![Modern Markets Initiative logo]

February 19, 2016

Mr. Christopher J. Kirkpatrick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: Comment to the Technology Advisory Committee (TAC)

Dear Mr. Kirkpatrick, Commissioners and TAC Members:

On behalf of the Modern Markets Initiative ("MMI"), I respectfully submit this letter to the Commodity Futures Trading Commission's (the "CFTC" or "Commission" or "Agency") TAC in connection with the meeting to discuss the Proposed Rulemaking on Regulation Automated Trading (the "Regulation AT" or "Proposal") scheduled for February 23, 2016.[1]

MMI is an industry association dedicated to investor education and fact-based advocacy regarding High Frequency Trading ("HFT"). MMI provides comments regarding regulatory and legislative developments from the perspective of globally-respected HFT firms working daily to serve investors and end users with reliable market liquidity across asset classes creating optimum price discovery.

I.   COMMENTS

As previously stated in our response to the request for public comment on Regulation AT,[2] MMI supports the vast majority of definitions and designations proposed by the Commission, as well as its specific efforts to ensure that all market participants: (1) seek registration with the Commission; (2) adhere to written policies and procedures for the development and testing of Automated Trading Systems ("ATSs"); (3) implement pre-trade risk controls including kill switches; and (4) provide needed transparency around market maker programs and trading incentives.

While MMI supports most elements of the Proposed Rule, we have grave concerns with the proposed requirement under section § 1.81(a) that AT Persons must produce for inspection "*a source code repository to manage source code access, persistence, copies of all code used in the production environment, and changes to such code.*" We believe this aspect of the Proposal will

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[1] CFTC Technology Advisory Meeting Notice, 81 Fed. Reg. 6509 (Feb. 8, 2016).

[2] William R. Harts, Modern Market Initiative, 80 Fed. Reg. 78824, Comment Letter No: 60589 (Jan. 15, 2016); s*ee also* Notice of Proposed Rulemaking on *Regulation on Automated Trading*, 17 CFR Parts 1, 38, 40, and 170 (Nov. 24, 2015), *available at* http://www.cftc.gov/idc/groups/public/@newsroom/documents/file/federalregister112415.pdf.

do little to further confidence in futures markets, while unprecedentedly placing trade secrets and intellectual property of algorithmic trading firms at precarious, unwarranted and unnecessary risk.

MMI is concerned that section § 1.81(a) gives rise to unnecessary and substantial risks to market participants, negatively impacting the efficiency, integrity and competitiveness of markets. Furthermore, it could be viewed as somewhat arbitrary and capricious given the lack of any specified and identified basis for implementing this Proposed Rule requirement for several main reasons discussed below.

A. No Standardized Definition of Source Code

As a preliminary matter, the Proposal neither explains nor defines the term "source code" and no meaningful public discussions or debates have occurred about the meaning of the term. Without consensus on a standardized definition of source code within the industry, the Proposal's request for production would result in enormous confusion, at best;

B. Lack of Clear Government Interest

The Proposal does not clearly express or explain the benefit and government interest in the use of source code. The Commission provides no detailed justification nor explanation as to the potential use of such code, nor any appropriate particulars related to Agency storage and analysis. Moreover, the proposed requirement under § 1.81(a) is unnecessary because subpoena powers already exist that permit the Commission to demand certain information from market participants. In fact, absent a subpoena, there is no prescribed Commission authority to even request such information. As a result, section § 1.81(a) creates legal uncertainties and would serve to circumvent the existing subpoena process.

At a recent House Agriculture Committee hearing, CFTC Chairman Timothy Massad sought to dispel the notion that the Agency is seeking the power to compel market participants to turn over source code, stating that the Agency is "not asking [market participants] to give us…their 'source code'. All we're asking is that they preserve it … so that if there is a problem and we do need to go get it using the proper procedures, we can."[3] However, under section § 1.81(a), AT Persons must keep and make a source code repository available for inspection in accordance with Commission Regulation 1.31, which states that all books and records "shall be open to inspection by any representative of the Commission, or the United States Department of Justice."[4] Adding highly-proprietary, intellectually-sensitive source code—the life blood of any trading firm or exchange—to the normally-available information easily accessible to CFTC employees under the books and records provision would allow anyone at the Commission to seek and control the source code. If the Agency wants it, they should get it just like they do today, with a subpoena authorized by the Commissioners. We are not aware of any problems with such requests.

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[3] *Review the 2016 Agenda for the Commodity Futures Trading Commission Before the H. Comm. On Agric.* (Feb. 10, 2016) (statement of CFTC Chairman Timothy Massad), *available at* http://agriculture.house.gov/calendar/eventsingle.aspx?EventID=3122.
[4] 17 C.F.R. 1.31 (2016).

C. Code Market Implications

The Proposal takes a somewhat one-dimensional view of how contemporary market mechanisms work together. Source code, viewed by itself, would not provide a thorough interpretation of any potential market interactions since there are an exponential number of variables informing and continuously steering the source code. The production environment of an algorithm consists of three elements: (1) the technology that informs the algorithm; (2) the algorithm itself; and (3) the technology that executes the algorithm. The informing and executing elements of an algorithm often come from third parties. For instance, an algorithm might pull stock data from Bloomberg and execute the trade through Portware's execution management system. Thus, the source code of algorithmic trading firms would provide only a partial view into today's contemporary market structure, unless coding information from technology vendors is viewed simultaneously.

Additionally, the Proposal's requirement that trading firms provide their source code would represent an unprecedented step that is without parallel among federal agencies. No federal agency requires that market participants relinquish such sensitive information; even the Food and Drug Administration, which is tasked with protecting the health and wellbeing of American citizens, exempts secret recipes and trade secrets from disclosure requirements.[5] Furthermore, since no other market participants would be required to provide similar information, the Commission is effectively singling out one segment of the trading ecosystem in a deeply troubling manner that could be considered arbitrary and capricious;

D. Intellectual Property and Trade Secret Issues

The Proposal raises myriad legal issues related to protections of trade secrets, privacy, intellectual property, and copyright. Source code is protected by copyright law and trade secret law when kept secret.[6] Specifically, since the source code itself is never distributed to the public, it qualifies as a trade secret. Furthermore, U.S. copyright regulations permit the protection of software. If the source code were required to be distributed or inadvertently disclosed, the value of such rights would be compromised, as third parties would be able to determine, at least in part, how the algorithm functions and utilize such ideas or concepts in their software. Such circumstances could decimate a trading firm, costing hundreds of millions of dollars;

E. Privacy Law, Security and Cybersecurity Concerns

The Proposal raises numerous concerns related to the protection of source code and algorithms that could potentially be requested by regulators. Cyber-attacks and data breaches threaten the security and integrity of source code and algorithms, which is why we are concerned about the Commission's systems in light of the 2012 CFTC hacking event. While we appreciate the Commission's view that it routinely handles confidential information without incident, a breach of source code could be exceedingly more destructive to firms than unintended disclosure of order/trade blotters, e-mail and internal accounting documents.

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[5] 21 CFR 20.61 (2016). *See* Part II.D for a discussion of intellectual property and trade secret issues regarding section § 1.81(a) of the Proposal.

[6] *See* Lilith Games (Shanghai) Co. v. uCool, Inc., 2015 WL 4128484, at *5 (N.D. Cal. July 08, 2015).

F. Significant Costs and Risks

In response to the Commission's question as to the industry's status in maintaining source code repositories and the cost for firms to maintain such repository, we respectfully submit that market participants already store certain code based on their specific needs. However, the costs and risks associated with creating a new regulatory requirement pursuant to section § 1.81(a) far outweigh any benefit gained from such a requirement. Moreover, legally-protected property related to coding is the lifeblood of many firms. To require the disclosure of such information to regulators (and possibly even inadvertently to the public) risks exposing the "secret formula" just like the ingredients of Coca Cola.

G. Harmonization with EU Regulation

Provided that the rules proposed under § 1.81 have been drafted to be consistent with other regulation, including the second iteration of the Markets in Financial Instruments Directive (MiFID II)[7] in the EU, we wish to highlight that the European Securities and Markets Authority (ESMA) initially proposed, and ultimately abandoned, MiFID II requirements relating to maintenance and inspection of source code after a forceful response from market participants.

In May 2014, ESMA proposed that participants implement appropriate controls "to ensure that the deployed binary codes were actually compiled from the documented source codes." Similarly, ESMA's proposal would require participants that insourced software to have a code escrow agreement with vendors, and that providers of direct electronic access would be required to analyze source code provided by their clients.[8] However, ESMA ultimately sided with market participants in its follow-up consultation paper, agreeing that such requirements relating to source code would be too cost intensive and could create a significant conflict of interest between market participants, in addition to the concern that the provision of this proprietary information could breach intellectual property law.[9]

H. Recordkeeping Compliance Costs

As previously stated, we do not believe the Commission has the authority to require that trading firms maintain source code repositories in accordance with books and records requirements, nor do we believe that such a proposal would achieve any meaningful Commission objectives. In addition to the lack of authority, we maintain that a new and unproven source code recordkeeping obligation would be costly and burdensome. Costly recordkeeping compliance would also serve as a detriment to new market entrants, thus stifling competition and innovation. In contrast, we recommend that firms continue to maintain source code in their own prescribed fashion and provide such information to the Commission as required by a subpoena.

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[7] Directive on Markets in Financial Instruments repealing Directive 2004/39/EC and amending Directive 2011/61/EU and Directive 2002/92/EC.

[8] *See* https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-548_discussion_paper_mifid-mifir.pdf, pages 222 and 231

[9] *See* https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-1570_cp_mifid_ii.pdf, pages 349 and 357

II. CONCLUSION

We appreciate this opportunity to provide comments to the Commissioners and TAC Members on this critical aspect of the Proposal. In advance, thank you for your consideration.

Very truly yours,

William R. Harts, CEO
Modern Markets Initiative