



8011-01p  
SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-77175; File No. SR-FINRA-2016-007)

February 18, 2016

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Notice of Filing of a Proposed Rule Change to Require Registration as Securities Traders of Associated Persons Primarily Responsible for the Design, Development or Significant Modification of Algorithmic Trading Strategies

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on February 11, 2016, Financial Industry Regulatory Authority, Inc. (“FINRA”) (f/k/a National Association of Securities Dealers, Inc. (“NASD”)) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by FINRA. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

FINRA is proposing to require registration as Securities Traders of associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies, or who are responsible for the day-to-day supervision or direction of such activities.

The text of the proposed rule change is available on FINRA’s website at <http://www.finra.org>, at the principal office of FINRA and at the Commission’s Public Reference Room.

---

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, FINRA included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. FINRA has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

NASD Rule 1032(f) (the “Rule”) generally provides that each person associated with a member included within the definition of a representative must register with FINRA as a Securities Trader if, with respect to transactions in equity, preferred or convertible debt securities effected otherwise than on a securities exchange, such person is engaged in proprietary trading, the execution of transactions on an agency basis, or the direct supervision of such activities.<sup>3</sup> This registration requirement currently does not reach associated persons that solely are involved in the design, development or significant modification of algorithmic trading strategies.

---

<sup>3</sup> Before registration as a Securities Trader may become effective, an applicant must pass the Securities Trader qualification examination. A FINRA rule change establishing the Securities Trader registration category and qualification examination (which replaced the Equity Trader registration category and qualification examination) was approved by the SEC on August 28, 2015. In this filing, FINRA also established a new principal registration category – Securities Trader Principal - for a principal with supervisory responsibility over securities trading activities. The effective date of the registration category and qualification examination requirement for Securities Traders and Securities Trader Principals was January 4, 2016. See Securities Exchange Act Release No. 75783, 80 FR 53369 (September 3, 2015) (Order Approving File No. SR-FINRA-2015-017); and Regulatory Notice 15-45 (November 2015). See also Securities Exchange Act Release No. 75394 (July 8, 2015), 80 FR 41119 (July 14, 2015) (Notice of Filing of File No. SR-FINRA-2015-017).

Given the prevalence of use of algorithmic trading strategies by members, and the resultant significant role such systems play in today's markets, FINRA proposes that associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies (or responsible for the day-to-day supervision or direction of such activities) be required to register as Securities Traders with FINRA and, thus, required to pass the requisite qualification examination and be subject to the same continuing education requirements as are applicable to individual securities traders. FINRA is concerned that problematic conduct stemming from algorithmic trading strategies, such as failure to check for order accuracy, inappropriate levels of messaging traffic, wash sales, failure to mark orders as "short" or perform proper short sale "locates," and inadequate risk management controls, could be reduced or prevented, in part, through improved education regarding securities regulations for the specified individuals involved in the algorithm design and development process.<sup>4</sup>

#### Scope of "Algorithmic Trading Strategy"

For purposes of the proposal, an "algorithmic trading strategy" is an automated system that generates or routes orders or order-related messages such as routes or cancellations, but does not include an automated system that solely routes orders received in their entirety to a market center. As markets change, the scope of what would be considered an algorithmic trading strategy will continue to evolve as new trading strategies are designed and developed.

For example, FINRA has observed the following types of automated systems that would be included within the proposed definition of "algorithmic trading strategy:"

- An arbitrage strategy, such as index or exchange-traded fund (ETF) arbitrage;

---

<sup>4</sup> See Regulatory Notice 15-06 (Registration of Associated Persons Who Develop Algorithmic Trading Strategies) (March 2015), in which FINRA solicited comment on the proposed registration requirement.

- A hedging or loss-limit algorithmic strategy that generates orders on an automated basis;
- A strategy that involves simultaneously trading of two or more correlated securities due to the divergence in their prices or other trading attributes;
- An order generation, routing and execution program used for large-sized orders that involve dividing the order into smaller-sized orders less likely to result in market impact;
- An order routing strategy used to determine the price or size for routed orders, the use of “parent” or “child” orders, or displayed versus non-displayed trading interest;
- A trading strategy that becomes more or less aggressive to correlate with trading volume in specified securities;
- A trading strategy that generates orders based on moving reference prices;
- A trading strategy that minimizes intra-day slippage in connection with achieving volume-weighted average prices and time-weighted average prices; and
- A strategy that creates or liquidates baskets of securities, including those that track indexes or ETFs.

The above is not an exhaustive list of the types of automated functionality that will be deemed an “algorithmic trading strategy” under the proposal. FINRA expects that members will register associated persons primarily responsible for the design, development or significant modification of automated programs (and day-to-day supervision or direction of such activities) that generate orders into the marketplace or execute trades without material intervention by any person. While NASD Rule 1032(f) currently is limited to activity effected otherwise than on a securities exchange, the proposed registration requirement applies to orders and order related messages whether ultimately routed (or sent to be routed) to an exchange or over the counter.

For the purpose of this proposal, an order router alone would not constitute an algorithmic trading strategy; for example, a standard order router that routes retail orders in their entirety to a particular market center for handling and execution would not be considered an algorithmic trading strategy. If an order router performs any additional functions, such as those set forth above, it would be considered an algorithmic trading strategy. In addition, an algorithm that solely generates trading ideas or investment allocations, including an automated investment service that constructs portfolio recommendations, but that is not equipped to automatically generate orders and order-related messages to effectuate such trading ideas into the market (whether independently or via a linked router), would not constitute an algorithmic trading strategy for purposes of the proposal.

#### Scope of Registration Requirement

FINRA developed the proposed registration requirement to address concerns around the role of algorithmic trading strategies in problematic marketplace conduct by member firms. Pursuant to the proposal, associated persons primarily responsible for the design, development or significant modification<sup>5</sup> of algorithmic trading strategies (or responsible for the day-to-day

---

<sup>5</sup> A “significant modification” to an algorithmic trading strategy generally would be any change to the code of the algorithm that impacts the logic and functioning of the trading strategy employed by the algorithm. Therefore, for example, a data feed/data vendor change generally would not be considered a “significant modification,” whereas a change to a benchmark (such as an index) used by the strategy generally would be considered a “significant modification.”

FINRA notes that, even in cases where a modification is not significant and, therefore, would not be required to be performed by a registered Securities Trader pursuant to this proposal, as stated in Regulatory Notice 15-09, firms should also focus efforts on the development of algorithmic strategies and on how those strategies are tested and implemented, including, among other things, implementing a change management process that tracks the development of new trading code or material changes to existing code. An effective process should include a review of test results and a set of approval protocols that are appropriate given the scope of the code or any change(s) to the code.

supervision or direction of such activities) would be required to take a qualification examination and be subject to continuing education requirements. As noted above, FINRA published Regulatory Notice 15-06 to solicit comment on the proposed registration requirement. FINRA received feedback from members, including requesting clarification and guidance on FINRA's expectations around supervision, and registration of supervisors, in connection with the proposal.<sup>6</sup> The majority of these questions and concerns focused on firm personnel not currently required to register pursuant to the Rule. For example, while an equity trader involved in the design of an algorithmic trading strategy already would be required to register pursuant to NASD Rule 1032(f), the developer with which the trader collaborates to create an algorithmic trading strategy may not be. Members have inquired whether, in such cases, the registration requirement would extend to other coders on the development team or persons higher in the developer's reporting line.

While workflows, structures and roles may differ across members, in proposing this amendment, FINRA seeks to ensure that members identify and register associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies (or responsible for the day-to-day supervision or direction of such activities). In establishing this requirement, FINRA seeks to ensure that one or more associated persons that possess knowledge of, and responsibility for, both the design of the intended trading strategy (e.g., the arbitrage strategy) and the technological implementation of such strategy (e.g., coding), sufficient to evaluate whether the resultant product is designed not only to achieve business objectives, but also regulatory compliance. As stated in Regulatory Notice 15-06, FINRA does

---

See Regulatory Notice 15-09 (Guidance on Effective Supervision and Control Practices for Firms Engaging in Algorithmic Trading Strategies) (March 2015).

<sup>6</sup> See supra note 4. The comments and FINRA's response are discussed in Item II.C. below.

not intend the registration requirement to apply to every associated person that touches or otherwise is involved in the design or development of a trading algorithm.

For example, if a sole associated person determines the design of the trading strategy employed by an algorithm, writes the code to effectuate such strategy, and executes or directs the modification of such code going forward, then that person alone would be required to register as a Securities Trader under the proposal.<sup>7</sup>

In contrast, where a lead developer liaises with a head trader regarding the head trader's desired algorithmic trading strategy, and is primarily responsible for the supervision of the development of the algorithm to meet such objectives, such lead developer must be registered under the proposal as the associated person primarily responsible for the development of the algorithmic trading strategy and supervising or directing the team of developers. Individuals under the lead developer's supervision would not be required to register under the proposal if they are not primarily responsible for the development of the algorithmic trading strategy or are not responsible for the day-to-day supervision or direction of others on the team.<sup>8</sup> Under this

---

<sup>7</sup> It is understood that various technology and other firm personnel are involved in additional tasks necessary to launch an algorithmic trading strategy into production – such as integrating the algorithm into the firm's technological infrastructure and testing linkages. However, because these activities generally would not be considered to be design, development or significant modification activities with respect to the algorithm itself, registration of such personnel as Securities Traders would not be required pursuant to this proposal.

<sup>8</sup> For example, a junior developer on the lead developer's team presumably is not "primarily" responsible for the design, development or significant modification of an algorithmic trading strategy and, therefore, would not be required to register under the proposal. By limiting the registration requirements to those persons primarily responsible for the design, development or significant modification of algorithmic trading strategies (or responsible for the day-to-day supervision or direction of such activities) FINRA aims to ensure that the member has identified the individuals primarily responsible for covered activities, and for the day-to-day supervision and direction of covered activities, and equip them with a basic level of familiarity with the regulatory obligations of the firm employing the algorithm. FINRA expects that the competency of these associated

scenario, the person on the business side that is primarily responsible for the design of the algorithmic trading strategy, as communicated to the lead developer, also would be required to register (if not already required to register as a Securities Trader due to their other duties). In the event of a significant modification to the algorithm, members, likewise, must ensure that the associated person primarily responsible for the significant modification (or the associated person supervising or directing such activity), is registered as a Securities Trader.<sup>9</sup>

To clarify the scope of the proposed requirement, the proposed rule provides that only those persons involved in the “day-to-day” supervision or direction of the activities covered by this proposal would be required to register. Thus, each person associated with a member must register as a Securities Trader if such person is (i) primarily responsible for the design, development or significant modification of an algorithmic trading strategy relating to equity (including options), preferred or convertible debt securities; or (ii) responsible for the day-to-day supervision or direction of such activities.<sup>10</sup>

FINRA notes that FINRA Rule 3110(a)(2) generally requires that all registered persons be designated to an appropriately registered principal or principals with authority to carry out the

---

persons will inform the behaviors of those acting under their supervision or at their direction.

<sup>9</sup> In certain cases, the design of a new algorithmic trading strategy (or significant modification to an existing strategy) may be originated and approved by a committee within the firm, including by committee members whose roles may be unrelated to trading or development (e.g., sales personnel providing insight regarding client needs or research analysts regarding sector trends). In such cases, FINRA would not consider each committee member to be primarily responsible for the design or significant modification of the algorithmic trading strategy, so long as an appropriately registered associated person is designated as primarily responsible for defining the business requirements of the trading strategy to be employed by the algorithm.

<sup>10</sup> As discussed further below, a senior or lead developer’s supervisor would not necessarily be required to be registered under the proposal if that person is not involved in the day-to-day supervision or direction of the development process.

supervisory responsibilities of the member for each type of business in which it engages for which registration as a broker-dealer is required. With the addition of this new activity to the Securities Trader registration category, members will be required to designate developers to a registered principal for Rule 3110(a)(2) purposes. In such instances, FINRA believes it is appropriate that members may “assign” a lead algorithm developer (or other non-trader) engaging in covered activities to one or more other registered persons of the member that supervise trading activities outside such developer’s or other non-trader’s usual reporting line.

While the adequacy of a member’s supervisory structure must be evaluated on an individual firm basis, members are afforded a degree of flexibility in arranging for the appropriate supervision of a lead developer (or other non-trader) that engages in covered activities, such as by assigning such person to:

- A Securities Trader Principal<sup>11</sup> in the member’s trading business line (e.g., the Securities Trader Principal in the reporting line of a Securities Trader primarily responsible for the design of any algorithmic trading strategy); or
- A Securities Trader in the member’s trading business line (e.g., a Securities Trader primarily responsible for the design of an algorithmic trading strategy, including the strategy developed by the lead developer); or

---

<sup>11</sup> To qualify for registration as a Securities Trader Principal, an individual must be registered as a Securities Trader (Series 57) and pass the General Securities Principal qualification examination (Series 24). See supra note 3.

- More than one registered person, provided that the supervisor responsible for the lead algorithm developer's activities requiring registration as a Securities Trader must be registered as a Securities Trader or Securities Trader Principal.<sup>12</sup>

Accordingly, the proposal may not necessarily trigger registration requirements for the current supervisor of algorithm design or development personnel if such supervisor is not responsible for the day-to-day supervision or direction of the specific activities covered by this proposal.

However, the firm must designate an appropriately registered person to be responsible for supervising the algorithmic trading strategy activities.

### Third-Party Algorithms

In some cases, an algorithmic trading strategy employed by a member may not have originated in-house and, therefore, may not have been designed or built by the member's associated persons. In cases where the design and development of an algorithmic trading strategy was performed solely by a third-party, the proposed registration requirement would not apply to the member with regard to the design or development of such algorithm. However, FINRA notes that, to the extent associated persons were involved in the design or development, or are able to significantly modify the algorithmic trading strategy in-house, such persons must be registered as Securities Traders.<sup>13</sup>

A member also may engage a third-party to custom-build an algorithmic trading strategy for the member. In such cases, the associated person responsible for directing the third-party in

---

<sup>12</sup> Another registered person – e.g., a General Securities Representative – may be assigned to supervise the lead algorithm developer with regard to other general areas applicable to registered reps, such as outside business activities.

As always, if the activities of a registered representative are assigned to be supervised by more than one registered representative or principal, the member must clearly document which activities are assigned to be supervised by each responsible party.

<sup>13</sup> See supra note 5.

the design, development or significant modification of the algorithmic trading strategy also would be included within the scope of this proposal and must be registered as a Securities Trader. Similarly, after the member has launched the externally built algorithm, any significant modification by the member to such algorithm must be performed by a registered Securities Trader.

FINRA notes that, irrespective of whether an algorithm is designed or developed in-house or by a third-party, the member employing the algorithm continues to be responsible for the algorithm's activities. Thus, in all cases, robust supervisory procedures, both prior to and after deployment of an algorithmic trading strategy, are a key component in protecting against problematic behavior stemming from algorithmic trading.<sup>14</sup> In addition, as is the case under the current rules, associated persons responsible for monitoring or reviewing the performance of an algorithmic trading strategy must be registered pursuant to NASD Rule 1032(f); a member's trading activity must always be supervised by an appropriately registered person. Therefore, even where a firm purchases an algorithm off-the-shelf and does not significantly modify the algorithm, the associated person responsible for monitoring or reviewing the performance of the algorithm must be registered pursuant to NASD Rule 1032(f).

As noted in Item 2 of this filing, if the Commission approves the proposed rule change, FINRA will announce the effective date of the proposed rule change in a Regulatory Notice to be published no later than 60 days following Commission approval. The effective date will be no sooner than 180 days following publication of the Regulatory Notice but no later than 300 days following Commission approval.

---

<sup>14</sup> See Regulatory Notice 15-09 (Guidance on Effective Supervision and Control Practices for Firms Engaging in Algorithmic Trading Strategies) (March 2015).

## 2. Statutory Basis

FINRA believes that the proposed rule change is consistent with the provisions of Section 15A(b)(6) of the Act,<sup>15</sup> which requires, among other things, that FINRA rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest.

The prevalence of use of algorithms in the marketplace has highlighted the risks that arise when such strategies are poorly designed. FINRA has observed situations in which algorithmic trading strategies have resulted in manipulative trading activities and potential securities law violations, including of SEC Regulation NMS, SEC Regulation SHO, SEA Rule 15c3-5 and other critical market and investor protection safeguards. This proposal requires associated persons primarily responsible for the design, development or significant modification of an algorithmic trading strategy (or responsible for the day-to-day supervision or direction of such activities) to meet a minimum standard of knowledge regarding the securities rules and regulations applicable to the member employing the algorithmic trading strategy that is identical to the standard of knowledge applicable to traditional securities traders.

FINRA believes that problematic market conduct may be reduced through improved education of firm personnel regarding securities regulations. FINRA also believes that the proposal will help clarify members' obligations with respect to FINRA's expectations regarding associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies (or responsible for the day-to-day supervision or direction of such activities). Thus, FINRA believes that the proposed rule change is consistent with the

---

<sup>15</sup> 15 U.S.C. 78o-3(b)(6).

provisions of Section 15A(b)(6) of the Act,<sup>16</sup> in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest.

B. Self-Regulatory Organization's Statement on Burden on Competition

FINRA does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Economic Impact Assessment

Need for the Rule

FINRA is concerned that associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies (or who are responsible for the day-to-day supervision or direction of such activities) may lack adequate knowledge regarding the securities rules and regulations applicable to FINRA members operating in the securities markets. This lack of knowledge could result in algorithms that do not comply with applicable rules. As noted above, FINRA has observed situations in which algorithmic trading strategies have resulted in manipulative trading activities and potential securities law violations. Further, FINRA notes that, under the current regulatory structure, some individuals primarily responsible for the design, development or significant modification of algorithmic trading strategies (or who are responsible for the day-to-day supervision or direction of such activities) may claim that they are not required to be aware of the firms' responsibilities under applicable securities rules and regulations. The proposed rule would close this gap in regulatory oversight.

The proposed rule change is intended to enhance investor protection by limiting the development of algorithms designed in conflict with securities rules and regulations. The

---

<sup>16</sup> 15 U.S.C. 78o-3(b)(6).

proposal may also reduce uncertainty by certain market participants of their obligations. It aims to do so through a registration requirement and improved education regarding securities regulations for specified individuals involved in the algorithm design and development process.

#### Economic Baseline

The registration requirements for associated persons under current FINRA rules serve as an economic baseline of the proposed rule change. Currently, associated persons that solely are primarily responsible for the design, development or significant modification of an algorithmic trading strategy (or who are responsible for the day-to-day supervision or direction of such activities) are not required to register with FINRA as Securities Traders. The economic impacts of the proposal depend on the number of additional individuals that would be covered by the proposed registration requirement.

Pursuant to the proposed rule change, associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies (or responsible for the day-to-day supervision or direction of such activities) would be required to register as Securities Traders with FINRA. Under current FINRA rules, it is likely that many of the associated persons primarily responsible for the design of algorithmic trading strategies already are registered, assuming that they also engage in traditional trading activities. Associated persons primarily responsible for the development of algorithmic trading strategies are likely not registered. With regard to supervisors, as noted above, FINRA believes it appropriate for members to “assign” a lead algorithm developer engaging in covered activities to certain registered persons supervising trading activities outside such developer’s usual reporting line. Therefore, many of the associated persons responsible for the day-to-day supervision or direction

of the design, development or significant modification of algorithmic trading strategies may have already registered.

In Regulatory Notice 15-06, FINRA sought comment on the number of persons who conduct activity that may be covered by the proposed rule change, but did not receive any quantitative estimates. Given the diverse nature of the activity and organizational structures among firms, it is not possible for FINRA to accurately estimate the number of persons who are primarily responsible for the design, development or significant modification of algorithmic trading strategies. FINRA is, however, aware of anecdotal information that suggests that these activities represent significant numbers of personnel for some firms. Currently, some firms may be organized such that the covered activities are supervised by a registered person, but in other cases the activities are managed separately.

#### Economic Impacts

The proposed rule change is expected to enhance investor protection and member compliance by limiting problematic conduct stemming from algorithmic trading strategies. It should also reduce uncertainty by certain market participants of their obligations.

FINRA recognizes that the proposal would impose costs on member firms employing associated persons engaged in the activity subject to the registration requirement. Specifically, among other things, additional associated persons would be required to become registered under the proposal, and the firm would need to establish policies and procedures to monitor compliance with the proposed requirement on an ongoing basis. In Regulatory Notice 15-06, FINRA solicited public comment on the estimated number of member firms that would be affected by the proposal, the estimated number of associated persons not currently required to register as Securities Traders that would be covered by the proposal, and the estimated costs associated with

monitoring compliance with the proposed requirement. FINRA did not receive any estimates of these metrics. As discussed above, FINRA expects that most of the costs would be related to the registration and continuing education requirements for associated persons primarily responsible for the design, development or significant modification of algorithmic trading strategies. Some of the costs may be passed on to the associated persons depending on member firm policies regarding examination and examination preparation costs.

The proposal also may have indirect impacts on member firms. For example, it may discourage persons not currently required to register as Securities Traders, such as some algorithm developers, from associating with a member firm in a capacity that requires registration.

However, given the prevalence and importance of algorithmic trading strategies in today's markets, FINRA believes that associated persons engaged in the activities covered by this proposal must meet a minimum standard of knowledge regarding the applicable securities rules and regulations. To mitigate the costs imposed on member firms, the proposed rule change limits the scope of registration requirement by excluding technological or development support personnel who are not primarily responsible for the covered activities. It also excludes supervisors who are not responsible for the "day-to-day" supervision or direction of the covered activities. Moreover, FINRA believes that it is appropriate for firms to "assign" lead algorithm developers or other non-traders engaging in covered activities to certain supervisors that are existing registered persons.

#### Alternatives Considered

As discussed in the Statement on Comments below, FINRA considered in-house training of firm personnel as an alternative to the proposed registration and qualification requirements.

FINRA also considered whether another existing examination would be as (or more) appropriate than the Securities Trader qualification examination. FINRA believes that the proposed registration and continuing education requirements are best suited for associated persons engaging in covered activities.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

On March 19, 2015, FINRA published Regulatory Notice 15-06 soliciting comment on the proposed registration of associated persons primarily responsible for the design, development or significant modification of an algorithmic trading strategy, or who are responsible for supervising or directing such activities. The comment period expired on May 18, 2015, and FINRA received six comment letters.<sup>17</sup> Three comment letters generally support the goal sought to be advanced by FINRA’s proposal – *i.e.*, to help prevent securities law violations from occurring through use of algorithmic trading strategies, though some commenters suggest alternatives to the proposed approach or request clarifications.<sup>18</sup>

Scope of “Algorithmic Trading Strategy”

---

<sup>17</sup> Letter from John Ramsay, Chief Market Policy Officer, IEX Services LLC, to Marcia E. Asquith, Corporate Secretary, FINRA, dated May 5, 2015 (“IEX”); letter from Abe Kohen, President, AK FE Consultants, LLC, to Marcia E. Asquith, Corporate Secretary, FINRA, dated May 15, 2015 (“AK FE Consultants”); letter from Mary Ann Burns, Chief Operating Officer, FIA Principal Traders Group, to Marcia E. Asquith, Corporate Secretary, FINRA, dated May 18, 2015 (“FIA PTG”); letter from Michael Hinel, Law Student Clinician, Michigan State University College of Law, to Marcia E. Asquith, Corporate Secretary, FINRA, dated May 18, 2015 (“Michigan State”); letter from Tom C.W. Lin, Associate Professor of Law, Temple University Beasley School of Law, to Marcia E. Asquith, Corporate Secretary, FINRA, dated May 18, 2015 (“Temple”); and letter from Richard J. McDonald, Chief Regulatory Counsel, Susquehanna International Group, to Marcia E. Asquith, Corporate Secretary, FINRA, dated May 18, 2015 (“SIG”).

<sup>18</sup> AK FE Consultants’ letter seems to misunderstand the scope of the proposed registration requirement as reaching to consultant developers that are not associated persons. As noted above, the current proposal applies to persons associated with a member firm.

IEX requests clarification on the rule's application to different types of order routers; particularly treatment of smart order routers that route orders received from customers, but may break the order into "child" orders. IEX states that it would not object to the coverage of such routers, but requests clarification as to the proposal's intended scope with respect to these routers. FINRA confirms that a smart order router that breaks orders into "child" orders is within the scope of "algorithmic trading strategy" as contemplated in this proposal.

FIA PTG proposes expanding the types of systems that would fall within the scope of the Rule to include strategies that are not fully automated. FIA PTG believes that partially automated strategies may present the same potentially problematic issues as fully automated strategies. Thus, FIA PTG recommends that the proposal apply to persons engaged in the development of "automated trading functionality" rather than "algorithmic trading strategies." FIA PTG believes this broader term – automated trading functionality – would better capture examples of both professional and retail trading systems that offer automated features, such as automation of order book sensitive pricing, automatic short order locate and marking logic, automation of trade timing based on moving reference prices, and automation of hedging or loss-limit orders among other software features.

FINRA does not believe it is appropriate at this time to modify the proposal as suggested by FIA PTG. FINRA believes that it is appropriate initially to focus the scope of the Rule on systems equipped to engage in activity that could potentially result in securities law violations and, thus, has limited the scope of the proposal to automated systems that generate or route orders (or order-related messages), but does not include automated systems that solely route orders received in their entirety to a market center. FINRA also determined to focus the proposal on the covered activities (design, development and significant modification activities, and the

day-to-day supervision or direction of such) to the extent that there was no material human intervention. Therefore, partially automated strategies would not fall within the proposal's scope (unless such systems otherwise met the definition of "algorithmic trading strategy" as discussed herein). Finally, FINRA believes that some of the functionality described by FIA PTG – e.g., automation of trade timing based on moving reference prices and automation of hedging or loss-limit orders – may currently fall within the scope of the proposal and, therefore, would be covered. FINRA will further consider whether the scope of the Rule should be broadened to cover a wider range of systems once experience has been gained with the proposed narrower scope.

#### Scope of Application to Supervisors

IEX notes that, as drafted, the proposal applies to persons (i) primarily responsible for the design, development or significant modification of an algorithmic trading strategy or (ii) responsible for supervising or directing such activities. IEX suggests that the second prong should be revised to cover persons responsible for the "day-to-day" supervision or direction of such activities, to more clearly reflect the proposal's intended scope. FINRA agrees that the proposal is intended to capture only those involved in the day-to-day supervision or direction of the covered activities, and has revised the proposed rule text to reflect this change.

#### Impact on Technology Professionals Associated with Member Firms

FIA PTG states that it agrees with FINRA's view that support personnel should not be required to register. FIA PTG argues that, in addition to excluding technological or development support personnel who are not primarily responsible for the covered activities, FINRA also should exclude users of software, researchers, infrastructure developers, hardware technicians, and operations development staff.

FINRA does not believe modification of the proposal is necessary. Particularly, to the extent that an associated person's activities are limited to using software in a manner that does not amount to engaging in the covered activities, FINRA believes the proposal already is clear that such persons would not be covered. In the case of the other types of personnel FIA PTG references by general job category (e.g., infrastructure developers), FINRA notes that an assessment of such persons' activities with respect to algorithms should govern whether they are captured by the proposal, rather than a wholesale exemption based on a general job category.

SIG believes that a registration requirement would discourage well-qualified developers from participating in the development of algorithmic trading strategies and affiliating with FINRA member firms, which SIG states would be broadly and materially counter-productive and may result in less market stability due to less qualified developers building algorithms. Similarly, FIA PTG notes that any time a registration requirement is not reasonably related to the role or expectations of a professional, it becomes an impediment to hiring and retention. However, FIA PTG also notes that the impact can be mitigated by avoiding prescriptive definitions, and allowing firms to use discretion when identifying the individuals who would require registration.

FINRA is sensitive to the impact of the proposal on persons not currently required to register pursuant to NASD Rule 1032(f). However, given the important role that certain associated persons play in the ultimate trading activities engaged in by member firms through the employment of algorithms, FINRA continues to believe it is important to balance the concerns raised by FIA PTG and SIG with the goal of facilitating compliance with critical market and investor protection rules and, thus, has focused the scope of the proposal on those associated persons primarily responsible for the design development and significant modification of

algorithmic trading strategies (and those responsible for the day-to-day supervision and direction of such activities), rather than entire departments or general job functions. As suggested by FIA PTG, FINRA's proposal places within the responsibility of each member the task of identifying the individual or individuals primarily responsible for the activities covered by the proposal and, thus, avoids overbroad application of the Rule.

#### Alternatives to a FINRA Registration Requirement

SIG disagrees that a FINRA registration requirement would be effective in preventing algorithm trading strategies that result in improper activities or securities law violations. SIG believes that robust systems controls are the most effective means of preventing the concerns raised; however, additional efforts suggested include training of technology staff, including a continuing education component (without a registration requirement), and chaperoning requirements for non-registered personnel. Michigan State supports the proposal and believes that it strikes an appropriate balance and will effectively promote both investor protection and market integrity.<sup>19</sup>

FINRA agrees that robust systems controls are a critical component in any discussion around the regulation of algorithmic trading. However, education of those responsible for the creation of an algorithmic trading strategy is a separate and equally important consideration. For

---

<sup>19</sup> Temple somewhat supports the proposal, but suggests that the registration requirement be more firm-focused than person-focused, so that the firms with the most potential market impact would be required to register. FINRA disagrees, and believes that all persons covered by a registration category should be appropriately qualified.

Temple also suggests that, in light of the rapid pace of financial innovation and technology, proposed rule initiatives should be structured as pilots, having sunset provisions, or other time-sensitive mechanisms to help support the goal of rules that are reflective of the marketplace. FINRA does not believe the registration requirement should be implemented on a pilot basis, and notes that registration requirements and accompanying examinations remain reflective of the marketplace on an ongoing basis through regular review of examination content outlines and continuing educational requirements.

example, even if an algorithm never malfunctions from a technological standpoint, its behavior nonetheless may violate securities laws if appropriate constraints were not built into the design and development phases that ensure any order generated by the algorithm observes applicable regulatory standards (e.g., entry of only bona fide orders) and incorporates necessary related tasks (e.g., short order marking and performing locates). In addition, while in-house training of firm personnel is important, FINRA does not believe it is a suitable substitution for registration and qualification in the area of securities trading.<sup>20</sup>

### III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve or disapprove such proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

---

<sup>20</sup> FIA PTG supports a FINRA registration requirement, but requests that a broader range of examinations be considered acceptable for purposes of the proposal, such as the Series 7. FINRA has considered whether another existing examination would be as (or more) appropriate than the Series 57, as well as whether a new examination should be created for this purpose, and continues to believe that, at this time, the Securities Trader registration category is best suited to educate associated persons that engage in the activities covered by the proposal.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

##### Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-FINRA-2016-007 on the subject line.

##### Paper comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-FINRA-2016-007. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of FINRA. All comments received will be posted without change; the

Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-FINRA-2016-007 and should be submitted on or before [INSERT DATE 21 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>21</sup>

Robert W. Errett,  
Deputy Secretary.

---

<sup>21</sup> 17 CFR 200.30-3(a)(12).

[FR Doc. 2016-03794 Filed: 2/23/2016 8:45 am; Publication Date: 2/24/2016]