



MAYSTREET

IOSCO Consultation Report CR03/2020

Market Data In The Secondary Equity Markets

MayStreet Response

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Response Summary

- Market data needs vary based on type of market participant and role within a market participant
- Core market data should be defined based on retail investor needs including those retail investors who work with sell-side firms or who invest in bundled offerings of buy-side firms.
- Key attributes to consider in terms of a core market data offering include coverage, quality, timeliness and accessibility.
- Consolidated data feeds that include core market data are valuable for retail investors and institutional investors that serve retail investors. Other market participants can derive value from consolidated data feeds by using such data as a benchmark for compliance and transaction quality analysis.
- Consolidated market data cannot replace or displace proprietary data feeds given their depth of book coverage and lower latency.
- When considering whether market data services offer “fair, equitable, and timely access,” all components of cost should be considered including implementation and ongoing costs associated with the content, software, infrastructure and administration of the data.
- Obstacles to implementing new consolidated core data offerings should be addressed, including the elimination of uncertainty, phasing of implementation, and leveling the playing field for all market entrants.

Response to Specific Questions

Defining Core Market Data

Q1: Please identify the data elements that are necessary for investors and/or market participants to participate effectively and competitively and make informed trading decisions in today’s markets. In your response, please consider:

- *The type of investor (e.g. retail or institutional) that uses the data;*
- *How orders are sent to a trading venue (e.g. electronic, manual, direct access by clients; and*
- *How orders are routed*

Please provide the reasons why each element is necessary.

The data elements necessary for market participants involved in the trading process varies based on the type of market participant and their role within the trading process. Useful categorizations of market participants in the context of market data include:

- Retail investors - the term retail investor can be used in a number of different ways, but for the purposes of this discussion, please consider retail investors to be individuals who interact directly with sell-side or buy-side firms offering trading services. Retail investors are typically characterized by their sophistication, net worth (e.g., traditional, high-net worth, ultra high net worth, etc.) and frequency of trading. Net worth may be used as a proxy for sophistication.

The key uses of market data for retail investors include:

- Determining which investments to make (e.g., what securities, what asset classes) and when to make them
 - Choosing financial services providers (including buy-side and/or sell-side firms) for investment and trading services
 - Assessing portfolio performance
 - Assessing financial services provider performance
- Buy-side firms - buy-side firms are investors that include asset managers, hedge funds and other firms that buy services from sell-side firms. Distinguishing features in terms of data needs for the buy-side include:
 - Customer Type: Buy-side firms may offer services to a variety of customers including retail investors categorized based on their net worth. Services offered differ based on the assets held with a buy-side firm. Additionally, the buy-side serves other institutions that are themselves buy-side firms or they may trade for their own account and have no external customers.
 - Investment Strategy: Key attributes impacting the use of data include the types of products offered to customers in terms of asset class, level of management (active/passive), and basis for strategy (quantitative, fundamentals focused, etc.)

Generally, a number of areas within buy-side firms require market data including: portfolio management, sales, trading, execution analysis, compliance and risk.

Key uses of market data for buy-side firms include:

- Determining product offering/product mix
- Determining investments/portfolio components (e.g., specific securities and asset classes)
- Selecting trading venues and timing of trades



- Selecting financial providers to work with (both buy-side and sell-side firms)
 - Assessing portfolio performance and associated portfolio management including portfolio rebalancing
 - Valuing client positions and calculating risk, exposure and margin requirements
 - Assessing providers of financial services in terms of the quality of investment and trading services (i.e. transaction cost analysis)
 - Demonstrating compliance with best execution and other regulatory requirements
- Sell-side firms are often referred to as broker-dealers who sell investment and trading services and are eligible to trade on exchanges. Broker-dealers include order-routing broker dealers, internalizers, wholesalers, market makers and Systematic Internalisers (SIs). Trading services may be offered on an agency or principal basis. Distinguishing features that impact market data needs include:
 - Types of offerings/client-base: Sell-side firms may service retail investors, institutional investors, other broker-dealers or just trade for their own account. Investment services may include managed accounts, transaction-based advice while trading services may include order taking, order routing, or actual execution.
 - Quantitative nature of offering in terms of use of algorithmic trading, quantitative strategies and other data-intensive strategies.
 - Extent to which data-intensive applications are outsourced versus built in-house

Like buy-side firms, the sell-side areas with differing market data needs include: portfolio management, sales, trading, pre-trade risk management, post-trade processing, execution analysis, best-execution assurance, compliance and risk. The key uses of market data include all of those listed for the buy-side as well as those specific to trade execution including algorithm development and smart order routing.

- Self-Regulatory Organizations (SROs) - SROs typically offer execution services that match buyers and sellers, typically in lit marketplaces that foster price discovery. Some SROs may only offer trade reporting as opposed to trade matching. SROs have a regulatory obligation to provide market data but also use market data including for the following:
 - Attracting liquidity and demonstrating execution quality
 - Demonstrating compliance with regulatory requirements

While the needs described above are varied, the data elements for a core market data offering that would be useful to all market participants are ones focused on investor needs, particularly retail investor needs for those individuals who purchase financial services from the sell-side or from a buy-side firm as part of a bundled offering.

At a minimum, core market data should include real-time trade information that can serve as a benchmark for retail investors and those serving retail investors on the buy-side and sell-side. The data elements required include:

- Symbol name/mnemonic (standardized across venues)
- Price
- Quantity/Size
- Execution Venue¹
- Timestamp
- Trade Conditions

Ideally, core market data should also provide pre-trade transparency which includes:

- Symbol name/mnemonic (standardized across venues)
- Best Bid (for each Venue)
- Best Offer (for each Venue)
- Quantity/Size for each Venue
- Consolidated Best Bid and Offer
- Consolidated Quantity/Size
- Timestamp
- Quote Conditions

While these data elements were chosen with investors in mind, they also would provide a benchmark for compliance and execution quality to all buy-side firms, sell-side firms and SROs.

Q2: Are there other data elements that, while not necessary to all market participants, may be necessary for some market participants or business models? Please provide the reasons for your answer.

¹ Note: Depending on the market structure of a particular jurisdiction the classification of off-exchange execution venues may vary (e.g., in the U.S. trade data does not include specificity beyond identifying a trade as an OTC execution).

Additional data elements are required to meet the unique needs of other market participants. The value of direct exchange feeds for low-latency and algorithmic trading is considerable but is not necessarily required in an expanded core market data offering that goes beyond basic retail investor needs. In terms of an expanded core data offering, there is value to both buy-side and sell-side firms in:

- Auction information to support participation in exchange auctions
- Administrative information (e.g., halts, etc.) for compliance and trading functions
- Aggregate price level information to support trading in quantities greater than those at the consolidated BBO.

Q3: Please share your view on defining Core Market Data and how such a definition can be used (for example, for compliance purposes or as a mechanism to make routing decisions, etc.).

As indicated above, core market data should be defined in terms of investor needs. Specifically, retail investors either being served directly by the sell-side or whose individual investments are bundled by buy-side firms.

Core market data cannot by itself serve the needs of all participants, but at a minimum it should serve the needs of investors by providing (1) price transparency, and (2) accountability by providing a benchmark for investors and their intermediaries to assess execution quality and regulatory compliance.

It is also important to be cognizant of market structure differences across jurisdictions and take an incremental approach to providing core market data to investors. In the US, which has had a core market data regime for many years, expanding core market data to multiple price levels and odd-lots is appropriate; whereas in the EU, which has no consolidated tape, starting with trade data would be a useful way to begin offering core market data to investors.

When providing core market data, other contextual information will also be required to help investors understand the data that is being provided. Reference data, like symbology and the methodology of calculations, should be standardized.

Uses of Core Market Data

Q4: How is market data used by different types of investors or different functions of your firm? Consider, for example:

- *Type of investor (e.g. retail or institutional)*

- *Trading Desks (proprietary or client-servicing including retail and institutional), Institutional, proprietary)*
- *Compliance*
- *Risk-Management*
- *Back office functions*

Please see our response to Question 1.

Q5: What impact does different uses have on the need to access data? How can these impacts be managed or addressed?

The data required for a particular decision — be it an investment, trading or post-trade evaluation of trading for performance, compliance or risk — dictates the data requirements. Key attributes to consider include:

- **Content/Coverage:** Scope of coverage of data feeds and data elements
- **Quality:** Consistent and transparent data model with data quality requirements met by all data providers
- **Timeliness:** Latency requirements depend on use case with value in real-time, intra-day and historical data
- **Accessibility:** Depending on the use case, data offerings may require implementation and ongoing effort by end users, such as hardware purchasing and maintenance and software development, acquisition, and maintenance.

Core market data should be a minimum viable product to meet the needs of retail investors. Specifically with respect to the attributes described above, such an offering should provide:

- **Coverage:** Provide at least the minimum coverage required to provide transparency into trading in equity securities across markets. See response to Question 1 for details.
- **Quality:** Define a consistent data model for all data providers, including the enforcement of data quality standards for all fields and values including symbology.
- **Timeliness:** Feed availability at the same time as proprietary exchange feeds are available. Consolidation will introduce latency and should be minimized to ensure that the feed can address retail investor use cases including compliance benchmarks. Note the use cases for a consolidated feed will extend to some types of trading (e.g., mid-point match) if the feed is of a sufficiently low latency.
- **Accessibility:** Minimal infrastructure requirements for buy-side and sell-side users. No implementation effort required for retail investors.

Access to Market Data

Q6: What factors should be considered in the context of evaluating “fair, equitable and timely access”? How should these factors be considered?

Factors to consider in terms of evaluating “fair, equitable and timely access,” include considering the various uses of the data, the audience of the data, as well as the implementation and ongoing costs associated with accessing the data.

It is important to recognize that the costs of using market data go beyond purchasing the content and include connectivity, colocation, software and hardware maintenance, change management, operational and compliance costs. Additionally, to make market data useful, end users may need to normalize and consolidate data. When considering whether market data services offer “fair, equitable, and timely access” all components of cost should be considered.

Opportunities to reduce those costs by standardizing administration, specifications and other contractual terms should also be considered.

Q7: What types of access do trading venues and RDPs provide? Are some forms of access provided only to specific market participants?

As discussed earlier, the needs of market participants vary and not all types of access are of interest to all market participants. For trading venues operating under fair market access rules, access to market data is available to all market participants at transparent prices. This is not the case with all venues providing market data. We see value in these rules especially for new market entrants that may not have economies of scale to take advantage of preferential pricing or contractual terms.

Q8: Please identify the type of access necessary for different investors and/or market participants to participate and make informed trading decisions in today’s markets and the rationale for the type of access and identified differences. In your response, please consider:

- *Type of investor (e.g. retail or institutional)*
- *Trading Desk (Proprietary or client-servicing including retail and institutional)*
- *How orders are sent to a trading venue (e.g. electronic, manual, direct access by clients)*
- *Order routing*
- *Business models*
- *Compliance and regulatory issues*

We believe consolidated access to core market data is required to meet retail investor needs and

institutional investors serving the retail community. Additionally, compliance, regulatory users, and execution quality analysts on the sell-side would use consolidated core market data as a benchmark.

Direct exchange feed access is a requirement for participants making decisions on where and when to trade including those who base trading decisions on quantitative analysis where latency and full depth of book data matters.

Q9: What issues or concerns arise in the context of fair, equitable and timely access to market data?

Determining whether access to market data is fair, equitable and timely is made more difficult by the complexity of market data pricing and administration. This complexity includes different pricing tiers; separate charges for connectivity, data, distribution and derived publication; usage or user type based pricing, as well as the complexities and costs of compliance with market data policies and reporting requirements. As discussed in our response to Question 6, the total cost of market data must be evaluated in determining whether such access is fair, equitable and timely. Simplicity and transparency with respect to these costs would make it easier to ensure fair and equitable access to market data.

Q10: Please share your view on interchangeability of market data between trading venues. If concerns are identified, please provide suggested mechanisms to address them.

Market data is unique to each venue. It is not interchangeable. This also means that proprietary exchange data products will still have a market even with a consolidated core market data offering. The value of a consolidated core data offering is the integration of unique venue data to provide a common reference across markets that is accessible to retail investors. Standardization on symbol mnemonic, usage/user type definitions and other common commercial classifications would reduce some of the friction involved in producing a consolidated core market data offering.

Q11: How should market data fees be assessed? How could this be implemented in practice? What factors should be considered and how can they be defined or applied?

Market data fees should be assessed in a manner that promotes fair and equitable access. Recent guidance provided by SEC staff with respect to SRO fees may be useful in applying this principle. See [SEC Staff Guidance on SRO Rule Filings Related to Fees, May 2019](#).

Q12: Please provide details of other products or services related to market data that are provided by trading venues or other RDPs.

Other products to consider in relation to market data provided by trading venues and other RDPs include

reference data, like symbology, as well as composition data for ETFs and indices. The concept of fair, equitable, and timely access should extend to these data sets as well.

Q13: Please share your views on the fees for connected services that are necessary to access essential market data. If concerns are raised, please identify mechanisms to address them.

See responses to Question 6 and Question 9.

Data Consolidation

Q14: Please provide your view on the need for consolidated data where there are securities trading on multiple trading venues. What should be the primary objectives of consolidated data and what outcomes should it lead to? How should these objectives and outcomes inform the nature of the consolidated data made available?

Consolidated data is a valuable tool for retail investors and financial institutions serving retail investors. See responses to Question 1 and Question 5. As discussed in those responses, consolidated core market data has the potential to improve investor confidence by providing the investing public with a comprehensive, high quality, timely, consistent, and accessible view of the markets.

Q15: Is a consolidated data feed the most efficient mechanism to achieve these objectives and outcomes? If not, what are the alternatives that could help achieve these objectives and outcomes? How do these alternatives affect the cost of and access to market data? How can they be addressed?

Consolidated data feeds can be efficient if the requirements discussed in our response to Question 5 are established. Please also see our response to Question 9 discussing pricing and access to market data.

Additionally, in the formation of new consolidated feed offerings, the following implementation issues should be addressed:

- Eliminate uncertainty - it is important for new market entrants committing capital to these offerings to have transparency into the process in terms of fees, specifications and administrative requirements.
- Establish a common data model - the data has to mean the same thing across venues, lit and OTC, to provide for comparison across venues. This consistency should be at the data field level as well as any summary statistics derived from data providers e.g., calculation of trade counts.
- Phase implementation - establishing or enhancing consolidated data offerings is best done in

phases to ensure incremental progress in development, testing and deployment.

- Promote compliance through implementation - the use of mandatory fields and transparency in terms of the data quality of providers can promote compliance (e.g., mandatory disclosures of data at the provider level.)
- Level the playing field and manage conflicts - Promote competition on a level playing field giving data consumers choice and new market entrants equal footing with incumbents.

Q16: Please describe any issues or concerns not raised by IOSCO in this Consultation Paper and describe any suggested mechanisms to address them.

Considerable advances have been made in the technology of market data creation and distribution. Factors including the adoption of cloud computing, the availability of high bandwidth internet access, and increasing market data volumes should be considered as markets look to provide consolidated market data offerings to meet investor needs.

About MayStreet

MayStreet's market data technology delivers the highest-quality, most complete global market data to enable data-driven decision making. Combining ultra-low latency software with consolidated, top-of-book, and full depth-of-book data, MayStreet empowers its clients – including the sell-side, buy-side, vendors, regulators, and academics – to gain deeper insights to drive investing, trading, execution analytics, and compliance. MayStreet's services include the Bellport Feed Handler Solution for real-time and historical market data processing, flexible access to MayStreet Market Data captured at exchanges worldwide across asset classes, and the MayStreet Analytics Workbench for analyzing normalized market data using query and visualization tools. For more information, visit www.maystreet.com.

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