MIFID REVIEW: The long way towards data excellence

Price discovery through efficient liquidity pooling is the core function of a securities exchange. The Swiss Stock Exchange (SIX) has a solid track record of delivering consistent high-quality market data, both in terms of content and latency. SIX is actively involved in industry initiatives aimed at promoting better data standards.

While the original MiFID (Markets in Financial Instruments Directive) introduced more competition in equity markets, the second iteration is looking to bring greater overall transparency to OTC markets. It also covers other asset classes such as bonds, derivatives and structured finance products. As part of this, the rules have banned the notoriously opaque broker crossing networks allowing for a proliferation of systematic internalisers (SIs).

This has had unintended consequences, namely increased market fragmentation. Across regulated markets (RMs) and multilateral trading facilities (MTFs), less transparent execution functionalities - such as periodic auctions - are becoming increasingly popular. As a result, the share of price forming lit trading activity has gone down.

The data accuracy challenge

Central to MiFID II is that investment firms obtain best execution and price discovery when trading, and evidence they have done so with their own clients. However, the rules are making this difficult. With the multitude of new trading venues, it is becoming much harder – arguably impossible – for market users to accurately screen all of their trading venues' data on a real-time basis to obtain the best price for individual assets.

Although both MiFID I and its successor have helped create greater market competition, the rise of alternative trading venues has had an adverse impact on transparency. While home markets still act as reference price setters for liquid equities, investment firms need to prove they have searched for the best price across multiple liquidity pools. These various liquidity pools unfortunately demonstrate unlevelled characteristics in terms of quality and latency. For this same reason, it has also become

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very complicated for users to obtain a consistent and actionable view in real-time. It is even difficult to get a consistent ex-post view over the various liquidity pools for individual assets.

Moreover, the costs to investment firms of having to subscribe to data-feeds providing access to real-time data from multiple trading venues is much higher than simply procuring the information from one single exchange. According to consulting firm Oxera, fees levied by securities exchanges for their real-time market data account for about 15% of the overall data procurement costs for investment firms.

Even though the previous broker crossing networks had flaws, transparency or lack thereof continues to be an ongoing problem under MiFID II, due to the poor quality of reported OTC/SI data. We're also mindful of some weaknesses in the Regulatory Technical Standards (RTS) 25 that prescribes bespoke timestamping granularity requirements and accuracy standards for different types of trade executions. This deficiency makes proper sequencing of price updates impossible.

The Swiss Stock Exchange has implemented measures to ensure compliance with MiFID/MiFIR regulations. It re-engineered its

market data processing systems and workflows, launching the MDDX feed. The Swiss Stock Exchange improved its market data offering with more granular timestamping up to the microsecond; enhanced the accuracy of its machine time management by synchronising its computer systems against an atomic clock; adopted the unified UTC time-zone when allocating execution/publication timestamps and improved overall content through the implementation of MMT (Market Model Typology) trade flags.

Improving data standards

Comprehensive data standards are absolutely pivotal insofar as they help facilitate interoperability between multiple counterparties in complex chains of computer systems across several legal entities. In turn, this minimises industry costs by reducing the overall development and integration effort. This also mitigates the risk of erroneous information interpretation, which could otherwise lead to potentially incorrect transaction processing and/or compliance breaches . ESMA ordered the mandatory use of a broad set of existing ISO standards across MiFID II implementation regulation. As part of broader post-trade transparency requirements, the EU Regulator has been very demanding on the unambiguous identification of trades that would do not originate from transparent lit trading venues. Such identification methods are known as trade flagging, and there was until recently no standard around this activity.

Trade flags are crucial for post-trade transparency purposes. They are embedded in execution messages and provide vital information about the nature of price formation; the availability of pre-trade transparency; the immediacy of publication; the validity of the trade details and the uniqueness of the specific pricing information. Prior to MiFID II, individual venues generated their own proprietary trade flags without any coordination. It was therefore difficult for end-users to assess the meaning, reliability and true origin of the flags.

MiFID RTS1 and RTS 2 prescribe a detailed list of trade flagging obligations, all listed in a sequential manner. FIX transformed them into a well-structured, logically hierarchised and fully documented data standard named Market Model Typology (MMT). MMT v3.04 is an effective operational solution for complying with MiFID trade flagging obligations. It is optimised for efficient implementation in data feeds, display services and databases. Today, approximately 80% of all equity trade messages in Europe carry MMT codes, although this is expected to rise to 95% by the end of 2020. The industry is looking at widening the use of the existing MMT trade flagging standards into non-equity markets such as fixed income.

Challenges to be resolved

The role of trading venues in generating reliable market data cannot be understated. Trading venues have an end-to-end insight over the order-transaction lifecycle. This gives them an informed view on how to deliver a fully compliant, immediate and meaningful data output, including the correct allocation of the appropriate trade flags on public trade messages . Moreover, the industry's long-held tradition of embracing common data standardisation initiatives has also played a crucial role in ensuring reported data is of excellent quality.

However, the situation is less straightforward for SI/OTC trade reporting activities. This is because the regulatory guidance on the issue has been quite limited. It is unlikely that identical OTC/SI trade scenarios would result in similar trade flags on outgoing market data messages. Unlike trading venues, downstream APAs (approved publication arrangement) and data vendors do not have a full oversight over the order-transaction lifecycle, meaning it is harder for them to validate the quality of the data. A potential future Consolidated Tape would face the exact same challenge.

To solve this data quality issue, the industry needs to; document the valid trade reporting scenarios; agree on appropriate trade flagging conventions; make sure there is broad acceptance and understanding of the proposed solution; and cooperate with regulators in order to achieve data excellence.

The industry has already started some initiatives in this space. FIX recently created dedicated working groups to identify and document the most frequent OTC/SI trade reporting scenarios. In addition, FIX working groups will submit a view on the appropriate post-trade transparency processing, including a suitable trade flagging recommendation.

In short, data integrity remains a challenge under MiFID II/MIFIR. While we have improved the granularity and accuracy of data originating from venues, more coordinated industry effort is needed to bring OTC/SI data quality up to the same standards.