

## The modern surveillance system

By Graham Jordi, Head of SMARTS, NASDAQ OMX



Traditionally, market surveillance has been a basic requirement for doing business, a sometimes burdensome and time-consuming activity that has attracted little attention beyond the regulatory and compliance functions. Even today, when millions of trades occur within the blink of an eye, most market surveillance programs are not fully real-time. Yet, typically traders have access to the fastest most sophisticated technology available, enabling them to view fully consolidated order books in real-time from all exchanges and MTFs across multiple asset classes.

Therein lies the conundrum. Surveillance professionals appear to be riding bicycles while trying to keep pace with traders driving sports cars.

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As evidenced by cases from 2007 just coming to light now, they will reach the same destination but too late to seriously affect the outcome. Surveillance professionals need the same view of the market as the traders they are monitoring and in the same time frame.

To do so, it is essential to develop a comprehensive surveillance program that takes a number of factors into

consideration, factors which may not have been relevant a few years ago. They need flexible, robust technology to keep pace with exploding volumes of trading data, ongoing market structure changes, increased market complexity and with the traders themselves.

### Cross-market surveillance essential

A major consideration for the market surveillance function is market fragmentation. A key concern is that the effectiveness of a single market's surveillance efforts is reduced if the system cannot incorporate trading data for the securities that it trades from all the venues on which those securities trade. Consider the following examples:

- **Insider Trading** Insiders may trade on different venues from where announcements are made – from an insider's perspective, less visibility equals less scrutiny, so insiders might gravitate towards non-primary venues.
- **Frontrunning** Traders may trade their proprietary or personal accounts on completely different venues from the market on which they execute large client trades. Without effective cross-market surveillance, there is no way to determine that one of these accounts is trading one venue ahead of substantial client trades on another venue.
- **Layering (Spoofing)** Analysts may be alerted to layering of the order book on one market, but without cross-market

functionality, they may not be able to identify that the same account is trading on the opposite side of the market from the layered orders on another venue.

In addition to possibly missing market abuse, compliance staff may be wasting time and resources investigating scenarios based on single venue data. Behaviour that appears unusual in the con-

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text of one venue may be normal when viewed against the backdrop of multiple markets. Hence, the ability to view consolidated trading data from multiple sources in a single view has become essential.

#### Other key challenges

Other major challenges the modern surveillance system needs to address include:

- **Data integration** High speed data feeds containing huge volumes from an ever larger number of multi-asset sources need to be consolidated into a single comprehensive view to create a clear picture of normal market behaviour against which to proactively measure deviations. The electronification of derivatives markets and proliferation of new asset classes adds complexity to this process.
- **Risk management** Global regulatory initiatives and market structure changes are leading to a greater focus on automated controls across risk and surveillance functions. The line between

the two is becoming blurred, and they cannot be viewed in isolation.

■ **Real-time control** While historical analysis continues to play a significant role in the surveillance function, real-time control has become essential to ensure early detection of unusual trading patterns that could be potential breaches of trading rules and practices. Keeping up with and responding to market participants in real-time is critical to maintaining market integrity.

■ **Market structure changes** Evolving market structures introduce new surveillance requirements with the flexibility to easily adjust alerts and order handling rules as necessary. A surveillance system must have the ability to grow with the market.

Of course, surveillance systems must continue to meet their core purpose of ensuring market integrity. Toward that end, any surveillance system must incorporate robust monitoring and analysis tools and provide clear visualizations to simplify the monitoring process and to provide clear-cut guidance to potential abuse scenarios. A single consolidated view of trading data across any number of markets and asset classes is essential.

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