



## **Inter-market Sweep Orders and the Quest for Liquidity**

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Liquidity is king.

Liquidity drives profit for exchanges, ECNs, ATSS, and dark pools. That explains why all of these matching entities want to attract the most quotes possible and to match the most orders possible, and historically, cost and speed have been the primary determinants of where traders sent their business. Now, Reg NMS adds new complexity to the liquidity game, while the goal – to attract as much liquidity as possible – remains unchanged.

Predictably, the battle is particularly intense for orders coming from institutions. In other words, the larger the orders coming from customers, the more value to be derived from thoughtful routing, and in these cases, the approach of sweeping and crossing is expected to become popular. Specifically, that means a matching entity would send orders sized to match or “sweep” the quotes protected by the Regulation (called an inter-market sweep) in order to cross the customer order internally and stay in compliance.

But how does a sweep and cross work? If Reg NMS protects the top-of-book quotes at exchanges and ADF participants, does a single order go from market center to market center leaving the unfilled portion available to cross? Does it break small orders off of the original order to match the protected quotes and send those orders out at the same time that it crosses the balance internally? Does it use a serial process allowing the trader to burn through the bands of pricing beneath each protected quote until the last protected quote has been matched before crossing? Does it entail some combination of the above or some other creative approach?

The answer is “it depends”, and by extension, “we’ll know it when we see it”.

As always, the choice between compliant options will be driven by speed, economics, and how each customer defines best execution. For example, the process of executing an order in one large parallel process will probably be fast, but the process of burning through the bands of available prices will probably be economically superior. So, ultimately, the value the customer places on each of those variables will determine which approach the trader should use. That said, we won’t know how effective the various options really are until Reg NMS is in effect and the implications of market data latency, order volumes, algo trading, and other variables play themselves out. Which is to say we can only make educated guesses as to which inter-market sweep order (ISO) processes will meet customer requirements today, and it won’t be until we see them in action that we will know if they deliver as expected.

Further, most exchanges and ADF participants are still defining their internal processes for handling ISO orders, and those processes are bound to change in light of their actual experience once the Regulation has gone into effect. For these reasons, all matching entities should be prepared to quickly incorporate into their own facilities future changes in published ISO message formats.

Finally, how do you get market data for ADF participants? Specifically, ECNs, ATs, and others who choose to display their quotes in the NASD ADF are protected under Reg NMS, so their top of book quotes need to be included in order routing decisions for compliance. However, the consolidated feed includes quotes displayed in the ADF, but it does not include attribution. That level of detail can only be gotten from the NASD directly.

Add all of this together, and the requirements for a Reg NMS solution capable of delivering inter-market sweep functionality become non-trivial. At a minimum, they include: (1) connectivity to all U.S. stock exchanges, (2) connectivity to current ADF participants and the ability to connect to new ADF participants quickly and easily, (3) the ability to receive orders in any message format from any type of system such as an order management system, an algo engine, or a proprietary system, (4) the ability to add new message types to exchange and ADF participant format libraries quickly and easily, (5) market data feeds for all stock exchanges and the ADF, including ADF quote attribution, (6) a way to capture, store, and update top of book data for each symbol across all exchanges and ADF participants, (7) the ability to access that top of book data quickly for fast order routing, (8) the ability to supplement compliant order routing with customer preferencing, (9) the flexibility to optimize ISO processes in real-time, based on first hand experience, (10) the ability to monitor individual orders, (11) the ability to archive the data used to route each order and confirm, after-the-fact, that each order was sent to the proper destination(s), and (12) redundancy and high availability. In addition, for those who want agency brokerage, the solution needs to offer membership access to all exchanges.

In summary, under Reg NMS, Inter-market Sweep Orders provide exchanges, ECNs, ATs, and dark pools a way to maximize liquidity retention, and by extension, a way to maximize profits. That said, baseline Reg NMS routing solutions provide most of the capabilities required to perform ISOs, but not all of them. So, those organizations that want to use ISOs must be clear about their full set of requirements in order to get what they need, and they have to do it quickly. Liquidity attracts liquidity in the world of equities trading, and first movers in the ISO game are bound to have an advantage in the quest for liquidity over those who follow.