



Securities and Exchange Board of India

First International Research Conference-2014

TGG, Algo Trading and Co-location

January 27-28, 2014







Context and Objective of the Conference

Securities and Exchange Board of India (SEBI) is organizing its First International Research Conference in its Silver Jubilee Year. The initiative of organizing an International Research Conference has been aimed at commencing a dialogue and contributing to clarity to the newer challenges faced by the securities market by harnessing the pool of research talents around the world. The theme of SEBI's First International Research conference is "HFT, Algo Trading and Co-location".

"Technology has advanced more in the last thirty years than in the previous two thousand. The exponential increase in advancement will only continue." ¹ Securities market is moving in tandem with the everadvancing and rapidly changing technology. It is a good sign that technology is improving as time goes on; however, it is also a challenge for the markets, its participants and especially the regulator.

A strong regulatory framework is essential for any market economy to operate efficiently and achieve optimal allocation of resources, and for market forces to function in a fair and transparent manner. SEBI was born in an era when technology was in infancy. In the quarter century since its inception SEBI has strived to position itself at the cutting edge. As a watchdog of the capital market, it has taken steps to keep up with the advancement in technology. Since 1988, it has initiated a series of steps to modernize and computerize stock exchanges. In 1994-95, stock trading shifted from open outcry to a fully automated screen-based trading system. Shortening of settlement cycle from T+5 to T+2, dematerialization of scrips, Straight Through Processing, adoption of Integrated Market Surveillance System are some of the bolder steps taken by SEBI to move ahead with the technology.

High Frequency Trading or HFT is one such product of technology innovation. In a very short period of time, high-frequency trading (HFT) has become a topic of regulatory focus around the world. In response to an automated trading process, market participants began to develop trading algorithms. Many of these trading algorithms were designed to replicate the behavior of other humans involved in the trading process, such as agency floor brokers or proprietary market-makers. Over the past years, these trading algorithms have been refined, computing technology continues to advance, and orders to buy and sell are appearing and matching at a faster rate than ever before.

Algorithm trading reflects another wave of adoption of technology wherein sophisticated computer aided tools are being deployed to execute trading and trading related activities. In 2012, SEBI has put in place the broad guidelines for algorithmic trading in the securities market. The guidelines, *inter alia*, include additional risk management measures/checks for Algorithmic (Algo) trading, required minimum levels of risk controls, managing the load at exchanges, putting up economic disincentives with regard to high daily order-to-trade ratio of algo orders, penalty for repetitive instances of high daily order to trade ratio. Adoption of various technological advancements in the Indian securities market has transformed the way trading takes place and has, in turn, resulted in the process becoming easier, faster, transparent, and safer for the investors. However, adoption of technological advancements such as HFT and Algo Trading in securities market has also brought to fore certain new challenges for the regulator.

¹ Quote by Neils Bohr





While technology is the proximate driver, a robust regulatory framework is the need of the hour for the current automated market structure, and a sound regulatory policy will most certainly influence the direction of future technological developments in trading.

As a discourse on 'HFT, Algo Trading and Co-location', is of contemporary relevance, which sketches a broad canvas of issues to ponder upon in the current situation as well as times to come; SEBI has chosen 'HFT, Algo Trading and Co-location' as the theme for its First International Research Conference to be held during January 27-28, 2014 in Mumbai. Six sessions encompass varied aspects of the impact of HFT and Algo Trading. During the one and a half days of the conference, the participants would delve on impact of HFT on Market Quality, Financial Stability, Information asymmetry and retail investors, HFT in developing countries, regulatory mechanism and technology as an enabler to re-level the field.

