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BY EMAIL

British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority (Saskatchewan)
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
Financial and Consumer Services Commission (New Brunswick)
Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island
Nova Scotia Securities Commission
Securities Commission of Newfoundland and Labrador
Superintendent of Securities, Northwest Territories
Superintendent of Securities, Yukon
Superintendent of Securities, Nunavut

Dear Mesdames and Sirs:

Re: Proposed Amendments to the Companion Policy to National Instrument 23-101 *Trading Rules*: Application of the Order Protection Rule ("OPR") to Marketplaces Imposing Systematic Order Processing Delays (the "Proposed Amendments")

Please see our views on the Proposed Amendments below. We appreciate the acknowledgement by the CSA of the need to respond in a timely manner to the issues raised by the impending market structure shift to include an unprotected "lit" marketplace, and their efforts to deal with these issues without unduly delaying a marketplace proposal.

The current sequence of events has, however, reinforced several key points: 1) Market structure changes that arise from a marketplace proposal should be addressed through the usual comment process for marketplace changes, as the specifics assist industry participants in analyzing them; 2) if the impact is larger, as it is here, then the information obtained during that comment process should be used to inform any rule proposals (including the cost-benefit analysis) and, where warranted, the CSA should delay the final approval of the changes until the rule amendment process is complete (or, at least, comments have been received and considered); and 3) there has been insufficient attention to the best execution implications of market structure changes.

Before responding to the specific questions raised in the notice and request for comment describing the Proposed Amendments (the "**Notice**"), we have two general comments. First, the concerns raised in the context of the CSA's May 15, 2014 OPR proposal (the "**2014 OPR Proposal**") about having both protected and unprotected marketplaces, and the suggestions that any such decision should be approached with caution, have not been addressed although they were mentioned in the introductory comments in the Notice. <u>It is unfortunate that there was no opportunity to comment on the impact of an unprotected Alpha Exchange ("**Alpha**")</u>, but we can address the issues raised by it in responding to the questions in the Notice. Our second general comment is that <u>we believe the lack of analysis on the impact of different types of systematic order processing delays ("**systematic delays**") and other functionality impacting speed and certainty of execution is a fundamental impediment to arriving at a principles-based conclusion</u>, and should raise issues for all industry participants, not just those of us most directly impacted by the Proposed Amendments.

Moving from all to some protected marketplaces

Consistent with our comment letter on the 2014 OPR Proposal and, as discussed below in our responses to the specific questions posed in the Notice, we see major complexities in the partially protected environment that would result from the Proposed Amendments, particularly with respect to Canadian investment dealers' ability to meet their best execution obligations and investors' ability (particularly the retail investors) to monitor the fulfillment of these best execution obligations.

The Canadian regulatory framework for trading is founded on order exposure, best execution, client priority, trade-through avoidance and data consolidation. Due to the structure and evolution of today's multiple marketplace environment, there has been little focus on quantifying and measuring best execution in a way that is available for review by investors and regulators. In fact, practically speaking, measures for meeting OPR have generally (and often inappropriately) been used as a proxy for meeting best execution. This is reflected in IIROC Rules Notice 14-0082 *Best Execution Survey Results* published March 28, 2014, where comments in response to how best execution should be approached included that the use of smart order routers ("**SOR**s") ensures best execution (see page 11). Further, in the section on IIROC's observations on SOR use (page 12), it was noted that: "*The Survey information indicates a relatively low ability for Participants to adjust SOR settings. Participants should consider whether their best execution practices enable them to take into account, and if deemed appropriate respond to, changing market conditions.*" It is our understanding that practices have not evolved significantly since IIROC's survey results were published, and we believe that the Proposed Amendments would move our securities markets into uncharted territory and expose dealers to substantial legal and reputational risks.

We are only aware of one other jurisdiction with a partial order protection environment: the US. The evolution into their current order protection rules followed a very different path than in Canada and, despite some superficial similarities, the Proposed Amendments would not put the Canadian securities markets in a similar position. As a result, we feel they should not be considered as a helpful precedent in this matter. We note, for example, that:

- The 2005 amendments to SEC's Regulation NMS ("**Reg NMS**") stated, as one of its purposes, the updating of an existing SRO/exchange-driven trade-through obligation that included both manual and automatic markets and protecting "immediately and automatically accessible" orders was aimed at tackling the issues with some of the remaining floor-based platforms (it shouldn't be forgotten that this signaled the end of manual trading in equities in the US).
- Reg NMS also created a partial-protection regime by linking order protection to the public market threshold in Regulation ATS (triggered when a marketplace hits 5% in any security). The purpose here was to allow proprietary systems to evolve without the cost of complying with onerous public market requirements: the unprotected under 5% ATSs were and are, for the most part, proprietary trading systems set up specifically to not to reach the threshold and for which there is no access or transparency to non-members, making the best execution assessment for non-members a much more manageable exercise, as further discussed below.

Not all systematic delays are created equal

As noted above with respect to the US market, when considering order protection rules for automatic versus manual markets ten years ago, the SEC struggled with the appropriate definitions and expectations. The solution they came up with was logical considering the quantum difference in execution timing between manual and automated trading platforms. Applying the same logic to the current issue of systematic delays, where we are discussing delays that are sub-1 second, is of questionable validity. Regardless of the advancements in technology, it is difficult to compare manual versus automatic against the scenario discussed under the Proposed Amendments, except for the sole purpose of looking at how a timing difference may advantage one subset of the trading community versus all others.

The Alpha systematic delay will slow down all orders except post-only (an order type typically used by high frequency trading firms), adding to the latency already inherent in the average life cycle of an order sent on behalf of a long term investor. This means that HFTs that already receive execution information earlier than others will now have even more time to adjust – on Alpha as well as other lit marketplaces[1]. As pointed out in most comment letters on the Alpha proposal, this could negatively impact institutional investors and large retail orders in a material way and was, we believe, the impetus to removing order protection from Alpha[2]. As a comparison, the NEO Book™ ("**NEO**") speed bump applies only to active orders from latency sensitive traders ("**LSTs**" which are, typically, HFTs) and is of a duration meant to replicate the average latency difference between orders sent by HFTs and orders sent on behalf of or by long-term investors that have to pass through a dealer's order management system. We question why the two systematic delays are considered in the Notice to be the same, given their very different impact and purpose.

<u>Oversight of marketplaces is aimed at ensuring consistency with the core principles of regulation, including OPR and best execution. New functionality of a marketplace should be reviewed in that light, not by isolating one characteristic that may be problematic in the context of another marketplace's overall offering</u>.

Responses to the specific questions in the Notice

Question 1: What are your views on whether OPR should apply to marketplaces that impose an order processing delay? If OPR should apply to marketplaces that impose an order processing delay, should it apply to some or all of them? What factors should be considered in processing delay?

We are of the view that OPR should apply to all automated, lit marketplaces, subject to the considerations further discussed below, or it should be removed for all, with a shift to a more robust best execution regime. The concept of partial order protection overlaid on the current market structure is troubling, as noted above. This is not a case similar to the US where unprotected venues do not provide open access nor participate in consolidated displays, making best execution a much more straightforward analysis (i.e., of the functionality of the venue and not of the prices and trading patterns on it).

If, however, the CSA decides to proceed with the Proposed Amendments and bring in a partial protection environment, we would argue that any functionality of a marketplace and the pricing related to it – not just whether it imposes a systematic delay – should be analyzed and subjected to a comment process to determine whether the application of OPR in the context of that functionality would have an undue impact on any market participants, especially those OPR was designed to protect. Factors to be considered would be:

- Is the impact of the functionality consistent or inconsistent with the purposes of OPR?
- Does the functionality create an undue advantage or disadvantage to a subset of the trading community? And

[1] In today's technology-enabled world, Alpha is reintroducing a version of the NYSE Specialist/NASDAQ market maker system (whereby those market makers had the ability to see the book before making a trading decision) that was addressed by Reg NMS.

[2] We are of the opinion that the Alpha systematic delay could also negatively impact small retail orders because it provides liquidity providers with an exclusive look at the changing market conditions during the period of the systematic delay; in other words they would know, before an order (held up by the systematic delay) can trade with them, under what market conditions it was entered and what the conditions are at the moment they trade (or decide not to trade by cancelling / re-pricing their post only order); this pre-knowledge allows them to trade with, all-be-it at millisecond level, preferred access to information and may represent considerable best execution concerns for liquidity takers, including small retail orders (see also, the previous footnote).

if there is an advantage, does it favour long-term investors or short term traders?

- Is the functionality useful to a broad or narrow set of users?
- How does the functionality interact with the other tools and functions available on that marketplace?
- If there is a systematic delay, how does the duration compare to the average processing speed for execution of orders on all marketplaces (i.e., is the difference on the scale of automated versus manual execution, similar to Reg NMS's comparison, or on the scale of the normal amount of latency already existing in the system)?

Not surprisingly, we remain convinced that a speed bump aimed at minimizing the difference in speed between HFTs and other participants accessing liquidity on a take-take marketplace has a very different impact than a systematic delay that slows down all orders except those of liquidity providers on a take-make marketplace. And that differentiated impact is on a number of fronts, including execution quality for long-term investors, best execution, and the ability of the affected participants to adjust and mitigate any potential disadvantage. We note that in response to comments that the new Order Protection Rule could interfere with some short term proprietary trading strategies, received in respect of the 2005 Reg NMS release, the SEC stated that if the interests of long-term investors and short-term traders conflicted, its clear responsibility was to uphold the interests of long-term investors.

Question 2: In an environment where not all displayed orders on visible marketplaces are protected under OPR because marketplaces impose an order processing delay, what are your views with respect to the outcomes for protected and unprotected visible marketplaces and for trading on those marketplaces? (For purposes of this Notice, a "protected" marketplace is considered to be a marketplace which displays protected orders as defined in OPR, while an "unprotected" marketplace is one which does not display protected orders.) **In responding, please consider the impacts on:**

(a) various market participants including retail and institutional investors, and liquidity providers;
(b) liquidity on both protected and unprotected visible marketplaces;
(c) price discovery;
(d) complexities and changes you anticipate from participating in both protected and unprotected visible marketplaces, including costs and effort; and
(e) the provision and use of consolidated data.

The outcomes for protected and unprotected marketplaces and the trading on them, regardless of the impetus for removing protection, are largely dependent on signalling/messaging from the CSA and IIROC.

For example, any indications that execution quality on unprotected marketplaces should be presumed to be inferior to that on protected marketplaces, would have a large influence on the outcome. Also, evidence of a more robust monitoring and enforcement regime for best execution or a lack thereof would lead to very different behaviours and outcomes. It is our understanding that many or even most of the original supporters of the 5% threshold that was included in the 2014 OPR Proposal ceased to support it when they learned that they would not simply be able to ignore the unprotected marketplaces and that they would need to monitor and assess them in light of best execution.

The reason for this is that the issues dealers were hoping to address with the 5% threshold remain unchanged under fully-enforced best execution obligations. Realistically, it would be hard to ignore unprotected marketplaces from a best execution perspective with (a) pre-trade information from all lit marketplaces available as part of a consolidated feed, (b) connections in place to all existing lit marketplaces, (c) the same level of regulation imposed on a marketplace whether protected or not, and (d) the certainty / quality of execution dependent on many factors beyond protected or unprotected. However, if there is no sign of a change in monitoring and enforcement of best execution by regulators, then some firms may assume it is acceptable to ignore unprotected marketplaces across the board, instead of on a case-by-case basis where the facts would dictate they should. This would lead to considerable best execution concerns.

Impact on liquidity on both protected and unprotected visible marketplaces and price discovery

We believe that the impact on liquidity and the price discovery process is not a consequence of whether a marketplace is protected or not, but a consequence of whether a new market model leads to substantial market-wide segmentation of long-term investors' order flow and of how investors will react to an environment where best execution is at risk.

It is generally acknowledged that the Alpha systematic delay, combined with an inverted fee structure, aims to replicate the US third-party market maker model: attract retail order flow, incentivized by liquidity taking rebates, and expose it to HFT liquidity providers, protected by the systematic delay, willing to pay a fee to have access to this flow. It appears to us that this model was designed assuming that institutional flow will not take liquidity, out of quality of execution considerations. We anticipate that this model will lead to a number of troubling consequences:

- Segmentation of informed from uninformed flow leading, as many academic studies have demonstrated, to a deterioration of the price discovery process.
- More sophisticated investors, whether retail or institutional, domestic or foreign, deciding to direct their flow away from the Canadian markets out of concerns of obtaining best execution in an environment where dealers are placed in a position of considerable conflict of interest due to the proposed model.

Impact on various market participants including retail and institutional investors, and liquidity providers

As discussed above, if a marketplace becomes unprotected because of a systematic delay, the impact on retail and institutional investors would depend on the application of the delay and the approach to protected versus unprotected marketplaces by their dealers. If the delay would act to enhance their execution quality, and their dealer has prioritized protected marketplaces, the investor will receive an inferior execution but it will be very difficult to determine that based on the market data and reporting or lack thereof (particularly at retail level) the investor will have access to (please see more below on the issues around consolidated data). If the delay slows down participants that are already slower than others, but doesn't slow down the fastest participants, it simply enhances the latter's advantage; combined with an inverted fee structure, this can lead to substantial conflicts of interest for dealers, leading to potential best execution issues, particularly for the execution of the least informed investors' orders.

Complexities and changes we anticipate from participating in both protected and unprotected visible marketplaces, including costs and effort

The current Canadian rule set, when applied to a structure with both protected and unprotected "lit" marketplaces as per the Proposed Amendments, will lead to a number of outcomes that do not appear to have been considered as of yet by the CSA:

- A market structure with all marketplaces (whether protected or unprotected) subject to the same costly obligations regarding fair access, data transparency, operational security and viability etc., and with regulatory reviews of pricing by regulators. This is very different from the US model and has a high risk of stifling innovation and competition.

- It would not continue to make sense for marketplaces to be accountable for ensuring OPR compliance, and the onus should solely be on the dealers (or direct participants, if it is a buy-side only venue). Marketplaces would never be in a position to assess best execution, as they generally do not have a direct relationship with the end client and, in a partially protected environment, the risk that a marketplace could be interfering with best execution for orders received that are not marked DAO would increase.
- Participants that do not have the ability today to appropriately assess best execution before sending an order to a marketplace (see the current state of affairs in IIROC Rules Notice 14-0082 *Best Execution Survey Results*) and are heavily reliant on the operation of OPR for demonstrating best execution compliance will not likely be well-positioned to take unprotected marketplaces into consideration. This will lead to substantial cost and effort for such dealers to become compliant.
- All other participants who currently have in place adequate technology to fulfill their obligations under the current rule set, will still need to implement costly technology and processes to handle a new best execution environment and manage the new conflicts of interest that will emerge, so long as there is a vacuum with respect to quantifiable and measurable best execution criteria.
- In addition to best execution, some regulatory requirements and functionality will still require market data from all transparent marketplaces (rules based on last sale price, some mid-point pricing), while others (OPR, pricing based on the NBBO) will be based on the market data from protected marketplaces only.

Overall, there will be substantial costs of re-engineering systems and work flows as well as higher compliance costs for dealers in ensuring there are no conflicts, perceptions of unfairness or excessive cancels, and that the best execution obligation is demonstrably met.

Impact on the provision and use of consolidated data

The Proposed Amendments would result in unprotected marketplaces that could reach any size and remain unprotected. At what point do volumes at unprotected marketplaces call the NBBO into question?

On the indicative data front, the Canadian public securities markets already suffer from a widespread lack of consolidated data beyond the professional traders and sales desks. If firms remain satisfied that their investment advisors and clients only require indicative data from one marketplace in the current environment (TSX and TSXV), how likely will it be for them to provide consolidated data that includes that of unprotected marketplaces[3]? And how does this impact investors' ability to assess fulfillment of best execution obligations? We also reiterate that unprotected markets in the US generally do not provide data to the consolidated feeds and request that this difference be carefully analyzed.

The following are some other potential risks with respect to consolidated data that we don't believe have been considered:

- The TMX Information Processor ("**IP**") decided that their CBBO feed should include all displayed markets and clients will have to subscribe to a different product if they want only protected quotes. Many of the global data distributors rely on the TMX IP CBBO as their only data source and, unless those distributors switch their feed or decide to implement two types of Canadian quotes, international investors will see a consolidated quote that includes unprotected marketplaces, which could potentially be locked or crossed; these investors will not be intimately familiar with the intricacies of Canadian market structure and will

[3] Note that TMX Group is in a unique position to decide if all or part of Alpha data should be included in the data that is distributed to advisors and retail investors as part of TSX/TSXV data. The TSX/TSXV data is currently the only data that gets widely distributed to this segment of the market. Should Alpha data be included (with or without a fee increase) then another TMX marketplace would benefit from this virtual market data monopoly, which also drives order routing decisions.

expect that what they see is what they can get. When they don't get their order filled or it gets filled at a worse price than what they see on their screen because their dealer didn't access the unprotected marketplaces or because the Alpha speed bump allows for a quote fade, it will not create confidence in the Canadian market.

- If marketplaces are required to use consolidated feeds from protected marketplaces only for OPR and other "best" bid or ask or "better price" obligations, but must use consolidated feeds from all marketplaces (protected and unprotected) to meet or facilitate best execution requirements and obligations based on last sale price , and if SORs price off either or both, there will be confusion and, at the very least, an impact on certainty and quality of execution; moreover, it will exacerbate an existing impediment (cost of compliance) to competition in the Canadian markets.

Question 3: A key objective of OPR is to recognize and support the role of retail participation in the market. If the Proposed Amendments are finalized, what changes if any, do you expect will be required for dealers handling retail order flow? What changes if any, do you expect in terms of outcomes for retail clients?

If the Proposed Amendments are approved it will mean there are at least two unprotected marketplaces. We expect a number of challenges for dealers handling retail order flow since OPR compliance has frequently been used as a proxy for best execution, and it is unclear what will be required in a partial-OPR environment. If no further regulatory guidance, aimed at ensuring meaningful steps are taken by dealers for obtaining best execution, is issued and no further metrics are required so that clients can ascertain whether they are receiving best execution, we imagine there will be substantial confusion and, ultimately, the very real risk that:

- Retail dealers will simply exclude unprotected marketplaces from their routing.
- Alternatively, driven by fee incentives, they may continue to use "displayed best prices" from certain unprotected markets regardless of the implications on best execution, as discussed above in relation to the Alpha market model. While common sense would dictate – as backed up by recent research[4] – that routing based on fees ultimately leads to inferior executions.

We also believe that, as discussed above, the Alpha model creates a clear conflict of interest for retail dealers that is detrimental to confidence in the Canadian marketplace overall.

Question 4: Are there implications that have not been addressed above that should be considered? How do you suggest they be addressed?

We have already listed above a number of outcomes and scenarios that we believe are required to be addressed by the CSA before implementing the Proposed Amendments, but we have a few final considerations we would like to raise:

- A considerable amount of focus has been placed on the impact of functionality that affects the speed and certainty of execution in determining whether an order should be protected. We believe the impact on the ability for all types of participants to interact and take advantage of differentiated functionality should be

[4] See retail best execution statistics in the US, released last month by the Financial Information Forum, which have raised new concerns and the March 2015 academic paper "Can Brokers Have It All? On the Relation between Make-Take Fees and Limit Order Execution Quality" by Battalio, Corwin and Jennings, which suggests that "order routing designed to maximize liquidity rebates does not maximize limit order execution quality".

the governing issue. As noted above, partial OPR means an emphasis on best execution which, to date, has mainly been about using OPR to facilitate best price and primarily taking into account volumes when making routing decisions. Given these prevailing practices, a partial protection regime would require more analysis by participants to provide any assurance that best execution is being given the necessary attention. For example: are fill rates being calculated for securities in different price ranges and for orders of various sizes? Are dealers analyzing the impact of broker preferencing on their clients' orders and taking that into account in their routing? Especially given that jitney orders cannot take advantage of broker preferencing, are clients of dealers that are routing through other dealers being disadvantaged by the latter's trading choices? Is there other functionality on a marketplace that would lead to the conclusion that a certain type of order should or should not be placed on that marketplace? Does the functionality improve certainty of execution for some participants at the expense of others and is this on balance fair or unfair? The CSA and IIROC have been clear that dealers are expected to carry out meaningful analysis to meet their best execution obligations, but we suggest that more detailed direction and the plan for monitoring and enforcing best execution in a partial order protection environment would be critical if the Proposed Amendments were implemented.

- Another issue is why under the Proposed Amendments all orders in a marketplace must be unprotected. In the 2005 Reg NMS release, the SEC allowed for "hybrid" markets with both protected and unprotected orders. If it would not add significant cost, it should be considered whether a marketplace with a systematic delay applying only to a subset of users should be partially protected. As per footnote #5 on page 7 of the Notice: a "protected" marketplace is considered to be a marketplace which displays protected orders as defined in OPR, while an "unprotected" marketplace is one which does not display protected orders. All displayed orders on NEO clearly fit the requirements of being immediately and automatically accessible to everyone but LSTs (and we would argue they fit for the latter as well for the reasons stated above.)

- Given the fundamental regulatory objective of fair access, why are tools created by marketplaces to provide speed advantages, which are only affordable for a limited group, e.g. micro-wave technology, acceptable, but tools that allow other participants to catch up, not acceptable? We do not believe that the differentiator should be whether the feature / tool is systematic or technically (despite the fact that they can be cost prohibitive for most participants) available to anyone. The differentiator should be whether, upon review of the functionality, it negatively impacts the ability to obtain good quality executions. If some HFTs are not able to execute fully on their strategies because they must execute some of their active orders on NEO at the same speed as everyone else, is that an "unfairness" that must be addressed?

- If the CSA remains convinced that this suggested approach to differentiation is not compelling, then other "systematic" operations on orders should also be treated similarly:
  - one example of this is the proposed "long life" order[5] on TSX where a minimum resting time on orders is imposed before they can be cancelled or amended; after the minimum resting time has elapsed any amendments to the long life order will be subject to a randomized systematic delay which can be as much as 20 milliseconds (the NEO speed bump is randomized between 3 and 9 milliseconds) and based on the Proposed Amendments this should also require the removal of order protection from TSX;
  - another example is broker preferencing: orders that would otherwise execute due to time priority are delayed so that subsequently-entered orders may be executed because they were sent by the same dealer as the order already in the trading book;
  - a further example is where a marketplace has chosen to invest in slower technology – assuming anything systematic that delays an order is a triggering event to remove order protection (in which case it will be important for the CSA to set a benchmark for what the acceptable round-trip latency is in a matching engine in order to be considered a protected marketplace).

[5] https://www.osc.gov.on.ca/en/Marketplaces_xxr-tsx_20150521_amd-rfc-long-life-orders.htm

Recommendations

In conclusion, we strongly recommend that before proceeding with the Proposed Amendments the CSA gives consideration to the following suggestions:

- Proceed with a detailed analysis of the potential outcomes and scenarios that may result from the Proposed Amendments, including a risk assessment and mitigating actions.
- Based on these results and the ability to properly mitigate the risks – or not – either:
  1. Issue quantifiable and measurable best execution guidance also tying consideration of all marketplace functionality impacting executions to the requirement to have reasonable policies and procedures to prevent trade-throughs (the CSA could state that it considers such reasonable policies and procedures may include whether there is functionality at a particular marketplace that would demonstrably impact best execution for that firm's clients or in a particular case); or
  2. Remove OPR and focus on best execution only.
- In the interim, issue guidance about how the Alpha systematic delay is to be addressed according to the OSC's approval notice. At the very least the opportunity to see how that plays out should be taken before proceeding with changes to the Companion Policy.

Thank you for the opportunity to comment on these very important issues.

Yours truly,

"Jos Schmitt"

Jos Schmitt
CEO
Aequitas NEO Exchange Inc.