

## **DRAFT CIRCULAR FOR PUBLIC COMMENTS**

### **“Participation of retail investors in algorithmic trading”**

#### **Background**

1. In an effort to enhance market efficiency and transparency, SEBI introduced Algorithmic Trading (algo trading) through Direct Market Access (DMA) Facility, which provided significant advantages such as faster order execution, reduced transaction costs, greater transparency, better audit trails and improved liquidity. However, access to these facilities has been limited to institutional investors.
2. With its benefits, algo trading also requires intermediaries and Market Infrastructure Institutions (MIIs) to have better market surveillance, risk management, and investor protection. Hence, SEBI has been proactively regulating this domain since 2012.
3. The evolving nature of algo trading, particularly with the increasing demand for algo trading by retail investors, has necessitated a further review and refinement of the regulatory framework so that retail investors are also able to participate in algo trading with proper checks and balances.
4. These provisions are expected to fill in the void for retail investors who want to trade using algos with adequate safeguards.
5. Accordingly, SEBI has undertaken extensive consultations with relevant stakeholders including the Intermediary Advisory Committee and Brokers Industry Standards Forum, to extend the existing regulatory framework, with additional safeguards, to facilitate participation of retail investors in algo trading.

**Public Comments:**

The regulatory environment envisaged is aimed at spelling out the rights and responsibilities of the main stakeholders of the trading ecosystem viz. investors, stock brokers, algo providers/vendors and Market Infrastructure Institutions (MIIs), so that the retail investors are enabled to avail algo facilities with requisite safeguards.

Draft circular on “Participation of retail investors in algorithmic trading” is placed at **Annexure A**. The comments/ suggestions should be submitted latest by Jan 03, 2025, through the following link:

<https://www.sebi.gov.in/sebiweb/publiccommentv2/PublicCommentAction.do?doPublicComments=yes>

In case of any technical issue in submitting your comment through web based public comments form, you may write to [consultationMIRSD@sebi.gov.in](mailto:consultationMIRSD@sebi.gov.in) with the subject: "Public comments on Draft Circular - Participation of retail investors in algorithmic trading".



**DRAFT CIRCULAR**

**SEBI/HO/MIRSD/MIRSD-PoD-1/P/CIR/2025/XX**

**Jan XX, 2025**

**To,**

**All Recognized Stock Exchanges**

**Stock Brokers through Recognized Stock Exchanges**

**Dear Sir/Madam,**

**Subject: Participation of retail investors in algorithmic trading**

1. SEBI, vide circular no. CIR/MRD/DP/09/2012 dated March 30, 2012, provided broad guidelines on Algorithmic Trading (“**Algo**” - orders generated using automated execution logic). Thereafter, SEBI has introduced measures to strengthen controls around Algorithmic Trading.
2. Algo trading provides significant advantages of timed and programmed order execution. At present, there are mechanisms such as Direct Market Access Facility, which enable institutional investors to trade through algorithms.
3. There has been an increasing demand for algo trading by retail investors. In order to facilitate participation of retail investors in algo trading, it has been decided to review and refine the existing regulatory framework to ensure proper checks and balances, to safeguard investor interest as well as integrity of the market.
4. The regulatory environment envisaged is aimed at spelling out the rights and responsibilities of the main stakeholders of the trading ecosystem viz. investors, stock brokers, algo providers/vendors and Market Infrastructure Institutions

(MIIs), so that the retail investors are enabled to avail algo facilities with requisite safeguards.

5. SEBI had issued a discussion paper dated December 09, 2021 on “**Algorithmic Trading by Retail Investors**”, on the use of API access and automation of trades using the same. Further, SEBI had extensive discussions with the Exchanges, Brokers and Algo providers. The proposal was also discussed in the meeting of the Intermediary Advisory Committee and with the Broker’s Industry Standards Forum (ISF), which comprises of industry representatives. Accordingly, after extensive deliberations, the following regulatory framework is being proposed to facilitate participation of retail investors in algorithmic trading through stock brokers -

#### **I. Roles and responsibilities of Stock Brokers:**

Brokers providing the facility of algo trading to investors shall continue to abide by the extant provisions related to algo trading including (but not limited to) the following –

- a) The facility of algo trading shall be provided by the stock broker only after obtaining requisite permission of the stock exchange for each algo.
- b) All algo orders shall be tagged with a unique identifier provided by the stock exchange in order to establish audit trail and the broker shall seek approval from the Exchange for any modification or change to the approved algos or systems used for algos.

#### **II. Use of Application Programming Interface (API)<sup>1</sup> for algo trading**

- a) For the purpose of provision of algo trading through APIs, brokers shall be the principal while any algo provider or fintech/vendor (hereinafter referred to as ‘algo provider’) shall act as its agent, while using the API provided by the broker.
- b) All orders, above the **specified order per second threshold<sup>2</sup>**, originating/flowing through Application Programming Interface (API)

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<sup>1</sup> An API (Application Programming Interface) is a set of rules and protocols that allows different software applications to communicate and exchange data with each other.

<sup>2</sup> Specified threshold for categorization as an algo shall be evolved by the Broker’s Industry Standards Forum (on a pilot basis), under the aegis of the stock exchanges and in consultation with SEBI.

extended by brokers to their clients/service providers, shall be treated as algo orders and shall be tagged with a unique identifier provided by Stock Exchange. This is in addition to orders already tagged as Algo orders.

- c) Algos developed by tech-savvy retail investors themselves, using programming knowledge, shall also be registered with the Exchange through their broker. Further, the same registered algo shall be permitted to be used by such retail investors for their family. 'Family' for this purpose would mean self, spouse, dependent children and dependent parents.
- d) Brokers shall:
- ensure that they have systems and procedures in place to detect/identify and categorize all orders above the specified threshold as algo orders;
  - not permit open APIs and allow access only through unique vendor client specific API key and static IP whitelisted by broker to ensure identification and traceability of the vendor and end user;
  - have OAuth (Open Authentication)<sup>3</sup> based authentication only and all other authentication mechanisms shall be discontinued;
  - authenticate access to API through two factor authentication;
  - deal with empaneled algo providers only and handle all related complaints, as such algo providers are agents of such broker.

### **III. Empanelment and Registration of Algo Providers:**

- a) For better oversight, any Algo provider, providing the facility to place algo orders with Brokers through API, shall require to be empaneled with Exchanges in a manner as stipulated by Exchanges.
- b) Exchanges shall specify the eligibility criteria for the algo providers.

### **IV. Role and Responsibilities of Stock Exchange:**

- a) Exchanges shall continue to be responsible for supervising algorithmic trading while ensuring the following:

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<sup>3</sup> A secure authorization framework that allows third-party applications to access user data without requiring users to share their login credentials or other sensitive information.

- i. post trade monitoring of algorithmic orders and trades including putting in place a Standard Operating Procedure (SOP) for testing of Algos;
  - ii. continue to have the ability to use the kill switch<sup>4</sup> for orders emanating from a particular algo id.
  - iii. defining the roles and responsibilities of brokers and empaneled vendors;
  - iv. defining the criteria and process of empanelment of vendors;
- b) Exchanges shall supervise/inspect that brokers have the ability to distinguish between Algo and non Algo Orders.
- c) The detailed operational modalities, regarding the roles and responsibilities of the Brokers and Algo providers including risk management system of Brokers for orders through API, shall be issued by stock exchanges, in consultation with SEBI, with due regard to the outsourcing guidelines specified by SEBI from time to time.
- d) Exchanges shall specify the turnaround time (TAT) to register certain types of algos (eg. Execution Algos) on a fast track basis while registering other types of algos on a normal basis. For both these scenarios, TAT shall be decided by the stock exchanges and mentioned in their SOP.

## V. Categorization of Algos

- a) Algos shall be categorized into two categories:
- i. Algos where logic is disclosed and replicable i.e. Execution Algos or White box<sup>5</sup> algos;
  - ii. Algos where the logic is not known to the user and is not replicable, i.e. Black box<sup>6</sup> algos –

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<sup>4</sup> The kill switch is an emergency function and the last level of defence against any algorithm malfunction. It is expected to automatically trigger a halt on trading activity based on pre-defined conditions.

<sup>5</sup> Execution Algos or White Box Algos are automated trading strategies/systems that execute orders based on fully transparent algorithms, where the logic, decision making processes and underlying rules are accessible and understandable to users.

<sup>6</sup> Black box Algos are algos where the user cannot see the internal workings and rationale of the algo or an algo where the logic is not known to the user and is not replicable.

For algos in category (ii), the Algo provider shall:

- Register as a Research Analyst and maintain a research report for each such Algo and confirm to the exchanges that such report has been maintained.
- In case of any change in the logic governing the algo, register such algo as a fresh algo and maintain a research report for the new algo, and confirm to the exchanges that such report has been maintained.

6. Exchanges and Brokers shall continue to comply with existing provisions prescribed with regard to algorithmic trading.

**7. Schedule of Implementation:**

- a) The provisions of this circular shall be applicable with effect from XX, 2025.
- b) The implementation standards shall be formulated by the Broker's Industry Standards Forum (on a pilot basis), under the aegis of the stock exchanges and in consultation with SEBI by XX, 2025.

8. Exchanges, are hereby, directed to:

- a) Take necessary steps and put in place necessary systems and procedures for implementation of the above.
- b) Make necessary amendments to the relevant bye-laws, rules and regulations for the implementation of the above provisions.
- c) Bring the provisions of this circular to the notice of their brokers and disseminate the same on their website.

9. This circular is issued in exercise of powers conferred under Section 11(1) of Chapter IV of the Securities and Exchange Board of India Act, 1992, read with Section 30 of the Securities and Exchange Board of India (Stock Brokers) Regulations, 1992 to protect the interests of investors in securities, to promote the development of and to regulate the securities market.

10. This circular is available on SEBI website at [www.sebi.gov.in](http://www.sebi.gov.in) under the category: 'Legal → Circulars'.

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