



March 17, 2016

Via Electronic Mail (rule-comments@sec.gov)

Mr. Brent J. Fields, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Proposed Rule Change to Reduce the Synchronization Tolerance for Computer Clocks that are Used to Record Events in NMS Securities and OTC Equity Securities; File No. SR-FINRA-2016-005

Dear Mr. Fields:

The Healthy Markets Association¹ appreciates the opportunity to provide our views on the FINRA proposal to reduce clock synchronization requirements in NMS and OTC Equity securities from the current one second to fifty milliseconds.

Sub-second clock synchronization standards are an important element of market data and audit trail reliability, and most market technology is already synchronized at tolerances far more precise than the fifty milliseconds proposed. Although we recommend further tightening the clock standards to increments less than the proposed fifty milliseconds for some market participants, we nevertheless applaud FINRA for this effort and strongly encourage the Commission to approve the proposal.

Clock synchronization is a critical component of today's market structure and is long overdue for reform. Tighter synchronization standards would enhance regulators' abilities to surveil for manipulative trading practices such as layering or spoofing and are critical to precisely reconstructing market events. These events are especially difficult to reconstruct when they are happening at sub-millisecond timescales. Tighter synchronization standards also allow practitioners greater resolution to monitor and evaluate order routing to fulfill their best execution obligations and compliance with Regulation NMS.

¹ Healthy Markets is an investor-focused not-for-profit coalition working to educate market participants and promote data-driven reforms to market structure challenges. Our members, who range from a few billion to hundreds of billions of dollars in assets under management, have come together behind one basic principle: Informed investors and policymakers are essential for healthy capital markets. To learn more about Healthy Markets, please see our website at <http://www.healthymarkets.org>.

Unquestionably, regulators already need more precision than fifty milliseconds to understand what is going on in the markets and to surveil for sophisticated manipulation strategies, which may be begun and completed in the 50 millisecond interval.

When FINRA last sought comment on this issue, in November 2014,² it received eight responses, the majority of which supported a reduction in the timeframes. Some commenters noted that a fifty millisecond standard posed a low implementation burden, and even suggested that the timeframe be further narrowed to 1-3 milliseconds.³

Today, many, if not most, trading firms already synchronize to a far greater resolution than the proposed fifty millisecond standard. FINRA should seek to take advantage of those practices, while appropriately recognizing the differences between extremely time-sensitive trading firms and other market participants.

The European Markets in Financial Instruments Directive (MiFID II) guidelines⁴ provide an excellent reference for how such an approach might work. European regulators recognize that not all participants are equal in their ability or need to maintain a microsecond-level order audit trail. Algorithmic trading systems are mandated to synchronize to 100 microseconds or less, and use microsecond-level timestamps, while manual and voice traders are not. Further, trading venues with a gateway-to-gateway latency under 1 millisecond are also required to synchronize to 100 microseconds, a standard that the SEC should consider adopting as well. We would hope that US regulators would want to remain at the same or better standards as international regulators.

In the US, FINRA and the SEC could practically implement such a separation. Perhaps the easiest way to do it might be to differentiate between co-located broker/dealers and others. Colocated firms could be identified as those at an exchange datacenter or in a datacenter with modern clock synchronization technology. These firms could be required to synchronize to the millisecond level as a first step, and eventually to the 100 microsecond standard. Once again, nearly all co-located firms are already doing this.

We expect that this could be accomplished with standard NTP or Precision Time Protocol (PTP), likely with little cost to the participant, provided it is occurring within the same datacenter. Of course, clock sources would have to be established (or simply designated from existing sources) in each datacenter, and those sources would have to be synchronized with each other at the

² See FINRA Regulatory Notice 14-47 (2014).

³ See KOR Group letter to FINRA, (Sept. 14, 2015), *available at* http://www.finra.org/sites/default/files/notice_comment_file_ref/14-47_KOR_comment_0.pdf; *see also* FSMLabs letter to FINRA (Jan. 7, 2014), *available at* http://www.finra.org/sites/default/files/notice_comment_file_ref/Yodaiken%20comment%20on%20FINRA%20Notice%2014-47.pdf.

⁴ See European Sec. and Markets Authority, *Regulatory technical and implementing standards, Annex 1*, at 506 and 507, (Sept. 28, 2015) *available at* https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-esma-1464_annex_i_-_draft_rts_and_its_on_mifid_ii_and_mifir.pdf.



SRO synchronization level. Other firms could be subject to the 50 millisecond proposal recommended by FINRA in the proposal. Again, this could be accomplished with standard Network Time Protocol (NTP) software, likely with little to no cost to the participant.

We think updating clock synchronization standards is important to improving transparency and aiding regulators in their surveillance and enforcement duties. While the FINRA proposal is a good first step, we encourage FINRA and the SEC to enhance the proposal to better take advantage of existing industry practices, and better reflect firms' different roles in the markets. Please feel free to reach out if you would like to discuss our comments or recommendations further.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dave Lauer". The signature is fluid and cursive, with the first name "Dave" being more prominent than the last name "Lauer".

Dave Lauer
Chairman, Healthy Markets Association
CC: Rick Ketchum, FINRA