

## U.S. Commodity Futures Trading Commission

Three Lafayette Centre,1155 21st Street, NW, Washington, DC 20581 www.cftc.gov

Scott D. O'Malia Commissioner (202) 418-5870 (202) 418-5550 Facsimile somalia@cftc.gov

## Dear Technology Advisory Committee Members:

I want to thank you for serving on the CFTC's Technology Advisory Committee ("TAC"). As we prepare for the upcoming meeting in December, I am seeking your input on one of the topics that will be discussed, High Frequency Trading ("HFT").

The role HFTs play in our markets has been a constant topic among market participants, regulators, academia, and the media as their market share has grown. According to some estimates, HFTs may participate in more than half of the trading volume in liquid futures contracts. In fact, the Tabb Group estimates that HFTs account for 54% of the derivative markets. Further, as the CFTC's policy choices encourage the use of central limit order books in the swaps markets, HFTs will likely migrate into these markets. Given their share of trading, many have called for the federal government to register, surveil, and regulate HFTs.

Yet, before we can recommend rules for HFTs, the CFTC must develop a precise and reasoned definition of who is and who is not an HFT. The CFTC needs to collect reliable data so it can define their trading activity before imposing regulations. Without a principled definition of what constitutes an HFT, any oversight scheme may inadvertently extend either too narrowly or too broadly unless the definition and behaviors are well understood.

To ensure we get this right, I want to draw on the TAC members' expertise and market experience to examine what constitutes the attributes of HFTs sufficient to allow the federal government to register and study the role these market participants play in our markets. For many months now, I have urged industry, academia, and the public to come forward with a definition of HFT to no avail. In order to advance the debate, I have decided to propose a set of attributes as the building blocks of an HFT definition. In preparing the following list of characteristics attributable to HFTs, I surveyed various sources including academic materials, the Securities and Exchange Commission's Concept Release on Equity Market Structure, various white papers, and had conversations with market participants.

Based on this, I propose for your consideration a seven part test for what constitutes an HFT:

- The use of extraordinarily high-speed order submission/cancellation/modification systems with speeds in excess of five milliseconds or generally very close to minimal latency of a trade;
- The use of computer programs or algorithms for automated decision making where order initiation, generating, routing, and execution are determined by the system without human direction for each individual trade or order;
- The use of co-location services, direct market access, or individual data feeds offered by exchanges and others to minimize network and other types of latencies;
- Very short time-frames for establishing and liquidating positions;
- High daily portfolio turnover and/or a high order-to-trade ratio intraday;
- The submission of numerous orders that are cancelled immediately or within milliseconds after submission;
- Ending the trading day in as close to a flat position as possible (not carrying significant, un-hedged positions overnight).

Though I do not purport to have a perfect definition, I believe that these seven points will provide the basis for a robust dialogue on this issue.

At the December meeting, I ask that TAC members be ready to engage in a fulsome debate on the issues surrounding HFTs and their role in our markets. This discussion is a crucial step in collecting important information needed to accurately define HFTs. I believe it is important that this dialogue have broad input from market participants and other stakeholders that will inform potential future rulemakings.

Please feel free to propose alternative definitions and/or constructions for consideration by TAC members by Friday, December 9, 2011.

Sincerely,

Commissioner Scott O'Malia