Dear BATS Customers and Members of the Trading Community,

*** Executive Summary**
If you don't have time to review the full text below, please read the executive summary.

*** Market data feeds, a historical perspective**
Questions and answers about the history and inner workings of exchange data feeds.

*** BATS will offer its customers a creative solution**
In an effort to satisfy differing needs around a common protocol, BATS paves the way …

EXECUTIVE SUMMARY

Recently we've received inquiries about our data feeds. Many of the conversations center on the topic of order IDs; whether or not order IDs are disseminated on our data feeds – and if so, what sort of information this provides. We thought it opportune to take a moment to provide an explanation of how exchange data feeds work.

Most importantly, our members can rest assured knowing that ***no confidential client information is transmitted over the BATS market data feeds.*** Even still, BATS will soon provide customers the choice of how to interact with our platform regarding the dissemination of order ID values for hidden order trade events. This new flexibility will allow each of our customers to decide how their hidden order trade events are reflected in the BATS market data feeds.

MARKET DATA FEEDS, A HISTORICAL PERSPECTIVE

Order book protocols and associated data feeds are largely similar between various exchanges and ECNs, mostly because their common origins go back 12 years to the late 1990's when the INET platform first surfaced. This is when automation of securities trading was beginning to take shape.

Around this time, the industry needed better programmatic linkages between trading firms and trading centers. FIX, OUCH, and other proprietary order entry protocols were designed for submitting orders into trading venues. Corresponding outbound data feeds were also developed that worked in unison with order entry mechanisms.

Order entry protocols are, by their nature, private linkages between each trading firm and the venue(s) that they connect to. Each customer's private and confidential order information is carried over their individual connection to the venue, and nobody but the venue can "see" the confidential order information sent by that customer.

Market data feeds, on the other hand, are consolidated feeds that provide insight into the nature of publicly displayed orders at various price levels as well as trades that have been executed at the venue. ***The information communicated through the BATS publicly available data feed carries no customer identifying information, period.***

The orders reflected in the feed are anonymous, and indicate symbol, side (bid or offer), price, and size (shares available to trade). This is true for all visible orders, i.e. those that are sent to a venue for dissemination to all users and to the consolidated tape.

Some orders, however, are intended by the customer to be "hidden" and are not disseminated to other customers or to the consolidated tape. These include truly hidden orders, mid-point peg orders, reserve orders, and orders with price discretion. For most publicly displayed venues, including BATS platforms in the US and in Europe, there is no information carried in the data feed that identifies that these orders exist on a pre-trade basis.

The reference number that is assigned by the venue to each unique order that comes into the venue, called an order ID, is communicated back to the originating customer on their private order entry connection. The same order ID is disseminated as an order event in the market data feed (not for hidden orders but for visible orders only) to all customers. This allows customers to build a view of the venue's visible electronic order book, thereby making the venue's resting orders (i.e., available liquidity) fully transparent for all customers. There is no way for users of these data feeds to know what hidden orders may be resting on a venue's order book; they are only able to track those orders which were intended to be displayed. BATS will, however, send trade events in the feed when one of those hidden orders is traded against.

Trade events are not intended to be kept hidden. They constitute public information. As part of the public price discovery process, it is generally the intended convention and a regulatory requirement that ***trade*** information be disseminated to the public, whether the original orders behind those trades where visible or hidden to begin with.

A fundamental question arises - "what information should be disseminated on a data feed when a trade is a result of an execution against hidden liquidity"?

On BATS platforms, when a trade event occurs against either displayed or hidden orders, the original order ID is sent in the trade event message. This enables customers to decrement the available liquidity at a price point and thus maintain a complete and accurate view of the displayed order book. By including order IDs with trade events against hidden orders, customers can monitor the dissemination of their own order and trade events in the publicly available feed. Only the customer who submitted the original order would know that the trade event message was a result of an order originally sent by them. Historically this allowed customers to monitor their own orders and trades to verify and audit a venue's order handling priority (to ensure that their own orders were not being "traded around"), and to measure the latency of the feed related to trade message dissemination and reserve order refresh times. Customers are using this protocol today as it was designed 12 years ago … for the monitoring and measuring of their own order and trade performance at each venue they connect to.

In addition to the order ID, the BATS market data trade event for hidden order executions includes the symbol, the price, and the size of the execution. Information related to whether the hidden order was resting as a bid or an offer is not disseminated with the trade event.

BATS WILL OFFER ITS CUSTOMERS A CREATIVE SOLUTION

Some firms don't use the order ID to monitor their own orders and would prefer that we remove order ID values in the feed. There are other customers, as previously mentioned, that do use this field to monitor their own orders and trades and rely on the order ID being in the data feed the way the feed specifications were written.

Since the order ID information can be valuable to firms who actively monitor their own order and trade messages, **we have decided to give BATS customers their choice of functionality**. BATS will create a port level configuration choice that allows customers to decide whether they want to keep their order ID values in the publicly available data feed for monitoring their own trades, or whether they would prefer that their order ID values for their own hidden trade events be obfuscated (i.e., randomized order ID values applied to their hidden trade event) in the data feed. This solution ultimately provides customers with the flexibility to choose how they want to interact with BATS platforms, both in the US and in Europe.

We appreciate the feedback our customers gave us as we surveyed their current use of our data feeds. Our development and operations teams will design and implement the user selectable functionality in the coming weeks and we will roll out the changes shortly. Our sales team will keep you up to date on the implementation time frame for these projects as well as other upcoming improvements and enhancements to the BATS trading platforms.

As always, your comments and feedback are welcome.

Sincerely,
Joe Ratterman

Chairman, President and CEO
BATS … Making Markets Better