To,

15th January, 2022

Mr. Narendra Rawat
General Manager
Market Intermediaries Regulation and Supervision Department
Securities and Exchange Board of India
Via email to: sushmau@sebi.gov.in

Sub: Comments on Consultation Paper on Algorithmic Trading by Retail Investors

At the outset, we, at Indian Association of Investment Professionals (IAIP), a member society of the CFA Institute, appreciate the opportunity to submit our comments to the **Consultation Paper Algorithmic Trading by Retail Investors**

IAIP is an association of over 2000 local investment professionals who are CFA charterholders and about 6000+ professionals who have cleared exams, eligible and awaiting charter. The Association consists of valuation professionals, portfolio managers, security analysts, investment advisors, and other financial professionals that promote ethical and professional standards within the investment industry, facilitate the exchange of information and opinions among people within the local investment community and beyond, and work to further the public's understanding of the CFA designation and investment industry.

CFA Institute is a global non-profit association of investment professionals with over 170,000 members in over 165 countries. In India, the community of CFA charterholders is represented by the Indian Association of Investment Professionals(CFA Society India).

Through our global research and outreach efforts, CFA Societies around the world endeavour to provide resources for policy makers, financial services professionals and their customers in order to align their interests. Our members engage with regulators in all major markets.

The recommendations put forth in the consultation paper for Algorithmic Trading by Retail Investors is a positive step to realize the need to regulation in a growing market but we also have certain concerns on the proposed mechanism, which we have put forth in our comments.

We would be happy to hear and discuss the merits / demerits of suggestions proposed by other practitioners and request to be included in the deliberation process.

A. Details of our Organisation:

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B. Key Contributors:

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C. Suggestions / Comments:

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Sr. No.	Paragraph	Suggestion/Comments	Rationale
1.	6.1. All orders emanating from an API should be treated as analgo order and be subject to control by stock broker and the APIs to carry out Algo trading should be tagged with the unique algo ID provided by the Stock Exchange granting approval for the algo.	We appreciate the SEBI's effort to bring out regulations in Algo trading for retail investors to safeguard the investor interest. We strongly believe that there is a need to make sure that Algo strategy should only be provided by participants under the purview of SEBI i.e. RIA, RA or any other registration provided by SEBI. This will ensure that investor interest is safeguarded and SEBI can take actions in case of market disruption or foul play. However, considering every order generated from API as an Algo order, is taking a broad brush approach to the problem, which will stop technology advancement happening to provide more ease to investors. Currently APIs are being used in several use cases, with as simple as logging through an	In a tech first world where everything is run over APIs including the Broker's own Trading app is powered by an authenticated REST API, we believe there is a need to clearly demarcate between automated algo strategies powered by APIs versus login/consent based workflows built to execute trades by customers themselves on a Broker or other platform every-time they have to trade. Even these flows are built on APIs. Using API and algo-trade in a same statement is not good for Indian Capital Markets which needs to be forward looking in a tech first world. Broker own trading apps where there is login flow, order placement flow, they are built on APIs. If Brokers open these same flows

		App requires as API. We believe treating every order generated from API as an Algo order is not a nuanced approach and so, we would suggest that APIs can be categorized at broker level under: 1. Decision making APIs 2. Execution APIs The focus should be on regulating execution APIs, instead of decision making APIs. There needs to be differentiation in API based workflow and Algo based workflow Further, we believe that SEBI can include regulations that Algo strategy providers are allowed to sell Algo strategy to Accredited investors only**.** This will help to safeguard the retail investor's interest. But, SEBI has to also consider, that there are several retail investors who have experience and risk appetite to manage their own funds using self developed Algos, which should not be curtailed. The idea should be put out enough disclaimers to make investors aware of the risk arising from Algorithmic trading and let Broker RMS handle customer level risks . There needs to be way to allow such cases in regulation.	through APIs to third party platforms to build consent based trading workflows especially around decision/knowledge providing platforms by entities who are SEBI licensed under RIA/RA, these workflows should not be treated as algo based trading as customer approves every trade by logging with the broker every-time and there is nothing automated here. SEBI should clearly demarcate these workflows with completely automated execution workflows where investor is not logging everytime to approve trade. That could be a systematic risk if left open. All order placement workflows should be through valid login and 2FA. This will help curb automated algo trading. In case retail Investors build their own strategy with their own money on their own computer using some Open APIs of the Broker, let Broker RMS handle customer level risks and take the right disclaimers from the end customer versus trying to say get every algo approved through Broker. It is very stifling for retail Investors to ever evolve in trading knowing all the underlying risks if Open APIs are

			curbed. Here 2-factor authentication for every order can be introduced to reduce market level systematic risk.
2.	6.2. Stock broker needs to take approval of all algos from the Exchange. Each Algo strategy, whether used by broker or client, has to be approved by Exchange and as is the current practice, each algo strategy has to be certified by Certified Information Systems Auditor (CISA)/ Diploma in Information System Audit (DISA) auditors. 6.3. Stock Exchanges have to develop a system to ensure that only those algos which are approved by the Exchange and having unique algo ID provided by the Exchange are being deployed. Brokers shall also deploy suitable technological tools to ensure that appropriate checks are in place to prevent unauthorized altering/tweaking of algos.	We would like to highlight our concerns on requiring approval of every Algo strategy by exchange, because this will effectively make it difficult for investors to use Algo strategy and also to get approval to make any changes to their strategy is impractical. As the whole ideain any trading strategy will evolve over a period of time with more data and market scenarios. Also, by the time approval will be received from exchange, the strategy may become obsolete and trading opportunity is missed. Further, the idea to take approval of strategy from exchange also risks infringement of Intellectual property of the Algo strategy provider. The approval needed should not be with exchanges, this can be done at broker level to make it implementable. Further, if approval is required there is a need that instead of looking at the Algo strategy in whole to protect IP, the user should only be asked to divulge the part of the strategy related to risk management. We would request SEBI to clarify that in case certification requirement is there it should	The proposal should be to focus on self regulation through auditor certification to be approved at broker level instead of exchanges to avoid unnecessary delay and IP infringement risk. The changes in strategy should only be required for approval only if it impacts the parameters impacting market level systematic risk. Brokers can tag Algo orders separately, so that broker RMS can differentiate and apply additional risk filters to handle risks arising from automated orders.

		only be risk based certification and also the approval should be self regulation based with only CISA/DISA certification to be submitted to brokers.	
3.	6.4. All algos developed by any entity have to run on the servers of broker wherein the broker has control of client orders, order confirmations, margin information etc.	We believe that this proposal may not be implemented practically. The client side Algos should be allowed to run on client servers. We suggest that SEBI should instead mandate that the server where Algo is running is based in India and accessible to SEBI in case of regulatory requirement. We also suggest that another way is that SEBI should ask brokers who are opening execution APIs to tag the orders coming through them separately and make sure enough disclaimers and risk management framework is put in place by broker for such orders.	The rationale is that in case needed SEBI can access the server where Algo is running to analyze it. For this , mandating that Servers are based in India and accessible if required should be enough. Further, only allow order placement on login every time by enabling 2-factor authentication so that automated orders cannot be places. Mechanisms can be placed to enforce 2 FA login with Authenticator/Captcha etc to avoid automated trades.
4.	6.5. Stock brokers need to have adequate checks in place so that the algo performsin a controlled manner.	We suggest that as per the comment in Point 1 above, there should be scalable risk management framework developed for Execution APIs. The tagging of orders generated from Algos by brokers by providing unique ID, will help broker risk management systems to target the Algo orders and SEBI can suggest extra checks/rules that can be incorporated by brokers specific to these orders, so that the risk of market	Brokers can tag Algo orders separately, so that broker RMS can differentiate and apply additional risk filters to handle risks arising from automated orders. Further, only allow order placement on login every time by enabling 2-factor authentication so that automated orders cannot be places. Mechanisms can be placed to enforce 2 FA login with Authenticator/Captcha etc to avoid automated trades.

		disruption is significantly reduced. Further, SEBI should propose that Login based workflows where customer have to login to trade every time should be outside the purview of algo trading. This will help SEBI licensed provider i.e. RIA and RA to be allowed to provide Algo strategy to investor .	
5.	6.6. Stock brokers can either provide in-house algo strategies developed by an approved vendor or outsource the services of third party algo provider/vendor by entering into a formal agreement with each third party algo provider/vendor whose services are being availed by the broker. 6.7. Stock broker is responsible for all algos emanating from its APIs and redressal of any investor disputes. 6.8. Obligations of stock broker, investor and third party algo provider/vendor need to be separately defined. Stock broker is responsible for assessing suitability of investor prior to offering algo facility. No recognition shall be given by the Exchange to the third party algo provider/vendor creating the algo 6.9. Stock brokers shall ensure that only those third party algo provider/vendor, with	We believe that the major risk emanating from Algo trading is that many Algo providers are unregulated. We suggest that SEBI should only allow participants such as RIA, RA etc. who are under the SEBI ambit, to provide Algo strategy related services. This will make sure that SEBI can assign responsibility in case of any suspected behavior. We agree that stock brokers should be acting as the first line of defense, as they would be providing APIs. As suggested above, Algo orders tagging and Algo strategy approval needs to be done by brokers following the SEBI guidelines. We agree that stock brokers should ensure that Algo strategies are only provided by providers who are under the SEBI ambit.	We need to make sure that even if broker is responsible for Algo orders, SEBI need to clearly mandate that Algo providers need to be under either the RIA or RA regulation of SEBI, as they are effectively providing buy/sell recommendations to investors.

	whom broker had entered into an agreement with, shall use the name of the broker as part of their testimonial, provided Exchange prescribed advertisement guidelines are met.		
6.	6.10. Two factor authentication should be built in every such system which provides access to an investor for any API/algo trade. The software to be used to create the strategies should be approved by the Exchange.	We agree that manual intervention through two factor authentication can provide safety to investors. SEBI can look to mandate Brokers who are opening execution based APIs can mandate 2 FA for orders, so that any user or platform who is using these APIs is not able to automate the trading, without any manual confirmation or authentication. Here Authenticator such as from Google or other service provider which is built on Time-based One-time Password Algorithm and HMAC-based One-time Password algorithm, can be made mandatory for second factor authentication. Additionally, Captcha can be introduced to avoid client side platform which try to do execution using robotic process automation. This will prevent complete automated algo trading at retail level	The basic idea is to prevent Algo trades to run unauthorized causing system level market risk. Ensuring investors are logging in every time manually for placing orders can reduce the risk considerably. Including 2 FA and captcha can further increase the protection.
7.	6.11. Stock brokers shall include a specific report on algorithm checks implemented by them as a part of annual system audit report submitted to the Exchanges and format	We agree with this suggestion of having brokers providing specific audit report to exchanges as this combined with our suggestion of allowing brokers to approve	Independent check/audit is always important to safeguard investor interest.

	for the same shall be prescribed by the Exchanges.	the Algo strategy will ensure safety of investor interest.	
8.	7. Third party algo providers/vendors as Investment Advisor/Research Analyst 7.1. There needs to be a clarity on whether the services offered by the third party algo providers/vendors are in the nature of investment advisory services as the nature of their services includes providing strategies to the investors based on research and analysis done by them. 7.2. Since there is limited understanding with respect to the nature of services provided by various algo providers, brokers may obtain from their clients, details of nature and type of services taken from algo providers along with a confirmation as to whether the said services are in the nature of investment advisory services. 7.3. Such details obtained by broker would help in formulation of policy framework, if felt necessary, regarding third party algo providers in future.	We believe that the major risk emanating from Algo trading is that many Algo providers are unregulated/ unlicensed. We suggest that SEBI should only allow participants such as RIA, RA etc. who are under the SEBI ambit, to provide Algo strategy related services. This will make sure that SEBI can assign responsibility in case of any suspected behavior. Further, we believe that SEBI can include regulations that only that Algo strategy providers are only allowed to sell Algo strategy to Accredited investors. This will help to safeguard the retail investor interest. But, SEBI has to also consider, that there are several retail investors who have experience and risk appetite to manage their own funds using self developed Algos, which should not be curtailed. There needs to be way to allow such cases in regulation.	We believe that most retail Algo providers are not registered as investment advisors or research analyst. But, there are several cases of them offering recommendations to retail investors. There is a section of coder-cum-traders who write their own algos so that needs to be considered while making regulation. But, there is a need to regulate off the shelf Algos being sold by unregulated/unlicensed providers. Anybody providing any sort of buy/sell recommendations should directly come under SEBI regulations for RIA or RA.

Thank you again for the opportunity to comment on this important regulatory framework. If you or your staff have questions or seek further clarification, please do not hesitate to contact Mr. Ravi Gautham, CFA at +91 99021 17087or at advocacy@iaipirc.org.

Sincerely yours,
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Chairperson - Research and Advocacy Committee
Indian Association of Investment Professionals, Member Society of CFA Institute