

August 18, 2017

Mr. Amir Zaidi, Director
U.S. Commodity Futures Trading Commission
Division of Market Oversight
Three Lafayette Center
1155 21st Street, NW
Washington, DC 20581

Re: Swaps Reporting Review by the Division of Market Oversight

Dear Mr. Zaidi:

Attached as Exhibit A and Exhibit B are two diagrams. The “Current Situation” diagram visually explains how the embargo rule¹ inhibits transparency in swap markets, and drives complexity in reporting implementation and delays for market participants, end users, the public and the CFTC.

The “Better Situation” diagram visually explains how the reporting process can be simplified for all involved by slightly modernizing a few of the technologies used, and by providing clarity on the definition of “transmit” in the embargo rule. The CFTC should clearly define “transmit” as the asynchronous delivery of data to a long-lived connection to an SDR using persistent non-cookie API credentials, which will force SDR implementation of proper API keys and long-lived connections (preventing multiple seconds of authentication and/or TCP window size scaling on each new trade report - delays not reflected in our “Current Situation” diagram).

After the swap data reporting regime enables SDRs to deal with higher-volume markets efficiently and effectively, we recommend several changes to the data field harmonization process. In particular, we propose a new schema methodology. We estimate this methodology would require several weeks to implement a complete specification for all products, from inception to production readiness, and anticipate swap market participants and reporters could fully integrate the new schema within 6 weeks with a single developer each.

Harmonization of fields and reduction of duplicate PET and confirmation data (in other words, upgrading the swap data reporting schema) is necessary but not sufficient to fix reporting. The schema update process itself should be modernized. Reporting a single product type via the

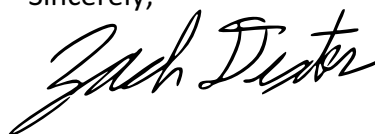
¹ See 17 C.F.R. 43.3(b)(3).

outdated XML and FIXML-style technologies currently requires LedgerX to use 411,745 lines of XML binding code. By contrast, modern API schema specification tools like Swagger or Protocol Buffers could specify the entire schema for all SDR products in a few thousand lines of schema definition code, and bindings for that code wouldn't even need to be generated.

The next time data harmonization needs to occur, the industry can just agree on a new version of a Swagger schema, which the CFTC can then publish. For reporting entities, version updates will be seamless, and they can simply download new auto-generated reporting integrations instead of struggling through PDFs and hundreds of thousands of lines of code, looking for how the bindings changed. The update process for versioning XML APIs is laborious and painful, and keeping the harmonization process centered around FIXML and XML schemas will incur needless overhead on the specification, agreement and implementation processes.

Of course, as explained in the diagrams, once a modern public schema definition of all swap products exists, there is no need for SDRs. The CFTC can quickly - and without building any infrastructure - ingest all swap data into its systems directly from the reporting entities by contracting with a cloud service like Amazon Web Services Kinesis or Redshift, which will store and de-duplicate all reporting entity data essentially automatically. Once connected to the cloud, this data will become permanently available for immediate analysis by essentially any regulatory analytics system.

Sincerely,

A handwritten signature in black ink that reads "Zach Dexter". The signature is written in a cursive, flowing style.

Zach Dexter

Chief Technology Officer, LedgerX

Exhibit A

Current Situation

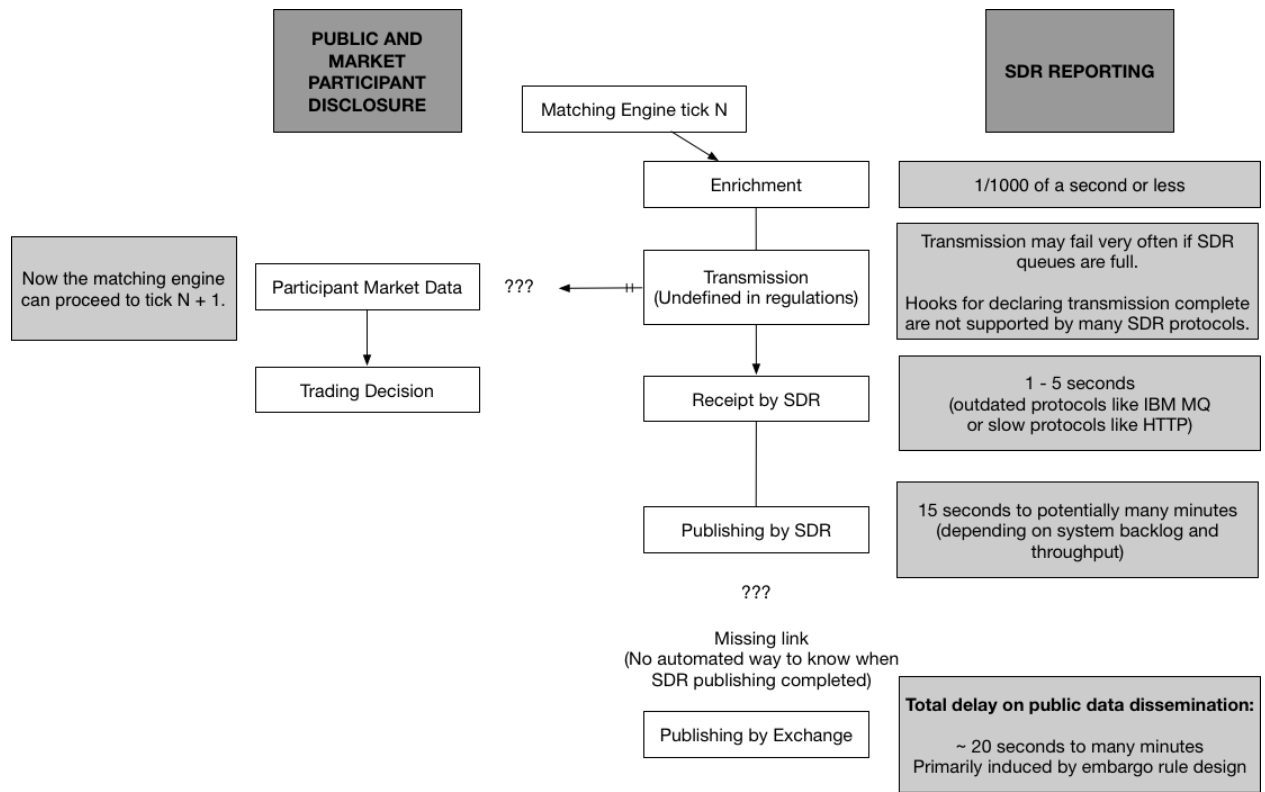


Exhibit B

Better Situation

