



MARKET REGULATION ADVISORY NOTICE

From	<i>NEX SEF Limited ("NEX SEF")</i>
To	<i>All Participants</i>
Subject	<i>Pre-Trade and Post-Trade Controls</i>
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NEX SEF PARTICIPANT CONDITIONS & ALGO TRADING DUE DILIGENCE POLICY

1 January 2018

Version 1.6

"REQUIREMENTS ON MTF MEMBERS,
INCLUDING THOSE EMPLOYING ALGORITHMIC
TRADING STRATEGIES, TO PROTECT THE
INTEGRITY OF OUR VENUES FOR ALL MARKET
PARTICIPANTS"

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1. INTRODUCTION

MiFID II sets out requirements for multilateral trading facility (“MTF”) operators and members, such as NEX SEF Limited (“NEX SEF” or the “Facility”) and its Participants, aimed at ensuring the orderly functioning of markets in volatile and even disorderly conditions through Article 48 and associated Regulatory Technical Standards (RTS). Capitalised terms used but not defined herein have the meaning given to them in the NEX SEF Rulebook.

NEX SEF is dual-registered as a swap execution facility (“SEF”) and a MTF and permits algorithmic trading in the roles summarised below:

Market Segment	MIC	Product(s)	Trading Model	In-scope Role(s)
EBS Market	NEXS	NDF	CLOB	Ai Trader
EBS Institutional	EBSI	Fwd/Swap NDF	Hybrid	Liquidity Provider (LP)

As per RTS 7, NEX SEF requires its Participants to have their own control environments to govern the use of its electronic order submission systems, both on NEX SEF user interfaces and via Application Programming Interface (API). The key elements of this control environment are:

- Pre-trade controls on price and value of orders
- Post-trade controls on credit and market risk
- Usage controls on message transmission via API and reject behaviour on RFQ protocols (RFQ currently not applicable)
- Software development control and conformance testing to NEX SEF venues
- Ability to cancel one or all live orders aka “Kill functionality”
- Direct Electronic Access provision (not currently applicable)
- Qualified and experienced staff in key positions

Whilst NEX SEF implements a range of market controls that are detailed in the Trading Protocol and Product Appendix for each market segment, algorithmic trading Participants are also required to have controls at their end and to self-certify with NEX SEF that these controls are in place and reviewed regularly - See section 5.

2. PRE-TRADE CONTROLS

NEX SEF expects its Participants to have pre-trade controls on API execution algorithms so as to minimise error trades and potential disruption to market segments and any associated transaction data.

2.1. PRICE CONTROLS

- Central Limit Order Book traders: Order submission price filters to limit potential error conditions like unintended sweeps through an order book
- Hybrid-model Liquidity Providers: Price filters to limit potential error conditions like inverted quotes on a price response

2.2. VALUE CONTROLS

- Central Limit Order Book traders: Order submission value filters to ensure that orders are only submitted at or above minimum and below maximum order values for an instrument or market segment.

3. POST-TRADE CONTROLS

NEX SEF expects its Participants to have post-trade controls on the risk elements of trades to minimise error trades and potential disruption to market segments and any associated transaction data.

3.1. CREDIT RISK

- Sufficient counterparty credit mapping within NEX SEF via the Trading Floor Administrator function
- Counterparty legal entity mapping and timely responses within RFQ and hybrid protocols (currently not applicable)
- Post-trade credit exposure management such that trades settle as per Participant Rulebook responsibilities

3.2. MARKET RISK

- Risk limits across trading books that execute into NEX SEF market segments
- Post-trade market risk exposure management such that market-making and any other obligations continue uninterrupted

4. USAGE CONTROLS

NEX SEF expects its members to adhere to Rulebook conditions on order submission and quote response so as to safeguard NEX SEF systems and deliver a positive market experience to other Participants

4.1. MESSAGE TRANSMISSION

- Order submission message throughput filters to ensure that orders are only submitted at or below the maximum message per second limit per API connection to Trading Platforms

4.2. ORDER CANCELLATION (CLOB)

- Management of the cancel and amendment of orders such that the member's trading is within the published Unexecuted Order to Transaction Ratios and any other quote-fill obligations
- Maintenance of orders within the book for a duration that at least meets any published Minimum Quote Life conditions
- Adherence to Market Abuse Regulations

4.3. TRADE REJECTIONS (HYBRID) (CURRENTLY NOT APPLICABLE)

- Trade response times within any limits set on RFQ and hybrid protocols
- Credit (see 3.1 above) and any economic rejects within counterparty expectations

5. CONFORMANCE TESTING

NEX SEF requires its Participants to pass a basic conformance test prior to deployment or significant change to trading algorithms, and to self-certify that they have tested against disorderly market conditions.

5.1. BASIC CONFORMANCE

- Book and pass the Basic test with the Client Integration Team following use of the NEX SEF Customer Lab basic test environment
 - Submission, cancel and amendment of orders
 - Market and trade data flows
 - Pre-trade controls and messaging throttles
 - Heartbeat, disconnection and reconnection
 - Market data feed loss
 - Trading suspension and resumption

See *EBS Client Conformance Requirements*, available from NEX SEF Customer Support.

- The NEX SEF Customer Lab is available at published times with a version of live market data and the possibility to interact with other customer orders in the Lab test environment for the Basic test

5.2. PARTICIPANT SELF-CERTIFICATION

- Sign-off from the Algo-owner and return Self-Certification form by electronic or other means
 - That the Participant's system have capacity and are resilient
 - That the Participant has appropriate pre-trade controls (see Section 2 above)
 - That the Participant has tested the specific trading algorithm version against the Disorderly Market test cases and that the algorithm doesn't exacerbate the situation
- The NEX SEF Customer Lab will additionally be set perform certain non-standard actions during a test window to expose the algo being tested to stressed and/or disorderly market conditions.
- Participant algos will be exposed to some or all of the following scenarios:
 - Partial or full market interruptions
 - Specific Instruments being suspended from trading
 - Instruments being placed into a price loop
 - Changes to order submission rates
 - Matching Engine Failure

See the *EBS Client Algo Self-Certification* form, available from NEX SEF Customer Support.

6. KILL FUNCTIONALITY

NEX SEF expects its Participants to have Kill Functionality such that they can cancel any Bids/Offers that could exceed risk thresholds or are the result of human or technical error.

6.1. ORDER LEVELS

- Kill functionality such that algorithmic trading orders sent to NEX SEF market segments can be cancelled for:
 - Individual traders or trading models
 - A trading desk or trading model group
 - All of a Participant's orders
- NEX SEF also has Kill Functionality for each market segment and Participants can contact NEX SEF Customer Support in the event that they find themselves unable to cancel individual or groups of orders – see *NEX SEF Kill Functionality Policy*

7. EXPERIENCED STAFF

NEX SEF expects its Participants to have sufficiently qualified and experienced staff with appropriate regulator registration for the roles that they perform.

7.1. ALGORITHM OWNER

- Participants must have a designated Algo-owner for every tested and live trading algorithm
- The Algo-owner must sign the NEX SEF self-certification form for each new deployment of and significant change to a trading algorithm

7.2. STAFF QUALIFICATION & IDENTIFICATION

- NEX SEF requires Participants within the EU to have current Investment Firm registration or local equivalents if located outside of the EU.
- NEX SEF does not make specific conditions on Participant's employees' qualification or registration status, but in general firms are expected to have sufficiently qualified staff in key positions and appropriate local registrations in place.
- NEX SEF does however have reporting and record maintenance obligations that require valid user identification data to be mapped against Participant's transactions – See *Data Protection & Storage policy*