August 22, 2014

Ms. Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549-1090

Re: Release no. 34-72685, file no. SR-BATS-2014-029 Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Clarify for Members and Non-Members the Use of Certain Data Feeds for Order Handling and Execution, Order Routing and Regulatory Compliance of BATS Exchange, Inc.; Release no. 34-72688, file no. SR-BATS-2014-028 Notice of Filing of Proposed Rule Change to Establish a New Market Data Product Called the BATS One Feed

Dear Ms. Murphy:

Thank you for the chance to comment on the above noted filings.

With regard to SR-BATS-2014-029, other exchanges posted similar and coincident filings in response to a very well-crafted, if overdue, inquiry from the SEC. These filings ("Filings") include illuminating disclosures of market data practices among the exchanges. Collectively they disclose a surprising diversity of data sources, techniques, and practices. They also show how far the National Market System ("NMS"), created at the direction of and under the authority of the 1975 amendments, has been eroded and privatized by the exchanges as they mold and cast a two-tiered Fat-cat Market System ("FMS") for themselves and their best and most affluent customers.

With regard to SR-BATS-2014-028 ("Feed Filing"), we see an exchange group respond to other exchange group data product initiatives with a similar initiative of its own. Taken together, these initiatives seem to march along a stealthy path to replace the Securities Information Processor utilities ("SIP" or "SIPs"), themselves established under the authority of the 1975 amendments, with exchange group products not subject to any NMS plans, privatizing the public functions of the SIPs and eventually marginalizing the SIPs themselves.

Perhaps unhappy with the SIPs, or sensing industry discontent with them, the exchanges could be positioning for a day when the SIPs are sidelined. Somewhere in here may be a useful discussion about the SIPs, but that assumes we appreciate what's happening rather than just letting the industry do whatever it wants inch-by-inch, rule filing by rule filing, in a steady and largely unnoted stream of proposals that might well undo four decades of effort devoted to the public interest.

Data feed practices

On reading the Filings, some obvious questions occur to anyone familiar with the industry. As a universal and permanent audit trail of exchange trades and quotes, the SIPs have a unique and irreplaceable status in the National Market System, a status encoded, directly and indirectly, in a wide variety of federal rules. But the Filings make it clear that few of the exchanges use the SIPs in real-time for any but auxiliary or failover functions. In the ordinary course there's nothing wrong with that, as the SEC's Reg NMS FAQs make clear, but those FAQs also make it clear that SIP data is "a common reference point for quotations and trades in NMS stocks that will be readily available to the public, Firms, and regulatory authorities." Those FAQs also say that:

> The data that bears on Rule 611 compliance can be divided into three categories: (1) the order and trade data of each trading center or broker-dealer (“Firm”), with internal time stamps reflecting when it was processed by each Firm (“Firm-Specific Order and Trade Data”); (2) the protected quotation data received by each Firm, with internal time stamps reflecting when it was received by the Firm (“Firm-Specific Quotation Data”); and (3) the protected quotation and trade data of the Network processors, with time stamps assigned by such processors (“Network Data”). Assuming reasonable data handling policies and procedures, compliance by individual Firms with Rule 611 will be assessed based on Firm-Specific Order and Trade Data and Firm-Specific Quotation Data, and not on Network Data [SIP data]...

All the exchanges using direct data feeds likely rely on this language. But the fulcrum here is "Assuming reasonable data handling policies and procedures," and we should all view that phrase in light of recent history including, certainly, market centers which have botched their own IPOs, market centers which have botched other history-making IPOs, catastrophic market center outages, and more. In other words, if market centers don't get technology right when the eyes of the world are on them, with millions - billions - at stake, what assurance is there they get it right in this?

The Filings disclose that exchanges calculate their own away-market quotes based on direct data feeds from those markets, and then use those quotes for order display and routing decisions. The Reg NMS FAQs say that:

> ...Rule 611 does not require Firms to maintain a comprehensive database of Firm-Specific Quotation Data if (1) the Firm has implemented reasonable policies and procedures that include periodic review of its compliance with Rule 611, and (2) the Firm retains sufficient Firm-Specific Quotation Data to demonstrate the reasonableness of its Rule 611 compliance reviews. The reasonableness of a particular Firm’s compliance reviews will be assessed in light of its individual characteristics, including its volume of trading and routing. In general, however, Firms must conduct periodic reviews for specific time periods that are reasonably designed to test the effectiveness of a firm’s policies and procedures for preventing trade-throughs and for complying with the Rule’s exceptions. For these time periods, the Firm should maintain Firm-Specific Quotation Data so that the effectiveness of its policies and procedures can be adequately evaluated by regulatory authorities.

There are many obvious questions after all this. Since the exchanges rely almost exclusively on direct data feeds for basic market functions like assembling and displaying quotes, routing orders, and ensuring compliance with federal rules, shouldn't we understand exactly how the exchanges monitor and manage inevitable discrepancies between their own data sources and the SIPs, between the "common reference point...[for] the public, Firms, and regulatory authorities" and what they actually use? When an exchange calculates a quote for another exchange using that exchange's direct feed data, what kind of audit trail, if any, does it make of those calculated quotes, and how does it use that audit trail in its compliance reviews? Does it ever compare its calculated quotes against the actual SIP-reported quotes on any regular basis? When there are differences between the SIP and their own calculated quotes based on the direct data feeds, how do the exchanges handle it? What quality control measures have the exchanges performed, and what ongoing quality control measures do they use, for any quote they calculate from other exchange data feeds? Is it possible that exchange X could calculate one BBO for exchange Z and for exchange Y to calculate a different BBO for exchange Z? Who audits and reconciles these differences (if any)? And when exchanges failover to use SIP data, do they announce this change in data source to anyone? Do they make sure the correct quote source is always used for reporting purposes? As regulators conduct market-specific and intermarket surveillance, which quotes are they using, the SIP or the privately calculated quotes market centers (and firms) actually used?

The Reg NMS FAQs were published years ago, and since then, thanks almost entirely to Sal Arnuk and Joe Saluzzi at Themis Trading, Eric Hunsader at Nanex, and Michael Lewis in *Flash Boys*, we've learned a great deal about the importance of network and processing latencies in our markets. The SEC's own reporting tools show that vast numbers of quotes have almost infinitessimally small lifetimes, measured at most in microseconds. Public investors can't take advantage of these rapidly decaying quotes. If investors ever even see them the quotes have changed by the time they do. Countless times a day those quotes are stale before they are even broadcast by the SIP. But there are firms which can take advantage of those quotes, firms which pay handsomely for privileged access to markets and their direct data feeds. The speed differences between SIP data and direct data feeds are leveraged by these firms in ways regulators are only beginning to comprehend, but it's clear that high speed gaming between the FMS and NMS has long been a source of profits for at least some segments of the industry.

Latency gaming among direct data feeds, SIP feeds, exchanges and dark pools has been much in the news this year, but as Haim Bodek recently pointed out there are still more issues. Shouldn't the exchanges disclose, as Bodek wrote in TabbFORUM, the "conditions for adherence to the SIP including the cases where an exchange will use direct feeds in conjunction with the SIP to determine 'locking' and 'lighting' conditions," and shouldn't the exchanges disclose "conditions and mechanisms where information about an exchange's protected quotation state management, which normally would be expected to remain local to the exchange order matching engine, is communicated to HFTs in an advantageous manner (i.e., mechanisms in which price sliding reject messages provide 're-posting' guidance for HFTs)"?

The exchanges should also regularly disclose latency differences experienced by investors between the exchanges' own direct feeds and the SIPs, and exchanges should regularly disclose latency differences between the external direct feeds they're using and the SIPs. Investors should at least know the scale of their structural and persistent disadvantages when they don't, or can't, pay for and process direct feeds themselves. In a lightspeed age, where millions of quotes are stale before any SIP customer ever sees them, these disclosures are certainly as useful as any 605/606 reporting.

Finally, what quote data will be saved in the Consolidated Audit Trail when it's built? Will it be SIP data, or the quotes the exchanges actually built and used to run their businesses?

Data products

Various initiatives have been launched lately by the exchange groups to produce and sell consolidated data from across their constituent exchanges, and it's easy to imagine how this can play out over time. In the first place, the exchange groups will encourage firms to use their new consolidated feeds. Then, as firms switch over to these new feeds, firms could well drop the SIPs. Why pay twice? The current SIPs then are further neglected, replaced by consolidated feeds from the exchange groups themselves. But unlike the SIPs, the proprietary consolidated feeds will not be managed by any National Market System plan, and will surely have less public transparency and regulatory oversight. It's also simple enough to predict rising fees for these private consolidated feeds if the current SIPs themselves are orphaned.

Rather than a public good in the public interest, as Congress clearly intended with the 1975 amendments, it's easy to see consolidated data become a private battleground. As that happens, SIP data as a "common reference point...[for] the public, Firms, and regulatory authorities" will be challenged by anyone using the new feeds - why pay twice? What, then, will be the common reference point for the public and regulators?

And it wasn't so long ago that the SEC regularly insisted SIP revenues should be devoted, at least in part, to pay for self-regulation and market surveillance. We don't see the SEC note any such imperative here even as the SIPs may well face an emerging existential challenge.

If all this happens, the National Market System, refined over 40 years to serve the public, will finally be replaced by the Fat-cat Market System. Shouldn't this be part of Chair White's market structure review before the public is presented with a *fait accompli*?

Particularly if they offer products with data consolidated across their constituent exchanges, the SEC should require the exchange groups to register as Securities Information Processors. At minimum, registration would bring welcome operational disclosures and shed more light on the workings of the FMS. The SEC should require the exchange groups to file National Market System plans for any products and services consolidating data from more than one exchange, just as do the current SIPs. If it walks like a SIP and it talks like a SIP, it should certainly be regulated like a SIP.

Sincerely,

R. T. Leuchtkafer