

January 16, 2015

Brent Fields
Secretary
Securities and Exchange Commission
100 F. Street N.E.
Washington, D.C. 20549-1090

RE: Proposed National Market System Plan to Implement a Tick Size Pilot Program on a One-Year Pilot Basis; Exchange Act Release No. 73511; File No. 4-657.

Dear Mr. Fields:

NASDAQ is the historical and modern market for emerging, fast-growing companies. From its first initial public offering in 1971, NASDAQ has been the birthplace and home of emerging growth companies. The creation of NASDAQ introduced sound regulation to the over-the-counter trading. And around NASDAQ grew an ecosystem of analysts, brokers, investors and entrepreneurs allowing growth companies to raise capital that was not previously available to them. Companies like Apple, Microsoft, Oracle, Google, and Intel, all of which made their initial public offerings on the NASDAQ Stock Market, use the capital they raised to make the cutting edge products that are now integral to our daily lives. NASDAQ supports these companies as they grow and they in turn bolster the U.S. economy by creating millions of jobs along the way. It is this heritage that drives our support of a market structure that supports and nourishes emerging growth companies. NASDAQ firmly believes that the proposed Tick Size Pilot Program will benefit these critical emerging growth companies and their investors, and we commend the Commission for ordering the self-regulatory organizations to file it.¹

Today, the NASDAQ OMX Group owns and operates the global infrastructure of public markets, markets for securities that are publicly traded and available to all investors. We own 24 markets, 3 clearing houses, and 5 central securities depositories, spanning the globe. Eighteen of our 24 markets trade equities, including the First North Markets in Stockholm, Copenhagen and Helsinki that list emerging growth companies in

¹ Order Directing the Exchanges and the Financial Industry Regulatory Authority To Submit a Tick Size Pilot Plan, Securities Exchange Act Release No. 34-72460 (June 24, 2014), 79 FR 36840 (June 30, 2014).

Europe.² The other six trade options, derivatives, fixed income products, and commodities. Seventy exchanges in 50 countries trust our trading technology to run their markets, and markets in 26 countries rely on our surveillance technology to protect investors, together driving growth in emerging and developed economies. We are the largest single liquidity pool for U.S. publicly traded equities and provide the technology behind 1 in 10 of the world's securities transactions.

Based on its history and global experience, NASDAQ believes that well-functioning public markets are vital to emerging growth companies for three critical reasons. First, efficient pricing and funding of entrepreneurial activity: The value of an enterprise, how much capital it should receive, and at what cost are best determined by a deep competitive market like the public markets. A company that has a clear price set in the open market will attract more investors and lenders to help them fund growth. Second, a healthy public equity market enables companies to raise capital more efficiently, funding more rapid growth and more jobs. Companies create 90 percent of their new jobs after they go public.³ An IPO is the best public policy outcome in terms of jobs for the broader economy. A company that has exchange-traded shares can better use its stock as a currency to grow its business and incentivize employees. A successful IPO is a very public signal to other entrepreneurs about the availability of capital financing. Third, wide availability of investment opportunity: A public listing allows the most diverse universe of investor's access to ownership. This democratization allows employees, individual investors, pension plans, mutual funds, corporations and others to put their capital to work and enjoy the rewards, and risks, of equity ownership.

The U.S. equities markets are the deepest, most liquid markets in the world, but the one-size-fits all model we operate with does not serve all issuers equally. Current U.S. market structure does not help emerging growth companies enough. Today's U.S. markets are increasingly fragmented and volatile. Liquidity in U.S. stocks is dispersed across 15 exchanges, over 40 other registered execution venues, and uncounted other trading facilities.⁴ The declining cost of launching and operating electronic order crossing systems has led to a proliferation of decentralized pools of liquidity that compete by offering their owners and customers reductions in regulatory obligations, transparency, order interaction and fees. The unintended consequences of the market fragmentation has been a decline in liquidity and price discovery in listed securities outside the top few hundred names and a disturbing absence of market attention paid to small growth companies by all market participants.

² NASDAQ's First North Markets attracted 49 new listings in 2014, helping emerging growth companies raise over half a billion dollars in new capital and creating almost three billion dollars in new market capitalization.

³ See, e.g., *Report of the IPO Task Force, Rebuilding the IPO On-Ramp: Putting Emerging Companies, Investor and the Job Market Back on the Road to Growth* (October 2011), at <https://www.sec.gov/info/smallbus/acsec/ipotaskforceslides.pdf>.

⁴ See, e.g., Laura Tuttle, *Alternative Trading Systems: Description of ATS Trading in National Market System Stocks* (October 2013), at <http://www.sec.gov/divisions/riskfin/whitepapers/alternative-trading-systems-10-2013.pdf>.

Congress recognized the problems facing emerging growth companies and acted in 2012 to adopt the Jumpstart Our Business Startups Act (“JOBS Act”). When adopting the JOBS Act, Congress expressed concern that the one-size-fits-all tick regime for equities harms emerging growth companies. Therefore, Section 106(b) of the JOBS Act directed the Commission to study and report to Congress on how decimalization affected the number of IPOs, and the liquidity and trading of smaller capitalization company securities. NASDAQ has continuously supported Congress’ efforts to improve conditions for emerging growth companies and worked to make the promise of that legislation real. For example, in March 2014, NASDAQ launched the NASDAQ Private Market, a platform for pre-IPO companies to connect with accredited investors that provide capital and liquidity to support their continued growth and development. In the JOBS Act, Congress triggered an important debate about tick sizes for emerging growth companies and the trading of their stock.

NASDAQ unequivocally believes that studying the impact of market structure on emerging growth companies is a valid use of finite Commission resources. In adopting the JOBS Act, Congress attempted to drive job creation and economic growth by improving access to public capital markets for emerging growth companies that innovate, create jobs, and grow rapidly. Public capital markets must support small companies by creating liquid, transparent, efficient markets for their securities. Efficient public markets assure investors in emerging growth companies that shares of newly created companies are liquid and transferable. Therefore, the JOBS Act and the Tick Size Pilot Plan that flowed from the JOBS Act are critically focused on eliminating obstacles to capital formation, and helping to optimize market conditions for growth.

NASDAQ supports small companies and better trading conditions for small companies’ stock, but broader and faster change would be preferable. NASDAQ believes that tick increments matter for all stocks, and that adopting a more intelligent overall tick size regime for all stocks would benefit all investors. The U.S. lags the world in having just two trading increments, one each for stocks bid above and below a dollar. Leading global financial regulators (United Kingdom, Canada, Japan, and others) have adopted intelligent tick regimes. NASDAQ and other market operators have long advocated for an intelligent tick size regime that promotes liquidity, price discovery, and trading efficiency.⁵ Thus, although the Tick Size Pilot Plan could ultimately lead to a somewhat more intelligent overall tick size regime for emerging growth companies, the pilot will, unfortunately, delay the adoption of a broader intelligent tick size regime.

Additionally, NASDAQ would caution against the overuse of pilots which tend to be slow and to extend beyond their predicted lifespan. NASDAQ suggests instead that, in the future, the Commission avoid the delay inherent in operating pilot programs by leveraging existing technology to mine “big data” on market behavior. While NASDAQ supports the laudable goal of gathering empirical data and conducting a data-driven cost

⁵ See Joint Request for Exemptive Relief dated April 30, 2010, submitted by Eric Noll, Executive Vice President, The NASDAQ Stock Market; Larry Leibowitz, Chief Operating Officer, New York Stock Exchange; and Chris Isaacson, Chief Operating Officer, the BATS Exchange.

and benefit analysis, we believe the pilot approach overlooks the sophisticated data modeling and simulation tools that are currently available for analyzing dynamic, multi-variant data sets such as the national market system. The Commission already operates the Market Information and Data Analytics System or MIDAS, which receives over a billion records daily from the consolidated and proprietary feeds. By adding over-the-counter data and leveraging existing modeling and simulation technologies, the Commission could wield a powerful, cutting-edge tool that would accelerate the pace of regulatory change to match the pace of market change.

Despite these weaknesses and based on NASDAQ's core principles and its global perspective, NASDAQ believes the Tick Size Pilot Plan should be approved, with only minor modifications. NASDAQ unequivocally supports data-driven study of the potential impact of market structure changes, especially changes designed to benefit emerging growth companies. There is widespread consensus that market structure changes should be driven by the analysis of empirical data. The essence of the Tick Size Pilot Plan – or any well-crafted pilot program for that matter – is the collection and analysis of empirical data. Moreover, there is no dispute that improving market structure for emerging growth companies is an important national objective. The sole objective of the Tick Size Pilot Plan is to improve market structure for emerging growth companies. Investors, industry participants, and the U.S. economy will benefit if the collection and analysis of empirical data leads to improved market structure for emerging growth companies.

NASDAQ believes that studying the impact of tick increments and display priority will benefit emerging growth companies regardless of whether the Tick Size Pilot leads to the permanent adoption of five-cent tick increments, national display priority, a Trade At rule, or any other rule. In our view, it is imperative to avoid pre-judging the outcome of the Tick Size Pilot Plan as some commenters appear to do. For example, BATS Global Markets argues that adopting a Trade At prohibition “will unquestionably shift the competitive environment in favor of the lit markets, is an intrusive and heavy handed regulatory reaction to concerns that have not been fully analyzed or proven” and that the results of the study are a “foregone conclusion.”⁶ This completely misses the key point that the proposal is simply a pilot study, and that no subsequent rules will be adopted unless fully analyzed and proven, as BATS demands. Similarly, Bloomberg Tradebook states that a Trade At rule is “premature” and “[p]rotecting inside depth with trade-at compromises best execution.”⁷ Again, Bloomberg jumps directly to the conclusion of the pilot, assumes that a Trade At rule will be adopted, and assumes that the impact will be negative. Omniscient market participants who predict the outcome of the pilot may be right or wrong; in the absence of a “big data” strategy, only by conducting the pilot and studying the resulting empirical data will the market have certainty.

⁶ See Letter, dated December 22, 2014, from Eric Swanson, General Counsel and Secretary, BATS Global Markets, Inc., at page 3.

⁷ See Letter, dated December 22, 2014, from Raymond M. Tierney III, President and CEO, Bloomberg Tradebook LLC, at page 7 and 8.

Commenters also predict that adopting Group 3 will benefit exchanges. NASDAQ is less confident of its ability to predict the impact of specific market structure changes on a complex and dynamic trading environment. If forced to predict, NASDAQ would worry that the Tick Size Pilot will cause more trading to migrate away from exchanges. Group 1 and Group 2 as currently constructed are apt to push trades towards dark venues that can trade inside the displayed quote which would reduce quoting and trading on exchanges and other lit markets.⁸ While Group 3 securities may experience greater trading volume on lit markets, they might also have less liquidity than previously, in which case exchanges would lose volume overall. Furthermore, if liquidity in Group 3 securities migrates to exchanges but market quality declines relative to stocks in Groups 1 and 2, then Group 3 would still be considered a relative failure. Only through detailed modeling or an actual pilot study will the Commission understand the specific performance of each Group, and the relative performance of the three Groups *vis a vis* each other. The only prediction of any value is this: issuers and market participants will all be helped if liquidity in this segment of the market is improved.

NASDAQ also questions the claims that proposed Group 3 is anti-competitive and will harm retail investors. In fact, the study could reveal just the opposite; the Plan might promote competition and benefit retail investors. The Commission has repeatedly differentiated between two co-existing competitive forces: competition among trading venues and competition among orders. Commenters go astray by focusing solely on competition among trading venues and ignoring competition among orders. While investors in Group 3 stocks may have fewer overall trading venues for their orders (though fourteen exchanges and growing would seem sufficient), those venues should compete more fiercely amongst themselves and orders should compete more fiercely with one another. This cannot be said today because retail investor orders are executed almost exclusively in non-display trading venues and often pursuant to restrictive bilateral order-flow agreements. Freed from existing constraints, orders for Group 3 stocks could enjoy increased liquidity, price improvement, and execution quality. These contrasting conjectures clearly demonstrate the need for further study.

Given that neither the Commission nor any market participant knows what the data to be collected will show or whether the data will lead to specific market structure rule changes or any changes at all, the question posed by the submission of the Tick Size Pilot Plan is not whether wider quotation and trading increments will benefit emerging growth companies, nor whether a Trade At rule will help or harm retail investors. In actuality, the active questions are far more limited and discrete: first, should the Commission study the impact of market structure changes on emerging growth companies; and second, is the proposed Plan well designed to produce meaningful data regarding the first question.

Those opposed to change speculate about the complexity and risk associated with performing a pilot and study. That speculation is routine but rarely if ever borne out, as

⁸ In the extreme, retail investors could be the only class of market participants whose orders would be quoted on lit markets, 17 CFR 242.604 - Display of customer limit orders.

was the case in the move to penny increments in 2000 and sub-penny increments in 2005. In 2001 and 2005, some commenters claimed that smaller quote increments cause flickering quotes, less liquidity at the quoted spread, and that limit orders can gain execution 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 extended quote increments to four decimals for quotes 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 was able to quickly transition to trading more securities at increments other than one penny. In short, yesterday's skeptics were proven wrong; today's doubters should be viewed in light of this history.

The truth is that while the Tick Size Pilot is complex, market participants regularly overcome far greater complexity in today's equities markets. In fact, NASDAQ is so committed to cutting through this speculation that it hereby offers to develop and make available at no cost tools designed to ease the burden of implementing the Pilot and to promote operational effectiveness. First, NASDAQ will develop a utility that reads the consolidated data feeds, combining trades with quotes, and scans for potential trade-at violations. Second, NASDAQ will offer industry participants unique testing opportunities via the NASDAQ Test Facility to validate that NASDAQ is in compliance with the Trade At provisions of the Tick Size Pilot Plan. NASDAQ is open to other suggestions and collaborative opportunities such as industry-wide FAQs.

NASDAQ also believes that the Tick Size Pilot Plan is validly designed to yield important information regarding the potential for market structure changes to help emerging growth companies. The sample size and stratification technique described in the proposed Tick Size Pilot Plan comply fully with accepted statistical methodology. By layering potential changes one upon another upon another in Groups One, Two and Three, the Commission enables researchers to isolate the impact of each change. While multiple commenters have speculated that the number of securities is too small or too large, that the pilot is too short, or that the test groups are over-inclusive or under-inclusive, these criticisms are mere speculation. NASDAQ has seen no persuasive criticism of the proposed Tick Size Pilot Plan rooted in economics or statistics that conclusively undermines, much less refutes, the design of the Pilot.

Of course, any proposal can be improved. For example, NASDAQ agrees with the Financial Industry Forum ("FIF") and other commenters that the data required to be gathered under the Tick Size Pilot Plan can be enhanced. The FIF has provided valid suggestions for strengthening the pilot program by reducing the costs of collecting and analyzing the data. The strength of the FIF proposal is its focus on collecting pure data during the pilot and on leaving computations, analysis, and interpretation for later. Pure data is eminently flexible, and flexibility is critical because a pilot cannot anticipate or prioritize every question that might arise. Also, unlike the analysis and interpretation that will follow the pilot, pure data collected during the pilot is less subject to self-interest or other motivation-based distortions. Finally, the FIF properly suggests that utilizing existing, transparent data, such as that collected pursuant to SEC Rule 605 will benefit

market participants by avoiding duplication and saving time and money.

In conclusion, while NASDAQ continues to recommend broader rulemaking on tick increments, NASDAQ supports the Tick Size Pilot Plan as a data-driven approach to studying the impact of market structure on the liquidity and trading of the securities of small capitalization companies. Those calling for a data-driven approach to market structure rulemaking should be first and loudest in support of the current proposal. Rather than imposing radical change, the Commission's Tick Pilot Study represents an incremental approach to determining whether and how to modify rules that govern a dynamic system. NASDAQ supports the proposal and will assist the Commission and other market participants in making the study a success.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Thomas Wittman", with a long horizontal flourish extending to the right.

Thomas Wittman
Executive Vice President
The NASDAQ OMX Group, LLC

cc: The Honorable Mary Jo White
The Honorable Luis A. Aguilar
The Honorable Daniel M. Gallagher
The Honorable Kara M. Stein
The Honorable Michael S. Piwowar
Stephen Luparello, Director, Division of Trading and Markets