



Consolidated Tape Association

The Consolidated Tape Association Announces Upgrades to the Securities Information Processor

NEW YORK, June 30, 2016 – The Consolidated Tape Association (CTA), comprised of all exchange participants and FINRA, today announced plans to upgrade its Securities Information Processor (SIP) technology to improve latency, and increase capacity and resilience.

The SIP processes and consolidates all protected bid/ask quotes and trades from every venue trading Tape A and B symbols into a single, easily consumable data feed. The SIP also calculates and disseminates important regulatory information, such as the National Best Bid and Offer (NBBO) and Limit Up-Limit Down (LULD) price bands, and disseminates other regulatory information such as short sale restrictions and regulatory halts.

The multi-phase program of work, which has already commenced, will involve upgrades to the Consolidated Quotation System (CQS) and the Consolidated Tape System (CTS) feeds, with completion set for Q2 and Q3 2017 respectively.

The upgrade schedule for implementation includes:

- **Efficiency** – The SIP will continue to reduce median latency to a level of 50 microseconds or lower via network/hardware upgrades and software efficiencies (median latency was 240 microseconds in Q1 2016)
- **Capacity** – Upon completion CQS will have the capacity to handle 10 million messages per second (currently 4 million messages per second) and CTS will have the capacity to handle 3 million messages per second (currently 1 million messages per second)
- **Binary Data Formats** – Conversion to binary formats will provide message efficiencies to reduce latency and bandwidth
- **Resiliency and Reliability** – The SIP will continue to utilize a robust architecture platform with hot/hot redundancy, dynamic failover, and hot/warm disaster recovery
- **Scalability** – The systems' highly scalable architecture is designed to quickly respond to capacity demands

SIP performance metrics can be tracked at www.ctaplan.com. To provide greater transparency, SIP performance data will soon be provided monthly rather than quarterly. Notices will be generated to Data Recipients shortly with target dates of CTS/CQS binary implementations.

About the Consolidated Tape Association

The Consolidated Tape Association (CTA) oversees the dissemination of real-time trade and quote information in New York Stock Exchange LLC (Network A) and Bats, NYSE Arca, NYSE MKT and other exchange (Network B) listed securities. Since the late 1970s, all SEC-registered exchanges and market centers that trade Network A or Network B securities send their trades and quotes to a central consolidator where the Consolidated Tape System (CTS) and Consolidated Quotation System (CQS) data streams are produced and distributed worldwide.

CTA

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The current Participants include the Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., Bats EDGX Exchange, Inc., Bats EDGA Exchange, Inc., Chicago Stock Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX, Inc., Nasdaq Stock Market LLC, National Stock Exchange, New York Stock Exchange LLC, NYSE Arca, Inc., and NYSE MKT LLC, (collectively, the "Participants"). The Plans govern the collection, processing and dissemination of trade and quote data. The New York Stock Exchange LLC is the Administrator of Network A and NYSE MKT is the Administrator of Network B. The Plans were filed with and approved by the Securities and Exchange Commission in accordance with Section 11A of the Securities Exchange Act of 1934.

For questions, please contact account support at: <https://www.ctaplan.com/contact>