



CIRCULAR

IFSCA/CMD-DMIIT/ALGO/2026-27/01

October 16, 2026

To,

All the Stock Exchanges in the International Financial Services Centre (IFSC)

All the Broker Dealers in the IFSC

All the Remote Trading Participants (RTPs) through respective Stock Exchanges

Dear Sir/ Madam,

Subject: Guidelines for Algorithmic Trading on the Stock Exchanges

1. To promote the sound, orderly and transparent development of algorithmic trading across the Stock Exchanges in IFSC, the International Financial Services Centres Authority (IFSCA) hereby issues the following guidelines. These guidelines are intended to strengthen market integrity, mitigate systemic and operational risks, and ensure fair and equitable access to market infrastructure, while preserving the operational flexibility that competitive Stock Exchanges demand.
2. This Circular aims to establish a comprehensive regulatory framework governing algorithmic trading practices with the objective to broaden meaningful market participation, enhance liquidity and strengthen market resilience across the IFSC ecosystem.
3. In doing so, the Authority aims to balance technological advancement with prudent regulatory safeguards, thereby supporting the continued growth, stability and international competitiveness of the IFSC as a premier financial market jurisdiction.

Definitions

4. For the purpose of this Circular, unless the context expressly states otherwise, the following definitions and their related expressions shall be construed according to the meanings assigned herein,



- a) “Algorithmic Trading” means trading in securities listed on a Stock Exchange where a computer algorithm or program or automated system, determines, with limited or no human intervention, one or more individual parameters of an order, including but not limited to:
- i. Initiation/ cancellation of the order
 - ii. the timing of order entry
 - iii. price of the order
 - iv. quantity of the order
 - v. type of the order
 - vi. the modification of any of the above parameters after order submission

Explanation:

For the purposes of this clause, the term “Algorithmic Trading” shall not include any system that is solely used to perform non-discretionary, mechanical functions, involving no independent determination or adjustment of trading parameters, including but not restricted to:

- i. processing of orders or*
- ii. confirmation of orders or*
- iii. post-trade processing of executed transactions.*

- b) “Algorithmic Trading Order” means an order, including any subsequent modification or cancellation, that is initiated, generated or determined through Algorithmic Trading
- c) “Algorithmic Trading System” means the entire suite of hardware, software, procedures processes used in the execution and risk management of Algorithmic Trading
- d) “Dysfunctional Trading Algorithm” means any Trading Algorithm that malfunctions, behaves abnormally or operates in a manner not intended or authorized by the Market Participant, including any algorithm that creates a loop or a runaway execution or repetitive order generation or erroneous order placement or other unintended trading behaviour that may adversely affect market integrity
- e) “Market Participants” means all Broker Dealers registered with the Authority and includes all RTPs onboarded by the Stock Exchanges in the IFSC
- f) “Trading Algorithm” means a computer-based set of rules, instructions or logic used in Algorithmic Trading



General Responsibilities of the Stock Exchange

5. The Stock Exchange shall put in place the necessary arrangements, procedures and system capabilities to effectively manage system load and ensure consistent, fair and equitable response times for all Market Participants.
6. The Stock Exchange shall synchronize its system clock with the atomic clock before the start of the market and shall ensure that such clock maintains:
 - a) a precision of at least one microsecond and
 - b) an accuracy of at least +/- one millisecond.
7. The Stock Exchange may, wherever necessary, consider requisite changes in tick sizes to ensure effective operation of the price-time priority order matching system protocol or such other order matching system protocol as may be adopted by the Stock Exchange.
8. The Stock Exchange shall ensure that its systems possess the requisite resilience and scalability to handle peak order volumes and high-velocity data flows. The Stock Exchange shall, wherever necessary, upgrade its technological infrastructure to accommodate the latency, throughput and reliability requirements inherent to Algorithmic Trading.
9. No Market Participant shall deploy, offer or facilitate Algorithmic Trading unless it has obtained the prior express approval of the Stock Exchange in accordance with such conditions and procedures as may be specified by the Stock Exchange.
10. The Stock Exchange shall put in place measures, procedures, standards, formats and guidelines as may be necessary for evaluating, approving, monitoring, suspending or withdrawing approval of any Algorithmic Trading System, including Trading Algorithm, proposed to be deployed by a Market Participant.
11. The Stock Exchange shall subject the Algorithmic Trading System of a Market Participant to initial conformance testing to ascertain, inter alia, that the risk control checks mentioned below are duly implemented and that the system is capable of supporting orderly trading and safeguarding market integrity. The results of the test shall be communicated to the Market Participant.
12. For Market Participants already deploying, offering or undertaking Algorithmic Trading, as on the date of issuance of this Circular, the Stock Exchange shall ensure that such Algorithmic Trading Systems are subjected to initial conformance testing,



if not already undertaken, within a period of three months from the date of issuance of this Circular.

13. The Stock Exchange shall, where necessary, seek re-conformance or fresh conformance testing of any modified Algorithmic Trading System to verify continued compliance with the requirements specified in this Circular.
14. The Stock Exchange shall require Market Participants to participate in the periodical testing of their Trading Algorithms, in isolation as well as a collective, in simulated market environments, to ascertain:
 - a) behavior and stability of the Trading Algorithm under conditions of extreme market volatility and stress
 - b) the impact of delayed or disrupted market data feeds on decision-making of the Trading Algorithm
 - c) the efficacy of kill-switch mechanisms and the logic governing automated liquidity withdrawal
 - d) any other behavior of the Trading Algorithm or Algorithmic Trading System relevant for orderly trading and market integrity.

The Stock Exchange shall utilize the insights gained from these simulations as a feedback loop and accordingly update its mechanisms for grant of permission for Algorithmic Trading, initial conformance tests, surveillance mechanisms and logic, etc.

15. The Stock Exchange may, if necessary, deny, suspend or revoke authorization for any Trading Algorithm or specific class of trading strategies. Furthermore, the Stock Exchange may mandate immediate modifications to any Trading Algorithm to ensure the continued maintenance of orderly trading and systemic integrity:

Provided that in the case of such rejections or modifications, the Stock Exchange shall inform the Authority, along with detailed rationale.

General Obligations and Responsibilities of Market Participants

16. Every Market Participant engaged in, proposing to engage in, or facilitating Algorithmic Trading shall establish and maintain adequate governance, oversight, risk management and operational control arrangements commensurate with the nature, scale, complexity and risk profile of its Algorithmic Trading activities.



17. Market Participants shall ensure that personnel involved in the design, development, procurement, deployment and oversight of Algorithmic Trading Systems possess an adequate understanding of the following:
- a) the general design, functionality, operating logic and intended use of the relevant Algorithmic Trading Systems
 - b) the applicable risk controls, inter alia including the pre-trade risk checks, throttles and kill-switch arrangements
 - c) the circumstances in which the Trading Algorithm may malfunction, behave abnormally, or generate disorderly trading activity
 - d) the escalation, incident management and emergency intervention arrangements applicable to Algorithmic Trading
 - e) the regulatory, operational and technology risks associated with Algorithmic Trading

Market participants shall establish and maintain appropriate policies, procedures and arrangements for the training, skill development and periodic assessment of such personnel.

18. Market Participants using services of a third party for undertaking Algorithmic Trading in any manner, including design, testing and operation of Algorithmic Trading Systems and Trading Algorithms, shall have necessary arrangements in place with such third parties to access information that may be relevant to demonstrate compliance with these guidelines.
19. Where artificial intelligence machine learning, adaptive models, self-learning techniques or other advanced computational methods are used in connection with Algorithmic Trading, the Market Participant shall remain responsible for adequately explaining the impact of AI on the decision-making of the Trading Algorithm.
20. Broker-Dealers providing services to their clients which are intended to facilitate Algorithmic Trading, including through Application Programming Interfaces (APIs) or other technological interfaces, specifically designed to facilitate deployment of sophisticated Trading Algorithms, shall establish and maintain robust controls to safeguard market integrity and orderly trading.

Such Broker-Dealers shall be fully responsible for ensuring that Algorithmic Trading Orders originating from, routed through or facilitated by their systems are subject to appropriate pre-trade risk checks.

21. The Broker-Dealers providing Direct Market Access /Sponsored Access (DMA/SA) facility shall bring the requirements stipulated in these guidelines to the notice of



their clients and shall ensure that the DMA/SA clients undertaking or proposing to undertake Algorithmic Trading adhere to these guidelines, including but not limited to the following:

- a. Algorithmic Trading Systems and Trading Algorithms of DMA/SA clients shall be approved by the Stock Exchange prior to deployment and prior to any subsequent changes.
- b. DMA/SA clients shall maintain complete and accurate records relating to their Trading Algorithms and Algorithmic Trading System shall furnish such information as may be required by the Broker-Dealer, the Stock Exchange or the Authority for purposes such as inquiry, surveillance, inspection, audit or investigation.
- c. Where a DMA/SA client engages a third party for the design, development, testing, hosting, operation, modification, support or maintenance of any Trading Algorithm or Algorithmic Trading System, the DMA/SA client shall ensure that it has adequate written arrangements with such a third party to obtain all information, assistance, access and records necessary to demonstrate compliance with these Guidelines.
- d. The Algorithmic Trading System of every DMA/SA client shall be subject to annual system audit by an independent and suitably qualified auditor or such other person as may be specified by the Stock Exchange or the Authority.

Risk Management

Stock Exchange level risk controls

22. The Stock Exchange shall maintain robust, real-time risk control mechanisms to identify, contain and mitigate the possible risks emanating from Algorithmic Trading and Algorithmic Trading Orders. At a minimum, the order-level risk controls shall, *inter-alia*, include the following:

- a) Price check

All Algorithmic Trading Orders shall strictly conform to the price bands prescribed by the Stock Exchange for each security. For securities not subject to price bands, the Stock Exchange shall deploy Dynamic Price Constraints and Soft-



Limit Filters to prevent algorithmic trading activity from inducing artificial, manipulative or disorderly price movements. The Stock Exchange shall periodically review the calibration of such filters/controls to ensure their continued effectiveness against evolving trading patterns.

b) Quantity Limit check

All Algorithmic Trading Orders shall be subject to a Maximum Order Quantity limit prescribed by the Stock Exchange for each security. Algorithmic Trading Orders exceeding the designated limit shall be blocked/ rejected at the point of entry by the trading infrastructure of the Stock Exchange, so as to prevent unintended or disproportionate market impact.

23. All other risk management checks presently put in place by the Stock Exchange shall continue to apply. The Stock Exchange shall have the operational flexibility to review, update, modify or introduce additional checks, as and when required, to preserve market integrity and address emerging technological vulnerabilities, including those arising from new trading strategies, infrastructure or classes of Market Participants.

Risk Controls at the Market Participant Level

24. A Market Participant desirous of undertaking Algorithmic Trading on its own behalf or facilitating Algorithmic Trading for its clients, shall satisfy the Stock Exchange, as to the implementation of, at a minimum, the following risk controls at its end:

a) Price check

Algorithmic Trading Orders shall not be released in breach of the price bands defined by the Stock Exchange for a given security.

b) Quantity check

Algorithmic Trading Orders shall not be released in breach of the quantity limit defined by the Stock Exchange for a given security.

c) Order Value check

Algorithmic Trading Orders shall not be released in breach of the 'value per order' limit as defined by the Stock Exchange for a given security.



d) Cumulative Open Order Value check

The Market Participant may prescribe an individual client level Cumulative Open Order Value check. For this purpose, the Cumulative Open Order Value of a client shall mean the aggregate value of all unexecuted orders released from the Market Participant's Algorithmic Trading System, on behalf of that client.

e) Automated execution check

A Trading Algorithm shall account for all executed, unexecuted and unconfirmed orders placed by it prior to releasing any further order. Additionally, the Algorithmic Trading System shall incorporate recursive execution safeguards designed to trigger an instantaneous and autonomous stoppage upon detection of a loop, runaway situation or any other anomalous self-reinforcing order flow.

f) Kill Switch Mechanism

Every Market Participant undertaking Algorithmic Trading shall implement a "kill switch" mechanism capable of immediately halting all outgoing Algorithmic Trading Orders and cancelling live orders, whether triggered manually by designated personnel or automatically upon breach of prescribed risk thresholds. The kill switch shall be tested periodically and records of such testing shall be maintained and made available to the Stock Exchange upon request.

g) System Capacity and Stability Check

The Algorithmic Trading System shall be subject to periodic load and stress testing to ensure it can operate within its rated capacity without degradation of performance and shall incorporate safeguards to prevent order flow from exceeding system throughput limits agreed with the Stock Exchange.

Undertaking to be Furnished by Market Participants

25. A Market Participant, desirous of placing orders through Algorithmic Trading, shall submit to the respective Stock Exchange, an undertaking affirming that it:

- a) has in place the adequate procedures, systems and technical capabilities to carry out Algorithmic Trading in a sound and controlled manner



- b) has established necessary protocols and safeguards to prevent unauthorized access, manipulation or misuse of trading logic and proprietary algorithms
- c) maintains real-time monitoring systems capable of detecting anomalous algorithmic behavior and shall report any deviation from prescribed operational parameters to the Stock Exchange without delay and in any event instantaneously upon detection
- d) shall maintain logs of all trading activity to ensure a clear, complete and verifiable audit trail. It shall maintain a record of control parameters, orders, trades and all data points emanating from trades executed through Algorithmic Trading for such minimum period as may be prescribed by the Stock Exchange
- e) shall inform the Stock Exchange, prior to deployment, of any structural modification, logic update or systemwide change to a previously authorized Algorithmic Trading System, including Trading Algorithm forming part thereof
- f) shall designate a suitably qualified compliance or risk officer responsible for oversight of Algorithmic Trading activity, who shall serve as the point of contact for the Stock Exchange on matters pertaining to these guidelines

Audit Trail of Algorithmic Trading Orders

- 26. The Stock Exchange shall ensure that all Algorithmic Trading Orders are tagged with unique identifiers so as to ensure a comprehensive, clear and verifiable audit trail of orders arriving at its system, up to the level of the individual Market Participant.
- 27. The Market Participant shall ensure that all Algorithmic Trading Orders are tagged with unique identifiers provided by the Stock Exchange so as to maintain a comprehensive, clear and verifiable audit trail of orders arriving at its system, up to the level of the individual client and the specific Trading Algorithm.
- 28. The audit trail maintained under paragraphs 26 and 27 above shall be retained for such minimum period as may be prescribed by the Stock Exchange and shall be capable of retrieval in a reconstructible and legible form to facilitate inquiry, surveillance or investigation by the Stock Exchange or by the Authority.



Framework of Economic Disincentives

29. The Stock Exchange shall have the operational flexibility to implement a framework of financial disincentives in respect of Algorithmic Trading Orders that result in an excessively high daily Order-to-Trade Ratio (OTR).

Such disincentives may take the form of 'Charges to be levied per Algorithmic Trading Order' calibrated across graded slabs of daily OTR. The rates so specified shall be sufficiently stringent to deter order flooding and other forms of market manipulation or market disruption.

30. Where a Market Participant incurs OTR-related penalties on more than ten occasions within any rolling thirty-day period, the Stock Exchange may, if it considers it necessary, suspend such Market Participant's proprietary trading privileges for the opening hour of the immediately succeeding trading session.
31. The Stock Exchange shall put in place real time throttling mechanisms to detect and neutralize any possible instances of order flooding by Algorithmic Trading Systems.

Surveillance by the Stock Exchange

Identification and Handling of Dysfunctional Trading Algorithms

32. The Stock Exchange shall put in place a system to identify Dysfunctional Trading Algorithms and shall take suitable measures in respect thereof, including but not restricted to:
- a) advising the Market Participant to shut down such Dysfunctional Trading Algorithms
 - b) remove any outstanding orders in the system entered by Dysfunctional Trading Algorithms.

Provided that, in case of any exigency, the Stock Exchange shall shut down the trading terminal of the Market Participant concerned.



Re-enabling of Terminals Disabled for Collateral Exhaustion

33. The terminals of the Market Participants that were disabled due to exhaustion of collaterals shall be re-enabled only through manual intervention, in accordance with the risk management procedures of the Stock Exchange.

Strengthening of Surveillance

34. In order to further strengthen the surveillance mechanism related to Algorithmic Trading and prevent market manipulation, the Stock Exchanges are hereby directed to take all necessary steps to ensure effective monitoring and surveillance of all orders and trades resulting from Algorithmic Trading Systems.

Periodic Review of Surveillance Arrangements

35. The Stock Exchange shall periodically review its surveillance arrangements so as to proactively identify, isolate and investigate sophisticated patterns of market manipulation and systemic disruptions. The Stock Exchange shall continuously calibrate its surveillance systems and undertake such architectural enhancements as may be necessary from time to time.

System Audit

Requirement of Annual System Audit

36. A Market Participant that undertakes Algorithmic Trading shall subject its Algorithmic Trading System to an annual system audit to ensure effective implementation of these guidelines.

Provided that, in the case of Broker Dealers, such audit should form part of their system audit as specified by the Authority vide Master Circular for Broker Dealers and Clearing Members, dated May 12, 2026, as amended from time to time.

Provided further that, in the case of RTPs, the Stock Exchange may specify the terms of reference for such system audit.



Eligibility of System Auditors

37. A system audit of an Algorithmic Trading System shall be undertaken by a system auditor who possesses any of the following certifications:

- a) CISA (Certified Information Systems Auditor) from ISACA;
- b) DISA (Post Qualification Certification in Information Systems Audit) from Institute of Chartered Accountants of India (ICAI);
- c) CISM (Certified Information Securities Manager) from ISACA; or
- d) CISSP (Certified Information Systems Security Professional) from International Information Systems Security Certification Consortium, commonly known as (ISC).

Provided that an auditor having not less than ten (10) years of experience in auditing Algorithmic Trading Systems shall also be eligible to undertake such system audit, notwithstanding the absence of the certifications specified above.

Rotation of System Auditors

38. A system auditor can perform a maximum of three successive system audits of the Algorithmic Trading System of a Market Participant.

Provided that such system auditor shall be eligible for re-appointment in respect of the same Market Participant only after a cooling off period of two years.

Reporting of Audit Findings

39. Deficiencies or issues identified during the system audit shall be reported by the Market Participant to the Stock Exchange immediately upon completion of the audit, and in any case not later than one month from the date of such completion.

Corrective Action and Closure Report

40. The Market Participant shall take immediate corrective actions to rectify the deficiencies/issues identified during the system audit and shall furnish a closure and compliance report in respect thereof to the Stock Exchange within two months from the date of completion of the system audit.

41. In case of serious deficiencies/issues or failure of the Market Participant to take satisfactory corrective action, the Stock Exchange shall not permit the Market Participant to deploy the Trading Algorithm/ Algorithmic Trading System till such



deficiencies/issues are rectified and a satisfactory system audit report, confirming the same, is submitted to the Stock Exchange.

Penalty for Failure to Undertake Corrective Action

42. The Stock Exchange may also consider imposing suitable penalties in case of failure of a Market Participant to initiate satisfactory corrective action to its Algorithmic Trading System within such a time period as may be specified by the Stock Exchange.

Periodic Monitoring

43. The Stock Exchange may seek details of trading strategies employed by the Market Participants through their Algorithmic Trading Systems for such purposes as inquiry, surveillance, investigation or any other purpose it considers necessary.
44. The Stock Exchange shall include a report on Algorithmic Trading on the Stock Exchange in the Monthly Development Report (MDR) submitted to the Authority, in the format as may be specified.

Implementation of this Circular

45. The Stock Exchanges are hereby directed to:
 - a) take necessary steps and put in place the requisite systems for implementation of this Circular within a period of three months from the date of issuance of this Circular
 - b) make necessary amendments to the relevant bye-laws and rules for the implementation of this Circular
 - c) bring the provisions of this Circular to the notice of its Market Participants and also disseminate the same through its website
 - d) report the status of implementation of the provisions of this circular to the Authority through the MDR.
46. This circular is issued in exercise of powers conferred by Section 12 and 13 of the International Financial Services Centres Authority Act, 2019, read with regulation 72 of the IFSCA (Market Infrastructure Institutions) Regulations, 2021, and



regulation 45 of the IFSCA (Capital Market Intermediaries) Regulations, 2025, and shall come into force with immediate effect.

47. All earlier circulars and guidelines issued by the Securities and Exchange Board of India relating to algorithmic trading on stock exchanges and applicable in IFSC shall stand superseded by this Circular:

Provided that anything done or any action taken or purported to have been done or taken under the superseded circulars, prior to such supersession, shall be deemed to have been done or taken under the corresponding provisions of this Circular.

A copy of this Circular is available on the IFSCA website at www.ifsc.gov.in under “About Us → Circular” section.

Yours Faithfully,

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