

# MiFID II Minimum Standard Recommendations for ETD eTrading

This document outlines a baseline set of minimum standards for trading venues. This document is intended to provide a principles-based framework - it does not prevent trading venues from providing additional value-added functionality/services.

## 1) Risk Management

In practice, members expect to set their own Risk Management controls narrower than the Risk Management controls managed at the trading venue. This enables Members to stop and restrict electronic trading flow closer to the originating source. In order for this to occur, the details and methodologies of the trading venue controls would need to be published and understood. This would then enable members to set and calibrate controls within those of the trading venues. In light of the increasing number of risk management controls, a common categorisation framework of rejection messages as well as more information on the message itself would improve automated and manual responses to rejections.

- a) **Price Tolerance Controls** (also known as Price Reasonability Checks) to be defined and managed at source at the trading venue, and cover all products to help protect market integrity.

*“Trading venues shall operate.....:*

*(a) price collars, which automatically block orders that do not meet set price parameters on an order-by-order basis” – RTS 7, Article 20 (1) (a)*

- ✓ Managing at source provides uniformity and certainty, and reduces risk for all participants.
- ✓ Managing at source provides a level playing field for all participants.
- ✓ Managing fair value calculations at source provides a single methodology for illiquid instruments.

The following points were raised for consideration. Given the potential for complexity in the trading venue price tolerance controls, it is recommended to keep the procedures, methodology and mechanism as simple as possible, and clearly published:

- **Categorisation:** flow can be broadly split into two categories: the first category includes the liquid products (and contracts) frequently traded; the second includes the illiquid products (and contracts) that may not have an available reference price and could include new products, new contracts (including option strikes or expiry dates) and those that may not have an appropriate reference price, which could include single stock products where there has been a corporate action on the underlying. It should be made clear; (i) how the categories are defined; (ii) into which category a

particular instrument or set of instruments fall; and (iii) any difference in methodology between the two categories.

- **Coverage:** all trading activity and trading periods should be covered by the control (universal coverage). Specifically, both central limit order book matching periods and other specific periods such as auctions and pre-auctions. Specifically, both DMA flow and wholesale (manual, trade registration) should be included.
- **Resetting Control Mechanics:** both the procedure and the mechanism, whether manual or automatic, for altering the Price Tolerance Controls (i.e. price bands) should be clearly published and apply to all participants. This should also include temporarily altered values and any subsequent rebalancing (if this scenario exists). Intraday alteration events should be clearly published and notified to all members simultaneously.
- **Over-ride:** any over-ride of Price Tolerance Controls is expected to take place by means of a bilateral discussion with the trading venue about fair value; i.e. this is a manual process such as calling the exchange helpdesk. In any case, the process should be clearly published and followed by the Resetting procedure above.
- **Methods of publication:** preferably publication should take place by both website/report publication as well as via API, supplemented by email. Given the potential granularity of Price Tolerance values, an automated method of publication would be beneficial.
- **Trade Bust:** the procedure should be clearly published and include information on when 'trade busts' will occur due to being outside price bands. Notwithstanding, trading venues maintain the discretion pursuant to their rulebooks to bust trades within applicable price bands.

- b) **Order and Message Throughput Controls** (also known as Throttle Limits) to be hosted and administered at the trading venue itself on a per session (or logical connection ID) at point of entry, and cover all products.

*“Trading venues shall have at least the following arrangements to prevent disorderly trading and breaches of capacity limits:*

*(a) limits per member on the number of orders sent per second (throttle limits);” RTS 7, Art 18 (1) (a)*

- ✓ Managing at source provides uniformity and certainty, and reduces risk for all participants.
- ✓ Managing at source provides a level playing field for all participants.

Throttle Limits (1) help manage capacity and (2) can help prevent a “runaway algo” scenario. The following points were raised for consideration:

- Sessions/IDs: trading venue Throttle Limits should be set per session (or logical connection ID), facilitating the identification of flow and administration of limits.
  - Messages or Orders: it should be clear whether trading venue Throttle Limits are a control of orders (new order message), or a control of messages (including new order message, amend or cancel, and other message types). If both types are provided, then there should be a separate counter for both.
  - Single or Repetitive Flow: trading venue policies should differentiate between persistent or frequent reaching of the Throttle Limit and a single instance of reaching the Throttle Limit. Members would appreciate guidance on when Throttle Limits would lead to cut-off.
  - Application: in real time or at least within 5 seconds.
  - Rules: any trading venue rules for maximum throttle limits should be clearly published.
- c) **“Cancel All” Button** (or Kill Switch) to be supported at source at the trading venue (and made available through a screen and preferably also via API) on both a per firm and per session (or logical connection ID). Such functionality would supplement exchange members’ own Kill Switches. Such functionality is expected to be rarely used, but should provide a failsafe option to cancel outstanding orders and/or restrict trading access. A trading venue’s “Cancel on Disconnect” functionality should not be mandated alongside “Cancel All” but rather offered as optional functionality for participants to implement according to the nature of their business and risk mitigation procedures.

✓ Managing at source reduces the technology risk when this function is used.

For consideration:

- Availability via screen should offer a clear method of cancelling all orders.
- Provision via the existing API is preferred (to reduce development and conformance overhead for vendors). Optional redundancy should also be considered (members should be able to access the “Cancel All” Button via a separate connection in order to be able to deal with a “runaway algo”).
- Formalised Conformance Testing of the Kill Switch feature is recommended.
- Detail on whether the Kill Switch does anything more than cancel open orders should be made clear.
- The option to re-enable trading access is required, and should be made clear.
- Kill Switch should be provided on a broad basis (per firm and per session or logical connection ID). Further optionality for more granular controls could be considered provided its application on a broad basis is satisfied.

## 2) Legal Entity Identifiers and Additional Mandatory Order Tags

More liaison between trading venues and market participants is recommended given there is room for different interpretation of what is required to be sent. The development of a common industry framework should be promoted to regulators as part of future advocacy. Sensitivity around the data itself, when and where to send, as well as what is required (or not required) to meet real time surveillance obligations provide further challenges. Encryption and third party storage of sensitive values have been raised as possible solutions. However, no consensus was reached on the challenges, as well as on the possible solutions.

- a) There is a current proposal to use the participant or member for the “**entity submitting order**” – which could be provisioned by the trading venues coding this information on the connection, rather than via another field having to be sent through.
- b) The ability to support **New Regulatory Tags** at point of inception (order entry/ execution).
  - Maintaining ability to send fields at outset provides optimum flexibility and adheres to the majority of existing Client DMA and Voice trading workflows.
- c) The ability to support **New Regulatory Tags** (particularly LEI and National IDs) at **end of day\***

\*this is currently being suggested by FIX Trading Industry Association.

- Providing the mechanism to update specific information at end of day reduces latency impact of providing a number of fields in order messages.
  - Providing the mechanism would also provide options to separate information that may be classed as Personal Identifiable Information, and the associated stringent data protection obligations.
  - Providing the mechanism may reduce the number of updates or corrections to data.
- d) LEI and other new fields should not be used for Risk Management purposes.
    - Maintaining simplicity to reduce technology risk.
    - There are other explicit obligations for Risk Management (not referencing additional tags).
  - e) **Existing industry practices** to be leveraged for user and algo identification including:
    - a. Execution Decision User ID - (also known as TAG50) – for security reasons, trading venue participants should be permitted to enter unique and persistent mnemonics as opposed to personal identity information. Participants will retain records of such user

ID mappings and make personal identity information available to trading venues and NCAs upon request.

*“Execution within firm” - RTS 6, Annex II, Table 3*

*And RTS 22, Article 7*

- b. Investment Decision User ID – (a new addition field equivalent to TAG50) – for security reasons, trading venue participants should be permitted to enter unique and persistent mnemonics as opposed to personal identity information. Participants will retain records of such user ID mappings and make personal identity information available to venues and NCAs upon request.

*“Investment decision within firm” - RTS 6, Annex II, Table 2*

*And RTS 22, Article 8*

- c. Algo ID Code – Execution (also known as Algo Flag)

*“Execution within firm” - RTS 6, Annex II, Table 3*

*And RTS 22, Article 9*

- d. Algo ID Code – Investment Decision

*“Investment decision within firm” - RTS 6, Annex II, Table 2*

*And RTS 22, Article 8*

- ✓ Flexibility in both tag format and content encourages a minimum standard across trading venues.
- ✓ No registration process significantly reduces administrative overhead for all parties, and prevents additional dependencies.

- f) Additional Tag for **Aggregated Orders** (AGGR) to adhere to the standard (at point of order entry/execution).

*“Client identification code” - RTS 6, Annex II, Table 2*

- g) Additional Tag for Pending Allocation (PNAL) as an alternative to Client ID Code.
- h) Additional Tags (as per the above) to be **free text field and without validation by the trading venue** except for simple validation of the format (such as valid characters, field length etc.).
- i) Additional Tags (as per the above ) **not to be subject to the validation of content by the trading venue** (for example content or values should not require registration at the trading

venue).

Additional Order Flow Tags to be passed down in a **standardised way from trading venue to CCP**.

- ✓ Passing down additional order flow tags in a standardised way supports transaction reporting simplicity without the need to build further components or middleware.

j) Order Reporting:

Order reporting facilities may require a correction mechanism for post-execution correction. Such a correction mechanism could provide a method of post-execution enrichment of data.

The distinction should be made between members who report, and members who expect the trading venue to report. In the case of the trading venue reporting on behalf of members - there are both latency and privacy concerns about provision of certain fields and values on orders at point of entry/execution and regarding storage and reporting.

### 3) Algo Testing, Algo Trading and Algo Flags

- a) **Existing industry technical practices to be built upon, and followed for algorithmic flags** (such as technical implementation of German HFT requirements from March 2014).
- b) **Concept of chaining and translation of algorithmic flags** (from participant to participant) to be supported and extended to other markets and to be handled by the member.
- c) **Maintaining the concept of chaining** (of Algo IDs) provides access to the market at all levels up and down the client chain, and does not restrict access to certain sections of the industry.

In accordance with Article 6 of Regulatory Technical Standard 6 (Commission Delegated Regulation (EU) XX/XXXX of 19/07/2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to the regulatory technical standards specifying the organisational requirements of investment firms engaged in algorithmic trading<sup>1</sup>), an investment firm is required to test the conformance of its algorithmic trading systems and trading algorithms with:

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<sup>1</sup> [http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160719-rts-6\\_en.pdf](http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160719-rts-6_en.pdf)

- a) *the systems of the trading venue [...] iii) where there is a material change of the systems of that trading venue.*
- b) *The system of the direct market access provider [...] ii) when there is a material change affect the direct market access functionality of that provider; iii) prior to the deployment or material update of the algorithmic trading system, trading algorithm or algorithmic trading strategy of that investment firm.*

It is widely understood that 'materiality', in the context of conformance testing for algorithms, is something determined by members of the trading venue themselves, and is in respect to the interface between the member and the trading venue.

**Conformance and Algo Testing/Certification to be split out into:**

- I. Conformance testing (in trading venue UAT environment, but not a production like-live replica environment).
  - II. Algo testing (in trading venue UAT environment or via trading venue Test Symbol).
    - Splitting Conformance and Algo testing provides appropriate and commensurate methods to control and quality assure the release of algorithms into the market, without the scale and cost of production like-live replica trading environments.
    - Conformance testing is about ensuring connectivity works rather than how the algo performs and interacts. As such, from an exchange perspective, a material change in an algo will be one that changes the exchange gateway.
    - Trading venues should require all members to undergo conformance testing prior to accessing the market for the first time after the member has been admitted to membership and upon "significant" change of the trading system interface. What constitutes "significant" is for the member to decide.
    - Given that the RTS will not change, it would be helpful if trading venues' guidance on when conformance testing is required would state explicitly new conformance is not required for every Algo ID generated, but rather only for material changes to the trading system interface. The FCA are looking for the participants and trading venues to agree a common approach in this area.
- d) Trading venues to confirm support of **Test Symbols**

Members strongly prefer trading venues to confirm support of Test Symbols instead of requiring members to conduct Algo testing in a trading venue UAT environment. Members believe that a Test Symbol will help the controlled introduction of algos into the production live environment and therefore help to protect market integrity.

Only one symbol is required.

Whether the Test Symbol may be used during trading hours or only outside of trading hours shall be at the discretion of the trading venue; however, members have a desire to be able to use Test Symbols additionally during trading hours as a validity check prior to reconnecting when there have been connectivity issues at the trading venue. Test Symbols shall be subject to the trading venue's fair use policy. It is acceptable for the trading venue to reject orders on the Test Symbol during trading hours.

#### **4) HFT and Market Maker Categorisation**

a) Existing industry practices to be leveraged for Proprietary and Client order flow categorisation at point of entry/execution (through use of Customer Type Indicator & Origin Codes).

- ✓ Leveraging existing industry practice provides a simple solution to categorise order flow, with minimal disruption.

(b) Existing industry practices to be leveraged for Market Making order flow categorisation at point of entry/execution (through use of a distinct Market Making tag).

- ✓ Leveraging existing industry practice provides a simple solution to categorise order flow, with minimal disruption.

#### **5) Sponsored Access**

Trading venues to confirm how they plan to facilitate sponsored access on behalf of their members post-MiFID II, including providing clearing members tools to comply with RTS 6 requirements.