



71 S. Wacker Drive  
31<sup>st</sup> Floor  
Chicago, IL 60606  
USA

Tel +1 312 726 0677  
Fax +1 312 726 5225

milliman.com

June 24, 2016

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

**Re: RIN 3038-AD52; Proposed Regulation Automated Trading**

Dear Mr. Kirkpatrick:

Milliman Financial Risk Management LLC (“Milliman FRM”) appreciates the opportunity to provide comment to the Commodity Futures Trading Commission (“Commission”) regarding the proposed Regulation Automated Trading (“Regulation AT”). Milliman FRM is a Commission-registered commodity trading adviser (“CTA”) that provides financial risk management services to the global retirement savings industry. Milliman FRM provides investment advisory, hedging, and consulting services to institutional and fund clients, mutual funds in particular. Milliman FRM’s approach relies on the simplest, most liquid hedge assets available, and the firm prides itself on complete transparency with all of its clients. Milliman FRM’s strategies use derivatives only to hedge, not as a means to generate profit, and make use of algorithms in order to seek best execution. Milliman FRM’s risk management strategies have been tested for more than seventeen years and through two market crises (the 2000 dot-com bubble and the 2008 global financial crisis). We respectfully request that the CFTC clarify in the final rule that it is the developer of the algorithm’s responsibility to provide certification to the users.

Amendments to the Definition of Direct Electronic Access

Proposed Regulation AT defines Direct Electronic Access (DEA) in 1.3(yyyy) as “an arrangement where a person electronically transmits an order to a designated



71 S. Wacker Drive  
31<sup>st</sup> Floor  
Chicago, IL 60606  
USA

Tel +1 312 726 0677  
Fax +1 312 726 5225

milliman.com

contract market (DCM), without the order first being routed through a separate person who is a member of a derivatives clearing organization (DCO) to which the DCM submits transactions for clearing.”<sup>1</sup> The Commission has asked for a comparison to the definition of direct electronic access in §38.607, where it is defined as “allowing customers of futures commission merchants to enter orders directly into a designated market’s trade matching system for execution.”

We do not believe that the §38.607 definition of DEA should be used instead of 1.3(yyyy) in Regulation AT, as it could potentially capture more market participants unnecessarily and may create ambiguity. The latter portion of the definition of DEA in 1.3(yyyy) helps make clear that when a market participant first routes an order to another party that participant does not have DEA. For example, §38.607 could capture participants that use futures commission merchant (FCM) portals or algorithms, as the market participant is placing the orders directly to the market. Those orders still flow through the FCM and are subject to its risk controls prior to being sent.

However, 1.3(yyyy) should be modified in order to make clear when risk control infrastructure is applied. The key role of the party to which orders are routed is *execution*. While clearing plays an important role in the trading process, it is the executing FCM’s risk controls which are pivotal, the clearing phase of the trading process is not. 1.3(yyyy) should be modified to reference the executing party rather than a clearing member: “an arrangement where a person electronically transmits an order to a DCM, without the order first being routed through a separate person who is an executing agent.”

During the Roundtable the Commission asked whether DEA is an important filter in determining which market participants are AT Persons. We believe that it is. Only

---

<sup>1</sup>80 FR 78844



71 S. Wacker Drive  
31<sup>st</sup> Floor  
Chicago, IL 60606  
USA

Tel +1 312 726 0677  
Fax +1 312 726 5225

milliman.com

those entities which can immediately impact the DCM, potentially without having their trades subject to any risk controls, should be subject to Regulation AT. Commodity trading advisers that always route their orders through FCMs do not have DEA and should not be subject to Regulation AT.<sup>2</sup>

### Quantitative Measures

Establishing a quantitative measure to determine which market participants should be regulated as AT Persons presents challenges. We believe that a principles based approach would be preferable. As discussed during the Roundtable, a quantitative measure, such as messages per second, creates a path for market participants to eschew regulation by altering their algorithm and trading. Additionally, markets and contracts are dynamic: an established quantitative measure, even if it is contract specific, may eventually be outdated. There may be a negative impact for users of that contract during the time they wait for the regulation to be updated.

It is important that a principles based approach be clear and specific enough in order to avoid capturing many types of algorithms which are simple, widely used, and frequently slow. Not all algorithms have the same potential for market disruption. Any principles designed to determine which AT Persons fail under Regulation AT should take the complexity and potential impact of the algorithm into consideration.

### AT Persons' Compliance when using Third-Party Algorithms

Working to create well-functioning and safe markets are laudable goals. Milliman FRM agrees that certain algorithms should be scrutinized by the Commission in order to further those goals. However, for many market participants algorithms are tools used to achieve better execution. As a CTA, Milliman FRM places many orders in the futures markets for clients: we rely on these algorithms to achieve best execution. The algorithms used are typically provided as a part of a suite of services

---

<sup>2</sup> Milliman FRM agrees with the Investment Adviser Association's comment letter on this point, which was submitted during the initial comment period.



71 S. Wacker Drive  
31<sup>st</sup> Floor  
Chicago, IL 60606  
USA

Tel +1 312 726 0677  
Fax +1 312 726 5225

milliman.com

from an FCM. We focus on providing our clients with the best possible commodity trading advice and leave the algorithm design to those experts at FCMs, as they have the requisite technical skills and market knowledge. While we make use of these algorithms, Milliman FRM does not believe that it should be a market participant's obligation to certify algorithms; it should be the obligation of the algorithm provider.

#### *Certification, Testing, and Source Code*

There are many algorithms that market participants commonly use, some examples include VWAP, TWAP, and iceberg. These algorithms are so widespread that nearly all FCMs provide some version of them. As a CTA we rely on these algorithms to spread out our trades intelligently across volume and time. The purpose is to avoid disrupting the markets of the contracts we trade in, as we may have order sizes so large which otherwise could. The algorithms we use have limited configurability and are fairly standard. When selecting which FCM provided algorithms to use, we conduct thorough testing, typically in an FCM provided testing environment. We work to ensure that our systems can work with the FCM's and conduct mock trading to ensure that the needs of our clients are met. However, at no point do we ask to review the source code of these algorithms; our agreements with FCMs do not allow for access to source code, nor would we want access. In addition, we work with the FCM in order to establish risk controls that would prevent erroneous trades. These risk controls are a part of the FCM's infrastructure and each trade we make passes through them.

We agree that Algorithmic Trading systems should be developed and tested using appropriate standards. The party best able to do so is the developer of the algorithm. Any certification regime the Commission creates should focus on the developer of the algorithm, whether that is an independent algorithm provider or an FCM. For a market participant to certify an algorithm, even after extensive testing, is problematic. The algorithm provider is the party with the expertise, thus even if



71 S. Wacker Drive  
31<sup>st</sup> Floor  
Chicago, IL 60606  
USA

Tel +1 312 726 0677  
Fax +1 312 726 5225

milliman.com

source code was made available, many market participants do not have the technical resources to thoroughly understand and review trading algorithms.

In our experience, trading algorithms provided by FCMs are not copied and stored on local computers, but rather are accessible via a portal. Control over the algorithm remains entirely with the FCM. Thus, even after testing and review, the algorithm provider may update the code, which could lead to malfunction, all without the knowledge of the market participant. Since the code would continue to reside with the FCM or algorithm provider and could be modified, updated, or changed at any time, it is impossible as a practical matter for a market participant to continuously certify FCM or independent software provider (ISV) algorithms. It is also possible for the FCM or ISV to create “forks” of each algorithm for each client, requiring a sign-off for changes. However, this would create an additional burden on the user of the algorithm and force reliance on the algorithm provider’s information security and change control procedures.

As a CTA that uses algorithms to trade, we are not in a position to audit and test FCM or ISV algorithms to the point where we could comfortably certify them. Regulation AT could curtail our access to or significantly increase the cost of tools that allow us to best serve our clients. An unintended consequence of Regulation AT could be that investors will incur transaction costs and execution quality could be impacted due to best-in-class and prudent algorithms not being accessible to execute trades.

We appreciate this opportunity to comment on the Proposed Rule, and would be happy to discuss any questions with respect to this letter.

Sincerely,  
Milliman FRM