



# ***FIA Webinar: Understanding Regulation AT***

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# *FIA Webinar: Understanding Reg AT*

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# Overview of Proposed Reg AT

1. AT Person—Proposed requirements
2. Floor Traders—Proposed new registration
3. FCMs—Proposed requirements
4. DCMs—Proposed requirements
5. Questions



# AT Person Requirements



# AT Person

1. AT Person defined
2. Pre-Trade Risk Controls and Other Measures
3. Development and Testing
4. Source Code Repositories
5. Monitoring
6. Compliance
7. Training
8. Annual Reports



# AT Person Defined

- AT Person includes existing categories of registrants (FCM, FB, SD, CPO, CTA, IB) or a Floor Trader (as proposed to be defined)—
- That engages in Algorithmic Trading (“AT”) *on a DCM*
  - *Algorithmic Trading—trading on a DCM where one or more computer algorithms or systems determines whether to initiate, modify or cancel an order, or otherwise makes determinations with respect to an order, including the product, venue, type, timing, sequencing, quantity, number of orders or post submission order management.*
  - **and** *such order, modification or order cancellation is electronically submitted for processing on or subject to the rules of a DCM; provided, however, that Algorithmic Trading does not include an order, modification, or order cancellation whose every parameter or attribute is manually entered into a front-end system by a natural person, with no further discretion by any computer system or algorithm, prior to its electronic submission for processing on or subject to the rules of a DCM.*

# Risk Controls for AT Persons

- For all AT Order Messages, an AT Person shall implement **pre-trade risk controls and other measures** reasonably designed to prevent an Algorithmic Trading event.
- To be set at level of each AT person or at more granular level as the AT person may determine.
- Regulation is not prescriptive as to specific levels of controls.

# Pre-Trade Risk Controls and Other Measures

## Pre-Trade Risk Controls

- Message and execution throttles
- Order price parameters and maximum order size limits
- Natural person monitoring

## Other Measures

- Order Cancellation Systems
- Connectivity Systems
- Algorithmic Trading Notifications to DCMs and FCMs
- Self-Trade Prevention Tools
- Periodic reviews of such controls



# Development and Testing

Each AT Person shall implement written policies and procedures for the **development and testing** of ATS, that at a minimum provides--

- A development environment that is separate from the production environment;
- Testing of all Algorithmic Trading code and related systems (including any changes) prior to their implementation;
- Regular back-testing of AT using historical data;
- Regular stress tests;
- Documenting the strategy and design of proprietary AT software, including changes ; and
- Periodic review of the effectiveness of these policies and procedures

# Source Code Repositories

- Each AT Person must maintain “a **source code repository** to manage source code access, persistence, copies of all code used in the production environment, and changes to such code.”
- Must be maintained in accordance with the current recordkeeping obligations under Regulation 1.31.
- Under Regulation 1.31, an AT person would be required to make all of the information in the source code repository available to any representative of the Commission or the U.S. Department of Justice upon request.

# Monitoring

Each AT Person shall implement written policies and procedures for the **continuous real-time monitoring** of ATs that provide at least—

- Continuous real-time monitoring by knowledgeable and qualified staff of the AT System;
- Automated alerts when the AT system breaches design parameters, loses network connectivity, or market conditions exceed its operating boundaries;
- Monitoring staff must have the ability to disengage an AT system and to cancel resting orders when market conditions so require; and
- Periodic review of the effectiveness of these policies and procedures.

# Compliance

Each AT Person shall implement written policies and procedures reasonably designed to **ensure that each of its ATS complies** with the CEA and Commission regulations, including—

- Review of AT systems to detect potential Algorithmic Trading Compliance Issues;
- A plan of internal communication and coordination between compliance staff and trading staff to detect and prevent Algorithmic Trading Compliance Issues; and
- Periodic review of the effectiveness of these policies and procedures.

# Training

Each AT Person shall implement written policies and procedures to designate and train its staff, including—

- Procedures for designating and training all staff involved in the design, testing, and monitoring of AT, and documenting training events. Training must cover design and testing standards, and Algorithmic Trading Event communication procedures;
- Training policies must be reasonably designed to ensure that natural person monitors are adequately trained;
- Procedures to inform senior staff as soon as an Algorithmic Trading event is identified; and
- Periodic review of the effectiveness of these policies and procedures.

# Annual Reports

Each AT Person must submit an **annual report** that must include—

- Descriptions of pre-trade risk controls;
- Copies of the written policies and procedures providing for development and testing and for compliance with the CEA; and
- CEO/COO Certification that the report is accurate and complete.

## Annual Deadline

- Required to be submitted to DCMs Annually by June 30<sup>th</sup>.

# Proposed Costs

- One-time costs
  - Pre-Trade Risk controls - \$79,680
  - Development and Testing - \$349,865
  - Monitoring - \$196,560
  - Compliance - \$174,935
  - Designation and Training of Staff - \$101,600
- Ongoing annual costs
  - Compliance reports - \$4,240
  - Recordkeeping - \$5,130
- Ongoing annual compliance costs lacking in discussion

# Proposed Trader Registration





# New Registrants

- Algorithmic traders with direct electronic access must register as floor traders
  - Registration requirements
  - Registration consequences



# Expansion of the Scope of the Floor Trader Registration Requirement

- The CFTC proposes to expand the definition of floor trader in 1.3(x) to include proprietary traders that engage in algorithmic trading through direct electronic access on a DCM
  - The proposed rule does not impact trading activity on SEFs
- A person need not register as a floor trader if the person is otherwise registered as a floor broker, FCM, IB, SD, MSP, CPO or CTA

# Expansion of Floor Trader Registration Requirement (cont.)

- Not all algorithmic traders are required to register as floor traders – only algorithmic traders with “direct electronic access”
- Direct electronic access means electronically submitting an order without the order first being physically routed through a clearing member for clearing
  - The SEC’s definition of direct market access, which includes orders that pass through broker-dealers infrastructure, is broader than the CFTC’s proposed definition of direct electronic access



# Expansion of Floor Trader Registration Requirement (cont.)

- Once a floor trader is registered, proposed Regulation AT would apply regardless of whether the floor trader's orders are submitted through DEA or a clearing member's infrastructure



# Current Floor Trader Definition

- CEA Section 1a(23) defines the term “floor trader” and provides the CFTC with the authority to include or exclude from the definition:
  - “any person in or surrounding any pit, ring, post, **or other place** provided by a contract market for the meeting of persons similarly engaged who trades solely for such person’s own account if the Commission determines that the rule or regulation will effectuate the purposes of the Act”

# Current Floor Trader Definition (cont.)

- The CFTC argues that the “other place” refers to persons using electronic systems
- The CFTC is concerned that AT Persons with direct electronic access pose significant operational, liquidity, market integrity, clearing and settlement and risk management risks
- The registration requirement is intended to enhance the Commission’s oversight capabilities and enable wider implementation of the pre-trade risk controls and risk management tools in proposed Regulation AT

# Impact of New Registration

- The CFTC estimates that 100 new firms will be required to register
- The CFTC's cost estimates for new registrants appear to be unrealistically low:
  - One-time costs:
    - Registration – \$2,106 per firm
    - Compliance with AT Person Requirements - \$84,810 per firm



# Impact of New Registration (cont.)

- Annual Costs:
  - NFA Membership - \$5,625 per firm
  - Compliance with AT Person Requirements - \$10,720 per firm
- Comments should focus on the likely higher costs in relation to the CFTC's perceived benefit, and should propose alternative regulatory proposals



# Consequences of New Registration

- The floor trader registration requirement fundamentally changes the regulatory exposure of proprietary traders that engage in algorithmic trading through direct electronic access
  - Principals of non-natural person floor traders must register with the NFA
    - Principals cannot be statutory disqualified
  - Algorithmic traders will be subject to new supervision requirements
  - Sanctions for serious regulatory violations could include suspension or revocation of registration status

# Consequences of New Registration Requirement – Supervision

- During the past few years, there has been a marked increase in the number of failure to supervise charges in CFTC enforcement cases – Thus, it is important to understand the supervisory obligations of AT Persons proposed by Regulation AT
- Proposed Rule 1.81(b) requires AT Persons to adopt and enforce written policies and procedures reasonably designed to ensure that each of its ATSs is subject to *continuous real-time monitoring and supervision by knowledgeable and qualified staff* while such ATS is engaged in trading



## Consequences of New Registration Requirement – Supervision (cont.)

- The Commission described the supervision requirement of proposed § 1.81(b) as “***analogous*** to the supervision requirements for Commission registrants under the customer protection rules of Commission regulation 166.3” (see footnote 328)
  - This suggests that Rule 166.3 may not apply to floor traders even though, on its face, CFTC Rule 166.3 requires “[e]ach Commission registrant” to, among other things, “*diligently supervise . . . all . . . activities* of its partners, officers, employees and agents (or persons occupying a similar status or performing a similar function) *relating to its business as a Commission registrant* (Emphasis added)

## *Consequences of New Registration Requirement – Supervision (cont.)*

- Proposed Rule 1.81(c) requires AT Persons to adopt implement written policies and procedures reasonably designed to ensure that ATs operate in a manner that complies with:
  - the CEA and the rules and regulations thereunder, and ensure that staff are familiar with the CEA and the CFTC’s rules and regulations;



## *Consequences of New Registration Requirement – Supervision (cont.)*

- the rules of any DCM to which such AT Person submits orders through Algorithmic Trading;
- the rules of any RFA of which such AT Person is a member;
- the AT Person’s own internal requirements; and
- the requirements of the AT Person’s clearing member FCM, in each case as applicable



# Preventing an Algorithmic Trading Event

- Proposed Regulation AT requires AT persons to adopt policies and procedures reasonably designed to prevent an algorithmic trading event including:
  - maximum order message and execution frequencies per unit time;
  - order price parameters and maximum order sizes; and
  - order cancellation capabilities

# Knowledgeable Supervisors with Authority

- Supervisory staff must have the *authority and knowledge* to take steps to prevent an algorithmic trading event
  - The CFTC expects supervisors to be able to “intervene quickly when automated systems experience unexpected or degraded performance”
  - The CFTC believes that staff persons who are responsible for monitoring the trading of other AT Person staff should typically not be actively engaged in trading at the same time, because it would be difficult to adequately and consistently monitor trading of other AT Person staff while engaged in trading activities

# NFA Supervisory Guidance

- NFA Compliance Rule 2-9 requires NFA members to “diligently supervise its employees and agents in the conduct of their commodity futures activities for or on behalf of the member”
- What does this mean in the context of algorithmic trading?
  - According to NFA, members must adopt and enforce written policies and procedures to examine the security, capacity, and credit and risk-management controls provided by the firm’s automated order-routing systems (“AORS”) (Interpretive Notice 9046)



# NFA Supervisory Guidance (cont.)

- Interpretive Notice 9046 applies to systems “that are within a Member's control, including AORSs that are provided to the Member by an application service provider or an independent software vendor.”
  - Must have pre-execution (blocking orders that exceed pre-set limits) and post-execution controls (prompt monitoring and future order blocking)

# Supervisory Standards

- Floor traders would benefit from an industry-wide consensus concerning “reasonably designed” algorithmic trading supervisory procedures
- Reasonableness is an objective, not a subjective standard
- When testing the adequacy of a floor trader’s AT supervisory procedures, expect the CFTC and the NFA to measure them against what they believe to be industry best practices



# Clearing Member FCM Requirements



# Existing Rules

- FCMs and SDs that are clearing members must establish risk-based limits based on position size, order size, margin requirements, or similar factors for all proprietary and customer accounts (1.73 and 23.609)
  - For orders that are subject to automated execution, FCMs and SDs must use automated means to screen orders for compliance with risk limits

## Existing Rules (cont.)

- FCMs must have automated financial risk management controls reasonably designed to prevent the placing of erroneous orders (1.11)
- FCMs and SDs must have policies and procedures governing the use, supervision, maintenance, testing and inspection of automated trading programs

# Proposed Pre-Trade Controls

- Clearing member FCMs must implement pre-trade risk and order management controls with respect to AT Order messages with an AT person
- AT Order messages represent a new order or quote, or change or deletion, submitted through algorithmic trading to a DCM by an AT person
  - The proposed controls are only required for algorithmic trading

# Specific Pre-Trade Risk Controls

- *Message Throttles*: Maximum AT Order message frequency per unit time
- *Execution Throttles*: Maximum orders that an ATS can execute in a given direction in a given period of time
- *Order price parameters*: Prevent orders with prices far from the prevailing market price (*price tolerance limits*)
- *Maximum order size limits*



# Additional Pre-Trade Controls

- Clearing FCMs must also implement pre-trade controls reasonably designed to prevent or mitigate an “Algorithmic Trading Disruption” defined as an event originating with an AT person that disrupts, or materially degrades:
  - The algorithmic trading of the 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 that the AT person is trading
- Minimum controls may not be enough – regulatory uncertainty



# Direct Electronic Access Orders

- For AT Order messages submitted through DEA, the risk controls are established and located at the DCM-level
- The controls are administered or calibrated by the clearing member FCM



# Non-Direct Electronic Access Orders

- For AT Orders that are not submitted through DEA, the clearing member FCM has the obligation to implement and calibrate pre-trade risk controls
- The controls are the same as the controls implemented by AT persons, but the clearing member FCM is responsible for ensuring the appropriate calibration of the control

# Where to Apply the Controls

- Clearing member risk controls must be set at the level of each AT person
- Clearing FCM may set the controls at a more granular level such as by product, account number, or in one or more identifiers of natural persons associated with an AT Order message.

# Monitoring

- Clearing member FCMs must implement policies and procedures to ensure that natural person monitors for the clearing FCM are promptly alerted when pre-trade risk control parameters are breached



# Cancellation Systems

- FCMs must utilize order cancellations systems that have the ability to:
  - Cancel selected or up to all resting orders when systems or market conditions require it
  - Prevent the submission of new AT Order messages
- CFTC references the FIA March 2015 Guide as “reasonable recommendations as to the design and implementation of order cancellation systems”

# Compliance Reports

- Clearing member FCMs must submit compliance reports to the DCMs on which they operate describing their program for establishing and maintaining the pre-trade controls (in the aggregate)
- Compliance reports are certified by the CEO or CCO (best of his or her knowledge or belief the information is accurate and complete)
  - FIA opposed the certification requirement
- Report is due June 30 to each DCM on which they operate
- Report must cover DEA and non-DEA AT persons

# Recordkeeping

- Maintain books and records regarding compliance with rules applicable to clearing member FCMs
- Proposal requires that DCMs implement recordkeeping requirements applicable to clearing member FCMs

# Proposed Costs

- One-time costs
  - Risk controls for DEA orders - \$49,800
  - Risk controls non-DEA orders - \$159,360
  - Recordkeeping - \$5,130
- Ongoing annual costs
  - Compliance reports - \$7,090
  - Recordkeeping - \$2,670
- Ongoing annual compliance costs lacking in discussion





# DCM Requirements



# DCM Requirements Overview

- 1) Risk Mitigation
- 2) Testing Environments
- 3) Compliance Reports and Books and Records
- 4) Disclosure and Transparency in DCM Trade Matching Systems
- 5) DCM Market and Trading Incentive Programs
- 6) Self-Trading Measures



# Risk Mitigation – DEA Orders

- **DEA Orders:** DCMs must provide FCMs pre-trade risk controls and order cancellation systems to enable FCMs to manage risks from their AT customers using DEA to the exchange.



# Risk Mitigation- All Orders

- **All Orders:** DCMs must make use of pre-trade risk controls, order cancellation systems, and system connectivity controls applicable to AT Persons.
  - Controls are consistent with the types of controls that FCMs and AT persons must implement.
  - DCMs also must implement these risk controls for orders that do not originate from algorithmic trading.

# Testing Environments

- A DCM must provide a test environment that will enable AT Persons to simulate production trading.



# Compliance Reports and Books and Records

## Compliance Reports

- Establish programs for reviewing compliance reports and remediating deficiencies.

## Books and Records

- Have rules requiring each AT Person and their clearing member FCMs to keep and provide to the DCM books and records regarding their compliance Regulation AT rules.
- DCMs review and evaluate books and records as necessary.

# Disclosure and Transparency in DCM Trade Matching Systems

## Disclosures

- 1) The rules or specifications of a DCM's electronic matching platform or trade execution facility, including those that “materially affect the time, priority, price, or quantity of execution, or the ability to cancel, modify, or limit display of market participant orders.”

# Disclosure and Transparency in DCM Trade Matching Systems (cont.)

- 2) Except for those already disclosed, “any known attributes of the electronic matching platform . . . that materially affect the
- **Time, priority, price, or quantity of execution** of market participant orders,
  - **The 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.



# DCM Market and Trading Incentive Programs

## **Public Disclosures about the Program:**

- Its purpose,
- The products eligible,
- Eligibility criteria,
- How to apply to participate,
- Describe the benefits a participant may receive,
- Describe the program requirements,
- Disclose any affiliation between the DCM and any market maker, and
- Explain why a program may not be open to all

## **Disclosure to the CFTC or Division of Market Oversight (“DMO”)**

Upon request, DCMs must provide

- Individual program agreements,
- Names of program participants,
- Benchmarks achieved by program participants, and
- Payments or other benefits provided to participants.

## **Prohibition on payment for trades with no change in ownership**

# Self-Trading Measures

**Definition of “Self-Trading”**: The “matching of orders for accounts that have common beneficial ownership or are under common control.”

***Exceptions*** to Self-Trading Prohibition:

- Where (1) accounts have the same common beneficial ownership AND (2) the orders are initiated by independent decision makers.
- Where the orders (1) comply with a DCM’s cross-trade, minimum exposure requirements or similar rules, AND (2) are for accounts not under common beneficial ownership.

**Self-Trade Prevention Tools**: DCMs would be required to

- Have rules to prevent self-trading.
- Apply, or provide and require the use of, self-trade prevention tools.
- Identify, or require market participants to identify, which accounts should be prohibited from trading with each other.

**Self-Trading Data**: For each product and expiration month traded on a DCM in the previous quarter, the DCM would be required to publish on its website data on the amount of self-trading in that product.

# Proposed Costs

- One-time costs
  - Controls to FCMs for DEA orders - \$155,520
  - Pre-Trade and Other Risk Controls - \$155,520
  - Test Environments for AT Persons - \$0
  - Designation and Training of Staff - \$101,600
- Ongoing annual costs
  - Compliance Reports - \$133,200 (Total Cost)
    - Establishment of Review Program: \$37,000
    - Review of Compliance Reports - \$925/report
    - Communication of Remediation Instructions - \$925/report
    - Review of Books and Records - \$4,620/entity



# Q&A

Please use the “question” function on your webinar control panel to ask a question to the moderator or speakers.

If you have additional questions following the conclusion of the webinar, please contact:

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