

SEC Proposes Changes to Market Data Infrastructure

April 2, 2020

The Securities and Exchange Commission (“SEC”) recently **proposed** to amend its rules relating to the collection, consolidation, and dissemination of securities data in national market system (“NMS”) stocks. This is the first major market data infrastructure proposal since the SEC adopted Regulation National Market System (“Regulation NMS”) in 2005. The proposal comes on the heels of a separate, and oddly inconsistent, **proposed order** to require changes to the governance structure of the existing securities information processors (“SIPs”). The amendments would expand the scope of market data that is required to be distributed to the public through the consolidated tape and decentralize the system for collecting, consolidating, and transmitting market data.

In light of the COVID-19 pandemic, the SEC extended the comment deadline for the proposed rule to May 26, 2020.

Background and Overview

Under Regulation NMS, self-regulatory organizations (“SROs”) are required to collect and consolidate market data with respect to transactions in NMS stocks, such as the price, size, and venue of the last sale; each exchange’s current highest bid and lowest offer, and the shares available at those prices; and the national best bid and offer (“NBBO”) for each stock (collectively, “current SIP data”). SROs are required, pursuant to the governing NMS plans (the “Equity Data Plans”), to act jointly to collect and transmit SIP data about each NMS stock to a designated exclusive SIP¹. The SIPs then consolidate the current SIP data and disseminate the information to market participants through the consolidated tape.

While the consolidated tape is made available to subscribers at prices set by the SIPs and filed with the SEC, exchanges also collect and sell market data beyond current SIP data, such as depth of book, odd-lot quotations,² and auction information (collectively, “proprietary data”) directly to interested market participants.

¹ An “exclusive processor” is defined as “any securities information process or self-regulatory organization which, directly or indirectly, engages on an exclusive basis on behalf of any national securities exchange or registered securities association, or any national securities exchange or registered securities association which engages on an exclusive basis on its own behalf, in collecting, processing, or preparing for distribution or publication any information with respect to (i) transactions or quotations on or effected or made by means of any facility of such exchange or (ii) quotations distributed or published by means of any electronic system operated or controlled by such association.”

² An “odd-lot quotation” is a security buy or sell limit order for less than 100 shares.

Proprietary data is typically received by subscribing market participants more quickly than current SIP data for various reasons, including that proprietary market data does not have the extra “hop” of first being sent to the SIP for consolidation before being transmitted to subscribers, but also due to differences in the data transmission technology used. The SEC has expressed concern that proprietary data purchased directly from the exchanges provides purchasers an unfair trading advantage because of the richer content of information and the speed at which the data is received. To address these concerns, the SEC is proposing two major amendments to the current national market system to:

- expand the content of market data that is required to be published on the consolidated tape by the SIPs; and
- decentralize the collection, consolidation, and dissemination of market data through the creation of competing consolidators and self-aggregators.

1. Proposal to Expand the Content Required to Be Published on the Consolidated Tape

The SEC’s proposed rule would expand the amount of information that is required to be collected, consolidated, and disseminated as SIP data. Specifically, in addition to the current SIP data, each SRO would be required to provide certain information currently sold as proprietary data, as well as regulatory data, administrative data, and exchange-specific program data to be disseminated as part of the consolidated tape.

Proposed Definition of “Consolidated Market Data”	
Existing SIP Data Required Under the Current Rule	Additional Market Data Required Under the Proposed Rule
Quotation Size* Aggregate Quotation Sizes* Best Bid and Best Offer* National Best Bid and National Best Offer (“NBBO”)* Protected Bid and Protected Offer* Transaction Reports* Latest Sale Data*	Certain Odd-Lot Transactions* Certain Depth of Book Data* Auction Information* Regulatory Data Administrative Data Exchange-Specific Program Data Additional Regulatory, Administrative, or Exchange-Specific Program Data Elements
* Included within the proposed rule’s definition of “core data.”	

Certain Odd-Lot Market Data

Under the current rules, only “round lots” – currently defined as limit order quotations of 100 shares or more regardless of the price of each share – are included within the current SIP data that is disseminated as part of the consolidated tape. The proposed rule would expand the definition of “round lot” to include quotations based on a combination of the number shares and the prior month’s average closing price for the stock:³

Proposed rule amended definition of “round lot”	
Stock Price ⁴	Proposed Round Lot Size
\$50.00 or less per share	100 shares
\$50.01 – \$100.00 per share	20 shares
\$100.01 – \$500.00 per share	10 shares
\$500.01 – \$1,000.00 per share	2 shares
\$1,000.00 or more per share	1 share

³ If the prior month’s average closing price is not available, the price is based on the IPO price.

⁴ Price is based on the average closing price during the prior calendar month’s average closing price of any NMS stock on the primary listing exchange.

While certain quotations of less than 100 shares would be included as part of core data, the proposed rule does not include these smaller quotation sizes within the scope of protected quotes under the Order Protection Rule (Rule 611). Rather, a “protected bid” or “protected offer” is limited to “an automated quotation that is the best bid or best offer of at least 100 shares . . . or the best bid or best offer of at least 100 shares.” Thus, the scope of this proposal in some ways extends beyond market data issues to other core requirements of Regulation NMS such as trade through protection.

Depth of Book Data

The “depth of book” is the open limit orders to either buy at a price below the highest bid or sell at a price above the lowest offer. This information is valuable to market participants as it shows the liquidity of a security beyond the top of the book. Under the current rules, depth of book data is not required to be disseminated to the SIP.

The proposed rule, includes “depth of book data” within the definition of core data that would be required to be disseminated as part of the consolidated market data. Depth of book data would include (i) “all quotation sizes at each national securities exchange, aggregated at each price at which there is a bid or offer that is lower than the best bid down to the protected bid and higher than the best offer up to the protected offer;” and (ii) “all quotation sizes at each national securities exchange, aggregated at each of the next 5 prices at which there is a bid lower than the protected bid and offer that is higher than the protected offer.” Limit orders beyond five price levels away from the best price would not be included in SIP data. The chart below provides an example of the price points for an example stock that would be the top of book, depth of book, and outside of depth of book:

	Limit Order Book for Stock ABC			
	Bid		Offer	
Top of the Book	200 shares	\$10.50	400 shares	\$10.51
Depth of Book under the proposed rule	150 shares	\$10.49	200 shares	\$10.52
	300 shares	\$10.47	250 shares	\$10.53
	100 shares	\$10.46	100 shares	\$10.54
	400 shares	\$10.44	150 shares	\$10.56
	350 shares	\$10.43	400 shares	\$10.57
Not part of Depth of Book under the proposed rule	250 shares	\$10.42	350 shares	\$10.58
	100 shares	\$10.41	200 shares	\$10.59
	450 shares	\$10.40	100 shares	\$10.60
	150 shares	\$10.39	250 shares	\$10.61

Auction Information

Auction information includes auction order imbalance and other auction data generated by the exchanges during an auction. The proposed rule defines “auction information” to mean “all information specified by national securities exchange rules or effective national market system plans that is generated by a national securities exchange leading up to and during an auction, including opening, reopening, and closing auctions, and disseminated during the time periods and at the time intervals provided in such rules and plans.” The SEC believes that including this information will provide greater access for markets participants to engage in market auctions.

2. Proposal to Decentralize the Collection, Consolidation, and Dissemination of Market Data

Under the current rule, the SIPs do not compete with one another or with other consolidated market data providers. Each SRO is required to transmit information regarding a particular NMS stock to that stock’s designated exclusive SIP. The SIP then broadcasts the SIP data through the consolidated tape for consumption by market participants.

As noted above, SIP data is generally slower to be received by market participants than proprietary market data. The SEC believes that competition between multiple consolidators could improve market efficiency and increase the speed of transmitting SIP data.

The SEC has identified three sources of SIP latency:	
Geographic Latency	The difference in time that it takes data to travel based on the physical distance between two points.
Consolidation Latency	The amount of time that it takes for information to be consolidated from multiple sources and then distributed to market participants.
Transmission Latency	The time between when data is sent and when it is received based on the transmission communication technology through which the data is transmitted.

The proposed rule would eliminate the requirement that there be only one exclusive SIP for each NMS stock. Instead, each SRO would be required to provide consolidated market data to all competing consolidators and self-aggregators “in the same manner and using the same methods, including all methods of access and data formats,”⁵ as it provides market data to any other person, including its own affiliates or subsidiaries. This aspect of the proposed rule contrasts and in many ways conflicts with the proposed order covering governance changes for the SIPs, which contemplated a single new equity data plan but not multiple, competing SIPs.

Proposed New Definitions	
Competing Consolidator	A securities information processor required to be registered pursuant to Rule 614 or a national securities exchange or national securities association that receives information with respect to quotations for and transactions in NMS stocks, and generates consolidated market data for dissemination to any person.
Self-Aggregator	A broker or dealer that receives information with respect to quotations for and transactions in NMS stocks, including all data necessary to generate consolidated market data, and generate consolidated market data solely for internal use. A self-aggregator may not make consolidated market data, or any subset of consolidated market data, available to any other person.

Under the proposed rule, distributing consolidated market data would be prohibited for any entity that is not registered as a competing consolidator. The proposed rule would subject competing consolidators to Regulation SCI as SCI entities, which requires that the entities maintain certain policies and procedures reasonably designed to ensure the integrity and resiliency of their market systems.

Under the current rules, many broker-dealers purchase proprietary data from exchanges to calculate the NBBO for their own smart order routing, algorithmic trading systems, alternative trading systems, visual display, or other uses. These broker-dealers could do the same as “self-aggregators” using the new SIP data, however, self-aggregators would be prohibited from sharing consolidated market data to any other person, including customers or any affiliates or subsidiaries, unless they registered as competing consolidators. Together with the proposed rule concerning SIP governance, the proposed rule, if adopted, could result in meaningful changes to the revenue models of the exchanges.

⁵ By contrast, currently, Rule 603(a)(1) requires that exclusive processors who “distribute[] information with respect to quotations for or transactions in an NMS stock to a securities information processor . . . do so on terms that are fair and reasonable.” (emphasis added).

If you have any questions regarding the matters covered in this publication, please contact any of the lawyers listed below or your usual Davis Polk contact.*

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