



CIVIL

# SEBI Circular: Safeguarding Retail Investors in Algorithmic Trading

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On February 4, 2025, the Securities and Exchange Board of India (SEBI) issued a significant circular aimed at ensuring the safer participation of retail investors in algorithmic trading. This move comes as a response to the growing interest of retail investors in algo trading and the need to refine the existing regulatory framework to protect their interests and maintain market integrity.

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## Background and Public Consultations

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Algorithmic trading, or “algo trading,” involves using automated execution logic to generate orders. SEBI first provided guidelines on algo trading in 2012 and has since introduced measures to strengthen controls in this area. Recognizing the increasing demand from retail investors to participate in algo trading, SEBI decided to review and refine its regulatory framework. This process involved extensive consultations with stock exchanges, brokers, and algo providers. A discussion paper was issued in December 2021, and further discussions were held with industry representatives to inform the new regulatory framework.

## Use of Application Programming Interface (API) for Algo Trading

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The circular outlines the use of APIs for algo trading, emphasizing the principal-agent relationship between brokers and algo providers. Brokers will act as principals, while algo providers will be their agents. All algo orders flowing through APIs will be tagged with a unique identifier provided by the stock exchange to ensure traceability. Tech-savvy retail investors who develop their own algos must register them with the exchange through their broker if the algos exceed a specified order per second threshold. This ensures that even self-developed algos are monitored and regulated.

Brokers are required to implement robust security measures for API access. They must detect and categorize orders above the threshold as algo orders. Open APIs are prohibited; access will be allowed only through a unique vendor client-specific API key and a static IP address whitelisted by the broker. OAuth-based authentication will be mandatory, and two-factor authentication will be required for API access. Brokers will also be responsible for dealing with empanelled algo providers and handling related complaints.

## Roles and Responsibilities of Stock Brokers

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Stock brokers play a crucial role in facilitating algo trading for investors. They must obtain permission from the stock exchange for each algo before offering algo trading facilities. All algo orders must be tagged with a unique identifier to establish an audit trail. Brokers are responsible for seeking exchange approval for any modifications to approved algos. Additionally, brokers are solely responsible for handling investor grievances related to algo trading and monitoring APIs for prohibited activities.

## Empanelment and Registration of Algo Providers

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While algo providers will not be regulated by SEBI, they must be empanelled with stock exchanges as specified by the exchanges. Brokers must conduct due diligence before onboarding empaneled algo providers. Algo providers and brokers may share subscription charges and brokerage fees, provided all charges are clearly disclosed to the client and no conflict of interest arises. This ensures transparency and protects investors from hidden costs.

## Role and Responsibilities of Exchanges

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Stock exchanges have a significant role in supervising algorithmic trading. They are responsible for implementing a comprehensive Standard Operating Procedure (SOP) for testing algos. Exchanges must conduct surveillance on all algo orders and monitor their behaviour, including simulation testing. They must maintain the ability to use a kill switch for orders from a particular algo ID in case of malfunctions. Exchanges will also define the roles and responsibilities of brokers and algo providers, ensuring proper oversight and accountability.

Exchanges are required to issue detailed operational modalities and FAQs covering various aspects, including broker roles and risk management systems for API orders, algo provider roles, empanelment criteria, registration processes, measures to enhance confidentiality of retail algo strategies, and data flow between parties involved.

## Categorization of Algos

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The circular categorizes algos into two types: White Box Algos and Black Box Algos. White Box Algos, also known as Execution Algos, have disclosed and replicable logic. Black Box Algos, on the other hand, have undisclosed and non-replicable logic. For Black Box Algos, algo providers must register as Research Analysts and maintain detailed research reports for each algo. Any changes in the logic of these algos must be registered as new algos, and detailed research reports must be maintained.

## Implementation and Dissemination

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Exchanges are directed to:

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

This circular is issued under the powers conferred by 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. The aim is to protect the interests of investors in securities, promote the development of the securities market, and ensure its regulation.

## Conclusion

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The SEBI circular represents a significant step towards creating a safer and more transparent environment for retail investors in algo trading. By clearly defining roles and responsibilities, enhancing security measures, and ensuring proper oversight, SEBI aims to protect investor interests and maintain the integrity of the securities market. This regulatory framework will help retail investors participate in algo trading with confidence, knowing that their interests are safeguarded and that the market operates in a fair and transparent manner.

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