Regulation Automated Trading (AT) Roundtable and Comment Period Discussion Points Roundtable: June 10, 2016 Comment Period: June 10-24, 2016

The items below may be included for discussion during the CFTC staff roundtable on certain elements of proposed Regulation AT. These topics address comments and concerns expressed in certain comment letters regarding the proposed rules.

In conjunction with the staff roundtable on June 10, the Commission is reopening the comment period for specific elements of Regulation AT. The comment period will be reopened as of June 10, 2016, and will close on June 24, 2016. This additional comment period is intended to obtain public comments solely on the specific items in the roundtable agenda, including those listed below, and that arise during the roundtable.

Roundtable Panel 1: Amendments to the Definition of Direct Electronic Access (DEA), Consistent with the Proposed Rules' Registration Requirements:

- 1. Commenters have questioned whether the proposed definition of DEA in § 1.3(yyyy) is overly broad. CFTC staff would like to further explore what commonly used connectivity methods are potentially captured by the proposed definition, and what segments of the market use such connectivity methods.
 - a. For each such connectivity method potentially included by the proposed definition of DEA in § 1.3(yyyy), please describe:
 - i. the connectivity method (APIs, GUIs, AORS, third-party ISVs, etc.);
 - ii. the types of market participants that typically use such method and the type of trading for which they use it; and
 - iii. the specific language in the proposed definition of DEA in § 1.3(yyyy) that results in the capture of such market participants.
 - b. In any final rules that the Commission may adopt, should any of the connection methods described above not be considered DEA, and accordingly be <u>excluded</u> from the definition of DEA in § 1.3(yyyy)? If so, please explain why, and describe regulatory language that would accomplish such exclusion.
- 2. Existing Commission regulation § 38.607 requires DCMs to provide, for use by FCMs, certain systems and controls in connection with customers' DEA to the exchange. In the context of § 38.607:
 - a. How do DCMs, FCMs, and other panelists or commenters interpret the population of market participants subject to § 38.607?
 - b. What types of market participants make use of DEA, and what kinds of trading strategies do they typically pursue?
 - c. For DCM and FCM panelists or commenters, approximately what percent of market participants use DEA?

- d. How do these market participants with DEA connect to the DCM (e.g., through APIs, GUIs, AORS, services provided by an exchange or a third party such as an ISV)?
- 3. If the Commission were to adopt final rules for Regulation AT including a final definition of DEA in § 1.3(yyyy), should the Commission use the definition of direct electronic access in § 38.607 rather than the definition proposed in 1.3(yyyy)? Why, or why not?
 - a. What are the differences in the sets of market participants captured by each definition?
- 4. The proposed definition of DEA in § 1.3(yyyy) makes reference to "a separate person who is a member of a derivatives clearing organization to which [the transaction] is submitted for clearing." Would it be preferable to revise the definition to instead reference the infrastructure of the executing FCM?
- 5. To the extent commenters believe that the proposed definition of DEA in § 1.3(yyyy) should be further clarified, including with respect to the term "routed," what alternative language could be proposed?

Roundtable Panel II: Covered Parties I—Quantitative Measures to Establish the Population of AT Persons:

A number of comment letters in response to the proposed rules suggested that Regulation AT could impact more market participants (both new and existing registrants) than appropriate. Pursuant to the questions below, please comment on potential quantitative measures that would determine which AT Persons would be subject to the rule based upon certain pre-defined quantitative thresholds.¹

- 1. If the Commission were to adopt a quantitative threshold, which metrics would be most suitable for establishing the threshold for potential AT Persons to be subject to Regulation AT?
 - a. Relevant considerations include the risks posed by market participants captured at different quantitative levels, the ease of administration for market participants and the Commission of different quantitative options, and potential harmonization with other regulators.

¹ Under this scenario, new Floor Trader registrants would be limited to persons who meet the criteria specified in proposed § 1.3(x) (i.e., proprietary Algorithmic Trading through DEA) and who <u>also</u> meet the quantitative test. Similarly, existing Commission registrants would be deemed AT Persons only if they engaged in Algorithmic Trading and <u>also</u> met the quantitative test. In this manner, the total number of AT Persons (new and existing registrants) could be substantially impacted depending on the where the quantitative threshold was set. Staff notes that market participants who are not deemed AT Persons generally would not be subject to the proposed rules.

- 2. Once a metric is determined, should this metric be calibrated to market activity across products and across DCMs? If so, how?
- 3. If any quantitative threshold incorporates either order message or trade data, should all messages and/or trades be weighted equally?
 - a. Are there subsets of messages and/or trades which should not be included in the calculation of a quantitative threshold?
 - b. Should messages sent by a firm on an agency basis be considered equivalently to those sent on a principal basis?
 - c. Over what timeframe should measures be calculated/benchmarked (e.g., a metric is defined as average daily counts over the course of a month or quarter)?
- 4. Which quantitative metrics would trading firms, FCMs and/or DCMs be able to calculate easily and on an ongoing basis?
 - a. Are there cases where messages sent by a firm get adjusted or divided prior to being sent to a DCM, leaving the firm unable to calculate or monitor its message frequency?
 - b. For registration purposes, which entities should be tasked with monitoring proposed metrics and communicating these metrics to the CFTC?
 - c. If the Commission were to adopt final rules for Regulation AT that include quantitative thresholds, what periodic review of thresholds would be appropriate to adjust for market evolutions?

Roundtable Panel III: Covered Parties II—Alternative to Imposing Direct CFTC Pre-Trade Risk Control and Development, Testing, and Monitoring Standards on AT Persons:

Some observers have noted the role of FCMs in adopting risk controls with respect to customers' orders. Please comment on alternatives to certain of the proposed requirements for AT Persons in §§ 1.80, 1.81, and 1.83(a). For example, one alternative could require that FCMs: (1) implement their own risk controls for all proprietary and customer orders; (2) require that certain customers (determined by the Commission using DEA and/or quantitative criteria) apply pre-trade risk controls, and development/testing/monitoring standards for their own algorithmic trading systems; and (3) perform due diligence regarding such customers' compliance ("FCM-Based Risk Control Structure").²

² Staff notes that the FCM-Based Risk Control Structure discussed here would not necessarily eliminate all direct requirements that could potentially be imposed by the Commission in any final rules arising from proposed Regulation AT, such as registration and recordkeeping. FCMs could potentially be responsible, however, in the areas of pre-trade risk controls and development, testing and supervisions standards for certain of their customers engaged in Algorithmic Trading.

- 1. What personnel resources and technological development would be necessary for FCMs to comply with elements (2) and (3) of the FCM-Based Risk Control Structure (e.g., FCMs must require that certain customers apply pre-trade risk controls and that such customers perform testing and monitoring of their systems, and FCMs must perform due diligence regarding clients' compliance)?
- 2. Describe how an FCM would evaluate the adequacy of clients' systems and controls. In particular, what types of criteria would FCMs use to evaluate the adequacy of systems and controls for clients engaged in Algorithmic Trading?
- 3. Aside from evaluating the adequacy of clients' systems and controls, in what other areas should an FCM conduct due diligence of clients' trading in order to mitigate the risks of Algorithmic Trading?
- 4. If the Commission were to adopt final rules for Regulation AT that include an FCM-Based Risk Control Structure, how should Regulation AT articulate the standard against which FCMs measure their customers' risk controls?
- 5. How would an FCM-Based Risk Control Structure ensure that trading firms implement a consistent baseline of risk controls that effectively mitigate the risks of algorithmic trading?
 - a. Could this structure result in inconsistencies across FCMs or trading firms, or in commercial incentives for FCMs to offer customers less burdensome requirements?
 - b. Would an FCM-Based Risk Control Structure avoid "race to the bottom" concerns if it specified a baseline of controls that FCMs should require of their customers, such as those currently proposed in Regulation AT (e.g., maximum AT Order Message frequency per unit time; order price parameters; and maximum order size limits)?
 - c. More broadly, what recommendations do panelists or commenters have for balancing market participants' request for flexibility against the need for a clear regulatory "floor" beneath which standards cannot fall?
- 6. With respect to an FCM-Based Risk Control Structure, are there potential challenges to an FCM's ability to determine which client orders resulted from algorithmic trading, and therefore require certain risk controls?

Roundtable Panel IV: AT Persons' Compliance with Elements of the Proposed Rules when Using Third-Party Algorithms or Systems:

Several comment letters in response to Regulation AT noted potential difficulties in AT Persons' compliance with the proposed rules when they obtain their algorithms or systems from third-parties. The questions below are intended to explore those potential difficulties, and potential solutions.

- 1. Do panelists or commenters agree that Algorithmic Trading systems should include appropriate development and testing standards, regardless of who might develop them?
- 2. To the extent that panelists or commenters use commercially available algorithms or systems developed by a third party for their Algorithmic Trading, please describe the type of algorithms or systems used, and the purposes for which they are used. For example, panel participants or commenters could indicate whether they use a third-party investment algorithm, execution algorithm, routing algorithm, etc.
- 3. When using third-party algorithms or systems, what information do market participants typically obtain, and what due-diligence do they typically perform, to understand the design, programming, testing, and risk controls embedded in such algorithms or systems? How is such understanding documented or verified?
- 4. Do market participants typically require third-party algorithm or system vendors to make any representations regarding the regulatory compliance, sufficiency of design and testing, or effectiveness of pre-trade risk controls pertaining to such algorithms or systems?
- 5. Would a representation/certification and due-diligence framework be an effective means of helping to ensure the safety and soundness of third-party algorithms and Algorithmic Trading systems used by Commission registrants? If so, what would be the attributes of an effective representation/certification and due-diligence framework?
- 6. Do panel participants or commenters store an original copy of the algorithm or system code received from the third-party provider? How and where do panelists or commenters maintain this copy?
- 7. Do third-party algorithms or systems allow market participants to input parameters, or modify any other configurations? For panelists or commenters familiar with such third-party systems, please describe the extent to which you are able to adjust the algorithm or system in order to tailor it to your trading needs.
 - a. Are the parameters/configurations recorded? If so, how? How are records of such adjustments logged and maintained?
- 8. For panelists or commenters who use of third-party algorithms or systems, is your use subject to a contractual agreement? What provisions, if any, does your agreement make for complying with regulators' request for records, including algorithmic source code?
 - a. Are you authorized to provide the algorithm or system code, or other proprietary information, to a regulator upon request?
 - b. If you are not authorized to provide such information upon request, how would you currently envision complying with a request from the Commission?

Roundtable Panel V: Source Code Access and Retention:

- 1. Some commenters have expressed concern that the Commission does not define the term "source code" as used in the proposed rule (e.g., in § 1.81). What do panel participants or commenters suggest as an appropriate definition of "source code" consistent with the intent of proposed § 1.81?
- 2. What software or hardware components should be included within the term "Algorithmic Trading system" to help ensure that appropriate systems are subject, for example, to the development, testing, and other standards in proposed § 1.81?
- 3. What elements of an Algorithmic Trading system (e.g., software, hardware, or files or records generated) would an AT Person typically review to assess a potential operational malfunction or regulatory compliance flaw associated with such Algorithmic Trading system?
- 4. To the extent that a panel participant utilizes hardware such as a Field Programmable Gate Array (FPGA) or an Application-Specific Integrated Circuit (ASIC), please describe the files or records used to create the hardware design to be placed on the FPGA or ASIC chip.
- 5. What are industry best practices for tracking and maintaining records of changes to source code, including changes to trading parameters, configurations, or market data inputs used for Algorithmic Trading? Please describe your practices and procedures.
- 6. Assuming a circumstance where the Commission must review or inspect algorithmic trading source code, what options do panel participants or commenters suggest for review or inspection of such algorithmic trading source code?