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Office of the Under Secretary for Domestic Finance  
Department of the Treasury  
1500 Pennsylvania Avenue, NW  
Washington, D.C. 20220

***Re: Notice Seeking Public Comment on the Evolution of the U.S. Treasury Market Structure, Docket ID: TREAS-DO-2015-0013***

Nasdaq, Inc. (“Nasdaq”) respectfully submits this letter in response to the Notice Seeking Public Comment on the Evolution of the U.S. Treasury Market Structure (“Notice”).<sup>1</sup> The market for U.S. Treasury Securities (“USTs”) is widely recognized to be the most liquid and consequential market in the U.S. and perhaps the world. Trillions of dollars of USTs circumnavigate the globe, trading across, and resting in, the accounts of individual investors, institutions, corporations, and governments on every continent. Trillions of dollars more in derivatives on USTs trade separately and just as actively. The U.S. Treasury Bond reflects the

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<sup>1</sup> See TREAS–DO–2015–0013; 81 F.R. 3928 (Jan. 22, 2016). The Notice follows closely the work of the Joint Staff Report: The Treasury Market on October 15, 2014 (“JSR”), issued by the U.S. Department of Treasury, the Board of the Federal Reserve System, The Federal Reserve Bank of New York, the U.S. Securities and Exchange Commission, and the Commodity Futures Trading Commission, available at [https://www.treasury.gov/press-center/press-releases/Documents/Joint\\_Staff\\_Report\\_Treasury\\_10-15-2015.pdf](https://www.treasury.gov/press-center/press-releases/Documents/Joint_Staff_Report_Treasury_10-15-2015.pdf).

stability of the United States and its strength and is, quite literally, the coin of the realm for the world.

Simultaneously, Nasdaq suggests that the market for USTs could benefit from greater transparency, organization and efficiency. Nasdaq operates eSpeed (“eSpeed”), the first electronic trading platform for “On-the-Run” USTs, providing real-time institutional trading of benchmark USTs and is one of the largest and most liquid fixed-income cash markets in the world. Nasdaq also operates 25 exchanges and six clearinghouses for equities, options, commodities, power, freight, interest rates, and fixed income trading in the U.S. and Europe, as well as providing technology to power more than 70 other brokers, markets, and regulators around the globe. Based both on its specific knowledge of the UST market and its broad knowledge of global markets, Nasdaq believes that the market for USTs would benefit from modernization and reform.

Nasdaq’s analysis of market structure and market structure reforms is driven by the application of core principles derived from Nasdaq’s long experience operating markets, like Nasdaq eSpeed, across a broad range of regulatory frameworks. Nasdaq aims to operate each market within its specific, existing regulatory framework, and also to drive each regulatory framework towards principles and rules that will best serve market participants.

- ***Transparency Benefits all Market Participants.*** Markets must be transparent in each of several respects to serve market participants and investors fully and fairly. The structure, regulation, and operation of the market should be readily understood to inspire trust and confidence. Widespread availability of the best available prices ensures that market participants make informed investment decisions and receive high quality, low cost service from intermediaries and markets alike.
- ***Regulation Must be Clear, Consistent, and Technology Driven.*** Markets and market participants should be held to clear, high, and consistent standards of conduct. As markets evolve and automate, regulators must maintain a coordinated and complete view of market activity. Full transparency to regulators underpins fair markets.
- ***Competition on a Level Playing Field.*** Market structure serves market participants best by including a diverse set of participants. The open interaction of diverse trading interests and strategies – whether long term, short term, institutional, or proprietary -- promotes continued innovation and efficiency.
- ***Equal Access to Trading Promotes Efficiency.*** Equal access fosters order interaction, price discovery and market efficiency. Restricted access and liquidity fragmentation creates order isolation, price opacity and inefficiency.

- ***All Investors are Entitled to a Fair Deal.*** The quality of execution for market participants should not depend on the venue they choose. If all venues that trade the same securities are equally transparent, equally regulated, and held to equally high standards of conduct, investors will be fairly treated.

Nasdaq believes that the market for USTs can be significantly improved on in each of these measures. Today, as these markets are evolving, they are becoming more fragmented and segregated; more opaque to competitors and regulators alike; subject to uneven and uncertain regulation and enforcement; less efficient; and less clearly focused on serving market participants. Therefore, Nasdaq recommends the following basic improvements that it believes are necessary to better serve market participants and protect investors:

1. Establish a comprehensive, centralized reporting regime to regulators to augment transparency.
2. Impose minimum regulatory requirements on all venues to ensure fair and orderly markets.
3. Reduce systemic risk by requiring cost effective clearing of all transactions, be it centralized or through an interoperable model.

Following a brief assessment of the current market, each of these recommendations will be discussed in greater detail below. By introducing these changes, Nasdaq believes that operational and systemic risks will be reduced and market efficiencies will be improved.

### ***Current State of the Market***

As it is generally known, the secondary market for USTs has two segments: the Dealer-to-Customer segment and the Inter-Dealer Broker (“IDB”) segment. eSpeed operates exclusively in the IDB segment, offering a Central Limit Order Book (“CLOB”) based on Price/Time matching principles.<sup>2</sup> As such, eSpeed provides a venue through which dealers can trade in ways that facilitate their customer-facing business. For example, a dealer can access liquidity in eSpeed to rebalance inventory in reaction to a large customer trade. A liquid, well-functioning IDB market therefore ultimately benefits end investors.

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<sup>2</sup> As opposed to “Workup” matching protocols, offering exclusivity and queue priorities originally introduced in early IDB solutions. These are no longer available on eSpeed for Treasury Benchmark securities.

The post financial crisis regulatory framework has impacted traditional providers of liquidity, mainly in the wake of the Volcker Rule<sup>3</sup> and Basel III Capital Requirements.<sup>4</sup> Principal Trading Firms (“PTFs”) have become an increasingly important part of the IDB market, and currently represent a significant portion of eSpeed activity. PTFs act as both liquidity providers (submitters of passive bid and offer quotes) and liquidity takers. This latter role is often associated with a variety of statistical arbitrage strategies that tie together the prices of related asset classes, such as prices in the futures markets with prices in the cash market. PTF participation increases liquidity and price discovery in the IDB market. These PTFs have accounted for a substantial increase in trading volumes without any significant increase in overnight risk. Liquidity provisioning PTFs facilitate risk transfer while continuing to allow primary dealers to serve the buy side.

As an operator of one of the primary UST venues, Nasdaq cannot completely evaluate the liquidity and/or efficiency of the entire market either in real-time or on a delayed basis. eSpeed can only assess the activity on its own platform and does not know either the best prices currently available or those recently executed at competing CLOBs or Single/Multi Provider Streaming (“SMPS”) or Request For Quote/Request For Stream (“RFQ/S”) venues. Likewise, without a uniform reporting regime, regulators are currently unable to meaningfully monitor and analyze the market in real-time and *ex post facto* data collection is a painstaking process. This point was amply demonstrated by the Treasury “flash crash” of October 2014, where regulators were challenged to understand the activity of various market participants due to the difficulties of analyzing and normalizing data collected from multiple sources on an *ad hoc* basis.<sup>5</sup> These challenges are compounded by the proliferation of trading venues and the resulting fragmentation and segmentation of order flow. Since the introduction of eSpeed, the number of CLOBs has grown from one to three, with a fourth soon to enter market, and the emergence of several SMPS and RFQ/S solutions. As the markets continue to evolve, we anticipate that venues and market participants will continue to explore innovative solutions within the current regulatory structure.<sup>6</sup>

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<sup>3</sup> See 79 F.R. 5808 (January 31, 2014); §619 (12 U.S.C. § 1851) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

<sup>4</sup> See <http://www.bis.org/bcbs/basel3.htm>.

<sup>5</sup> See [https://www.treasury.gov/press-center/press-releases/Documents/Joint\\_Staff\\_Report\\_Treasury\\_10-15-2015.pdf](https://www.treasury.gov/press-center/press-releases/Documents/Joint_Staff_Report_Treasury_10-15-2015.pdf).

<sup>6</sup> For example, in October 2015, Nasdaq introduced eSpeed Elect, designed to improve order book quality by giving market participants the ability to provision additional liquidity with their resting orders to specific counterparty groups. Then, in January 2016, eSpeed entered into an exploratory agreement with CrossRate Technologies, LLC to

The U.S. equities markets experienced a similar proliferation of venues and similar fragmentation in the period between 2000 and 2006, when multiple alternative trading systems were launching (including Island, Instinet, Archipelago, Redibook, BATS, Direct Edge, Attain, and others). The Securities and Exchange Commission proposed, adopted, and implemented Regulation NMS in 2004, 2005, and 2006 to address the problems of fragmentation and inaccessibility that this proliferation caused. During that period and thereafter, consolidation occurred and Archipelago, BATS, and Direct Edge all increased in size and went on to register as full exchanges. Although we are not advocating for something similar to Regulation NMS being applied to the UST market, better regulation, built on a stronger base of transparency and coordination, would be an improvement to that which currently exists in the UST market today.

Without consistent rules and oversight of all liquidity pools, including private venues, fragmentation may lead to reduced levels of liquidity and wider spreads for those ineligible to participate in those private venues. Although these venues facilitate the transfer of risk, the firms do not act (or function) in the capacity of IDBs and their opaque operations restrict access and provide limited, if any, public information.<sup>7</sup> The current regulations are largely focused on financial risk mitigation, leaving a number of important areas unaddressed such as trading infrastructure, system resiliency, technology requirements, and operating standards across venues. Nasdaq notes that it will voluntarily publish its operating manual online for the benefit of its market participants in the near future.

Perhaps understandably, the significant increase in the levels of automated trading has necessitated the development of advanced automated risk control systems. The leading marketplaces, such as eSpeed, utilize a suite of financial risk management controls based on the SEC Market Access Rule,<sup>8</sup> including daily trading limits, profit and loss (“P&L”) and market risk monitors, as well as counterparty credit monitoring processes. Many of these and other risk

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partner to launch an alternate trading venue for USTs designed to increase overall liquidity and improve execution quality.

<sup>7</sup> In other markets, regulators have cited potential conflicts of interest where single provider operators participate in their own venues. See SEC Administrative Proceeding File No. 3-16742 *In the Matter of ITG Inc. and Altnet Securities, Inc.*; *Schneiderman v. Barclays Capital Inc. et al.*; SEC Administrative Proceeding File No. 3-17077 *In the Matter of Barclays Capital Inc.*; SEC Administrative Proceeding File No. 3-17078 *In the Matter of Credit Suisse Securities (USA) LLC*.

<sup>8</sup> See SEC Rule 15c3-5, 17 C.F.R. 240.15c3-5.

management solutions are widely available to market participants and are supported by a network of third party vendors who specialize in the provision of this technology.

We advocate for the imposition of uniform standards with respect to these areas, accompanied by greater supervision, provided that it is applied equally across all venue types, including CLOBs, SMPS and RFQ/S systems. We welcome competition, as long as it is based upon sound fundamental and operational structures.

***Recommendation Number One: Establish a comprehensive, centralized reporting regime to regulators to augment transparency.***

Investor protections, considered rudimentary in the equity and options markets, are unavailable to UST market participants due to the lack of a comprehensive, centralized reporting regime. Every protection offered in response to the equity “flash crash” of 2010 depends on centralization and cooperation; this includes market-wide and single stock circuit breakers, and standardized market making and trade break rules. Enforcement of the duty of best execution and trade through protection are facilitated by the same coordination and centralization. Reasonable minds can differ on whether all of these protections are currently necessary in the UST market, but it is clear that proponents would be seriously hindered by the current market structure.

In failing to establish a comprehensive transaction reporting regime, the UST market lags behind the equities and options markets, as well as other sectors of the fixed income market, including municipal and corporate bonds. The Municipal Securities Rulemaking Board (“MSRB”) operates the Real-time Transaction Reporting System for centralized transaction reporting,<sup>9</sup> and the Financial Industry Regulatory Authority (“FINRA”) operates the Trade Reporting and Compliance Engine for corporates.<sup>10</sup> Nasdaq offers comparable trade reporting and data dissemination functionality, including for listed debt instruments, through the Trade Reporting Facility that it operates jointly with FINRA. The MSRB, FINRA, and Nasdaq are self-regulatory organizations subject to SEC oversight, and they themselves oversee broker-dealer members registered under the Exchange Act.

Nasdaq believes that UST regulators should establish a comprehensive central registration and transaction reporting regime for their own use in the UST market, preferably based upon existing proven industry protocols, and encourage venues to offer services for the submission of transactions to reduce the overall impact on market participants. A comprehensive system would

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<sup>9</sup> See MSRB Rule G-14; see also <http://www.msrb.org/Market-Transparency/Trade-Data.aspx>.

<sup>10</sup> See FINRA Rule Series 6700-6770; see also <http://www.finra.org/industry/trace>.

gather all transactions, including those executed on CLOBs, those executed on SMPS and RFQ/S platforms, and those executed bi-laterally between participants. A system that focused on creating transparency in just one segment of the market, such as IDBs, may encourage participants to shift transactions to segments of the market that remain dark, and therefore fail to capture the true breadth of transactions within the marketplace. The case for full and immediate data transparency to regulators and increased public transparency of venue operating guidelines is abundantly clear.

Nasdaq also supports price transparency. Strong reference prices created by exchanges, Trade Reporting Facilities,<sup>11</sup> and network processors<sup>12</sup> through the SEC's transaction reporting regime have helped make those markets the deepest, most liquid markets in the world. In fact, Nasdaq has been a leader and innovator in supplementing that already-strong transparency with an even wider and deeper range of "non-core" data products that provide market participants greater freedom to choose pre- and post-trade data. Nonetheless, Nasdaq does not support radical change in this area, preferring a more cautious and incremental approach to regulatory reform. Full pre- and post-trade transparency requires a level and breadth of technical infrastructure that does not currently exist in the market for USTs. For example, trading venues and market participants must operate under uniform quoting and trading conventions before data from multiple venues can be aggregated. Also, quotations must be uniformly accessible, requiring connectivity and operational frameworks. Therefore, Nasdaq recommends that regulators develop a careful plan to identify and then establish the requisite infrastructure in the shortest achievable time frame to support better price transparency.

***Recommendation Number Two: Impose minimum regulatory requirements on all venues to ensure fair and orderly markets.***

Well-functioning markets must be transparent, fair, and orderly. This requires uniform minimum regulatory standards across all trading venues, whether electronic multiparty trading platforms or bi-lateral dealer-to-customer arrangements. For example, rules similar to Regulation SCI,<sup>13</sup> recently implemented by the Securities and Exchange Commission to enhance the technology infrastructure of securities markets, would ensure that participants in the UST markets develop systems with sufficient capacity, resiliency, availability and security to minimize the

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<sup>11</sup> See FINRA Rule Series 6700-6770.

<sup>12</sup> See 15 U.S. Code §78k-1, Exchange Act Section 11A; see also SEC Rule 603 of Regulation NMS, 17 C.F.R. 242.603.

<sup>13</sup> See 17 C.F.R. Parts 240, 242, and 249; <https://www.gpo.gov/fdsys/pkg/FR-2014-12-05/pdf/2014-27767.pdf>.

occurrence of disruptive systems issues. SCI also provides requirements for industry-wide testing that could enhance the stability of these markets.

Beyond minimum regulatory standards, Nasdaq believes that market protection requires sound surveillance and monitoring to ensure fair and orderly markets. The securities and futures markets have developed a tiered approach to market surveillance with individual firms and trading platforms tasked with compliance monitoring of their activity, and self-regulatory organizations (“SRO”) given front-line responsibility for market surveillance and enforcement.

In the UST market, as with our other markets, Nasdaq has implemented operational and compliance best practices to promote and maintain the integrity and efficiency of eSpeed, and the overall UST market. Similar to other securities and futures markets, eSpeed employs its own surveillance program, which is designed to review its participants’ trading activities for instances of manipulative or deceptive practices. Surveillance reviews currently deployed or in development include manipulative wash trading, spoofing, layering, mid-point price manipulation, and flipping. Each UST venue should perform similar market monitoring surveillance for the activity related to that venue. In addition, Nasdaq believes the UST market would benefit from consolidated surveillance by a SRO with regulatory responsibility for the trading activity.

Of course, proper surveillance of a fragmented UST market requires that regulators have visibility across all UST cash and derivative markets with the ultimate goal of efficiency and transparency. Regulators could significantly benefit by being a central repository of information to monitor trading across the UST cash and derivative markets using order and transaction activity. This could be accomplished by using trade data similar to that which is available to FINRA from the securities exchanges.

In summary, we strongly advocate for the standardization of regulatory standards and surveillance practices across all UST venues. This would benefit market participants, regulatory agencies, and potentially a centralized clearing provider should the UST markets evolve in that direction. In setting these standards, we believe regulatory agencies should leverage models similar to those that already exist in the securities markets (such as Regulation SCI, SRO oversight, the Consolidated Tape, and TRFs) before devising new sets of rules or requirements that might have unintended consequences on the UST market.

***Recommendation Number Three: Reduce systemic risk by requiring cost effective clearing of all transactions, be it centralized or through an interoperable model.***

The clearing market structure, in our view, has fallen behind the realities of automated trading. The uneconomical cost of clearing large volumes of trades with very small net positioning has resulted in the majority of trading that occurs in the UST market being done



without utilizing a centralized clearing counterparty (“CCP”). This development poses material counterparty risk to the market. The market instead relies on the solvency of the trading venues and an ever diminishing number of Clearing Brokers.

Clearing Brokers are the only third-party that can view a client’s full trading position, as they typically act as settlement agents. Trading venues only get an incomplete view based upon the transactions being executed on their platform. However, Clearing Brokers acting as agent are not legally bound to guarantee the settlement of executed trades. This exposes trading venues and market participants to counterparty risk and it creates a scenario whereby default management must involve multi-lateral coordination of clearing brokers, trading venues, and clients, thus adding unnecessary complexity and risk to the market.

To mitigate counterparty risk, eSpeed has implemented a suite of pre-trade and post-trade risk controls as well as a thorough credit review of clients that do not clear trades. The eSpeed Credit Risk team conducts annual credit due diligence meetings to evaluate each client’s management and firm history, trading strategies, risk management policies and procedures, operational controls and compliance, financial condition, and past performance. This data is used to assess each client’s credit quality, which drives their daily trading limits and any collateral posting to eSpeed. This is supplemented by market risk monitoring of unsettled trades and internal default management policies and procedures. For example, real-time P&L monitoring will alert the Credit Risk team to any unusually large client P&L or exposure that exceeds pre-determined thresholds.

In addition to the counterparty risk associated with the clearing structure currently in place, there are very large inefficiencies in terms of the required collateral for clients to trade effectively across the different venues. Cash trades done on different venues require individual margin postings that do not net across a client’s positions. Also, trades done in the futures market against cash positions do not always get the benefit of netting and require even more collateral. A centralized clearing solution would very likely help to significantly reduce counterparty risk (and help the default management process) while making the collateral margin requirements reflect the actual risk being taken by particular entities.

In summary, the lack of a centralized clearing solution poses material counterparty risks to the market and leads to the following:

- Less transparency as to the size of the exposure faced by individual participants;
- Concentration risks that are not properly managed;
- Clients having to post collateral to multiple venues and brokers creating inefficient management of settlement and counterparty risk; and

- A decentralized default management process that is cumbersome and prone to delays and errors, thus increasing the chances of financial losses and/or subsequent litigation.

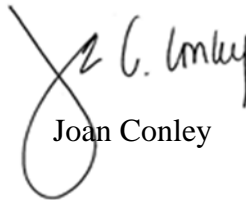
We believe that, so long as market liquidity is maintained, the ideal clearing solution involves a CCP, be it centralized or through an interoperable model, as is the case with many asset classes. The CCP has a complete view all trading by all participants. It is ideally suited to provide uniform capital and risk controls applied equally to all market participants.

The caveat is that clearing costs represent a frictional market force which leads to either a virtuous or a vicious cycle. Lower costs lead to more liquidity and less market risk, while higher costs lead to less liquidity and more market risk. The virtuous cycle would be aided, for example, by a model including intra-day netting because allowing immediate offsetting of positions would reduce both systemic risk and member margin requirements. The relationship between risk and cost closes the cycle. Lower risk leads to lower clearing costs and vice-versa. Thus, it is imperative that the CCP be cost efficient and well governed, having representation from a cross-section of all market participants.

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We appreciate the opportunity to comment on the Notice and your consideration of our responses. Please do not hesitate to contact me with any questions or for further information.

Respectfully submitted,



Joan Conley