoint in certain exchange and non-exchange trading systems, and by offering price improvement in non-exchange trading systems.

Setting minimum quotation increments too small can also harm price discovery. If the minimum increment is too small, investors hoping to set the NBBO could enter orders that improve prices by an amount that is economically insignificant relative to the price of the security and aggregate value of a given trade. As a result, quotations may change rapidly and, in the absence of actual executions, potentially may be wasteful. Quotes that change too rapidly and prices that move for insignificant amounts reduce the incentives to post limit orders. Where the quotation increment is too small or too large, price discovery is impaired.[30]

Maintaining a one-penny increment by regulation can increase costs for investors when the spread would otherwise decline below one penny. For example, if an investor buys 100 shares at $5.00 when the spread is $5.00 to $5.01, the cost of exiting the position is one dollar plus transaction costs. When the spread is one tenth of a penny ($5.00 to $5.001), and the investor buys 100 shares at $5.00, the cost of exiting the position is only 10 cents plus transaction costs. In low-priced stocks, the minimum one cent per share pricing increment of Rule 612 is much larger on a percentage basis than it is in higher-priced stocks. For example, a one cent spread in a $40 stock is 2.5 basis points, while a one cent spread in a $2 stock is 50 basis points – 20 times as wide on a percentage basis. From a rational economic viewpoint, if an investor is willing to quote at a spread of 2.5 basis points in one security, that investor may be willing to quote another security with the same tight spread but is prevented from doing so by regulation.

NASDAQ has observed that in circumstances where the spread in a low-priced, liquid security appear unnaturally wide due to current regulation, a large number of shares may be executed at inefficient prices. For example, Sirius XM Radio Inc. is an actively traded security with a share price that has fluctuated below and above one dollar. When the stock traded at prices between eighty cents and one dollar, the spread was generally one hundredth of a penny and executions occurred at the spread. When the stock traded at prices just above one dollar the spread was generally one penny and the vast majority of executions occurred at the spread. The spread increased approximately 100 times when the quote moves above the SEC-mandated threshold of $1.00 per share, indicating that, for such a security, the spread is artificially wide above one dollar.

In a highly competitive environment, one might reasonably assume that market forces should suffice to set the minimum increment. In practice, however, our dispersed markets have experienced difficulty in setting a consistent minimum quotation increment across venues, including ATSs, for acceptance, rank, and display of all orders. Therefore, the markets must rely

[30] *See* Regulation NMS Adopting Release, *infra* at n.12 at 37551.

somewhat on the Commission to set intelligent tick sizes. To set the minimum increment, the Commission generally should consider attributes such as average daily volume of a security, price, and its quoting behavior, although flexibility may be needed for specific "outlier" securities with unusual attributes. This balance between the operation of market forces and thoughtful regulation should result in an intelligent tick size regime and foster a robust and transparent market for all securities.

In Europe, markets have grown accustomed to minimum increment schedules with many different minimum quotation increments. The recent entry and rapid growth of multiple pan-European Multilateral Trading Facilities ("MTFs") has made European trading more competitive. Some MTFs chose different minimum increments than the primary listing exchanges, resulting in up to 25 different minimum increment regimes operating in Europe. This caused confusion in the trading community, prompting the Federation of European Stock Exchanges ("FESE") to attempt to harmonize minimum increments. The London Investment Banking Association consulted market participants and recommended tick sizes based on the notional value of the stock.[31] FESE developed several model tick size schedules, including two popular schedules that constrain the minimum increment to between one and ten basis points for securities priced similarly to U.S. securities.[32] Major European marketplaces have adopted various "basis point" schedules, some markets choosing narrower tick sizes and others wider tick sizes.[33] In sum, European markets have grown accustomed to a "sub-penny" increment for active, lower-priced securities and multiple tick sizes at higher prices.

NASDAQ urges the Commission to consider amending Rule 612 to adjust the minimum pricing increment to include more than two increments. We also urge the Commission to consider seriously whether a secondary minimum increment regime should exist for certain higher-priced securities, which, because of their volume and liquidity, could significantly benefit investors. A secondary regime exists for both securities listed on the London Stock Exchange and on three exchanges NASDAQ operates in the Nordic region. Securities with exceptional quoted size, high average daily volume, and quotes constrained to the minimum increment possess key attributes of securities that are appropriate for a narrower increment.[34]

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[31] LIBA is the principal trade association in the United Kingdom for firms which are active in the investment banking and wholesale securities industry. LIBA and SIFMA have merged their London-based operations into a single organization, the Association for Financial Markets in Europe ("AFME"). See www.afme.eu.

[32] See http://www.fese.be/en/?inc=cat&id=34 for complete details. Under Rule 612, the equivalent U.S. range for the minimum increment is from 0.2 to 100 basis points.

[33] The two most common schedules being adopted are FESE's Table 2 and Table 4. Table 2 is being adopted by the LSE and the Nasdaq OMX Nordic Markets. Table 4 is being adopted by the Deutsche Borse and NYSE Euronext. The major MTFs (Chi-X, BATS Europe, Nasdaq OMX Europe, and Turquoise) have agreed to adopt the tick size regime used by the primary market. Table 2 uses a tick of 0.001 stocks with prices between 1 and 5. Between prices of 5 and 10, the tick is 0.005. Table 4 shows that a tick of 0.001 is used with stocks priced between 1 and 10.

[34] For example, trading in the NASDAQ-100 Trust QQQ during 2004 demonstrated price discovery in sub pennies with an average quote of $0.003;, and close to uniform distribution among trades in penny

Less active securities should also be examined to determine whether a wider increment is appropriate. Quotation data from the week of March 22, 2010 demonstrates that higher-priced and less-active securities are more appropriately quoted in a wider increment. NASDAQ compared two sets of securities priced between $10 and $20 per share: active securities with an average spread less than $0.011 and less active securities with average spreads above $0.011. We found that active securities change price on average every 21 seconds whereas less active securities change price every 15 seconds even though there is substantially less trading interest in these securities. More strikingly, active and inactive securities with spreads above $0.011 and priced above $50 per share experience a price change every 2.5 and 3.5 seconds, respectively.[35]

NASDAQ takes no position on how many price changes are appropriate. Nevertheless, one theory that explains why price changes increase in frequency as trading interest decreases and share price rises is that the pricing increment becomes less material in those circumstances. We also observed smaller quoted sizes in certain high-priced and less-active securities, perhaps due to the failure of the current increment to encourage posting of quotes and orders. In the European model, discussed above, some markets have migrated to a wider tick size for some higher-priced securities. In adopting Rule 612(c), the Commission itself observed that if the minimum increment were to become too small the potential costs to investors and the markets could at some point surpass any potential benefits.[36]

Based on our experience moving to penny increments in 2000 and sub-penny increments in 2005, NASDAQ anticipates that some commentors will raise concerns regarding a narrower increment and regarding varying increments for different securities. Some will be concerned with the impact across the industry on message traffic and the system programming required if the minimum quotation increment changes. With respect to narrower increments for certain securities, NASDAQ believes that the systems impact, albeit real, should not be substantial and does not outweigh the benefits to the marketplace cited above. For instance, within the National Market System, the Securities Information Processors ("SIPs") have the ability to disseminate quotes and trades to four decimals. Websites used by retail investors, such as Yahoo Finance, currently show quotes and trades to four decimals for securities priced less than one dollar. Based on the post-Regulation NMS transition to sub-penny pricing for securities quoted below $1, with proper notice, the industry should be able to quickly transition to trading more securities at increments less than one penny.

In 2001 and 2005, some commentors claimed that smaller quote increments cause flickering quotes, less liquidity at the quoted spread, and that limit orders can gain execution

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increments Citation http://www.sec.gov/rules/proposed/s71004/igi063004.pdf at page 47.

[35] Data is from the week of March 22, 2010. Active securities are those with average daily volume above 1 million shares/day and inactive securities trade on average less than 1 million shares/day.

[36] *See Release* at n. 479.

priority over other limit orders based on a *de minimis* economic amount of price improvement. Nonetheless, in adopting Regulation NMS, the Commission noted that the benefits of decimalization outweighed the costs, and decided to extend decimalization of quote increments to four decimals for quotes less than one dollar. Since that time, equity markets have become increasingly automated, which should mitigate some concerns about the burden of smaller increments. An active security, such as Citigroup, sometimes trades more than one billion shares in a single day and other securities often trade more than 100 million shares per day with a quoted spread of one penny. Despite skeptics of decimalization in 2000, today, meaningful price discovery does occur in quote increments of one penny.

Accordingly, NASDAQ believes that the minimum increment established pursuant to Rule 612 under Regulation NMS should be revisited in favor of an intelligent tick size regime that considers the price, volume and quoting attributes of a security. Applying such a regime, a narrower increment for active, low-priced securities is particularly appropriate in today's marketplace, while a wider increment is likely appropriate for certain higher priced securities.

VI. Market Metrics

In the Release, the Commission observed that Rules 605 and 606 of Regulation NMS bolster the fundamental duty of best execution and also "support competition by enhancing the transparency of order execution and routing practices." The Commission requested comment on whether Rule 605 and Rule 606 reports continue to provide useful information for investors and their brokers in assessing the quality of order execution and routing practices.

In NASDAQ's view, Rules 605 and 606 have had a positive impact on execution and routing practices since their implementation. The rules have provided valuable, comparative tools for brokers that handle orders on behalf of retail investors. Retail-oriented brokers state that they continue to use Rule 605 and 606 reports to conduct regular and rigorous reviews of their execution quality and routing practices, as well as to market their services to other brokers or to institutions that act on behalf of retail investors. While individual retail investors generally do not review the 605 statistics themselves, the existence of the reports appears to provide precisely the form of discipline that the Commission envisioned when it adopted Rules 605 and 606.

Based on NASDAQ's review of Rule 605 and Rule 606 reports, however, it is not clear that Rule 605 and Rule 606 continue to provide the level of transparency necessary to exert meaningful pressure on market centers to provide superior execution quality and routing practices. Rules 605 and 606 have lagged behind technological advances that enhance market quality and consequently render the metrics utilized in Rule 605 and 606 less useful to investors. Developments in market structure, including the proliferation of private linkages and the increasing complexity of broker operations, have created ambiguity and potential inconsistency regarding the scope of operations and orders reflected in Rule 605 and 606 reports. In certain respects, this ambiguity may ultimately harm transparency by masking relevant differences,

providing a false sense of execution and routing quality, and justifying sub-optimal execution and routing practices.

NASDAQ shares the Commission's belief that transparency promotes competition. Therefore, it is critical to ensure the continued vitality of Rule 605 and Rule 606 by updating their metrics, clarifying ambiguities, and eliminating the potential for inconsistency. Accordingly, NASDAQ recommends several enhancements to Rule 605 and 606 that we believe are necessary to address changes in market practices that have eroded the value of information currently contained in Rule 605 and Rule 606 reports.

Background. Rule 605 and Rule 606 were adopted in November of 2000 after the Commission requested comment on issues related to market fragmentation.[37] The Commission was concerned about fragmentation because eight ECNs together accounted for 25.8% of Nasdaq share volume and, while the New York Stock Exchange floor accounted for 83.3% of share volume in NYSE equities, the rescission of NYSE Rule 390 and its limits on off-exchange trading promised to promote increased competition in trading of NYSE stocks. In fact, fragmentation has increased dramatically since 2000 when fragmentation prompted the Commission to adopt Rule 605. During the last decade, the primary markets' share of trading has steadily declined, and the number of exchanges has grown, with more applications for exchange registration currently pending or announced.

Rule 605 and Rule 606 have never been amended despite changes that have revolutionized trading and the national market system, including the advent of decimal trading, the demise of trading floors and other manual trading, proliferation of private linkages, adoption of Regulation NMS, refinement of smart routers, modernization of high frequency trading and automation of dark pools. [38] Through all this, Rule 605 has measured execution quality in the same fashion since trading occurred in fractions via the Intermarket Trading System, largely without the aid of computers.

Rule 605 must be updated to ensure that execution quality reports remain useful to investors and that quote competition remains appropriately balanced with order interaction. NASDAQ recommends the Commission consider at least the following five changes, in addition to those that other commentors may identify.

Cover the life of an order. Rule 605 reports miss important information about the overall execution quality of a covered order because they only cover routing handled by market centers. Orders are now commonly handled by smart order routers that may or may not sit within a market center. With a smart order router an order may be routed to many market centers before achieving an execution. Any price slippage or delays that may occur as the order was received

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[37] *See* Securities Exchange Act Release No. 43590 (Nov. 17, 2000), 65 FR 75414, 75415 (Dec. 1, 2000).

[38] In 2005, the rule was re-designated without modification as Rule 605 of Regulation NMS under the Exchange Act of 1934.

by multiple non-executing market centers is not captured in the data because the executing market only knows the history of the order from the time it received the order; the non-executing market centers consider the order cancelled and reports no execution quality statistics, and the smart order router is not a market center under the Rule.

For example, to understand fully the execution and routing performance of Market Maker X, investors must understand what happens to orders that are received by Market Maker X and then cancelled. Are those orders ultimately executed at prices superior or inferior to orders executed by Market Maker X, if at all?

Improve uniformity in covered orders. To make informed trading decisions, investors need consistent information on similarly situated orders being handled by competing venues. Covered order, defined in section (a)(8), includes any market order or any limit order (including immediate-or-cancel orders) received by a market center during regular trading hours at a time when a consolidated best bid and offer is being disseminated. Importantly, covered orders do not include any order for which the customer requests special handling for execution, including, but not limited to, orders to be executed at a market opening price or a market closing price, orders submitted with stop prices, orders to be executed only at their full size, orders to be executed on a particular type of tick or bid (such as short sales), orders submitted on a "not held" basis, orders for other than regular settlement, and orders to be executed at prices unrelated to the market price of the security at the time of execution.

Based upon NASDAQ's review of Rule 605 reports, it appears that market centers do not define special handling consistently. There are many reasons that different venues may report different levels of covered volume under Rule 605. Venues may have different order types, different customer bases, or different practices in encouraging subscribers to use special handling orders. Regardless of the underlying basis for the differences, without uniformity the resulting Rule 605 reports from different venues can be unhelpful or even misleading to investors.

The Commission can reduce disparities in covered volume by requiring increased transparency from market centers. Specifically, NASDAQ proposes that market centers be permitted to exclude "special handling" orders only if they identify precisely which order types are excluded, the volume of excluded shares associated with each excluded order type, and the rationale for exclusion. The Commission might also consider requiring market centers to report execution quality statistics for excluded orders either by individual order type or in aggregate. These measures will help investors and firms better to understand the overall statistics reported regarding covered orders.

Re-calibrate speed parameters. Rule 605 is out of date in measuring the speed of executions. For covered orders of all five types, market centers report the number of covered orders, shares of covered orders, and shares of covered orders cancelled prior to execution, executed at the receiving venue and executed at an away venue. For covered orders executed, market centers must report the speed of execution of cumulative executed between 0 and 9 seconds, 10 and 29 seconds, 30 and 59 seconds, 1 and 5 minutes, and 5 to 30 minutes.

In today's fast-moving, integrated markets, even the fastest category of executions much less the four other categories in the current rule – 0 to 9 seconds – is largely unhelpful to investors. For example, comparing the speed parameters for small market orders for all covered market centers in all stocks shows that only 1 percent of small market order fell outside of the fastest speed category in July 2009 compared with 50 percent in July 2002. Without meaningful differentiation among the categories the metrics establish, investors gain little if any useful comparative information. Execution speed has simply outpaced the reporting rule. The execution speed requirements of Rule 605 must be sensitized to electronic trading where executions are measured in milli-seconds rather than minutes.

Accordingly, NASDAQ urges the Commission to consider creating at least one category of execution speed below one second and eliminating one category above one minute. If the Commission chooses to maintain five categories, the two categories that measures executions in minute increments can be combined into a single category without sacrificing or, alternatively, the three categories above 30 seconds can be merged into two. The Commission has adequate data at its disposal properly to identify speed metrics that would provide meaningful information for comparative purposes.

Redefine market center to require better disclosure of combined reports or, alternatively, to require separate Rule 605 reports. Rule 605(b) states that "every market center shall make available for each calendar month, in accordance with the procedures established pursuant to paragraph (b)(2) of this section, a report on the covered orders in national market system securities that it received for execution from any person." Under Section (a)(14), the term market center includes any exchange market maker, OTC market maker, alternative trading system, national securities exchange, or national securities association.

In 2000, when Rules 605 and 606 were adopted, the Commission did not contemplate that a single broker-dealer would operate multiple Alternative Trading Systems alongside a market making desk and multiple other desks. NASDAQ is not commenting on this practice, but simply highlighting that market participants do not understand Rule 605 reports filed by a broker-dealer that operates what would *if operated by separate entities* constitute multiple market centers. The decision to file a single Rule 605 report combining the two venues versus two separate reports would meaningfully impact the data presented. This is by no means the most complex existing scenario.

The definition of market center must be amended to establish consistency among brokers that operate multiple market centers. There are several general approaches: (1) require a separate Rule 605 report for each operation that constitutes a market center, (2) require a combined report and full disclosure of the operations included in that report, or (3) permit separate or combined reports with full disclosure of the operations included and excluded as well as a rationale. Any of these approaches would improve the current situation by resolving some existing ambiguity. The Commission should have adequate data to weigh the costs and benefits

of each approach and determine to what extent each approach promotes the Commission's policy objectives.

Refine the calculation of price improvement. For market orders and marketable limit orders, market centers report the above information plus information regarding effective spreads and price improvement or dis-improvement. Specifically, reports must show the average effective spread for all covered orders executed, the cumulative number of shares of covered order executed inside the NBBO, outside the NBBO, and at the NBBO, the average amount of price improvement or dis-improvement per share of covered orders executed, and the average elapsed time from order receipt to order execution for covered shares executed inside, at, or outside the NBBO.

NASDAQ believes it is possible that the aggregate price improvement data available to investors masks specific practices that investors should understand in isolation. For example, in stocks trading below a dollar, price improvement may represent just one or several hundredths of a penny. Such insignificant price improvement might drag down the average price improvement statistics for a market center. It might also distort the percentage of covered shares receiving price improvement.

The Commission should consider requiring a minimum level of price improvement as a condition for inclusion in Rule 605 reports. In NASDAQ's view price improvement that occurs in economically insignificant increments does not necessarily benefit the overall marketplace and, in fact, it may detract from overall market quality, when the impact of order isolation and trade-throughs is evaluated comprehensively. Economic significance can be measured in various ways, including by basis points, relative to stock price ranges, or relative to the spread. For example, FINRA's "Manning" Rule requires market participants to provide price improvement equal to one penny or one-half the current spread prior to trading in advance of a customer order. This measure may overly complicate Rule 605 reports. Again, NASDAQ believes that the Commission is well-positioned to balance these interests in a manner that benefits investors.

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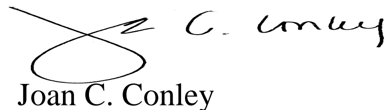
U.S. equities markets are the fairest, deepest, and most efficient in the world due to (i) effective regulation, (ii) strong public reference prices, (iii) transparency to investors, (iv) fair and open access to trading interest, and (v) competition. NASDAQ's policy priorities are designed to update and improve upon those key market characteristics. We have laid out proposals that we believe will enhance regulation, encourage public price discovery, and increase transparency. We believe that fair deployment of technology combined with effective and equivalent regulation will improve market performance overall, and we offer tools for investors to measure that performance more accurately. These improvements will help U.S. markets to continue evolving rapidly and successfully.

NASDAQ looks forward to continued engagement on the important market structure issues raised by the Commission in the Release.

Sincerely,



Joan C. Conley

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The Hon. Kathleen L. Casey, Commissioner
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