

FINANCIAL INFORMATION FORUM

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Via Electronic Delivery

Mr. Robert W. Errett
Deputy Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-1090

December 16, 2015

Re: SR-FINRA-2015-048; Release No. 34-76484; Notice of Filing of a Proposed Rule Change To Adopt FINRA Rule 6191(b) and Amend FINRA Rule 7440 To Implement the Data Collection Requirements of the Regulation NMS Plan To Implement a Tick Size Pilot Program

Dear Mr. Errett,

On behalf of Financial Information Forum (“FIF”)¹ non-exchange industry members, I am writing to provide comment on the Financial Industry Regulatory Authority, Inc. (“FINRA”) proposed rule filing SR-FINRA-2015-048 related to the Data Collection and Reporting requirements of the Tick Size Pilot.

First, we wish to express our sincere appreciation for the opportunities the Tick Size Pilot Operating Committee provided FIF and our members to work closely with Plan Participants to better understand many of the detailed data collection and reporting requirements of the Plan. We thank FINRA for its support of non-exchange industry members subject to the Plan (those that meet the definitions of “Trading Centers” or “Market Makers”), through its offer to leverage existing OATS trade reporting infrastructure to the extent possible to meet the data collection and reporting requirements of the Plan. In doing so, we recognize that FINRA has taken much of the burden from industry members in terms of categorization of orders and calculation of execution quality and market makers’ profitability statistics. Published FAQ 2 states “each DEA will publish information on how they will perform the required calculations from the underlying data provided by their members (e.g., which timestamps will be used, how Trading Centers will be represented (by MPID or other identifier) and will make completed statistics available for review by their members”. FAQ 17 indicates “DEAs will calculate the statistics required by Appendix C using the detailed market maker transaction data provided under B-IV. The Plan Participants intend to file proposed rules describing the method used to calculate such statistics.” FIF members look forward to receiving these details in the near future.²

¹ FIF (www.fif.com) was formed in 1996 to provide a centralized source of information on the implementation issues that impact financial services and technology firms. Our participants include trading and back office service bureaus, broker-dealers, market data vendors and exchanges. Through topic-oriented working groups, FIF participants focus on critical issues to arrive at productive solutions to meet the requirements of new regulations, technology developments, and other industry changes.

² In undertaking this initiative, FINRA (and other DEAs) will be producing the reports and statistics to be provided to the SEC and made publicly available on SROs’ websites. While it is the responsibility of Trading Centers and Market Makers to ensure their OATS reports and Market Maker Transaction Files are accurate and complete, industry members have no insight into or control over the accuracy of the data that FINRA ultimately produces for publication. Will FINRA

For FINRA and other DEAs, Plan Participants, Trading Centers and Market Makers, much work remains to be done in a short period, given implementation is scheduled for April 4, 2016. As highlighted in our comment letter of November 5, 2015 regarding SR-NYSE-2015-46³, the effort required by the non-exchange trading centers and market makers to meet their obligations under the Plan is complex, particularly where OATS changes are involved, and requires months of development and testing. We asked that compliance with pre-Pilot data collection and reporting *requirements be delayed to allow a minimum of six months for development from the time that the Participants' rules are approved and final specifications and FAQs are published to the industry.* To date, the rule filings to which FINRA-members will be subject have not been approved, and numerous questions remain unanswered. With little more than three months to begin pre-Pilot data collection and reporting, resolution of these matters and all open issues is urgent.

For these reasons, FIF comments regarding FINRA's proposed rules are largely focused on verifying our understanding of the requirements and seeking clarification on implementation-related issues. Appendix 1 provides questions that have been shared with FINRA over the past several months but remain outstanding. FIF requests written feedback (such as in the form of expanded FAQs or revised specifications) on these and other questions posed by this letter, and made publicly available so all market participants will have the benefit of FINRA's guidance.

For example, we have not been informed as to how market participants will obtain the list of impacted securities, details regarding the location and format of the daily changes, or Test Group assignments. While there has been discussion that FINRA will provide the information in conjunction with the list of OATS-reportable securities, confirmation of the approach and specifications are needed to begin analysis and programming to consume and apply the daily list of Pilot securities and changes.

FIF members' ability to comply with the data collection and reporting rules proposed in SR-FINRA-2015-048 and a primary concern rests on one overarching and critical assumption: the specifications for modifications to OATS and the Market Makers' Transaction files designed to meet requirements of the Tick Size Pilot, will include no fields other than those presented in the specs published on October 12, 2015. In order to meet the April 4, 2016 date, our members have begun analysis and programming. Additional changes, particularly if they require capturing new data fields that are not readily available in firms' current workflows and related systems, could put at risk many firms' ability to implement by April 4, 2016.

As we have frequently stated, a bare minimum of 6 months is typically required for any OATS implementation, particularly when a new field is being added. At most firms, numerous systems are required to generate the OATS reports. Changes made to any aspect of OATS could have serious impact in other areas involved in OATS reporting; therefore, rigorous testing (including regression testing) is necessary in numerous systems to avoid costly errors.

In addition to format adjustments to outgoing OATS reports, there are code changes and testing that will impact: a) multiple upstream systems where changes must be made to create/capture data that did not previously exist (e.g. Retail Investor Order Flag), b) client interfaces to provide new data fields for input, c) database schemas to accommodate the new fields, d) database search screens, and e) modules to review and correct OATS submissions.

provide statistical summaries and analytical tools that will enable firms to identify errors; for example, those caused by incorrectly tagged trades, or errors on the SIP feed? Currently, 605 vendors apply validations and aggregate statistics to discover reporting errors, and once corrections are made, vendors will "rerun" the reports to ensure the data being reported is accurate. Will FINRA provide functionality for error checking and remediation?

³ <http://www.sec.gov/comments/sr-nyse-2015-46/nyse201546-1.pdf>

Following are FIF non-exchange members' questions and comments related to FINRA Proposed Rule 6191(b). It is imperative that we have a complete and thorough understanding of the new fields, formats and functional requirements as soon as possible, as our members are working diligently to meet the compressed deadline.

Confidentiality Concerns

Rule 6191(b)(2)(B) requires FINRA to transmit data to the SEC in a pipe delimited format, disaggregated, by Trading Center, within 30 calendar days following month end; FINRA will also make this data publicly available on the FINRA website at no charge, and will not identify the Trading Center that generated the data.⁴

With respect to data made publicly available by FINRA or other SROS, Trading Centers have concerns regarding publication of *disaggregated* data. Because some of these securities trade infrequently and there may be a limited number of market participants and trading centers that provide liquidity, even if unattributed, the data may be reverse-engineered to identify the counterparties. FAQ 24 indicates that "anonymity will be established through *aggregation* of the data as described in the Plan".

The data collected and published will include daily market quality statistics as well as specific orders, as specified in Appendix B of the Plan. The scope of the data far exceeds that which is currently published to meet 605/606 requirements. As a practical matter, it is unclear how large amounts of order level information specified in Appendix B-II can be published in a disaggregated format. Furthermore, great care must be taken to ensure confidentiality is maintained as detailed information is disclosed. *FIF members respectfully request that the industry be invited to assist in defining the form and content of the data that will be made publicly available on the SROs' websites. We consider it an obligation of the exchanges and all trading centers to protect the confidential nature of their counterparty relationships and transactions.*

Proposed Rule 6191(b)(3)(B) requires FINRA to send "Participation Statistics" of Market Makers for whom it is the DEA to each Plan Participant [exchange] where there was Market Maker activity in a listed Pilot security. In accordance with the Plan, this information will be provided to the relevant exchanges on a disaggregated basis within 15 days following month end. The exchanges will then send the data to the SEC to fulfill their obligations as a Plan Participant. There are concerns related to the exchanges' access to the disaggregated Market Makers' data as it is received from FINRA, before publication. *We would expect to see reflected in the SROs' rule filings, clear assurances that the data supplied to them through the Tick Size Pilot Plan cannot be used for commercial or competitive purposes.*

⁴ While FINRA has indicated in FAQs and discussed with FIF working group members that broker dealers may mark ALL OATS reports with a "T" on any and all securities transactions even when the security is not a pre-Pilot or a Pilot security (indicating the firm is a Tick Size Pilot Participant), it is important that FINRA is able to filter these reports to ensure that only Pre-Pilot and Pilot securities are included in the statistics published for purposes of Tick Size Pilot reporting, and only those trades where the broker dealer has, in fact, traded as principal or crossed orders as agent to qualify as a Trading Center. There may be instances where the broker dealer firm has indicated by marking a "T" that it is a Tick Size Pilot Participant, when in fact, there has been no principal trading or internalization of any Pre-Pilot or Pilot securities to identify that firm as a "Trading Center" as defined by this Rule.

Requirements to Comply with Rule 6191(b)(2), 6191(b)(3), 6191(b)(4), and 6191(b)(5)

The following questions and comments are aimed at gaining clarity around the reporting requirements to generally comply with Rule 6191 (b) including: 6191(b)(2) to support Appendix B-I and B-II requirements, 6191(b)(3)(A) and 6191(b)(4)(A) to meet Appendix B-IV and C-I requirements, and Rule 6191(b)(5) which outlines the fields that must be reported within Market Makers' transaction files.

Impacts on OATS Reporting Requirements

The rules proposed within this FINRA filing impact OATS reporting for firms deemed to be a "Trading Center" in certain securities identified as "pre-Pilot data collection securities", as well as "Pilot securities", for the duration of the Pilot, plus six months prior and six months following the Pilot. Additional fields required for OATS reporting are addressed in Supplementary Material discussed in later sections. This proposed filing also amends Rule 7440(c)(6) to require OATS reporting for executions at non-FINRA members' venues, or "away markets".

"Away Markets" – US Non-FINRA Members

The filing explains, "For those exchanges that provide FINRA with execution information, FINRA is able to link the route to any executions occurring on the exchange. OATS data, however, does not currently link to executions occurring on venues that do not provide this information to FINRA." In those cases, "OATS Reporting Members would be required to report any executions on that venue in an OATS Execution Report or Combined Order/Execution Report."⁵

OATS reporters currently produce a Route report for orders sent to "away markets", but for OATS reporters subject to the requirements of 6191(b)(2)(a) pursuant to the Tick Size Pilot, OATS Execution reports must also be generated. FIF members contend that it will be very difficult and costly to link these orders to the OATS Execution report process, and consider this a large undertaking for purposes of a two year program. We believe that only a very few number of trades in Pilot securities will be "away trades"; some executions may take place in US markets where the execution venue is not a FINRA member, and others may take place in foreign markets.

We believe the largest majority of "away trades" on a US venue that is not a FINRA member, may be those executed on the Chicago Stock Exchange. *FIF recommends that as a Plan Participant subject to the requirements of the Tick Size Pilot Plan, the Chicago Stock Exchange should work with FINRA to provide an OATS-like execution report that can be tied to Trading Centers' OATS Route reports, which will enable FINRA to match the routed orders to the executions. That would allow all OATS reporters to continue to submit only Route reports for the trades they send to the Chicago Stock Exchange, without having to also produce Execution reports.*

We anticipate executions on other US venues that are non-FINRA members to be so infrequent, that the cost of building the OATS Execution report for de minimis activity does not justify the expense. *FIF members strongly suggest that the requirement to create Execution reports for these few trades (if there any at all in Pilot securities) be reconsidered.*

"Away Markets" – Foreign Execution Venues

Also impacted by the amendments to Rule 7440(c)(6) are trades routed to foreign markets. As discussed in Supplementary Material .03, FINRA proposes that an indicator be added to identify orders in dually listed securities so that orders executed on foreign venues not subject to the quoting

⁵ http://www.finra.org/sites/default/files/rule_filing_file/SR-FINRA-2015-048.pdf; Page 11.

and trading requirements do not compromise the integrity of the data⁶. FIF members agree that data for Tick Size Pilot analysis should not include foreign executions that will not comply with the quoting and trading conventions applied to Pilot Securities. In addition to the fact that these quotes and trades are not subject to the Tick Size Pilot restrictions, the conversion of the execution prices from the foreign exchange (FX) price to US dollars will negatively impact the quality of the data, as Trading Centers are not uniform in the sources used for FX rates or the methodologies applied for FX conversion. *Although we expect there will be very few Pilot securities that are dually listed and will trade in foreign markets, FIF believes inclusion of foreign executions in the calculations for B-I and B-II will not add value to the analysis, but will as FINRA states, “compromise the integrity of the data”; therefore, FIF recommends that foreign executions be excluded.*

There should be no compelling reason to capture the foreign trades other than to track the volumes of orders that are being routed to foreign markets and measure any change in the volumes as a result of the Pilot. The information required to do so is already available on the OATS Route reports currently produced for these trades. FINRA's amendments to Rule 7440(c)(6) for the Tick Size Pilot would require OATS Execution reports to also be submitted. FIF members expect this to require a complex build which may involve pulling data from multiple systems that are not currently tied into OATS reporting processes. Limiting the foreign data analysis to routing would allow the Trading Centers to avoid a large build and additional expense of reporting those executions to OATS, which we contend will produce virtually no benefit. *For these reasons, FIF requests that the requirement to produce OATS Execution reports for Pilot securities executed in foreign markets be eliminated.*

Market Maker Reporting Requirements

FINRA has created a transaction file format to obtain certain data from Market Makers to support Plan requirements to provide “Participation Statistics” to the SEC. That same transaction file will be analyzed and enriched by FINRA to fulfill Market Makers’ obligations under Appendix C-I to report “Market Maker Profitability Data”. Technical Specifications have been published on FINRA’s website <http://www.finra.org/industry/tick-size-pilot-program>; however, the scope of reporting and some of the field definitions remain vague. Market Makers require a more complete understanding of the specifications to ensure full compliance with these rules.

The proposed rule generally requires Market Makers to submit (1) Ticker Symbol; (2) Trading Center where the trade was executed, or if not known, the destination where the order originally was routed for further handling and execution; (3) Time of execution; (4) Price; (5) Size; (6) Buy / sell; (7) for trades executed away from the Market Maker, a unique identifier, as specified by the Market Maker’s DEA, that will allow the trade to be associated with the Trading Center where the trade was executed; and (8) for trades cancelled or corrected beyond T+3, whether the trade represents a cancellation or correction.

Execution Venue

Considering the ultimate execution venue is often unknown to the broker dealer that routed an order, we appreciate that FINRA’s requirement under Rule 6191(b)(5) to populate the “Trading Center where the trade was executed” was written to allow “the destination where the order was originally routed for further handling and execution.” FINRA has indicated it can establish the necessary linkages to identify the ultimate execution venue. FIF members are concerned, however, that to accomplish this, FINRA will require Market Makers to capture new data, or that new fields or reports must be created beyond that which has been published in the Market Maker Transaction Data

⁶ Federal Register / Vol. 80, No. 227 / Wednesday, November 25, 2015 / Notices; pg. 73862. “FINRA believes that this proposed flag will better identify orders in dually-listed securities, as such orders that were executed in foreign venues would not be subject to the Plan’s quoting and trading requirements, and could otherwise compromise the integrity of the data.”

Technical Specification. *Members may not be able to submit the required information by April if any new fields or report formats not already included in the specs published on 10/12/2015 are added to establish the ultimate execution venue.*

Exchange Identifiers

While not explicitly stated in the Plan, it has been determined that linkages are needed to support Plan Participants' and FINRA's obligations for reporting Market Maker Participation Statistics. Fields on the newly created Market Maker file stipulate "Exchange Provided Execution Identifier" and "Exchange Provided Order Identifier". There are some exchanges that provide an Order ID, others that provide an Execution ID. In some cases, the Order ID is what is sent in by the Broker Dealer, in other cases the exchange generates their own Order ID. Typically all exchanges provide a unique Execution ID. FINRA has indicated it will determine which IDs will be used for each exchange and will provide guidance on how they expect those fields to be populated. Therefore, to fulfill this requirement, Market Makers will require additional details from FINRA such as a table which maps to the actual fields from each of the exchanges. *FIF members request further information regarding this requirement in the form of enhanced specifications at least 3-4 months prior to effective date in order to allow for coding and testing.*

Because these specifications are complex to develop, and more importantly, the linkages are difficult for FINRA to code, FIF members are concerned that this portion of the requirements cannot be completed in the limited time remaining. This set of requirements impacts only the Market Maker Participation Statistics, and not the Profitability Data. The assumption that the functionality needed to identify the ultimate execution venue can be met by April 4, 2016 may be unrealistic; and focus on accomplishing this aspect of the rule while leaving other critical issues unresolved could jeopardize the entire project's completion date. *FIF suggests that this portion of the Rule and associated requirements be temporarily waived or perhaps eliminated from the pre-Pilot data collection and reporting phase, until all other components are complete, and until the details on how the linkages can be established are further developed.*

Questions and Comments Regarding Proposed Supplementary Material

Supplementary Material .02

- The "Retail Investor Flag" has been added to the OATS specification, with instructions that the indicator should be set to "y" only in cases where the Retail Investor Order Exemption was *relied* on to trade stocks in increments other than those permitted in Test Group 2 or 3. FINRA notes in its rule filing that a Retail Investor Order may only be indicated *where the exception may apply*, and this is consistent with the approved Plan.

FIF members point out that information related to the execution, and whether the exemption was relied on to complete the trade, is not known at the point in the transaction lifecycle when the OATS order report or the OATS route report is created. The logical series of events would indicate that it may not be definitively known that the Retail Investor Order Exemption was *relied* on until the execution is complete. It would be a difficult and time-consuming implementation to modify the New Order Type Reports (New Order, Combined Order/Route, Combined Order/Execution, Cancel/Replace) to indicate the exemption has been relied upon, after the order has been internalized or after the order is routed to another trading center. Given the limited time we have to implement, and for other reasons stated above, *FIF recommends that the Retail Investor Flag should be required only on OATS Execution reports that reflect the final execution, and not on the New Order Type Reports (named above).*

Supplementary Material .03

- This section discusses the Plan Participants' new requirement to populate a field which indicates whether an order is affected by the bands in place to address Extraordinary Market Volatility (Limit Up/Limit Down).

FIF members are concerned by language included in FINRA's proposed rule that this indicator be set by the Trading Center⁷, as it is our understanding that FINRA will determine whether this is applicable by comparing the Time of Order Receipt on the OATS report to the information available on the SIP feed. *Please confirm that Trading Centers are not required to report this information and no additional input beyond the new OATS fields included in the specs published on 10/12/2015 will be required of the Trading Center. If our understanding is not correct, FINRA must indicate how this information will be provided, as the OATS spec does not presently accommodate this requirement.*

- The language in the supplement also requires Plan Participants to indicate whether the order was handled domestically or routed to a foreign venue. For B-I, Participants must indicate whether the order was fully executed domestically, or fully or partially executed on a foreign market. For B-II, Participants must classify all orders in dually listed Pilot stocks as: a) directed to a domestic venue for execution, b) may only be directed to a foreign venue for execution, or c) was fully or partially directed to the foreign venue at the discretion of the member.

It is our understanding that this is an obligation of the Plan Participants, and Trading Centers will not be responsible for providing this information. *FIF members wish to confirm that no additional input beyond the new OATS fields included in the specs published on 10/12/2015 will be required of the Trading Center. Members may not be able to submit the required information by April if specifications are changed at this late date.*

Supplementary Material .04

- A series of changes and additions are being applied to the Plan to provide for more granular reporting of timeframes between order receipt and execution or cancelation. FAQ 29 clearly states that "the Plan does not change any timestamp granularity requirements for broker-dealers. The Plan does require timestamps to be reported using the finest granularity captured by the trading center."

If there is any expectation that Trading Centers would be required to adapt their systems to capture and/or report in microseconds, we must stress that it would be a substantial build, extremely expensive, and not able to be completed within the project timeframe. Appendix 2 includes the feedback FIF members provided to the Plan Participants' Operating Committee Data Collection working group when asked to consider the question of reporting in milliseconds or microseconds.

FIF members have noted that OATS formats do not allow for reporting in microseconds, and we are under the impression that FINRA does not intend to change the granularity of OATS reporting to accommodate microseconds. Therefore, if a Trading Center maintains internal

⁷ Federal Register / Vol. 80, No. 227 / Wednesday, November 25, 2015 / Notices; pg. 73862. "FINRA and the other Participants have determined that it is appropriate to create a new flag for reporting orders that are affected by the Limit-Up Limit-Down bands. Accordingly, a Trading Center shall report a value of "Y" when the ability of an order to execute has been affected by the Limit-Up Limit-Down bands in effect at the time of order receipt. A Trading Center shall report a value of "N" when the ability of an order to execute has not been affected by the Limit-Up Limit-Down bands in effect at the time of order receipt."

systems' timestamps in microseconds, and is only able to report via OATS in milliseconds, that Trading Center is technically out of compliance with the guidance provided in FAQ 29. *We request that FAQ 29 be revised to recognize that Trading Centers have met the requirements under the rule to the extent that OATS reporting formats permit; that is, if there is a Trading Center that does capture transactions in microseconds but reports in milliseconds, the Trading Center is in compliance, because its ability to report "using the finest granularity captured by the trading center" is limited by OATS.*

Additionally, Trading Centers required to report via OATS do not have a vehicle to provide the information necessary to populate the new buckets (14A and 21A) being added by this amendment.

Supplementary Material .08

- New Order Type categories are being added for purposes of B-I reporting including: "Not Held Orders", "Clean Cross Orders", "Auction Orders", and "Orders that cannot otherwise be Classified".

FIF members wish to confirm that no additional input beyond the new OATS fields included in the specs published on 10/12/2015 will be required of the Trading Center, and FINRA will be responsible for determining these order types based on the trade details provided by the Trading Centers in their OATS reports.

Supplementary Material .09

- This language provides a clear description of the type of internalization that does not qualify a firm as a Trading Center, and in doing so, allows us to form a better understanding of the type of activity that does deem a firm to be a Trading Center. FIF members thank FINRA for this delineation, and we are in agreement with the criteria set forth.

We do wish to confirm a point that has not been made clear in any of the Plan materials, the FAQs, or proposed rules. FIF recommends that if a firm is neither a Trading Center or a Market Maker during the Pre-Pilot period, and becomes a Market Maker in a Pilot Stock during either the Pre-Pilot or the Pilot Period, that firm must begin reporting the additional OATS fields and provide Market Maker Transaction Data only from that point forward, and *there is no obligation to collect and report B-I and B-II data or market making activity, retroactively.* We believe one of the goals of the Pilot is to stimulate additional market making activity. To require retroactive reporting could discourage a firm from becoming a Market Maker after the pre-Pilot phase has begun.

Furthermore, based on FAQ 21, we assume that if a Market Maker becomes registered, withdraws, and again becomes registered – *Market Maker Transaction Data is required to be reported only on those days where the Trading Center has conducted principal trading as a Registered Market Maker.* Any principal trading conducted on days other than when the Trading Center is a Registered Market Maker will be included in OATS reports.

To reiterate, we greatly appreciate the interaction that has taken place regarding data collection and reporting between the Plan Participants and the industry. Through group discussion, telephone and email inquiries, FINRA has answered many questions and provided informal guidance. It would be helpful if the guidance provided in one-on-one phone and e-mail correspondence supported by the web-portal, and answers provided to questions in larger forums such as FIF meetings were to be published in the form of FAQs, for the benefit of all industry members. There are many more questions contained in this letter including those presented in Appendix 1. Furthermore, as FIF

members progress in their analysis and coding to meet these data collection and reporting requirements, we expect additional questions to arise. We look forward to continuing the open dialog, as it is important that these questions be addressed in a timely manner for the industry to be ready for Pre-Pilot data collection and reporting.

Thank you again for the opportunity to provide comments and ask questions regarding this important initiative and related rule makings. Please do not hesitate to contact me at [REDACTED] [REDACTED] to arrange for follow up discussions.

Regards,



Mary Lou Von Kaenel
Managing Director
Financial Information Forum

cc: The Honorable Mary Jo White, Chair
The Honorable Luis A. Aguilar, Commissioner
The Honorable Michael S. Piwowar, Commissioner
The Honorable Kara M. Stein, Commissioner
Stephen Luparello, Director, Division of Trading and Markets
Gary Goldsholle, Deputy Director, Division of Trading and Markets
David S. Shillman, Associate Director, Division of Trading and Markets

Appendix 1 – Questions Outstanding with FINRA

FIF has posed the following questions to FINRA regarding OATS reporting and Market Makers' files to meet Tick Size Pilot data collection and reporting obligations. Some of these questions have been answered verbally by FINRA, others remain open. FIF members request answers in the form of FAQs or other written documentation, for the benefit of all industry members.

1. Pre-Pilot Securities list – SRO filings will determine securities attributes for selection for the Pilot. FINRA will publish the list to indicate the securities for which data needs to be collected.
 - a. Once the Pre-Pilot list is published, will there be daily changes to that list to account for corporate actions, or any other activities?
 - b. For pre-pilot securities, is it possible to add on the existing OATS reportable list a new flag that indicates that it is subject to data collection? This will enable Trading Centers to process the list only once, instead of have two similar lists to process.
 - c. Once entering the Pilot Phase, is it possible to add the Control or Test Group to which the security has been assigned?
2. FINRA – please confirm if each of the following new fields need to be populated on the OATS reports during the pre-Pilot data collection and reporting period:
 - a. Retail Investor Order Flag (would this not be applicable if it is defined as having *relied on* the Retail Order exemption in the execution, and in Pre-Pilot there are no quoting or trading restrictions)?
 - b. Routable Flag?
3. Market maker file questions:
 - a. Is there a maximum file size or other technology constraints?
 - b. Currently there is no ability to specify multiple file submissions if a file would exceed a certain file size or record count.
 - c. In the header record, please confirm that file “submission time” should be file “creation time”
 - d. FINRA to address inconsistencies in the file formats; e.g. Market Maker specs give instructions for how each line must terminate which are different from OATS. Which should it be: CR or CR+LF (MM), or LF or CR+LF (OATS)?
 - e. By including an Order ID from the exchange, the subset of data that FINRA sends to each exchange can be matched with the NBBO at the time of the execution for purposes of bucketing under B-IV. What about Market Making items that do not match the exchanges' information – will FINRA provide a feedback loop?
4. Regarding the feedback loop – Trading Centers will need to build a process to repair any rejects or corrections. Will we merely receive rejects from FINRA if the file doesn't pass validation tests or will we expect to receive more detailed error messages as the records have progressed deeper into the process; e.g. should be expect to receive DKs or other error messages and apply corrections to records that are rejected by the exchanges?
5. Order ID and Execution ID fields – FINRA will provide guidance on how they expect those fields to be populated; that is, FINRA will add details in their specs with a table which maps to the actual fields from each of the exchanges.
 - a. There are some exchanges that provide an Order ID, others that provide and Execution ID. For some exchanges, the Order ID is what is sent in by the B/D. Other exchanges provide back their own Order ID. Typically all exchanges provide a unique Execution ID. FINRA to determine which IDs will be used for each exchange.
 - b. Leading zeros, special characters, and other formatting may be different for each exchange

- c. If an execution is done with a floor broker, there is no Execution ID assigned, and what ID should be used?
- d. On OTC transactions, what is the expectation for these to be populated? FINRA will confirm that “null” would be acceptable.

Appendix 2

What would be the impact of requiring timestamps to be in milliseconds for all trading centers? What if timestamps must be in microseconds?

The Participants' Plan defines (II) "Time of order execution" means the time (to the second, or to such smaller increments as are available) that an order was executed at any venue. (JJ) "Time of order receipt" means the time (to the second, or to such smaller increments as are available) that an order was received by a trading center for execution. It was clearly not the intent under this Tick Size Pilot Plan to increase the granularity of time stamps that are currently in production, or to require that order handling, execution systems and associated data warehouses be retooled to capture and store expanded timestamps.

The requirement for milliseconds will necessitate changes to the systems of a handful of order routing firms that use legacy technology. It is assumed that all OMS vendor platforms, market data providers, and vendor reporting systems have millisecond precision in their data structures already and most internal systems do also. Considering the size of the legacy platforms, which are mostly for retail investors, however, the commission should consider the consequences of forcing those systems to change for the purpose of the pilot only. This would be a burdensome, invasive, expensive and time-consuming exercise that would deliver negligible incremental value, primarily because the quoting and trading patterns of the Pilot stocks do not warrant such precision.

The requirement for microseconds will require major systemic changes to almost all trading and data collection systems. Few OMS systems, market data platforms or vendor reporting systems have microsecond precision in their data structures. Most firms have multiple trading systems supporting various trading desks. Some of these are vendor based, some are internal systems, all with additional complexity of integration points amongst them. To capture timestamps in microseconds, all these various systems and workflows in front office, middle office, and back office, need to make changes to existing data types for timestamps, expand the database schemas, introduce proper clock synchronization, make infrastructure changes, software interface modifications, etc., etc. This not only involves careful coding changes but also involves big release management cycle work, followed by end-to-end testing, including rigorous front-to-back regression testing, for all trading systems.

This change would likely be the largest systems change since Regulation NMS. Considering clock skew and the speed of light, changing 100 microseconds to 1 millisecond will make no difference in the statistical buckets required by the order, but would be substantially easier to implement.

Again, we remind the Commission and Plan Participants that this is *pilot program*; such demands could result in reduced participation. Were either of these requirements to be imposed on the Tick Size Pilot trading centers, those who do not currently operate at the millisecond or microsecond level would consider steps to ensure they have no reporting obligations under the Tick Size Pilot Plan; as the cost of this undertaking would outweigh any financial benefits to be derived from market participation.