



CFTC REGULATION AT

OVERVIEW

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On November 24, 2015, the CFTC unanimously approved and issued a proposed rule, known as Regulation Automated Trading or Regulation AT, in response to the evolution of algorithmic trading on U.S. designated contract markets (DCMs). Please find the summary of Regulation AT prepared by Delta Strategy Group, which provides a brief description (by section) of the Commission's policy discussion and each regulatory requirement. Additionally, please find some questions requested for comment by the Commission and questions formulated by Delta Strategy Group that may raise potential issues for future discussion.

Please see below for additional information:

[Regulation AT](#)

[Fact Sheet](#)

[Question and Answer](#)

SUMMARY

Codification of Defined Terms

Algorithmic Trading, 1.3(ssss) – (PG 65-73)

Algorithmic (algo) trading does not include an order that is manually entered into a front-end system by a natural person, with no further discretion by any computer system of algorithm.

Q) Should the Commission expand the algo trading definition to encompass orders generated using algo methods (e.g. algo generates buy or sell signal at a particular time), but are then manually entered into a front-end system by a natural person, who determines all aspects of the routing of the orders?

AT Person, 1.3(xxxx) - (PG 80-84)

Definition is necessary to identify which persons or entities are subject to the proposed rule addressing trading firms' management of algo trading risks, including pre-trade and other risk controls on orders initiated by the trading firm; development, testing and supervision standards; and the requirement to submit compliance reports regarding the new risk controls.

Entities that may be an AT Person: registered or required to be registered as FCMs, floor brokers (FB), SDs, MSPs, CPOs, CTAs, or IBs that engage in algo trading on or subject to the rules of a DCM, or persons required to be registered as a floor trader (FT).

Algorithmic Trading Compliance Issue, 1.3(tttt) – (PG 73-76)

An event at an AT Person that has caused any algo trading of such entity to operate in a manner that does not comply with the CEA or regulations, rules of any DCM to which the AT Person submits orders through AT, the rules of any registered futures association of which such AT Person is a member, the AT

Person's own internal requirements, or the requirements of the AT Person's clearing member, in each case as applicable.

Q) Should the definition be modified to include other potential compliance failures involving an AT Person that may have a significant detrimental impact on such AT Person, DCM or other market participant?

Algorithmic Trading Disruption, 1.3(uuuu) - (PG 76-77)

An event originating with an AT Person that disrupts or materially degrades the algo trading of such AT Person, the operation of the DCM on which such AT Person is trading, or the ability of other market participants to trade on the DCM on which such AT Person is trading.

Q) Further interpretation of "materially degrades"?

Algorithmic Trading Event, 1.3(vvvv) (PG 77-78)

An event at an AT Person that constitutes an algo trading compliance issue or an algo trading disruption.

AT Order Message, 1.3(wwww) - (PG 78-80)

Each new order or quote and any changes or deletions submitted through algo trading to a DCM by an AT Person.

Proposed controls include a maximum AT Order Message frequency per unit time (message throttle requirement).

Q) Further interpretation on the scope of AT order messages?

Direct Electronic Access (DEA), 1.3(yyyy) - (PG 84-89)

An arrangement where a person electronically transmits an order to a DCM, without the order first being routed through a separate person, who is a member of a DCO to which the DCM submits transactions for clearing.

Q) Should "routed" be further defined? Should there be a sub-definition of DEA, i.e. sponsored market access?

Q) Should an AT order message originating with an AT Person and submitted by AT Persons through such DEA be subject to the same types of pre-trade and other risk controls that such orders would pass through if they flowed through the infrastructure of an FCM before entering the market?

Registration of Certain Persons Not Otherwise Registered with Commission – 1.3(x)

Description of Regulation (PG 93-95)

The FT definition under regulation 1.3(x) is amended to include any person who purchases or sells swaps solely for such person's own account in a place provided by a contract market for the meeting of persons similarly engaged, where such place is accessed by such person in whole or in part through DEA for algo trading, and such person is not otherwise registered with the Commission as a FCM, SD, FB, MSP, CPO, CTA or IB.

Policy Discussion (PG 95-97)

FT registration does not expand to capture all proprietary traders engaged in algo trading, but is limited to firms using DEA to engage in algo trading.

New regulation 1.80 controls must all be established by all AT Persons: i.e. maximum AT order messages

frequencies per unit time, maximum execution frequencies per time, order price parameters, and maximum order size limits.

The Commission estimates 100 proprietary trading firms will register under the FT category.

Request for Comments (PG 98-99)

Q) Should the Commission limit registration to trading firms meeting certain trading volume based on order or message levels? If so, what should thresholds be?

Q) Should the Commission broaden registration requirements so all firms with DEA register?

RFA Standards for AT and ATS – 170.19

All AT Persons must be members of at least one registered futures association (RFA). The National Futures Association (NFA) is currently the only RFA in existence.

Policy Discussion (PG 99-101)

Regulation 1.81(a)(vi) requires AT Persons to maintain a source code repository (SCR) to manage source code access, persistence, copies of production code, and changes to production code, but 1.81 does not impose prescriptive standards for how the SCR must be structured or maintained.

Stress testing and regular back testing is also required, but no specific testing protocols or minimum testing frequency is prescribed.

Responsive risk controls and other measures are required as well as pre-trade risk controls.

RFAs would have discretion in augmenting the requirements of Regulation AT for AT Persons, and may operate examination programs.

Description of Regulation (PG 102-104)

RFAs must adopt rules requiring pre-trade risk controls and other measures such as: standards for developing, testing, monitoring, and compliance of ATSS; designation and training of algo trading staff; and operational risk management standards for clearing member FCMs with respect to customer orders.

The Commission expects RFAs to conduct routine examinations and verification on whether members are complying with RFAs rules.

Request for Comments (PG 105-106)

Q) Should the scope of an RFAs responsibilities be further defined?

Q) Are there any duplicative regulatory requirements to AT Persons under this section?

AT Persons Must Become Members of an RFA – 170.18

Policy Discussion (PG 106-107)

All AT Persons that are not otherwise required to be a member of a RFA pursuant to previous Commission rules will need to become members under regulation 170.18 (i.e. FB and FTs historically regulated by the DCM in which they were a member are required to become an RFA member).

Request for Comments (PG 108)

Q) Could the goals of the Commission be realized without requiring all AT Persons to be members of an RFA?

Pre-Trade and Other Risk Controls for AT Persons – 1.80

Description of Regulation (PG 117-118)

Pre-trade risk controls, order cancellation systems, and other measures are required to prevent an algo trading event.

Controls include: maximum AT Order message frequency and execution frequency per unit time; order price parameters and maximum order size limits; order cancellation and algo trading disconnect systems; and connectivity monitoring systems.

AT Persons must notify applicable FCMs and DCMs that they will engage in algo trading; calibrate or implement DCM-provided self-trade prevention tools; and periodically review compliance with 1.80.

Policy Discussion (PG 118-119)

Maximum AT order message and execution frequencies are required. The Commission will not mandate specific thresholds and these should be based on the specific attributes of the trading firm or account, including trading strategies, the market it trades in, and the speed of its systems. This is required at the AT Person level, by product, account number of designation, or one or more identifiers of natural persons associated with an AT order message.

Order price parameters and maximum order size limits are required to limit the prices and quantities associated with individual order messages (prevent orders with prices far from the prevailing market from entering the market). Each order must pass through price parameter and maximum order size limit checks to protect the natural price discovery process from disruptive behavior such as unintentionally large orders. DCM-provided order size limit for AT Persons would not constitute DCM compliance with its own limits at the exchange level.

Order management controls must be able to immediately disengage algo trading, cancel selected or possibly all resting orders when market conditions require it, and prevent submission of any new AT order messages (kill switch).

Notification of algo trading: AT Persons must notify its FCM and DCM.

Self-trade prevention tools: DCMs are required to either apply existing tools or provide such tools and require their use.

Periodic review for sufficiency and effectiveness: AT Persons must periodically review and revise controls if necessary.

Measures not included or required: drop copies and error trade policies.

Request for Comments (PG 131-133)

Q) Are any requirements ineffective? Do controls sufficiently address technological advances?

Q) Does periodic review need more prescriptive and granular requirements?

Standards for Development, Testing, Monitoring, and Compliance of ATS – 1.81

Description of Regulation (PG 140-145)

AT Persons are required to establish policies and procedures that accomplish a number of objectives with respect to the design, testing, and supervision of algo trading such as: written policies and procedures for the development and testing of ATSs, written policies and procedures to ensure each of its ATSs subject to continuous real-time monitoring and supervision by knowledgeable and qualified

staff, written policies and procedures reasonably designed to ensure ATs operate in compliance with the CEA and other rules.

DCMs are required to provide a test environment for market participants to simulate production trading and conduct exchange-based conformance testing.

Development and testing of ATs: written policies must at a minimum include an environment adequately isolated from the production trading environment; testing of all algo trading code and related systems prior to implementation; regular back-testing using historical data; regular stress tests; procedures for documenting the strategy and design of proprietary algo trading software used; and maintaining a source code repository with an audit trail of material changes.

Monitoring of ATs: written policies must at a minimum include continuous real-time monitoring to identify potential algo trading events; automated alerts when order message breaches design parameters; monitoring staff have ability and authority to disengage the ATs and cancel resting orders in certain market conditions; and procedures tracking of which monitoring staff is responsible for ATs during trading hours.

Designation and training of algo trading staff: written policies must at a minimum include procedures for designating and training all staff involved in designing, testing, and monitoring algo trading and documenting training events, cover design and testing standards, algo trading event communication procedures, and notification methods; training policies designed to ensure monitoring staff are adequately trained; and escalation procedures.

Request for Comments (PG 150-151)

Q) What are the costs incurred by AT Persons from this requirement?

Q) Is it typical for persons responsible for monitoring algo trading to not simultaneously engage in trading activity?

Q) Should requirements vary with respect to size, sophistication, or other attributes of a firm?

Q) Should source code information be further protected (due process) as it is the intellectual property of a firm, and not currently subject to a call authority (but rather subpoena for transfer to the Commission) by the Commission?

Q) Does source code constitute books and records under regulation 1.31, or should it be subject to more protection by firms (due process)?

Q) Will source code be adequately protected by the agency if transferred via special call by the agency?

Risk Management by Clearing Member FCMs – 1.82

Description of Regulation (PG 157-160)

FCMs must implement pre-trade risk controls and order management controls for AT order messages originating with an AT Person to prevent algo trading disruptions.

Pre-trade risk controls must be set at the level of each AT Person including but not limited to: by product, account number of designation, or one or more identifiers of natural persons associated with an AT order message.

DEA orders: controls reside at the DCM.

Non-DEA orders: FCMs implement and calibrate controls that are of the same type of controls implemented by AT Persons, but each entity is responsible for ensuring appropriate calibration of the

control. The Commission will not specify a mandate which, if complied by an FCM, would absolve the FCM of liability.

Discussion of Persons Subject to Proposed 1.80 and 1.82 (PG 162-166)

1.82 applies to clearing FCMs when acting as clearing member for their customers with respect to an AT order message, however, an ATS trading for its own account and for clients would be subject to both 1.80 and 1.82. Specific examples are provided on pages 163-166 of the proposed rule.

Request for Comments (PG 167-168)

Q) Any unnecessary burdens on FCMs due to requirements for non-DEA orders?

Q) Potential competitive advantages for firms without DEA and using an FCM for risk controls?

Compliance Reports Submitted by AT Persons and Clearing FCMs to DCMs; Related Recordkeeping Requirements

Description of Regulation (PG 173-177)

Compliance report program: AT Persons and FCMs must provide DCMs with information regarding compliance. AT Persons must prepare, certify, and submit annual reports (by June 30 to each DCM) regarding their controls for maximum AT order message frequency; maximum execution frequency; order price parameters; and maximum order sizes. FCMs must prepare, certify, and submit annual reports (by June 30 to each DCM) regarding its programs for establishing and maintaining the same controls as required for AT Persons. Certification must be provided by the chief compliance officer or a firm's executive.

Recordkeeping requirements: keep and provide upon request to DCMs books and records regarding their compliance with 1.80, 1.81, and 1.82 (for FCMs).

DCMs receiving these reports must establish a program enabling them to effectively review and evaluate the reports.

Request for Comments (PG 179-180)

Q) Should the frequency of reports to DCMs be further prescribed?

Q) Who should certify the reports?

Risk Controls for Trading: DEA Provided by DCMs – 38.255(b) and (c)

Description of Regulation (PG 182-183)

DCMs must implement systems and controls to facilitate an FCMs management of algo trading risks arising from its DEA customers and mandate those permitting DEA to use certain risk controls by all FCMs for their customers.

Request for Comments (PG 184-185)

Q) Should connectivity monitoring systems (system heartbeats) or automatic cancel-on-disconnect functions be required (DCMs provide to FCMs)?

Disclosure and Transparency in DCM Trade Matching Systems – 38.401(a)

Description of Regulation (PG 189-197)

Existing obligations will include additional disclosure of an electronic matching platform on trade

execution facility that materially impact market participants orders, but which are not readily apparent to a market participant. Includes information that materially affects the time, priority, price, or quantity of execution, or the ability to cancel, modify, or limit display of market participant orders.

Information has a “materiality” threshold, on whether it should be disclosed or not.

Each market participant should have ready access to information that explains the existence and operation of any attribute within an electronic matching platform or trade execution facility that will impact how a market participant experiences the market. Including information that will materially affect the time, priority, price, or quantity of execution of market participants orders, ability to cancel, modify, or limit display of market participant orders, or the dissemination of real-time market data to market participants, including but not limited to latencies or other variability in the electronic matching platform and the transmission of message acknowledgements, order confirmations, or trade confirmations, or dissemination of market data.

DCMs must make available on its website information within a reasonable time, but no later than 10 business days following identification of these attributes.

DCMs must disclose a description of known attributes of its electronic trading platform.

Request for Comments (PG 198-201)

Q) Further interpretation of “Materiality”?

Q) Further interpretation of “Attributes”?

Q) Will inadvertent disclosure of “trade secrets” result?

Q) Further interpretation of “electronic matching platforms”?

Q) Further interpretation on the amendment of the word “rule” under this section?

Pre-Trade and Other Risk Controls at DCMs – 40.20

Description of Regulation (PG 212-214)

DCMs must establish pre-trade and other risk controls specifically designed to address risks that may arise from algo trading, and to establish similar controls for orders entered manually. Requires message and execution throttles and controls establishing price and size parameters, and to establish certain order cancellation (with certain abilities laid out on page 213) and connectivity monitoring systems.

Acceptable practices for Core Principle 4 are amended to make it a requirement to implement pre-trade limits on order size, price collars or bands around the current price, message throttles and daily price limits to comply with this Core Principle.

Policy Discussion (PG 214-218)

The Commission will not establish messaging thresholds and will leave it to DCMs, yet preferring that a more granular prescriptive approach be adopted by DCMs.

DCM Test Environments for AT Persons – 40.21

Description of Regulation (PG 220)

DCMs required to provide a test environment that will enable AT Persons to simulate production environment.

Test environment should provide access to historical transaction, order and message data, and enable

AT Persons to conduct conformance testing of their ATS to verify compliance with Commission requirements.

DCM Review of Compliance Reports by AT Persons and Clearing FCMs; DCM Rules Requiring Certain Books and Records; and DCM Review of Such Books and Records as Necessary – 40.22

Description of Regulation (PG 222-223)

AT Persons and FCMs must submit compliance reports to DCMs and DCMs to implement rules that require each AT Person and FCM trading on a DCM to submit these reports by June 30th annually.

DCMs must establish a program for effective periodic review and evaluation of reports, to identify and remediate insufficient mechanisms, policies and procedures described in reports, etc.

DCMs must implement rules requiring each AT Person and FCM to keep and provide books and records regarding their compliance with all requirements.

DCMs may conduct review if certain events are triggered (i.e. kill switch activated, see page 223).

Request for Comments (PG 225)

Q) Should review be annual or every two years? Further comment on the frequency of reviews?

Q) More specific requirements needed in triggering DCM review to evaluate books and records?

Self-Trade Prevention Tools – 40.23

Description of Regulation (PG 235-238)

DCMs required to apply, or provide and require the use of, tools reasonably designed to prevent self-trading.

Self-trading: matching of orders for accounts that have common beneficial ownership or are under common control.

Bona fide self-match trades are allowed (accounts with common beneficial ownership but initiated by independent decision makers). DCMs must approve this type of activity from a request from the compliance officer or senior officer of the firm requesting it.

DCM must display on its website following information: % of trades in such product including all expiration months that represent self-trading approved by the DCM; % of volume of trading in such product including all expiration months that represents approved self-trading by the DCM; and ratio of orders in such product and expiration months. “Prominent display” standard is applied toward disclosure. DCMs must display those authorized and prevented self-trading requests on its website.

Request for Comments (PG 241-245)

Q) Should market participants be allowed to use its own self-trade prevention tools (without using a DCM provided tool)?

Q) Should the request for exemption not be restricted to the CCO or a senior officer?

Q) Should there be a *de minimis* exception for a certain percentage of unintentional self-trading?

Q) Is more clarification needed on definitions, such as common beneficial ownership, independent decision maker, common control, and self-trading?

Q) Are there other types of self-trading that should be permitted?

Q) Should more data (or less) be disclosed on self-trade reporting by DCMs?

DCM Market Maker and Trading Incentive Programs – 40.25-40.28

Description of Regulation (PG 250-253)

DCMs required to provide additional public information regarding their market maker and trading incentive programs. Additional information required when submitting a new program, including: name of market maker and/or incentive program; explanation of purpose; list of products eligible and services it applies; description of any eligibility criteria or categories of market participants defining who may participate; for any programs not open to everyone, explanation of why its limited to them and how limitation complies with the impartial access and comparable fee structure requirements; explanation of how persons eligible may apply and is evaluated; description of any payments, incentives, discounts, considerations, inducements or other benefits participants receive (trading priority, preferential access to market data, and trade data, etc); description of obligations, benchmarks, or other measures a participant must meet to receive; and description of any legal affiliation between the DCM and entity action as a market maker or participating in a program.

DCMs must make this information easily available on its website during the lifetime of this program, from time it accepts applications to when it ceases operations.

Upon request by the Commission or the Division of Market Oversight (DMO), DCMs must provide such information and data as requested regarding participation in programs by the DCM, including but not limited to the individual program agreements, names or participants, benchmarks, and payments or other benefits conferred.

DCMs required to implement policies and procedures to prevent payment of program benefits, including but not limited to payments, discounts, or other considerations for trades between accounts that are: identified to the DCM as under common beneficial ownership to the approval process or otherwise known to the DCM as under common ownership.

DCMs required to review all benefits accorded to participants to ensure benefits are not earned through abusive practices.

Request for Comments (PG 254-256)

Q) Information requested sufficient to determine whether program complies with impartial access requirements?

Q) Is more clarity needed on what trades are not eligible for programs?

Q) Will any of these requirements hamper liquidity formation?

Calculation of Number of Persons Subject to Regulations

AT Persons: the Commission estimates approximately 350 potential AT Persons with a 20% margin of error, for a total of about 420 firms. **(PG 256-258)**

FT: the Commission anticipates new registrants at around 100 firms. **(PG 258)**

FCMs and DCMs: 57 FCMs and 15 DCMs. **(PG 258-259)**

Cost Benefit Considerations (PG 299-426)

AT Persons: see “Regulatory Flexibility Act” under “AT Persons” for all costs related to AT Persons.

RFAs: 450 hours of burden for a total cost of \$34,200 to comply with rule for RFAs.

Update to controls, DEA orders: 57 FCMs at a total one time cost of \$49,800 per FCM.

Update to controls, non-DEA orders: \$159,360 per FCM.

FCM recordkeeping costs: \$292,410 total initial cost and \$152,190 total annual cost.

Pre-trade and other risk controls for DCMs: \$155,520 for upgrade to controls and a one-time cost of \$2,332,800.

DCM cost for test environments: no estimates provided.

DCM establishment of review program: one-time cost of \$37,000 per DCM.

DCM review of compliance reports: total annual cost of \$111,000 per DCM.

DCM communication of remediation instructions: total cost of \$925 and with an estimate of 24 reports, \$22,200 per year per DCM.

DCM review of books and records: \$110,880 per DCM per year.

Total cost to DCMs for proposed 40.22 requirements: \$33,200 on an annual basis to review all reports received at least once every two years.

FT registration and membership fees: \$105,500 total one-time cost for all 100 firms (one Form 7-R per registrant at \$200 per form plus 10 Forms 8-R by all 100 registrants at \$85 per form). Indirect costs

DCMs exchange trade-matching systems: annual cost of \$19,200 per DCM.

DCM costs to implement self-trade prevention tools: \$155,520 total one-time cost per DCM.

DCM review of approval requests: \$22,000 per DCM annually.

DCM publication of statistics regarding self-trade prevention: \$6,650 annually per DCM

Market participant approval requests: \$3,810 annually to prepare and submit requests to the DCM.

Market-maker and trading incentive programs: \$14,976 per DCM for 40.25 surveillance, \$12,710 per DCM for 40.28 communication with business and compliance staff, \$16,224 for 40.27 payment for trades with no change in ownership prohibited.